

# **Final Mitigated Negative Declaration**

## **Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties**



Los Angeles Department of Water and Power  
Environmental Affairs  
111 North Hope Street, Room 1044  
Los Angeles, California 90012

**June 2019**

**CEQA Initial Study and Mitigated Negative Declaration  
Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties**

**June 2019**

**General Manager**

David H. Wright

**Senior Assistant General Manager**

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Mark J. Sedlacek

**Manager of Environmental Affairs**

Charles C. Holloway

*Prepared by*

**Los Angeles Department of Water and Power**

111 North Hope Street

Los Angeles, CA 90012



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***Previously published in the Draft IS/MND (see Appendix AA)***

**Section 1: Project Description**

**Section 2: Initial Study/Environmental Checklist**

**Section 3: References and Report Preparation**

**Appendix  
AA - Draft IS/MND**

**Table 6-1 Mitigation and Monitoring Program**

## SECTION 4

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### Comment Letters

The Draft Initial Study/Mitigated Negative Declaration (Draft IS/MND) for the Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties Project (proposed project) was circulated for public review for 60 days from December 18, 2017 to February 15, 2018 in accordance with the requirements of *CEQA Guidelines* Section 15072(a). The Los Angeles Department of Water and Power (LADWP) received twenty comment letters during the public review period noted below and included within this chapter. The letters have been marked with brackets that delineate comments pertaining to environmental issues and the information and analysis contained in the Draft IS/MND. Responses to such comments are provided in Section 5.

- Comment Letter 1: California Department of Transportation District 9
- Comment Letter 2: Lone Pine Paiute-Shoshone
- Comment Letter 3: California State Clearinghouse - Office of Planning and Research
- Comment Letter 4: Harry Williams
- Comment Letter 5: Inyo National Forest
- Comment Letter 6: Kendra Atleework
- Comment Letter 7: Big Pine Paiute Tribe of the Owens Valley
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- Comment Letter 16: Lahontan Regional Water Quality Control Board
- Comment Letter 17: Mono Lake Committee
- Comment Letter 18: Owens Valley Indian Water Commission
- Comment Letter 19: Sally Manning
- Comment Letter 20: Tom Noland

**DEPARTMENT OF TRANSPORTATION**

DISTRICT 9  
 500 SOUTH MAIN STREET  
 BISHOP, CA 93514  
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 FAX (760) 872-0678  
 TTY 711  
 www.dot.ca.gov



*Making Conservation  
 a California Way of Life.*

January 9, 2018

Mr. Eduardo Cuevas  
 Los Angeles Dept. of Water and Power (LADWP)  
 111 North Hope Street, Room 1044  
 Los Angeles, CA 90012

File: Iny/Mno-Var  
 MND  
 SCH #: 2017121042

**Long Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties  
 Mitigated Negative Declaration (MND)**

Dear Mr. Cuevas

The California Department of Transportation (Caltrans) District 9 appreciates the opportunity to review the draft MND for routine waterway maintenance activities in Inyo and Mono counties. We offer the following:

- Please contact our District Office should any activities be in the vicinity of state highway water crossings, or affect flow at such locations. This should avoid both impacting Caltrans drainage facilities and conflicting with any Caltrans maintenance. Coordination of maintenance work could also be possible. An encroachment permit shall be required for any LADWP activities within state right-of-way (R/W).
- Placement of work site guidance signs or controlled burn signs in state R/W may be appropriate. These may be placed via the Caltrans encroachment permit process.
- Stephen Winzenread - our District Encroachment Permit Engineer, may be contacted at [stephen.winzenread@dot.ca.gov](mailto:stephen.winzenread@dot.ca.gov) or (760) 872-5222. Permit application information may be found at: <http://www.dot.ca.gov/trafficops/ep/index.html>

1-1

1-2

We value our cooperative working relationship with the LADWP in the Eastern Sierra. Feel free to contact me at (760) 872-0785, with any questions.

Sincerely,

GAYLE J. ROSANDER  
 External Project Liaison

c: State Clearinghouse  
 Mark Reistetter, Caltrans



## Lone Pine Paiute-Shoshone Reservation

P.O. Box 747 • 1103 South Main Street  
 Lone Pine, CA 93545  
 (760) 876-1034 Fax (760) 876-8302  
 Web Site: [www.lppsr.org](http://www.lppsr.org)

January 30, 2018

Mr. Eduardo Cuevas  
 Los Angeles Department of Water and Power  
 111 North Hope Street, Room 1044  
 Los Angeles, CA 90012  
[Eduardo.Cuevas@ladwp.com](mailto:Eduardo.Cuevas@ladwp.com)

### Re: Initial Study/Mitigated Negative Declaration (IS/MND) for the Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties

Dear Mr. Cuevas:

The Lone Pine Paiute-Shoshone Reservation (LPPSR) appreciates the opportunity to comment on the Initial Study/Mitigated Negative Declaration (IS/MND) for the Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties. LPPSR has concerns in two areas of Environmental Analysis.

1) Section 2.3.3 Air Quality, pages 2-6 and 2-7:

In the Owens Valley Spreading Activity Report (May 23, 2017) FIN, the following text regarding maintenance on McIver and Eclipse ditches for excess water divergence to the east side of Owens River:

Prepare the canals East of Owens River that includes:

- McIver ditch from East of Goose Lake to south of Mazourka road.
- Maintaining structures, replacing spreading pipes and reinforcing capacity in the ditch (90% of maintenance complete; scheduled for completion 5/26).
- Eclipse/East Side ditch from Mazourka road to south of Owenyo area.
- Maintaining spreading areas and replacing culverts (100% complete). Will require ongoing maintenance.

The term, "prepare" in this report does not provide any indication of the extreme earth-moving associated with the canal and water-spreading construction over the following few months. Where was the CEQA process? The very heavy runoff was not a surprise. Preparations could have been planned with the proper environmental oversight. In 100 years, LADWP should have had a contingency plan for very high runoff years. These ditches were excavated greater than their historic depth and width. Additionally, silt removed from the ditches was built into a berm that is driven on by LADWP employees as well as the public. This very loose and powdery silt becomes airborne in low wind conditions, especially with vehicle traffic. The "road" is already eroding and too soft for driving in many places.

2-1

2-2

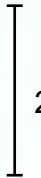


In the attached photo, dust from a vehicle driving on the berm under windless conditions billows. In this PM10 Serious Non-Attainment area, LADWP should be taking special precautions where construction will inevitably lead to increased fugitive dust.



2) Appendix E, General Best Management Practices (BMPs):

There doesn't appear to be any dust stabilizing effort along the length of the canal or in water-spreading construction areas (such as berms south of Independence). The BMP list does not address mitigation or avoidance of new dust sources. LADWP has nearly 20 years of experience with dust mitigation in Owens Valley. We would like to see some of these lessons applied to dust sources created by practices throughout Inyo and Mono County waterway maintenance activities.



Again, thank you for the opportunity to provide comments.

Sincerely,

Mary L. Wuester, Tribal Chairperson  
Lone Pine Paiute-Shoshone Reservation

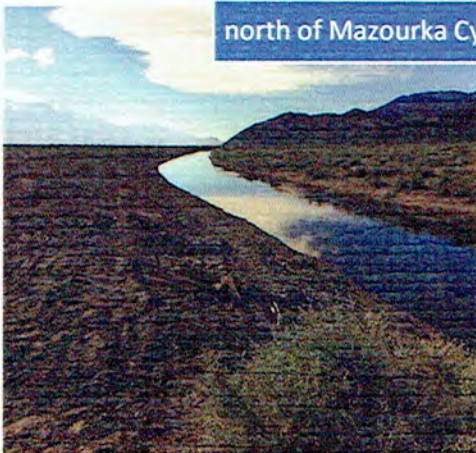
south of Mazourka Cyn Rd, 6/8/2017  
dust from vehicle on berm



south of Mazourka Cyn Rd., 6/8/2017



north of Mazourka Cyn Rd, 6/8/17



north of Mazourka Cyn Rd, 4/6/17





Edmund G. Brown Jr.  
Governor

STATE OF CALIFORNIA  
Governor's Office of Planning and Research  
State Clearinghouse and Planning Unit



Ken Alex  
Director

February 1, 2018

Charles Holloway  
City of Los Angeles  
111 North Hope St  
Los Angeles, CA 90012

Subject: Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties  
SCH#: 2017121042

Dear Charles Holloway:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on January 31, 2018, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan  
Director, State Clearinghouse

Enclosures  
cc: Resources Agency

3-1



**Document Details Report  
State Clearinghouse Data Base**

**SCH#** 2017121042  
**Project Title** Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties  
**Lead Agency** Los Angeles, City of

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**Type** MND Mitigated Negative Declaration  
**Description** Note: Review Per Lead

The city of LADWP proposes to continue ongoing routine maintenance activities on man-made and natural waterways and associated facilities located in Inyo and Mono Counties in order to maintain such waterways and facilities essential to the continued delivery of water for irrigation and domestic use in Inyo and Mono Counties and the city of LA. The waterway network maintained by LADWP includes 1,300 mi of unpaved roads, 450 mi of natural waterways, 84 mi of aqueducts, and 111 miles of man-made ditches and canals with several hundred water diversion. LADWP's ongoing activities include water gathering, water distribution, hydroelectric power production, and continuation of other land uses. For water gathering and distribution, LADWP performs routine maintenance and operations of facilities in Mono and Inyo Counties including about 187 flumes and measuring stations, 190 water intake and diversion structures, more than 60 sand traps or sediment basins, and 30 spillgates.

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**Lead Agency Contact**

**Name** Charles Holloway  
**Agency** City of Los Angeles  
**Phone** (213) 367-0285 **Fax**  
**email**  
**Address** 111 North Hope St  
**City** Los Angeles **State** CA **Zip** 90012

---

**Project Location**

**County** Inyo, Mono  
**City**  
**Region**  
**Lat / Long**  
**Cross Streets**  
**Parcel No.**  

<b>Township</b>	<b>Range</b>	<b>Section</b>	<b>Base</b>
-----------------	--------------	----------------	-------------

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**Proximity to:**

**Highways** 395  
**Airports**  
**Railways**  
**Waterways** various  
**Schools**  
**Land Use** routine maintenance activities are conducted on lands owned by LADWP that are undeveloped or used for ag purposes. ag uses includes irrigated land for crops and livestock grazing.

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**Project Issues** Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Landuse; Minerals; Noise; Other Issues; Population/Housing Balance; Public Services; Recreation/Parks; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Tribal Cultural Resources

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**Reviewing Agencies** Resources Agency; Department of Fish and Wildlife, Region 5; Cal Fire; Office of Historic Preservation; Department of Parks and Recreation; California Highway Patrol; Caltrans, District 7; Office of Emergency Services, California; Air Resources Board; State Water Resources Control Board, Division of Drinking Water; State Water Resources Control Board, Division of Drinking Water, District

**Document Details Report**  
**State Clearinghouse Data Base**

13; Regional Water Quality Control Bd., Region 6 (Victorville); Native American Heritage Commission;  
Public Utilities Commission; State Lands Commission

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**Date Received** 12/15/2017      **Start of Review** 12/15/2017      **End of Review** 01/31/2018



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1-31-18  
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Making Conservation  
a California Way of Life.

Governor's Office of Planning & Research

JAN 12 2018

STATE CLEARINGHOUSE

January 9, 2018

Mr. Eduardo Cuevas  
Los Angeles Dept. of Water and Power (LADWP)  
111 North Hope Street, Room 1044  
Los Angeles, CA 90012

File: Iny/Mno-Var  
MND  
SCH #: 2017121042

**Long Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties  
Mitigated Negative Declaration (MND)**

Dear Mr. Cuevas

The California Department of Transportation (Caltrans) District 9 appreciates the opportunity to review the draft MND for routine waterway maintenance activities in Inyo and Mono counties. We offer the following:

- Please contact our District Office should any activities be in the vicinity of state highway water crossings, or affect flow at such locations. This should avoid both impacting Caltrans drainage facilities and conflicting with any Caltrans maintenance. Coordination of maintenance work could also be possible. An encroachment permit shall be required for any LADWP activities within state right-of-way (R/W).
- Placement of work site guidance signs or controlled burn signs in state R/W may be appropriate. These may be placed via the Caltrans encroachment permit process.
- Stephen Winzenread - our District Encroachment Permit Engineer, may be contacted at [stephen.winzenread@dot.ca.gov](mailto:stephen.winzenread@dot.ca.gov) or (760) 872-5222. Permit application information may be found at: <http://www.dot.ca.gov/trafficops/ep/index.html>

We value our cooperative working relationship with the LADWP in the Eastern Sierra. Feel free to contact me at (760) 872-0785, with any questions.

Sincerely,

GAYLE J. ROSANDER  
External Project Liaison

~~c: State Clearinghouse~~  
Mark Reistetter, Caltrans

**From:** [harry williams](#)  
**To:** [Cuevas, Eduardo](#)  
**Subject:** mitigated Negative Declaration for the long term routine maintenance for the waterways in the inyo + mono counties  
**Date:** Wednesday, February 07, 2018 7:31:22 PM

---

To Eduardo Cuevas  
L.A.D.W.P.  
111 N. Hope St. Room 1044  
Los Angeles Ca. 90012

re mitigated Negative Declaration for the long term routine maintenance for the waterways in the inyo + mono counties

from: Harry Williams  
145 So. Barlow In.  
Bishop Ca,

I am strongly opposed to issuing a 5yr. permit to the L.A.D.W.P. for cleaning of the waterway in the Inyo + Mono counties.

4-1

Over my lifetime in the Owens valley.I have watched these waterway be cleaned from once a year to 2 to 3 times a year an have and have destroyed the habitat and natural meandering of these waterway

4-2

In the early 1960 I used to see the fish spawning in the canals , that no longer happens, due to the deepening to a single fast moving stream.

The deepening of the canals as much as 3` to 6` in all the canals has increased The siphining of the ground WaterTable. It has caused the riparian areas close to the waterway to decrease and die.

4-3

The habitat of the vegetation for the birds and bugs and animal is constantly decreasing due to all of the water gathering practices of L.A.D.W.P.

A quote from O.V.P. is "its our water and we are not going to give any of it up."  
These comments and other actions are a reminder to me that L.A. only intent here in the valley is to take as much water as possible out of this valley as possible no matter what are the effect to this valley environmental and plants and animals and to its people.

4-4

I would not grant L.A.D.W.P. request for renewal of their 5year waterway cleaning permit.

Harry

Williams , Bishop Ca.



Forest  
Service

Pacific  
Southwest  
Region

Inyo National Forest  
351 Pacu Lane, Suite 200  
Bishop, CA 93514  
(760) 873-2400 Voice  
(760) 873-2538 Text (TDD)

**File Code:** 1950

**Date:** February 9, 2018

**Subject:** Comments on the Notice of Intent to adopt a mitigated negative declaration for the long-term routine maintenance activities for waterways in Inyo and Mono Counties.

Dear Mr. Cuevas,

Thank you for the opportunity to provide comments on the Los Angeles Department of Water and Power (LADWP) Notice of Intent to adopt a mitigated negative declaration for the long-term routine maintenance activities for waterways in Inyo and Mono Counties.

As explained in the document and shown in Appendix A (Waterways Mapbook), many of the streams you refer to as RMA Waterways are on Forest Service System lands managed by the Inyo National Forest. LADWP and the Forest have worked together over the years regarding maintenance, replacement and construction of LADWP infrastructure located on Forest Service land. Typically, LADWP has informed us when you plan to do work on the Forest and I believe we have a good working relationship with LADWP staff in order to ensure we meet both our agencies' needs, including our respective regulatory requirements. I look forward to the same spirit of cooperation into the future.

5-1

I am aware that LADWP performs routine maintenance on their own land, and also on DWP infrastructure on the Forest, including weirs, diversions, culverts, roads, and man-made channels. However, I am not aware of any past routine maintenance on natural waterways on the Forest, as is described in the Notice of Intent. Therefore, I would like clarification on the statement, "Routine maintenance work is conducted by LADWP on man-made and natural waterways in order to maintain such waterways and structures essential to the continued delivery of water for irrigation and domestic uses..." (Initial Study, Section 1.3, p. 1-1). Additionally, the accompanying maps show RMA streams continuing miles upstream from any LADWP infrastructure, and even into congressionally designated Wilderness in some cases.

5-2

My concern is that it is unclear what activities you are proposing to conduct on Inyo National Forest land, in natural channels and why you believe these activities are warranted as routine maintenance. Additionally, how does LADWP plan to coordinate with the Forest prior to the implementation of any of the proposed activities? I request that all these issues be clearly addressed in the final mitigated negative declaration document.

5-3

In section 1.6.1, the initial study explains in more detail the type of routine maintenance activities that would occur on specific types of waterways. In that section, the only activity that is specifically listed as occurring in natural waterways is 3c; "Removing spot obstructions from intermittent streams to facilitate within channel flow". This description does not appear to include perennial streams, so it is unclear why your maps in Appendix A include most perennial streams in the Sierra Nevada Mountains in Inyo and Mono Counties. Please clarify what routine maintenance you plan for these perennial streams, and more precisely where it would occur and under what conditions.

5-4

It is unclear in the document why removing spot obstructions such as fallen trees and aquatic vegetation is necessary in natural streams, well upstream from any LADWP infrastructure, in order to convey water to LADWP customers. Please clarify the purpose of activities on natural waterways and under what circumstances they would be considered necessary. For example, are you proposing to clear obstructions only within a mile upstream of infrastructure, 2 miles, or whatever distance you deem necessary to protect water flow?

5-5

Please include clarification on the types of maintenance activities LADWP proposes on natural streams in wilderness areas and why these activities are necessary for your operations. For example, on the Aberdeen Quad in Appendix A, you show that LADWP will be performing routine maintenance activities up to Sawmill Lake, and in the headwaters of Goodale Creek, both of which are more than 3 miles into the John Muir Wilderness. These are only a couple of the many streams that are shown on the maps as RMA Waterways. If this is the intent, please explain how these activities would be completed such as what equipment will be used, crew size, etc. Activities that are authorized in wilderness are restricted to the use of non-mechanized/motorized equipment and should align with maintaining wilderness character of the area, so I need to understand possible effects to wilderness quality with regards to any proposed activity.

5-6

Finally, some of your maps have an incorrect Inyo National Forest boundary. For example, the Aberdeen Quad map in Appendix A, shows that there are "holes" within the Inyo National Forest boundary in the foothills near Goodale, Sawmill, and Division Creeks. The Forest is almost contiguous from the straight boundary shown on your maps, up to the Sierra Crest in this area. Please contact our GIS coordinator Dan Yarborough at [dyarborough@fs.fed.us](mailto:dyarborough@fs.fed.us) if you would like a GIS layer of the legal Forest boundary to create more accurate maps.

5-7

I understand that this document was written to comply with CEQA in order to facilitate obtaining California State permits, and therefore does not seem to have been intended to cover activities on Federal land that would require a permit or other approval by the Inyo National Forest. I would like LADWP to clearly state in the document that activities on National Forest land will require consultation with the Forest Service, compliance with regulations for management of National Forest Lands and that proposed activities may require additional environmental analysis compliant with the National Environmental Policy Act (NEPA).

5-8

Thank you for the opportunity to comment on this proposal. I would like to meet in person with LADWP staff so that we can better understand this specific project and the maintenance activities the Department is proposing on Inyo National Forest land, and to determine what level of coordination may be required for the Department to implement these activities. Please contact me at (760)873-2464 or [djpietrasanta@fs.fed.us](mailto:djpietrasanta@fs.fed.us), to arrange a meeting. As always, please feel free to contact me with any questions you have about my comments.

Sincerely,



DIANA PIETRASANTA  
Acting Forest Supervisor

**From:** [Kendra A](#)  
**To:** [Cuevas, Eduardo](#)  
**Subject:** Comment on Mitigated Negative Declaration for the Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties  
**Date:** Tuesday, February 13, 2018 5:46:48 PM

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Hello,

I am writing with a comment on the Mitigated Negative Declaration for the Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties.

This Negative Declaration covers a huge area with dozens of sensitive species that could be affected. Based on that fact alone, there needs to be an Environmental Impact Report prepared for this project that would provide in depth analysis of these effects.

6-1

Thank you!

Kendra Atleework

GENEVIEVE JONES  
TRIBAL COUNCIL CHAIR



**BIG PINE PAIUTE TRIBE OF THE OWENS VALLEY**

*Big Pine Paiute Indian Reservation*

P.O. Box 700 · 825 SOUTH MAIN STREET · BIG PINE, CA 93513  
(760) 938-2003 · FAX (760) 938-2942

[www.bigpinepaiute.org](http://www.bigpinepaiute.org)

February 14, 2018

Los Angeles Board of Water and Power Commissioners  
Los Angeles Department of Water and Power  
Room 1555-H  
111 North Hope St.  
Los Angeles, CA 90012

Mr. Eduardo Cuevas  
Los Angeles Department of Water and Power  
111 North Hope St., Room 1044  
Los Angeles, CA 90012

Dear Commissioners and Mr. Cuevas:

Subject: Mitigated Negative Declaration for LADWP Routine Maintenance of Waterways

The Big Pine Paiute Tribe of the Owens Valley (Tribe) submits the following comments on the Los Angeles Department of Water and Power (LADWP) Initial Study/ Mitigated Negative Declaration (MND) for the Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties project (“Waterways Project”). The MND has been prepared to describe and disclose LADWP’s maintenance activities performed throughout a vast region from Conway Summit north of Mono Lake to Rose Valley south of Owens Lake. LADWP desires to apply for a long-term general permit for waterways maintenance from the California Department of Fish and Wildlife and the Lahontan Regional Water Quality Control Board, rather than continue to obtain permits on a case by case basis. For this reason, the state agencies have requested LADWP comply with the California Environmental Quality Act (CEQA), and LADWP has prepared the MND.

7-1

Please note that Tribal consultation under California Assembly Bill 52 (“AB 52”) remains ongoing for the Waterways Project. The Tribe submits the comments in this letter during the open public comment period for the MND; however, independent of the public comment period, LADWP is obligated to work with the Tribe and fulfill its responsibilities with regard to AB 52 Tribal consultation. In the spirit of continuing dialog between the Tribe and LADWP, the Tribal Historic Preservation Officer or other Tribal representatives may add or send comments and concerns in addition to this letter.

7-2

COMMENTS

AB 52 Tribal Consultation is Ongoing for the Waterways Project. The Tribe received a letter from LADWP in November 2015 offering the opportunity to engage in Tribal consultation on the Waterways Project. The Tribe notified LADWP of its desire to consult, and the then-Tribal Councilwoman signed a form provided by LADWP on December 15, 2015. Shortly afterwards, on January 7, 2016, staff from LADWP visited the Tribal office and spoke with Tribal staff about three projects. The Waterways Project was introduced to Tribal staff at the January 2016 meeting, and Tribal staff was told that information being provided by LADWP was preliminary because work would begin in earnest much later in 2016 or in 2017. Tribal staff expressed interest in the Waterways Project and requested LADWP staff keep the Tribe informed as more information became available. Since that meeting, LADWP staff did not keep Tribal staff informed on progress on the project, and no government to government meeting to address the project was scheduled. In the intervening months since January 2016, there have been numerous opportunities for communication or updates regarding the Waterways Project as LADWP has corresponded and met with Tribal representatives for other reasons, but no further information was provided on the Waterways Project. Therefore, the Tribe was surprised and disappointed to receive notification from LADWP in mid December 2017 that the MND for this project had been publicly released.

7-3

AB 52 is a law that requires lead agencies to engage in meaningful consultation with a Native American tribe that desires to consult. The law requires agencies to reach out to tribes before a decision is made on the type of CEQA document to be prepared. The reason for this is that a tribe may possess information regarding tribal cultural resources potentially threatened by the project, and if the threats constitute a significant impact to the resource, then the agency may need to prepare a more involved document, and the agency would need to continue consultation with the tribe to agree on avoidance or mitigation measures to incorporate into the project design.

7-4

According to respective LADWP and Tribal codes for governing authority, the Los Angeles Board of Water and Power Commissioners is the decision making body which decides whether a project subject to CEQA moves forward, and elected Tribal leaders are the Tribal decision makers with the authority to agree or disagree in the AB 52 consultation process. The Tribe has made it clear in writing and in person that consultation with the Tribe is conducted on a “government to government” basis. This means that, when a tribe has particular concerns about a proposed project, decision makers of both entities are expected to meet during the consultation period. Consultation concludes successfully when there is an agreement between the decision makers. Alternatively, and not preferred, after meetings in which decision makers attempt in good faith to reach agreement, if a mutual agreement cannot be reached, consultation may conclude.<sup>1</sup> These are the only two methods of legally concluding AB 52 consultation. Staff is permitted to assist in helping agency and Tribal leaders appropriately implement the law, but interactions among our respective staffs do not decide to initiate or conclude AB 52 consultation.

7-5

---

<sup>1</sup> Public Resources Code § 21080.3.2(b) states, *The consultation shall be considered concluded when either of the following occurs:*

(1) *The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource.*  
(2) *A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.*

LADWP Did Not Prepare a Cultural Resources Report for the Waterways Project. The MND is fatally flawed due to the lack of an adequate description of archaeological, cultural, and paleontological resources along the LADWP waterways. It is not possible to determine significant impacts which may have already occurred or which may occur under the project in the future if LADWP presents no meaningful data on existing conditions. In fact, the Waterways Project showcases the long-standing need for a comprehensive cultural resource survey of all LADWP landholdings and claimed water courses.

7-6

One reason the Tribe was unaware of the status of the Waterways Project after January 2016 is the fact that LADWP did not perform a field survey of archaeological and cultural resources for the areas where waterways maintenance is to take place. LADWP did prepare a Biological Resources Report. Normally, a lead agency with an extensive project involving earth-moving is obligated to inventory archaeological, cultural, and paleontological resources. In fact, the inventory assists the agency in identifying potential project impacts so the cultural resources assessment may help determine the type of CEQA document that needs to be prepared. LADWP did not undertake an appropriate inventory of these important resources, so has no report to share with the Tribe.

7-7

The Tribe knows there are cultural resources associated with the waterways, but these are not addressed in the MND. LADWP fails to disclose that the extensive network of “natural” and “man-made” waterways it currently maintains include places which were undoubtedly created and maintained by Owens Valley Paiute prior to the arrival of people of European descent. See for example excerpts from Euro American visitors to the eastern Sierra during the 1850s and 1860s (attached) and Julian H. Steward’s 1933 Ethnography of the Owens Valley Paiute. The Tribe’s ancestors lived adjacent to, cultivated, and extensively used resources from aquatic, wetland, and riparian habitats. Resources continue to be used to the present day, but the Waterways Project is designed to remove -- mechanically or by using herbicides -- vegetation that may appear obstructive, and this is very likely to include culturally significant species such as plants used for food, cordage, or medicine. The Tribe was not consulted with regard to culturally sensitive areas.

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Over the years, LADWP has altered waterways and damaged in situ resources, with no assessment of the destroyed resources, no acknowledgment of the destruction, and no adequate mitigation. AB 52 and CEQA offer the opportunity for the Tribe to address this long-term unfair situation.

7-9

The Waterways Project MND Fails to Provide an Adequate Description of Important Environmental Resources Occurring in Association with Waterways. The MND is fatally flawed due to the lack of an adequate description of vegetation and habitat resources along the LADWP waterways. It is not possible to determine significant impacts which may have already occurred or which may occur under the project in the future if LADWP presents no meaningful data on existing conditions.

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The Land Use and Planning section of the MND omits mention of the primary document allowing LADWP’s ongoing water-related activities in Owens Valley: the Inyo/LA Water Agreement. Its related documents include the Green Book, 1991 EIR, and 1997 MOU. Green Book Section I.D. (“Other Vegetation”)<sup>2</sup> calls for the Inyo/LA Technical Group to identify and map important vegetated areas that were known to exist throughout Owens Valley yet occurred in the landscape in a manner

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<sup>2</sup> Language from Green Book Section I. D. is attached to this letter.



that was not accommodated by Water Agreement baseline vegetation mapping protocols used in the 1980s. In conducting the baseline vegetation mapping, LADWP assessed and mapped vegetation units (parcels) if they encompassed at least approximately 20 acres (Green Book Section II). In the 1991 EIR for the Water Agreement, it was acknowledged that important habitat may exist in areas occupying much less than 20 acres. The important habitat areas that were missed include vegetation dependent on springs and seeps, rare plant populations, stands of trees less than 20 acres, and riparian and aquatic vegetation and habitat along smaller permanent and intermittent waterways in the region, where vegetation may be linear (long and narrow) and sometimes segmented (for example due to an intervening bridge). In fact, for the Big Pine area, the baseline map data is crude to the point that no riparian vegetation is shown along Big Pine Creek until the last few feet where the creek flows into Owens River. Riparian vegetation along much of Baker Creek, and creeks to the south of Big Pine (Little Pine, Fuller, Tinemaha, Red Mountain, Birch, Taboose, Goodale, etc.) similarly was never adequately inventoried and mapped, nor is habitat along the Big Pine Canal identified. This vegetation was supposed to be identified and mapped as overlays to the existing Water Agreement baseline vegetation maps, and all of this is vegetation and habitat that may be adversely affected by the Waterways Project. The 1991 Final EIR called for the Technical Group to carry out the Green Book Section I.D. mapping as mitigation identified under Impact 10-15 (see pages 3-21 and 3-30 of the FEIR), and LADWP made findings and committed to perform the mitigation measures in the 1991 EIR. However, this obligation has never been fulfilled. The purpose of the map overlays was to provide an inventory for these important vegetation areas and to develop ongoing monitoring adequate to detect changes due to groundwater pumping and changes in surface water management practices. As of 2018, the Inyo/LA Technical Group has no baseline data for these important vegetation stands. Many areas with trees and wetland vegetation were lost from 1970 through 1990, and since implementing the Water Agreement in 1991, additional areas have been lost due to LADWP groundwater pumping, changes in surface water flows, and waterways operations and maintenance, but there is no accounting of the losses.

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Waterways Project Presents Systematic, Ongoing Losses With No Compensatory Gains. The incremental negative effects of LADWP's routine maintenance activities are cumulative. Why is there no section in the MND addressing cumulative effects? Each tree seedling that is killed, nest that is destroyed, animal that is displaced, temporary degradation to water quality, etc., and each year that goes by without adequately taking into account impacts to the cultural landscape and other cultural resources, takes its toll on the eastern Sierra environment and people's quality of life. Despite statements made in the MND, many in the valley, including Tribal staff and Tribal members, have observed LADWP heavy equipment deepen and straighten (channelize) water courses, which has the effect of hastening flows and draining ground water away from nearby sensitive habitats. State-listed and some federally listed plants and animals live in or near or use a majority of the waterways identified in the MND, and of course the reason for obtaining permits is to "permit" some "take" of these species. Despite assertions (e.g. bottom of page 2-10) that maintenance activities sometimes "even enhance rare plant populations" (no specifics are provided, and it is probably best that LADWP heavy equipment operators not try to do this unilaterally), there is obviously more harm to the sensitive species than benefit. In fact, activities carried out by LADWP is one reason why there are so many vulnerable species. When viewed in connection with the effects of past projects, the effects of other LADWP projects such as groundwater pumping, the effects of probable future projects, and the fact that LADWP has committed to but not fulfilled numerous mitigation obligations in the valley, the

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negative impacts of the Waterways Project *are* significant, and the negative impacts *are not* currently adequately mitigated nor will they be by the measures presented in the MND. ▲

LADWP's Waterways Project Requires an Environmental Impact Report. Based on the comments presented in this letter, the Tribe requests LADWP withdraw the MND. The Tribe understands that some maintenance along waterways is necessary, but this MND is insufficient to address the scope and potential impacts of the Waterways Project. In fact, the MND presents a worrying glimpse into LADWP's less-than-systematic practices as maintenance workers are tasked with earth moving and heavy equipment usage in areas with numerous sensitive and listed species, and where resources are not known or inventoried. LADWP's routine waterways maintenance poses a potentially significant threat to cultural resources, plants, animals, habitat, hydrology, air quality, water quality, soils, agriculture, and recreation. CEQA requires that an agency prepare an Environmental Impact Report (EIR) for any project that may have a significant effect on the environment<sup>3</sup>. In preparing and EIR, LADWP may continue with its AB 52 consultation obligations with the Tribe, undertake a comprehensive cultural resources inventory, tighten protocols for maintenance workers, and present much-needed meaningful mitigation measures to compensate for the losses and harm imposed by maintenance activities.

7-13

CONCLUSION

The Tribe requests LADWP withdraw the wholly inadequate MND for the Waterways Project for the reasons discussed above. The Waterways Project is huge in scope, archaeological and cultural resources must be assessed, AB 52 consultation is ongoing for the project, many sensitive plant and animal species are potentially harmed, the project is inadequately described, and mitigation measures fall short of compensating for impacts.

The Tribe respectfully requests a government to government meeting be scheduled to take place in Owens Valley between LADWP decision makers and Tribal representatives to address, at minimum, the Waterways Project. (There is a need to discuss other LADWP projects as well.) The Tribe and Los Angeles must work together to identify processes which incorporate Tribal needs and cultural considerations with LADWP's proposed activities in Owens Valley.

7-14

Please contact Tribal Administrator Jill Paydon at [j.paydon@bigpinepaiute.org](mailto:j.paydon@bigpinepaiute.org) or (760) 938-2003 to coordinate scheduling a meeting.

Sincerely,



Genevieve Jones  
Tribal Chairwoman

- C: Eric Garcetti, Mayor, Los Angeles
- Mitch O'Farrell, Los Angeles City Councilman, 13<sup>th</sup> District
- Nury Martinez, Los Angeles City Councilwoman, 6<sup>th</sup> District

<sup>3</sup> Public Resources Code § 21151(a)

Richard Harasick, Senior Assistant General Manager, Water, LADWP  
George Kivork, Los Angeles Tribal Liaison  
Nathan Voegeli, Calif. Dept. of Fish and Wildlife Tribal Liaison  
Native American Heritage Commission  
Inyo County Board of Supervisors

Attachments:

Paiute irrigation quotes  
Green Book Section I. D.

## WATERWAYS BUILT AND MAINTAINED BY OWENS VALLEY PAIUTE

Below are some quotes from journals and articles by some of the first Euro-Americans who observed Owens Valley Paiutes. Most of these quotes may be found in a 1976 article by authors Lawton, Wilke, DeDecker, and Mason entitled *Agriculture Among the Paiute of Owens Valley*, published in the *Journal of California Anthropology*.

An article in the *Los Angeles Star* of August 21, 1858, notes observations made by gold prospectors who passed through Eastern California. The article says:

“About the centre from one lake to the other [between Owens and Mono lakes], there is a tribe of fine looking Indians, tall and well made .... They are an active, industrious race, irrigate the lands and raise a kind of pea, which is their principal food. Farther on, the party came to another tribe of Indians.... They also cultivate the land, turning the river by ditches for the purposes of irrigation. Several small streams descend from the mountains on the west and empty into the river. Where these Indians live, the land is good, and in the upper part of the valley there is plenty of clover. In this valley of Owen's River, there are probably 2,000 Indians ....”

Very shortly after U. S. Cavalry Capt. J. W. Davidson visited Owens Valley in summer 1859, an article by a correspondent who accompanied him appeared in the *Los Angeles Star* of August 27, 1859. The article says:

“Large tracts of land are here irrigated by the natives to secure the growth of the grass seeds and grass nuts - a small tuberous root of fine taste and nutritious qualities, which grows here in abundance. Their ditches for irrigation are in some cases carried for miles, displaying as much accuracy and judgment as if laid out by an engineer, and distributing the water with great regularity over their grounds, and this, too, without the aid of a single agricultural implement.”

Capt. Davidson himself wrote about the Paiutes' irrigation practices he observed. He said,

“They have already some idea of tilling the ground, as the *ascequias [sic]* which they have made with the labor of their rude hands for miles in extent, and the care which they bestow upon their fields of grass-nuts abundantly show. Wherever the Water touches this soil of disintegrated granite, it acts like the wand of an Enchanter, and it may with truth be said that these Indians have made some portions of their Country, which otherwise were Desert, to bloom and blossom as the rose.”

Author A. S. Taylor wrote *Indianology of California*. He published a report from a *San Francisco Evening Bulletin* correspondent who traveled in Owens Valley in June 1861. The report discusses the creeks flowing from the Sierra into the valley, saying:

“Some of them are large, forming branches of the river; others, mere rills losing themselves in the dry and porous earth, irrigating a considerable patch about the place where they disappear. Most of these streams are shallow, and after leaving the mountain-ravines, have banks but a foot or two high. This admits of their being easily turned aside for irrigation, a purpose to which they are extensively applied by the Indians. These tribes cultivate a small white root of an oval shape, and the size of a cherry..... In irrigating they conduct the water some distance through ditches and little *acqueducts [sic]* made of dirt. The surplus water flowing over the land below these patches of roots has caused much grass to grow along these creeks, consisting of clover, blue-joint, and bunch grass. Cattle are very fond of these and fatten upon them rapidly.”

In 1862, a Colonel Warren Wasson said of Owens Valley Paiute:

"The Indians are fighting to hold possession of their lands, which they have irrigated and subsisted on for many years, and are jealous of white settlers coming into their country." "These Indians have dug ditches and irrigated nearly all the arable land in that section of the country, and live by its products."

Colonel Wasson also commented on a bloody fight between Paiutes and 60 white cattle ranchers on March 28, 1862. He says the white men lost the battle and retreated to an Indian irrigation ditch, employing it as a trench until they could escape under cover of darkness.

An article about taboose appeared in the Inyo Independent newspaper of November 14, 1870, and it says:

"Many of the principal irrigating ditches now in use by the whites were originally constructed by the aborigines for the purpose of irrigating this plant."

According to written history, Owens Valley Paiute irrigated using water from creeks from Round Valley to Independence. Creeks in this range include: Pine, Horton, Mill, Birch, McGee, Bishop, Rawson, Freeman, Baker, Big Pine, Little Pine, Birch, Fuller, Tinemaha, Red Mountain, Taboose, Goodale, Division, Sawmill, Thibaut, Oak, and Independence creeks. These creeks carry water from the mountains to the valley floor and Owens River. Paiute people also used water from springs, such as Fish Springs, Hines Spring, and Blackrock Springs. These are now dry due to LADWP groundwater pumping, but the combined natural average flow once exceeded 25,000 acre-feet.



*drawing of taboose showing tubers on the roots*

#### D. Other Vegetation

For management purposes, vegetation in Owens Valley has been divided into five management classifications based on the dominant vegetation species. However, each vegetation classification is comprised of vegetation species other than the dominant species.

##### 1. Management

Certain vegetation of significant environmental value are not shown on the management maps because they are not the dominant species. This vegetation will be identified by the Technical Group for monitoring purposes on overlays to the management maps. Areas of this vegetation include riparian vegetation dependent upon springs and flowing wells, stands of tree willows and cottonwoods, and areas with rare or endangered species. The monitoring sites will be located in areas where there is a potential for impact to such vegetation by groundwater pumping or changes in surface water management practices (although certain areas of rare or endangered species will be monitored, these areas will not be publicly identified on the management maps in the interest of protecting such vegetation).

If, through field observation, monitoring, and other evaluations, it is determined that groundwater pumping or changes in surface water management practices has resulted in severe water deficit stress that could cause a significant decrease or change in this vegetation, the Technical Group will take such action as is feasible and necessary to prevent significant impacts and to reduce any impacts to a level that is not significant.

##### 2. Monitoring

Monitoring at each identified site will consist of one or more field visits during the period when groundwater pumping and changes in surface water management practices could affect such vegetation in an attempt to obtain advance knowledge of potential water stress. Shallow piezometers will be installed and monitored where and when deemed necessary (for rare and endangered species, only a qualitative assessment will be made in order to minimize the disturbance from monitoring). If an impact is suspected, more intensive measurements, such as vegetation transect procedures, would be undertaken as determined appropriate by the Technical Group.

##### 3. Mitigation

The procedures set forth in Section 1.C will be used to determine whether an impact to vegetation of concern is measurable, attributable to groundwater pumping or changes in surface water management, and is significant, and thus, if a mitigation plan should be developed and implemented.



State of California – Natural Resources Agency  
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**EDMUND G. BROWN JR., Governor**  
**CHARLTON H. BONHAM, Director**



February 14, 2018  
*Sent via email*

Eduardo Cuevas  
Los Angeles Department of Water and Power  
111 North Hope Street, Room 1024  
Los Angeles, CA 90012

Subject: **Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties  
Initial Study/Mitigated Negative Declaration  
SCH# 2017121042**

Dear Mr. Cuevas,

The California Department of Fish and Wildlife (CDFW) appreciates the opportunity to comment on the Initial Study/Mitigated Negative Declaration (ISMND) that the Los Angeles Department of Water and Power (LADWP; Lead Agency) has prepared for the Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties (Project) (State Clearinghouse No. 2017121042). Pursuant to the Guidelines for the Implementation of the California Environmental Quality Act (Cal. Code Regs., tit. 14, § 15000 et. seq.; hereafter CEQA Guidelines), CDFW has reviewed the ISMND and offers comments and recommendations on those activities involved in the Project that are within CDFW's area of expertise and germane to its statutory responsibilities, and/or which are required to be approved by CDFW (CEQA Guidelines, §§ 15086, 15096, and 15204).

### **Project Description**

The proposed Project includes operating and maintaining man-made and natural waterways in Inyo and Mono Counties by LADWP. This includes approximately 1,300 miles of unpaved roads, 450 miles of natural waterways, 84 miles of aqueducts, and 111 miles of man-made ditches and canals with several hundred water diversions. LADWP's ongoing activities include water gathering, water distribution, hydroelectric power production, power transmission activities, and continuation of other land uses. For water gathering and distribution, LADWP performs routine maintenance and operations of facilities in Mono and Inyo Counties including about 187 flumes and measuring stations, 190 water intake and diversion structures, more than 60 sand traps or sediment basins, and 30 spillgates. LADWP proposes to conduct routine maintenance activities on man-made and natural waterways in order to maintain such facilities and for the delivery of water for irrigation and domestic use in Inyo and Mono Counties and to the City of Los Angeles. This ISMND is intended to support the



acquisition of permits necessary to conduct these activities including a 1600 Streambed Alteration Agreement from CDFW.

### **CEQA Role**

CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of those species (Fish & G. Code, § 1802). CDFW holds the fish and wildlife resources in trust for the people of the state (Fish & G. Code, § 711(a)). As a Trustee Agency, CDFW is responsible for providing, as available, biological expertise to review and comment upon environmental documents and impacts arising from Project activities (CEQA Guidelines, § 15386; Fish & G. Code, § 1802).

CDFW also acts as a Responsible Agency based on its regulatory authority regarding certain discretionary actions (CEQA Guidelines § 15381) such as the issuance of a Lake or Streambed Alteration Agreement (Fish & G. Code, §§ 1600 et seq.) and/or a California Endangered Species Act (CESA) Incidental Take Permit (ITP) for take of endangered, threatened, and/or candidate species (Fish & G. Code §§ 2050 et seq.). CEQA must be interpreted “to afford the fullest possible protection to the environment within the reasonable scope of the statutory language.” (*Friends of Mammoth v. Board of Supervisors* (1972) 8 Cal.3d 247, 259). CDFW strongly encourages LADWP to consider these requirements of CEQA when completing the ISMND evaluation and analysis.

CDFW, in the role of Responsible Agency for issuance of a Streambed Alteration Agreement, must rely on LADWP’s environmental document to prepare and issue its own findings regarding the Project (CEQA Guidelines, §§ 15096, 15162). CDFW relies on the environmental document prepared by LADWP to make a finding and decide whether or not to issue the permit or agreement. It is important that LADWP’s CEQA document consider CDFW’s responsible agency requirements. Every public agency must avoid or mitigate Project-related significant effects on the environment to the extent feasible (Pub. Resources Code Section 21002; *Mountain Lion Foundation v. Fish and Game Comm.* (1997) 16 Cal.4th 105, 134.). CDFW is bound by this mandate in making our findings for a Streambed Alteration Agreement.

### **Lake and Streambed Alteration Program**

While the ISMND indicates that a Streambed Alteration Agreement will be required for this Project, CDFW emphasizes any Project that may substantially alter a lake or streambed will require notification to CDFW per Fish and Game Code section 1602. Fish and Game Code section 1602 requires an entity (as defined in Fish and Game Code section 1601(d)) to notify CDFW prior to commencing any activity that may do one or more of the following: substantially divert or obstruct the natural flow of any river, stream or lake; substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or deposit or dispose of debris or waste where it may pass



into any river, stream or lake. Please note that "any river, stream or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year round). This includes ephemeral streams, desert washes, watercourses with a subsurface flow, and hydraulically connected floodplains of a body of water.

Upon receipt of a complete notification, CDFW determines if the proposed Project activities may substantially adversely affect existing fish and wildlife resources and whether a Lake or Streambed Alteration Agreement is required. A Lake or Streambed Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify your Project that would eliminate or reduce harmful impacts to fish and wildlife resources.

In addition, CDFW's issuance of a Lake or Streambed Alteration Agreement constitutes a "Project" and is subject to CEQA (Pub. Resources Code, §21065); CDFW is thus bound by its role as a Responsible Agency to independently consider the environmental document prepared by the Lead Agency and reach its own conclusions on whether and how to approve the project (CEQA Guidelines, § 15096(f)). To facilitate issuance of a Lake or Streambed Agreement, the environmental document should fully identify the potential impacts to all lake, stream, or riparian resources, and provide adequate avoidance, mitigation, and monitoring and reporting commitments. Early consultation with CDFW is recommended to ensure timely preparation and execution of a Lake or Streambed Alteration agreement, since mitigation or avoidance measures may be required to avoid or reduce impacts to fish and wildlife resources.

### **General Comments and Recommendations on December 2017 Draft ISMND**

CDFW provided comments during informal consultation to LADWP in March and April of 2016 and in September 2017 on previous draft ISMND documents, but does not believe all of our comments have been adequately addressed in the December 2017 public draft ISMND document.

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As CDFW has stated before in prior comments, this document does not include sufficient information on the scope of the Project, detailed descriptions of the activities, detailed location information including maps identifying all areas included in the Project and descriptions of activities that will occur within each individual location, and a detailed analysis of potential impacts to biological and hydrological resources. CDFW recommends including a table showing the length of each waterway and the length of the impacts that are proposed to occur from maintenance at each location. As it is written, the document alludes to a large scope of maintenance activities, and the potential for those activities to impact a number of sensitive plant communities, special status species, wetlands, water quality, and potentially alter drainages patterns (identified in part in the document and in Appendices B-E). CDFW recommends that LADWP provide sufficient detailed information to foster informed public decision-making and facilitate meaningful environmental review and disclosure of Project related

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impacts. At a minimum, the description of the impacted waters needs to include individual descriptions of each stream/ditch/waterway including habitats, species associated with those habitats, a location map, the work that may occur in those habitats, and the potential impacts to resources from these activities. Any discussion of Project impacts requires additional information, discussion, and review.

LADWP has indicated that this Project is appropriately addressed under CEQA in this ISMND. CDFW believes additional CEQA review may be warranted and has cautioned LADWP over the last two years during informal consultation in conjunction with Lahontan Regional Water Quality Control Board that this may not be an appropriate level of CEQA review for the following reasons:

1. This document identifies numerous candidate, sensitive, or special status species listed by the U.S. Fish and Wildlife Service and CDFW that may be significantly impacted by the described activities; however, this is not reflected in the CEQA Biological Checklist (Section 2.3.4-a);
2. The document identifies what appear to be potentially significant substantial adverse effects on riparian habitats, and potentially significant impacts to wetlands regulated under the Clean Water Act; these impacts are not reflected in the Biological Checklist.
3. The Hydrology and Water Quality Checklist (Section 2.3.9) is similarly contradicted by the document. The document identifies Routine Maintenance Activities that have potentially significant impacts on water quality standards (Hydrology and Water Quality Checklist Section a), and also identifies and describes activities that can result in major alterations to drainage patterns (Hydrology and Water Quality Checklist Section d).
4. While these activities and associated impacts are ongoing, neither have undergone previous disclosure and analysis under CEQA. Given the potential for such significant impacts from on-going activities, CDFW's position is that an Environmental Impact Report (EIR) may provide the best opportunity for full disclosure and review under CEQA. CDFW recommends that baseline conditions be clearly established and documented as a part of this review.
5. The potential for substantial cumulative impacts resulting from either multiple activities on the same waterway, or same location along that waterway, as well as cumulative impacts from maintenance activities and surrounding land uses should be analyzed under CEQA. CDFW believes this additional review may necessitate an EIR.

Spread of Noxious Weeds

According to the ISMND, multiple non-native plant species have been identified to occur within the Project area. The spread of noxious weeds is a major threat to biological



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resources in the Owens Valley, particularly where disturbance has occurred and is ongoing. Nonnative weeds frequently out compete native plants resulting in the conversion of habitat types, increased fire frequency as well as decreased quality and quantity of plant foods available to native wildlife thus affecting their nutritional intake. Construction activities and soil disturbance aids the transport and dispersal of invasive weed propagules, thereby potentially introducing new species of noxious weeds, exacerbating invasions already present in the Project vicinity. CDFW requests that potential impacts to biological resources should include an assessment of the potential for the spread of non-native plants resulting from routine maintenance activities, as well as feasible alternatives to mitigate this risk. In addition, impacts caused by the introduction of noxious weeds from maintenance within natural stream and riparian habitats should be addressed in greater detail and mitigation strategies should be developed to address the problem.

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#### Potential Impacts to Special Status Species

The findings of the ISMND conclude that potential impacts to special status species and habitats from the Project is less than significant with mitigation incorporated. CDFW disagrees with this conclusion as the proposed mitigation measures are inadequate to address the potential for Project activities to impact threatened, sensitive or rare animal species, riparian habitat, wetlands, and wildlife habitats. The ISMND does not describe how impacts will occur, what types of impacts will occur, timing/duration of impacts, or acreage of impacts. The document should provide a table of all special status plant and animal species that could potentially occur within the Project area, what habitats have the potential to occur within Project areas, Project locations that are known to support these habitats, and Project locations within or adjacent to any known populations of these plant and animal species. The document should describe and quantify potential impacts to habitats and species, and an accompanying map showing the areas and acreages of impact should be included. This map should provide sufficient detail to show specifically which waterways are within special status species' habitats. The ISMND should include a discussion of both direct and indirect impacts to wildlife movement and connectivity as well as how those impacts will be mitigated (i.e., provide mitigation measures pertaining specifically to each species at each location as appropriate).

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#### Potential Impacts to Streams and Native Fishes

The ISMND does not include a discussion of potential impacts to aquatic habitats and communities resulting from recurring sediment-disturbing maintenance (e.g. measuring station dredging). Because numerous special status species occur in and around aquatic and riparian habitat, CDFW recommends these resources should be explicitly addressed in this document. Localized, high frequency dredging (like the maintenance activities described in the document) substantially increases fine sediment mobilization, resulting in adverse impacts to aquatic organisms, as well as adverse impacts to geomorphic and channel forming processes (Wohl 2006, Beechie *et al.* 1994, Modde *et*

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a/. 1986, Buckmaster 2017). CDFW recommends that LADWP include appropriate mitigation measures in this document to clearly demonstrate that fish populations are being maintained in good condition below water diversions (*i.e.* dams) and other Project locations. In locations where appropriate avoidance measures are not feasible, LADWP should include mitigation measures sufficient to compensate for the loss of natural resources.

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CDFW is working to update the known locations where sensitive native fishes occur, and will provide this information as soon as it is available; however, CDFW encourages LADWP to identify any locations where Project activities will overlap known native fish populations. In addition, other sediment-disturbing maintenance activities, such as seasonal water diversions entrain recreational and native fishes, often result in potential fish mortality when these diversions are shut off. The feasibility for placing fish screens on seasonally operated diversions should be analyzed, as well as any alternative mitigation measures. Locations where existing diversions may impact sensitive native fish species should be provided and analyzed.

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#### Mitigation Monitoring and Reporting Program

CEQA Public Resources Code, section 21081.6(a)(1) specifies the following: “The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead agency or a responsible agency, prepare and submit a proposed reporting or monitoring program.”

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CDFW requests that LADWP include an annual monitoring and reporting plan (Annual Report) in the final ISMND. The Annual Report should meet the reporting requirements of Fish and Game Code Section 1605 (g)(2), and include, at a minimum, a description of the work performed as a part of this Project, all monitoring and mitigation activities that were performed, and an assessment of the effectiveness of these measures. The Annual Report shall ensure that the measures are adopted as part of the ISMND and remain in effect for the duration of the Project.


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#### Mitigation Measures


CDFW recommends incorporating additional mitigation measures to sufficiently offset the impacts of Project activities. Specifically, additional measures addressing frequent, recurring sediment disturbance within streams and canals, drainage alteration, changes in sediment load, and alterations to flow regimes in natural waterways should be discussed and incorporated in the biological and hydrological sections. In addition,

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CDFW does not believe the included mitigation measures provide sufficient information and protection as written. 

Also note that CEQA requires that a MND or an EIR identify fully enforceable mitigation measures for all significant environmental impacts. CEQA mandates the adoption and implementation of mitigation measures, regardless of whether the impact is on-site or off-site, unless the agency finds, on the basis of substantial evidence in the record that mitigation is infeasible (*City of Marina, et al. v. Board of Trustees of the California State University* (2006) 39 Cal. 4<sup>th</sup> 341). An EIR is required in those situations where the potential significant impact cannot be reduced below the level of significance. 


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Mitigation Measure BIO-1 does not provide enough detail for CDFW to assess whether it will reduce impacts to a less than significant level. Minimizing work to the smallest footprint possible and removing vegetation only when necessary does not mean impacts cannot occur within that footprint. CDFW recommends that the Lead Agency revise to specify the Project footprint size and specific location before it is minimized as well as what the impact will be reduced to. 


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Mitigation BIO-3 should include a monitoring component to quantify success or lack thereof of the action taken. 


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Per Mitigation BIO-5, CDFW agrees biological surveys for sensitive plants shall be conducted as part of assessing impacts to plants. However, surveys alone do not constitute mitigation. This mitigation measure should include actions to be taken in the event that surveys detect special status plants, and describe how impacts will be avoided. Additionally, this mitigation measure should apply to species that may be present in habitat adjacent to, not just directly within, waterways. 


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Mitigation BIO-8 is inadequate in addressing the cleaning of equipment and the spread of invasive species. Equipment needs to be cleaned after working in each individual waterway. The "California Department of Fish and Game Aquatic Invasive Species Decontamination Protocol" should be followed. Disturbed areas subject to noxious weed invasion should be replanted with fast-growing native grasses, or a native species erosion control seed mixture. This should be completed in conjunction with non-native species suppression. 

8-19

Thank you for the opportunity to provide comments on the ISMND for the Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties. As described above, CDFW has concerns the ISMND may not be adequate for CDFW to complete its full due-diligence requirements pursuant to CEQA in issuing the associated CDFW agreements and/or permits. As a Responsible Agency, CDFW may determine that the CEQA analysis completed by the Lead Agency is not adequate to issue an agreement 

8-20

and/or permit and may be required to complete additional CEQA analysis. In this case, CDFW may be required to assume the role of Lead Agency and thus require the Project applicant to fund CDFW costs associated with this role. 

Please contact Heidi Calvert, Senior Environmental Scientist (Supervisor), with questions regarding this letter and further coordination at (760) 872-0751, or Heidi.Calvert@wildlife.ca.gov.

Sincerely,



Leslie MacNair, Regional Manager  
Inland Deserts Region

Cc: David Martin, LADWP  
Lori Gillem, LADWP

Patrice Copeland, LRWQCB  
Jan Zimmerman, LRWQCB

Nick Buckmaster, CDFW  
HabCon Chron

## References

Beechie, T., E. Beamer, and L. Wasserman. "Estimating coho salmon rearing habitat and smolt production losses in a large river basin, and implications for habitat restoration." *North American Journal of Fisheries Management* 14, no. 4 (1994): 797-811.

Buckmaster, N. "Memorandum to Files: Assessment of interbrate community health, riparian communities, and channel conditions in natural and manipulated habitats." *CDFW Bishop Field Office Files*

Modde, Timothy, Henry G. Drewes, and Mark A. Rumble. "Effects of watershed alteration on the brook trout population of a small Black Hills stream." *The Great Basin Naturalist* (1986): 39-45.

Wohl, Ellen. "Human impacts to mountain streams." *Geomorphology* 79, no. 3 (2006): 217-248.

**From:** [John Connolly](#)  
**To:** [Cuevas, Eduardo](#)  
**Subject:** IS/MND is not adequate  
**Date:** Wednesday, February 14, 2018 10:16:52 AM

---

Hi Eduardo, I looked over the supporting documentation for the long-term routine maintenance for Inyo/Mono water ways and wasn't convinced that the entire scope of the project was addressed. Sure, everything on the surface was listed, but I noticed that the scope of the project was so big that the report was just general in nature. And over the years, it is the unusual stemming from routine work practices that I have an issue with. Those go unlisted, and for that fact I find the IS/MND inadequate.

9-1

I think Inyo and Mono county residents would be better served with stricter controls and more accountability on routine maintenance rather than allowing LADWP an all access pass to do pretty much anything. I for one, rely on domestic surface water and have had long conversations with LADWP on who's rights are superior - mine or yours/theirs, and in the end I've been told it all comes down to who has more money to contest that issue.

9-2

I have also had a dirt road boot-legged in over our private lands by LADWP so they could access the aqueduct for routine maintenance.

9-3

I have lost a private property monument to LADWP contractors moving earth on larger projects.

9-4

And mostly, I am concerned when LADWP works above stream from our domestic water sources due to increased sediments and exposure to foreign materials.

9-5

My position is that routine maintenance may sometimes lead to unique consequences, where is the harm in limiting that? Thanks for the opportunity to comment, and please feel free to get a hold of me anytime. -John Connolly

9-6

**Law Offices of Matthew Emrick**

A Professional Corporation  
 3881 Scenic Court  
 El Dorado Hills, CA 95762  
 (916) 337-0361 (direct/cell)  
[matthew@mlelaw.com](mailto:matthew@mlelaw.com)

Feb. 13, 2018

**To:** Mr. Eduardo Cuevas, LADWP - **Via email:** [eduardo.cuevas@ladwp.com](mailto:eduardo.cuevas@ladwp.com)

**Re:** Initial Study/Negative Declaration for Long Term Maintenance of Waterways in Inyo and Mono Counties (“Neg Dec”).

Thank you for the opportunity to provide comments on the adequacy of LADWP’s Initial Study/Negative Declaration (“Neg Dec”) for Long Term Maintenance of Waterways in Inyo and Mono Counties (“Project”). After reviewing the Neg Dec, I have the following comments on behalf of myself and my clients (listed below):

1. How does the Neg Dec relate to the draft Habitat Conversation Plan prepared by LADWP and the U. S. Fish and Wildlife Service (“HCP”) ? Does the Neg Dec replace that draft proposed Habitat Conversation Plan? Will the HCP be adopted? If so, when? The Neg Dec is not clear as to how LADWP plans to proceed with the HCP and how it relates to the Neg Dec - and therefore deprives those reviewing and commenting on the Neg Dec the ability to adequately assess the potential for adverse impacts to the Project.
2. How can LADWP proceed with the Neg Dec when the HCP was prepared in anticipation of essentially this same Project. The HCP (2016) concluded that

10-1

10-2



this same project would result, or likely result, in the potential for incidental taking of endangered species. The Neg Dec, however, does not appear to anticipate incidental take permits or habitat conservation - and appears to instead be based on a plan of avoidance. Given the number of potentially impacted species noted in the Neg Dec and the HCP, and the enormity of the Project Area (covering two counties), it would appear impossible to “avoid” incidental taking of at least some of the impacted species. The HCP appeared to recognize this fact and the potential for an incidental take: “*This HCP is also intended to serve as the application for an incidental take permit (ITP) under State law pursuant to Fish and Game Code § 2081*” (HCP Executive Summary). The potential for take and/or destruction of habitat is clear. This is especially so given LADWP’s practice of de-watering streams and wetlands in Inyo County including in the Lone Pine area. For example, included with these comments please find photos of wetland and pond areas that have been de-watered by LADWP in Lone Pine (Inyo County) between Diaz Lake and Whitney Portal Road – areas identified by the Neg Dec and the HCP as areas of habitat for endangered species. Does LADWP intend to restore this area ponds and wetlands as part of this project – and if not, why not? Isn’t this area in Lone Pine an area including habitat or potential habitat for several endangered species including but not limited to the Owens Pupfish and Willow Flycatcher as indicated in the Neg Dec and the HCP?

10-2

10-3

10-4

3. The Neg Dec provides verifiably false and incorrect statements that LADWP knows are false. The Neg Dec declares that: “there are currently no major tributaries to the Lower Owens River. Water from the larger creek systems such as Independence, Oak, and **Lone Pine Creeks** is used to irrigate pastures for the purpose of livestock grazing.”

- While it is true some water from Lone Pine Creek is used for livestock grazing locally, the vast majority of water is diverted into the Los Angeles Aqueduct by LADWP for use in Los Angeles. LADWP's Statements of Diversion and Use filed with the State Water Resources Control Board over the past several years shows the conversion of Lone Pine Creek flows from local agriculture use to municipal use in Los Angeles (SODs S001768 and 1771 for example). As LADWP is aware, this practice of diverting the flow of Lone Pine Creek to Los Angeles violates two applicable judgments: the Shaw Decree (Boland v. Lone Pine Water Company (1902) Inyo Co. Sup. Court No. 516) and the Edwards Decision (included with these comments).
- Further, during times of high flows in excess of LADWP's rights to water from Lone Pine Creek, LADWP diverts the entire flow of the creek into the Los Angeles Aqueduct – again in violation of applicable judgments, water rights and law. Attached with these comments are photographs taken in

2017 showing nearly the entire flow of Lone Pine Creek during high runoff event being diverted by LADWP to the Aqueduct.

IF LADWP properly followed the law and the applicable judgments, and allowed water to flow in the historic ditches and branches of Lone Pine Creek, water from Lone Pine Creek would in fact reach the Owens River. Included with these comments are aerial photos showing the historic branches of Lone Pine Creek flowing into the Owens River within the recent past. Also attached are photos showing Lone Pine Creek flowing into the Owens River east of the town of Lone Pine.

4. Because the Neg Dec contains false and misleading information regarding tributary flow into the Owens River, the Neg Dec cannot be used to properly inform the public and decision makers regarding the potential impacts of the Project on the environment. The Neg Dec therefore violates the California Environmental Quality Act.

5. The Project description is entirely inadequate. Section 1.6.3 describes the Project as including the replacement of certain unspecified LADWP facilities. However, the Neg Dec does not describe where such replacements would specifically take place (other than a list that does not include specifics as to the replacement project or location and a vague map), or what facilities would be replaced, or what interference or impact there would be on any particular waterway flows from any particular replacement. It is therefore impossible for

10-5

10-6

10-7

the public and decision makers to determine where, when, how or the extent of any potential impacts from any such replacements. The photographs included with these comments showing the dried-out wetland and pond areas in Lone Pine demonstrate the result of LADWP's past practices of replacing facilities east of Lone Pine resulting in the destruction of large areas of habitat and public trust resources.

10-7

6. The Neg Dec fails to address potential impacts to specific water rights holders other than LADWP from the Project. The Neg Dec states with respect to "replacement" work that: "*The replacement of existing facilities involves installing temporary structures to divert water around the work area if water is present.*" If this is done in a stream or common canal with other water rights holders, what would be the impact on those other water users? The Neg Dec does not say because it does not analyze such impacts. A water rights holder or decision maker cannot review the Project or the Neg Dec and determine whether any particular replacement would have a potential impact on such water rights (or on biological and public trust resource) because the location and description of any such replacements are not set forth in any detail. The burden of determining potential impacts to other water rights holders (or biological or public trust resources) is on LADWP but there is absolutely no analysis of any such impacts.

10-8

7. The Neg Dec improperly defers discussing particular mitigation measures as to the impacts of the Project on biological resources. Instead of describing specific locations and specific measures with respect to re-routing water for Project activities, the Neg Dec vaguely provides that re-routing of water for maintenance and replacement for Project purposes “may” involve coffer dams, culverts, trenches, etc and “shall be discussed with CDFW prior to implementation.” How would any person or other entity using a canal or waterway be able to assess impacts of the Project based on such vague information? Will LADWP’s discussions with CDFW be public with public input? It is hard to imagine that certain cases of re-routing water flow in certain waterways with coffer dams and trenches would not result in a potentially significant impact to other water rights holders or biological resources (both endangered and not endangered) and public trust resources.

10-9

8. The Neg Dec improperly concludes that routine maintenance under the Project will not impact groundwater resources. This is not correct. Re-routing of surface flows for maintenance could potentially interfere with the recharge of groundwater from surface water sources. LADWP could rely on greater groundwater pumping into its Aqueduct at times that surface water sources are in the process of being maintained or re-routed. Attached to this comment letter are photographs showing LADWP pumping groundwater from Lone Pine into the Aqueduct in lieu of surface water in or about 2012. It would

10-10

appear likely that this would be likely to occur at least under certain  
circumstances under the proposed Project.

In sum, the Neg Dec is insufficient and violates applicable law. A fair argument  
can be made that the Project could result in substantial adverse impacts to the  
environment. LADWP should consider preparing a detailed Environmental  
Impact Report detailing the specifics of the Project and its potential impacts and  
finish the HCP.

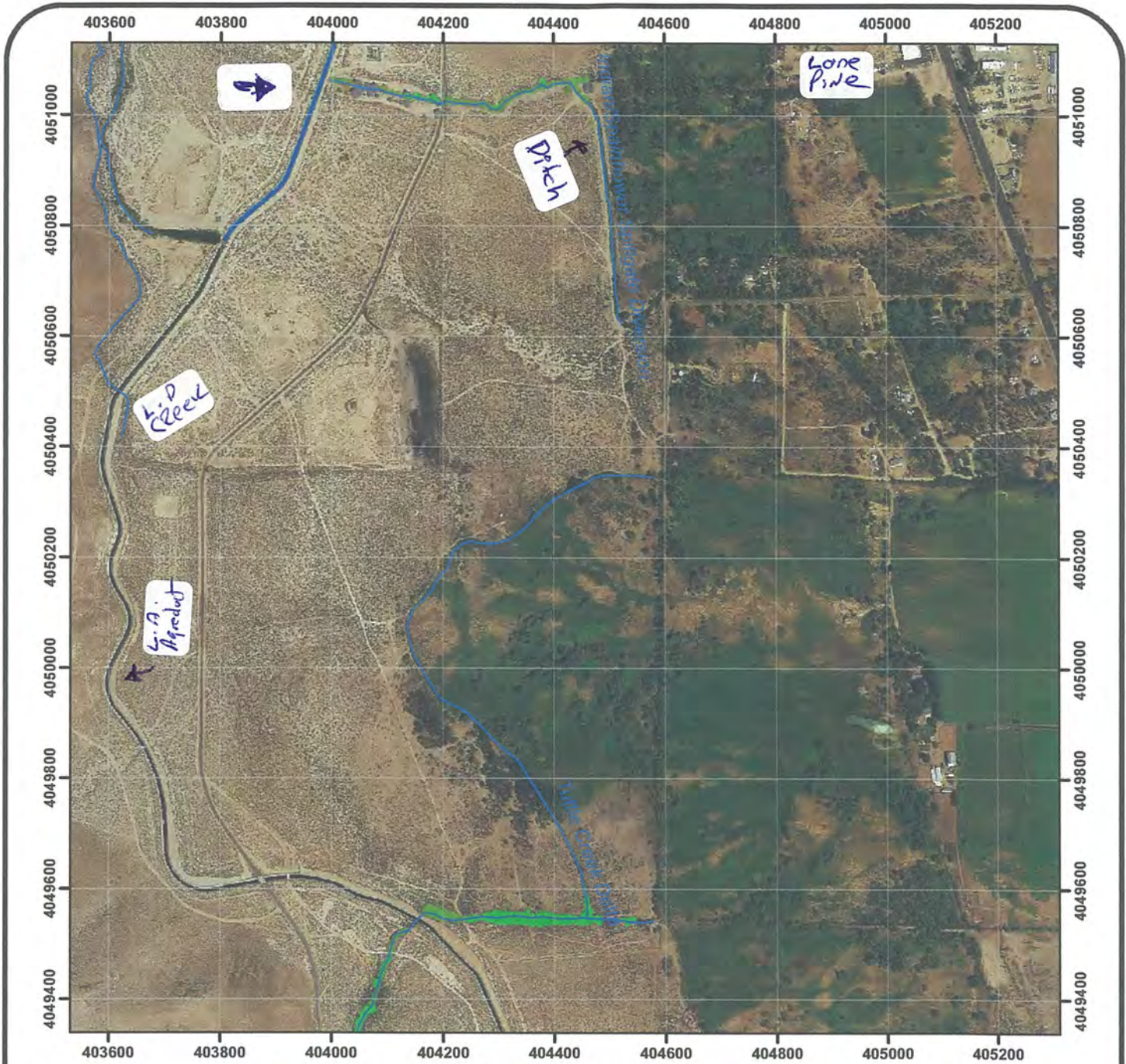
If you have any questions or would like additional information, please call me at  
916 337-0361 or email me at: [matthew@mlelaw.com](mailto:matthew@mlelaw.com). Thank you.

*-MATTHEW EMRICK*

On behalf of myself as well as local Lone Pine area property owners, Benjamin  
Bonham, Helga Hess, Ken Carpenter and Olivas Ranch.

# **EXHIBIT 1**



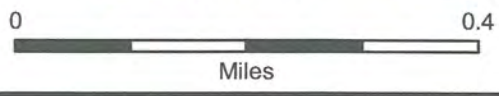


# Tributary Vegetation Mapping 2005 Conditions

LADWP  
S001771-  
Aqueduct  
Diversion

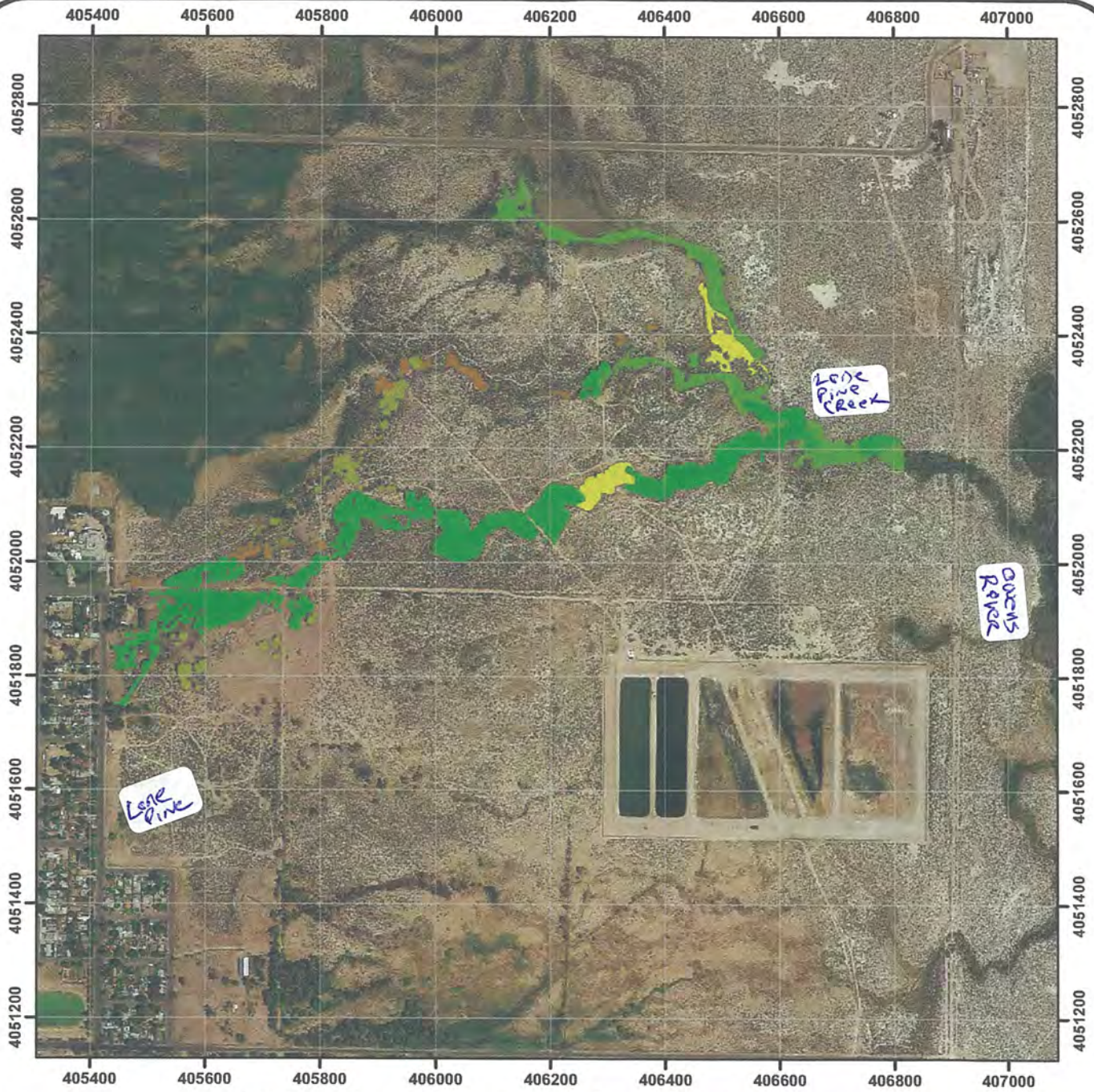
- |                           |                            |                                      |
|---------------------------|----------------------------|--------------------------------------|
| Marsh                     | Coyote willow-rose         | Fremont cottonwood                   |
| Wet alkali meadow         | Rose                       | Fremont cottonwood/scrub             |
| Mesic meadow              | Buffaloberry               | Black cottonwood/birch-arroyo willow |
| Alkali meadow             | Goodding-red willow/marsh  | Locust                               |
| Irrigated meadow          | Goodding-red willow/meadow | Oak                                  |
| Birch-arroyo willow       | Goodding-red willow/scrub  | Jeffery pine                         |
| Birch-arroyo willow/scrub | Red-arroyo willow-birch    | Alkali scrub/meadow                  |
| Coyote willow             | Red willow/scrub           | Water                                |

**MAP BC29**



Note: Grid is UTM NAD83, Zone 11.

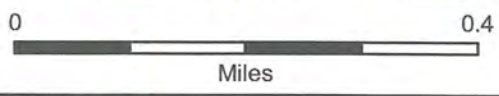




## Tributary Vegetation Mapping 2005 Conditions

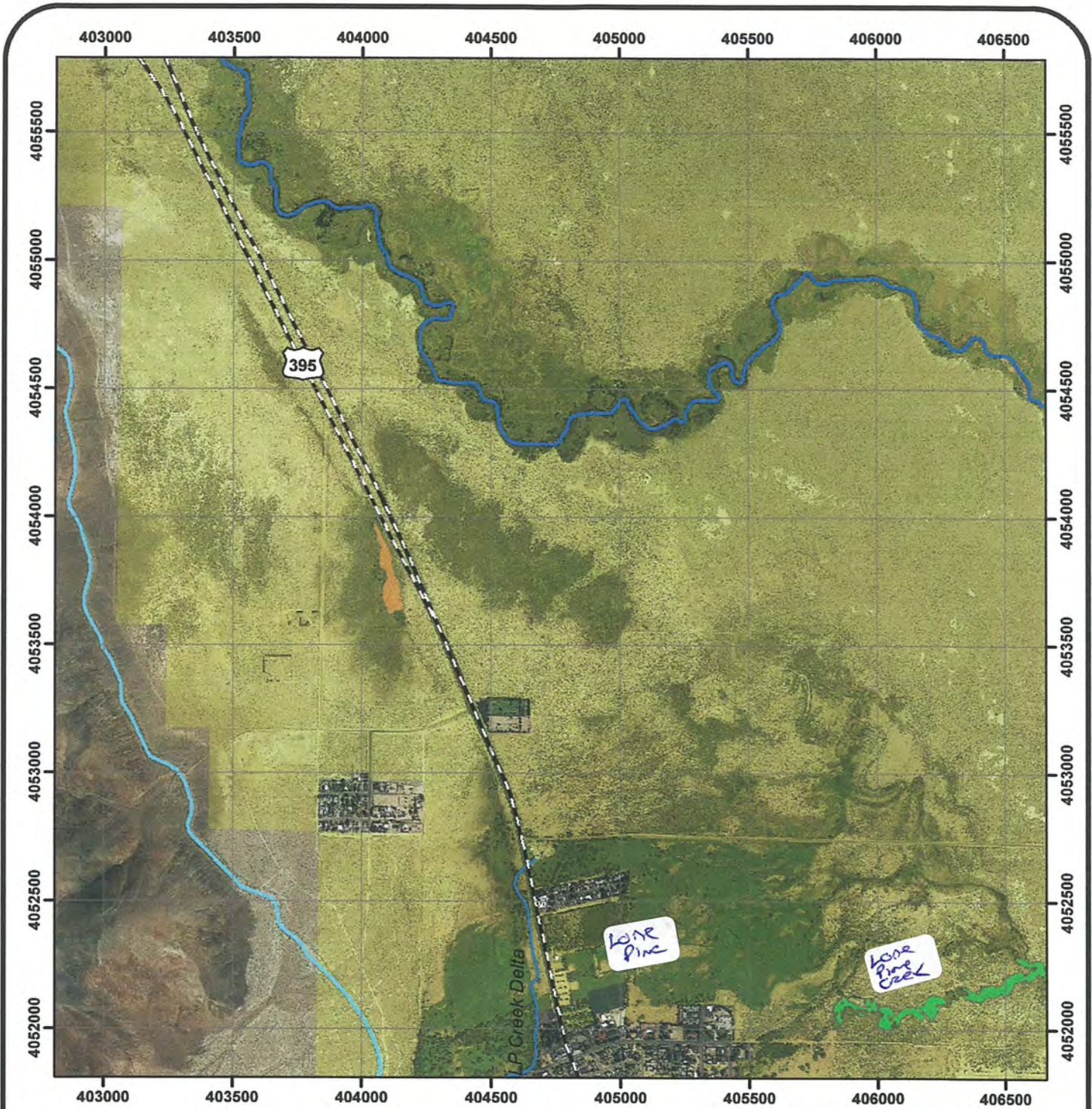
- |   |   |  |
|---|---|--|
| <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: red; margin-right: 5px;"></span> Marsh</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: orange; margin-right: 5px;"></span> Wet alkali meadow</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: lightorange; margin-right: 5px;"></span> Mesic meadow</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: yellow; margin-right: 5px;"></span> Alkali meadow</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: brown; margin-right: 5px;"></span> Irrigated meadow</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: green; margin-right: 5px;"></span> Birch-arroyo willow</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: lightgreen; margin-right: 5px;"></span> Birch-arroyo willow/scrub</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: limegreen; margin-right: 5px;"></span> Coyote willow</li> </ul> | <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: tan; margin-right: 5px;"></span> Coyote willow-rose</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: brown; margin-right: 5px;"></span> Rose</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: cyan; margin-right: 5px;"></span> Buffaloberry</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: green; margin-right: 5px;"></span> Goodding-red willow/marsh</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: green; margin-right: 5px;"></span> Goodding-red willow/meadow</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: lightgreen; margin-right: 5px;"></span> Goodding-red willow/scrub</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: green; margin-right: 5px;"></span> Red-arroyo willow-birch</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: olive; margin-right: 5px;"></span> Red willow/scrub</li> </ul> | <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: purple; margin-right: 5px;"></span> Fremont cottonwood</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: lightpurple; margin-right: 5px;"></span> Fremont cottonwood/scrub</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: magenta; margin-right: 5px;"></span> Black cottonwood/birch-arroyo willow</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: gray; margin-right: 5px;"></span> Locust</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: pink; margin-right: 5px;"></span> Oak</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: blue; margin-right: 5px;"></span> Jeffery pine</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: lightyellow; margin-right: 5px;"></span> Alkali scrub/meadow</li> <li><span style="display: inline-block; width: 15px; height: 15px; background-color: blue; margin-right: 5px;"></span> Water</li> </ul> |
|---|---|--|

MAP BB30



Note: Grid is UTM NAD83, Zone 11.





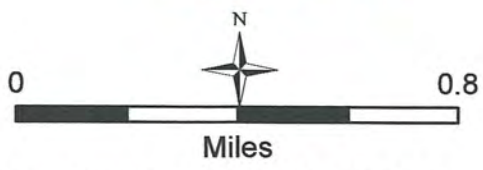
# Southwestern Willow Flycatcher Habitat

**Habitat Suitability**

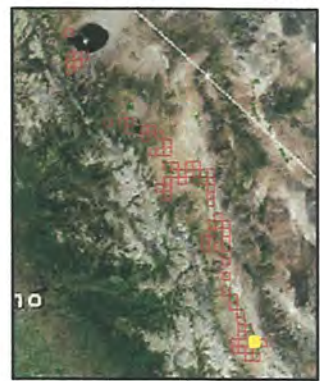
- High
- Moderate
- Low

**LADWP Property**

## Map AQ26



Note: Coordinates are UTM, NAD83, Zone 11; image is from September 2009.



Map Index

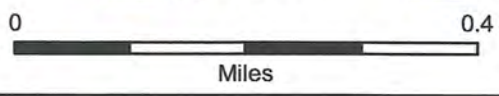




## Tributary Vegetation Mapping 2005 Conditions

- |   |   |   |
|---|---|---|
| <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: red; margin-right: 5px;"></span> Marsh</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; margin-right: 5px;"></span> Wet alkali meadow</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #fff9c4; margin-right: 5px;"></span> Mesic meadow</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #ffff00; margin-right: 5px;"></span> Alkali meadow</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #d2b48c; margin-right: 5px;"></span> Irrigated meadow</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #90ee90; margin-right: 5px;"></span> Birch-arroyo willow</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #c8e6c9; margin-right: 5px;"></span> Birch-arroyo willow/scrub</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #4db6ac; margin-right: 5px;"></span> Coyote willow</li> </ul> | <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #c5e1a5; margin-right: 5px;"></span> Coyote willow-rose</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #8d6e63; margin-right: 5px;"></span> Rose</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #00bcd4; margin-right: 5px;"></span> Buffaloberry</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #4db6ac; margin-right: 5px;"></span> Goodding-red willow/marsh</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #81c784; margin-right: 5px;"></span> Goodding-red willow/meadow</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #c5e1a5; margin-right: 5px;"></span> Goodding-red willow/scrub</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #4db6ac; margin-right: 5px;"></span> Red-arroyo willow-birch</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #8d6e63; margin-right: 5px;"></span> Red willow/scrub</li> </ul> | <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #9c27b0; margin-right: 5px;"></span> Fremont cottonwood</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #e1bee7; margin-right: 5px;"></span> Fremont cottonwood/scrub</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #9c27b0; margin-right: 5px;"></span> Black cottonwood/birch-arroyo willow</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #bdbdbd; margin-right: 5px;"></span> Locust</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #f5f5f5; margin-right: 5px;"></span> Oak</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #2196f3; margin-right: 5px;"></span> Jeffery pine</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #fff9c4; margin-right: 5px;"></span> Alkali scrub/meadow</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #2196f3; margin-right: 5px;"></span> Water</li> </ul> |
|---|---|---|

MAP BB29



Note: Grid is UTM NAD83, Zone 11.



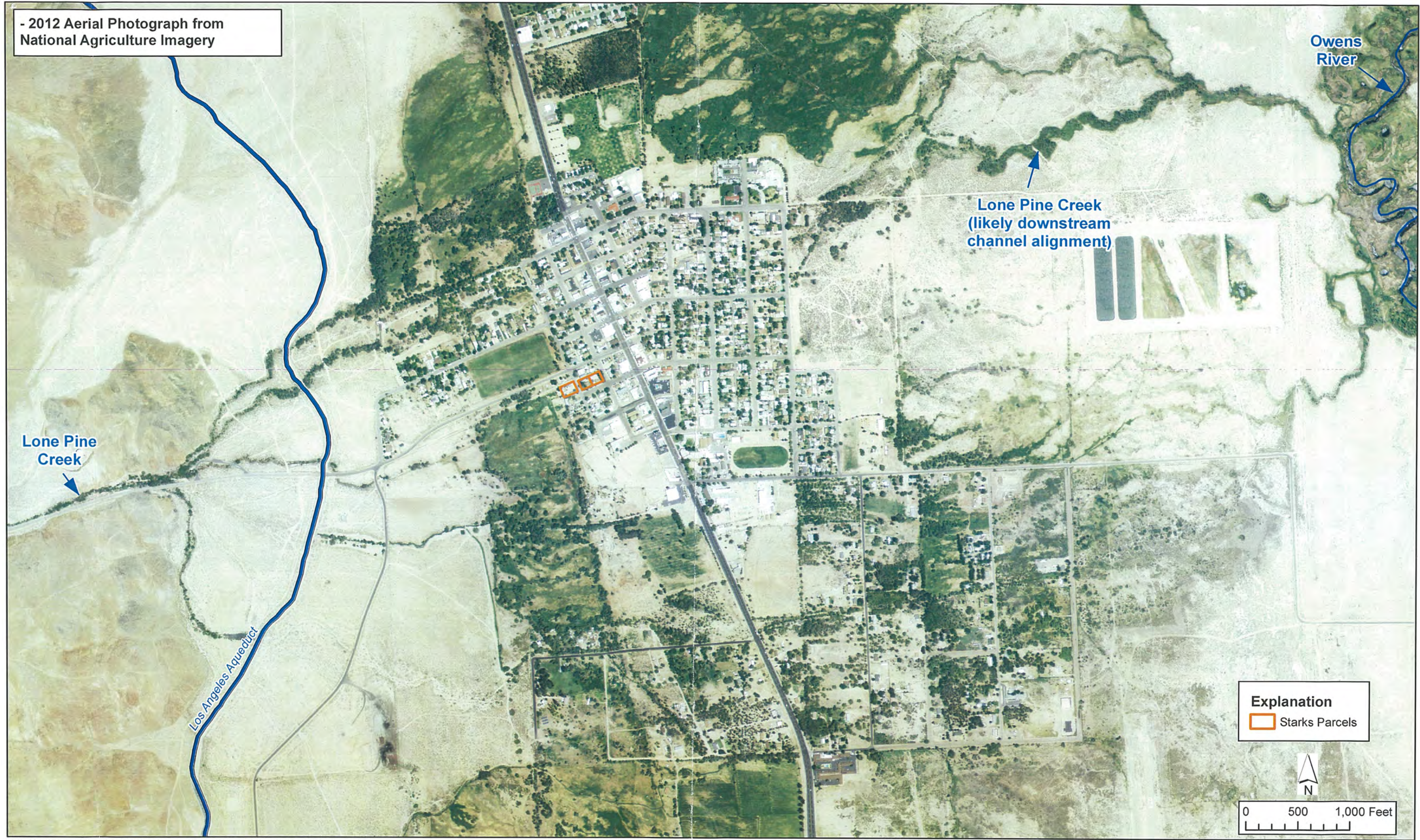
- 1975 Aerial Photograph from USGS  
Digital Orthophoto Quadrangle



\\server\_pe2900\clerical\2014 Job Files\14-023 Starks v LADWP\Maps\Exhibits\Exhibit F 1975 Historical Aerial Photograph of the Lone Pine Area.mxd

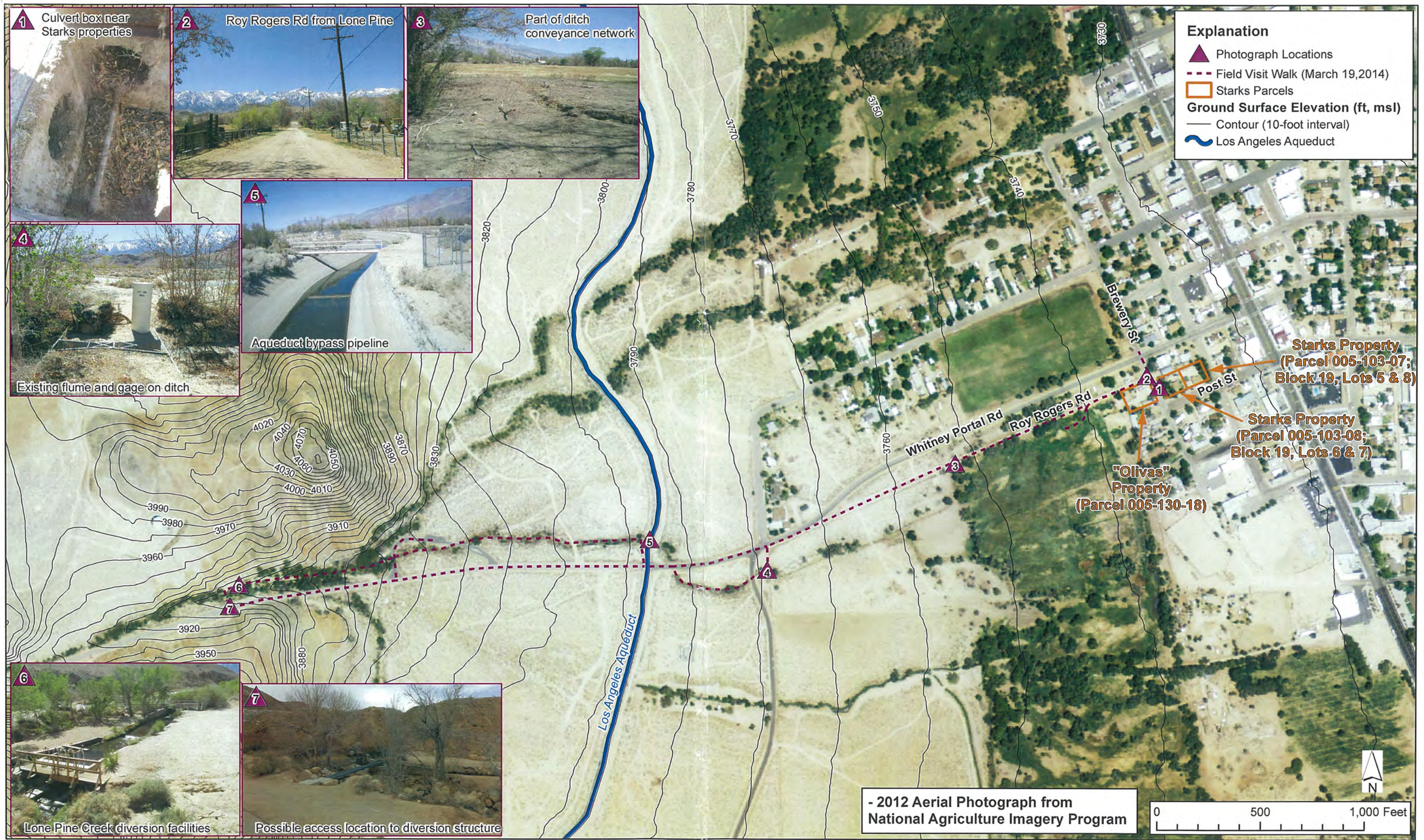


- 2012 Aerial Photograph from National Agriculture Imagery



X:\2014 Job Files\14-023 Starks v LADWP\Maps\Exhibits\Exhibit G 2012 Aerial Photograph of the Lone Pine Area.mxd





X:\2014 Job Files\14-023 Starks v LADWP\Maps\Exhibits\Exhibit B Lone Pine Field Visit and Physical Setting.mxd



# **EXHIBIT 3**

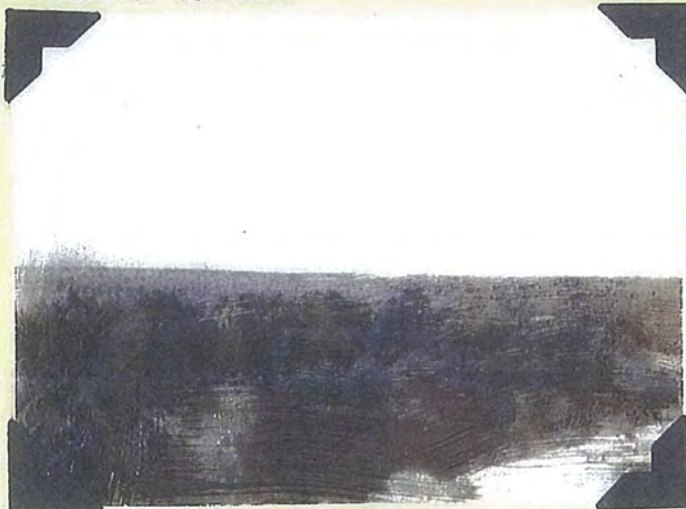
LONE PINE SEWER OUTFLOW - July 19, 19



Looking downstream from R.R. Bridge - Lone  
Pine Creek entering O.R., view to the East



Water flowing just before it goes into O.R.  
View to the East



O.R. below intake of Lone Pine Creek, view to  
the South - East



# **EXHIBIT 8**

IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA,

IN AND FOR THE COUNTY OF KERN.

DEPARTMENT OF HYDROGRAPHY  
FILE No.

# 21999 1-3-1

CHRISTIANNA G. J. EDWARDS,

Plaintiff,

-vs-

CITY OF LOS ANGELES, a municipal corporation, R. F. DEL VALLE, WILL E. KELLER, JOHN R. RICHARDS, WILLIAM P. WHITSETT and JOHN R. HAYNES, as members of and constituting the Board of Water and Power Commissioners of the City of Los Angeles, a municipal corporation,

Defendants.

F. W. McLACHLIN and MARY G. McLACHLIN, husband and wife; W. K. MILLER and VEDA MILLER, husband and wife; L. H. DEARBORN and MARY S. DEARBORN, husband and wife; WILLIAM J. GILSON and MARY GILSON, husband and wife; C. E. QUINN; A. H. JOHNSON and EMILIA A. JOHNSON, husband and wife; O. C. JOHNSON and MERCY M. JOHNSON, husband and wife; ROY JOURNIGAN and MARY JOURNIGAN, husband and wife; EMMA SPEAR; WALTER SPEAR and MYRTLE SPEAR, husband and wife; MINNIE A. DANIELS; DAVID N. POBST; and J. P. SMITH and MARY J. SMITH, husband and wife,

Plaintiffs,

-vs-

CITY OF LOS ANGELES, a municipal corporation, ET AL.,

Defendants.

JENS NESS,

Plaintiff,

-vs-

CITY OF LOS ANGELES, a municipal corporation, ET AL.,

Defendants.

FRANK RADA and ANNA RADA,

Plaintiffs,

-vs-

CITY OF LOS ANGELES, a municipal corporation, ET AL.,

Defendants.

MINNIE MILLER,

Plaintiff,

-vs-

CITY OF LOS ANGELES, a municipal corporation, ET AL.,

Defendants.

Lone Pine wells

2	No. 2	SEL/4	SEL/4	Sec 16	T	13	S	R	35	E	M.D.B.	& M.
	No. 3	NEL/4	SEL/4	Sec 16	T	13	S	R	35	E	M.D.B.	& M.
3	No. 5A	NEL/4	NWL/4	Sec 28	T	11	S	R	34	E	M.D.B.	& M.
	No. 5	SWL/4	NEL/4	Sec 16	T	13	S	R	35	E	M.D.B.	& M.
4	No. 7	SEL/4	SWL/4	Sec 9	T	13	S	R	35	E	M.D.B.	& M.
	No. 9	SWL/4	NWL/4	Sec 9	T	13	S	R	35	E	M.D.B.	& M.
5	No. 10	NEL/4	NWL/4	Sec 22	T	13	S	R	35	E	M.D.B.	& M.
	No. 11	NWL/4	NEL/4	Sec 25	T	14	S	R	35	E	M.D.B.	& M.
6	No. 12	SWL/4	NWL/4	Sec 30	T	14	S	R	36	E	M.D.B.	& M.
	No. 13	SEL/4	NEL/4	Sec 31	T	14	S	R	36	E	M.D.B.	& M.
7	No. 14	NWL/4	SWL/4	Sec 8	T	13	S	R	35	E	M.D.B.	& M.
	No. 15	SEL/4	NWL/4	Sec 8	T	13	S	R	35	E	M.D.B.	& M.
8	No. 16	NWL/4	NEL/4	Sec 8	T	13	S	R	35	E	M.D.B.	& M.
	No. 17	SEL/4	NWL/4	Sec 28	T	13	S	R	35	E	M.D.B.	& M.
9	No. 18	SWL/4	NEL/4	Sec 27	T	13	S	R	35	E	M.D.B.	& M.
	No. 20	SEL/4	SWL/4	Sec 22	T	13	S	R	35	E	M.D.B.	& M.
10	No. 21	NEL/4	SEL/4	Sec 14	T	14	S	R	35	E	M.D.B.	& M.
	No. 22	SEL/4	SEL/4	Sec 16	T	13	S	R	35	E	M.D.B.	& M.
11	No. 23	SWL/4	NEL/4	Sec 8	T	13	S	R	35	E	M.D.B.	& M.
	No. 24	NWL/4	NEL/4	Sec 27	T	13	S	R	35	E	M.D.B.	& M.
12	No. 25	NWL/4	NEL/4	Sec 27	T	13	S	R	35	E	M.D.B.	& M.
	No. 26	NWL/4	SEL/4	Sec 15	T	13	S	R	35	E	M.D.B.	& M.
13	No. 27	NWL/4	SEL/4	Sec 27	T	13	S	R	35	E	M.D.B.	& M.
	No. 28	NEL/4	SEL/4	Sec 16	T	13	S	R	35	E	M.D.B.	& M.
14	No. 29	NWL/4	NEL/4	Sec 8	T	13	S	R	35	E	M.D.B.	& M.
	No. 30	NEL/4	SWL/4	Sec 16	T	13	S	R	35	E	M.D.B.	& M.
15	No. 31	NWL/4	SEL/4	Sec 27	T	13	S	R	35	E	M.D.B.	& M.
	No. 32	SWL/4	SEL/4	Sec 27	T	13	S	R	35	E	M.D.B.	& M.
16	No. 33	SWL/4	NWL/4	Sec 16	T	13	S	R	35	E	M.D.B.	& M.
	No. 34	SWL/4	NEL/4	Sec 34	T	13	S	R	35	E	M.D.B.	& M.
17	No. 35	SWL/4	NEL/4	Sec 34	T	13	S	R	35	E	M.D.B.	& M.
	No. 36	NWL/4	SEL/4	Sl/2	Sec 5	T135	R35E				M.D.B.	& M.
18	No. 40	SWL/4	NWL/4	Sl/2	Sec 5	T135	R 35EM				M.D.B.	& M.
	No. 42	SWL/4	SEL/4	Sec 34	T	13	S	R	35	E	M.D.B.	& M.
19	No. 43	SWL/4	SEL/4	Sec 34	T	13	S	R	35	E	M.D.B.	& M.
	No. 44	NEL/4	SWL/4	Sl/2	Sec 5	T135	R35E				M.D.B.	& M.
20	No. 45	NEL/4	NEL/4	Sec 3	T	13	S	R	35	E	M.D.B.	& M.
	No. 47	NWL/4	NWL/4	Sl/2	Sec 5	T135	R35E				M.D.B.	& M.
21	No. 47											
22	No. 49	SEL/4	SWL/4	Sec 25	T	12	S	R	34	E	M.D.B.	& M.

23 and by means of the said aforementioned wells take and extract the  
 24 subterranean water of said Owens River Valley, and convey and carry  
 25 the same away and outside of the said Owens River Valley and the  
 26 Owens River Watershed, for use and consumption in the said City of  
 27 Los Angeles, and the said defendants, and each of them, are forever  
 28 enjoined, restrained and prohibited from extracting, taking, remov-  
 29 ing, diverting, conveying or carrying away in any manner whatsoever  
 30 any of the subterranean waters in said Owens River Valley in any  
 31 manner whatsoever except by means of the said wells hereinbefore in  
 32 this paragraph mentioned.

(2) That the said defendants are hereby enjoined,

WALTER J. LITTLE  
 WM. B. GILROY  
 LOS ANGELES

1 Los Angeles Aqueduct on the Owens River, five hundred twenty cu-  
2 bic feet per second of the said surface flow of said Owens River,  
3 and no more, and the said defendants, and each of them, are hereby  
4 enjoined, restrained and prohibited from making any other or fur-  
5 ther diversions of the said Owens River for the purpose of taking  
6 said water outside of the said watershed of the said Owens River,  
7 and are further restrained, prohibited and enjoined from taking  
8 any of the water of the said Owens River by means of that certain  
9 diversion ditch and pumping plant commonly known as the Mt. Whit-  
10 ney Pumping Plant situate at a point approximately northerly  
11 28°30" East, one thousand four hundred (1,400) feet from the  
12 Southwest quarter of Section 38, Township 14 South, Range 36  
13 East, M. D. B. & M., being within the Southwest quarter of the  
14 Southwest quarter of Section 38.

15 (4) That the water underlying the land of each  
16 plaintiff herein, and the water underlying the land of the defen-  
17 dants herein, and all the water underlying the lands of the Owens  
18 River Valley are in a state of continuity from their source, and  
19 that all of said water constitutes a common body of underground  
20 water, and that the rights of the plaintiffs herein, and each of  
21 them, except the plaintiffs Frank Nada and Anna Nada, in and to  
22 the said underground water and in and to the use thereof are  
23 superior and prior to any right of the said defendants, or any of  
24 them, to take said water for use outside of the said Owens River  
25 Watershed, or away from the lands overlying said water, and the  
26 said defendants, and each of them, are hereby forever debarred  
27 and enjoined from asserting any claim whatsoever in or to the  
28 said underground water or the use thereof adverse to plaintiffs,  
29 or any of them, except the plaintiffs Frank Nada and Anna Nada,  
30 except for use upon lands overlying said water in said Owens River  
31 Valley.  
32



**EXHIBIT 15**









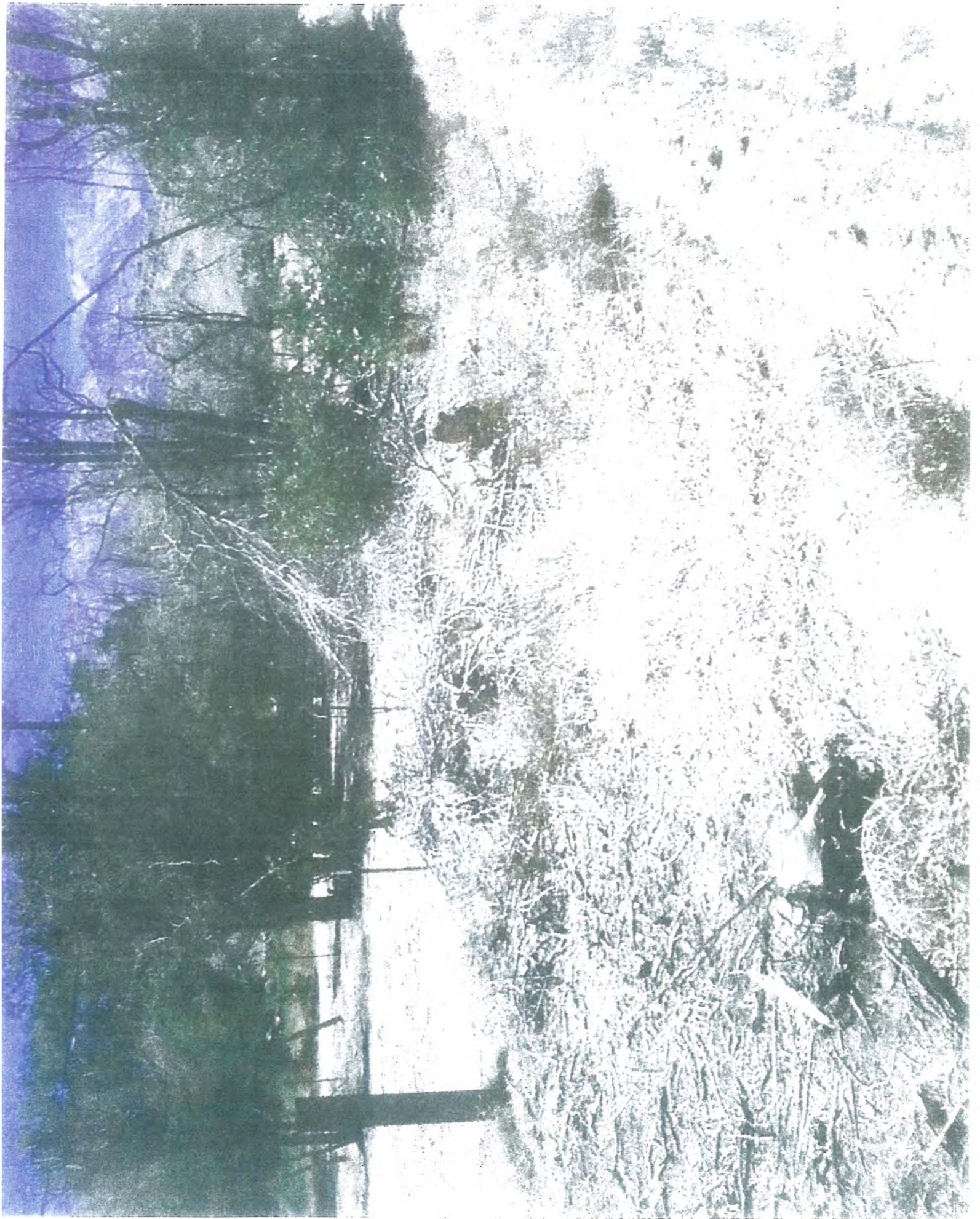








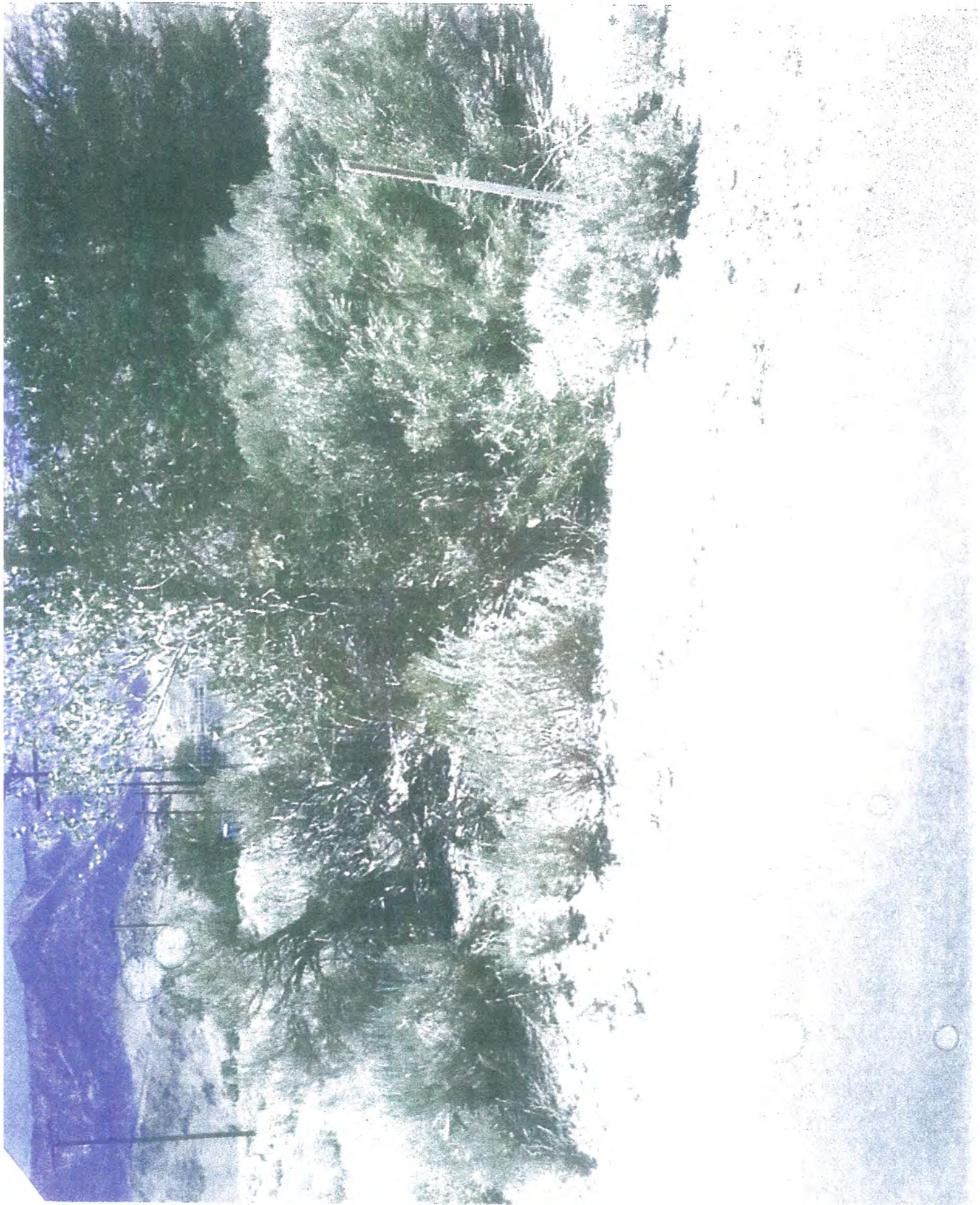












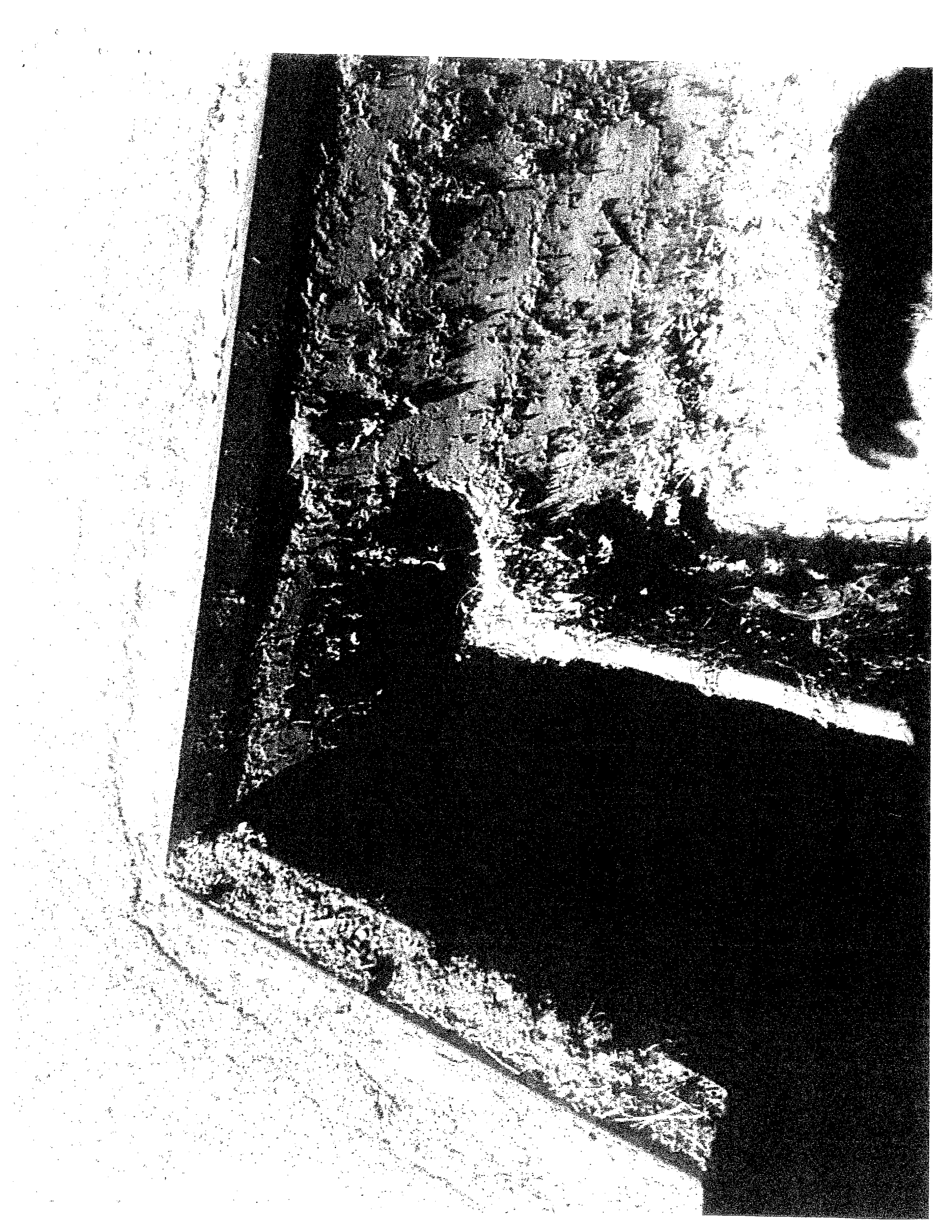




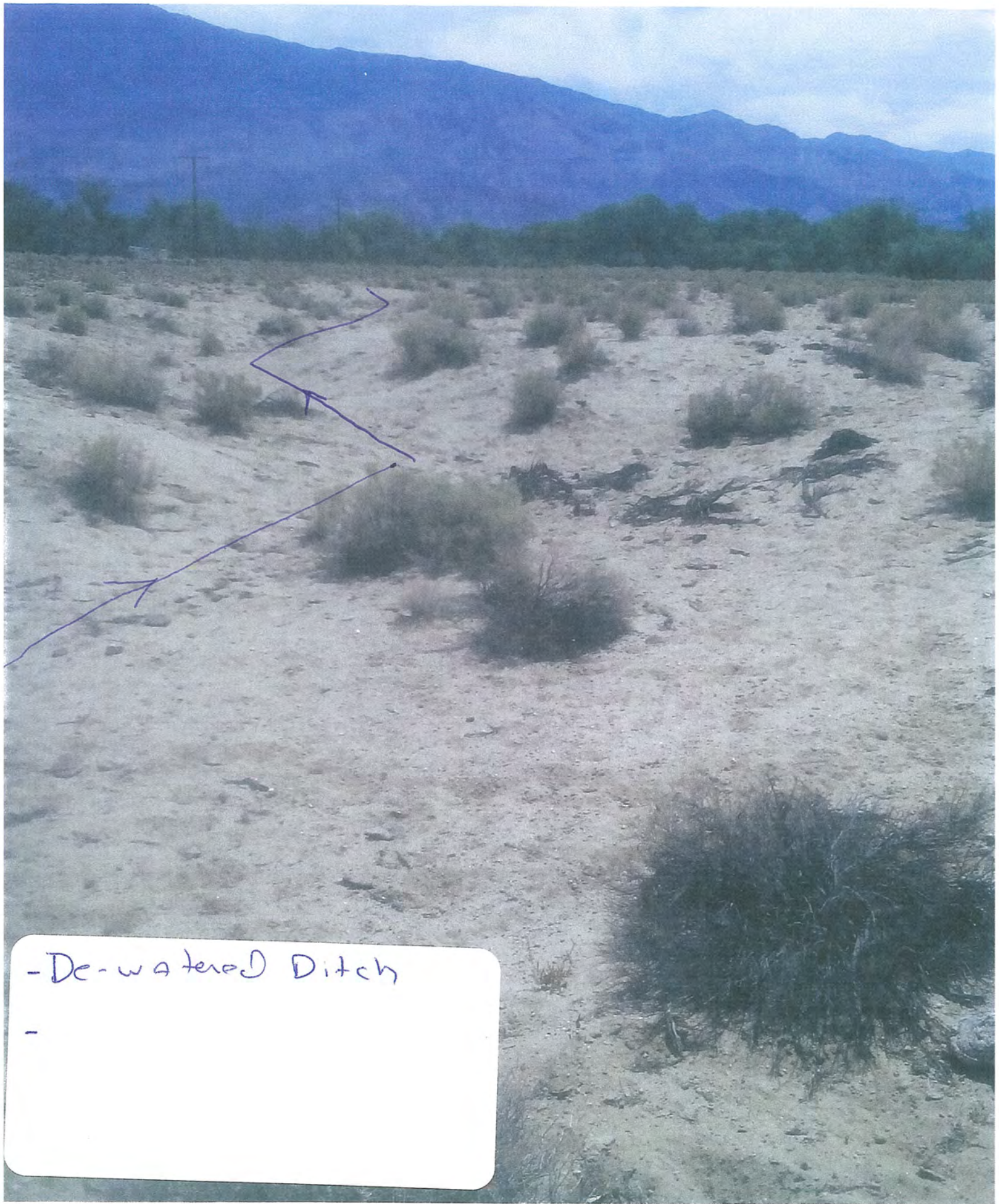












-De-watered Ditch

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**P. O. Box 77  
Bishop, CA 93515  
February 14, 2018**



ATTN: Eduardo Cuevas  
Los Angeles Dept. of Water & Power  
111 North Hope Street. Room 1044  
Los Angeles, CA 90012  
By Email: [Eduardo.Cuevas@ladwp.com](mailto:Eduardo.Cuevas@ladwp.com)  
By Email: [Charles.Holloway@ladwp.com](mailto:Charles.Holloway@ladwp.com)

RE: *Mitigated Negative Declaration for the Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties*

Dear Mr. Cuevas,  
Thank you for the opportunity to comment on the *Mitigated Negative Declaration for the Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties*. The Owens Valley Committee is an organization whose mission is to ensure the environmental health of the Owens Valley, including the protection of water resources.

Below are our comments concerning the *Mitigated Negative Declaration for the Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties*.

- This project, the maintenance of many kinds of waterways and structures in a variety of geographic settings, is vast: “This includes 1,300 miles (mi) of unpaved roads, 450 mi of natural waterways, 84 mi of aqueducts, and 111 mi of man-made ditches and canals with several hundred water diversions.” The project covers two very large California counties and many types of ecosystems. Because of the size of this project, the complexity of the tasks involved, and the potential for affecting sensitive biological resources, a thorough and complete analysis needs to be done with an Environmental Impact Report. 11-1
- Because this project has been ongoing for a number of years, the Environmental Impact Report needs to look retrospectively at the effects of prior years’ waterway maintenance. 11-2

- In support of the preparation of an EIR for this project, a more detailed mapping of “other vegetation” as provided for in Green Book Section 1.D (p.31) is an absolute requirement:

“Certain vegetation of significant environmental value are not shown on the management maps because they are not the dominant species. This vegetation will be identified by the Technical Group for monitoring purposes on overlays to the management maps. Areas of this vegetation include riparian vegetation dependent upon springs and flowing wells, stands of tree willows and cottonwoods, and areas with rare or endangered species. The monitoring sites will be located in areas where there is a potential for impact to such vegetation by groundwater pumping or changes in surface water management practices (although certain areas of rare or endangered species will be monitored, these areas will not be publicly identified on the management maps in the interest of protecting such vegetation).”

Completing this required mapping would allow this information to be included in an EIR, and would insure that future changes in surface water management practice or maintenance of waterways do not negatively affect existing vegetation. Vegetation loss that occurred in prior years from waterway maintenance activities and changes in surface water management should also be analyzed with any existing maps or data. Examples of past actions include changing water supplies for agricultural lands from flood irrigation to sprinklers and abandonment of irrigation ditches, with the concomitant loss of vegetation along the irrigation ditches that are no longer used. A poignant example of this is south of Big Pine where circular sprinklers have replaced irrigation ditches, and full-grown trees and hedgerows have died as a result. It is critical that this mapping by the Technical Group be done as soon as possible to prevent further damage; and it is noted that the mapping was a requirement in 1997 when the 1991 EIR and corollary documents went into effect. During the preparation of the EIR for this project, areas of vegetation loss can be identified, and mitigation be prescribed as provided by the Green Book 1.D (3). This mapping will allow the Department and its workers to avoid areas of concern, and also document locations of sensitive species. This mapping would also allow the Technical Group to monitor for effects of changes in surface water management practices as well as groundwater pumping. Mapping must be completed before further routine maintenance is performed.

11-3



• The mitigation measures as described in the MND are insufficient. When preparing the EIR for this project, in addition to the mitigation measures outlined, there must be a requirement for onsite reviews by a biologist from the Inyo County Water Department to verify compliance before and after the proposed work. The LADWP and Inyo County should review the maps prepared in accordance with the Green Book requirements as detailed above as part of this review process. A complete analysis in an EIR will likely reveal other significant impacts and necessary mitigation.

11-4

• Any areas identified as containing sensitive species of plants or animals should be flagged by LADWP and County biologists and avoided by workers and heavy equipment. Mapping as described above will be a useful tool in conjunction with site visits.

11-5

• Work on diversion structures or any other waterway on Federal lands should require review and approval for each individual activity by the appropriate agency.

11-6

• Of paramount importance is ceasing the practice of excessive deepening of drainage, irrigation, and spring/artesian outflow ditches. This has been occurring in recent years, and constitutes a change in surface water management practice. Excessive deepening of canals or ditches leads to subsurface drainage, lowering the water table, and drying up the soil surface, causing water dependent plants and animals to die. These overly deep ditches are also a hazard to wildlife, livestock, and people, with some ditches in excess of six feet deep. The Mitigated Negative Declaration fails to discuss this practice, nor does it provide mitigation and restoration for previously damaged ditches.

11-7

For all of the above reasons, we believe that this Mitigated Negative Declaration is insufficient, and a full Environmental Impact Report should be done.

11-8

Sincerely,



Mary Roper,  
President, OVC



# Big Pine Paiute Tribe of the Owens Valley

Big Pine Indian Reservation

P.O. Box 700 · 825 South Main Street · Big Pine, Ca 93513

(760) 938-2003 · Fax No. (760) 938-2942 ·

[www.bigpinepaiute.org](http://www.bigpinepaiute.org)

February 15, 2018

Los Angeles Board of Water and Power Commissioners  
Los Angeles Department of Water and Power  
Room 1555-H  
111 North Hope St.  
Los Angeles, CA 90012

Mr. Eduardo Cuevas  
Los Angeles Department of Water and Power  
111 North Hope St. Room 1044  
Los Angeles, CA 90012

Dear Commissioners and Mr. Cuevas:

Subject: Mitigated Negative Declaration for LADWP Routine Maintenance of Waterways

The Tribal Historic Preservation Officer (THPO) of the Big Pine Paiute Tribe of the Owens Valley (Tribe) is submitting comments *against* LADWP Mitigated Negative Declaration (MND) for the Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties to Rose Valley south of Owens Lake.

Consultation, as described in Government Code §6532.4, has not been followed as defined. The Tribe has not had their views considered carefully with our cultural values nor has respect been given to our places that have traditional cultural significance. We have requested a cultural resource survey in which we were told there is none and the cultural survey conducted at the Lower Owens River Project is not proper documentation of cultural resources that can be carried over to define our traditional lands in Big Pine, Fish Springs and Tinnemaha. These lands that are included within this project are rich with our Native American Indian heritage which is embedded in the lands, mountains and waterways of Mono and Inyo Counties.

12-1

The MND does not include our Tribal input. We haven't had proper consultation that includes our Tribal Council Leaders. The Tribe hasn't been able to establish participation to protect cultural resources that could be negatively impacted by the methods to be used by LADWP in the maintenance of the waterways. No discussion was made with the THPO, Tribal Cultural Committee and Elders to engage in much needed dialogue of ethnographic research and cultural resources.

12-2

In January 2016, the THPO was part of a meeting, which included discussions on several projects of LADWP. We were informed that further discussion for the Routine Maintenance of Waterways Project would be later on and we would be notified. We were not notified, nor was there another meeting for proper consultation between the Tribe and LADWP.

12-3

Consultation has not been concluded because it wasn't started. This letter documents the THPO department's disagreement of the Mitigated Negative Declaration for LADWP Routine Maintenance of Waterways and request that this project be halted until proper consultation is conducted; cultural and archaeological resources assessed; traditional plants; and wildlife species habitat properly assessed; and proper respect given to our Tribe to speak for our traditional lands. Mahno.

12-4

Respectfully,

Danelle Gutierrez  
Tribal Historic Preservation Officer



C: Eric Garcetti, Mayor, Los Angeles  
Mitch O'Farrell, Los Angeles City Councilman, 13<sup>th</sup> District  
Nury Martinez, Los Angeles City Councilwoman, 6<sup>th</sup> District  
Richard Harasick, Senior Assistant General Manager, Water, LADWP  
George Kivork, Los Angeles Tribal Liaison  
Nathan Voegeli, Calif. Dept. of Fish and Wildlife Tribal Liaison  
Native American Heritage Commission  
Inyo County Board of Supervisors



**BISHOP PAIUTE TRIBE  
ENVIRONMENTAL MANAGEMENT OFFICE**

**50 Tu Su Lane  
Bishop, CA 93514  
Phone 760-873-3584  
Fax 760-873-4614**

February 15, 2018

Los Angeles Department of Water and Power  
111 North Hope Street, Room 1044  
Los Angeles, CA 90012  
Attn: Mr. Eduardo Cuevas

*Transmitted by US Mail and email*

RE: Notice of Intent to Adopt a Mitigated Negative Declaration for the Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties.

On behalf of the Tribal Environmental Protection Agency of the Bishop Paiute Tribe I am resubmitting comments originally submitted to LADWP on January 14, 2015 regarding LADWP HCP for T&E on City of Los Angeles Land in Owens Valley. Through a cooperative effort led by our Tribe a CA state law has been amended (AB2001, 2016) with a provision to allow private landowners certain protections under the State Safe Harbor Agreement for a California fully protected species (Owens pupfish) where a net conservation benefit can be identified.

The TEPA encourages LADWP as a private landowner with their multiple waterway responsibilities to develop these agreements with state and federal agencies to obtain the protections not previously available for the species, with the goal to allow the fish to co-exist with your ditch management activities, thrive and recover. The TEPA discourages ditch maintenance activities such as ditch straightening or ditch deepening where it observed as having a negative impact on the groundwater table and groundwater dependent vegetation. Several of these areas have been observed adjacent to our reservation. Alternative management techniques should be considered to use water locally to create aquatic habitat and preserve species dependent on water for survival. Thank you.

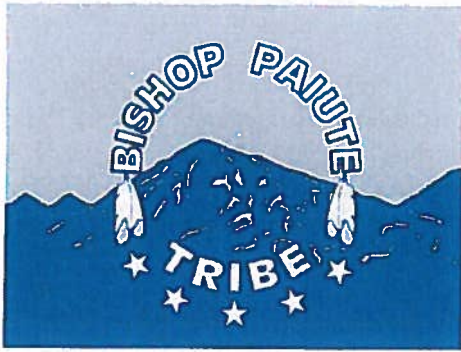
13-1

Sincerely,

Harry Williams  
TEPA Co-chair

CC:  
Honorable Tribal Council, Bishop Paiute Tribe  
Environmental Protection Agency, Bishop Paiute Tribe  
Gloriana Bailey, Administrator, Bishop Paiute Tribe





# BISHOP TRIBAL COUNCIL

January 14, 2015

Kennon Corey  
LADWP HCP  
Palm Springs Fish and Wildlife Service Office  
777 E. Tahquitz Canyon Way, Suite 208  
Palm Springs, CA 92262

**Re: Habitat Conservation Plan and the Recovery Attainability of Threatened and Endangered Species on City of Los Angeles Land in Inyo and Mono Counties (Comments Submitted by mail and email – 1/14/16)**

On behalf of the Bishop Paiute Tribe, thank you for the opportunity to comment on the Los Angeles Department of Water and Power (LADWP) Habitat Conservation Plan (HCP). It is understood that a main purpose of the 1998 MOU that initiated this planning process was for planning effort towards establishing and management of species populations that are threatened, endangered or sensitive. The Tribe is encouraged by LADWP's commitment to make positive changes for all species listed in the plan and encourages LADWP to maximize their effects for species recovery by submit the final adopted HCP plan to the State of California for consideration for adoption under the State's a Natural Community Conservation Plan (NCCP) for the fully protected Owens pupfish and CA sensitive Owen's specked dace and Tui-chub. In conjunction with federal and state safe harbor agreement this would give maximum flexibility to establish conservation areas and manage populations to support their recovery on your lands. It would enable certain populations of the species to be managed and introduced in a way that baselines can be established and maintained to work to reduce the loss of genetic diversity and increase the chance of species recovery.

13-2

The Tribe acting within its limited land base has completed construction of a managed wetland on federal reservation trust lands adjacent to DWP land specifically for management of several existing native species including Owens speckled dace, Owens sucker and Owens tui-chub (hybridized), SW willow flycatcher and several CA sensitive plant species. Central to the project are constructed wetland habitats designed to serve as a conservation area to nurture a population of Owens pupfish as called for in the Owens Aquatic Recovery Plan. Through the Tribe's efforts with the USFWS a Safe Harbor Agreement (July 17, 2014 Federal Register) was drafted that will provide for incidental take authority for the translocation of a population of Owens pupfish to aid in the overall effort to help recover the species. The fish is of cultural importance to the Paiute and the fact that the species is in serious peril of extinction has prompted effort from our tribal government to act within its jurisdiction, on its lands, to make a contribution towards recovery of the species. Unfortunately our efforts to obtain enhancement of survival permits has been placed on hold by the USFWS due to concerns and comments submitted by LADWP (3/25/15) which express concern that the fish, if introduced on tribal lands, may migrate to DWP lands and negatively affect ability to maintain their waterways. It is asserted that there exists no practical

13-3

mechanism under California state law to provide for incidental take under the Fully Protected Species Statute. As the entity proposing this effort the Tribe takes these comments seriously and has refrained from introducing the species while leading an inter-agency effort to design a barrier to prevent off-site migration. We have also initiated efforts to initiate change with state legislators to refine ambiguous language contained in the CDFW state code Sec 5515 regarding the ability to obtain take authorization for efforts to help recovery of the fish.

The intent of the 1997 MOU is clear that the a central purpose is to achieve sufficient recovery of the HCP species to the level that they can be delisted. LADWP has the opportunity to work with local landowners and regulatory authorities to obtain the power and ability to do that, the submittal and adoption of the HCP as a Natural Communities Conservation Plan for and to be able to receive an incidental take authorities from the state.

Thank you,

Sincerely,



Gerald Howard,  
Tribal Chairman

CC: Honorable Tribal Council  
File



13-4



Ceal Klingler  
940 Starlite Dr.  
Bishop, CA 93514  
ceal.klingler@gmail.com

February 10, 2018

Mr. Eduardo Cuevas  
Los Angeles Department of Water and Power  
111 North Hope St., Room 1044  
Los Angeles, California 90012

Dear Mr. Cuevas,

Thank you for the opportunity to comment on the Los Angeles Department of Water and Power’s Initial Study/Mitigated Negative Declaration for Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties (December 2017). My contact information appears above; comments follow.

Sincerely,  
Ceal Klingler

GENERAL COMMENTS

**1. The scope of the project described is large enough that it’s reasonable to acknowledge a potential for significant impacts, cumulative and/or otherwise. The project should be described with an Environmental Impact Report, especially in light of inadequate descriptions of current and/or baseline conditions.**

**A. The project covers an extensive area crossing two different counties.** The project description alone testifies to the size of the affected area: The area addressed “includes 1,300 miles (mi) of unpaved roads, 450 mi of natural waterways, 84 mi of aqueducts, and 111 mi--” [or possibly more, according to Table 1 on p. 2-9]-- “of man-made ditches and canals with several hundred water diversions.” (p. 1-1, IS/MND)

**B. Descriptions of baseline conditions are inadequate or are not available. Without an adequate description of such conditions in the project area and an ongoing mechanism for assessment of changes in baseline conditions, there’s no way to adequately assess the potential for significant impacts, to prevent significant impacts from occurring, or to be certain impacts won’t occur, especially in terms of cumulative impacts.**

**i. The acreage of “other vegetation” in routinely maintained areas adjacent to canals (e.g., see Green Book section I.D.) has not been addressed or assessed in the MND, and there is no assessment in this document of how much such vegetation might be affected by**



14-1



14-2

**dredging operations, deposits of dredge piles directly on such vegetation, introduction of pathways for invasive weeds, or mowing and grading operations** (see photos and comments in section 1C below).



ii. **Although the lengthwise mileage of canals and ditches to be routinely maintained has been estimated in the document, there's no description of average depths, widths, or flow rates of specific canal or ditch systems to be routinely maintained. Without even a ballpark approximation of such figures, there's no way to assess potential significant impacts, to establish when an impact occurs in spite of the project description, or to do anything about it.** For example, project proponents may argue that the project is not planned to affect canal or ditch depths or widths or assert that “deepening of waterways beyond their original capacity is not conducted,” (p. 2-31) but current conditions on the ground indicate that widths and depths of some irrigation canals and ditches have changed and that deepening of waterways beyond their original capacity has already occurred (see section 1C of these comments). Such conditions should be accurately described in the MND (or in an EIR), and mitigations proposed when impacts are significant or potentially significant. If real-world conditions are proposed to be changed rather than maintained by the project, a monitoring and adaptive management plan should be proposed to ensure that decades' worth of maintenance habits can be effectively changed with adequate monitoring for impacts, thresholds that trigger a stop in damaging activities, and mitigation that specifically addresses resulting impacts.

14-3

iii. **There are no monitoring or feedback measures to alert project proponents to changes in hydrology due to routine maintenance activities, no measures to stop impacts to hydrologic function when they occur, and no measures to mitigate potential significant impacts.** Simply asserting that changes won't occur isn't sufficient, particularly given that changes are already occurring. The MND (or an EIR) should include a clear pathway to identify impacts, stop them, and remedy the damage when or if significant damage occurs as a result of long-term maintenance habits.

14-4

C. **The MND's descriptions of BMPs and other practices do not accurately reflect current and previous maintenance practices and conditions in the project area, and there is no feasible plan proposed in the MND to change real-world conditions to the ones described in the MND or vice versa. The project description should be modified to reflect real-world conditions or propose a realistic plan for achieving the conditions described in the MND.**

i. **The MND inaccurately describes effects of “maintenance” dredging on groundwater resources.** The MND states on p. 2-31 that “Maintenance work in waterways ultimately leads to the enhancement of groundwater percolation through the removal of excess sediment. Maintenance returns facilities to their original hydraulic capacity and function; deepening of waterways beyond their original hydraulic capacity is not conducted....Therefore, no impacts to groundwater supplies or groundwater recharge would occur.” All of these assertions are inaccurate with respect to some maintenance activities: **In fact, maintenance work in some**

14-5





**waterways negatively affects groundwater percolation by creating channels so deep that groundwater flows into them. Maintenance dredging and digging sometimes eliminates the hydraulic capacity of function of original facilities. And--perhaps most important--“deepening of waterways beyond their original hydraulic capacity” is conducted, and impacts to groundwater recharge do occur. See following photos. All of these maintenance practices should be described in the MND, but are not.**

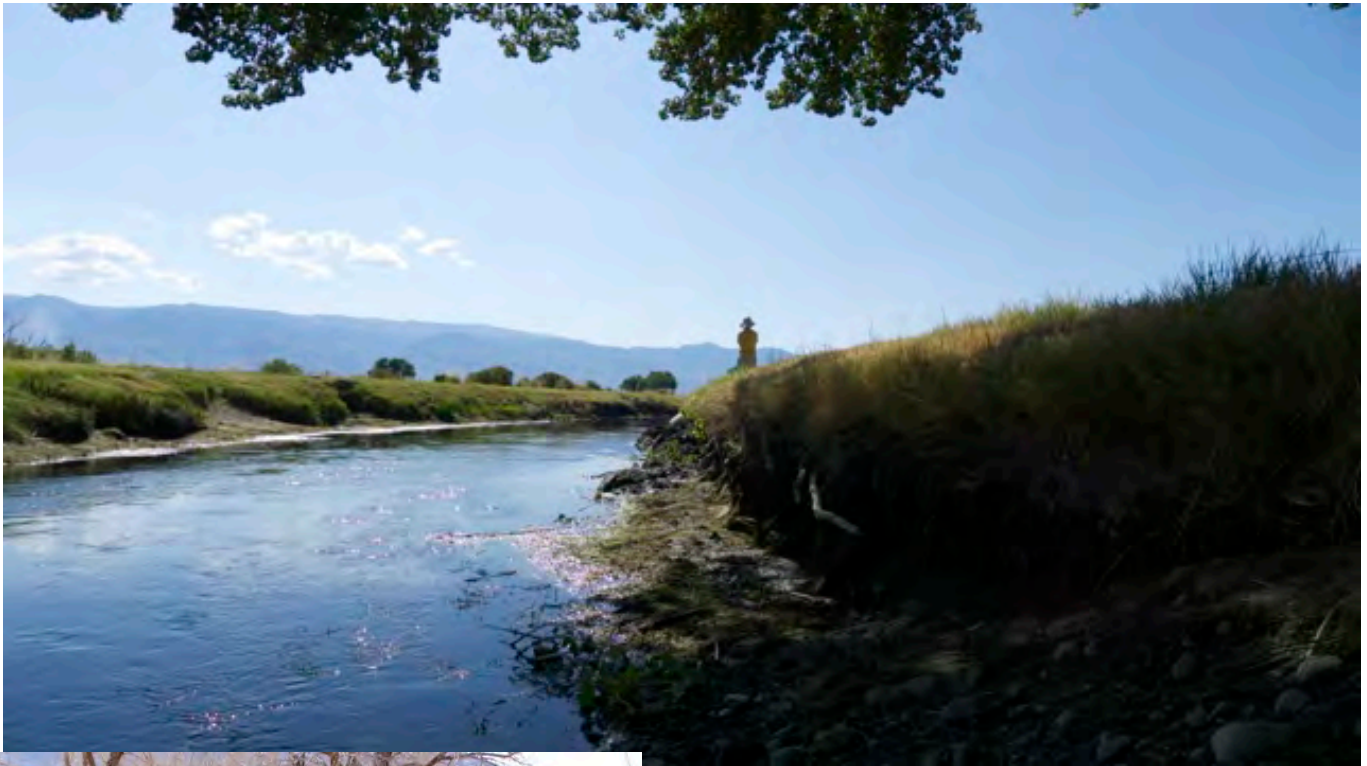
↑  
14-5



Left: This irrigation ditch west of Brockman Lane near Bishop has been dredged to depths well below the rooting zone of adjacent alkali meadow vegetation.  
Above and below: To the north of the ditch, groundwater tables are no longer high enough to sustain a cottonwood bosque, and have not been for some time. Cottonwood stands are dying and falling apart, and invasive tumbleweeds have replaced native grasses.







Above: Dredging and scraping operations in this canal north of Riverside Drive in Bishop have cut well below adjacent alkali meadows, widened the historical canal, and created a channel within the channel. (July 2014)

To far left: This ditch east of South Barlow Lane in Bishop has been deepened enough to capture groundwater flows. In the photo, water flows from the wall of the opposite bank, over the shelf/bank of a previous channel, and down into the current channel. Such practices also lower groundwater tables, affect hydrologic function and impact adjacent groundwater-dependent vegetation.

Below: Groundwater has been flowing from adjacent meadows into this ditch (same as in photo to left) long enough to form bright orange algal mats on a shelf above the main channel. (February 2018.)





To right: This ditch has been deepened far enough below previous irrigation structures to eliminate the function of the previous structures crossing the channel (see cement channels to right of main channel and to left of main channel).



ii. **Sediments are deposited on wetland habitat and on alkali meadows, creating biological barriers and inroads for invasive weeds.** The “Deposit of materials on existing wetlands: Conditions from Streambed Alteration Agreement #1600-2007-0111-R6 Between CDFW and LADWP for Routine Maintenance Work in Waterways in Inyo and Mono Counties” (Appendix D) states that “LADWP shall locate staging and storage areas for its construction equipment, sediment, and other materials outside of waterways and any associated wetland or riparian habitat.” In addition, the IS/MND states on p. 1-14 that “Sediment is not stockpiled on existing riparian and/or wetland habitat. If these conditions cannot be met, sediment is transported off site to an appropriate disposal site.” However, conditions on the ground do not match conditions stipulated in the Streambed Alteration Agreement or described in the MND (see photos below). **The MND (or an EIR) should be revised to accurately reflect real-world conditions; otherwise, potential significant impacts cannot be identified and evaluated. If current conditions do not meet Streambed Alteration Agreements, that should also be noted.**

14-6



Above, upper right, and lower right: soil and rushes have been dredged from a shallow channel and piled on adjacent wet meadows near this seep east of Barlow Lane and south of W. Line St. near Bishop, California (February 2018).





Photo above: New spoil piles initiated on alkali meadow habitat parallel to a canal north of Bishop have been built into a biological barrier that also serves as a nursery for invasive weeds. Although *Distichlis spicata* occasionally recolonizes the spoil piles (see lower right corner of photo above), it is usually buried during the next cycle of dredging. Other native plants are less successful than invasive weeds in colonizing the spoil piles. (Photo taken November 9, 2014.)

Below, spoil piles near a ditch south of West Line St. bury alkali meadow habitat, create a biological barrier for wildlife, and provide habitat and inroads for invasive weeds. (February 2018.)





iii. **Mowing and grading are not accurately described in the MND.** The “Conditions from Streambed Alteration Agreement #1600-2007-0111-R6 Between CDFW and LADWP for Routine Maintenance Work in Waterways in Inyo and Mono Counties” (Appendix D) states that “LADWP shall not disturb or remove vegetation along waterways in excess of what is necessary to accomplish maintenance activities described in this agreement or as otherwise authorized by the Department.” In addition, the IS/MND states that (p. 1-13) “LADWP performs the mowing described in this subsection provided that grading on banks does not occur and that vegetation is cut or mowed down to no lower than 2 inches...” Neither statement accurately represents current operations. See photos and caption below.

14-7



Upper left: Meadow vegetation mowed to dirt level on bank of Bishop Creek canal (photo taken November 9, 2014). Upper right: Vegetation and portions of far bank have been graded and/or chopped away during routine maintenance (photo taken July 17, 2014). Bottom: Meadow scraped and graded away during routine maintenance (photo taken November 9, 2014).



iv. **LADWP has not made “every effort” to avoid native vegetation when using herbicides.**

The “Conditions from Streambed Alteration Agreement #1600-2007-0111-R6 Between CDFW and LADWP for Routine Maintenance Work in Waterways in Inyo and Mono Counties” (Appendix D) states that “LADWP shall make every effort to avoid native vegetation when using herbicides.” (p. 2). However, herbicide crews have not made every effort to avoid native vegetation or even waterways with herbicide application. **These routine operations should be accurately described in the MND or in an EIR.**

14-8



Top left and bottom left: The Material Safety Data Sheet for “Habitat Herbicide” “accidental release measures” contains cautions against discharging the herbicide into surface waters/groundwater; here, herbicide has been discharged into the Owens River and the adjacent bank. Upper right: Herbicide has been liberally applied to an area that hosts narrow-leaved and showy milkweed (*Asclepias fascicularis* and *A. speciosa*)--both habitat for monarch butterflies (*Danaus plexippus*)--and Owens Valley checkerbloom (*Sidalcea covillei*), which is included in the CNPS Inventory of Rare and Endangered Plants list 1B.1 (rare, threatened or endangered in California and elsewhere). Lower right: Fremont cottonwood (*Populus fremontii*) is not typically a host for invasive plants. This method of herbicide application is probably ineffective.



MORE SPECIFIC COMMENTS

SECTION 1

1. Section 1 page 2: Given that climate and weather patterns have changed since 1981, precipitation information for the Mono Basin should be updated with respect to precipitation data during the intervening 37 years. Precipitation data for the Owens Valley should also be updated.

14-9

2. Section 1 page 5: Note that badgers also use areas near the Bishop Creek canal and mesic alkali meadow communities (pers. obs.).

14-10

3. Section 1 page 12: Note that spadefoot toads and chorus frogs also breed in intermittent man-made waterways during above-average water years (pers. obs.).

14-11

4. Section 1 page 13: Please see comments and photos about current mowing practices in 1Ciii above under “GENERAL COMMENTS.”

14-12

5. Section 1 pages 13 and 14: There should be an additional category of maintenance included here to describe regular LADWP dredging operations. For example, removal of sediment along the length of the Bishop Canal does not fit the description of “slushing” (1b, vegetation removal) because more than aquatic vegetation is removed; in fact, significant amounts of silt, other material, and sessile (i.e., immobile, adult-stage) native *Anodonta* mussels are removed from the channel and piled to the sides of the canals, where ravens arrive to pick dying mussels from the spoil piles. Such maintenance activities also do not fit the descriptions of maintenance in “3. Clearing obstructions,” as the banks of the canals and the silt at the bottom of the canals are not blocking flow. Likewise, removal of fill from shallow runnels in wetlands south of West Line Street is not accurately described by any of the maintenance categories in this MND. **An appropriate maintenance category that accurately describes removal of fill material from canals, ditches, or shallow waterways for distances from a hundred feet long up to several miles during a time period that can extend to days or weeks should be included in the MND.**

14-13

6. Section 1 page 17: The document states that “BMPs implemented during maintenance activities will be regularly inspected and maintained, in addition to the regular inspection of equipment for leaks.” However, no inspections are described for current mowing, dredging, and other maintenance practices, which do not appear to match current BMPs (see 1C under “GENERAL COMMENTS”). How will the project proponents monitor and adjust current real-world maintenance practices to match the ones described in the MND? **A clear pathway should be established for monitoring, feedback, and thresholds to trigger specific actions to ensure that maintenance practices on the ground match the ones described in this document. The IS/MND should also be adjusted to describe actual maintenance procedures.**

14-14

7. Section 1 page 18. Given that turbidity, suspended materials, sediment, and other factors change substantially during regular LADWP dredging operations (it is not clear whether these fall under “slushing” or “clearing of obstruction”), a protocol or at least a brief outline should be included in the project description of how these characteristics will be measured during maintenance in order to comply with water quality objectives identified in the Porter-Cologne Water Quality Control Act.

14-15

SECTION 2

1. Section 2 page 1 “Hydrology and water quality” should be marked here as one of the “environmental factors potentially affected.” See photos and comments in 1C under “GENERAL COMMENTS” above. Also, the project may have a significant effect on hydrology and water quality, and therefore an EIR should have been prepared.

14-16

2. Section 2 page 2. Aesthetics. The project should be identified as having the potential to “Substantially degrade the existing visual character or quality of the site and its surroundings.” Although one small heap of sediment might not substantially impact the aesthetic nature of a site,

- a) many miles of scraped and graded-away vegetation,
- b) introduced colonies of highly aggressive invasive ants (now more suited to these highly disturbed sites than previous resident native harvester ants and horned lizards),
- and
- c) a continuous visual and biological barrier of tall, decades-old dredge piles, colonized by substantial tumbleweed thickets and other invasive weeds, and--during maintenance operations--decorated with dead and dying mussels and the inevitable scent of rotting invertebrates

14-17

constitutes a substantial degradation of the aesthetic nature of regularly maintained canals from north of Bishop to Big Pine.

3. Section 2 page 3c) The IS/MND states here that “As discussed above, routine maintenance activities have been ongoing for decades and the work that is conducted would not change the existing visual character or quality of the waterways and their surroundings.” In fact, routine maintenance work has been steadily and cumulatively changing the visual character or and biological quality of the waterways and their surroundings. Please see my comment on Section 2 page 2 immediately above.

14-18

4. Section 2 page 8. Please see photos, captions, and comments in 1C under “GENERAL COMMENTS” above with respect to “b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?” and “c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?”

14-19



Routine maintenance activities are not accurately described in the MND and may have a potentially significant impact in these two categories.



5. Section 2 page 9. The MND states here that “151 miles of waterways are routinely maintained. The 151 miles of maintained waterways assumes that the entire length of canals (Bishop, Big Pine, Ford Rawson, George Collins, Upper and Lower McNally, Blackrock Ditch, and Owens River) are maintained and that 100 feet above and below 1695 structures and culverts is also maintained.” However, Table 1-1 lists a total of 416.6 miles of canals, ditches, and diversions. Does that mean that 265.6 miles of canals, ditches, and diversions are never maintained or that some of them are intermittently maintained? **If some canals, ditches, and diversions not included in the 151 miles are intermittently maintained, such maintenance should be described in the MND, and its effects analyzed, unless that maintenance is covered by other environmental documents. Also, the potential cumulative effects of these and other LADWP operations in Inyo and Mono counties should be addressed.**

14-20

6. Section 2 page 9. There is no estimate here or elsewhere in the MND of surface area or acreage affected by routine maintenance activities. While the length of 151 miles is a good start, the MND should also include approximate average widths, depths, and flows of canals and ditches to be maintained, as well as the approximate acreage of adjacent vegetation that has been, is, and will be affected. Without such figures and a more extensive description of baseline conditions, it’s impossible to gauge the cumulative environmental impacts of maintenance operations.

14-21

7. Section 2 page 12: The document states that “CDFW will be notified at least 5 days prior to conducting work in this area to ensure that tui chub, if extant, are not impacted.” Notification protocols should also specify a delay of activity if CDFW staff are not available or do not have time to assess impacts of proposed activities on tui chub within 5 days of notification.

14-22

8. Section 2 pages 12 to 13. The MND states that “To avoid potential impacts to these native fish species, mitigation measure BIO-3 will be implemented....Additionally, mitigation measures BIO-1 and BIO-12 will further reduce potential impacts on fishes to less than significant levels.” However, BIO-3 simply states that “water quality data will be collected” when maintenance activities are conducted from June to August, but doesn’t specify how these data will be used to reduce impacts. There are no data measures identified to trigger an action. Likewise, waiting for “signs of stress” may be too long to wait. Once fish are showing “signs of stress” significant enough to be seen while maintenance workers are operating heavy equipment, how likely are the fish to recover if chased, captured, and relocated by the measures described? Also, how will the implementation of this mitigation measure be evaluated for effectiveness?

14-23

9. Section 2 page 2-14. Mitigation measures described here for the Sierra Mountain Beaver would not reduce impacts on them. The MND states that “implementation of mitigation measures BIO-1 and BIO-11 will reduce potential impacts to this species to less than

14-24



significant levels.” Please note that measure Bio-11 would only mitigate effects on North American beavers, a different genus and species than Sierra Mountain beavers, which do not build dams across waterways as North American beavers do. Furthermore, Bio-1 is a generic measure that does not specifically apply to or mitigate effects on Sierra Mountain Beavers in the project area. If there are no appropriate mitigation measures that the project proponents can implement to mitigate impacts to a rare species, that should be stated in the project description.

14-24

10. Section 2 p. 15. The MND states that “With implementation of mitigation measures BIO-1 and BIO-4, ongoing routine maintenance activities would not result in direct or cumulatively significant impacts to federally protected wetlands and associated riparian habitat” and that impacts will be “Less than significant with mitigation incorporated.” However, mitigation measure Bio-4 states that a) banks on waterways “shall not be graded,” when in fact banks on waterways are graded (see photos and notes under 1C in “GENERAL COMMENTS”) and that b) vegetation shall be cut to no lower than 2” when in fact vegetation is frequently scraped or graded to below soil level (again, see photos and comments in 1C under “GENERAL COMMENTS”). Nor is Bio-1 regularly implemented with respect to removing vegetation only when necessary or placing spoil piles away from waterways, wetlands, and riparian habitats. And finally, there is no mitigation measure proposed here to avoid dredging ditches below the rooting zone of vegetation and capturing groundwater flow. Without a plan to

14-25

- change current maintenance practices,
- monitor future practices,
- stop noncompliance and resulting impacts, and
- mitigate for any incidental impacts of maintenance,

the measures proposed here would not mitigate “direct or cumulatively significant impacts to federally protected wetlands and associated riparian habitat.” There is therefore high potential for a significant impact to occur.

11. Section 2 page 15. The MND states that “maintenance activities would result in only a temporary loss of habitat value” and that “Since maintenance activities at any one location are temporary, they would not permanently interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors.” However, please note that dredge piles, which border miles of routinely maintained canals, are a long-term and continuously growing landscape feature, that they constitute a biological barrier and impediment to wildlife following corridors or trying to reach or leave water from either side of the dredge piles, and that they constitute a hardened clay cap that eliminates habitat buried beneath. Such losses of habitat value aren’t temporary.

14-26

12. Section 2 page 16. The MND states that “Within the maintenance area, there is a proposed Habitat Conservation Plan for Los Angeles Department of Water and Power’s Operations, Maintenance, and Management Activities on its Land in Mono and Inyo Counties, California....Mitigation measures to be implemented as part of maintenance activities are consistent with measures identified in the proposed Habitat Conservation Plan.” However,

14-27



that is not quite correct. Some maintenance activities are not consistent (see General Comment 1C photos and notes) with the proposed Habitat Conservation Plan goals, e.g.,

a) Habitat Goal 5: "Improve the quality of natural waterways and the hydrologic and geomorphic processes that support them to maintain functional aquatic and riparian communities to benefit covered species and promote native biodiversity."

and

b) Habitat Goal 6: "Maintain, enhance, and create or restore functional pond, spring, and wetland habitats that benefit Covered Species and promote native biodiversity."

14-27

13. General comment applying to Section 2.3.4 (Biological Resources): No mention is made in this section or any other part of the IS/MND of springsnails (genus *Pyrgulopsis*) or of mitigation measures to prevent a significant and permanent impact from maintenance activities to unique springsnail species on LADWP lands. Maintenance activities at the northeast springs of Fish Slough may have extirpated unique spring snails there (Derham Giuliani, pers. comm., August 2010). **The MND (or an EIR) should address the potential significant impacts of maintenance activities on springsnails and other unique or endangered invertebrate species on LADWP lands.**

14-28

14. Section 2, pages 29 and 31. The IS/MND states that maintenance activities don't and won't "Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level" (p. 2-29) and that "Maintenance work in waterways ultimately leads to the enhancement of groundwater percolation through the removal of excess sediment. Maintenance returns facilities to their original hydraulic capacity and function; deepening of waterways beyond their original hydraulic capacity is not conducted.... Therefore, no impacts to groundwater supplies or groundwater recharge would occur." All of these statements are inaccurate with respect to current maintenance activities; see photos and comments in 1C under "GENERAL COMMENTS." Potentially significant impacts may occur and should be described.

14-29

15. Section 2.3.19 MANDATORY FINDINGS OF SIGNIFICANCE. Whether or not routine maintenance activities "are a set of on-going activities," the fact remains that the project described in this IS/MND "has impacts that are individually limited, but cumulatively considerable," both incremental and otherwise, especially "when viewed in connection with the effects of past projects, effects of other current projects, and the effects of probable future projects" conducted by LADWP in Inyo and Mono counties (p. 2-46), and especially when the duration, extent, and undescribed on-the-ground impacts of routine maintenance are considered. It's startling to see that project proponents have deemed cumulative impacts for routine maintenance activities to be less than significant rather than bearing the risk of potentially significant impacts. I urge them to reconsider.

14-30

Mr. Eduardo Cuevas  
 Los Angeles Department of Water and Power  
 111 North Hope St., Room 1044  
 Los Angeles, CA 90012

Dear Mr. Cuevas:

Please find below comments on the Mitigated Negative Declaration for Long Term Routine Maintenance Activities in Inyo and Mono Counties

**Comment 1**

Routine maintenance activities are already resulting in significant soil erosion and loss of topsoil. Therefore DWP's responses to these questions are incorrect:

p. 2-23, Geology and soils:

"Would the project b) Result in substantial soil erosion or the loss of topsoil?"

LADWP answer is "less than significant impact"

p. 2-29 of the MND, Hydrology and Water Quality:

"Would the project c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?"

LADWP answer is "less than significant impact"

In support of my assertion that these answers are incorrect please consider the following set of photos of Symmes Creek, southeast of Independence. The photos were taken between the powerline road and the LA Aqueduct. The site is downstream of one DWP sand trap close to the powerline road, and upstream of another one where the creek empties into the LA Aqueduct. This portion of Symmes Creek is shown on the MND in the Independence Quad and designated as an RMD waterway.

The photos (taken by Daniel Pritchett unless otherwise noted) were taken over a ten year period from 2007 through 2017. If they do not document "substantial soil erosion" and "loss of topsoil" it is hard to imagine what would. There are other sites in Owens Valley with similar erosion problems, but I cited this one because I have photos of it. It is so egregious it is better classified as "crime against nature" than merely "erosion problem."

DWP routine maintenance of this area not only has the potential for creating a significant impact, it already has, hence a full EIR is required, including a mitigation plan for this DWP-created disaster area.



### Photos for Comment 1

Symmes Creek between the power line road and the LA Aqueduct, view north east. Water (when present) flows from the lower left to the center right. The channel is at least 10' deep. The fence post marked with the oval will be shown in subsequent photos.

**Photo #1: 2007-02-21**



In 2013 I attempted to retake photo #1 (above) photo, but was unable to because erosion had completely destroyed the bank where I had stood in 2007. In 2013, the point where I had stood to take the 2007 photo was ~8-10' below the ground surface, down in the channel. The channel itself was at least 5-10' wider than in 2007. The fence post marked with the oval is the same one marked in the 2007 photo above.

**Photo #2: 2013-05-04**





The two fence line photos below are views to the east along the line shown in the previous photos. The fence post marked with the oval in the photos above is the one marked with the oval in the two photos below. The post has been captured by bank erosion. The ground into which it was originally placed has been eroded away by Symmes Creek and the post is now kept upright by barbed wire attached to it.

The gully that is eroding the bank has left the bottom of the fence post (circled) dangling in the air.

**Photo #3: 2013-09-14**



The gully has enlarged. The fence post is literally “blowing in the wind.” Video footage is available upon request.

**Photo #4: 2017-10-22**



The previous photos show erosion rapidly widening the sides of the channel. The following time series show erosion moving upstream. DWP attempted to stop the upstream erosion on Symmes Creek by armoring the channel with concrete. The attempt has failed and the concrete itself is being undercut and in 2017 (see below) large pieces broke off entirely

The circled area shows the concrete armoring which is being undercut by erosion. View upstream.

**Photo #5: 2013-05-04**





In 2016, the concrete armoring was still intact, though there had been obvious erosion on the banks around it. This view is looking south. Photo by Jennifer Little.

**Photo #6: 2016-07-26**



Sometime in 2017 the armoring began to fall into the creek. This photo, looking upstream, shows one piece of concrete dangling from the lip, and another, circled, which has already broken off and fallen into the channel.

**Photo #7: 2017-10-22.**





**Comment 2**

It is an affront to the public and to the intent of CEQA that an agency with such a record of bad faith in Owens Valley may be allowed to whitewash a project of this magnitude with a mitigated negative declaration. I will cite three recent examples of DWP bad faith in Owens Valley:

- 1) In the two fence line photos above (photos #3 &4), the area to the left of the fence line is supposed to be revegetated to mitigate the devastation of the meadow which used to occupy the area (per the EIR to the 1991 Inyo-LA Long Term Water Agreement). In dry years, the area is barren (photo #3.) In wet years the area is a tumbleweed nursery (photo #4). Nevertheless, DWP considers this successful revegetation. This is but one of many “successful” mitigations which are, in fact, ecological disasters. 15-2
- 2) In 1999 DWP agreed to “permanently shut down” well 385 as a mitigation measure for the enormous damage the well had caused. In 2017, after giving the well a new designation and modifying it, DWP unilaterally claimed it was a “new well,” hence the pumping prohibition no longer applied. It attempted to pump the well and even produced a negative declaration which omitted any reference to its agreement to permanently shut the well down. DWP is now being sued by both the Owens Valley Committee and the County of Inyo over this matter. 15-3
- 3) In the EIR to the 1991 LTWA, the Technical Group was tasked with identifying stands of riparian vegetation, and stands of tree willow and cottonwoods so they might be monitored so impacts of water gathering activities avoided. The Technical Group never completed this task. This failure has particular relevance to this MND because many riparian areas and stands of willows and cottonwoods grow in close proximity to RMD waterways and undoubtedly are greatly impacted by DWP “routine maintenance activities.” Had DWP and the Technical Group met its obligation, there would be plenty of data to document the impacts of such management. 15-4

A full EIR should be produced, which identifies all riparian areas and stands of tree willows and cottonwoods and documents their current status and change relative to conditions when baseline data for the Inyo-LA Long Term Water Agreement were gathered in the mid 1980’s. Without such an analysis it is impossible to adequately asses the potential and actual impacts of DWP routine maintenance activities. 15-5

Thank you for considering my comments.

Sincerely,  
Daniel Pritchett  
Bishop, CA



## Lahontan Regional Water Quality Control Board

February 15, 2018

File: Environmental Doc Review  
Inyo and Mono Counties

Charles C. Holloway  
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Los Angeles Department of Water and Power  
111 North Hope Street, Room 1044  
Los Angeles, CA 90012  
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### **Comments on the Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties, Los Angeles Department of Water and Power, State Clearinghouse Number 2017121042**

California Regional Water Quality Control Board, Lahontan Region (Water Board) staff received the Initial Study and Mitigated Negative Declaration (IS/MND) for the above-referenced project (Project) on December 15, 2017. The IS/MND, prepared by the City of Los Angeles Department of Water and Power (LADWP), was submitted in compliance with provisions of the California Environmental Quality Act (CEQA) in order to solicit input on the potential impacts on the environment and ways in which those significant effects are proposed to be avoided or mitigated. Water Board staff, acting as a responsible agency, is providing these comments to specify the scope and content of the environmental information germane to our statutory responsibilities pursuant to CEQA Guidelines, California Code of Regulations (CCR), title 14, section 15096. Based on our review of the environmental document, we find that Project has the potential to result in several potentially significant water quality impacts, none of which were identified in the IS/MND, and all of which require further evaluation. Our comments are outlined below.

#### **Water Board's Authority**

All groundwater and surface waters are waters of the State, and all waters of the State are protected under California law. The responsibility for protection of water quality in the Lahontan Region is assigned to the Lahontan Water Board. The Water Quality Control Plan for the Lahontan Region (Basin Plan) contains policies that the Water Board uses with other laws and regulations to protect the quality of waters of the State in the Region. The Basin Plan can be accessed via the Water Board's web site at [http://www.waterboards.ca.gov/lahontan/water\\_issues/programs/basin\\_plan/references.shtml](http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.shtml). Some waters of the State are also waters of the U.S. The Federal Clean Water Act (CWA) provides additional protection for those waters of the State that are also waters of the U.S.

PETER C. PUMPHREY, CHAIR | PATTY Z. KOUYOUMDJIAN, EXECUTIVE OFFICER

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**Comments on the Environmental Review**

Based on our review of the environmental document, we find that the Project has the potential to result in several potentially significant water quality impacts, none of which were identified in the IS/MND. These potentially significant water quality impacts require further evaluation. For all potential water quality impacts, LADWP must first consider measures or alternatives to avoid the impacts; for all unavoidable impacts, measures must be taken to minimize the significance of the impact and then mitigation must be provided to ensure no loss of beneficial use and no net loss of resource. The measures to be taken to avoid, minimize, and then mitigate all potential water quality impacts should be clearly identified and described in the IS/MND. The following are our specific comments on the proposed Project and environmental review.

16-1

1. **Potentially Significant Hydrology and Water Quality Impacts** – The IS/MND finds that all impacts to hydrology and water quality are “less than significant.” We disagree with these findings. The types of maintenance activities included in the Project description have the potential to significantly impact water quality by exceeding water quality objectives (WQOs) for one or more parameters, by changing water quality thereby leading to secondary adverse impacts on aquatic resources, and by changing the hydrology of the waterways. Appropriate mitigation must be identified in the IS/MND that, when implemented, will reduce these potential impacts to a less than significant level.

16-2

2. **Mitigation Monitoring and Reporting Program** – CEQA Public Resources Code, section 21081.6(a)(1) specifies the following: “The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead agency or a responsible agency, prepare and submit a proposed reporting or monitoring program.”

16-3

Water Board staff requests that LADWP include in the final IS/MND a Mitigation Monitoring and Reporting Program (MMRP) that includes a description of the monitoring and reporting that will occur to ensure that all mitigation measures adopted as part of the IS/MND remain effective throughout the life of the Project.

3. **Beneficial Uses of Waters** – The Basin Plan sets forth water quality standards for surface water and groundwater, which include designated beneficial uses as well as narrative and numerical WQOs which must be maintained or attained to protect those uses. The waterways subject to LADWPs long-term routine maintenance activities are identified in the Basin Plan and assigned various beneficial uses including groundwater recharge (GWR), municipal and agricultural supply (MUN, AGR), freshwater replenishment (FRSH), cold water

16-4

habitat (COLD), warm water habitat (WARM), preservation of biological habitats of special significance (BIOL), rare or endangered species habitat (RARE), wildlife habitat (WILD), spawning (SPWN), recreation (REC-1, REC-2), commercial and sport fishing (COMM), and water quality enhancement (WQE), among others. Implementation of the long-term maintenance activities must not adversely affect a water's designated beneficial use.

4. **Water Quality Objectives** – The maintenance activities included in the Project description have the potential to significantly impact water quality by exceeding WQOs for one or more parameters. The applicable water quality parameters include, but are not limited to: chemical constituents, dissolved oxygen, oil and grease, pH, sediment, temperature, and turbidity. For example, activities that involve removing sediment from waterways or structures, such as the use of pressurized water to clear culverts, can lead to high turbidity and suspended sediment concentrations. Water diversions, if not done properly, could easily result in erosion or siltation and may also result in low dissolved oxygen levels and/or changes in water temperatures. Slushing and other mechanical means of vegetation removal would likely result in increased sediment transport, turbidity, and changes in water temperature. Implementation of the long-term maintenance activities must comply with the following WQOs.

- a. **Chemical constituents** – Waters designated MUN shall not contain concentrations of chemical constituents in excess of the maximum contaminant level (MCL) or secondary MCL basin upon current drinking water standards.
- b. **Dissolved Oxygen** – The dissolved oxygen concentration, as percent saturation, shall not be depressed by more than 10 percent, nor shall the minimum dissolved oxygen concentration be less than 80 percent of saturation. For waters with beneficial uses of COLD, COLD with SPWN, WARM, and WARM with SPWN, the minimum dissolved oxygen concentration shall not be less than that specified in the table below.

<b>Water Quality Criteria for Ambient Dissolved Oxygen Concentration<sup>1,2</sup></b>				
	<b>Beneficial Use Class</b>			
	<b>COLD and SPWN<sup>3</sup></b>	<b>COLD</b>	<b>WARM and SPWN<sup>3</sup></b>	<b>WARM</b>
<b>30 Day Mean</b>	NA <sup>4</sup>	6.5	NA	5.5
<b>7 Day Mean</b>	9.5 (6.5)	NA	6.0	NA
<b>7 Day Mean Minimum</b>	NA	5.0	NA	4.0
<b>1 Day Minimum<sup>5,6</sup></b>	8.0 (5.0)	4.0	5.0	3.0

1 Values are in milligrams per liter (mg/L).  
 2 These are water column concentrations recommended to achieve the required intergravel dissolved oxygen concentrations shown in parentheses. For species that have early life stages exposed directly to the water column (SPWN), the figures in parentheses apply.  
 3 Includes all embryonic and larval stages and all juvenile forms to 30-days following hatching (SPWN).  
 4 NA (Not Applicable).  
 5 For highly manipulatable discharges, further restrictions apply.  
 6 All minima should be considered as instantaneous concentrations to be achieved at all times.

16-5



- c. **Oil and Grease** – Waters shall not contain oils, greases, waxes or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect the water for beneficial uses.
- d. **pH** – In fresh waters with designated beneficial uses of COLD, changes in normal ambient pH levels shall not exceed 0.5 pH units.
- e. **Sediment** – The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect the water for beneficial uses.
- f. **Temperature** – For waters designated COLD, the temperature shall not be altered.
- g. **Turbidity** – Waters shall be free of changes in turbidity that cause nuisance or adversely affect the water for beneficial uses. Increases in turbidity shall not exceed natural levels by more than 10 percent.

16-5

5. **Water Quality Monitoring** – To ensure that WQOs are being met throughout the life of the Project (see Comment No. 4), the IS/MND must identify a mitigation measure for water quality monitoring that includes the following details: (1) who will be conducting the monitoring and when; (2) criteria for establishing water quality monitoring locations; (3) the water quality parameters to be monitored and methods for monitoring; (4) WQOs and thresholds for the specified parameters which will be used to determine whether adverse water quality impacts are occurring or are likely to occur near the work site; and (5) what criteria will be used to determine whether additional actions are necessary to protect water quality in or near the work site. LADWP staff will need to be properly trained in how to interpret monitoring data collected at the work site and how to determine if water quality impacts are occurring or are likely to occur at the work site. All required training should be adequately described in a revised mitigation measure BIO-9.

16-6

6. **Best Management Practices (Section 1.7)** – Though not stated explicitly, the intent of the best management practices (BMPs) discussed in this section is to prevent or reduce potentially significant hydrology and water quality impacts to a less than significant level. Therefore, by definition, these BMPs are mitigation measures and should be identified in the IS/MND as such.

The discussion of BMPs in this section is not sufficiently detailed for Water Board staff to assess their effectiveness at preventing environmental impacts for the various activities and diverse locations where waterway maintenance will occur. Only three short paragraphs are included along with the list of BMPs in Appendix E. We request that LADWP develop a table that identifies, for each proposed activity, the specific BMP or suite of BMPs that may be implemented. While not all BMPs for the same activity will be applicable at all locations, the table would

16-7

provide a more detailed approach to describe the actions expected to occur to mitigate for potential impacts. The table should be accompanied by a matrix that describes how decisions will be made regarding which BMPs to use in any given circumstance. The final IS/MND should identify the resources available to LADWP staff (1) to aid them in selecting the appropriate BMP for any activity or location and (2) to properly install and maintain any given BMP.



- 7. **Biological Resources (Section 2.3.4)** – The IS/MND identifies the potential for significant impacts to biological resources, particularly to aquatic species and their habitats due to degraded water quality during and following maintenance activities. The IS/MND includes mitigation measures to reduce the significance of these biological impacts, yet the IS/MND identifies **not one** mitigation measure to reduce the significance of the water quality impacts. The IS/MND appears to ignore the primary cause of many of the potential biological impacts: short-term and long-term degradation of water quality during and following maintenance activities.

16-8

We request that the IS/MND identify and discuss which biological impacts are secondary impacts that are dependent upon and directly related to adverse water quality impacts. LADWP must incorporate into the IS/MND a suite of mitigation measures to reduce the significance of water quality impacts and thereby avoid and minimize potential impacts to biological resources.



- 8. **Mandatory Findings of Significance (Section 2.3.19)** – The discussion regarding cumulative impacts misstates some of the regulatory history related to LADWP's maintenance activities, particularly the fact that these maintenance activities have not been previously analyzed pursuant to CEQA. While LADWP's maintenance activities have been occurring for a long time, this does not mean that these actions, together with other activities in the Project area, have not or will not result in cumulative impacts. A more thorough discussion is needed that considers other activities in the Project area and the potential for cumulative impacts to occur especially considering the extended period over which LADWP has undertaken maintenance activities in the waterways. The analysis should consider the cumulative effect of all current and future maintenance activities within the Owens and Mono watersheds and evaluate, at minimum, the potential impacts to groundwater recharge due to deepening of man-made and natural waterways, changes in the hydrology of the watershed as a result of surface water diversions and potential flooding implications, and habitat connectivity and fragmentation. The cumulative impacts analysis should identify both regional and Project-specific mitigation measures that, when implemented, will reduce potential impacts to a less than significant level.

16-9

- 9. **Impaired Waterbodies, Page 2-30 (Section 2.3.9)** – The discussion on water quality recognizes that some waterways in the Owens and Mono watersheds are classified as impaired waters under CWA Section 303(d). Please revise this section of the IS/MND to identify all waterways subject to LADWP maintenance activities that are included on the most recent CWA Section 303(d) list of

16-10





impaired waters and the listed impairments for each water. Also include discussion of whether LADWP's activities could lead to any discharge to the impaired waterways that would exacerbate the impaired water quality condition at those locations. The most recent CWA Section 303(d) list of impaired waterbodies can be found at the following website:

[https://www.waterboards.ca.gov/lahontan/water\\_issues/programs/tmdl/303d\\_305b/2012/docs/apxh\\_proposed.shtml](https://www.waterboards.ca.gov/lahontan/water_issues/programs/tmdl/303d_305b/2012/docs/apxh_proposed.shtml)



10. **Waterway Maintenance Activities (Section 1.6)** – The Project description covers the types of activities typically associated with waterway maintenance and describes primarily physical solutions to reducing vegetation in LADWP's waterways. However, Section 2.3.8, Hazards and Hazardous Materials, and mitigation measure BIO-8 both reference the use of herbicides for the control of invasive vegetation in and along waterways. More details should be provided in the Project description regarding the use of herbicides near waterways that include, at minimum, the methods used for applying herbicides and the areal extent of those applications. The mitigation measures to be taken to assure that herbicides do not enter surface water or otherwise impact non-targeted vegetation and other species should be clearly identified in the IS/MND.

16-11

To establish baseline, the Project description should also provide estimates for the distance upstream and downstream of spillgates and culverts from which sediment or vegetation is typically removed to maintain these types of structures.

16-12

11. **Biological Resources, Question (c) (Section 2.3.4)** – The explanation regarding potential impacts to wetlands acknowledges that the Project area includes banks and riparian zones along waterways that are subject to jurisdiction by state and/or federal regulatory agencies. The discussion for this checklist item should acknowledge the need to consult with the United States Army Corps of Engineers (USACE) and the Water Board to determine whether the long-term maintenance activities require the issuance of CWA, section 404 permits and associated CWA, section 401 water quality certifications. These permits, if needed, would specify required protective measures to avoid or reduce impacts and may also require compensatory mitigation for impacts to all jurisdictional waters.

16-13

12. **Biological Resources, Question (e) (Section 2.3.4)** – The explanation for the "no impact" determination mistakenly claims that there are no local policies that address the protection of biological resources in the Project area. In fact, both the Inyo County General Plan and the Mono County General Plan contain policies that highlight the protection of biological resources, wildlife habitat, and associated water resources in their respective Conservation and Open Space Elements. This section should be revised to acknowledge the existence of these policies and address how the Project is consistent with and does not conflict with these local policies.

16-14

13. **Biological Resources, Mitigation Measure BIO-1 (Section 2.3.4)** – Mitigation measure BIO-1 addresses various approaches to reduce impacts to biological communities, including pre-construction site visits. The IS/MND should be clear on the criteria that will be used to determine whether a pre-construction site visit is warranted for a given site. Additionally, the IS/MND should be clear on the criteria that will be used to determine how maintenance activities will be limited to the “smallest footprint” with respect to this mitigation measure.

16-15

14. **Biological Resources, Mitigation Measure BIO-3 (Section 2.3.4)** – Mitigation measure BIO-3 states that work will be scheduled to avoid conducting maintenance activities from March 15 to July 1 so as not to impact trout spawning. The discussion earlier in this section suggests that BIO-3 is specific to protect Lahontan Cutthroat Trout and limited only to the tributaries of Grant Lake and Crowley Lake. Please note that trout other than Lahontan Cutthroat Trout occur in many of the streams and waterways subject to LADWP’s maintenance activities (Appendix B). In fact, portions of three of those streams are designated as “Wild Trout Waters” by the California Fish and Game Commission<sup>1</sup>, specifically Cottonwood Creek, Hot Creek, and Lower Owens River below Pleasant Valley Dam. Please provide explanation for why only the tributaries to Grant Lake and Crowley Lake are called out for the protection of trout populations and how LADWP will mitigate impacts to spawning trout in other waterways throughout the Project area.

16-16

Mitigation measure BIO-3 also states that water quality data will be collected if work is conducted from June to August in waterways where Owens Speckled Dace are known to occur. Please revise mitigation measure BIO-3 to include more details regarding (1) the type of water quality data that will be collected, (2) how water quality data will be collected and by whom, (3) what threshold values will be used to determine whether changes in water quality may adversely affect fish in the vicinity of the work site, and (4) what criteria will be used to determine whether additional actions are necessary to protect the aquatic resource. LADWP staff will need to be properly trained in how to interpret water quality data collected at the work site and how to determine if aquatic species near the work site are showing signs of stress. In addition, all required training should be adequately described in a revised mitigation measure BIO-9.

16-17

15. **Biological Resources, Mitigation Measure BIO-8 (Section 2.3.4)** – Mitigation measure BIO-8 addresses actions that will be taken to avoid the spread of invasive species. Additional actions should be identified including the use of certified weed-free straw or mulch for erosion control and avoid the siting of staging areas in locations that are weed-infested. Please revise mitigation measure BIO-8 to include these and other actions that LADWP can take to avoid spreading both invasive plant and animal species.

16-18

<sup>1</sup> <https://www.wildlife.ca.gov/Fishing/Inland/Trout-Waters>



Mitigation measure BIO-8 also identifies the use of herbicides/pesticides to treat invasive plant species. The Basin Plan contains a prohibition against the discharge of pesticides to surface water and groundwater. However, exemption criteria has been established that, if met and appropriate documentation is provided, can allow the use of aquatic pesticides under limited circumstances. Specifically, an exemption to the pesticide prohibition could be granted when the pesticide is not applied directly to surface waters and if adequate documentation is provided regarding how potential impacts to surrounding vegetation and surface water quality will be prevented and mitigated. We recommend that mitigation measure BIO-8 be revised to include (1) the actions that will be taken to reduce potential impacts to plants and animals near the herbicide treatment area, (2) the actions that will be taken to assure that transporting and preparing herbicides for treatment events will not result in accidental spills or inadvertent releases to the environment, and (3) the identification and descriptions of any water quality or treatment effectiveness monitoring that will occur in association with herbicide treatment events.

16-19

**16. Biological Resources, Mitigation Measure BIO-11 (Section 2.3.4)** – Mitigation measure BIO-11 states that water quality monitoring will be done during beaver dam removal, and work will be halted if water quality is substantially reduced. Releasing water impounded behind beaver dams may result in low dissolved oxygen conditions downstream. Please revise mitigation measure BIO-11 to include the following additional details: (1) the type of water quality data that will be collected; (2) how water quality data will be collected and by whom; (3) what threshold values will be used to determine whether changes in water quality impacts may adversely affect aquatic resources in the vicinity of the work site; (4) what criteria will be used to determine whether additional actions are necessary to protect the aquatic resource; and (5) a list of adaptive management strategies that will be used to help identify what additional actions could be taken to protect the aquatic resource. LADWP staff will need to be properly trained in how to interpret water quality data collected at the work site and how to determine if aquatic species near the work site are showing signs of stress. Again, all required training should be adequately described in a revised mitigation measure BIO-9.

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Mitigation measure BIO-11 also states that beaver dams may be removed if they are inhibiting the development of diverse vegetation types within specific waterways. Please describe the criteria that LADWP staff will use to determine whether the development of diverse vegetation types is being inhibited by a beaver dam at a given site.

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**17. Biological Resources, Mitigation Measure BIO-12 (Section 2.3.4)** – Mitigation measure BIO-12 addresses the need to divert water around a work area but provides no details regarding monitoring of aquatic resources near the work site. We recommend that mitigation measure BIO-12 be revised to include monitoring to ensure that aquatic resources near the work site are not adversely affected by the diversion. The following details should be provided: (1) who will be

16-22

conducting the monitoring and when; (2) what criteria will be used to determine stress in or adverse impacts to aquatic resources near the work site; and (3) what criteria will be used to determine whether additional actions are necessary to protect the aquatic resource. LADWP staff will need to be properly trained in how to interpret monitoring data collected at the work site and how to determine if aquatic species near the work site are showing signs of stress. All required training should be adequately described in a revised mitigation measure BIO-9.

**18. Federal Endangered Species Act/California Endangered Species Act (Section 1.8)** – This section discusses both the Federal Endangered Species Act and the California Endangered Species Act and the potential need to acquire incidental take permits under one or both of these laws. The discussion goes on to reference that state and/or federally listed species are known to exist or have existed in areas adjacent to or within waterways that are subject to the long-term maintenance activities. It is not clear from the discussion whether LADWP has needed to acquire either a state or federal take permit for any of its maintenance activities in the past or expects to need one in the future for any listed species in the area. Please clarify.

16-23

**19. Hazards and Hazardous Materials, Question (b) (Section 2.3.8)** – Due to the proposed use of herbicides for the removal of invasive vegetation and the proposed use of heavy machinery in or near waterways, potentially significant impacts to the environment could occur due to accidental release of hazardous substances. This section should be revised to include a more thorough discussion of the measures LADWP will take to prevent discharges of hazardous substances to the environment from occurring, such as: limiting the quantity of herbicides transported to the field; routine vehicle inspections and removing equipment from service when maintenance is needed; staff training on spill response procedures; and requirements for spill containment and cleanup supplies at the work sites.

16-24

**20. Biological Resources Report, Special Status Species (Appendix C)** – While it is helpful to display in Appendix A the waterways in each quad map for which special-status species occurrences are identified in the California Natural Diversity Database, it is difficult to interpret these maps since the actual species names are not provided either in the maps or elsewhere in the document. While a table identifying the species that could occur in the Project area is included in Appendix C, the table does not identify which waterways have current or historical occurrences of the listed species. Please revise the table in Appendix C to include the specific waterways and associated buffer regions for each special status species. This information is necessary for Water Board staff to assess which waterways may need additional protection to avoid impacts to RARE and WILD beneficial uses.

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**21. Sections 401 and 404 of the Clean Water Act (Section 1.8)** – This section should acknowledge those portions of the waterways in the Project area may be subject to USACE jurisdiction and the fact that activities at those locations may

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require CWA, section 404 permits and associated CWA, section 401 water quality certification. The IS/MND should address any consultation that has or will take place to determine the need for USACE permits for maintenance activities within the Project area.



22. **Project Description (Section 1)** – Please revise the referenced maps to include appropriate map legends.

16-27

**Potential Permitting Requirements**

Several activities implemented as part of the Project have the potential to impact waters of the State and, therefore, may require permits issued by either the State Water Resources Control Board (State Water Board) or Lahontan Water Board. The required permits may include the following.



23. Streambed alteration and/or discharge of fill material to a surface water may require a CWA, section 401 water quality certification for impacts to federal waters (waters of the U.S.), or dredge and fill Waste Discharge Requirements for impacts to non-federal waters, both issued by the Lahontan Water Board.

All unavoidable permanent impacts to waters of the State must be mitigated to ensure no net loss of beneficial use and wetland function and value. Water Board staff coordinate mitigation requirements with staff from federal and other state regulatory agencies. In determining appropriate mitigation ratios for impacts to waters of the State, we consider Basin Plan requirements (minimum 1.5 to 1 mitigation ratio for impacts to wetlands) and utilize the most current version of *12501-SPD Regulatory Program Standard Operating Procedure for Determination of Mitigation Ratios*, published December 2012 by the US Army Corps of Engineers, South Pacific Division.

16-28

24. Land disturbance of more than 1 acre may require a CWA, section 402(p) storm water permit, including a *National Pollutant Discharge Elimination System (NPDES) General Construction Storm Water Permit*, Water Quality Order 2009-0009-DWQ, obtained from the State Water Board, or individual storm water permit obtained from the Lahontan Water Board.

25. The application of aquatic pesticides may be subject to discharge and monitoring requirements under the *Statewide NPDES General Permit for Discharges of Aquatic Pesticides to Waters of the United States*, Water Quality Order 2013-0002-DWQ. In order to be eligible for enrollment under this General Permit in the Lahontan Region, a discharger must request a prohibition exemption from the Lahontan Water Board and the Lahontan Water Board must specifically grant an exemption for the use of algaecides or aquatic herbicides.

26. Activities involving timber harvest and vegetation management may require a *Conditional Waiver of Waste Discharge Requirements for Waste Discharges Resulting from Timber Harvest and Vegetation Management Activities in the*



*Lahontan Region*, Board Order No, R6T-2014-0030, issued by the Lahontan Water Board.

We request that the IS/MND recognize the potential permits that may be required, as outlined above, and identify the specific activities that may trigger these permitting actions in the appropriate sections of the environmental document. Information regarding these permits, including application forms, can be downloaded from our web site at <http://www.waterboards.ca.gov/lahontan/>. Early consultation with Water Board staff regarding potential permitting is recommended.

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Thank you for the opportunity to comment on the IS/MND. If you have any questions regarding this letter, please contact me at (760) 241-7404 ([patrice.copeland@waterboard.ca.gov](mailto:patrice.copeland@waterboard.ca.gov)) or Jan Zimmerman, Senior Engineering Geologist, at (760) 241-7376 ([jan.zimmerman@waterboards.ca.gov](mailto:jan.zimmerman@waterboards.ca.gov)). Please send all future correspondence regarding this Project to the Water Board's email address at [Lahontan@waterboards.ca.gov](mailto:Lahontan@waterboards.ca.gov) and be sure to include the State Clearinghouse No. and Project name in the subject line.



Patrice Copeland, PG  
Supervising Engineering Geologist

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February 15, 2018

Mr. Eduardo Cuevas  
Los Angeles Department of Water and Power  
111 North Hope Street, Room 1044  
Los Angeles, CA 90012

*Submitted via email*

Subject: Initial Study/Mitigated Negative Declaration for the Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties

Dear Mr. Cuevas:

The Mono Lake Committee (MLC) is submitting the following comments on the Initial Study Mitigated Negative Declaration (MND) for the Los Angeles Department of Water and Power's (LADWP) Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono counties.

LADWP is pursuing the MND in an effort to support the acquisition of permits necessary for the continuation of long-term waterway maintenance activities related to its facilities. The purpose of the MND as we understand it is to streamline permitting with California Department of Fish & Wildlife (CDFW) and Lahontan Regional Water Quality Control Board (Lahontan) for routine maintenance associated with LADWP's Los Angeles Aqueduct facilities located in waterways in Inyo and Mono counties.

Overall comments

MLC recommends that the MND not be adopted as currently written and that LADWP revise the MND. The current MND lists potential impacts to waterways and related maintenance activities, but it needs to be more specific, and activities need to be associated with each individual waterway. Given the scope of LADWP's operations in Inyo and Mono counties, detailed documentation and specific definitions are critical for the MND to be useful to the permitting agencies. The current MND lacks sufficient detail in the following areas: specific maintenance activities, exact geographic boundaries of areas where routine maintenance takes place, and impacts to sensitive plants and wildlife.

MLC also recommends adding a section that outlines, by waterway, the specific location of LADWP facilities and the associated geographic boundary within which the routine maintenance activities would take place, a list of probable maintenance activities that will occur at each location (including specific reaches), the specific time interval (such as annually, bi-monthly, etc.) as well as a list of sensitive plants and wildlife associated with each location. The addition of this section would provide the clarity necessary for the agencies, interested parties, and the public to have a clear understanding of what actions will happen where, and approximately when.

actions will happen where, and approximately when.

MLC is also concerned that the MND does not address the numerous situations in the Mono Basin where the proposed RMAs are preempted by the terms of the California State Water Resources Control Board (SWRCB) Decision 1631, subsequent SWRCB Orders, requirements regarding stream restoration activities, and other operational requirements, or the 2013 Mono Basin Stream Restoration Agreement. MLC believes the MND can be improved to address this issue through implementation of the above recommendation of geographical listing of LADWP facilities and identification of RMAs appropriate for these specific sites.

17-2

MLC is more than willing to help LADWP with components of the MND, especially those that relate to the Mono Basin.

Specific comments

MLC has reviewed the MND in detail and has the following concerns, questions, and clarifications—paying close attention to the specific Mono Basin waterways delineated for routine maintenance. MLC has also identified a number of inconsistencies and discrepancies that need to be addressed. MLC defers to CDFW and Lahontan expertise and authority related to the larger MND review. CDFW and Lahontan assessment and final comments should take precedence if there are any conflicts with our comments.

17-3

1. The acronym listing should include “RMA.”

17-4

2. The broad definition of “routine” is problematic as activities that might be routine on a constructed ditch are far from routine on a natural waterway. Routine maintenance is not adequately defined for the purposes of this document. For agency permitting, it is important that LADWP, CDFW, and Lahontan all have a clear and precise definition of what constitutes “routine maintenance.” As it stands, the term “routine” is problematic in that the routine maintenance list includes actions that are not routine, and would instead be associated with extraordinary events such as extreme high runoff flows or extended drought.

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3. Regarding Lahontan Cutthroat Trout (LCT), a protected species, Appendix C Biological Resources Report for Routine Maintenance on Waterways in Inyo and Mono counties states “the wild population stocked for recreational purposes has a medium potential to be impacted during the spring spawning season within some tributaries into Crowley Lake as well as one small area between Reversed Creek and Grant Lake where project activities are conducted within a flume and forebay” (p. 26). The MND needs to describe how these areas will or can be impacted, and offer additional mitigation measures. Appendix C also states: “In the Mono Basin there are two strains of LCT: one is the federally threatened species (recovery species) with recovery goals for downlisting; the other is a non-threatened wild strain stocked for recreational purposes. The recovery strain of LCT are present in the upper reaches of O’Harrel Canyon Creek at elevations much higher upstream than routine maintenance activities occur for the project. The wild stocked strain is present in the June Lake Loop (between Reversed Creek and Grant Lake)” (p. 26). Correction: O’Harrel Creek is not in the Mono Basin.

17-6

4. LADWP’s “proposed *Habitat Conservation Plan for Los Angeles Department of Water and Power’s Operations, maintenance and Management Activities on Its Land in Mono and Inyo Counties, California* has been finalized but not adopted” (p. 2–16). What is the process for adoption? Will there be a review period and opportunity for public comment? This information should be clearly defined in the MND. What assurances are there that the MND is consistent with the Habitat Conservation Plan?

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5. Mono Gate One Return Ditch (MGORD) is mapped but not labeled as an RMA Waterway in Appendix A and is not listed in the Master Waterway List, and thus, it is not classified. CDFW has treated the MGORD as an extension of Rush Creek and has managed it that way for fishing regulations purposes. The MGORD classification should be identified and consistent between the two agencies. 17-8

Maintenance activities

1. Regarding “Clearing Obstructions” (p. 1–14): MLC strongly supports pre-consultation with CDFW prior to removing obstructions in natural waterways. Whenever possible, obstructions in natural waterways should be left intact so that habitat and geomorphic benefits of the obstructions are not lost. Under the State Water Board-ordered stream restoration program in the Mono Basin, large woody debris is to be inserted into stream channels on an opportunistic basis in order to create additional habitat. This should be noted in the MND and adhered to in the Mono Basin. Additionally, routine removal of beaver dams should not be allowed. In situations where there are adverse impacts, CDFW should be consulted and specific permission requested. 17-9
2. Regarding “Stockpiles” (p. 1–14): In the Mono Basin, under the State Water Board-ordered stream restoration program on Lee Vining, Parker, and Walker creeks, LADWP is required to pass sediment downstream of its dams. This sediment passage is contrary to the stockpiling procedures discussed on p. 1–14. In the Mono Basin, sediment removed from ponds upstream of diversion dams should not be stockpiled but passed downstream during peak spring runoff. This exception should be noted in the document everywhere the stockpiling provisions are discussed (e.g. p. 1–15 Intake and Diversion Structures, p. 2–17 BIO-1). 17-10
3. Regarding “Replacement of Existing Facilities” (p. 1–16): Any time significant changes in habitat are expected to result from a replacement, CDFW should be consulted (e.g. MGORD rebuild). MLC recommends that LADWP follow CDFW’s criteria for which projects fall under this RMA—a large size project (e.g. dam replacement) or non-routine action will have impacts not addressed by this RMA. 17-11
4. The application of RMAs for routine maintenance of man-made waterways is not appropriate for natural waterways. Natural waterways are very different from DWP-operated man-made waterways, where RMAs for routine maintenance may be appropriate. Blanket permission should not be given for these actions and coordination with DFW for activities should continue. 17-12
5. Regarding “Routine Maintenance Work Conducted” (p. 1–12): Maintenance activities should always be done with the least invasive method possible, especially in sensitive areas where access is limited. 17-13
6. Does the “Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties” document eliminate the development of annual maintenance plans? Will annual maintenance plans still be developed and available for review? 17-14
7. Is there a Waterways maintenance procedure manual (or document of similar purpose) available for review? Will this document be incorporated into a Waterways procedure manual? 17-15
8. Sierra Nevada Mountain Beaver is mentioned on p. 2–11, p. 2–14 and in Appendix C (p. 13, p. 35, and p. 40). Conclusions are that Mountain Beaver are 1) uncommon, and 2) that they burrow along fringes of riparian and upland habitats so stream maintenance work should not impact them. Other agencies such as CalTrans typically adopt more stringent requirements for the 17-16

protection of this rare species. Mountain Beaver exist in the Mono Basin yet there is no mention of that in the MND.



9. Error on Appendix C Biological Resources Report for Routine Maintenance on Waterways in Inyo and Mono Countries: “Rainbow Trout are not a special status species. However, there will be ancillary benefits of avoiding work during the bird nesting season” (p. 26). The reference should be corrected to trout spawning season, not bird nesting season.

17-17

#### Best Management Practices (BMP)

1. Page 1–17 states “the selection of the best BMPs will be made on a case-by-case basis.” This should be more specific, such as “all applicable BMPs will be followed.”

17-18

#### Impact analysis

1. Section 2.3.4 Biological Resources of the Environmental Analysis defines the project area on p. 2–9 and states that 151 miles of the total 1,363 miles of waterways are routinely maintained. It is unclear from the discussion if the analysis of species occurrence applies to only that 151 miles, and if so, how the less-routinely maintained waterways would be treated or analyzed for impacts under the “potential for impacts” categories (p. 7 of Appendix C). The areas covered should be clearly shown on the maps in Appendix A.

17-19

#### Mitigation measures

1. Page 2–13: “To minimize impacts to the recreational fishery, mitigation measure BIO-10 will be implemented. In areas where Brown Trout could conflict with native sensitive fishes, only mitigation measure BIO-3 will be implemented which may enhance the native fish assemblage.” BIO-3 (p. 2–17) says no work March 15–July 1. BIO-10 (p. 2–18) says no work in fall/early winter but only in areas identified in coordination with CDFW, where there is known fishing pressure, and where “habitat conditions support catchable Brown Trout in the 2–3 pound range.” Are these conditions appropriate for the Mono Basin? LADWP should consult with State Water Board-appointed fisheries biologist Ross Taylor regarding any potential impacts to Mono Basin fisheries.
2. BIO-8 on p. 2–18: Is a high pressure washer adequate for removing aquatic invasive species, or are additional measures necessary? MLC suggests that LADWP consult with CDFW and adopt current methods appropriate for each specific invasive species.
3. BIO-11 (p. 2–18): “Beaver dams shall only be removed if they are causing excessive flooding, restricting flow substantially, or are inhibiting the development of diverse vegetation types within specific waterways.” These conditions are inappropriate for natural waterways and should only apply to man-made ones.

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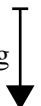
17-22

#### Waterway definitions

MLC has the following questions, comments, and concerns about the RMA Waterway Definitions and the identification and mapping of RMA waterways in Appendix A and their listing in Appendix B.

1. The Waterway definitions on p. 1–11 and 1–12 appear to only encompass natural and man-made open channels. The Appendix A map, however, identifies RMAs on conduits and pipes, including “Mill Creek PP Penstock” and the “Pipeline to Mono Inn.” There are many other pipelines and

17-23





conduits that are part of the Inyo/Mono water management system that are not shown in Appendix A. Examples in the Mono Basin include the Lee Vining Conduit, Mono Craters Tunnel, Dechambeau Ranch Irrigation Pipe, and others. As written, it is unclear if these are encompassed within the RMAs. At a minimum the Waterway definition section should explain why some conduits and pipes are included and others are not; MLC recommends a consistent approach be adopted to either comprehensively include or exclude conduits and pipes.

17-23

2. The definition of toe drains on p. 1–12 states: “Flows from toe drains are conveyed in man-made ditches.” This is not always the case. Below Grant Dam the flow from the toe drains enters the usually-dry natural channel of Rush Creek known as “Reach 1.” The toe-drain definition raises a complexity with the binary sorting of natural and man-made channels. While Reach 1 is usually dry, it ponds during certain conditions and has some riparian vegetation. It is a natural channel with some natural values. On the other hand, the Mono Gate One Return Ditch (MGORD) is a man-made ditch that conveys the entire flow of Rush Creek during non-spill periods. Due to that critical function, and the tremendous natural values contained within the ditch (to some extent offsetting the loss of habitat and functions due to the drying of Reach 1), the RMAs implemented in the MGORD must maintain the natural values associated with the natural channels of Rush Creek as much as possible (such as shading, temperature control, and fish habitat complexity). MLC suggests listing specific actions for each waterway instead of broad categories that are not appropriate for specific situations.

17-24

3. The statement on p. 1–11 that there are five dams in Inyo and Mono counties that are part of LADWP’s water infrastructure is not consistent with the Division of Dam Safety’s Listing of Jurisdictional Dams within California (Sept 2017), which indicates that there are four jurisdictional dams in Mono County and four in Inyo County that are owned by LADWP. In addition LADWP operates a number of smaller non-jurisdictional dams such as the diversions dams on Lee Vining, Parker, and Walker creeks. LADWP should distinguish the different types of dams they own and/or operate and note which will be covered under this MND.

17-25

### Appendix A and Appendix B

Page 1–2 states that “Specific water bodies maintained by LADWP are identified in the map book in Appendix A and are also listed in Appendix B” and p. 1–12 states that “A list of applicable waterways where maintenance activities occur is included in Appendix B.” MLC has a number of questions and comments about the identification of RMA waterways in Appendix A and their listing in Appendix B—including discrepancies between the two.

1. The MND needs to explain what Appendix A is attempting to identify and how to interpret it. It is unclear if the blue lines on the RMA Waterway maps delineate the length of where routine maintenance might occur.
2. Similarly the MND needs to better explain the Appendix B listing and what differentiates it from the RMA Waterways in Appendix A, particularly since there are some Appendix B waterways that are not shown in Appendix A and conversely Appendix A waterways not included in Appendix B (see below for the Appendix A and Appendix B listing discrepancies in the Mono Basin). Are Appendix B waterways the only ones that require routine maintenance notwithstanding if they are identified in Appendix A?
3. What is the status of the RMA if a waterway is not listed in the Master Waterways List (Appendix B), but is shown as having an RMA on the Waterways Mapbook (Appendix A)?

17-26

17-27

17-28

- |   |       |
|---|-------|
| 4. Are the RMA Waterways in Appendix A and Appendix B supposed to represent waterways that require routine maintenance or might require maintenance in the future?  | 17-29 |
| 5. Do the RMA Waterways in Appendix A and Appendix B that are not on LADWP land have agreements with the landowners that those waterways traverse?  | 17-30 |
| 6. A better labeling system is needed for the Waterways Mapbook (Appendix A) so that the full reach of a given RMA Waterway is clearly delineated and differentiated from other waterways (e.g. “Dechambeau Creek” and “Mill Creek” on page 91 or “Lee Vining Creek” on page 95). MLC recommends that all the RMA waterways have a label—either a name or a number where it is too tight to fit a name on the map; the number and the proper name can be put below the map. | 17-31 |
| 7. Recommend that the column headers in Appendix B be clearly defined and that all acronyms be spelled out for clarity.   | 17-32 |

Discrepancies and inconsistencies between Appendix A and B

The following list itemizes the discrepancies/inconsistencies between Appendix A and Appendix B as well as questions about specific waterways in those appendices. The comments below are also presented in the attached workbook and are organized by the waterway and major comment heading.

- |  |       |
|--|-------|
| 1. Listed as having RMA on the Master Waterways List (Appendix B) but not included in the Waterways Mapbook (Appendix A). Presumably these should mapped and labeled in Appendix A: <ul style="list-style-type: none"> <li>○ Gibbs Creek Diversions</li> <li>○ Grant Reservoir Spillway Flume</li> <li>○ Lee Vining Creek Diversion</li> <li>○ Mill Ditch – not clear if that is a reference to the Mill Creek Return Ditch which is mapped but not labeled on Appendix A</li> <li>○ Parker Creek Diversions</li> </ul>  | 17-33 |
| 2. Mapped and labeled as having RMA in the Waterways Mapbook (Appendix A) but not included in the Master Waterways List (Appendix B): <ul style="list-style-type: none"> <li>○ Alger Creek</li> <li>○ Bloody Canyon</li> <li>○ Conway Lower Ditch</li> <li>○ Conway Upper Ditch</li> <li>○ Coyote Spring</li> <li>○ Crest Creek</li> <li>○ Dechambeau Ranch</li> <li>○ Deer Creek</li> <li>○ Dry Creek</li> <li>○ Farrington Ditch</li> <li>○ Grant Reservoir Spillway</li> <li>○ Horse Meadow Ditch</li> <li>○ Mill Creek</li> <li>○ Mill Creek PP Penstock</li> <li>○ Mill Creek South Fork</li> <li>○ Mine Creek Ditch</li> </ul> | 17-34 |



- Pipeline to Mono Inn
  - Rancheria Gulch Creek
  - Reversed Creek
  - South Parker Creek
  - Upper Rush Creek
  - Virginia Creek
- 17-34
3. Mapped as an RMA Waterway but does not have a label in the Mapbook (Appendix A) and not mentioned in the Master Waterways List (Appendix B). Better labeling needed in Appendix A:
- 5 Siphons Bypass
  - Mono Gate One Return Ditch (Rush Creek Return Ditch)
  - Mill Creek Return Ditch
  - East Parker Creek
  - Virginia Creek Diversion to Conway Ranch
  - Warren Fork
  - Waugh Creek
- 17-35
4. Needs better labeling and delineation in Appendix A—only part of the waterway is labeled or labeled and it isn't clear:
- Dechambeau Creek
  - Lower Conway Ditch extends back to Mill Creek and crosses the Mill Return Ditch. That portion is not shown even though it is occasionally used when the Lundy Powerplant is shut down.
  - The labeling of North Mono Basin ditches is incomplete and not clear.
- 17-36
5. Waterway traverses LADWP lands but is not identified on Appendix A or Appendix B. Does that mean no RMA occurs?
- Bell Ditch
  - Bowl Ditch
  - Waterway below HWY 395 that is an extension of a Bohler Creek branch that flows into Rush Creek
- 17-37
6. Not identified neither Appendix A nor Appendix B:
- Dechambeau Ranch Irrigation Pipe
  - Lee Vining Conduit
  - DeChambeau-Adair Ditch
- 17-38
7. Incorrectly listed in Master Waterways list (Appendix B) as returning to Mono Lake; the two below are in the Owens River watershed:
- Fuller Creek
  - Gunter Creek
- 17-39
8. Listed as having RMA on the Master Waterways List (Appendix B) and mapped in the Waterways Mapbook (Appendix A) without a label. Label needed in Appendix A:
- Thompson (Upper)
  - Thompson Main
- 17-40

9. Other questions about specific waterways:

- Do “Bloody Canyon” and “Walker Creek” have the same RMA?
- “Dechambeau Ranch” should be labeled “Dechambeau Ranch Ditch.”
- “Gibbs Creek Diversions” and “Parker Creek Diversions” refer to multiple waterways; should avoid delineating multiple waterways with one name since it is hard to identify which one is being referenced.
- Should delineate “Grant Reservoir Spillway” and “Grant Reservoir Spillway Flume.”
- What/where is “Mill Ditch?” Is that the same as the Mill Creek Return Ditch?
- “Rancheria Gulch Creek” in Appendix A is misspelled as “Rancheria Glutch Creek.”
- There are two different Walker Creeks in Appendix A and Appendix B that should be more clearly differentiated.
- RMA classification for “Wilson Creek” should be “Perennial man-made waterway.”
- Horse Meadow Ditch is a natural channel and should be labeled on Appendix A as Horse Meadow Creek.
- Where did the name “Mill Creek South Fork” come from?

17-41

Conclusion

In conclusion, MLC recommends that the MND not be adopted as currently written. The MND project description and environmental analysis are incomplete and inadequate. MLC recommends that LADWP consult and coordinate with CDFW and Lahontan, incorporating their recommendations related to the specificity of the MND.

17-42

We would like to reiterate that MLC is willing to help LADWP with the necessary revisions to the MND, especially those that relate to the Mono Basin. Please contact me at the Mono Lake Committee at (760) 647-6595 ext. 142 if you have any questions about these comments.

Sincerely,



Lisa Cutting  
Eastern Sierra Policy Director





**Owens Valley Indian Water Commission**  
**46 TuSu Lane • Bishop, CA 93514 • 760-873-3300**

February 14, 2018

Los Angeles Department of Water and Power  
 111 North Hope Street, Room 1044  
 Los Angeles, California 90012  
 Attn: Mr. Eduardo Cuevas

**Re: Comments on Initial Study/Mitigated Negative Declaration (IS/MND) for the Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties**

Dear Mr. Cuevas:

The Owens Valley Indian Water Commission (Commission) is a Tribal Consortium whose member Tribes include the Bishop Paiute Tribe, Big Pine Paiute Tribe of the Owens Valley, and Lone Pine Paiute-Shoshone Reservation. The Commission hereby submits the following comments on the City of Los Angeles Department of Water and Power (LADWP) Initial Study/Mitigated Negative Declaration (IS/MND) for the Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties:

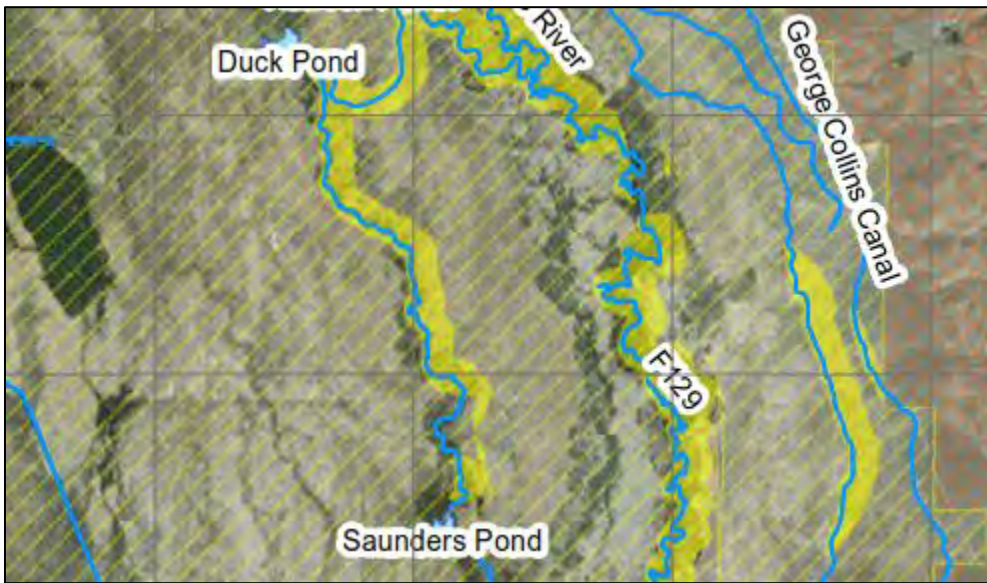
1. The Geographic Information Systems (GIS) analysis used in the preparation of this document appears flawed and is likely to misrepresent areas of concern for special-status plants and wildlife. As described in Appendix C: Biological Resources Report for Routine Maintenance on Waterways in Inyo and Mono Counties, the project area is defined:

“...to encompass each waterway with an associated buffer of 800 feet total (400 feet on each side of each waterway from the center of the channel out to the banks, capturing the extent of the riparian limits into upland habitat).” (Appendix C, Page 1)

Appendix A: Waterways Mapbook (Page 84 to 202 in the document) displays the results of the GIS analysis used to identify where special-status plants and

18-1

wildlife might likely intersect with the above described riparian areas buffers that LADWP might perform maintenance on. Based on the maps included for review in Appendix A, the calculated riparian buffer that defines the project area does not equally ring the mapped location of the Routine Maintenance Activities (RMA) Waterways with a 400 foot buffer on each side. It appears that either the riparian buffers or the RMA Waterways are not in the same coordinate system and are shifted in a west/east direction. Many of the RMA waterways on the map are displayed on the far side of the 800 foot buffer, an error of up to 400 feet, which in essence ignores an entire side of many of the analyzed waterways (see Figure 1 below). This error has likely impacted the results of the Biological Resources Report (Appendix C), which informed the biological mitigation measures in the Mitigated Negative Declaration.



**Figure 1.** Example screen shot of error between project area buffers (yellow where buffer intersects with species from California Natural Diversity Database), and RMA Waterways (blue). The project area is supposed to be a riparian area buffer an equal 400 feet distance on each side of the RMA Waterway, but errors appear to have shifted either the project area buffer or RMA Waterway layer in an east/west direction. (Source: Appendix A, page 149)

Based on the above comments, the Commission respectfully requests that the GIS analysis used for Biological Resources Report be redone, and the correct findings be used to amend both the Biological Resources Report and the biological mitigation measures in the Mitigated Negative Declaration.

2. The waterway maintenance activity of cleaning of intermittent man-made waterways (described in section 1.6.1, Part 3) deepens canals and ditches, which can impact local and regional groundwater conditions by draining shallow



groundwater from lands near the waterways being maintained. This hydrologic alteration can impact local plant and wildlife communities. This occurrence of deepening waterways has been observed by Commission staff on the Bishop Cone and other locations throughout the Owens Valley.

Based on the above potential impact to groundwater, the Commission respectfully requests that Section 2.3.9 Hydrology and Water Quality be updated to consider this impact. The Commission additionally requests that the Los Angeles Department of Water and Power include in the CEQA document a Best Management Practice that limits channel cleaning to only include removal of short-term deposition of sediments and encourages cleaning in a manner that prevents the deepening of man-made waterways.

18-2

3. Cleaned debris from man-made waterways in Inyo and Mono Counties often includes trash such as tires, bottles, and other items. These items are typically left in the sediment and natural debris spoils piles after they are removed, which impacts the aesthetics of the local area and potentially exposes local communities to hazardous materials. The Commission respectfully asks that this potential impact be considered in the document, and a Best Management Practice be included in the document to emphasize that all trash gathered from cleaning operations should be properly disposed at a landfill.

18-3



**Figure 2.** Debris with trash from waterway cleaning.

Sincerely,

Teri Red Owl  
Executive Director

401 E. Yaney St., Bishop CA 93514  
(760) 873-3790/ [smanning@telis.org](mailto:smanning@telis.org)

February 15, 2018

Mr. Eduardo Cuevas (via email)  
Environmental Planning and Assessment  
Los Angeles Department of Water and Power  
111 North Hope St., Room 1044  
Los Angeles, CA 90012  
[eduardo.cuevas@ladwp.com](mailto:eduardo.cuevas@ladwp.com)

Dear Mr. Cuevas:

Subject: Comments on Initial Study/Mitigated Negative Declaration, Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties

Los Angeles Department of Water and Power (DWP) has issued an Initial Study / Mitigated Negative Declaration (MND) entitled Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties (RMW Project) and is soliciting public comment. The MND has been prepared to satisfy requests by state regulatory agencies which issue permits for clearing, dredging, and otherwise performing activities in riparian and wetland areas of Owens Valley. The MND is insufficient for the magnitude of the project. Some comments are presented below.

The MND shows that this project is huge in scope, yet very few data are disclosed and useful information about the project are not presented. A project of this magnitude requires an Environmental Impact Report (EIR) which should fully disclose information needed by the public to better understand the project and the resources potentially threatened by it. The USGS maps contained in the MND cover an area of about 3,600 square miles. The waterways highlighted on the maps are extensive. Who knew DWP went so high in elevation? Even so, the maps do not show all of the waterways DWP maintains. For example, DWP performs maintenance associated with the Lower Owens River and the Eastside and McIver ditches, but these are not shown on the maps.

19-1  
19-2

An EIR is needed because the RMW project potentially adversely affects dozens of federal and state listed and/or sensitive species, as presented in minimal detail in the MND. DWP's RMW activities disturb and take species, yet there is no meaningful mitigation to avoid or compensate for these losses.

19-3

The MND fails to disclose information on the vegetation and habitats disturbed by RMW activities. The Inyo/LA Green Book (Appendix to the Inyo/LA Water Agreement) Section I.D. calls for the Inyo/LA Technical Group to map vegetation along water courses and in wetlands. These areas of important habitat less than 20 acres in size were ignored in the Water Agreement's 1980s baseline vegetation mapping. How can the public understand if important resources are being threatened or damaged if DWP does not disclose the nature of the existing resources? Over the years, I have witnessed total clearing of standing vegetation along water

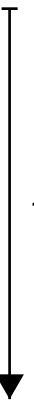
19-4



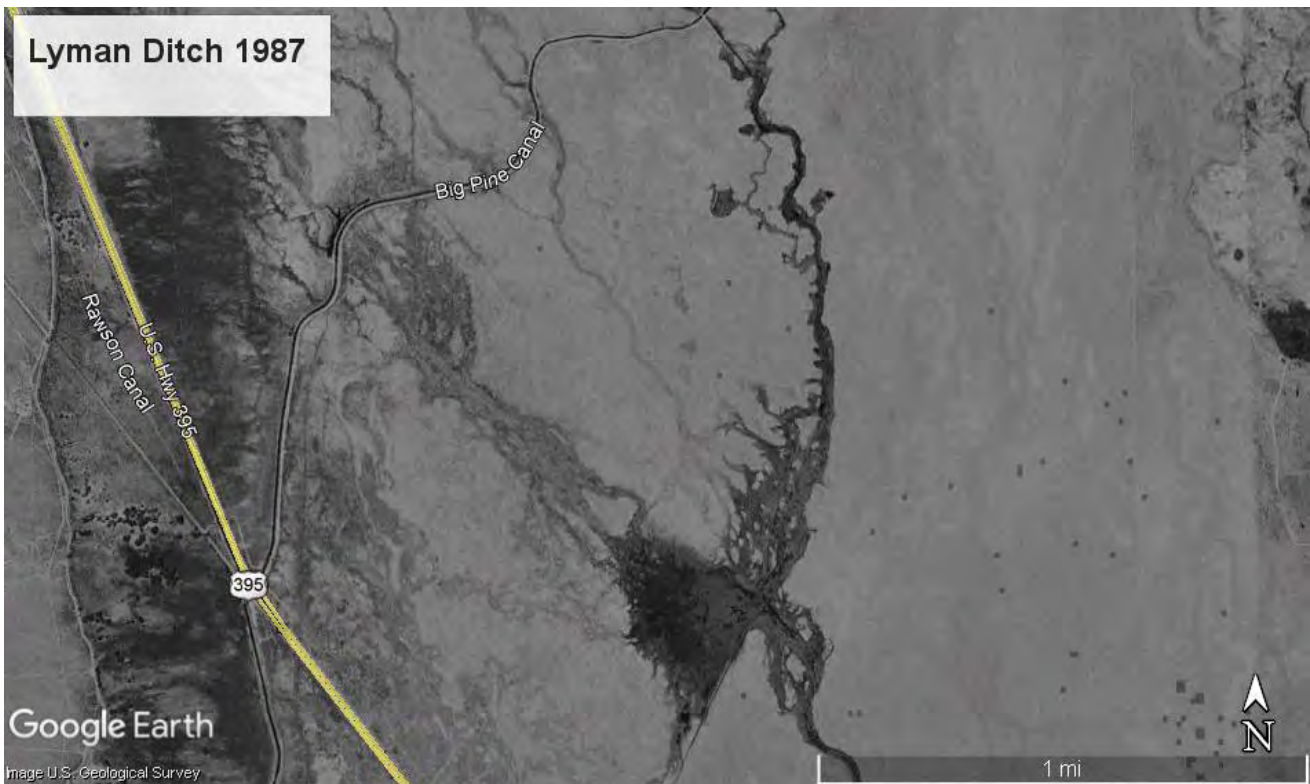
courses. Many trees have been lost since the Water Agreement was adopted, and this MND indicates that the destruction will continue. The reader wonders: If DWP crews leave trees  $\geq 4$  inches dbh, and chop down the rest (smaller ones) how does any tree ever reach 4 inches? Trees grow upwards first, then wider in diameter.

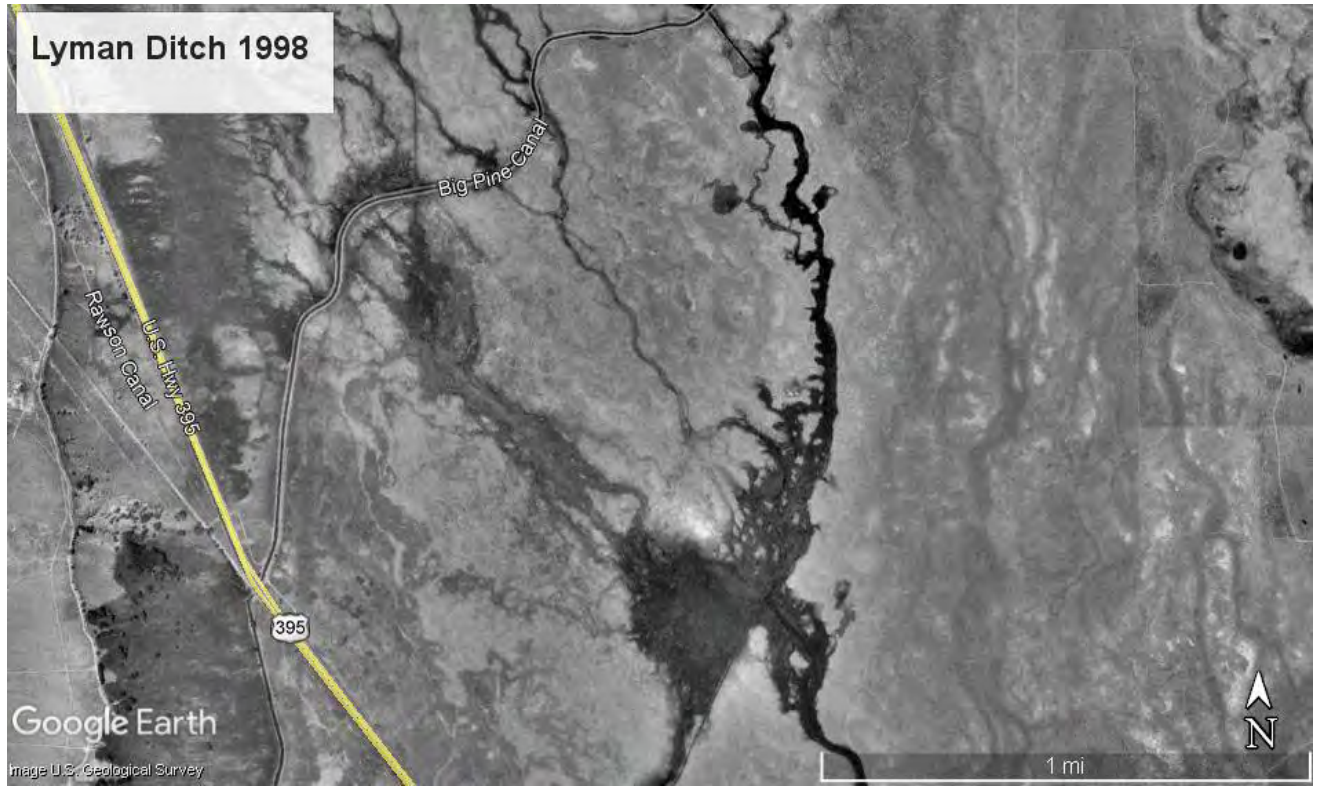


One area DWP crews have destroyed is Lyman Ditch, which carries water from the Big Pine Canal to Klondike Lake. In 2004, DWP deepened and straightened the 3.5 mile ditch. Worse: DWP dug out all of the riparian and wetland plants leaving them along the deeper ditch in big, rotting piles. A population of the rare plant *Calochortus excavatus* was destroyed as the result of this activity. I visited the area shortly after DWP crews had been there, and it was a sickening sight. I saw a marsh wren hopping around, wondering where its home had gone (and wondering who would do such a destructive act). Since 2004, DWP went back at least once more and thoroughly “cleaned” out all the vegetation once again. They also drained a wetland area to the west of the ditch, north of the fault. Images from Google Earth tell the story. The first two images from 1987 and 1998 show a wide, meandering waterway thick with riparian vegetation.



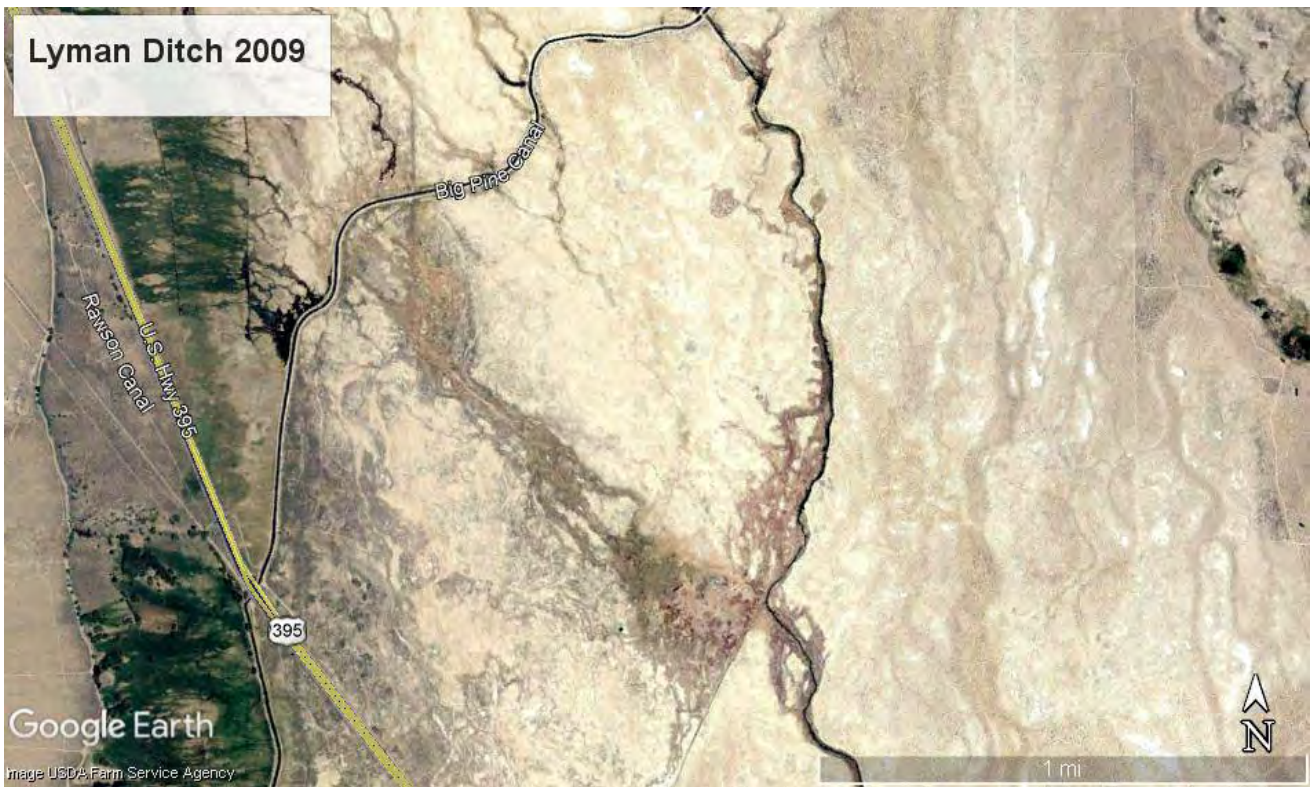
19-5





The next two images show the ditch in 2009 and 2016 after one or two dredgings. The watercourse is thin and narrow, and riparian vegetation, if any, is sparse. Note also the dead triangular-shaped wetland to the west of the ditch in the lower part of the image.

↑  
19-5







Another example of DWP RMW activities is Saunders Pond, north of Collins Road and southeast of Bishop. The Google Earth images below show it in 2006 then ten years later in 2016. What activities is DWP doing here?

19-6





Dewatering due to downcutting along an incised waterway associated with an active DWP sandtrap north of Collins Road, east of Highway 395, appears to be killing trees, as shown in





these Google Earth images from 1998 and 2016.

19-7



There are many more examples I could present, but the point is that Owens Valley has been losing vegetation and habitat, year by year, with no accounting of the changes. The direct RMW activities coupled with the loss of habitat is a doubling of harm to animals. Deepening of waterways hastens water loss from the valley. These losses in turn affect quality of life in Owens Valley. Best Management Practices discussed in the MND do not contain measurable performance criteria. It is a good thing that DWP is finally required to disclose these destructive activities. DWP needs to prepare an EIR, and if the project moves forward, DWP needs to compensate for changes to date (1991 to the present) and either just let the water do what it will or propose meaningful mitigation measures to compensate for the damage.

19-8

I respectfully request DWP withdraw the MND, prepare the necessary background information, and then prepare an EIR if this project is to be pursued.

19-9

Sincerely,

*Sally Manning*

Sara J. "Sally" Manning, Ph.D.

As the author of these comments, I, Sally Manning, am a Plant Ecologist, with a Ph.D. in Botany from UC Davis and have first-hand experience, with more than 30 years working on Owens Valley/DWP/Inyo County water issues.



**From:** [Tom Noland](#)  
**To:** [Cuevas, Eduardo](#)  
**Subject:** Comments on Long Term Routine Maintenance Activities In Inyo and Mono Counties.  
**Date:** Thursday, February 15, 2018 3:31:11 PM

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It would be good if the City could talk with individual ranchers about proposed projects. We had a case in Lone Pine where the City operator dug out our cattle crossing. Along comes a horse back cowboy and down he goes horse and all into a big hole. Had the operator talked with us ahead of time we could have told him that this crossing has never been dug out in the past. These good crossings need to be left as they are.

20-1

Some ditches are dug out very deep. Cattle can fall in them and die. Perhaps some thought could be given to allowing these deep ditches to fill in to a more natural state where they are not so deep and dangerous.

20-2

If a ditch has too much fall, depending on soil type, too much erosion can take place causing the ditch to become too deep. By digging in meanders to increase sinuosity, erosion problems are lessened and the course becomes more natural.

Sand Traps. Cleaning of sand traps as the City does now, is of utmost importance to agriculture and maintaining our ability of getting irrigation water where it needs to go.

20-3

Bull Gang. The work done by the City hand crews is of great value in keeping water in it's proper channel. Especially in the smaller streams coming down the alluvial fans, this mostly eliminates the need for heavy equipment which would disturb the steam banks too much.

20-4

Sincerely, Tom Noland  
Box 835  
Lone Pine, Ca.  
93545  
tomanchorranch@hotmail.com

## **SECTION 5**

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### **Response to Comments**

#### **Comments on the IS/MND and Response to Comments**

The responses to comments included in this section correspond to each comment letter outlined in Section 4. Responses did not require revisions to text or the analysis presented in the Draft IS/MND

#### **Letter 1: California Department of Transportation District 9**

##### **Response to Comment 1-1**

LADWP will continue coordination with Caltrans for work within the state right-of-way and will obtain any necessary encroachment permits.

##### **Response to Comment 1-2**

LADWP will coordinate with Caltrans through the encroachment permit process prior to placement of work site guidance signs.

#### **Letter 2: Lone Pine Paiute-Shoshone Tribe**

##### **Response to Comment 2-1**

The work described was conducted as part of emergency water spreading activities associated with the record breaking runoff that occurred in 2017 and is not considered routine in nature. Therefore, this would not be a covered activity included in the Project Description for this CEQA analysis.

##### **Response to Comment 2-2**

See response to Comment 2-1

##### **Response to Comment 2-3**

See response to Comment 2-1

#### **Letter 3: State Clearinghouse**

##### **Response to Comment 3-1**

This comment letter communicates that the State Clearinghouse has provided the CEQA document to select state agencies for review and acknowledges that LADWP has complied with State Clearinghouse



review requirements for draft environmental documents, pursuant to CEQA. Included with this comment letter are the comments from Caltrans. The responses to the comment letter from Caltrans are included in responses to comments 1-1 through 1-3.

## Letter 4: Harry Williams

### **Response to Comment 4-1**

This comment does not state a specific concern regarding the adequacy of the environmental impact analysis presented in the IS/MND. Your comment is noted.

### **Response to Comment 4-2**

LADWP maintains waterways based on operational needs. During extreme runoff conditions sediment transport is high and settles out in slow moving canals and ditches which requires removal in order to safely move water through the system.

### **Response to Comment 4-3**

LADWP's routine maintenance activities do not involve deepening waterways beyond the extent necessary to maintain their capacity. LADWP provides annual training to all construction personnel which includes appropriate cleaning techniques which emphasize the removal of recently deposited loose sediment – not deepening waterways.

### **Response to Comment 4-4**

This comment does not state a specific concern regarding the adequacy of the environmental impact analysis presented in the IS/MND. Your comment is noted.

## Letter 5: Inyo National Forest

### **Response to Comment 5-1**

LADWP will continue ongoing practices of working collaboratively with the Inyo National Forest to ensure necessary regulatory requirements associated with the management of National Forest System lands are met prior to conducting routine maintenance activities on those lands, as discussed during our meeting on March 27, 2018.

### **Response to Comment 5-2**

LADWP mapped the extent of the waterways included in our agreement and, as you are aware, some of these waters are on Federal lands. LADWP will continue ongoing practices of working collaboratively with the USFS and obtaining any necessary permits or agreements before work is completed on any structures or waterways on federal lands.

### **Response to Comment 5-3**

LADWP will continue ongoing practices of working collaboratively with the Inyo National Forest and obtain any necessary permits, authorizations, or agreements before work is completed on any structures or waterways located on federal lands.

### **Response to Comment 5-4**

Routine maintenance performed on perennial waterways includes the replacement of existing structures, and the removal of obstructions which would cause the waterway to jump the banks and leave the watercourse which inhibits the measurement of flows. However, LADWP will continue working collaboratively with the USFS to obtain necessary permits or agreements before work is completed on any structures or waterways on federal lands.

### **Response to Comment 5-5**

See response to comment 5-4. Additional clarification regarding the nature of routine maintenance activities on National Forest System lands was provided during our meeting held on March 27, 2018.

### **Response to Comment 5-6**

See response to comment 5-3. Additional clarification regarding the nature of routine maintenance activities on National Forest System lands was provided during our meeting held on March 27, 2018.

### **Response to Comment 5-7**

We will contact the Inyo National Forest (INF) GIS Coordinator to ensure that we have the most up-to-date and accurate INF boundaries in our files for future reference.

### **Response to Comment 5-8**

LADWP will continue working collaboratively with the Inyo National Forest and will obtain necessary permits, authorizations, or agreements before routine maintenance is completed on any structures or waterways located on federal lands.

## **Letter 6: Kendra Atleework**

### **Response to Comment 6-1**

Mitigation measures applicable to the minimization of impacts to sensitive species are included in *Section 2.3.4 Biological Resources* of the IS/MND (pages 2-16 – 2-19). Additional information related



to the potential presence of sensitive species in maintenance areas is included in *Appendix C: Biological Resources Report for Routine Maintenance on Waterways in Inyo and Mono Counties* of the IS/MND. With implementation of the identified mitigation measures, continuation of the on-going routine maintenance activities would not result in significant environmental impacts. Therefore, preparation of an EIR is not required.

## **Letter 7: Big Pine Tribe of the Owens Valley**

### **Response to Comment 7-1**

This comment summarizes the background regarding the preparation of the IS/MND.

### **Response to Comment 7-2**

LADWP concurs with this statement and welcomes the receipt of additional comments and communication identifying concerns and providing input regarding routine maintenance activities that may occur in areas of interest to the Big Pine Paiute Tribe of the Owens Valley.

### **Response to Comment 7-3**

Following the meeting that took place on January 7, 2016, a letter was sent to the Big Pine Paiute Tribe of the Owens Valley requesting input pertaining to tribal cultural resources for consideration during the environmental review process. No comments or input expressing specific concerns were received. LADWP thus proceeded with the preparation of appropriate environmental review documentation pursuant to the California Environmental Quality Act (CEQA). Two mitigation measures (CUL-1 and CUL-2) have been identified in the IS/MND (pages 2-21 to 2-22) to ensure that Native American Tribes, including the Big Pine Paiute Tribe of the Owens Valley, are promptly contacted if any potential Tribal resources are discovered in the course of conducting routine maintenance activities. Following the receipt of this comment letter during the public review period for the IS/MND, a meeting was scheduled with the Big Pine Paiute Tribe of the Owens Valley and held on March 13, 2018. A site visit was also conducted with your Tribal Historic Preservation Officer (THPO), Danelle Gutierrez, on March 21, 2018. During this site visit, areas of interest to the Big Pine Paiute Tribe of the Owens Valley were discussed, and clarification was provided regarding the nature and locations of routine maintenance activities that are conducted in those areas. Opportunities to collaborate on future maintenance activities in potentially sensitive areas were also identified during this site visit.

### **Response to Comment 7-4**

Your comment is noted. Please see response to comment 7-3.

### **Response to Comment 7-5**

LADWP's Environmental Planning and Assessment Group has been designated as the lead for the implementation of LADWP's AB 52/CEQA Tribal Consultation process. Technical staff from this group are the most informed regarding project details, impact analysis, and technical studies that are

relevant to consultation meetings, which enables LADWP to consult with tribal representatives in an effective manner and focus on the protection of specific tribal resources relevant to specific projects. Prior to approving a project, the LADWP Board of Commissioners considers: the CEQA compliance document(s), the recommendations that are developed through tribal consultation, and comments received during the public review period. Additionally, Tribal representatives have an opportunity to address the Board during the Board's consideration of the above mentioned items.

### **Response to Comment 7-6**

Since routine maintenance activities are conducted in previously disturbed areas, a comprehensive cultural resources survey was not conducted. Site-specific cultural surveys are conducted for ground disturbing activities that are not routine, and which involve areas where maintenance has not been previously conducted. Those activities are beyond the scope of the Project Description for the IS/MND.

### **Response to Comment 7-7**

Your comment is noted. Please note that the routine maintenance activities described in the IS/MND do not consist of extensive earth-moving activities in areas that have not been previously disturbed.

### **Response to Comment 7-8**

Your comment is noted. Thank you for providing this input. Opportunities to collaborate on future maintenance activities in areas that can potentially support vegetation that may include culturally significant species were identified during a meeting and site visit held on March 13 and March 21, 2018, respectively. This collaboration would include communication between LADWP and Tribal staff regarding the schedule, location, and extent of specific routine maintenance activities where culturally significant plant species are located.

### **Response to Comment 7-9**

The Project Description elements for the IS/MND are the routine maintenance activities currently conducted by LADWP on waterways in Inyo and Mono Counties. Mitigation measures for the protection of cultural resources have been included for these activities (IS Section 2.3.5).

### **Response to Comment 7-10**

The mapping described in the Greenbook Section V. FURTHER STUDIES, Subsection 8. Type D Vegetation Monitoring Techniques describes efforts to refine mapping and monitoring of riparian vegetation that was not thoroughly mapped during the initial vegetation inventory. In 2005 LADWP contracted with Ecosystem Sciences, the MOU Consultant, and Whitehorse Associates to conduct mapping and description of riparian areas in Inyo County. The final report entitled "OWENS RIVER TRIBUTARY INVENTORY 2005 CONDITIONS" was completed in September 2006.



## **Response to Comment 7-11**

Please see response to comment 7-10.

## **Response to Comment 7-12**

Section 15065(a)(3) of the CEQA Guidelines defines “cumulatively considerable” as the incremental effects of an individual project that are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. The routine maintenance activities are a set of ongoing activities. Routine maintenance was previously permitted by CDFW, and found to be exempt from CEQA. An exception to the exemption was not identified; the cumulative impact of successive projects of the same type in the same place, over time, was not found to be significant.

## **Response to Comment 7-13**

It is acknowledged that an EIR is the appropriate CEQA document for situations where adverse impacts cannot be reduced below the level of significance by the implementation of feasible mitigation measures. However, in the case of the ongoing routine maintenance activities, with implementation of the identified mitigation measures, significant impacts are not identified. It should be further noted that the environmental protection measures identified as mitigation measures in the Initial Study are ongoing measures currently implemented during routine maintenance activities. The Initial Study, and the MMRP for the project, will serve to formalize these measures as required mitigation.

## **Response to Comment 7-14**

Following the receipt of this comment letter during the public review period for the IS/MND, a meeting was scheduled with the Big Pine Paiute Tribe of the Owens Valley and held on March 13, 2018. A site visit was also conducted with your Tribal Historic Preservation Officer (THPO), Danelle Gutierrez, on March 21, 2018. During this site visit, areas of interest to the Big Pine Paiute Tribe of the Owens Valley were discussed, and clarification was provided regarding the nature and locations of routine maintenance activities that are conducted in those areas. Opportunities to collaborate on future maintenance activities in potentially sensitive areas were also identified during this site visit.

## **Letter 8: California Department of Fish and Wildlife**

### **Response to Comment 8-1**

Your comment is noted. Responses to your additional comments are provided below.

### **Response to Comment 8-2**

Location maps for waterways included in the Project are provided in Section 1.2 of the IS/MND. Additionally LADWP has prepared diagrams of the tributary waterways to the Los Aqueduct System, please see attached. Habitat descriptions are provided in Sections 1.2 and 2.3.4 and in Appendix A.

Descriptions of routine maintenance activities are detailed in Section 1.6. Potential impacts to biological resources are presented in Section 2.3.4.

Based on database entries and staff survey results, LADWP is currently collaborating with CDFW to identify special status species by waterway. Since conditions are variable, this listing is considered a dynamic document. This matrix, is included as an attachment to this response letter, and will be included in the application to be submitted for a master routine maintenance agreement.

LADWP continues to work with CDFW on the potential waterway specific impacts and the appropriate work windows to address any concerns regarding special status species that could potentially be impacted by continuing routine maintenance. LADWP has been performing the routine maintenance activities described in the IS/MND under a Lake and Streambed Alteration Agreement (LSAA) 1600-2007-0111-R6, and the Master Agreement entered into on March 5, 2001 and an applicable CEQA Notice of Exemption (NOE) filed on March 8, 2002 with the Inyo County Clerk. During this period, there have been no documented impacts to special status species, nor have significant changes to habitats occurred as a result of performing covered activities.

### **Response to Comment 8-3**

Your comment is noted. Please see the responses to your specific concerns in response to comments 8-4 through 8-8.

## Response to Comment 8-4

There is discussion in the CEQA checklist regarding the potential impacts to special status species and discussion regarding the potential impacts being reduced to less than significant with the specific mitigation measures described. The MND discusses the 800-foot buffer around each waterway which included an analysis of all potential impacts to special-status species within this buffer. Special status species are listed and discussed, with mitigation measures identified to reduce potential impacts to less than significant levels, on pages 2-10 through 2-14. While performing maintenance activities and implementing mitigation measures as described in this Agreement, LADWP to date has not impacted any special status species. Please also see the biological resources analysis presented in the *Biological Resources Report for Routine Maintenance on Waterways in Inyo and Mono Counties* (Appendix C of the IS/MND).

## Response to Comment 8-5

Routine maintenance activities within the riparian corridor and the specific mitigation measures implemented to reduce the impacts from on-going maintenance activities to less than significant levels are described in Section 2.3.4 of the IS/MND. LADWP has been performing the routine maintenance activities described in the IS/MND on an ongoing basis under an existing Fish and Game Code Section 1602 Agreement. These activities have not resulted in deleterious effects on aquatic habitat due to the implementation of Bio measures 1-4, which are implemented under the current 1600 Agreement. Similarly, the fishery and beneficial uses have not been significantly impacted by these activities.

## Response to Comment 8-6

LADWP does not change the hydrology of waterways. As described in the IS/MND, LADWP maintains waterways by bringing them back to their original capacity so that the water can move from point A to point B in an efficient manner that protects water quality and its beneficial uses. The maintenance of the waterways is necessary in order to protect aquatic habitat and public health and safety. As part of the maintenance activities, LADWP implements Best Management Practices (BMPs) to reduce potential water quality impacts below a level of significance. Replacement of existing structures identified in section d does not result in major alterations to drainage patterns; on the contrary, installing coffer dams or culverts to divert flows around the structure to be replaced facilitates a continuous supply of clean water throughout the stream reach, further protecting fish and wildlife resources downstream while maintenance is being conducted. Continuing ongoing maintenance will maintain existing drainage patterns. However, the cessation of maintenance activities may result in major detrimental alterations of drainage patterns, which could include the potential flooding of highways, private dwellings and local communities.

## Response to Comment 8-7

Previous permits with CDFW regarding routine maintenance activities were found to be exempt from CEQA. The routine maintenance activities that are on-going and planned for the future are of the same type and will be conducted in the same locations as past routine maintenance activities. No increase in adverse environmental impacts or identification of new significant impacts is anticipated. However, in response to regulatory agency comments, LADWP has prepared an Initial Study and Mitigated Negative Declaration to formalize some of the environmental protection measures currently



being implemented by identifying them as mitigation measures and including them in a Mitigation Monitoring and Reporting Program (MMRP). Pursuant to CEQA Guidelines Section 15065, the trigger for preparation of an Environmental Impact Report requires substantial evidence that significant impacts would occur from the project. However, the project does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory. Since there is no substantial evidence in light of the whole record that, as mitigated, the project would have a significant negative effect on the environment, LADWP has prepared a Mitigated Negative Declaration. The routine maintenance activities are on-going and part of the environmental baseline in the project area. The existing environmental setting is presented in Section 1.2 and throughout Section 2 of the Initial Study.

## **Response to Comment 8-8**

Section 15065(a)(3) of the CEQA Guidelines defines “cumulatively considerable” as the incremental effects of an individual project that are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. The routine maintenance activities are a set of on-going activities. Routine maintenance was previously permitted by CDFW and the Regional Board, and found to be exempt from CEQA.

However, in light of now preparing an MND for activities that were previously exempt under CEQA, the proposed project, in combination with approved, proposed, and other reasonably foreseeable projects in the cumulative project area, could potentially result in disturbance to special-status species and sensitive habitats throughout the region. This impact is considered potentially cumulatively considerable. The suitable habitat within the proposed project area represents only a small portion of the habitat available for special-status wildlife species, including migratory birds. Implementation of the proposed project may result in impacts to wildlife habitat through a variety of actions which, when combined with other habitat impacts occurring from development in surrounding areas, would result in cumulatively considerable impacts. However, the implementation of mitigation measures Bio-1 through Bio-12 assist in reducing significant impacts to cumulative biological resources. Therefore, cumulative impacts related to biological resources from the project would be reduced to less than what is cumulatively considerable under CEQA.

Owens Valley, Mammoth Lake and Mono Basin are non-attainment areas for PM10. Since maintenance is generally conducted in wet or moist conditions, the impact of the routine maintenance activities on air quality would not be cumulatively considerable. Significant cumulative impacts for other resources (i.e., biology, water quality and hydrology), are not identified, and the routine maintenance activities would not contribute to an existing or anticipated significant impact. The routine maintenance activities are on-going and a part of the baseline in the project area, and they would not contribute to any cumulative impact when viewed in combination with any other projects.

Specific reasonably foreseeable future projects, such as development projects, that would impact the same waterways as the on-going routine maintenance activities are not known. Should any be identified in the future, compliance with regulatory requirements and mitigation measures would ensure that the ongoing operations under the routine maintenance activities would not incrementally contribute to cumulatively considerable impacts.

## **Response to Comment 8-9**

LADWP currently cleans all equipment when moving between waterways in different drainages. LADWP has developed and currently implements a vigorous pepperweed treatment program in cooperation with the Inyo Mono Agricultural Commissioner's office that includes the assessment of areas infested as well as on-going treatment. With implementation of these precautions, continuation of ongoing maintenance activities would not increase the spread of noxious weeds over existing conditions.

## **Response to Comment 8-10**

Section 2.3.4 and Appendix C of the IS/MND describe impacts to biological resources and formalize on-going protective measures as mitigation measures that will be formally adopted for the project. The mitigation measures identified in the IS/MND reduce potential impacts to special status species and habitats to less than significant levels. Extensive data have been collected in the course of conducting routine maintenance activities over the past several decades which demonstrate that significant impacts to special status species and habitats have not occurred.

Based on database entries and staff survey results, LADWP is currently collaborating with CDFW to identify special status species by waterway. Since conditions are variable, this listing is considered a dynamic document, and a draft of the waterways matrix is attached as an appendix.

## **Response to Comment 8-11**

LADWP has been successfully performing the activities identified in the IS/MND under an existing Section 1600 Agreement without any significant impacts to riparian vegetation or fish populations. We have maintained fish populations below dams in good condition as well as rescuing fish when they are entrained in diversions that are dewatered. Through the past implementation of maintenance activities, LADWP has successfully demonstrated that significant impacts do not result from the routine maintenance activities. To formalize the environmental protection measures currently implemented, including those for the protection of fish populations, mitigation measures have been identified in the IS/MND. A MMRP will include all of the mitigation measures identified in the IS/MND and describe relevant implementation details.

## **Response to Comment 8-12**

LADWP continues to work with CDFW regarding mapping of special status and native and recreational fish populations. The results of these efforts are included in the attached waterways matrix. As diversions are shut off or channel flows diminish, LADWP routinely walks below diversions and relocates entrained fish back to the main channel as required under our current Section 1600 Agreement. Mitigation measures BIO-3, BIO-10 and BIO-12 detail measures to prevent significant impacts to fish populations.

## **Response to Comment 8-13**

A MMRP will be prepared and included with the IS/MND at the time that the documents are considered for adoption by the Board of Water and Power Commissioners. The MMRP will include all mitigation measures identified in the IS/MND; as relevant, implementation details will be provided.

If requested by CDFW as part of a new Section 1600 Agreement, LADWP will prepare an Annual Monitoring Report for submission to CDFW.

### **Response to Comment 8-14**

In addition to the mitigation measures identified for the protection of biological resources (Section 2.3.4 of the IS/MND), LADWP currently implements BMPs for the protection of water quality and associated biological resources (Appendix E of the IS/MND). These measures have been successfully utilized for the protection of biological resources during the term of the current Section 1600 Agreement. Under existing conditions, routine sediment disturbance has not resulted in documented fish kills or long-term impacts to water quality. The on-going maintenance activities maintain the current drainage patterns and reduce the amount of immersed aquatic vegetation that can lead to low dissolved oxygen in the system which can result in fish stress and decreased water quality. LADWP currently conducts these activities and implements the mitigation measures identified in the IS/MND. Impacts from future routine maintenance activities will be reduced to less than significant levels by implementation of the identified BMPs and mitigation measures.

### **Response to Comment 8-15**

It is acknowledged that an EIR is the appropriate CEQA document for situations where adverse impacts cannot be reduced below the level of significance. However, in the case of the ongoing routine maintenance activities, with implementation of the identified mitigation measures, significant impacts are not identified. It should be further noted that the environmental protection measures identified as mitigation measures in the Initial Study are on-going measures currently implemented during routine maintenance activities. The Initial Study, and the MMRP for the project, will serve to formalize these measures as required mitigation.

### **Response to Comment 8-16**

The routine maintenance activities and mitigation measures described in the IS/MND are ongoing activities. Collectively, with implementation of the identified mitigation measures, continuation of maintenance activities will not result in significant impacts to biological resources. The work areas along waterways are minimized to a defined foot print (currently up to 100 feet upstream and downstream) surrounding existing structures. Canals that serve as irrigation ditches are the only waterways where LADWP routinely maintains the entire reach via mowing and channel cleaning activities. All access to facilities occurs on existing roads and any sediment or vegetation removed from the channel is placed on adjacent existing spoil piles that are already established. The work described in the IS/MND is routine and has been previously covered under an existing CDFW Streambed Alteration Agreement, as well as an HCP developed in coordination with the USFWS.

### **Response to Comment 8-17**

During routine maintenance activities in waterways with flows, LADWP performs upstream and downstream water quality monitoring for dissolved oxygen, temperature, pH, and turbidity. Collected data can be made available to CDFW.

### **Response to Comment 8-18**



Inventoried adjacent habitat for special status plant species is currently conducted and is included in mitigation measure BIO-5. Where feasible, LADWP schedules botanical surveys for the specific blooming period of potentially present rare plants. Sensitive plants, if identified, are marked in the field for avoidance. Where rare plants are known, a biological monitor is on-site for the duration of ground disturbing work to avoid any potential impacts to special status plants.

### **Response to Comment 8-19**

LADWP currently cleans all equipment when moving between waterways in different drainages. LADWP has a vigorous pepper weed and salt cedar treatment program in cooperation with the Inyo Mono Agricultural Commissioner's office that includes the annual assessment of areas infested as well as on-going treatment.

### **Response to Comment 8-20**

As noted in Section 1.8 of the IS/MND, LADWP acknowledges CDFW is always a trustee agency when projects may affect fish, wildlife, or their habitats. Since the routine maintenance activities require a permit from CDFW, the agency is also a responsible agency under CEQA. As mitigated, significant impacts would not result from the on-going routine maintenance activities. Therefore, the CEQA document prepared by LADWP could be used by CDFW to meet their CEQA requirements. LADWP looks forward to further coordination with CDFW regarding permit conditions for the Section 1600 Agreement for the routine maintenance activities.

## **Letter 9: John Connolly**

### **Response to Comment 9-1**

The IS/MND was prepared to analyze environmental impacts associated with the ongoing practice of conducted routine maintenance activities. The types of activities do not include unusual and unlisted work practices. This comment does not identify a specific concern regarding the adequacy of the environmental impact analysis presented in the IS/MND. Your comment is noted.

### **Response to Comment 9-2**

Continuation of RMA does not alter existing surface water rights or expand them. Water rights must be obtained from the State Water Resources Control Board, and are not addressed by in the IS/MND. This comment does not identify a specific concern regarding the adequacy of the environmental impact analysis presented in the IS/MND. Your comment is noted.

### **Response to Comment 9-3**

The creation of access roads is not considered a routine maintenance activity, and therefore is not discussed in the RMA. These RMA are related to maintaining waterways in Inyo and Mono Counties. It is unclear where and when this event occurred. This comment does not identify a

specific concern regarding the adequacy of the environmental impact analysis presented in the IS/MND. Your comment is noted.

### **Response to Comment 9-4**

It is unclear where and when this event occurred. This comment does not identify a specific concern regarding the adequacy of the environmental impact analysis presented in the IS/MND. Your comment is noted.

### **Response to Comment 9-5**

DWP performs routine maintenance on waterway infrastructure in Inyo and Mono Counties. Our understanding is that most domestic water sources in the region are subterranean. Any increased sedimentation in a waterway would not impact domestic water supplies. Also, it is unclear what types of foreign materials are being referred to. This comment does not identify a specific concern regarding the adequacy of the environmental impact analysis presented in the IS/MND. Your comment is noted.

### **Response to Comment 9-6**

LADWP analyzed ongoing practices performed on waterways in Inyo and Mono County in the IS/MND. Unique consequences would be individually addressed with regulatory agencies prior to any work occurring. This comment does not identify a specific concern regarding the adequacy of the environmental impact analysis presented in the IS/MND. Your comment is noted.

## **Letter 10: Matthew Emrick**

### **Response to Comments 10-1 through 10-11**

Your comments have been received and provided to our decision makers, the Los Angeles Department of Water and Power Board of Commissioners, for their review and consideration during the approval process for the Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono counties and adoption of the IS/MND.

## **Letter 11: Owens Valley Committee**

### **Response to Comment 11-1**

Mitigation measures applicable to the minimization of impacts to biological resources are included in *Section 2.3.4 Biological Resources* of the IS/MND (pages 2-16 to 2-19). Additional information related to the potential presence of sensitive species is included in *Appendix C: Biological Resources Report for Routine Maintenance on Waterways in Inyo and Mono Counties* of the IS/MND. With implementation of the identified mitigation measures, continuation of the ongoing

routine maintenance activities would not result in significant environmental impacts. Therefore, preparation of an EIR is not required.

## **Response to Comment 11-2**

Prior years' routine maintenance activities have been covered under a CEQA Notice of Exemption prepared by the California Department of Fish and Wildlife.

## **Response to Comment 11-3**

The mapping described in the Greenbook Section V. FURTHER STUDIES, Subsection 8. Type D Vegetation Monitoring Techniques describes efforts to refine mapping and monitoring of riparian vegetation that was not thoroughly mapped during the initial vegetation inventory. In 2005 LADWP contracted with Ecosystem Sciences, the MOU Consultant and Whitehorse Associates to conduct mapping and description of riparian areas in Inyo County. The final report entitled "OWENS RIVER TRIBUTARY INVENTORY 2005 CONDITIONS" was completed in September 2006.

## **Response to Comment 11-4**

When necessary, LADWP qualified biologists perform preconstruction surveys. LADWP cannot compel or require Inyo County staff to perform the work described in the comment as those employees are not under LADWP control.

## **Response to Comment 11-5**

Please see the response to comment 11-4.

## **Response to Comment 11-6**

LADWP works closely with the Bureau of Land Management and U.S. Forest Service to secure any necessary permits, agreements, or authorizations prior to conducting work on any structures or waterways located on federal lands.

## **Response to Comment 11-7**

There are many waterways in the geographic area described in the IS/MND that pre-date the presence of LADWP in the Eastern Sierra. The Bishop Creek Canal and McNally Canals for example date to the late 1800s. Of these, several waterways such as the C-drain and the A-1 drain in the Bishop area appear to have been purposely constructed between the early 1900s and the 1920s in an effort to dewater "swampy" areas so that they could be actively cultivated as farmland. This is evident in a comparative analysis between the 1907 topographic map of the Owens Valley and Ritchie maps from 1931. These ditches were set at a contour to facilitate flow through the ditch from its origin to the endpoint by gravity. For both the A-1 and D-drain the endpoint is ultimately the lowest point of the valley, the Owens River. These waterways are only minimally maintained because they do not truly factor in to LADWP's operational needs. However, they cannot be abandoned because a number of housing areas especially in west Bishop and on the Bishop Paiute Reservation, have French drains under them that end in these "drains". The limited maintenance is required because vegetation which establishes in the ditches traps sediment which interferes with



proper functioning. Filling the drains would likely result in property damage that would be difficult to predict.

Regarding waterways that are not “drains”, it is LADWP practice to not clean these waterways beyond what is necessary to maintain their capacity and operability. No excessive deepening of channels is conducted. There are a number of reasons for this, primary is that over excavating ditches would make it more difficult to meet downstream water needs. Additionally, over excavation of ditches is unnecessary for water conveyance and would also result in a waste of resources. LADWP work practice is to only clean ditches to a level that is warranted and is environmentally sensitive.

## **Response to Comment 11-8**

Your comment is noted. Please see response to comment 11-1.

## **Letter 12: Big Pine Paiute Tribe of the Owens Valley**

### **Response to Comment 12-1**

Since routine maintenance activities are conducted in previously disturbed areas, a comprehensive cultural resources survey was not conducted. Site-specific cultural surveys are conducted for ground disturbing activities that are not routine, and which involve areas where maintenance has not been previously conducted. These projects are beyond the scope of the Project Description for the IS/MND.

Locations where routine maintenance activities occur have been subject to consistent levels of disturbance that do not extend the areas necessary to maintain the capacity and operability of waterways and structures. Two mitigation measures (CUL-1 and CUL-2) have been identified in the IS/MND to ensure that maintenance crews are familiar with measures that must be taken to protect tribal cultural resources that are discovered in the course of conducting routine maintenance activities. Over the past 20 years of conducting routine maintenance activities, no sensitive cultural resources have been discovered in a routine maintenance work area.

### **Response to Comment 12-2**

A meeting was held with the Big Pine Paiute Tribe of the Owens Valley on January 7, 2016, which included a discussion of the routine maintenance activities that are conducted for waterways in Inyo and Mono Counties. Following this consultation meeting, LADWP requested comments and input pertaining to tribal cultural resources associated with the routine maintenance activities to consider and incorporate during the environmental review process. No comments were received following the consultation meeting, and no request was received regarding a meeting specifically with the Tribal Cultural Committee and Elders.

Following the receipt of this comment letter during the public review period for the IS/MND, a meeting was scheduled with the Big Pine Paiute Tribe of the Owens Valley and held on March 13, 2018. A site visit was also conducted with your Tribal Historic Preservation Officer (THPO), Danelle Gutierrez, on March 21, 2018. During this site visit, areas of interest to the Big Pine Paiute

Tribe of the Owens Valley were discussed, and clarification was provided regarding the nature and locations of routine maintenance activities that are conducted in those areas. Opportunities to collaborate on future maintenance activities in potentially sensitive areas were also identified during this site visit.

### **Response to Comment 12-3**

Please see response to comment 12-2.

### **Response to Comment 12-4**

In response to the request included in your letter dated February 14, 2018 for a meeting to discuss the Waterways Project, a consultation meeting was scheduled and held on Tuesday, March 13, 2018. In attendance were representatives from the LADWP Environment Planning and Assessment group, which has been designated as the lead in carrying out LADWP's AB 52 consultation process. A subsequent site visit of routine maintenance areas was also conducted with your THPO on March 21, 2018. We welcome the receipt of additional comments and communication identifying concerns and providing input regarding routine maintenance activities that may occur in areas of interest to the Big Pine Paiute Tribe of the Owens Valley.

## **Letter 13: Bishop Paiute Tribe**

### **Response to Comment 13-1**

Routine channel maintenance does include the removal of accumulated sediments. However, routine maintenance does not include straightening, widening and/or deepening of ditches.

LADWP continues to work with the USFWS to protect threatened and endangered species on its lands throughout the Owens Valley. LADWP has identified numerous potential projects that would benefit pupfish and has approached CDFW regarding these projects. Coordination regarding how best to meet the needs of both agencies while improving conditions for threatened and endangered species is ongoing.

### **Response to Comment 13-2**

The comment is not relevant to this CEQA document or the Routine Maintenance Project as described. Your comment is noted.

### **Response to Comment 13-3**

The comment is not relevant to this CEQA document or the Routine Maintenance Project as described. Your comment is noted.

## **Response to Comment 13-4**

The comment is not relevant to this CEQA document or the Routine Maintenance Project as described. Your comment is noted.

## **Letter 14: Ceal Klingler**

### **Response to Comment 14-1**

While the routine maintenance activities are conducted over a wide geographic area, they are on-going activities that are part of the environmental baseline. As described in the Initial Study, continuation of maintenance in the identified waterways would not result in unmitigable significant effects. The trigger for preparation of an Environmental Impact Report is substantial evidence that significant effects would occur from the project, not location or size of the project activities. A Mitigated Negative Declaration is proposed by LADWP since there is no substantial evidence in light of the whole record that, as mitigated, the project would have a significant effect on the environment.

The routine maintenance activities are on-going and part of the environmental baseline in the project area. The existing environmental setting is presented in Section 1.2 and throughout Section 2 of the Initial Study.

### **Response to Comment 14-2**

The mapping described in the Greenbook Section V. FURTHER STUDIES, Subsection 8. Type D Vegetation Monitoring Techniques describes efforts to refine mapping and monitoring of riparian vegetation that was not thoroughly mapped during the initial vegetation inventory. In 2005 LADWP contracted with Ecosystem Sciences, the MOU Consultant and Whitehorse Associates to conduct mapping and description of riparian areas in Inyo County. The final report entitled "OWENS RIVER TRIBUTARY INVENTORY 2005 CONDITIONS" was completed in September 2006.

### **Response to Comment 14-3**

The particular state of a waterway is variable depending on the type of water year, the time of year, and downstream water demands. Work that is conducted in ditches and canals consists of the removal of accumulated sediment and plant material that may be growing on the sediment. The pictures provided appear to show low flow conditions, which is not representative of the state of waterways when they are at maximum capacity necessary to meet downstream demands.

### **Response to Comment 14-4**

The Owens Basin is a very heavily instrumented and monitored system. LADWP consistently utilizes this information to guide management decisions.

### **Response to Comment 14-5**



There are many waterways in the geographic area described in the IS/MND that pre date the presence of LADWP in the Eastern Sierra. The Bishop Creek Canal and McNally Canals for example date to the late 1800's. Of these, several waterways such as the C-drain and the A-1 drain in the Bishop area appear to have been purposely constructed between the early 1900's and the 1920's in an effort to dewater "swampy" areas so that they could be actively cultivated as farmland. This is evident in a comparative analysis between the 1907 topographic map of the Owens Valley and Ritchie maps from 1931. These ditches were set at a contour to facilitate flow through the ditch from its origin to the endpoint by gravity. For both the A-1 and D-drain the endpoint is ultimately the lowest point of the valley, the Owens River. These waterways are only minimally maintained contrary to allegations made in many comment letter because they do not truly factor in to LADWP's operational needs, however they cannot be abandoned because a number of housing areas especially in west Bishop and on the Bishop Paiute Reservation have French drains under them that end in these "drains". The limited maintenance is required because vegetation which establishes in the ditches traps sediment which interferes with proper functioning. Filling the drains would likely result in property damage that would be difficult to predict.

Regarding waterways that are not "drains", it is LADWP practice to not overly clean these waterways. There are a number of reasons for this, primary is that over excavated ditches make it more difficult to meet downstream water needs. Over excavation of ditches is unnecessary for water conveyance and would also result in a waste of resources and is expensive. LADWP work practices is to only clean ditches to a level that is warranted and is environmentally sensitive.

### **Response to Comment 14-6**

Sediment removed from waterways is routinely placed such that it does not impact the waterway from which it was removed. Sediment cannot be immediately hauled away, and must remain for a period to allow it to dry. In some cases during the 2017 runoff year, it may have been necessary to temporarily place sediment adjacent to a waterway to provide flood protection as was done adjacent to the Bear Creek and Meadow Creek neighborhood. Due to the large volume of sediment transported during the record breaking runoff year of 2017, some sediment piles have yet to be removed.

### **Response to Comment 14-7**

LADWP carries out mowing activities only to the extent necessary for staff to have an unobstructed view of waterways for operational purposes.

### **Response to Comment 14-8**

LADWP agrees that the practice depicted in the photographs does not reflect the appropriate use of herbicides. These same photographs were included in comments received in 2015 on LADWP's Habitat Conservation Plan. Staff were retrained based on those comments and the practice no longer occurs.

### **Response to Comment 14-9**

Your comment is noted.

### **Response to Comment 14-10**

Your comment is noted.

### **Response to Comment 14-11**

Your comment is noted.

### **Response to Comment 14-12**

Your comment is noted.

### **Response to Comment 14-13**

Your comment is noted. Irrigation ditches and canals are the only waterways that LADWP routinely maintains the entire reach via mowing and channel cleaning activities. Other waterways are only maintained up to 100 foot upstream and downstream of measuring stations and other facilities.

### **Response to Comment 14-14**

Your comment is noted. LADWP currently does daily maintenance checks, which includes inspections leaks on all equipment prior to use in the field. Staff also receives annual training regarding proper implementation of BMPs.

### **Response to Comment 14-15:**

A qualified LADWP Watershed Resources Specialist will be performing all applicable monitoring. This will consist of performing upstream and downstream monitoring for dissolved oxygen, temperature, pH, and turbidity. Monitoring will be performed with a hand held multi-probe meter.

### **Response to Comment 14-16**

Your comment is noted.

### **Response to Comment 14-17**

Your comment is noted.

## **Response to Comment 14-18**

Your comment is noted.

## **Response to Comment 14-19**

Your comment is noted.

## **Response to Comment 14-20**

The document describes what work may need to be conducted by LADWP on covered waterways in Section 1.6.1 and identifies facilities on these waterways in Appendix B.

## **Response to Comment 14-21**

Please see response to comment 14-3.

## **Response to Comment 14-22**

Your comment is noted.

## **Response to Comment 14-23**

Water quality data is collected during maintenance events to ensure that basin plan objectives are met. Your comment is noted.

## **Response to Comment 14-24**

Mitigation measures described in the IS/MND will provide adequate protection for Mountain beaver.

## **Response to Comment 14-25**

The photo provided appears to show emergent aquatic vegetation removed from the waterway located on the bank. Your comment is noted.

## **Response to Comment 14-26**

Stockpiles are not placed directly adjacent to waterways, and therefore do not pose an impediment to wildlife nor create a biological barrier. Also, as stated in Section 1.6.1 of the IS/MND, stockpiles are not placed on existing riparian and/or wetland habitats. Your comment is noted.



## **Response to Comment 14-27**

Your comment is noted.

## **Response to Comment 14-28**

Your comment is noted. LADWP continues to work with wildlife agencies to protect unique and endangered invertebrate species located on LADWP lands.

## **Response to Comment 14-29**

Your comment is noted.

## **Response to Comment 14-30**

It is unknown which impact(s) the commenter considers cumulatively considerable. Unmitigable significant impacts are not identified for the routine maintenance activities. The routine maintenance activities are on-going and a part of the baseline in the project area, and they would not contribute to any cumulative impact when viewed in combination with other projects.

## **Letter 15: Daniel Pritchett**

### **Response to Comment 15-1**

The waterway being described is Symmes Creek which is an ephemeral stream that historically only runs a few months a year under normal conditions. On the 1907 contour map Symmes Creek does not reach Highway 395. Historic aerial photographs indicate that erosion has occurred along Symmes Creek since at least 1944 and presumably began as a result of an exceptional runoff year. Erosion depicted in these photos is not a result of the types of activities described in this CEQA document but instead are a result of non-routine efforts of LADWP to protect the town of Independence and Highway 395 from flooding associated with extreme runoff events.

### **Response to Comment 15-2**

This comment is not related to this CEQA analysis or the project as described. Your comment is noted.

### **Response to Comment 15-3**

This comment is not related to this CEQA analysis or the project as described. Your comment is noted.

## **Response to Comment 15-4**

LADWP completed the mapping described in the Greenbook Section V. FURTHER STUDIES, Subsection 8. Type D Vegetation Monitoring Techniques describes efforts to refine mapping and monitoring of riparian vegetation that was not thoroughly mapped during the initial vegetation inventory. In 2005 LADWP contracted with Ecosystem Sciences, the MOU Consultant and Whitehorse Associates to conduct mapping and description of riparian areas in Inyo County. The final report entitled “OWENS RIVER TRIBUTARY INVENTORY 2005 CONDITIONS” was completed in September 2006.

## **Response to Comment 15-5**

Baseline conditions for CEQA review are generally defined as the time the environmental analysis is commenced, or in the case of an EIR, when the Notice of Preparation is published. The baseline is used as the point of comparison for determining the significance of a proposed project’s environmental effects. For review of the on-going routine maintenance activities, existing conditions from the mid-1980s would not reflect the current environmental setting or be the relevant baseline condition for impact assessment.

## **Letter 16: Lahontan Regional Water Quality Control Board**

### **Response to Comment 16-1**

As described in Appendix E of the IS/MND, LADWP implements Best Management Practices (BMPs) for the protection of water quality during routine maintenance activities. Since LADWP will continue to implement and monitor, as spelled out in the Mitigation Monitoring and Reporting Program (MMRP) and Attachment E, these BMPs for future routine maintenance, impacts to water quality would be less than significant. Reporting of BMP implementation is also conducted and will be made available to LRWQCB as a condition of the future permit, to verify water quality impacts are lessened.

### **Response to Comment 16-2**

LADWP maintains the existing hydrology of the waterways. As described in the IS/MND, LADWP maintains waterways by bringing them back to their original capacity so that the water can move from point A to point B in an efficient manner that protects water quality and its beneficial uses. The maintenance of the waterways is necessary in order to protect aquatic habitat and public health and safety. As part of routine maintenance activities, LADWP implements BMPs to reduce any potential water quality impacts below a level of significance. General BMPs discussed in the mitigation measure and as delineated in the MMRP are described in Appendix E of the IS/MND; as applicable, implementation details for BMPs will be developed in coordination with the LRWQCB and monitored to ensure impacts are less than significant.

### **Response to Comment 16-3**

An MMRP will be prepared and included with the IS/MND at the time that the document is considered for adoption by the Board of Water and Power Commissioners. The MMRP will include all of the mitigation measures identified in the IS/MND; where applicable, additional details regarding implementation will be provided. BMPs of the protection of water quality are also monitored and reported and will be provided to LRWQCB. General BMPs discussed in mitigation measures as delineated in the MMRP are described in Appendix E of the IS/MND; as applicable, implementation details for BMPs will be developed in coordination with the LRWQCD and monitored to ensure impacts are less than significant.

### **Response to Comment 16-4**

Your comment is noted. LADWP will continue to be proactive in the protection of all beneficial uses of waters during routine maintenance activities. Monitoring will be performed by LADWP to ensure that beneficial uses are protected.

### **Response to Comment 16-5**

LADWP agrees that any maintenance activities must comply with the water quality objectives set forth in the Lahontan Basin Plan. LADWP will continue to monitor water quality conditions (dissolved oxygen, temperature, pH, and turbidity) upstream and downstream of routine maintenance activities in the waterways with surface flows, and implement and monitor BMPs to assure that all water quality objectives (WQOs) are met. In addition, visual observations will be made and adjustments done as needed for flow management changes to mitigate potential impacts.

### **Response to Comment 16-6**

With implementation of BMPs described in Appendix E of the IS/MND, LADWP currently meets the objectives of the Lahontan Basin Plan and other appropriate regulations when performing routine maintenance activities. Trained qualified LADWP personnel will continue to monitor water quality (dissolved oxygen, temperature, pH, and turbidity) upstream and downstream of routine maintenance activities in waterways with surface flows. Monitoring is conducted with multi-probe hand-held meters; personnel are trained in the proper calibration and use of the meters. WQOs established in the Lahontan Basin Plan are the thresholds used to determine if implementation of additional BMPs is required. Note that the initial selection of BMPs is site-specific and based on the conditions observed in the field at the time routine maintenance activities are proposed. In response to your comment, the MMRP will include implementation details for mitigation measures BIO-9 to detail water quality monitoring training and thresholds for operational condition and triggers for necessary response actions.

### **Response to Comment 16-7**

BMPs as described in Mitigation Measures, in Appendix E, are ongoing measures implemented for routine maintenance activities, and therefore they are included as part of the project description. Under existing conditions, LADWP staff select, install, and maintain BMPs for the protection of water quality. LADWP concurs that BMPs are site and time specific. For future routine maintenance



activities, LADWP will coordinate with LRWQCB regarding BMP selection, and preparation of the requested matrix.

### **Response to Comment 16-8**

Please see response to comment 16-6 and reference the Mitigation Measures Table, Appendix E.

### **Response to Comment 16-9**

Previous permitting for the routine maintenance activities was considered under CEQA, and found to be exempt by the California Department of Fish and Wildlife. Regarding impacts to groundwater recharge, as described in Initial Study Section 2.3.9, deepening of waterways beyond their original hydraulic capacity is not conducted. The routine maintenance activities are ongoing, temporary at any one location, and a part of the baseline in the project area. Therefore, they would not contribute to any cumulative impact when viewed in combination with any other projects. Please note that mitigation has been identified in the Initial Study and will be monitored during project implementation to reduce potential environmental impacts to less than significant levels.

### **Response to Comment 16-10**

In response to your comment, the Clarification Sheet to the IS/MND includes the list of waterways maintained by LADWP on the 303(d) list. BMPs implemented during maintenance of impaired waterways are selected in consideration of the pollutants of concern for each waterway.

### **Response to Comment 16-11**

Trained LADWP personnel only apply herbicides in compliance with product labeling and on dry intermittent man-made waterways and adjacent to stations away from any flowing water. All restricted products are reported to the Inyo-Mono Agricultural Commissioner as required under our restricted materials use permit. Products are currently applied around the A-tubes and edges of stations with backpack sprayers which eliminate the possibility of over-spray into adjacent waterways. Pepper weed treatments are similarly applied with backpack sprayers as well as motorized Off Highway Vehicles (OHV) equipped with spray tanks.

LADWP is in the process of applying for a Non-Time Sensitive Non-Emergency Basin Plan Exemption for the use of aquatic pesticides at Alabama Gates, Merritt Cut, North and South Haiwee Reservoirs, and other water bodies within the Lahontan Region. As part of the application process, LADWP has enrolled in the National Pollutant Discharge Elimination System (NPDES) Aquatic Pesticide permit and as part of this permit LADWP has developed and amended its Aquatic Pesticide Application Plan (APAP) for the application of pesticides on and/or near these water bodies.

## **Response to Comment 16-12**

LADWP currently cleans up to 100 feet upstream and downstream of all measuring stations and facilities, such as diversion structures, spill gates, sand traps, flumes, spreading basins, toe drains, as listed in pages 1-15 – 1-16 in the IS/MND.

## **Response to Comment 16-13**

LADWP acknowledges the need to consult with these agencies. LADWP presently meets with the Lahontan Water Board, in addition to other regulatory agencies and land owners on a quarterly basis for the determination of permitting for water bodies in the Lahontan Region. The United States Army Corps of Engineers (USACE) is invited to these quarterly meetings. LADWP continues ongoing consultation with USACE regarding ongoing maintenance activities and is pursuing a permit to address all activities not covered by a Non-notifying Nationwide Permit.

Please see the discussion regarding the applicability of Section 401 and 404 of the Clean Water Act, administered by Lahontan Regional Water Quality Control Board and the USACE respectively, in Section 1.8 Required Permits and Approvals of the IS/MND.

## **Response to Comment 16-14**

Implementation of mitigation measures and BMPs during routine maintenance activities protects water quality, biological resources, wildlife habitat, and associated beneficial uses for the project area. As mitigated, the project is consistent with the conservation policies of the Inyo County and Mono County General Plans. In response to your comment, reference to these plans is included in the Clarification Sheet to the IS/MND.

## **Response to Comment 16-15**

Watershed Resources staff inspects all facilities prior to replacement and all waterways prior to cleaning. During this inspection site visit, areas to be avoided during maintenance and the size of the footprint for maintenance activities are determined. The area of impact is generally limited to previously disturbed areas and any material stockpiled on site is located away from the waterway in such a way that material does not wash into the waterway if there were a storm event. Fencing needed for nearby sensitive receptors is site specific and will be described within the plan for each project. Stockpiles are confined to previously disturbed areas and are hauled off-site for use or disposed of annually.

## **Response to Comment 16-16**

LADWP is aware that trout other than Lahontan Cutthroat trout occur in many of the waterways where maintenance activities could be conducted. The language in question, “Work activities shall not be conducted between March 15 and July to avoid impacts to spawning trout, redds, and embryos in identified tributaries to Grant Lake and Crowley Lake”, is specific to the spawning activities and timing in this area. Mitigation measure BIO-10 provides protection for all waterways that could have potential impacts to the fisheries.

## **Response to Comment 16-17**

In response to your comment, additional clarifications to Mitigation Measures BIO-3 and BIO-9 will be provided in the MMRP and in the Clarification Sheet for the IS/MND.

## **Response to Comment 16-18**

The MMRP will include the requested implementation detail for mitigation measure BIO-8.

## **Response to Comment 16-19**

Please see response to comment 16-11.

## **Response to Comment 16-20**

To avoid negative impacts to the downstream fishery, qualified trained LADWP personnel conduct water quality monitoring at dam locations when the ambient air temperature exceeds 95 degrees Fahrenheit. Parameters sampled include dissolved oxygen, temperature, pH, and turbidity. Monitoring is performed with a hand held multi-probe meter. The threshold values for water quality parameters follow the Lahontan Basin Plan and other applicable regulations. In response to your comment, staff training and other implementation details for mitigation measures BIO-9 will be incorporated as well as thresholds for operational conditions and triggers for necessary response actions into the MMRP.

## **Response to Comment 16-21**

LADWP identifies existing beaver dams for potential removal if they are: (1) negatively affecting the measuring stations by affecting the flow necessary for meter accuracy; (2) negatively affecting the maintenance or expansion of riparian habitats; or (3) otherwise impacting ecosystem health. However, control is conducted in consideration of the beneficial contributions of beaver dams to the fisher, along with the benefits to other desirable species and habitats. Beaver dams are left in place when their presence does not adversely affect measuring stations, water conveyance, or ecosystem goals.

## **Response to Comment 16-22**

Please see response to comment 16-6. In response to your comment, implementation details for mitigation measure BIO-9 will be incorporated into the MMRP.

## **Response to Comment 16-23**

To address the protection of threatened and endangered species, LADWP has worked collaboratively on an HCP with USFWS and CDFW; approval this summer is anticipated. To date,



incidental take permits for state or federally-listed species have not been required for routine maintenance activities nor do we expect them to be.

### **Response to Comment 16-24**

Please see response to comment 16-11.

Additionally, in order to address the potential release of hazardous materials to the environment from waterway maintenance, a site-specific Spill Prevention Plan is developed and targeted training for maintenance personnel is conducted. The Spill Plan describes the appropriate deployment of chemicals to the field for application, vehicle maintenance, spill kit maintenance and use, proper site housekeeping, and notification procedures in the event of a jobsite spill. A copy of the Spill Pan is present on-site during routine maintenance activities.

### **Response to Comment 16-25**

Based on database entries and staff survey results, LADWP is currently collaborating with CDFW to identify special status species by waterway. Since conditions are variable, this listing is considered a dynamic document. Once submitted and approved by CDFW, LADWP will provide the information to LRWQCB.

### **Response to Comment 16-26**

Please see response to comment 16-13.

### **Response to Comment 16-27**

Revised maps will be include as part of future permit application packages.

### **Response to Comment 16-28**

The reference permit requirements are noted. As described in response to comment 16-13, LADWP meets with Lahontan Regional Board staff on a quarterly basis and will continue these quarterly meetings to discuss upcoming projects. As part of these ongoing quarterly discussions, CDFW as well as USACE staff are often present (or available via teleconference) to coordinate activities, determine jurisdictional status and clarify permitting requirements. In the event that CDFW and /or USACE staff are not available for the meeting, relevant projects are discussed with these agencies prior to implementation. In all cases, consensus is required of all parties before projects receive the authorization to proceed.

## Letter 17: Mono Lake Committee

### **Response to Comment 17-1**

The IS/MND describes what work may be conducted by LADWP on covered waterways in Section 1.6.1, and identifies facilities on these waterways in Appendix B. There are too many unknown variables that make the request impractical.

### **Response to Comment 17-2**

Work described in the IS/MND is not inconsistent with the SWRCB Decision 1631 nor the subsequent Orders or other agreements.

### **Response to Comment 17-3**

Your comment is noted.

### **Response to Comment 17-4**

Your comment is noted.

### **Response to Comment 17-5**

Activities are described as routine since it is the type of work typically necessary to be conducted for maintenance and operational needs on the waterways and facilities described.

### **Response to Comment 17-6**

Existing biological mitigation measures described in the IS/MND provide sufficient protection for the fish described in the comment.

### **Response to Comment 17-7**

The public comment period for the habitat conservation plan closed in December of 2015. The Mono Lake Committee submitted comments on December 3, 2015. Since the comment period closed, LADWP and USFWS staff have been working on the development of an implementing agreement.

### **Response to Comment 17-8**

LADWP and CDFW have worked cooperatively on planning efforts when work on the MGORD is required.

## **Response to Comment 17-9**

LADWP works cooperatively with CDFW when it is necessary to remove obstructions from natural waterways.

## **Response to Comment 17-10**

Work described in the MND is not inconsistent with the SWRCB Decision 1631 nor the subsequent Orders or other agreements

## **Response to Comment 17-11**

Please see response to comment 17-9.

## **Response to Comment 17-12**

Your comment is noted.

## **Response to Comment 17-13**

Your comment is noted. Please see Mitigation Measure BIO-1 on page 2-17.

## **Response to Comment 17-14**

LADWP is unsure what is being referred to as an annual maintenance plan.

## **Response to Comment 17-15**

No, a Waterways maintenance procedure manual is not available for review.

## **Response to Comment 17-16**

The Mitigation measures identified in the IS/MND (pages 2-17 through 2-19) will provide adequate protection for Mountain beaver.

## **Response to Comment 17-17**

Your comment is noted.

## **Response to Comment 17-18**

Your comment is noted.



## **Response to Comment 17-19**

Your comment is noted.

## **Response to Comment 17-20**

Mitigation measures described in the IS/MND will provide adequate protection for Mountain beaver.

## **Response to Comment 17-21**

Mitigation measures described provide sufficient protection from the spread of invasive species.

## **Response to Comment 17-22**

Your comment is noted.

## **Response to Comment 17-23**

Your comment is noted.

## **Response to Comment 17-24**

Your comment is noted.

## **Response to Comment 17-25**

Your comment is noted.

## **Response to Comment 17-26**

Your comment is noted.

## **Response to Comment 17-27**

Your comment is noted.

## **Response to Comment 17-28**

Your comment is noted.

### **Response to Comment 17-29**

Yes, that is correct.

### **Response to Comment 17-30**

If LADWP facilities are present and need maintenance, appropriate agreements are in place.

### **Response to Comment 17-31**

Your comment is noted.

### **Response to Comment 17-32**

Your comment is noted.

### **Response to Comment 17-33**

All the waterways listed are covered under the existing RMA and will have work performed on an as-needed basis. These facilities are not called out in appendix A, but are located along the covered waterways.

### **Response to Comment 17-34**

LADWP will update list to include the particular waterways that will be maintained (Farrington Ditch, Grant Reservoir Spillway, Horse Meadow Ditch, and South Parker Creek).

### **Response to Comment 17-35**

LADWP has not mapped specific facilities in Appendix A, however all the waterways are labeled.

### **Response to Comment 17-36**

LADWP only labeled waterways where we perform routine maintenance work. There are other waterways in the Mono Basin on Private or Federal Property that we do not maintain.

### **Response to Comment 17-37**

Please see response to comment 17-36.

## **Response to Comment 17-38**

Dechambeau Ranch Irrigation Pipe and DeChambeau-Adair ditch are not maintained by LADWP. The Lee Vining Conduit is a facility and not specifically called out but covered under the appropriate waterway.

## **Response to Comment 17-39**

Your comment is noted.

## **Response to Comment 17-40**

Your comment is noted.

## **Response to Comment 17-41**

Your comment is noted.

## **Response to Comment 17-42**

Previous permits with CDFW regarding routine maintenance activities were found to be exempt from CEQA. The routine maintenance activities that are on-going and planned for the future are of the same type and will be conducted in the same locations as past routine maintenance activities. No increase in adverse environmental impacts or identification of new significant impacts is anticipated. However, in response to regulatory agency comments, LADWP has prepared an Initial Study and Mitigated Negative Declaration to formalize some of the environmental protection measures currently being implemented by identifying them as mitigation measures and including them in a Mitigation Monitoring and Reporting Program (MMRP). The trigger for preparation of an Environmental Impact Report is substantial evidence that significant effects would occur from the project. A Mitigated Negative Declaration is proposed by LADWP since there is no substantial evidence in light of the whole record that, as mitigated, the project would have a significant effect on the environment.

The routine maintenance activities are on-going and part of the environmental baseline in the project area. The existing environmental setting is presented in Section 1.2 and throughout Section 2 of the Initial Study.

## **Letter 18: Owens Valley Indian Water Commission**

### **Response to Comment 18-1**

The original mapping and biological analysis are correct and do include the 400' buffer on either side of the each waterway. When combining layers the projection was altered and created maps that do not clearly depict the actual area of impact analysis.



## **Response to Comment 18-2**

LADWP's routine maintenance activities do not involve deepening waterways beyond the extent necessary to maintain their capacity. Over excavation increases the overall maintenance costs as it increases the amount of material that is required to be hauled offsite. LADWP provides annual training to all construction personnel that include appropriate cleaning techniques which emphasize the removal of recently deposited loose sediment – not deepening waterways.

## **Response to Comment 18-3**

As stated sediment removal often contains trash. As soon as feasible after cleaning stretches of a waterway, sediment piles are removed from the work area and the trash is disposed in a local landfill. Unfortunately, the increased level of effort required related to the high runoff of 2017 has meant that spoil piles have not been removed as quickly as during low run-off years.

## **Letter 19: Sally Manning**

### **Response to Comment 19-1**

Previous permits with CDFW regarding routine maintenance activities were found to be exempt from CEQA. The routine maintenance activities that are on-going and planned for the future are of the same type and will be conducted in the same locations as past routine maintenance activities. No increase in adverse environmental impacts or identification of new significant impacts is anticipated. However, in response to regulatory agency comments, LADWP has prepared an Initial Study and Mitigated Negative Declaration to formalize some of the environmental protection measures currently being implemented by identifying them as mitigation measures and including them in a Mitigation Monitoring and Reporting Program (MMRP). The trigger for preparation of an Environmental Impact Report is substantial evidence that significant effects would occur from the project. A Mitigated Negative Declaration is proposed by LADWP since there is no substantial evidence in light of the whole record that, as mitigated, the project would have a significant effect on the environment.

The routine maintenance activities are on-going and part of the environmental baseline in the project area. The existing environmental setting is presented in Section 1.2 and throughout Section 2 of the Initial Study.

### **Response to Comment 19-2**

The Lower Owens River Project area is covered by a separate maintenance agreement. Work performed on the Eastside and McIver was not “routine” but was required because of the historic runoff that occurred in 2017.

### **Response to Comment 19-3**

The potential impacts to biologic resources that may be encountered during routine maintenance work was evaluated in the initial study. With the mitigation measures described in the Mitigated

Negative Declaration (see pages 2-17 through 2-19, there will not be a significant impact to any sensitive species.

### **Response to Comment 19-4**

The mapping described in the Greenbook Section V. FURTHER STUDIES, Subsection 8. Type D Vegetation Monitoring Techniques describes efforts to refine mapping and monitoring of riparian vegetation that was not thoroughly mapping during the initial vegetation inventory. In 2005 LADWP contracted with Ecosystem Sciences, the MOU Consultant, and Whitehorse Associates to conduct mapping and description of riparian areas in Inyo County. The final report entitled “OWENS RIVER TRIBUTARY INVENTORY 2005 CONDITIONS” was completed in September 2006.

LADWP only trims and removes trees along ditches and canals that interfere with normal operations of these facilities. Trees that do not interfere with normal operations are not treated and there is no systematic tree removal program.

### **Response to Comment 19-5**

An incident did occur in 2004 in which inappropriate work activities were conducted. Once supervisory staff became aware, work was immediately stopped. To ensure that work activities throughout the aqueduct system are performed appropriately, all work crews receive additional training to ensure that working guidelines were clearly understood by all personnel. Regarding the photographs of the Lyman Ditch included with the comment letter, the photographs do not represent similar conditions. The early photographs depict wet periods when water spreading activities were occurring. The later photographs were from dry period in which water spreading was not occurring.

### **Response to Comment 19-6**

The cleaning of Saunders pond was a community event that was carried out to improve wildlife habitat and recreational opportunities in the Bishop area. The pond had filled with emergent vegetation which eliminated open water habitat for waterfowl and fish, and restricted access for recreational activities. Flow to the pond was ceased for two years to allow the pond to dry. Volunteers from Cal Fire, CDFW, LADWP, Inyo County, City of Bishop, local civic groups (e.g. Lions Club), and numerous private local contractors and citizens participated in the project. Once the cleaning was complete, the Lions Club installed an accessible fishing dock and warm water fishers installed fish habitat structures. Once these were completed, the pond was refilled.

### **Response to Comment 19-7**

Based on LADWP aerial imagery, it appears that trees were removed from the area noted sometime between 2000 and 2005. A site visit indicated that the most likely scenario was illegal wood cutting of locust, a desirable species for use in woodstoves. This activity was not carried out by LADWP personnel.

## **Response to Comment 19-8**

LADWP's routine maintenance activities do not involve deepening waterways beyond the extent necessary to maintain their capacity. . LADWP provides annual training to all construction personnel that includes appropriate cleaning techniques which emphasize the removal of recently deposited loose sediment – not deepening waterways. Please also see response to comment 19-1.

## **Response to Comment 19-9**

This comment does not state a specific concern regarding the adequacy of the environmental impact analysis presented in the IS/MND. Your comment is noted. Please also see response to comment 19-1.

## Letter 20: Tom Noland

### **Response to Comment 20-1**

LADWP is not sure what this is in reference to. Staff has contacted your ranch manager who is unaware of any issues.

### **Response to Comment 20-2**

LADWP's routine maintenance activities do not involve deepening waterways beyond the extent necessary to maintain their capacity. LADWP provides annual training to all construction personnel that includes appropriate cleaning techniques which emphasize the removal of recently deposited loose sediment – not deepening waterways.

### **Response to Comment 20-3**

LADWP concurs with this statement.

### **Response to Comment 20-4**

LADWP concurs with this statement.



## SECTION 6

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# Mitigation Monitoring and Reporting Program

The Mitigation Monitoring and Reporting Program (MMRP) for the proposed project has been prepared in accordance with Public Resources Code Section 21081.6 and State CEQA Guidelines Section 15091(d). LADWP will use this MMRP to track compliance with the project mitigation measures. LADWP will consider the MMRP during the certification hearing for the Mitigated Negative Declaration (MND). The MMRP will incorporate all mitigation measures adopted for the proposed project.

This MMRP summarizes potentially significant impacts and mitigation commitments identified in the MND. Table 6-1 provides the MMRP which includes all mitigation measures, project design feature, monitoring process, monitoring timing, and responsible persons/agency for implementation. Impacts and mitigation measures are presented in the same order as in the project MND. The columns in the table provide the following information:

- **Mitigation Measures:** The action(s) that will be taken to reduce the impact to a less-than-significant level.
- **Additional Implementation Information:** This column outlines the additional steps to implement and verify compliance with the mitigation measures.
- **Time Frame for Implementation:** This column indicates the general schedule for conducting each monitoring task, either prior to construction, during construction, and/or after construction.
- **Responsible Monitoring Agency and Additional Applicable Agencies:** This column lists the agencies responsible for ensuring implementation of the mitigation measure.
- **Clarification Notes:** This column outlines specific steps and clarifying information to implement and verify compliance with the mitigation measures.

TABLE 6-1  
 Mitigation Monitoring and Reporting Program  
 Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties  
 Mitigation Negative Declaration

Mitigation Measure Number	Mitigation Measure	Additional Implementation Information	Time Frame for Implementation	Responsible Monitoring Agency	Additional Applicable Agencies	Verification of Compliance (Initials/Date/Notes)	Clarification Notes
BIO-1	<p>Potentially significant impacts to plants, fish and wildlife shall be minimized to less than significant levels by: using existing roads for ingress and egress to work locations; confining work to the smallest footprint possible and to previously disturbed areas associated with water conveyance infrastructure; removing vegetation only when necessary; and placing staging and spoil piles in predetermined locations away from waterways, wetlands, and riparian habitats.</p> <p>Watershed Resources staff shall perform pre-project surveys to find a location for staging and access that will minimize impacts to surrounding vegetation and avoid sensitive resources.</p>	<p>During preconstruction site visits, the smallest footprint possible will be determined prior to start of the construction and/or maintenance activities.</p> <p>All facilities are inspected prior to replacement and all waterways are inspected prior to cleaning.</p>	<p>Prior to and during maintenance events</p>	<p>LADWP</p>	<p>LRWQCB CDFW</p>		<p>All personnel will participate in annual environmental awareness training in order to understand all conditions within current permits.</p> <p>Baseline monitoring for waterway depth using cross section measurement techniques.</p> <ul style="list-style-type: none"> <li>• LADWP surveyors will take cross section measurements annually on the large canals covered under the Routine Maintenance Agreement . These canals include; Bishop Creek Canal, Big Pine Canal, Rawson Canal</li> <li>• Cross-section surveys will be performed at the same time of year, and will be in the same location. Survey locations will be agreed upon by LADWP, CDFW and Lahontan.</li> <li>• LADWP proposes a measurement at the mid-point of the canals as well as near the bottom.</li> <li>• If a significant change in depth occurs LADWP, CDFW and Lahontan will work together on adaptive management strategies to mitigate any potentially significant impacts.</li> </ul>

<p>BIO-2</p>	<p>To the maximum extent feasible, maintenance work shall be conducted outside of the bird nesting season, March 1 to September 1; however, if species are active earlier or later, surveys shall be performed. If maintenance activities cannot be feasibly avoided between March 1 and September 1, nesting bird surveys shall be conducted by qualified biologists prior to the start of work. If a nest is found or nesting suspected, project activities shall cease within suitable nesting habitat or within 300 feet of nesting habitat (within 500 feet for raptor nesting habitat). Any active bird nests located shall be protected and work postponed until after young have fledged. If a special status bird species is found present in a specific area, no maintenance work shall occur in that area during the breeding season.</p>		<p>Prior to and during maintenance events</p>	<p>LADWP</p>	<p>LRWQCB CDFW</p>		
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<p>BIO-3</p>	<p>Work activities shall not be conducted between March 15 and July 1 to avoid impacts to spawning trout, redds, and embryos in identified tributaries to Grant Lake and Crowley Lake. Work activities shall not be conducted in waterways with known Speckled Dace during the spawning season (late spring into summer) to avoid impacts to spawning Cypriniform fishes (e.g., Owens Suckers, Speckled Dace). Specific locations and timing will be coordinated with CDFW. Known locations of Speckled Dace are shown in Appendix C. If work is conducted in these waterways from June to August, water quality data will be collected during maintenance activities. If aquatic life and fish are showing signs of stress, a reasonable effort will be made to capture and relocate stressed or stranded aquatic life. Capture methods may include fish landing nets, dip nets, buckets, and by hand. Captured aquatic life shall be released immediately into the waterway in reaches where fish are likely to survive. If fish capture is necessary, LADWP shall consult with CDFW for capture and relocation guidance and assistance.</p>		<p>Prior to and during maintenance events</p>	<p>LADWP</p>	<p>CDFW LRWQCB</p>		<p>Water quality samples will be taken upstream and downstream of the in-stream maintenance activity and shall be tested for dissolved oxygen, turbidity and pH using handheld meters. LADWP staff will be trained in the calibration and use of the meters.</p> <p>Speckled dace monitoring for distribution using presence/absence.</p> <ul style="list-style-type: none"> <li>• Prior to 2020, CDFW will survey potential speckled dace habitat within the Owens Valley and prepare a report summarizing results.</li> <li>• CDFW will identify monitoring locations in consultation with LADWP prior to June 1, 2020.</li> <li>• Beginning in 2020, CDFW will conduct annual monitoring of identified speckled dace locations between August 1 and September 1 on LADWP lands. CDFW will also conduct monitoring on non-LADWP lands.</li> <li>• LADWP will inform CDFW in advance in the event of any scheduled water outages in perennial waters.</li> <li>• These surveys will consist of a single-pass electrofishing effort within the identified survey area and will be conducted by CDFW in collaboration with LADWP staff.</li> <li>• Each survey will consist of 400 seconds of electrofishing effort, with the electrofishing fishing unit set at setting appropriate for the water conductivity.</li> <li>• Up to fifty speckled dace will be captured and measured (mm total length) at each location.</li> <li>• If no speckled dace are captured within 400 seconds of electrofishing, the surveyors will attempt to repeat the survey 300 meters upstream and 300 meters downstream of the sample point.</li> </ul>
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BIO-3  
Cont'd

- If no speckled dace are captured within a given sample location, or the adjacent locations, CDFW and LADWP will meet prior to October 1 and discuss possible reasons for extirpation and potential adaptive management options.

Monitor fish stranding and fish kill events to determine locations where it is occurring and to determine total numbers of fish killed and/or stranded. LADWP and CDFW will establish set protocol is for communicating observed or eminent fish kills.

- LADWP will inform CDFW 48 hours in advance in the event of any scheduled or unscheduled water outages in perennial waters.
- If fish stranding is observed, LADWP staff will rescue fish using buckets, dip nets, or seine and place them in the nearest waterway. The location, number, and approximate size of the fish will be reported to CDFW within 24 hours of the event.
- Coordination between LADWP and CDFW regarding fish rescues will occur as soon as possible. Collaboration on fish rescues with CDFW is encouraged, however LADWP is responsible for compliance with this measure.

Prior to October 1 of each year, CDFW and LADWP will conduct an annual meeting to discuss any fish rescues or fish kills that occurred during the preceding calendar year. Future fish rescues, areas of concern, and potential data gaps will be identified at this meeting.

<p>BIO-4</p>	<p>Banks on waterways shall not be graded. Vegetation shall be cut down to no lower than 2 inches to leave roots that promote waterway bank stability and regrowth. Any native vegetation with DBH of 4 inches or greater shall be left intact. LADWP shall consult with CDFW and prepare a mitigation plan prior to removing any riparian vegetation with a DBH equal to or greater than 4 Inches. Replacement-to-impact ratios will be discussed as necessary. Any area that has not been mowed annually shall be assessed prior to mowing by a Watershed Resources Specialist to determine if there are any resource concerns.</p>		<p>Prior to and during maintenance events</p>	<p>LADWP</p>	<p>CDFW</p>		<p>Woody riparian vegetation monitoring to measure vegetative cover and ensure no significant decline occurs in areas where routine maintenance activities are occurring.</p> <ul style="list-style-type: none"> <li>• LADWP will utilize the vegetation mapping that was prepared for the HCP as baseline conditions for the maintained waterways (as described in the RMA Attachment A).</li> <li>• Monitoring will be consistent with the landscape, community and species level monitoring as described in the HCP and will be replicated every 5 years (section 6.0 HCP Monitoring and Adaptive Management).</li> <li>• LADWP will track changes in natural and semi-natural landscapes and vegetation communities every five to ten years to ensure compliance. Monitoring and analysis of the Plan Area may be staggered to create a manageable workload.</li> <li>• The results will be submitted to CDFW with a summary that assesses vegetation, community and landscape changes across the project area.</li> <li>• If needed, image analysis will be verified on the ground by LADWP staff following the completion of the survey.</li> </ul>
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BIO-4  
Cont'd

- Habitat monitoring relies upon Vegetation Mapping from remote imagery to quantify major habitat changes and early detection of problem areas at a natural community and landscape scale. Vegetation Mapping from remote imagery is ground truthed and revised as necessary to improve accuracy. Accuracy assessment will be reported in the Annual Reports. The purpose of Vegetation Mapping is to provide managers with a landscape and natural community scale measurement of the Project Area. New imagery is gathered approximately every five years. In regions where vegetation change is expected vegetation is re-mapped approximately every five years.
- Mapping within the Project Area will be similar to the methods used in the LORP effort (LADWP 2010). Mapping methods change with aerial imagery quality, software updates, and advancements in technique. In general, the resolution of the final mapping products continues to increase with time. This mapping is part of an already established long-term monitoring program dating back to the mid-1980s; therefore, future methods will be designed to be comparable to those utilized before and during 2010.

<p>BIO-5</p>	<p>If maintenance activities are proposed to occur within a specific waterway where special status plants, such as frogs-bit buttercup are known to exist, a qualified Watershed Resources staff member shall conduct surveys prior to work activities and ensure that any populations of special status plants are avoided. If a specific waterway contains an outdated occurrence record for a special status plant, a survey shall be conducted prior to work activities. If a waterway has not been cleaned for more than 5 years, a rare plant survey shall be conducted prior to work activities both in the waterway and in appropriate adjacent habitat. All records shall be submitted to the CNDDDB.</p>		<p>Prior to and following maintenance events</p>	<p>LADWP</p>	<p>CDFW</p>		
<p>BIO-6</p>	<p>If a bat is observed in daylight hours during project activities, qualified LADWP Watershed Resources Staff shall be contacted to come to the project area and investigate the observation. A daylight observation may indicate that the bat is sick, or has been disturbed from a sensitive day roost or maternity roost containing multiple individuals and/or pups. If this type of roost is discovered, project activities shall not occur within 100 feet of the roost until the bats are no longer utilizing the area for hibernation or pup-rearing.</p>		<p>During maintenance events</p>	<p>LADWP</p>	<p>CDFW</p>		

<p>BIO-7</p>	<p>LADWP Watershed Resources Staff shall conduct surveys in Locust Ditch, Hogback Creek, and the Alabama Gates Spillway during March and November when the Inyo Mountain Slender Salamander are most active, to determine if this species is extant or extirpated from these areas. LADWP shall consult with CDFW to determine the state-approved protocol, monitoring techniques, and interval.</p>		<p>Prior to maintenance events</p>	<p>LADWP</p>	<p>CDFW</p>		
<p>BIO-8</p>	<p>Equipment shall be cleaned with a high-pressure washer before traveling between waterways to avoid the spread of invasive species. Information shall be shared as it becomes available regarding the presence and prevention of any observed invasive species including botanical (e.g., pepperweed, knapweed, etc.) and aquatic invasive species (e.g., New Zealand Mudsnaills, Quagga/Zebra Mussels, etc.) in or near waterways. LADWP currently treats both pepperweed and tamarisk annually with chemical and mechanical removal techniques to reduce the spread of known populations.</p>		<p>Prior to, during, and following maintenance events</p>	<p>LADWP</p>	<p>LRWQCB</p>		<p>To avoid the spread of weeds or other invasive species, weed-free mulch will be used and staging areas will be avoided where weeds are evident. In order to minimize disturbance, preconstruction surveys will be conducted to determine appropriate locations.</p>



BIO-9	<p>Worker Environmental Awareness Training shall be provided annually to all LADWP personnel involved in conducting and managing routine maintenance activities. This training shall cover authorized maintenance activities, permit conditions, required pre-maintenance biological surveys and protective measures that must be followed to avoid inadvertent impacts to biological, cultural and historic resources.</p>		<p>Prior to maintenance events</p>	<p>LADWP</p>	<p>LRWQCB CDFW</p>		<p>Personnel will be trained in the implementation of BMPs to minimize water quality impacts and meet Basin Plan water quality objectives. Qualified Storm Water Developers (QSDs) and environmental trainers to conduct environmental awareness training including a review and proper implementation of BMPs.</p>
BIO-10	<p>Maintenance activities shall be avoided during the fall/early winter spawning season for the protection of Brown Trout spawning beds when eggs and larvae could occur. Specific locations for avoidance shall be identified in coordination with CDFW. The following criteria will be used to identify locations where measures will be implemented:</p> <ul style="list-style-type: none"> <li>a) There is known or suspected fishing pressure, and</li> <li>b) Habitat conditions support catchable Brown Trout in the 2-3 pound range.</li> </ul>		<p>Prior to maintenance events</p>	<p>LADWP</p>	<p>CDFW</p>		

<p>BIO-11</p>	<p>Beaver dams shall only be removed if they are causing excessive flooding, restricting flow substantially, or are inhibiting the development of diverse vegetation types within specific waterways. During beaver dam removal, water quality monitoring (dissolved oxygen, temperature, pH, and turbidity) shall be conducted. Work shall be halted immediately if fish stress is observed or water quality is substantially reduced.</p>	<p>With regards to water quality monitoring, data will be collected by qualified LADWP personnel.</p>	<p>Prior to maintenance events</p>	<p>LADWP</p>	<p>CDFW LRWQCB</p>	<p>LADWP to identify existing beaver dams for potential removal if such dams:</p> <ul style="list-style-type: none"> <li>• Negatively impact measuring stations by affecting the flow necessary for meter accuracy;</li> <li>• Negatively affect the maintenance or expansion of riparian habitats;</li> <li>• Otherwise impacts ecosystem health.</li> </ul> <p>Control is conducted in consideration of the beneficial contributions of beaver dams to the fisher, along with benefits to other desirable species and habitats. Beaver dams are to be left in place when their presence does not affect measuring stations, water conveyance, or ecosystem goals.</p> <p>To avoid adverse impacts to the downstream fishery, LADWP to conduct water quality monitoring at beaver dam locations when the ambient air temperature exceeds 95 degrees Fahrenheit. Qualified LADWP personnel to monitor water quality (dissolved oxygen, temperature, pH, and turbidity) using multi-probe hand-held meters. Personnel to be trained in the proper calibration and use of meters. WQOs established in the Lahontan Basin Plan will serve as the thresholds to determine if implementation of additional BMPs is required.</p>
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<p>BIO-12</p>	<p>When replacing existing facilities, water shall be diverted around the worksite to ensure fish remain in good condition, or facilities shall be replaced when the waterway is dry. When it is not possible to complete work while a waterway is dry, an appropriate water diversion method will be utilized. The selection of the method used will be based on site conditions and may involve the use of coffer dams, culverts, and open trenches and all water diversions shall be discussed with CDFW prior to implementation. Trenches and culverts are typically placed in previously disturbed areas to minimize additional vegetation disturbance. Water quality will be monitored 100 feet upstream and 100 feet down stream of work areas and measured for turbidity, dissolved oxygen and pH by qualified LADWP personnel using hand held meters. Standards defined in the Lahontan Basin Plan are used as applicable water quality standards.</p>		<p>Prior to and during maintenance events</p>	<p>LADWP</p>	<p>CDFW LRWQCB</p>		<p>The aquatic habitat will be visually monitored 100 feet upstream and 100 feet downstream. In addition, water quality will be monitored 100 feet upstream and 100 feet down stream of work areas and measured for turbidity, dissolved oxygen and pH by qualified LADWP personnel using hand held meters. Personnel will be trained as detailed in Bio-3 and Bio-9. Standards defined in the Lahontan Basin Plan are used as applicable water quality standards.</p>
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CUL-1	<p>In the event of a discovery of previously unknown prehistoric or historic cultural material, maintenance activities shall immediately cease in the area and a qualified archaeologist shall be contacted to evaluate the find and determine if it represents an intact deposit or archaeological site. An appropriate plan to protect or salvage the find shall be developed by the archaeologist in collaboration with LADWP. If prehistoric cultural material is found, the evaluation and determination of appropriate measures shall be coordinated with regional Native American Tribes.</p>		<p>During maintenance events</p>	LADWP	-		
CUL-2	<p>Worker Environmental Awareness Training shall be provided annually to all LADWP personnel involved in conducting and managing routine waterway maintenance. This training shall cover authorized maintenance activities, permit conditions, and required protective measures that must be followed to avoid inadvertent impacts to biological, cultural and historic resources.</p>		<p>Prior to maintenance events</p>	LADWP	LRWQCB		

Appendix AA  
**Draft IS/MND**

# **Initial Study/ Mitigated Negative Declaration**

## **Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties**

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**Los Angeles Department of Water and Power  
Environmental Affairs  
111 North Hope Street, Room 1044  
Los Angeles, California 90012**

**December 2017**



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Acronyms and Abbreviations

- AB Assembly Bill
BMP Best management practice
CARB California Air Resources Board
CCR California Code of Regulation
CDC California Department of Conservation
CDFW California Department of Fish and Wildlife
CEQA California Environmental Quality Act
CESA California Endangered Species Act
CFR Code of Federal Regulation
CH4 methane
CNDDDB California Natural Diversity Database
CNPS California Native Plant Society
CO2 Carbon dioxide
CO2e Carbon dioxide equivalent
CWA Clean Water Act
DBH Diameter-at-breast height
FESA Federal Endangered Species Act
ft feet
GBUAPCD Great Basin Unified Air Pollution Control District

GHG	Greenhouse Gas
GIS	Geographic Information System
HCP	Habitat Conservation Plan
ICWD	Inyo County Water Department
Ldn	Day-night average sound level
LAA1	First Los Angeles Aqueduct
LADWP	Los Angeles Department of Water and Power
LORP	Lower Owens River Project
MBTA	Migratory Bird Treaty Act
mi	mile
NAHC	Native American Heritage Commission
N2O	Nitrous oxide
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
PM2.5	Particulate matter 2.5 micrometers or less in diameter
PM10	Particulate matter 10 micrometers or less in diameter
RWQCB	Regional Water Quality Control Board
SCE	Southern California Edison
SSC	Species of Special Concern
SWFL	Southwestern Willow Flycatcher
SWRCB	State Water Resources Control Board
TMDL	Total Maximum Daily Load
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
WDR	Waste Discharge Requirements



# Section 1 – Project Description

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<b>Project Title:</b>	Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties
<b>Lead Agency Name:</b>	Los Angeles Department of Water & Power
<b>Lead Agency Address:</b>	111 North Hope Street, Room 1044 Los Angeles, California 90012
<b>Contact Person:</b>	Mr. Eduardo Cuevas
<b>Contact Phone Number:</b>	(213) 367-6376
<b>Project Sponsor:</b>	Same as Lead Agency

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## 1 Routine Maintenance Description

### 1.1 Overview

Waterways within the Inyo County and Mono County watersheds are managed by the Los Angeles Department of Water and Power (LADWP), Southern California Edison (SCE), Mammoth Community Water District, various water associations or private landowners. For several decades, LADWP has operated and maintained extensive man-made and natural waterways in Inyo and Mono Counties. This includes 1,300 miles (mi) of unpaved roads, 450 mi of natural waterways, 84 mi of aqueducts, and 111 mi of man-made ditches and canals with several hundred water diversions. LADWP's ongoing activities include water gathering, water distribution, hydroelectric power production, and continuation of other land uses. For water gathering and distribution, LADWP performs routine maintenance and operations of facilities in Mono and Inyo Counties including about 187 flumes and measuring stations, 190 water intake and diversion structures, more than 60 sand traps or sediment basins, and 30 spillgates. Routine maintenance activities are on-going and necessary to ensure the continued safe and reliable operation of these waterways and facilities. LADWP has minimized impacts through on-going best management practices (BMPs) as described in the Biological measures outlined in this document. LADWP continues to maintain access and functionality of measuring stations, diversions and waterways in a manner consistent with current regulations. Without regular maintenance, facilities can become damaged and water flow can be hindered by excessive amounts of sediment and vegetation that naturally accumulate in waterways. The effective transport and efficient use of water can be further impeded by submerged measuring structures which become inoperable and cause further waste of water. These waterways are essential for the continued delivery of water for use in Mono County, Inyo County and the City of Los Angeles. Furthermore, due to legal requirements to provide allocated water to habitat enhancement and environmental mitigation projects (e.g., Owens River) on predetermined schedules, it is important that LADWP be able to promptly conduct maintenance work on waterways and structures to avoid disruptions in water delivery.

#### 1.1.1 Use of the Initial Study / Mitigated Negative Declaration

LADWP has prepared this Initial Study / Mitigated Negative Declaration for use by the California Department of Fish and Wildlife (CDFW) and the Lahontan Regional Water Quality Control Board as the California Environmental Quality Act (CEQA) compliance document for issuance of permits for the continuation of long term waterway maintenance activities by LADWP.

### 1.2 Routine Maintenance Area

#### Environmental Setting

Routine waterway maintenance occurs throughout Inyo and Mono Counties, California. These two Counties are bounded by the Sierra Nevada Mountains to the west and the White and Inyo Mountains to the east and from the Mono Basin in the north to Pearsonville in the south. The Sierra Nevada casts a rainshadow over the area resulting in low precipitation. The Owens River originates at Big Springs in southwestern Mono County, flows into Crowley Reservoir, through the Owens River Gorge and into the Owens Valley. Roughly 5 miles south of Tinemaha Reservoir, the Owens River is diverted into the Los Angeles Aqueduct (LAA). However, some perennial flow is maintained to the Lower Owens River and Owens Lake Delta. The maintenance area includes most of the riparian habitat and associated waterways within Mono Basin, Long Valley, Owens Valley (Bishop and Independence area) and Rose Valley (Haiwee area). Figures 1 through 5 depict waterways in the project area. Specific water bodies maintained by LADWP are identified in the map book in Appendix A and are also listed in Appendix B.

#### Climate

The Mono Basin is characterized by a high altitude Mediterranean climate with great seasonal and annual precipitation variability. The area receives 6-13 inches of precipitation a year, with 80 percent of that between November and April in the form of snow (Gaines 1981). After a storm on cool days the poconip, or dense fog, covers the basin and leaves a dusting of frost. In the spring and fall, winds are common; some reaching speeds of 100 miles per hour; and during the summer, thunderstorms often form (Gaines 1981). Mean daily winter temperatures (December through February) are usually below freezing throughout the basin, while mean daily summer temperatures are between 60 and 65 degrees Fahrenheit (°F). Summer daily maximums normally range from 75 to 85 °F and winter daily maximums are often above freezing (Jones and Stokes Associates 1993).

The Long Valley climate is semi-arid and moderate. Due to its high altitude, this area has a dry-summer humid continental climate, with long, snowy winters, and warm, dry summers. Snowfall is particularly heavy from December through March, and averages 206 inches per season. On average, there are 21 days of high temperatures above 80 °F and 5.2 nights of sub-0 °F lows annually. This area has winter average lows of 16 to 21 °F to summer average highs of 70 to 80 °F (NCEI 2009). Precipitation totals about 20 to 25 inches per year, divided between winter snows and summer thunderstorms.

The Owens Valley has hot, dry summers and moderately cold winters. Relative humidity is low to moderate ranging from 6 to 100 percent and averages less than 30 percent during the summer months and more than 40 percent during the winter months (Duell 1990). Evapotranspiration is high (range of 8.9 to 37.4 in per year) (Danskin 1998). Air temperatures vary greatly from a winter low of 2 degrees F to a summer high of 107 degrees F. The average low January temperature in winter is 21 degrees F and the average high July temperature is 99 degrees F.

Above 10,000 feet, the majority of precipitation falls as snow and averages 30 inches in snow-water equivalent. In the Owens Valley, average precipitation is 4 to 6 inches; in the White and Inyo Mountains it is 7 to 10 inches. Most precipitation falls between December and February.

Rose Valley is a hot, arid desert region with wide annual temperature fluctuations that occur from a high of 119 °F to a low of 1 °F. Winds are known to reach as high as 75 mph on a sunny day. The area receives

5-7 inches of precipitation per year while the area's open water potential evaporation rate has been estimated to be up to 65 to 80 inches per year (SWRCB 1993, Bauer 2002). Surface water bodies in the Rose Valley area consist of perennial springs sustained by groundwater flow, ephemeral streams and washes that mainly flow in the winter, and man-made lakes and reservoirs.

### **Topography, Geology, and Soils**

The Owens Valley is the most southwestern basin in the Basin and Range geologic province, which is characterized by a series of separate and parallel mountain ranges interposed with broad valleys. The Owens Valley floor elevation ranges from 3,000 to 4,500 feet (ft). The topographic relief from neighboring mountains varies from 3,700 to 10,800 ft. The valley floor is underlain by valley fill that consists of unconsolidated to moderately consolidated alluvial fan, transition-zone, glacial and talus, and fluvial and lacustrine deposits. The valley fill also includes interlayered recent volcanic flows such as Red Hill and pyroclastic rocks such as the Bishop Tuff (Danskin 1998).

A major geologic feature of the region is the Owens Valley Fault zone, which extends from Bishop in the north to south of Owens Lake. Springs and other minerotrophic wetland features are associated with the fault zone.

The Volcanic Tablelands, located at the northern end of the Owens Valley and extending north to Mono Lake, are part of a 580 square mi area covered by volcanic ash flows from the eruption of Long Valley Caldera approximately 760,000 years ago. The region remains geologically active with faulting at the base of the Sierra Nevada and crustal stretching of the Basin and Range Province. The tablelands consist of several layers of compacted ash known as Bishop Tuff, which is up to 600 feet deep in places. The soils associated with this formation are very shallow and well-drained. The dominant rocky and loamy soil textures are generally nutrient poor, with low levels of inorganic nitrogen and plant-available phosphorus. The Natural Resources Conservation Service (NRCS) mapped and classified Owens Valley soils (2002).

### **Hydrology**

In the Mono Basin the major surface waters within the maintenance area include Mill, Wilson, Lee Vining, Walker, Parker, and Rush Creeks, which all flow into Mono Lake. Grant Reservoir is located on Rush Creek. In addition, there are numerous springs and seeps located around Mono Lake.

In Long Valley and the Owens Valley (i.e., the Owens Basin), the Owens River headwaters are located at Deadman Creek and the Owens River begins at Big Springs. The Upper Owens River then flows through Long Valley and empties into Crowley Reservoir. The main tributaries to the Upper Owens River are Mammoth, Hot, Little Hot, Convict, and McGee Creeks. Below Crowley Reservoir, the river flows into the Owens River Gorge, which runs 20 mi to Pleasant Valley Reservoir. Rock Creek and Pine Creek join the Owens River just upstream of Pleasant Valley Reservoir. Lower Horton and Lower McGee Creeks are tributary to the Owens River downstream of Pleasant Valley Reservoir. The Middle Owens River runs from Pleasant Valley south past Bishop and Big Pine to the LAA Intake downstream of Tinemeha Reservoir. Main tributaries to the Middle Owens River are Bishop and Big Pine Creeks. Downstream of the Intake, the Lower Owens River continues south to the Owens River Delta. Following implementation of the Lower Owens River Project in December 2006, perennial flow has been maintained in the Lower Owens River downstream of the Intake. The LAA lies well west of the Owens River, and from the Intake south to the Alabama Gates it is an open, unlined channel. From the Alabama Gate south to Haiwee



Reservoir, the Aqueduct is open, but is a concrete lined channel. South of Haiwee Reservoir, the Aqueduct is a lined, closed system. While several creeks originating from the east slope of the Sierra Nevada historically were tributary to the Owens River, there are currently no major tributaries to the Lower Owens River. Water from the larger creek systems such as Independence, Oak, and Lone Pine Creeks is used to irrigate pastures for the purpose of livestock grazing.

Water is provided to other small lakes within the maintenance area including Klondike Lake, Buckley Ponds, Upper and Lower Twin Lakes, Goose Lake, Billy Lake, and Diaz Lake. The Blackrock Waterfowl Management Area provides up to 500 acres of flooded habitat each year, including some open water and ponded areas. In addition, there are numerous canals and ditches that are used to divert flow from the Owens River and its tributaries for irrigation, groundwater recharge, and other purposes (refer to Figures 1 through 5 and Appendix A).

### Vegetation Communities

Vegetation in the Owens Valley is controlled by the arid to semi-arid conditions, the high salinity of soil, and the presence of a shallow water table. Vegetation communities within the maintenance area include emergent wetland, alkali meadow, rush-sedge meadow, riparian forest and riparian shrub (modified from Cheatham and Haller 1975).

Emergent wetlands occur throughout the maintenance area in locations with surface water and near surface water. Dominant species include cattail (*Typha* spp.) and bulrush or tule (*Schoenoplectus acutus*). Under some conditions, these native species become invasive and efforts to control them are ongoing.

Alkali meadow and rush sedge meadow communities occur throughout the maintenance area in locations with high water tables. Dominant alkali meadow species are tolerant of high salinity and alkalinity. These species include alkali sacaton (*Sporobolus airoides*) and salt grass (*Distichlis spicata*). The rush-sedge meadow communities are dominated by Nebraska sedge (*Carex nebraskensis*) and Baltic rush (*Juncus balticus*).

Riparian forest and shrub communities occur along the Owens River and along streams draining from the Sierra Nevada. Common tree species include Fremont cottonwood (*Populus fremontii*), Gooding's black willow (*Salix gooddingii*), and red willow (*Salix laevigata*). Understory species include coyote willow (*Salix exigua*), Woods' rose (*Rosa woodsii*), grasses, rushes and sedges. Saltcedar (*Tamarix ramosissima*) and perennial pepperweed (*Lepidium latifolium*), nonnative species, have invaded many riparian areas in the maintenance area, and efforts to eradicate them are ongoing.

### Wildlife Resources

Wildlife species are closely associated with the various vegetation communities described above.

The aquatic communities in the maintenance area include aquatic invertebrates such as nonnative Crayfish (*Procambarus clarkii* and *Pacifastacus leniisculus*), native Mussels (*Anodonta* spp.), Spring Snails (*Pyrgulopsis* spp.), nonnative invasive New Zealand Mud Snails (*Potamopyrgus antipodarum*) and Asian Clam (*Corbicula* sp.). Common macroinvertebrates include Diptera (midge), Amphipoda (scud), and Bivalvia (clam). These aquatic communities are dominated by predatory fish species introduced for recreational fishing, such as Largemouth Bass (*Micropterus salmoides*), Brown Trout (*Salmo trutta*),

## Section 1 - Project Description

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Rainbow Trout (*Oncorhynchus mykiss*), and Bullhead Catfish (*Ameiurus nebulosus* and *Ameiurus melas*). Additionally Owens sucker (*Catostomus fumeiventris*) are widely distributed in streams and the Owens River. Mosquitofish (*Gambusia affinis*), also a nonnative species, were introduced in many areas for mosquito control.

Emergent wetlands, alkali and rush-sedge meadows, and riparian forest communities provide habitat for species such as the introduced American Bullfrog (*Lithobates catesebeiana*), Marsh Wren (*Cistothorus palustris*), Common Yellowthroat (*Geothlypis trichas*), Savannah Sparrow (*Passerculus sandwichensis*), Red-winged Blackbird (*Agelaius phoeniceus*), Western Meadowlark (*Sturnella neglecta*) and Botta's Pocket Gopher (*Thomomys bottae*). The introduced Tule Elk (*Cervus canadensis nannodes*) typically occurs in meadows around the Owens River and tributaries, moving into irrigated pastures to forage, and making seasonal movements into surrounding upland vegetation and onto alluvial fans.

Wet meadow and riparian areas typically support amphibian species such as Western Toad (*Anaxyrus boreas*), Great Basin Spadefoot (*Spea intermontana*) and the introduced American Bullfrog. There are minimal lizard species in these habitats, however snakes, such as Sierra Garter Snake (*Thamnophis couchii*) and Wandering Garter Snake (*Thamnophis elegans vagrans*) are frequently found. Riparian areas, including associated wet meadow habitats, support a multitude of breeding bird species, depending on elevation and vegetation structure: Red-breasted Sapsucker (*Sphyrapicus ruber*), Hairy Woodpecker (*Picoides villosus*), House Wren (*Troglodytes aedon*), American Robin (*Turdus migratorius*), Yellow Warbler (*Setophaga petechia*), Song Sparrow (*Melospiza melodia*), and Brewer's Blackbird (*Euphagus cyanocephalus*). Mammal species in these areas include Mule Deer (*Odocoileus hemionus*), American Beaver (*Castor canadensis*) and Owens Valley Vole (*Microtus californicus vallicola*).

More mesic alkali meadow and riparian communities provide habitat for amphibians such as Sierran Treefrog (*Pseudacris sierra*), Western Toad, Great Basin Spadefoot, and nonnative Tiger Salamander (*Ambystoma tigrinum*). Bird species found breeding in most riparian areas are Bewick's Wren (*Thryomanes bewickii*), House Wren, Nuttall's Woodpecker (*Picoides nuttallii*), Northern Flicker (*Colaptes auratus*), Spotted Towhee (*Pipilo maculatus*), and Song Sparrow. Mammals that typically utilize these communities include Raccoon (*Procyon lotor*), Striped Skunk (*Mephitis mephitis*), Desert Woodrat (*Neotoma lepida*), and American Beaver. Large mammals typically have large home ranges, thus they may utilize many different vegetation communities, and commonly include Coyote (*Canis latrans*), Gray Fox (*Urocyon cinereoargenteus*), and Mule Deer. Less common mammals in the project area include Bobcat (*Lynx rufus*), and Mountain Lion (*Felis concolor*).

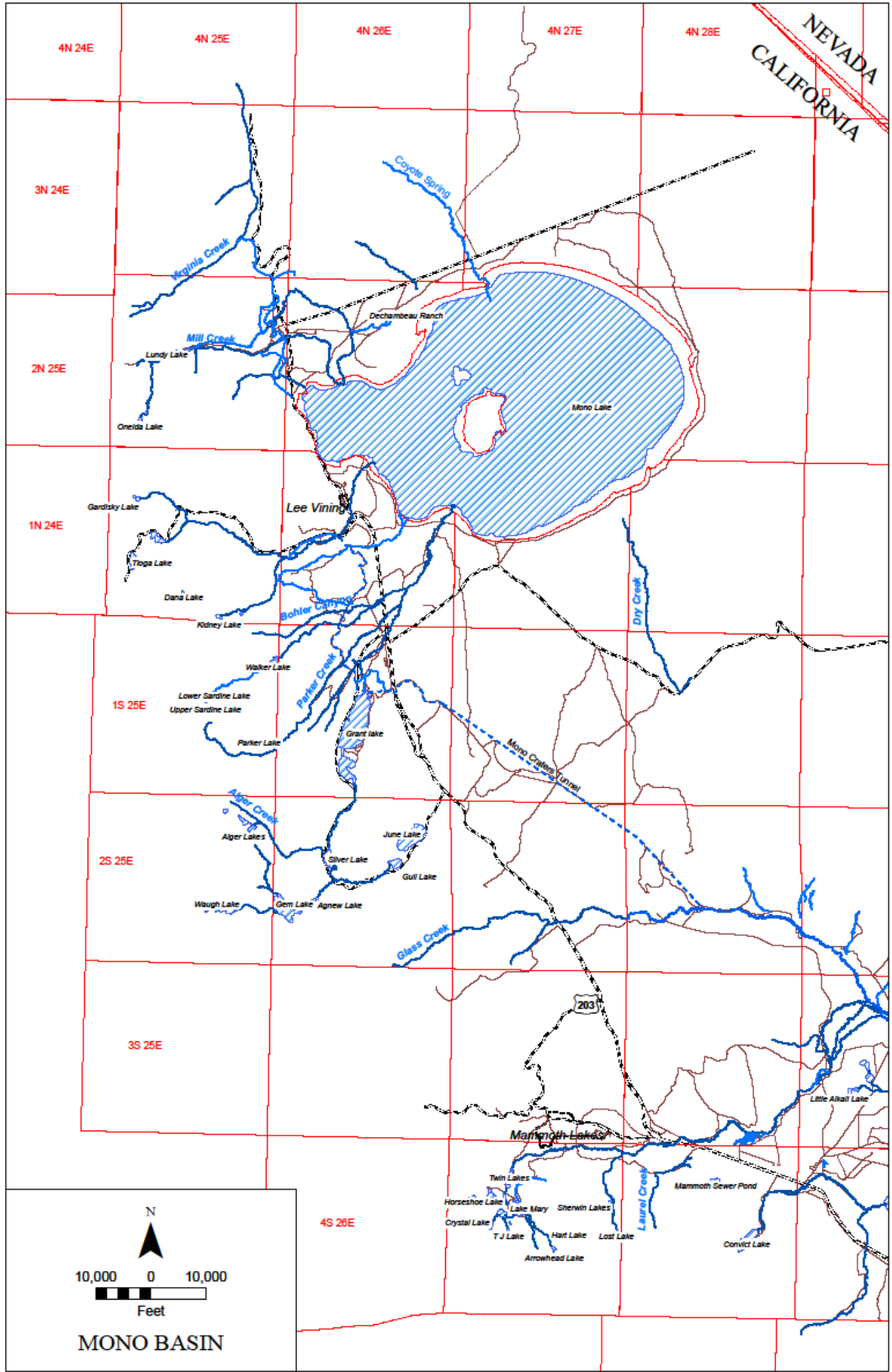


Figure 1: Mono Basin Area Map



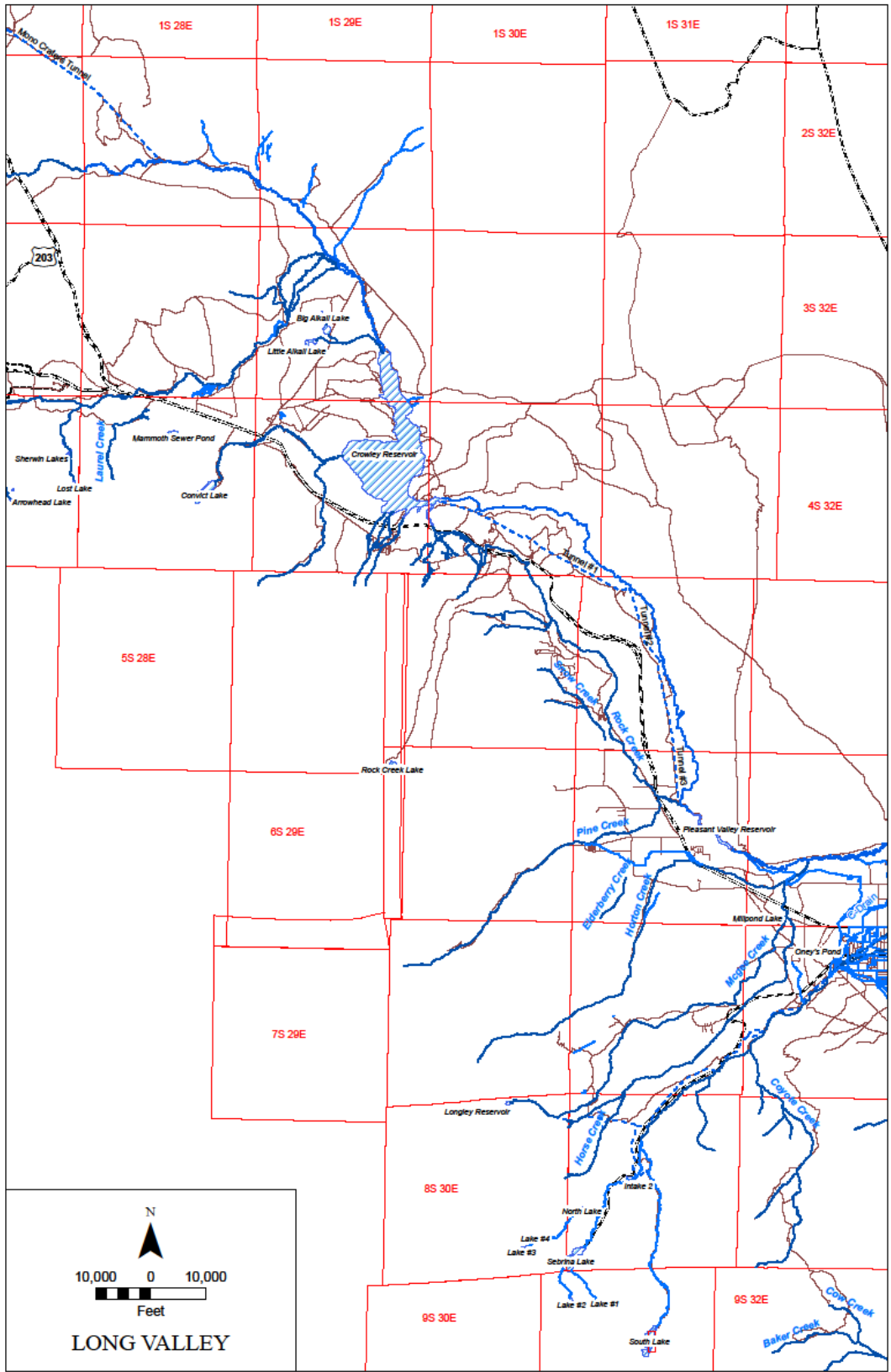


Figure 2: Long Valley Area Map

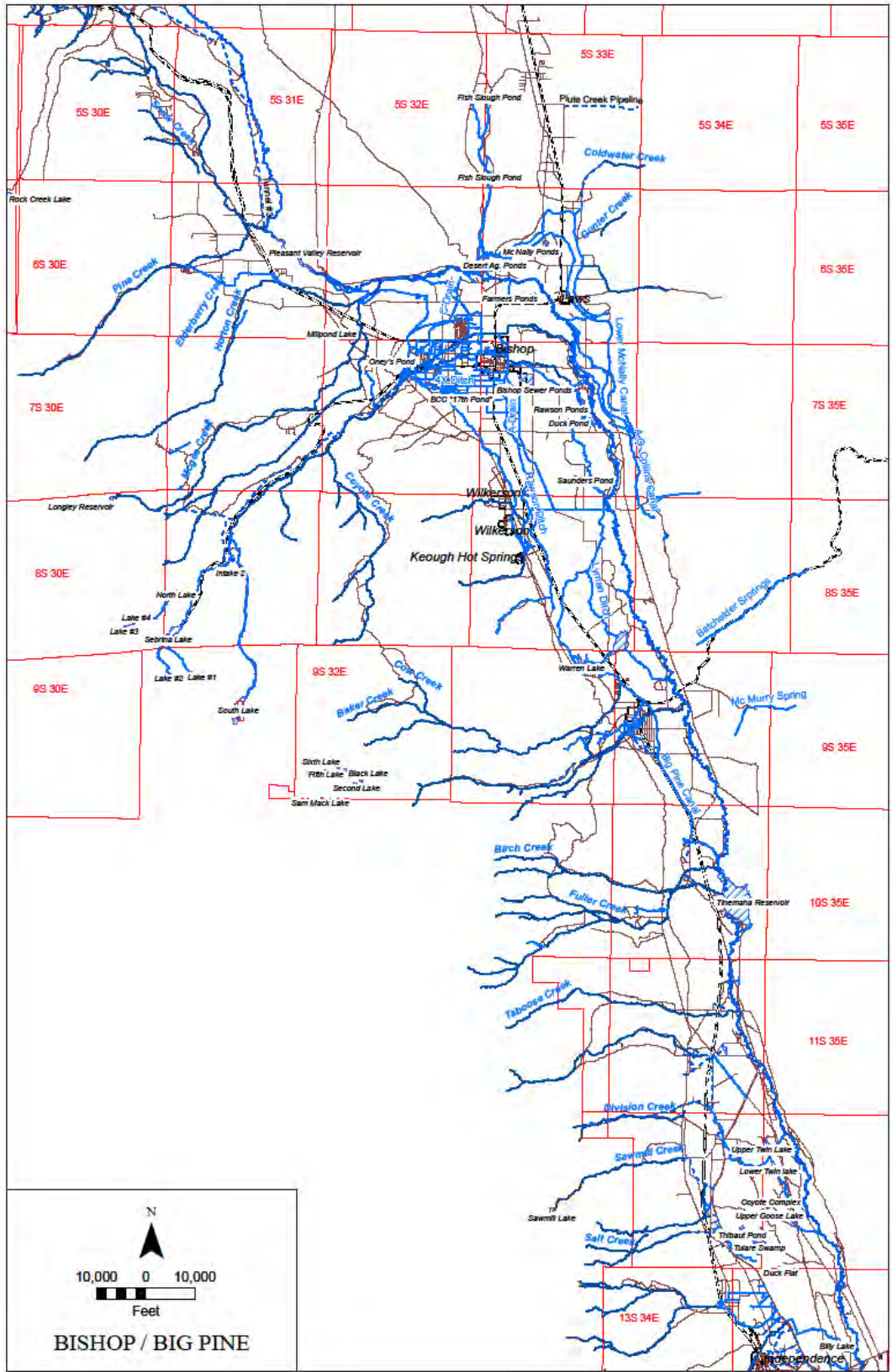


Figure 3: Owens Valley (Bishop) Area Map

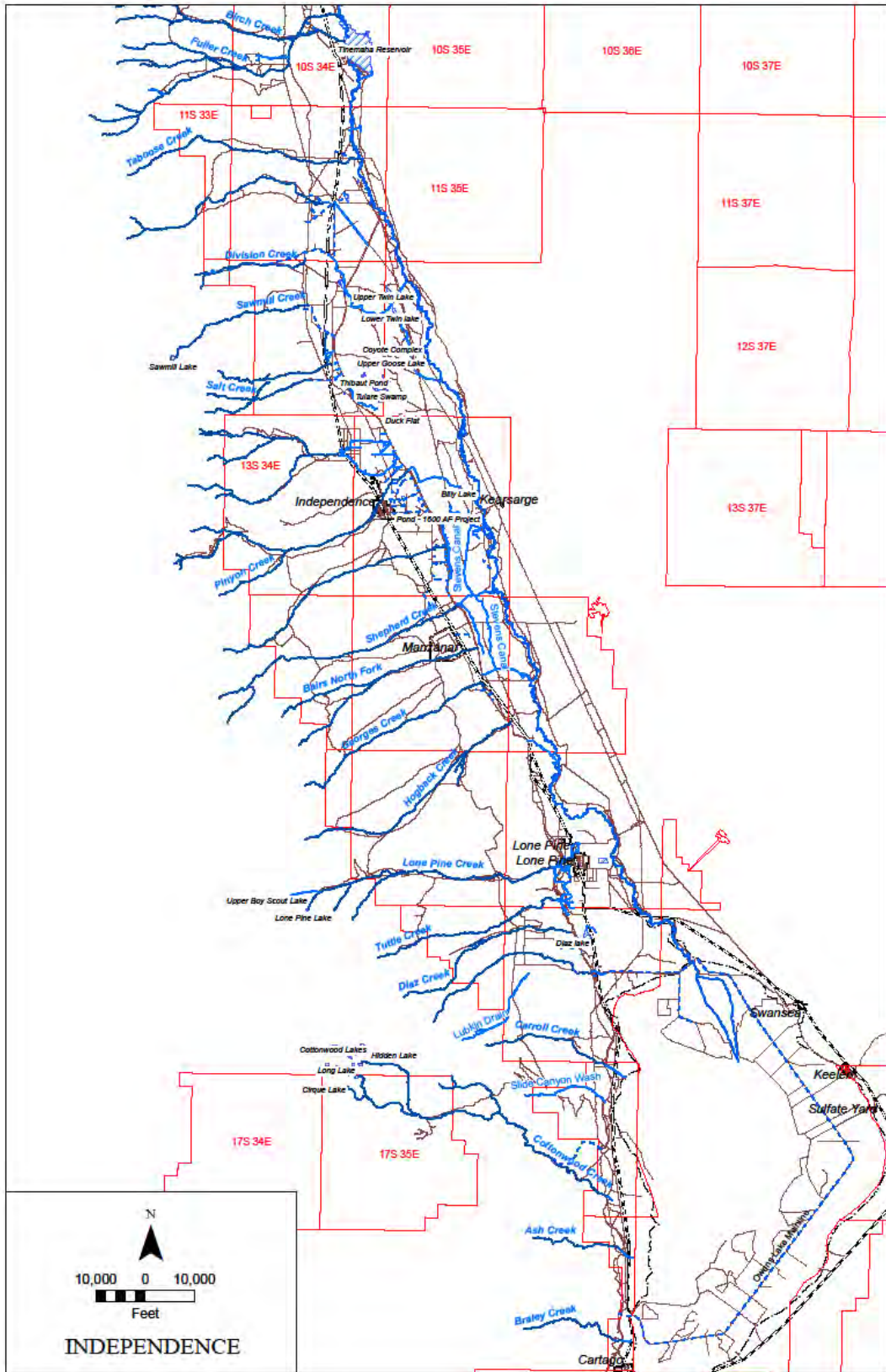


Figure 4: Owens Valley (Independence) Area Map



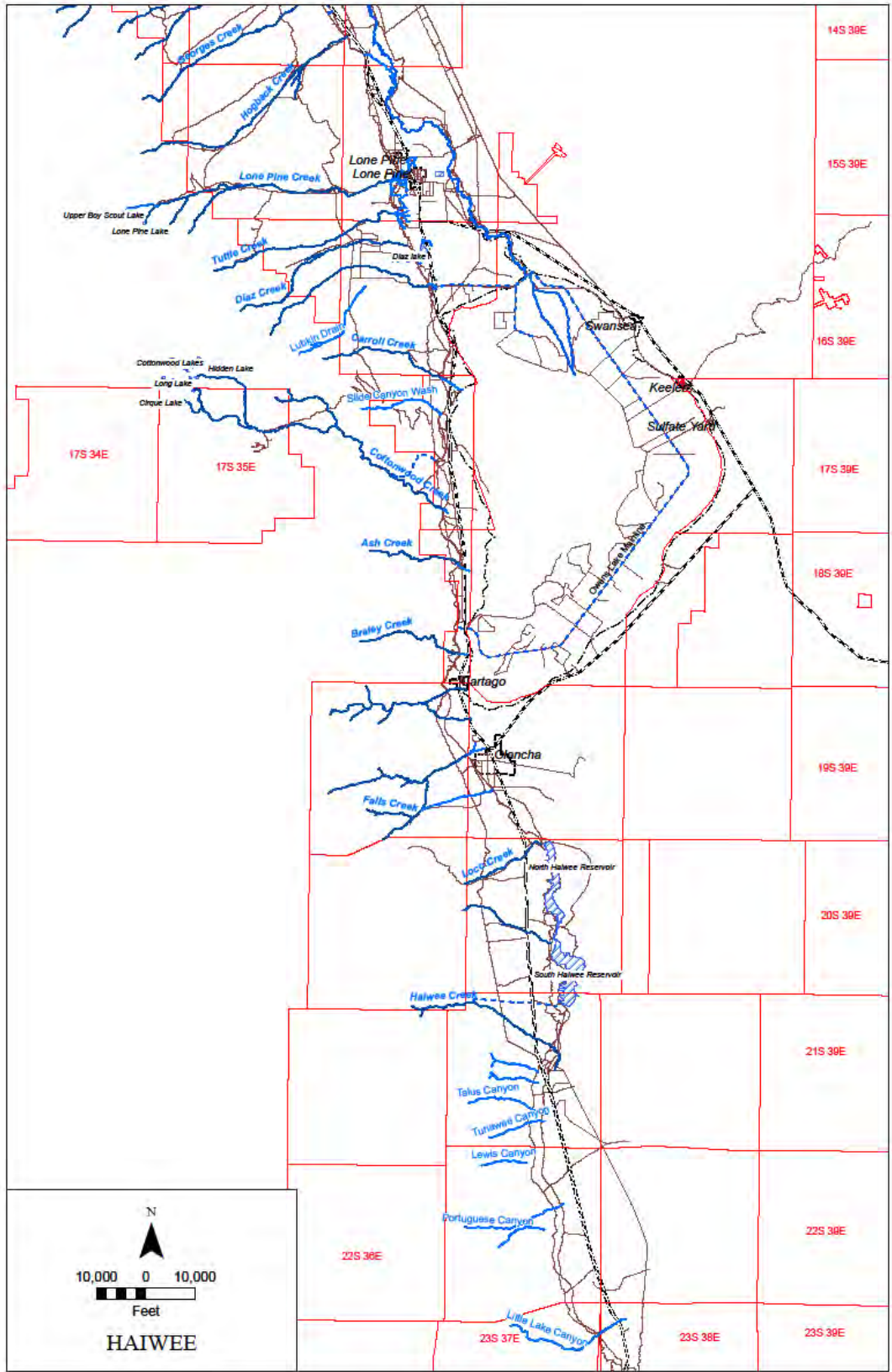


Figure 5: Rose Valley (Haiwee) Area Map



### 1.3 Objective of Routine Maintenance Activities

Routine maintenance work is conducted by LADWP on man-made and natural waterways in order to maintain such waterways and structures essential to the continued delivery of water for irrigation and domestic use in Inyo and Mono counties and the City of Los Angeles.

### 1.4 Application by LADWP for Long-term Maintenance Agreements and/or Permits with CDFW and the Lahontan Regional Board

Effective water management is critical to ensuring the safe and reliable utilization of the waterway infrastructure during periods of both above-average precipitation and runoff, and during periods of extended droughts. It is important to maintain accurate and effective methods to direct and measure water and avoid unfavorable situations that may result from inconsistent or delayed maintenance which could result in damage to infrastructure that would result in the need for more extensive repair and restoration work. The current process of permitting work on an individual case-by-case basis may result in delays of several months before work can be initiated on waterways and structures. These delays have led to deteriorated conditions that subsequently require more extensive maintenance work. LADWP has established and is currently implementing routine maintenance activities. To decrease the permitting time frame for routine maintenance work that is required to maintain structures and flow, LADWP is applying for:

1. Renewal of the existing Section 1600 Routine Maintenance Agreement with the California Department of Fish and Wildlife
2. A long-term maintenance permit from the Lahontan Regional Board in compliance with the Clean Water Act and the California Porter-Cologne Water Quality Control Act

These permits would provide an efficient approach to completing necessary maintenance work consistent with applicable resource protection measures and BMPs.

### 1.5 Waterway Definitions

LADWP's water infrastructure in the Inyo and Mono counties currently consists of various waterways and structures including 5 dams, 70 perennial streams, 22 perennial canals, 127 intermittent man-made waterways, 13 ponds and lakes, and 14 intermittent streams. Other identified waterway types and infrastructure components include toe drains and ditches. The waterways with routine maintenance requirements are defined as follows:

"Perennial streams" are natural waterways with highly variable year round flows driven by snow pack and rain events. Sources of water in these waterways include upstream water, groundwater, and runoff from precipitation. These waterways support fish and wildlife resources, including riparian vegetation.

"Perennial canals" are man-made waterways that typically flow year round and are used to collect and convey water. The Bishop Creek Canal serves as a prime example of a perennial canal that is part of the waterway infrastructure in Inyo and Mono Counties. Perennial canals can support fish and wildlife resources, including riparian vegetation.

“Intermittent man-made waterways” are man-made lateral ditches that are used to convey water from a natural or man-made waterway for several purposes (e.g., irrigated agriculture, livestock grazing, and habitat enhancement). These waterways flow intermittently and generally do not support fish and wildlife resources. Intermittent man-made waterways typically feature surface flows only during certain times of the year. These waterways are also utilized for flood control during high runoff events when water must be released from surrounding waterways that may be at risk of overflowing.

“Intermittent streams” are natural waterways with intermittent flow.

“Toe drains” are man-made drains which carry seepage in man-made ditches away from the base of a dam. Toe drains are an integral component of dams to allow for the monitoring of dam conditions. Specifically, toe drains allow crews to determine the quantities of dam seepage, which is an important indicator of a dam’s operating condition. Flows from toe drains are conveyed in man-made ditches.

“Intermittent ponds” are man-made ponds in which water levels are periodically manipulated including draining the pond, and vegetation is cleared using heavy equipment or fire, as frequently as every year.

“Perennial ponds” are ponds in which the water levels are maintained throughout the year. The ponds that are part of the overall infrastructure within the maintenance area are connected by means of man-made waterways and associated structures, while several are also located on natural waterways. These bodies of water primarily serve as recreational areas or serve as water storage reservoirs. These bodies of water feature vegetated banks that must also be maintained.

“Spreading basins” are located throughout the Owens Valley and are utilized during higher than normal snowpack years or for operational flexibility when the Aqueduct cannot accommodate run-off flows. These basins were established and utilized during past runoff events and are located in upland areas and do not support riparian vegetation.

### **1.6 Routine Maintenance Work Conducted**

LADWP’s maintenance activities are applicable to several different types of waterways and structures on private and public lands. LADWP’s water infrastructure in the Inyo and Mono counties currently consists of 5 dams, 70 perennial streams, 22 perennial canals, 127 intermittent man-made waterways, 13 ponds and lakes, and 14 intermittent streams. Other identified waterway types and infrastructure components include numerous toe drains. A list of applicable waterways where maintenance activities occur is included in Appendix B.

Waterway maintenance activities include periodic replacement and removal of several types of structures that must be regularly maintained. Activities that are typically performed in waterways in the delivery system include: operating and maintaining dams, measuring stations, flumes, intake and diversion structures, culverts, sand traps, and spillgates; mowing, slushing, and cleaning obstructions; preparing waterways for high seasonal flows and water flow management; spot clearing obstructions (e.g., sediment and vegetation plugs/blockages, beaver dams, downed trees, and emergent aquatic vegetation); and replacing, maintaining, and/or removing existing facilities, when and where needed. Mechanical equipment that is typically used to conduct maintenance activities includes, but is not limited to, hand-operated power tools, a helicopter equipped with a mechanical grabbing device, an aquatic weed cutting boat, scraper, backhoe, excavator, bulldozer, tractor with mower attachment,

track loaders, pontoon and aluminum gas-powered boats, dredge/suction dredge, cranes with associated attachments, lattice booms, and draglines.

A description of LADWP's on-going waterway maintenance activities within intermittent man-made waterways, perennial man-made canals, as well as the maintenance of pertinent structures, is provided below.

### 1.6.1 Waterway Maintenance Activities

#### 1. Vegetation Removal.

- a. Mowing. LADWP mows vegetation to provide access to ditches, canals, and all associated facilities to perform maintenance. LADWP also mows vegetation along banks to provide an unimpaired view for routine patrol and inspection activities. LADWP performs mowing with mechanical mowing devices and hand tools. LADWP performs the mowing described in this subsection provided that grading on banks does not occur and that vegetation is cut or mowed down to no lower than 2 inches and LADWP leaves intact any trees with a diameter-at-breast height (hereinafter "DBH") of 4 inches or greater, except for tamarisk or "saltcedar," and Russian olive trees that may be removed regardless of their DBH.
  - b. Slushing. Slushing is performed to remove aquatic growth in man-made waterways to ensure constant water flow. LADWP accomplishes this task by dragging large flat pieces of metal through a waterway to dislodge or cut the aquatic growth at its base. Smaller sections or problem areas can be slushed utilizing a backhoe or excavator. A sweeping motion of the bucket accomplishes the task without removing material from the bottom of the waterway. The water current carries the slushed materials down the waterway where it is removed mechanically or allowed to pass downstream. Removed materials are transported to an appropriate disposal site or placed on existing adjacent spoils sites so that material will not wash back into the waterway; materials are not stockpiled on existing riparian and/or wetland habitats. Slushing is only performed on six man-made canals (Ford Rawson Canal, Upper and Lower Mc Nally Canals, Big Pine Canal, Bishop Creek Canal and the Rawson Canal) that have access roads along both sides.
2. Burning. LADWP conducts controlled burns to remove vegetation or reduce the vegetation biomass prior to vegetation removal using another method (e.g., mechanical removal). All burns are coordinated with CalFire, Great Basin Unified Air Pollution Control District (GBUAPCD), and the Lahontan Regional Board. Proper measures are taken to ensure burns will not violate air or water quality standards. Typically, LADWP will use fuses or a drip torch and walk along an intermittent man-made waterway or pond (during dry conditions), igniting vegetation with a DBH of less than 4 inches. The burned material is removed through mechanical means before the area is re-watered. Controlled burns help to improve and maintain water conveyance and enhance habitat through a variety of ecosystem benefits. Some of these post-burn benefits include removing invasive plant species that compete with native species, providing nesting habitat for birds and homes for mammals, optimizing plant growth by returning nutrients to the soil, and reducing the amount of fuel buildup which in turn reduces the potential of large



wildland fires. Areas are monitored post-burn to ensure invasive species are not re-establishing. Overall, fires promote biological diversity and healthy ecosystems. Controlled burns are conducted only on days with favorable wind and weather conditions.

3. Clearing Obstructions. LADWP removes, at its discretion, obstructions, including, but not limited to, trash, sediment and vegetation blockages, beaver dams, downed trees, and emergent aquatic vegetation in man-made waterways and pre-consults with CDFW prior to removing obstructions in natural waterways.
  - a. Removing spot obstructions from man-made waterways. LADWP removes obstructions, such as trash, large woody debris, upland or instream vegetation, or beaver dams, from man-made waterways to maintain flow. LADWP either uses hand equipment or heavy equipment such as an excavator or helicopter equipped with a mechanical grabbing device to remove the obstruction. The method of removal is determined on a case-by-case basis depending on the available access to the obstruction, and the size of the obstruction. Existing roads are utilized when available, impacts to riparian vegetation are minimized and the material removed is placed on existing spoil piles, or hauled off site.
  - b. Cleaning intermittent man-made waterways. Prior to maintenance, water is not diverted to the waterway. This may be accomplished through the use of retention structures (e.g., coffer dams, culverts, and open trenches). After sufficient drying, LADWP uses construction equipment such as a scraper to clean accumulated sediments and remove debris out of up to the entire length of a dry intermittent man-made waterway. Heavy equipment may be used from the outer banks of perennial canals to maintain the capacity of the canal, by removing impoundments after it has been determined that fish, wildlife and riparian resources will not be adversely impacted. This maintenance activity does not apply to perennial streams.
  - c. Removing spot obstructions from intermittent streams to facilitate within channel flow. LADWP removes spot obstructions including sediment and vegetation plugs/blockages, beaver dams, downed trees, emergent aquatic vegetation, and trash using heavy equipment, helicopters, or watercraft.
  - d. Flushing. LADWP uses a high pressure water hose to clear obstructions from the concrete floor of measuring stations, and in clogged culverts.
4. Stockpiles. Sediment and materials that are removed from waterways as a result of maintenance activities are placed on existing adjacent spoils sites so that material will not wash back into the waterway. Sediment is not stockpiled on existing riparian and/or wetland habitat. If these conditions cannot be met, sediment is transported off site to an appropriate disposal site. Disposal sites may include nearby designated pits, upland sites, or landfills. Alternatively, spoils may be spread on roadways to address ruts and potholes and improve overall conditions.

### 1.6.2 Waterway Structures and Associated Maintenance Activities

1. Dams. In general, dams are operated for water gathering; power production is an ancillary benefit. Operations vary depending on the runoff year and downstream operational needs (i.e., water demand). Operations and maintenance activities include conducting California Department of Water Resources Division of Safety of Dams surveys, and removing vegetation from the dam face using hand tools such as weed eaters to prevent vegetative roots from growing into the dam and creating leaks.
2. Measuring Station and Flumes. Measuring stations and flumes are used to measure water flow in waterways. Maintenance work related to measuring stations and flumes includes the mowing of vegetation to provide access along the channel banks, the clearing of obstructions / spot removal of sediments within a maximum area of 100 feet upstream and 100 feet downstream of the measuring stations to allow for unobstructed water flow, and the accurate reading of water flow, however in many cases the maintained distance is much smaller. LADWP performs this work with construction equipment such as a back hoe or an excavator with a bucket. LADWP also restricts the work to an area within 100 feet upstream and 100 feet downstream of the measuring station; and up to 25 feet away from the bank(s) to provide access to the facility. In addition, LADWP places sediment on existing adjacent spoils sites so that material will not wash back into the waterway. Sediment is not stockpiled on existing riparian and/or wetland habitat.
3. Intake and Diversion Structures. Diversion structures, including intake and spreading diversion structures, direct water from one waterway into another waterway. Sediment is removed above and below intake structures. Clearing obstructions / spot removal of sediment occurs within an area 100 feet upstream and 100 feet downstream of intake structures. LADWP performs the work described in this subsection with construction equipment. These activities occur within a work area that includes the structure, up to 100 feet upstream and 100 feet downstream of the structure. Removal of sediment is handled in a manner consistent with the Stockpiles section above.
4. Sand Traps. Sand traps are located along higher capacity segments of waterways which allow for the settling of sediment during high runoff events. Sand traps occur mainly above the entrance of creeks into the First Los Angeles Aqueduct (LAA1) or at the confluence of waterways. LADWP mows vegetation around sand traps to allow for unobstructed water flow and to enhance sand trap effectiveness. The amount of sediment that needs to be removed depends on the size and location of the sand trap, climatic variations in flow, and the time of year. LADWP performs the maintenance work described in this subsection with construction equipment. Removal of sediment is handled in a manner consistent with the Stockpiles section above.
5. Spreading Basins. Spreading basins are man-made flat-bottom basins that may have water diverted into them during high runoff years to assist with flood control in the region. The water percolates into the ground to recharge ground water for storage and potential future use. Occasional maintenance may be needed to ensure the integrity of the berms or to till the bottom to increase infiltration rates. Heavy equipment used to accomplish this task includes rippers, or a tractor fitted with a disc or plow. Areas that are utilized for spreading have a

tendency to support tamarisk and pepperweed. Areas are monitored and treated after use to try and control the spread of these invasive species. Areas are monitored for a period of 2 years after use and the weeds are monitored and treated annually.

6. Spillgates. Spillgates are structures designed to spill excess water from one waterway to a different waterway whenever channel capacity is exceeded. They can also be used as diversion structures. Spillgates are located along waterways and consist of release gates constructed of wood, concrete, or steel where water flows are discharged. Sediment accumulation can cause leakage or damage to spillgates, including reducing discharge capacity and eroding away the banks and washing structures away. Sediment accumulation may also prevent spillgates from being opened. It is crucial that spillgates remain in working condition because they must be operated when emergency flood control releases are necessary. LADWP maintains its spillgates by clearing obstructions, removing sediment, and repairing them using construction equipment (backhoe or excavator). Sediment that is removed is handled in a manner consistent with the Stockpiles section above.
7. Culverts. Culverts are structures designed to convey water, typically under roadways. Typically these are either round or rectangular and range in size from a few inches to up to 15 feet across. Blockages prevent culverts from functioning properly. LADWP clears obstructions and removes sediment for hundreds of culverts by washing with pressurized water or using hand tools such as pull forks, rakes, and chainsaws or heavy equipment (including but not limited to a backhoe or excavator). Sediment and materials that are removed are handled in a manner consistent with the Stockpiles section above.

### 1.6.3 Replacement of Existing Facilities

LADWP replaces existing facilities in intermittent man-made waterways and perennial waterways in a manner that utilizes a substantially similar footprint and area of disturbance as the existing structure. Structures are replaced in order to maintain the same waterway function that is provided by existing facilities (e.g., a measuring station is replaced with a new measuring station). LADWP completes the work when water is not present in the waterway to the extent feasible. The replacement facilities are substantially similar to the facilities being replaced, i.e., in-kind, and have substantially the same purpose as the structure being replaced. The replacement of existing facilities involves installing temporary structures to divert water around the work area if water is present. LADWP places sediment catchment structures in the waterway when necessary to minimize sediment movement down the waterway during facility replacement activities. If needed, vegetation with a DBH of up to 4 inches is mowed. In order to minimize impacts from replacement of facilities, LADWP Watershed Resources personnel perform a pre-construction site visit to determine the best access, diversion area and smallest possible footprint of disturbance.

## 1.7 Best Management Practices

Appropriate structural and non-structural BMPs are implemented during maintenance activities to reduce the risk of impacts to water quality and biological resources resulting from erosion, sediment in water discharges, and minor waste material spills. A list of general BMPs that may be utilized is provided

in Appendix E. The selection of the best BMPs will be made on a case-by-case basis according to site conditions and specifics of the maintenance situation.

Non-structural BMPs include activities such as good housekeeping (i.e., keeping work areas clean and free of debris), scheduling the work during periods when the waterway is dry, minimizing the size of the work area to allow for faster recovery of habitat, avoiding unnecessary removal of vegetation, allowing existing vegetation to act as a filter for silt and sediment where possible, shutting off existing upstream valves to allow natural drying of the work area (as well as flow bypass in perennial waterways), avoiding storage of chemicals on-site, and fueling off-site. Annual employee training is conducted regarding proper BMP selection.

Temporary erosion control BMPs during maintenance work may include the installation of filter barriers (e.g., wattles, fabric, silt fencing), retention structures, or stabilized access points. Stabilization of disturbed areas following the replacement of facilities and associated activities may include measures such as seeding, mulching, erosion blanket installation, and rip rap installation. BMPs to prevent and control minor leaks of materials including fuel and chemicals may consist of locating secured storage areas for potentially hazardous materials away from waterways and ensuring the availability of sufficient spill cleanup materials. BMPs implemented during maintenance activities will be regularly inspected and maintained, in addition to the regular inspection of equipment for leaks. Necessary repairs will be completed as soon as possible in order to maintain the effectiveness of the BMPs.

### 1.8 Required Permits and Approvals

This environmental document will be used to comply with applicable State laws by State and local agencies with jurisdiction over the routine maintenance activities conducted.

#### Federal

##### Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 protects plants and animals that the government has listed as “Endangered” or “Threatened”. The FESA is implemented by enforcing Sections 7 and 9 of the Act. A federally listed species is protected from unauthorized “take” pursuant to Section 9 of the FESA. “Take”, as defined by the FESA, means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or to attempt to engage in any such conduct. All persons are presently prohibited from taking a federally listed species unless and until (1) the appropriate Section 10(a) permit has been issued by the U.S. Fish and Wildlife Service (USFWS) or (2) an Incidental Take Permit is obtained as a result of formal consultation between a federal agency and the USFWS pursuant to Section 7 of the FESA and the implementing regulations that pertain to it (50 Code of Federal Regulations [CFR] §402). “Person” is defined in the FESA as an individual, corporation, partnership, trust, association, or any private entity; any officer, employee, agent, department or instrument of the federal government; any State, Municipality, or political subdivision of the State; or any other entity subject to the jurisdiction of the U.S. The Project Applicant is a “person” for purposes of the FESA.

Species covered by the FESA are known for areas in and adjacent to waterways currently being maintained by LADWP in Inyo and Mono counties. Current best practices focus on avoidance of impacts



to FESA species. Additional BMPs and mitigation measures for the protection of FESA species are detailed in this Initial Study.

### **Sections 401 and 404 of the Clean Water Act of 1972 (33 U.S.C. Section 1251 et seq.)**

Under the Federal Clean Water Act (CWA), an activity involving dredging or which results in a discharge to a water body requires a federal permit and a State Water Quality Certification in order to ensure that the activity will not violate established water quality standards. The USEPA is the federal regulatory agency responsible for implementing the CWA.

Section 404 of the CWA regulates the discharge of dredge and fill material into “Waters of the U.S.,” including wetlands. Dredge and fill activities are typically associated with water-resource related projects, infrastructure development, wetland conversion to farming, forestry, and urban development. The United States Army Corps of Engineers (USACE) is the designated regulatory agency responsible for administering the Section 404 permit program and for making jurisdictional determinations.

Section 401 of the CWA requires that a certification be issued for regulated dredging and discharges which confirms compliance with provisions of Section 404. It is the State Water Resources Control Board (SWRCB), in conjunction with the nine California Regional Water Quality Control Boards (RWQCBs), who have been delegated the responsibility of administering the water quality certification (Section 401) program.

While these CWA provisions do not pertain to flood hazards per se, areas under the jurisdiction of the SWRCB, RWQCB, and the USACE (through Sections 401 and 404 of the CWA) typically occur within some floodplain areas. LADWP is applying for a long-term maintenance permit in compliance with the CWA and the California Porter-Cologne Water Quality Control Act.

### **Migratory Bird Treaty Act**

The Migratory Bird Treaty Act (MBTA) of 1918, implemented by the USFWS, provides that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. The responsibilities of federal agencies to protect migratory birds are set forth in Executive Order 13186.

LADWP maintenance activities are conducted in compliance with the MBTA as discussed in Section 2.3.4 of this Initial Study.

## **State**

### **Porter Cologne Water Quality Control Act**

California’s Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. It predates the CWA and regulates discharges to waters of the state. Waters of the state are defined more broadly than waters of the United States and means “any surface water or groundwater, including saline waters, within the boundaries of the state” (California Water Code section 13050(e)). This act requires a “Report of Waste Discharge” for any discharge of waste (liquid, solid, or gas) to land or surface waters that may impair beneficial uses of waters of the state. Discharges under

the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA.

The SWRCB and the nine RWQCBs are responsible for establishing the water quality standards (water quality objectives and beneficial uses) required by the CWA and regulating discharges to ensure compliance with the water quality standards. The RWQCBs designate beneficial uses for all water body segments in their jurisdictions and establish narrative and numerical objectives which must be maintained or attained to protect those uses. Details regarding water quality standards for a particular project area are included in the applicable RWQCB Water Quality Control Plan (Basin Plan). The Basin Plan for the Lahontan Region can be accessed online at:  
[http://www.waterboards.ca.gov/lahontan/water\\_issues/programs/basin\\_plan/references.shtml](http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.shtml).

Additionally, the SWRCB identifies those waters that fail to meet water quality standards for specific pollutants. These waters are then state-listed in accordance with CWA Section 303(d). If the waters are impaired for one or more constituents and the standards cannot be met through point source or non-point source controls (i.e., National Pollutant Discharge Elimination System [NPDES] permits or WDRs), the CWA requires the establishment of Total Maximum Daily Loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

### **State Water Resources Control Board and Regional Water Quality Control Boards**

The SWRCB administers water rights, sets water pollution control policy, issues Water Board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWQCBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

### **California Endangered Species Act**

Pursuant to the California Endangered Species Act (CESA) and Section 2081 of the California Fish and Game Code, an Incidental Take Permit from the CDFW is required for projects that could result in the take of a State-listed Threatened or Endangered species. Under the CESA, “take” is defined as an activity that would directly or indirectly kill an individual of a species, but the definition does not include “harm” or “harass”, as the federal act does. As a result, the threshold for a take under the CESA is higher than that under the FESA. A CDFW-authorized Incidental Take Permit under Section 2081(b) is required when a project could result in the take of a State-listed Threatened or Endangered Species. The application for an Incidental Take Permit under Section 2081(b) has a number of requirements.

Species covered by the CESA are known for areas in and adjacent to waterways currently being maintained by LADWP in Inyo and Mono counties. Current best practices focus on avoidance of impacts to CESA species. Additional BMPs and mitigation measures for the protection of CESA species are detailed in this Initial Study.

### **California Fish and Game Code**

State law confers upon the CDFW the trustee responsibility and authority for the public trust resource of wildlife in California. The CDFW may play various roles as part of the CEQA process. By State law, the CDFW has jurisdiction over the conservation, protection, and management of the wildlife, native plants,

and habitat necessary to maintain biologically sustainable populations. The CDFW shall consult with lead and responsible agencies and shall provide the requisite biological expertise to review and comment upon environmental documents and impacts arising from project activities. Trustee agencies are generally required to be notified of CEQA documents relevant to their jurisdiction whether or not these agencies have actual permitting authority or approval power over aspects of the underlying project (14 California Code of Regulations [CCR] §15386). The CDFW, as a trustee agency, must be notified of CEQA documents regarding projects involving fish and wildlife of the State as well as special status native plants, wildlife areas, and ecological reserves. Although, as a trustee agency the CDFW cannot approve or disapprove a project, lead and responsible agencies are required to consult with them. The CDFW shall provide the requisite biological expertise to review and comment upon environmental documents and impacts arising from project activities and shall make recommendations regarding those resources held in trust for the people of California.

Sections of the California Fish and Game Code that may be applicable to the routine maintenance activities include, but are not limited to:

- Section 1600 et seq. - An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake, unless written notification is received by CDFW in the manner prescribed by the department.
- Section 3500 et seq. - It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the Fish and Game code or any regulation made pursuant thereto.
- Section 5650 - Limits the deposition of polluting materials into waters of the state.
- Section 5937 - The owner of any dam shall allow sufficient water at all times to pass through a fishway, or in the absence of a fishway, allow sufficient water to pass over, around or through the dam, to keep in good condition any fish that may be planted or exist below the dam. During the minimum flow of water in any river or stream, permission may be granted by the department to the owner of any dam to allow sufficient water to pass through a culvert, waste gate, or over or around the dam, to keep in good condition any fish that may be planted or exist below the dam, when, in the judgment of the department, it is impracticable or detrimental to the owner to pass the water through the fishway.
- Section 5946 - No permit or license to appropriate water in District 4<sup>1/2</sup> shall be issued by the State Water Rights Board after September 9, 1953, unless conditioned upon full compliance with Section 5937. Plans and specifications for any such dam shall not be approved by the Department of Water Resources unless adequate provision is made for full compliance with Section 5937.
- Section 5947 - It is unlawful for the owner of a dam in District 4<sup>1/2</sup> to release water from the dam, or any facilities for the generation of hydroelectric energy operated in connection therewith, in varying flows in such a manner as to destroy fish life below such release.

## **Section 1 - Project Description**

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A Section 1605 Routine Maintenance Agreement has been implemented between the CDFW and LADWP since 1998, and was renewed in 2003 and again in 2008. This Agreement has allowed routine maintenance work in waterways in Inyo and Mono Counties to be conducted in accordance with the requirements of Section 1602. The current agreement expires on June 1, 2018 and must be renewed or replaced prior to this date to allow on-going maintenance activities to continue. It is anticipated that the renewed Agreement would incorporate the BMPs and mitigation measures defined in this Initial Study / Mitigated Negative Declaration.



# Section 2 – Environmental Analysis

## 2 Environmental Analysis

### 2.1 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” or “Less than Significant with Mitigation” as indicated by the checklist on the following pages.

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Aesthetics                      | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality                        |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources      | <input type="checkbox"/> Geology, Soils and Seismicity      |
| <input type="checkbox"/> Greenhouse Gas Emissions        | <input type="checkbox"/> Hazards and Hazardous Materials    | <input type="checkbox"/> Hydrology and Water Quality        |
| <input type="checkbox"/> Land Use and Land Use Planning  | <input type="checkbox"/> Mineral Resources                  | <input type="checkbox"/> Noise                              |
| <input type="checkbox"/> Population and Housing          | <input type="checkbox"/> Public Services                    | <input type="checkbox"/> Recreation                         |
| <input type="checkbox"/> Transportation and Traffic      | <input type="checkbox"/> Utilities and Service Systems      | <input type="checkbox"/> Mandatory Findings of Significance |

### 2.2 Agency Determination

On the basis of the initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.

Signature: Charles C. Holloway

Date: 12/12/2017

Printed Name: Charles C. Holloway

Title: Manager, Environmental Planning & Assessment

2.3 Environmental Impact Assessment

2.3.1 Aesthetics

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:** The maintenance area extends from the waterways in the vicinity of Mono Lake in the north to South Haiwee Reservoir in the south. The most dominant water features that can be seen from the main north-south route, U.S. Route 395, include Mono Lake, Crowley Lake, South Haiwee Reservoir, and Owens Lake. This region is flanked by views of the Sierra Nevada to the west and the Inyo Craters, Glass Mountains, White Mountains, and Inyo Mountains to the east.

**a) Less than Significant Impact.** The routine maintenance activities would not significantly impact scenic vistas. The waterway maintenance and structure replacement work that is performed by LADWP does not substantially affect the views that the public has access to via publicly and privately owned lands, and public rights-of-way. One primary purpose of waterway maintenance is to clear vegetation and other materials that may obstruct water flow. These activities consequently enhance the view of natural and man-made waterways which could otherwise be covered in part by a growth of vegetation without the implementation of vegetation removal measures. Therefore, no significant effect on scenic vista would occur.

**b) Less than Significant Impact.** There are several designated scenic highways in Inyo and Mono counties offering intermittent views of regularly maintained waterways and structures. These roadways include segments of U.S. Route 395 in both Inyo and Mono counties and a segment of CA State Route 168 extending from Sabrina Campground in the Inyo National Forest to Brockman Lane in Bishop, California (Caltrans 2013). Because these waterways have been maintained for decades, views from scenic routes would remain similar to those that were available from the routes at the time they were originally designated. Native tree removal conducted during routine maintenance activities is limited to trees less than 4 inches in DBH. Furthermore, no modifications to rock outcroppings and historic buildings would take place as part of the routine maintenance activities. Therefore, impacts to scenic resources would be less than significant.

**c) Less than Significant Impact.** The purpose of the routine maintenance work is to keep the water delivery infrastructure operated by LADWP in Inyo and Mono counties in a safe and reliable operating condition. Maintenance in waterways involves the trimming and removal of excess vegetation and the removal of sediment and other materials that cause blockages. As discussed above, routine maintenance activities have been ongoing for decades and the work that is conducted would not change the existing visual character or quality of the waterways and their surroundings. Furthermore, the replacement of existing facilities that exhibit wear and damage with structures of similar design and purpose would not significantly affect the character of those sites. Therefore, impacts would be less than significant.

**d) No Impact.** Maintenance activities occur during daylight hours. Since no nighttime activities are anticipated, new sources of light and glare would not result from conducting waterway maintenance and facility replacement work. There are also no lighting installations at the structures that are currently in place. Therefore, no impact resulting from substantial new sources of light and glare which could adversely affect day or nighttime views would occur.

2.3.2 Agriculture and Forestry Resources

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:** There are approximately 22,000 acres of irrigated agricultural lands associated with the waterway system where maintenance is conducted. About 2,000 of those acres are used for raising crops and the remainder is used as irrigated pastures for livestock grazing. LADWP maintains most of the irrigation systems that supply water to these agricultural lands. The irrigation systems include center-pivot sprinklers, flood irrigation, and irrigation ditches that divert water from waterways in the network.

**a) No impact.** No farmland would be converted as a result of routine maintenance activities. Therefore, no impact would occur.

**b) No Impact.** The maintenance of waterways in Inyo and Mono counties would not conflict with the existing zoning for agricultural use. Because all of the waterways and related facilities currently exist, and expansion and development of new facilities is not proposed, no land associated with the maintenance work would be converted to an alternative land use. Additionally, one of the primary purposes of maintaining and operating the waterway infrastructure in Mono and Inyo counties is to continue to deliver water to local ranchers and farmers in the region to support agricultural activities. No impact would occur.

**c) No Impact.** The routine maintenance activities would not conflict with the existing zoning, or cause the rezoning of, forest land, timberland, or timberland zoned Timberland Production. No impact would occur.



**d) and e) No impact.** As stated above, maintenance activities occur within existing waterways and facilities and the conversion of current land uses is not expected or proposed. Furthermore, a portion of the water that is transported through these waterways is used for irrigation to support agricultural activities. No forest land would be converted to non-forest use and no Farmland would be removed from production. Therefore, no impact would occur.

2.3.3 Air Quality

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

**a) and b) Less than significant impact.** Carrying out routine maintenance activities and structure replacement work may result in short-term air pollutant generation. Dust emissions may be produced by vehicles that access maintenance sites on unpaved roads. Pollutants are also emitted by vehicles and equipment necessary for the removal of vegetation, sediment, and other obstructions from waterways and the transportation of materials necessary for facility replacements. Smoke, primarily in the form of fine particulate matter (PM2.5), also results from the periodic use of burning to remove vegetation or reduce its density for the purpose of improving water conveyance and enhancing habitat. Since maintenance activities are conducted periodically, and use only limited numbers of construction equipment and vehicles, the temporary release of air pollutants would not violate air quality standards or dramatically worsen existing air quality conditions in Inyo and Mono counties. Since maintenance activities are on-going, the project would not result in a substantial increase in air pollutant emissions; emissions would be the same as existing conditions. Therefore, impacts would be less than significant.

**c) Less than Significant Impact.** The region where routine maintenance activities occur is within the Great Basin – Valleys Air Basin (Basin). There are several non-attainment areas within the Basin. In Inyo County, the Owens Valley is currently classified as a serious non-attainment area for particulate matter less than 10 microns in size (PM10) (USEPA 2015). There are also two moderate non-attainment areas for PM10 in Mono County, Mammoth Lake and Mono Basin. Because individual maintenance activities are conducted at relatively small areas, and in generally moist conditions, maintenance activities would not result in a considerable net increase of PM10. Since maintenance activities are on-going, the project

would not result in a substantial increase in particulate emissions; emissions would be the same as existing conditions. Therefore, impacts would be less than significant.

**d) and e) Less than Significant Impact.** Sensitive receptors are not expected to be exposed to substantial air pollutant concentrations or objectionable odors. The majority of maintenance activities are removed from habitations or recreational areas. This substantially reduces the number of people who may potentially be exposed to odors and pollutants produced by gasoline and diesel powered vehicles and equipment during maintenance. People who may encounter a maintenance crew operating equipment would only briefly experience relatively minor odors and air pollutants not unlike those present in developed areas with car and truck traffic. Maintenance work within waterways is also relatively short term and would not pose an undue nuisance to residents who do live and recreate nearby. Therefore, impacts would be less than significant.

2.3.4 Biological Resources

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

Typical routine maintenance activities in waterways include: operating, maintaining and cleaning around dams, measuring stations, flumes, intake and diversion structures, culverts, sand traps, and spillgates; mowing, slushing, and cleaning obstructions; preparing waterways for high seasonal flows and water flow management; spot clearing obstructions (e.g., sediment and vegetation plugs/blockages, beaver dams, downed trees, and emergent aquatic vegetation); and replacing, maintaining, and/or removing existing facilities. Maintenance work must be conducted to maintain the aqueduct system’s designed capacity and function, to prevent the loss of life and property, and to promote the efficient and beneficial use of water. To assess the impacts on biological resources of these on-going routine maintenance activities, a Biological Resources Report was prepared by LADWP in May 2017 (Appendix C).



**Project Area and Buffer.** The project area includes all waterways in Inyo and Mono Counties where LADWP measuring stations and diversions are present, and where routine maintenance activities are conducted. Work within these waterways for water conveyance has been performed in some locations for the last 100 years. The project area was defined to encompass each waterway with an associated buffer of 800 feet total (400 feet on each side of each waterway from the center of the channel out to the banks, capturing the extent of the riparian limits into upland habitat). Although routine maintenance activities identified under the project are not expected to occur beyond the bed, bank or channel of these waterways, an extensive buffer was created to analyze all potential impacts to species, including potential noise impacts to nesting birds and other breeding wildlife.

To display the waterways identified in the project area, associated buffer, and the ArcGIS and California Natural Diversity Database (CNDDDB) special-status species occurrence records, a pdf mapbook was generated (Appendix A). A query was also performed in the waterway layer to determine the total length of each category of waterway for the entire project area. **Table 1** summarizes the total length of waterways by category within Inyo and Mono Counties. The total linear length of all waterways is approximately 1363.3 miles, of this distance approximately 151 miles of waterways are routinely maintained. The 151 miles of maintained waterways assumes that the entire length of canals (Bishop, Big Pine, Ford Rawson, George Collins, Upper and Lower McNally, Blackrock Ditch, and Owens River) are maintained and that 100 feet above and below 1695 structures and culverts is also maintained.

**Table 1. Total waterway length by category within the project area.**

Waterway Description	Waterway Length (miles)
Canal	87.1
Creek	819.3
Ditch	214.0
Diversion	115.5
River	127.4
Total	1,363.3

**Existing Biological Resources Setting.** A description of existing vegetation and wildlife conditions in the project area is provided above in Section 1.2, and in Appendix C.

**Literature Review.** Database queries were conducted to identify recorded and potential occurrences of special-status plant and wildlife species as well as natural communities in the project area, and the surrounding vicinity. Special-status species are those that are designated as Federally Listed, State Listed, California Species of Special Concern (SSC) and California Native Plant Society (CNPS) rare. Queries and reviews included: a geographic information system review of the CNDDDB Rarefind 5 (59-quad search that included all quads with waterways with a buffer of 800 feet total [400 feet on each side of each waterway from the center of the channel out to the banks, capturing the extent of the riparian limits and extending into upland habitat]); the CDFW CNDDDB January 2017 Special Animals List; the California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants of California; and Calflora, information on California plants. Also incorporated were data from focused species surveys and general wildlife surveys of specific project areas conducted by LADWP staff. LADWP data were available for the following projects: Owens River Gorge avian point counts and bat acoustical monitoring (LADWP 2002a, LADWP 2002b), Owens River Gorge Southwestern Willow Flycatcher surveys (LADWP 2008), Yellow-billed Cuckoo surveys of Baker Creek and Hogback Creek management areas 2007-2012,

and Burrowing Owl surveys and bat acoustical inventory surveys of Haiwee Reservoir in 2014. Observations from “eBird,” the online citizens’ science bird reporting program developed by the Cornell Lab of Ornithology were downloaded and queried for observations of special status bird species in the project area. All species occurrence data were clipped to capture the waterway plus 800 foot buffer of the project area.

### Impact Analysis

**a) Less Than Significant with Mitigation Incorporated.** The maintenance area includes vegetation communities that may provide suitable habitat for sensitive plant and wildlife species. Based on the literature review, 130 special-status plant species and 54 special-status wildlife species were identified that may occur in the project area (Table 2 and Table 3 of Appendix C). However, because of the large scale multi-quad search that was conducted around the actual maintenance area, a majority of these species occur in upland desert scrub habitats or within the Sierra Nevada Mountains, which are not habitats that have the potential to be impacted by the maintenance activities. Extensive review was conducted to determine habitat suitability for each generated species as well as each species’ potential to be impacted by project activities. Each species was then assigned to one of four “potential for impacts” categories defining their potential to occur and to be negatively affected by the proposed project: Unlikely, Low, Medium, or High. Factors taken into consideration when assigning a species to a category included: previously recorded occurrences, on-site vegetation and habitat quality, topography, elevation, soils, surrounding land uses, habitat preferences, geographic ranges, Watershed Resources Staff reports, monitoring data, and local expert knowledge.

**Plants.** Rush-sedge meadow and alkali meadow vegetation communities that could have special status plant species could be temporarily impacted by heavy equipment accessing waterways and facilities. Of the 130 special-status plant species identified, 111 are unlikely to be affected, or are not within the vicinity of the project area (Appendix C, Table 2). Nineteen (19) special-status plant species were determined to have low, medium or high potential to be impacted by the routine maintenance activities in the project area:

- **High Potential** - 12 special-status plant species: Lemmon's milk-vetch, Fish Slough milk-vetch, Inyo County star-tulip, small-flowered grass-of-Parnassus, scalloped-leaved lousewort, Parish's popcorn flower, narrow-leaved cottonwood, frog's-bit buttercup, Owens Valley checkerbloom, alkali tansy-sage, prairie wedge grass, and slender-leaved pondweed
- **Medium Potential** – 3 special-status plant species: smooth saltbush, alkali ivesia, and foxtail thelypodium
- **Low Potential** - 4 special-status plant species: falcate saltbush, hot springs fimbristylis, Robbins' pondweed, and marsh arrow-grass

Routine maintenance activities are conducted to maintain water conveyance and in some cases, maintain or even enhance rare plant populations. For example, Owens Valley checkerbloom can be found adjacent to waterways in wet alkali meadows. Spreading water via diversions (irrigating meadows) helps to maintain alkali meadow systems, and therefore, potential checkerbloom habitat.

When internal population information is lacking on a certain species (i.e., Lemmon's milk-vetch), or if occurrence information is outdated, surveys are conducted prior to maintenance activities being conducted (mitigation measure **BIO-5**). When a species is present within the waterway (i.e., frog's-bit buttercup), pre-maintenance surveys are conducted so the population can be flagged and avoided.

- Lemmon's milk-vetch, small-flowered grass-of-Parnassus, scalloped-leaved lousewort, narrow-leaved cottonwood, frog's-bit buttercup, and prairie wedge grass - These species prefer habitat that may be present directly in the waterway where project activities may be conducted. Mitigation measures **BIO-1**, **BIO-5** and **BIO-8** will be implemented to reduce impacts on these species to less than significant levels.
- Fish Slough milk-vetch, Inyo County star-tulip, Parish's popcorn flower, Owens Valley checkerbloom, alkali tansy-sage, slender-leaved pondweed, smooth saltbush, alkali ivesia, and foxtail thelypodium, hot springs fimbriatylis, Robbin's pondweed, marsh arrow-grass, and falcate saltbush - These species prefer habitat that may be present adjacent to project activities. Mitigation measures **BIO-1** and **BIO-8** will be implemented to reduce impacts on these species to less than significant levels.

With implementation of mitigation, impacts to special-status plant species would be less than significant. In some cases, populations of special-status plants may be enhanced by irrigation and routine maintenance activities. For instance, the frogs-bit buttercup is only found to persist in irrigation ditches that are routinely cleaned. Populations are known to have disappeared from lack of maintenance as determined during periodic rare plant inventories.

**Wildlife.** Of the 54 special-status wildlife species identified, 11 are unlikely to occur in the project area or to be impacted by the project, including: Paiute Cutthroat Trout, California Golden Trout, Yosemite Toad, Southern Mountain Yellow-legged Frog, Sierra Nevada Yellow-legged Frog, Great Gray Owl, Le Conte's Thrasher (subspecies *macmillanorum*), Mount Lyell Shrew, California Wolverine, Fisher (West Coast), and Desert Bighorn Sheep. Forty-three (43) were determined to have low, medium or high potential to be impacted by the routine maintenance activities in the project area:

- High Potential - 12 special-status animal species: Owens Speckled Dace, Owens Sucker, Greater Sage-Grouse, Northern Harrier, Willow Flycatcher, Southwestern Willow Flycatcher, Yellow-breasted Chat, Yellow Warbler, Yellow-headed Blackbird, Pallid Bat, Townsend's Big-eared Bat, and Owens Valley Vole
- Medium Potential – 10 special-status animal species: Lahontan Cutthroat Trout, Least Bittern, Golden Eagle, Swainson's Hawk, Bald Eagle, Western Yellow-billed Cuckoo, Long-eared Owl, Loggerhead Shrike, Bank Swallow, and Spotted Bat
- Low Potential - 21 special-status animal species: Long Valley Speckled Dace, Owens Tui Chub, Owens Pupfish, Inyo Mountains Slender Salamander, Northern Leopard Frog, Panamint Alligator Lizard, Northern Goshawk, Snowy Plover (interior pop.), Mountain Plover, Burrowing Owl, Least Bell's Vireo, Summer Tanager, Western Mastiff Bat, Pygmy Rabbit, White-tailed Jackrabbit, Sierra Nevada Mountain Beaver, Sierra Nevada Red Fox, American Badger, Sierra Nevada Bighorn Sheep, Mohave Ground Squirrel, and Desert Tortoise

**Fishes:** Fish species could be impacted from reduced water quality, and reduced spawning habitat and mortality could result from removal of eggs and fish. [BMPs for the protection of water quality during maintenance activities are described in Section 2.3.9.] A brief description of expected impacts to individual species is provided below.

- Owens Speckled Dace - Owens Speckled Dace are most abundant in areas where predatory fishes are absent, often in man-made ditches and canals (Sada 1989, Becker 1999). Limiting disturbance to Speckled Dace occupied waters when Speckled Dace eggs and young are in the substrate and vulnerable (Mitigation Measure **BIO-3**) will reduce impacts on this species to less than significant levels.
- Owens Sucker – Owens Sucker are endemic to the Owens River drainage and are a species that is widely distributed in streams and rivers of the Owens River watershed, including the Owens River and Bishop Creek. They are most abundant in Crowley Reservoir (Mono County) and are also found in Convict Lake (Mono County) and Lake Sabrina (Inyo County). Since work activities will not be conducted during the breeding season (March 15 to July 1, Mitigation Measure **BIO-3**) impacts on Owens Suckers will be less than significant.
- Lahontan Cutthroat Trout - The listed recovery population of this species will not be impacted by the project; however, the wild population stocked for recreational purposes has a medium potential to be impacted during the spring spawning season within some tributaries into Crowley Lake as well as one small area between Reversed Creek and Grant Lake where project activities are conducted within a flume and forebay. Since work activities will not be conducted during the breeding season (March 15 to July 1, Mitigation Measure **BIO-3**) impacts on Lahontan Cutthroat Trout will be less than significant.
- Owens Tui Chub - Of the two existing populations, project activities only occur at the Crowley toe drain to the main weir (where the Owens River Gorge population occurs in critical habitat). Project activities below the Crowley weir include spot cleaning obstructions. CDFW will be notified at least 5 days prior to conducting work in this area to ensure that tui chub, if extant, are not impacted. No project activities are performed by LADWP at the Hot Creek fish hatchery, however CDFW maintains and operates a fish hatchery and uses springflow from tui chub habitat in hatchery operations.
- Owens Pupfish - Owens Pupfish are only found in isolated refuges at Fish Slough (BLM Spring, the Letter Ponds, Marvin’s Marsh), Mule Spring, and Artesian Well 368 (LADWP 2016). Since project activities are not conducted within the current isolated refuge populations, there will be no impacts to this species.
- Long Valley Speckled Dace – This species currently occurs at Whitmore Springs and Becky’s pond (a private pond in Bishop; CDFW unpublished data). The measuring station at Whitmore springs has been abandoned. Since there will be no project activities conducted within the current isolated populations, there will be no impacts to this species.

To avoid potential impacts to these native fish species, mitigation measure **BIO-3** will be implemented. LADWP will work in coordination with CDFW regarding specific timing of seasonal spawning avoidance such as in locations where native fish populations persist, spring spawning avoidance windows will be



implemented. Additionally, mitigation measures **BIO-1** and **BIO-12** will further reduce potential impacts on fishes to less than significant levels.

Although they are not a special status species, maintenance activities will be conducted to avoid the Brown Trout spawning season in areas with catchable trout to help maintain a recreational fishery. Regardless of Brown Trout presence, if native fish occur in a given location, measures will be prioritized to protect native populations (CDFW personal comm.). To minimize impacts to the recreational fishery, mitigation measure **BIO-10** will be implemented. In areas where Brown Trout could conflict with native sensitive fishes, only mitigation measure **BIO-3** will be implemented which may enhance the native fish assemblage.

**Amphibians and Reptiles:** Amphibian and reptile species could be impacted by the removal of riparian vegetation and the operation of heavy equipment.

- Inyo Mountain Slender Salamander – Because the Inyo Mountain Slender Salamander is endemic to the Inyo Mountains and typically restricted to rocky canyons and springs in this mountain range, the likelihood for this species to occur in the project area and be impacted by project activities is low. However, since there are occurrence records from 1988, mitigation measure **BIO-7** will be implemented, which includes a one-time survey in the drainages where the CNDDDB records occurred in the project area.
- Northern Leopard Frog – Northern Leopard Frog has not been documented in the project area in over four decades, including absence during 2009 surveys conducted by CDFW in spring/marsh systems within Tinemaha and Birch Creeks. It is not expected to occur or be impacted by project activities.
- Panamint Alligator Lizard – Panamint Alligator Lizard has been recently documented up Silver Canyon Creek and Cottonwood Creek drainage. Inspections on LADWP infrastructure occur weekly up this drainage and project maintenance activities occur quarterly. The infrastructure in this area has a high rate of disturbance; therefore Panamint Alligator Lizard is not expected to occur or be impacted by the project where high activity and human disturbance is prevalent.

Impacts to sensitive amphibians and reptiles are not anticipated, however, mitigation measures **BIO-1** and **BIO-7** will be implemented to reduce potential impacts on these species to less than significant levels.

**Birds:** Bird species could be impacted by the removal of riparian vegetation and the operation of heavy equipment. Bird species most likely to be impacted by project activities are those that breed in riparian or marsh vegetation, or are particularly sensitive to disturbance at certain times of the year (e.g., Greater Sage-Grouse, nesting raptors). Waterway types in the project area vary in their attractiveness to nesting birds and areas such as perennial streams generally support more woody riparian and marsh vegetation than man-made waterways. In addition, perennial streams and perennial man-made waterways are more likely to support more nesting birds than lower cover or more xeric sites such as intermittent native and man-made waterways.

Impacts to sensitive bird species as well as all native nesting bird species covered under the MBTA will be minimized by avoidance to the extent possible through implementation of mitigation measures **BIO-1**, **BIO-2** and **BIO-4**. A priority will be placed on seasonal avoidance in perennial streams or other areas supporting significant woody riparian or marsh vegetation. In addition,

seasonal avoidance will be a priority in areas known to support specific sensitive species (Sage Grouse leks, nesting sensitive raptors, etc). If seasonal avoidance cannot be achieved, a nesting bird survey will be conducted as described in **BIO-2**, or measures will be taken to reduce disturbance in the case of Sage-Grouse (such as limited work windows). With implementation of mitigation measures **BIO-1**, **BIO-2** and **BIO-4**, impacts on sensitive bird species will be reduced to less than significant levels.

**Mammals:** Mammal species could be impacted by the removal of riparian vegetation and harassment could occur from the operation of heavy equipment.

- Pallid Bat and Townsend’s Big-eared Bat – These bat species emerge at dusk to forage and roost during the day. They are extremely sensitive to roost disturbance and have been known to abandon roosts, including hibernation and maternity colonies, following human disturbance.
- Spotted Bat and Western Mastiff Bat – These bat species are less sensitive to roost disturbance compared to Pallid and Townsend’s Bats, but can still be impacted during the pup-rearing season (April-August), when young are present, but not yet ready to fly.

Mitigation measure **BIO-6** will be implemented to reduce potential impacts to bat species to less than significant levels. Bat observations in the maintenance area will be investigated, in order to identify and protect potential roost sites.

- Owens Valley Vole - Based on a 2011 study conducted by CDFW, the Owens Valley Vole appears to have healthy breeding populations throughout its range. Although this species has a high potential for impacts by project activities because it occurs throughout the project area, with implementation of mitigation measure **BIO-1**, vole runway tunnels and burrows will not be significantly impacted. Only existing disturbed areas will be used and vegetation will be removed only as needed for project activities.
- Sierra Mountain Beaver – This species is uncommon in the Sierra Nevada but has been found along Mammoth Creek. This species does not burrow within waterways, but along the fringes of riparian and upland habitats where soils are friable. They may be found foraging in riparian habitat within minimal drainages in the Mono Basin; however implementation of mitigation measures **BIO-1** and **BIO-11** will reduce potential impacts to this species to less than significant levels.
- Pygmy Rabbit, Western White-tailed Jackrabbit, Sierra Nevada Red Fox, American Badger and Sierra Nevada Bighorn Sheep - This group of species may pass through the project area during migration or foraging activities but prefers upland or alpine habitats such as sagebrush scrub or coniferous forests and does not rely on riparian habitats for survival. Implementation of mitigation measure **BIO-1** will reduce potential impacts to these species to less than significant levels.

In addition to the mitigation measures identified above, Worker Environmental Awareness Training will be conducted annually for all LADWP personnel involved with routine maintenance activities. Mitigation measure **BIO-9** will ensure that personnel are familiar with permit conditions and mitigation measures to be implemented for the protection of biological resources.

- b) Less Than Significant with Mitigation Incorporated.** LADWP has been conducting routine maintenance activities, such as the removal of sediment and vegetation around intake and diversion structures and within waterways in Inyo and Mono Counties for many decades prior to the requirement and implementation of regulatory permits. LADWP has modified cleaning and maintenance operations in order to minimize impacts to sensitive species and to reduce areas of disturbance as described in the mitigation measures and BMPs that are currently utilized. Native riparian vegetation grows along the banks of perennial man-made canals and perennial streams, which are currently subject to CDFW jurisdiction. Over time, some of the intermittent man-made waterways (i.e., canals and ditches) have developed favorable conditions for the growth of native riparian vegetation, which is also considered to be jurisdictional by CDFW. Emergent wetland, riparian forest and riparian shrub habitat occurs along the creeks, canals and ditches within the maintenance area. Routine maintenance may require the temporary removal of these vegetation communities within the maintenance area, but would be limited to only what is necessary to maintain LADWP's facilities and to ensure transportation of water throughout the aqueduct system. A pre-construction site visit with Construction and Watershed Resources staff occurs prior to maintenance projects to ensure sensitive areas are not impacted. Many of these vegetation types are known to regenerate quickly and would provide valuable habitat for fish and wildlife species within a short time of completion of maintenance activities. Additionally, vegetation is typically trimmed or mowed on only one side of the waterway in order to maintain water quality as well as habitat for fish and wildlife. Rush-sedge meadow and alkali meadow vegetation communities also exist within the maintenance area outside of the waterways and could be temporarily impacted by heavy equipment accessing waterways and facilities. With implementation of mitigation measures **BIO-1** and **BIO-4** routine maintenance activities would not result in direct or cumulatively significant impacts to riparian habitats or other sensitive natural communities.
- c) Less Than Significant with Mitigation Incorporated.** By nature of their function and their position along a natural stream course, the banks and riparian zones of the waterways designated for routine maintenance activities are generally considered to be protected waters, wetlands and associated riparian habitat under the jurisdiction of state and federal regulatory agencies. Vegetation communities in the maintenance area that would be considered true wetland vegetation or an indicator of wetlands include emergent marsh. The amount of true wetlands is dependent on the frequency and extent of periodic inundations, and may vary from season to season due to the amount of snowpack and groundwater recharge within the watershed. Removal of sediment from waterways in the maintenance area, including freshwater emergent wetland vegetation fringing the stream bank edges, would be limited to maintaining facilities and facilitating flows where blockages may occur. However, as previously described, maintenance activities would result in only a temporary loss of habitat value. With implementation of mitigation measures **BIO-1** and **BIO-4**, ongoing routine maintenance activities would not result in direct or cumulatively significant impacts to federally protected wetlands and associated riparian habitat.
- d) Less Than Significant with Mitigation Incorporated.** Since maintenance activities at any one location are temporary, they would not permanently interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors. However, temporary impacts to wildlife corridors could occur during construction due to the

increased presence of equipment, structures, and construction personnel. The CDFW Section 1605 Routine Maintenance Agreement provides conditions for compliance with Sections 3503 and 3503.5 of the *California Fish and Game Code* to protect nesting migratory birds and raptors. These conditions state the following:

3503. It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.

3503.5 It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.

As a result, maintenance activities are conducted primarily in the fall and winter after the breeding season for birds and outside of the spawning season for native and resident fish. Resident fish, wildlife species and migratory birds, including migrants and wintering visitors, do use biological resources within maintained waterways during the fall and winter seasons and may be temporarily displaced by maintenance activities. However, this impact would be temporary and implementation of mitigation measures **BIO-1**, **BIO-2**, and **BIO-12** will ensure that maintenance activities would not interfere with the movement of any native resident or migratory fish or wildlife species or with migratory wildlife corridors, or impede the use of native wildlife nursery sites. Impacts would be less than significant as mitigated.

- e) **No Impact.** There are no local municipal codes, policies or ordinances protecting biological resources within the maintenance area. Therefore, there will be no impact, as the continued implementation of routine maintenance activities would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
  
- f) **No Impact.** Within the maintenance area, there is a proposed *Habitat Conservation Plan for Los Angeles Department of Water and Power's Operations, Maintenance, and Management Activities on its Land in Mono and Inyo Counties, California*. This plan has been finalized but has not yet been adopted. Mitigation measures to be implemented as part of maintenance activities are consistent with measures identified in the proposed Habitat Conservation Plan. No other Habitat Conservation Plans exist within the maintenance area. Therefore, there would be no impact, as maintenance activities would not conflict with any locally adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plan.

### Mitigation Measures

The CDFW Section 1605 Routine Maintenance Agreement contains conditions for fish and wildlife protection, minimization of riparian impacts, the removal of non-native vegetation, and exotic species removal and control (Appendix D), which would be implemented by LADWP to protect and preserve sensitive species found within the waterways and riparian habitats within the maintenance area. With implementation of these conditions, and implementation of the following mitigation measures, potential impacts on biological resources from routine waterway maintenance activities would be less than significant.



**BIO-1:** Potentially significant impacts to plants, fish and wildlife shall be minimized to less than significant levels by: using existing roads for ingress and egress to work locations; confining work to the smallest footprint possible and to previously disturbed areas associated with water conveyance infrastructure; removing vegetation only when necessary; and placing staging and spoil piles in predetermined locations away from waterways, wetlands, and riparian habitats. Watershed Resources staff shall perform pre-project surveys to find a location for staging and access that will minimize impacts to surrounding vegetation and avoid sensitive resources.

**BIO-2:** To the maximum extent feasible, maintenance work shall be conducted outside of the bird nesting season, March 1 to September 1; however, if species are active earlier or later, surveys shall be performed. If maintenance activities cannot be feasibly avoided between March 1 and September 1, nesting bird surveys shall be conducted by qualified biologists prior to the start of work. If a nest is found or nesting suspected, project activities shall cease within suitable nesting habitat or within 300 feet of nesting habitat (within 500 feet for raptor nesting habitat). Any active bird nests located shall be protected and work postponed until after young have fledged. If a special status bird species is found present in a specific area, no maintenance work shall occur in that area during the breeding season.

**BIO-3:** Work activities shall not be conducted between March 15 and July 1 to avoid impacts to spawning trout, redds, and embryos in identified tributaries to Grant Lake and Crowley Lake.

Work activities shall not be conducted in waterways with known Speckled Dace during the spawning season (late spring into summer) to avoid impacts to spawning Cypriniform fishes (e.g., Owens Suckers, Speckled Dace). Specific locations and timing will be coordinated with CDFW. Known locations of Speckled Dace are shown in Appendix C. If work is conducted in these waterways from June to August, water quality data will be collected during maintenance activities. If aquatic life and fish are showing signs of stress, a reasonable effort will be made to capture and relocate stressed or stranded aquatic life. Capture methods may include fish landing nets, dip nets, buckets, and by hand. Captured aquatic life shall be released immediately into the waterway in reaches where fish are likely to survive. If fish capture is necessary, LADWP shall consult with CDFW for capture and relocation guidance and assistance.

**BIO-4:** Banks on waterways shall not be graded. Vegetation shall be cut down to no lower than 2 inches to leave roots that promote waterway bank stability and regrowth. Any native vegetation with DBH of 4 inches or greater shall be left intact. LADWP shall consult with CDFW and prepare a mitigation plan prior to removing any riparian vegetation with a DBH equal to or greater than 4 inches. Replacement-to-impact ratios will be discussed as necessary. Any area that has not been mowed annually shall be assessed prior to mowing by a Watershed Resources Specialist to determine if there are any resource concerns.

**BIO-5:** If maintenance activities are proposed to occur within a specific waterway where special status plants, such as frogs-bit buttercup are known to exist, a qualified Watershed Resources staff member shall conduct surveys prior to work activities and ensure that any populations of special status plants are avoided. If a specific waterway contains an outdated occurrence record for a special status plant, a survey shall be conducted prior to work activities. If a waterway has not been cleaned for more than 5 years, a rare plant survey shall be conducted prior to work activities both in the waterway and in appropriate adjacent habitat. All records shall be submitted to the CNDDDB.

- BIO-6:** If a bat is observed in daylight hours during project activities, qualified LADWP Watershed Resources Staff shall be contacted to come to the project area and investigate the observation. A daylight observation may indicate that the bat is sick, or has been disturbed from a sensitive day roost or maternity roost containing multiple individuals and/or pups. If this type of roost is discovered, project activities shall not occur within 100 feet of the roost until the bats are no longer utilizing the area for hibernation or pup-rearing.
- BIO-7:** LADWP Watershed Resources Staff shall conduct surveys in Locust Ditch, Hogback Creek, and the Alabama Gates Spillway during March and November when the Inyo Mountain Slender Salamander are most active, to determine if this species is extant or extirpated from these areas. LADWP shall consult with CDFW to determine the state-approved protocol, monitoring techniques, and interval.
- BIO-8:** Equipment shall be cleaned with a high-pressure washer before traveling between waterways to avoid the spread of invasive species. Information shall be shared as it becomes available regarding the presence and prevention of any observed invasive species including botanical (e.g., pepperweed, knapweed, etc.) and aquatic invasive species (e.g., New Zealand Mudsnails, Quagga/Zebra Mussels, etc.) in or near waterways. LADWP currently treats both pepperweed and tamarisk annually with chemical and mechanical removal techniques to reduce the spread of known populations
- BIO-9:** Worker Environmental Awareness Training shall be provided annually to all LADWP personnel involved in conducting and managing routine maintenance activities. This training shall cover authorized maintenance activities, permit conditions, required pre-maintenance biological surveys and protective measures that must be followed to avoid inadvertent impacts to biological, cultural and historic resources.
- BIO-10:** Maintenance activities shall be avoided during the fall/early winter spawning season for the protection of Brown Trout spawning beds when eggs and larvae could occur. Specific locations for avoidance shall be identified in coordination with CDFW. The following criteria will be used to identify locations where measures will be implemented:
- a) There is known or suspected fishing pressure, and
  - b) Habitat conditions support catchable Brown Trout in the 2-3 pound range.
- BIO-11:** Beaver dams shall only be removed if they are causing excessive flooding, restricting flow substantially, or are inhibiting the development of diverse vegetation types within specific waterways. During beaver dam removal, water quality monitoring (dissolved oxygen, temperature, pH, and turbidity) shall be conducted. Work shall be halted immediately if fish stress is observed or water quality is substantially reduced.
- BIO-12:** When replacing existing facilities, water shall be diverted around the worksite to ensure fish remain in good condition, or facilities shall be replaced when the waterway is dry. When it is not possible to complete work while a waterway is dry, an appropriate water diversion method will be utilized. The selection of the method used will be based on site conditions and may involve the use of coffer dams, culverts, and open trenches and all water diversions shall be discussed

with CDFW prior to implementation. Trenches and culverts are typically placed in previously disturbed areas to minimize additional vegetation disturbance.

2.3.5 Cultural Resources

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

One of the integral components of the waterway infrastructure in Inyo and Mono counties is LAA1. Construction of LAA1, which initially extended 233 miles from the aqueduct intake to a spillway in the San Fernando Valley, was completed in 1913. Unlined portions of the original LAA1 extend from the aqueduct intake, located approximately 5 miles south of Tinemaha Reservoir, to an area approximately 5 miles north of Lone Pine, California. The northernmost reach of the waterway infrastructure providing water to LAA1 was extended in the 1930s through the implementation of the Mono Basin Project. This project extended the water delivery infrastructure northward to include Lee Vining, Parker, Walker, and Rush Creeks as water sources. This project also resulted in the creation of Crowley Lake Reservoir.

There are total of 46 historical resources in Inyo County identified by the California Office of Historic Preservation. Similarly, there are 28 historical resources identified in Mono County. The importance of these sites has led to their listing in the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), or their identification as a California Historic Landmark or Point of Interest (California OHP 2015).

Cultural resources inventories were conducted as part of the environmental review process for the Lower Owens River Project (LORP). The cultural resources surveys were performed in expected disturbance areas associated with the construction of new waterway infrastructure, a new transmission line, temporary access roads, and initial clearing of a 2.2 mile long dry portion of the river channel prior to initial water flow releases. As a result of the cultural resources surveys that were conducted, a total of 8 isolates, 14 historic sites, and 9 prehistoric sites were identified. Of these identified sites, 24 were recommended to be ineligible for listing in the NRHP, 2 were recommended to be eligible for listing and 5 had not been evaluated (ICWD, LADWP, and USEPA 2004).



California Assembly Bill (AB) 52, passed in September 2014, has added several sections to the Public Resources Code which pertain to tribal cultural resources and a formal consultation process. The primary purpose of consultation and the changes to CEQA under AB 52 is to allow tribes, who may have “expertise in tribal history and tribal knowledge about land and tribal cultural resources at issue” to be included in environmental assessments for projects that may have a significant impact on those resources. As of July 1, 2015, Public Resources Code Sections 21080.3.1 and 21080.3.2 require public agencies to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of mitigating impacts to tribal cultural resources. LADWP has contacted the tribes identified by the NAHC as having traditional lands or cultural places located within the boundaries of Inyo and Mono Counties. In response to the notification informing the tribes of the routine maintenance activities for waterways in Inyo and Mono Counties, two tribes responded with a request to initiate consultation. In response to these requests, separate meetings were held with the interested tribes in early January 2016 at their respective tribal offices. The purpose of the consultation meetings was to present additional information regarding the nature and location of the maintenance work and provide the tribes with an opportunity to submit input related to the pertinent activities and geographic areas of work. Shortly after the conclusion of these meetings, LADWP contacted the tribes to request that any comments, questions, or concerns be submitted within 30 days. To date, no specific comments or concerns related to routine maintenance work in waterways in Inyo and Mono Counties have been received.

**a) – e) Less than Significant Impact with Mitigation Incorporated.** Maintenance activities are not expected to result in adverse impacts to historical, archaeological or paleontological resources. Work would be completed in previously disturbed areas and materials that are removed from work areas would be limited to excess vegetation, accumulated sediment, various obstructions, and deteriorated structures. Furthermore, maintenance activities would not impact any of the historical resources identified in Inyo and Mono counties and maintenance work on the unlined portions of LAA1 would not impact the integrity of this man-made waterway. Cultural sites identified during surveys conducted for the LORP that are either eligible for listing in the NRHP or have not yet been evaluated would be avoided and no disturbance associated with routine maintenance activities would occur in proximity of the sites.

Resources that may be inadvertently discovered during routine maintenance work would be addressed through implementation of mitigation measure **CUL-1** and **CUL-2**. Materials that are discovered would likely be displaced from their point of origination considering the constant movement of water in perennial waterways and considerable flows that are experienced throughout the waterway infrastructure during high runoff events. Therefore, impacts would be less than significant with mitigation incorporated.

### ***Mitigation Measure***

**CUL-1:** In the event of a discovery of previously unknown prehistoric or historic cultural material, maintenance activities shall immediately cease in the area and a qualified archaeologist shall be contacted to evaluate the find and determine if it represents an intact deposit or archaeological site. An appropriate plan to protect or salvage the find shall be developed by the archaeologist in collaboration with LADWP. If prehistoric cultural material is found, the evaluation and determination of appropriate measures shall be coordinated with regional Native American Tribes.

**CUL-2:** Worker Environmental Awareness Training shall be provided annually to all LADWP personnel involved in conducting and managing routine waterway maintenance. This training shall cover authorized maintenance activities, permit conditions, and required protective measures that must be followed to avoid inadvertent impacts to biological, cultural and historic resources.

2.3.6 Geology and Soils

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994) creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems, where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

The Owens Valley is the most southwestern basin in the Basin and Range geologic province, which is characterized by a series of separate and parallel mountain ranges interposed with broad valleys. The Owens Valley floor elevation ranges from 3,000 to 4,500 ft. The topographic relief from neighboring mountains varies from 3,700 to 10,800 ft. The valley floor is underlain by valley fill that consists of unconsolidated to moderately consolidated alluvial fan, transition-zone, glacial and talus, and fluvial and lacustrine deposits. The valley fill also includes interlayered recent volcanic flows such as Red Hill and pyroclastic rocks such as the Bishop Tuff (Danskin 1998). A major geologic feature of the region is the Owens Valley Fault, which extends from Bishop in the north to south of Owens Lake.

The Volcanic Tablelands, located at the northern end of the Owens Valley and extending north to Mono Lake, are part of a 580 square mi area covered by volcanic ash flows from the eruption of Long Valley

Caldera approximately 760,000 years ago. The region remains geologically active with faulting at the base of the Sierra Nevada and crustal stretching of the Basin and Range Province. The tablelands consist of several layers of compacted ash known as Bishop Tuff, which is up to 600 ft deep in places. The soils associated with this formation are very shallow and well-drained. The dominant rocky and loamy soil textures are generally nutrient poor, with low levels of inorganic nitrogen and plant-available phosphorus. The NRCS (2002) mapped and classified Owens Valley soils.

**a) i. – iv. Less than Significant Impact.** The routine maintenance activities would not expose people or structures to substantial adverse effects resulting from earthquake fault ruptures, strong seismic ground shaking, seismic-related ground failure, or landslides. While earthquake faults along the U.S. Route 395 corridor in Inyo and Mono counties have been identified in the most recent Alquist-Priolo Earthquake Fault Zoning Map (CDC 2007), construction of habitable structures does not occur as part of routine maintenance activities and thus maintenance work would not pose a threat to people. Structures that are part of the waterway infrastructure would be repaired or replaced if damaged from seismic activity.

**b) Less than Significant Impact.** Maintenance activities involving the removal of vegetation and sediment would not result in substantial soil erosion or the loss of topsoil. Stockpiles are sometimes formed adjacent to waterways and structures to prevent materials that have been removed from washing back into the waterway. When necessary, this material is removed and transported to an appropriate disposal site. When this occurs, special care is taken to limit the removal of materials to those that have been cleared from the waterway, and not to disturb topsoil underneath the stockpile. To further limit soil disturbance, structure maintenance activities are restricted to an area 100 feet downstream and 100 feet upstream of the structure. Therefore, impacts would be less than significant.

**c) Less than Significant Impact.** As discussed above, routine maintenance activities would not result in the destabilization of soil in the maintenance area. Areas susceptible to liquefaction have not been identified within Mono and Inyo counties. Because lateral spreading, the displacement of gently sloping ground, is known to be liquefaction induced, the risk of this land movement would not increase as a result of maintenance activities.

Vegetation and sediment removal would not increase the risk of landslides, collapse, or subsidence. The maintenance area is relatively flat with limited significant natural or graded slopes. Furthermore, maintenance activities do not destabilize landforms. Since routine maintenance activities would not cause unstable soils, impacts would be less than significant.

**d) No Impact.** The structures that are maintained and replaced are located within existing waterways that are also regularly maintained. Since no habitable structures would be construction as part of the routine maintenance activities, the project would have no impacts associated with expansive soils.

**e) No Impact.** Wastewater disposal is not a component of routine maintenance activities and the use of septic tanks or alternative wastewater disposal facilities would not be required. Therefore, no impact would occur.



2.3.7 Greenhouse Gas Emissions

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

Greenhouse gases (GHGs) are gases that trap heat in the atmosphere. The most common GHGs emitted from natural processes and human activities include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). Examples of GHGs created and emitted primarily through human activities include fluorinated gases (hydrofluorocarbons and perfluorocarbons) and sulfur hexafluoride. Each GHG is assigned a global warming potential. The global warming potential is the ability of a gas or aerosol to trap heat in the atmosphere. The global warming potential rating system is standardized to CO<sub>2</sub>, which has a value of one. For example, CH<sub>4</sub> has a global warming potential of 21, which means that it has a global warming effect 21 times greater than CO<sub>2</sub> on an equal-mass basis. Total GHG emissions from a source are often reported as a CO<sub>2</sub> equivalent (CO<sub>2</sub>e). The CO<sub>2</sub>e is calculated by multiplying the emission of each GHG by its global warming potential and adding the results together to produce a single, combined emission rate representing all GHGs. On a national scale, federal agencies are addressing emissions of GHGs by reductions mandated in federal laws and Executive Orders. Several states have promulgated laws as a means to reduce statewide levels of GHG emissions. In particular, the California Global Warming Solutions Act of 2006 directs the State of California to reduce statewide GHG emissions to 1990 levels by the year 2020.

AB 32, California Global Warming Solutions Act of 2006, was signed into law on September 27, 2006. AB 32 requires the California Air Resources Board (CARB), in coordination with State agencies as well as members of the private and academic communities, to adopt regulations to require the reporting and verification of statewide GHG emissions and to monitor and enforce compliance with this program. Under the provisions of the bill, by 2020, statewide GHG emissions would be limited to the equivalent emission levels in 1990. On December 12, 2008, CARB adopted its Climate Change Scoping Plan pursuant to AB 32 (CARB 2008). The Scoping Plan was re-approved by CARB on August 24, 2011. The scoping plan indicates how these emission reductions will be achieved from significant GHG sources via regulations, market mechanisms and other actions.

The potential effects of proposed GHG emissions are by nature global, and have cumulative impacts. As individual sources, project GHG emissions are not large enough to have an appreciable effect on climate change. Therefore, the impact of proposed GHG emissions on climate change is discussed in the context of cumulative impacts.

As a power utility, the majority of LADWP's GHG emissions results from power generation. Other GHG emissions are a result of vehicle and equipment use for construction and operation of LADWP facilities. To reduce Department-wide GHG emissions, LADWP has instituted various programs including: increasing the use of renewable energy by 33 percent by 2020, early divestiture of coal generation, repowering existing natural gas power plants, adopting an aggressive energy efficiency program, and use of electric fleet vehicles.

**a) Less than Significant Impact.** The generation of GHG emissions associated with maintenance activities and the construction of replacement facilities would be intermittent, minor and the same as existing conditions. GHGs would continue to be periodically produced by vehicles and equipment used to remove vegetation and sediment, clear significant obstructions, and transport materials necessary for the replacement of structures. Maintenance activities have been ongoing and the generation of GHGs would not increase substantially compared to the existing environmental setting. Impacts related to the generation of GHGs would be less than significant.

**b) No Impact.** The implementation of the routine maintenance activities would not preclude LADWP from complying with applicable measures from a plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. No impact would occur.

2.3.8 Hazards and Hazardous Materials

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wetlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

**a) and b) Less than Significant Impact.** Aside from herbicides, hazardous materials are not transported as part of routine maintenance activities. Sediment and other materials that are removed during maintenance activities are periodically transported to appropriate disposal facilities. Sediment that is removed is unlikely to contain pollutants of concern. Aside from occasional herbicide use, hazardous materials are not used during the replacement of structures or the removal of vegetation and obstructions from waterways. LADWP regularly uses Garlon to control Tamarisk adjacent to some

waterways, as well as a mix of Telar, Milestone, Vanquish, and activator 90 for pepperweed control. On occasion, Roundup and Rodeo are also used. Since herbicide use is conducted in strict compliance with manufacturer's instructions for transport and use, impacts related to hazardous materials would be less than significant.

**c) Less than Significant Impact.** There are several instances where waterways that are regularly maintained are located within one-quarter mile of an existing school. However, hazardous materials use is limited to occasional herbicide application for vegetation management. Since herbicide use is conducted in strict compliance with manufacturer's instructions for transport and use, schools would not be exposed to hazardous materials releases. Impacts would be less than significant.

**d) No Impact.** The waterways and structures that are routinely maintained are not located within an identified hazardous materials site that is included on the list compiled pursuant to Government Code Section 65962.5 by the California Department of Toxic Substances Control (DTSC 2015). No impact would occur.

**e) No Impact.** There are nine public airports located within Mono and Inyo counties. Six of these airports are located within 2 miles of waterways that are routinely maintained. The remaining three airports are not located within the applicable maintenance area. People conducting maintenance work and others residing in the area would not be exposed to safety hazards associated with airport traffic. Maintenance activities would not present a hazard to people residing or working in maintenance areas located near airports. No impact would occur.

**f) No Impact.** Maintenance activities would not occur within the vicinity of a private airstrip. Furthermore, private airstrips would not be traversed to gain access to maintenance work areas. Therefore, no impact would occur.

**g) No Impact.** Maintenance and facility replacement work would not interfere with any adopted emergency response plan or emergency evacuation plan. Roads would not be blocked during maintenance activities and building access would not be impeded. Therefore, no impact would occur.

**h) Less than Significant Impact.** Maintenance activities would not result in a significant risk of loss, injury or death involving wildfires. There are measures in place, including a Fire Management Plan developed by LADWP, to address wildfires that may occur within maintenance areas in Mono and Inyo counties. In Inyo County, the California Department of Forestry and Fire Protection (CalFire) makes decisions regarding wildfire suppression activities using the incident command system. Within Mono County, the wildland fire agencies in the region (CalFire, Bureau of Land Management, and U.S. Forest Service) and LADWP have an agreement to collaborate on fire suppression. While most maintenance work and facility replacements would be carried out away from the immediate vicinity of residences and other structures, BMPs would be implemented to minimize the risk of fires whenever an activity that has the potential to cause a fire is conducted. For example, during preparation for controlled vegetation burns, a fire line is established. Additionally, burning is only conducted on days with favorable wind and weather conditions. With implementation of standard fire control BMPs, impacts would be less than significant.



2.3.9 Hydrology and Water Quality

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

Major surface waters in the Mono Basin are Mill, Wilson, Lee Vining, Walker, Parker, and Rush Creeks, which all flow into Mono Lake. Grant Reservoir is located on Rush Creek. In addition, there are numerous springs and seeps located around Mono Lake.

In the Owens Basin, the Owens River headwaters are located at Big Springs. The Upper Owens River then flows through Long Valley and empties into Crowley Reservoir. The main tributaries to the Upper Owens River are Mammoth, Hot, Little Hot, Convict, and McGee Creeks. Below Crowley Reservoir, the river flows into the Owens River Gorge, which runs 20 mi to Pleasant Valley Reservoir. Rock Creek and Pine Creek join the Owens River just upstream of Pleasant Valley Reservoir. Lower Horton and Lower McGee Creeks are tributary to the Owen River downstream of Pleasant Valley Reservoir. The Middle Owens River runs from Pleasant Valley south past Bishop and Big Pine to the LAA Intake downstream of Tinemeha Reservoir. Main tributaries to the Middle Owens River are Bishop and Big Pine Creeks. Downstream of the Intake, the Lower Owens River continues south to the Owens River Delta. Following implementation of the LORP in December 2006, perennial flow has been maintained in the Lower Owens River downstream of the Intake. The LAA lies well west of the Owens River, and from the Intake south to the Alabama Gates it is an open, unlined channel. From the Alabama Gate south to Haiwee Reservoir, the LAA is open, but is a concrete-lined channel. South of Haiwee Reservoir, the LAA is a lined, closed system. While several creeks originating from the east slope of the Sierra Nevada historically were tributary to the Owens River, there are currently no major tributaries to the Lower Owens River. Water from the larger creek systems such as Independence, Oak, and Lone Pine Creeks is used to irrigate pastures for the purpose of livestock grazing.

Water is provided to other small lakes within the maintenance area including Klondike Lake, Buckley Ponds, Upper and Lower Twin Lakes, Goose Lake, Billy Lake, and Diaz Lake. The Blackrock Waterfowl Management Area provides up to 500 acres of flooded habitat each year, including some open water and ponded areas. In addition, there are numerous canals and ditches that are used to divert flow from the Owens River and its tributaries for irrigation, groundwater recharge, and other uses.

Groundwater pumping is conducted in the Owens Valley portion of the Owens River watershed for export to the City of Los Angeles as well as for in-valley uses such as irrigation, storage, and residential use.

The Owens Valley Groundwater Basin encompasses 1,030 square mi that underlie the Benton, Hammil, and Chalfant Valleys in Mono County, and Round and Owens Valleys in Inyo County. In the Chalfant, Benton and Hammil Valleys, groundwater is managed by Tri-Valley Groundwater Management District. Groundwater in Round and Owens Valley is managed under the Water Agreement of 1991, and the levels and quality are monitored by LADWP and Inyo County Water and Health Departments.

Some waters in the Owens and Mono Basins have been classified as impaired by the Lahontan RWQCB. They are impaired because of the presence of naturally occurring metals and flow alterations.

### **Lahontan Basin Plan**

The waterbodies being maintained are located in the Mono and Owens Hydrologic Units. Beneficial uses and water quality objectives are specified in the Lahontan Region Basin Plan (Regional Board 2005). Beneficial uses (Table 2-1 of the Basin Plan) are designated for waterways in Inyo and Mono Counties and include: MUN – municipal and domestic supply; AGR – agricultural supply; IND – industrial service supply; GWR – groundwater recharge, FRSH – Freshwater replenishment; NAV – navigation; POW – hydropower generation; REC-1 – water contact recreation; REC-2 – noncontact water recreation; COMM – commercial and sportfishing; AQUA – aquaculture; WARM – warm freshwater habitat; COLD – cold freshwater habitat; SAL – inland saline water habitat; WILD – wildlife habitat; BIOL – preservation of biological habitats of special significance; RARE – Rare, Threatened, or Endangered species; MIGR –

migration of aquatic organisms; SPWN – spawning, reproduction, and development; WQE – water quality enhancement; and FLD – flood peak attenuation/flood water storage.

Waterbody-specific numeric objectives for the protection of these beneficial uses are summarized in Tables 3-16 and 3-17 of the Basin Plan for waterways in the Mono and Owens Hydrologic Units. Numeric objectives are defined for total dissolved solids, chloride, sulfate, fluoride, boron, nitrate as Nitrogen, Total Nitrogen, and dissolved orthophosphate. Additional narrative and numeric water quality standards for all surface waters in the region are applicable for: ammonia, coliform bacteria, biostimulatory substances, chemical constituents, total residual chlorine, color, dissolved oxygen, floating materials, oil and grease, non-degradation of aquatic communities and populations, pesticides, pH, radioactivity, sediment, settleable materials, suspended materials, taste and odor, temperature, toxicity, and turbidity.

**a) Less than Significant Impact.** No waste discharges are associated with maintenance of the waterways. The removal of vegetation and sediment from waterways with construction equipment may result in elevated turbidity levels. These elevated levels would be temporary and would not impact waters further downstream. In addition, BMPs are implemented to reduce turbidity and work within waterways is conducted in sections that are physically separated when possible to limit the propagation of elevated turbidity levels. In certain situations, an additional structure located within the waterway is utilized to allow sediment to settle in the vicinity of the work area and prevent raising turbidity levels further downstream. Minor fuel spills from vehicles and construction equipment are also possible. However, BMPs, including the presence of a spill kit with all active equipment, would be implemented to prevent further impacts to water quality resulting from these spills. The general types of BMPs that may be implemented are summarized in Appendix E. With implementation of BMPs during routine maintenance, impacts would be less than significant.

**b) No Impact.** Routine maintenance activities do not require the use of groundwater resources. Maintenance work in waterways ultimately leads to the enhancement of groundwater percolation through the removal of excess sediment. Maintenance returns facilities to their original hydraulic capacity and function; deepening of waterways beyond their original hydraulic capacity is not conducted. Further, maintenance work within spreading basins increases the groundwater recharge potential during high runoff events resulting in spreading basins acting as an important component of flood control systems in the region. Therefore, no impacts to groundwater supplies or groundwater recharge would occur.

**c) - d) Less than Significant Impact.** The replacement of certain structures would require rerouting the water flow of the waterway in which the structure is located. This is accomplished using various methods, including installation of culverts to bypass flows; culverts are sized to adequately handle the flows while causing the least amount of disturbance. When possible, adjacent or parallel waterways are utilized to divert flows and allow work to be conducted in the waterway that requires maintenance or structure replacement. Other features that can be utilized to isolate a dry work area include cofferdams and sheet piling to prevent water from entering a work area and material from entering an adjacent waterway.

An important purpose of maintaining waterways in Inyo and Mono counties is to effectively manage water flows in order to reduce the risk of flooding and the loss of usable water. Many interconnections exist within the waterway infrastructure which allows flows to be redirected in instances where

excessive flow rates exceed the capacity of any one waterway. Since flows can be redirected to avoid flooding, impacts would be less than significant.

**e) No Impact.** Routine maintenance activities do not involve the installation of additional impermeable surfaces which could potentially lead to increased stormwater flows. No additional stormwater facilities would be necessary. Therefore, no impacts would occur.

**f) Less than Significant Impact.** Routine maintenance activities would not cause significant water quality impacts. As discussed in section 2.3.9(a), appropriate BMPs would be implemented to reduce the likelihood and extent of potential impacts resulting from maintenance activities. In the absence of routine maintenance, water quality can degrade due to stagnation and subsequent algal growth. In properly maintained channels, flowing water results in higher dissolved oxygen levels and healthier aquatic habitat. Mosquito habitat is reduced in properly maintained waterways. However, refuge areas for aquatic invertebrates do remain in maintained channels; routine channel maintenance does not result in a complete removal of invertebrate habitat. Routine maintenance activities would have less than significant impacts on water quality.

**g) No Impact.** Routine maintenance activities do not involve the construction of housing within a 100-year flood hazard area. Therefore, no impact would occur.

**h) Less than Significant Impact.** The replacement of structures designed to redirect flood flows is a component of the maintenance work. The purpose of these structures is to divert excess water when the capacity of that waterway is at risk of being exceeded. This is done to prevent flooding, protect lives and property, and maximize the efficiency of the water transportation network. Therefore, impacts would be less than significant.

**i) Less than Significant impact.** The routine maintenance activities are designed to maintain the waterway infrastructure in an optimal operating condition. The waterway infrastructure is used not only to transport water but also to effectively manage high runoff events that have the potential to lead to flooding. Therefore, impacts would be less than significant.

**j) No Impact.** Seiches are known to occur in bound or partially bound bodies of water where conditions such as strong winds or earthquake induced ground shaking can cause the formation of significant oscillating waves. The waterways where maintenance activities occur are not susceptible to the formation of seiches and thus no impact would occur.

Because the maintenance area within Inyo and Mono counties is located more than 150 miles away from the nearest ocean where the formation of tsunamis is possible, no impact would occur.

The purpose of maintenance activities is to remove sediment and vegetation from waterways and replace structures that have the potential to impede flow through the waterway infrastructure. Since these maintenance activities would not increase the possibility of inundation by mudflow, no impact would occur.



2.3.10 Land Use and Planning

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

The areas surrounding the maintenance locations are largely undeveloped. The predominant land uses in the area are ranching and recreation.

LADWP owns approximately 251,000 acres in Inyo County and 63,000 acres in Mono County. Inyo is the second largest county in California in total area (10,140 square mi); the population is 17,945. Mono County encompasses approximately 3,100 square mi and has a population of 9,956. Most land in these counties is publically owned; federal agencies manage 92 percent of Inyo County and 88 percent of Mono County. About 1 percent of Inyo County lands are privately owned. The remaining lands are owned by the City, State, or local agencies. Shoshone, Paiute and other Indian lands occur adjacent to the maintenance areas. Inyo and Mono Counties are generally rural and sparsely settled, with residents concentrated around communities such as Lee Vining, Mammoth Lakes, Bishop, Big Pine, Independence and Lone Pine.

Within the maintenance area (314,000 non-urban acres owned by the City), there are about 22,100 acres of irrigated agricultural lands; about 2,000 acres are for crops (e.g., alfalfa) and the remaining acres area irrigated pastures used for livestock grazing.

**a) and b) No Impact.** The routine maintenance activities would not physically divide an established community. All of the waterways and structures where maintenance activities occur currently exist and the maintenance work does not impact land use planning or policy. Any replacement facilities would remain consistent with the current use and would not expand the extent of waterway infrastructure. Therefore, no impact would occur.

**c) No Impact.** The routine maintenance activities are consistent with the Habitat Conservation Plan (HCP) developed by LADWP. The HCP includes measures designed to enhance and expand the available habitat within the regularly maintained areas. Therefore, no impact would occur.

2.3.11 Mineral Resources

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

**a) and b) No Impact.** The routine maintenance activities would not interfere with existing mineral recovery sites or otherwise result in the loss of availability of locally important mineral resources. Therefore, no impact would occur.

2.3.12 Noise

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

Inyo County provided recommended ambient noise levels for agricultural land use in the May 2013 Draft General Plan. Noise levels of up to 80 day-night average sound level (Ldn) are considered conditionally acceptable. Chapter 10.16 of the Mono County Code provides exterior noise limits for several types of dwellings and commercial settings. However, limits have not been set for agricultural land use.

**a) – b) Less than Significant Impact.** The routine maintenance and structure replacement activities do not expose persons to elevated noise or vibration levels above those currently experienced in the region. Maintenance activities have been ongoing and most work occurs away from inhabited dwellings and other potential sensitive receptors. Short-term increases in noise levels would result from the operation of equipment used for waterway maintenance and structure replacements. Trucks used to remove dismantled structures and other materials extracted from waterways would also raise noise levels on access roads and highways within the maintenance area. However, these sources of noise would not considerably increase noise levels beyond those currently experienced in the region as a result of ongoing maintenance activities. Therefore, impacts associated with noise and vibration from routine maintenance activities would be less than significant.

**c) No Impact.** Routine maintenance activities would not cause permanent increases in noise levels above existing conditions. Maintenance activities are ongoing, but not a source of permanent noise generation. Maintenance activities are not expected to increase in frequency. No impact would occur.

**d) Less than significant impact.** As discussed above, noise levels resulting from maintenance work would be relatively minor and would not constitute a substantial increase over existing conditions. Therefore, impacts related to noise level increases would be less than significant.

**e) and f) No Impact.** People residing near and working within maintenance areas would not be exposed to excessive noise levels originating from nearby airports or private airstrips. No impact would occur.



2.3.13 Population and Housing

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

**a) – c) No Impact.** The routine maintenance activities do not involve the construction of habitable structures, businesses, or expanded transportation infrastructure that would potentially result in population growth. Furthermore, maintenance activities are conducted by permanent LADWP personnel who report to offices located in Inyo County and reside in the region. The routine maintenance activities would not necessitate an increase in the local workforce that would have the potential to displace local residents or require the construction of replacement housing. Therefore, no impact would occur.

2.3.14 Public Services

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

**a) No Impact.** Routine maintenance activities are not growth inducing and would not result in the need for new or expanded governmental facilities. Maintenance activities are ongoing and would not expand in scope and function. Since no additional personnel or public services would be required, no impacts would occur.

2.3.15 Recreation

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

Outdoor recreation-related tourism is the foundation of the region’s economy. City lands in Inyo and Mono Counties provide ample opportunities for outdoor recreation involving the Owens River, streams, lakes, and reservoirs, as well as access to wilderness areas and high mountain environments. There are numerous recreational facilities available for use in Inyo and Mono counties. Both counties provide campground facilities located adjacent to waterways maintained by LADWP. These campgrounds include Tinnemaha, Taboose, Independence, and Lundy. The names of these particular campgrounds coincide with the name of the creek which runs adjacent to the facility. Additionally, much of the area surrounding waterways, including existing roads, is open to the public for recreational use.

**a) Less than Significant Impact.** Routine waterway maintenance would not increase the use of existing neighborhood or regional parks. Pond maintenance may expand recreational opportunities in the region. However, the expanded use of the ponds for recreation would not lead to substantial physical deterioration of those facilities. Furthermore, maintenance work is carried out by LADWP staff who live in the region and do not require temporary housing accommodations which could potentially lead to an increase in the use of existing recreational facilities. Therefore, impacts would be less than significant.

**b) No Impact.** Routine waterway maintenance would not affect recreational facilities or require the construction or expansion of recreational facilities. No Impact would occur.

2.3.16 Transportation and Traffic

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

The most heavily traveled roadway within Mono and Inyo counties is U.S. Route 395. This route connects the population centers in the region and is utilized by LADWP to reach waterway maintenance sites. A network of unpaved access roads which connect to U.S. Route 395 and other arterial routes is also used by LADWP to reach maintenance areas.

**a) and b) No Impact.** Routine waterway maintenance would not conflict with the effectiveness of transportation networks in Inyo and Mono counties. The maintenance work on waterways and associated facilities is ongoing and is not expected to increase beyond current levels. Therefore, no impacts associated with congestion management and circulation system performance would occur.



**c) No Impact.** Routine maintenance activities are not associated with air traffic and would not result in a change in air traffic patterns or levels, or a change in location that would cause substantial safety risks. Therefore, no impact would occur.

**d) No Impact.** Maintenance activities would not increase hazards due to design features or incompatible uses. The routine maintenance activities do not include any proposed changes to roadway alignment or ingress and egress points. Further, any large construction equipment to be used for maintenance activities would be transported on major routes with a truck and flatbed trailer to avoid causing a low-speed hazard on roads. Therefore, no impact would occur.

**e) Less than Significant Impact.** Routine maintenance would not result in inadequate emergency access. During maintenance activities, vehicles and equipment are sometimes stationed adjacent to the work areas on existing access roads. While this may slow emergency vehicles attempting to pass through narrow unpaved roads, delays would be temporary and equipment and vehicles would be moved to avoid hindering emergency responders access. Therefore, impacts would be less than significant.

**f) No Impact.** Routine maintenance activities do not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Therefore, no impact would occur.

2.3.17 Tribal Cultural Resources

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</p>				
<p>a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Discussion:**

Consultation with Native American organizations and individuals was conducted to satisfy the requirements of AB 52. Consultation with the Native American Heritage Commission (NAHC) began on August, 26, 2015 with the request for a CEQA Tribal Consultation List containing the tribes with traditional lands or cultural places located within the boundaries of Inyo and Mono counties, the waterway maintenance area. The NAHC provided a list of 14 tribes to contact for further information regarding their knowledge of cultural resources within and near the project site. On November 12, 2015, letters were mailed to these 14 tribes to request information regarding local knowledge about cultural resources, traditional gathering areas, or sacred lands in or near the project site. In response to the notification informing the tribes of the routine maintenance activities for waterways in Inyo and Mono Counties, two tribes responded with a request to initiate consultation. In response to these requests, separate meetings were held with the interested tribes in early January 2016 at their respective tribal offices. The purpose of the consultation meetings was to present additional information regarding the nature and location of the maintenance work and provide the tribes with an opportunity to submit input related to the pertinent activities and geographic areas of work. On January 19, 2016, LADWP contacted the tribes to request that any comments, questions, or concerns be submitted within 30 days. To date, no specific comments or concerns related to routine maintenance work in waterways in Inyo and Mono Counties have been received.

**a) and b) Less than Significant Impact with Mitigation Incorporated.** No archaeological resources have been identified to date during on-going routine maintenance activities. However, given the possibility that maintenance activities and replacement of structures in waterways could impact unknown archaeological resources related to the prehistoric and historic use of the project site, a qualified Archaeologist shall be retained in the event that resources are discovered during maintenance and operation (Mitigation Measure **CUL-1**, defined in Section 2.3.5). Additionally, LADWP Watershed Resources Specialists present an annual environmental awareness training to all construction and operations personnel that includes a presentation on Cultural and Historic Resources as well as the laws protecting them (Mitigation Measure **CUL-2**). Therefore, since traditional cultural places are not identified for the project area, and since mitigation is included in the event unknown resources are identified, the project would have a less than significant impact on CRHR-listed or eligible resources, or on resources significant to a California Native American tribe.

2.3.18 Utilities and Service Systems

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Discussion:**

**a) No Impact.** No wastewater would be generated during routine maintenance activities. Therefore, no impact would occur.

**b) No Impact.** Maintenance activities are necessary for the continued delivery of water resources to locations in Inyo County and the City of Los Angeles. Water provided for irrigation in Inyo County does not require additional treatment prior to use. Water transported for use in the City of Los Angeles does eventually receive treatment. However, routine maintenance activities would not increase the volume of water transported that requires additional treatment. Therefore, no water treatment facilities would need to be constructed or expanded. No impact would occur.

**c) No Impact.** The construction of new or expanded stormwater drainage facilities would not result from the routine maintenance activities. All maintenance work would occur within existing waterways and



existing structures would be replaced with structures of similar form and function. Therefore, no impact would occur.

**d) No Impact.** Routine maintenance activities would not expand the existing waterway network or introduce new water sources. A primary purpose of maintenance activities is to facilitate the continued delivery of water supplies to agricultural customers in Inyo County through the use of existing waterways and structures. Maintenance is required to maintain the highest level of efficiency in the transportation of available water. However, additional water resources are not required for maintenance activities to occur. Therefore, no impact would occur.

**e) No Impact.** Routine maintenance activities do not involve wastewater treatment. Waterway maintenance allows for the continued transportation of water throughout Inyo County and to the City of Los Angeles for irrigation and domestic use. As a result, no impact associated with wastewater treatment would occur.

**f) Less than Significant Impact.** As part of routine maintenance activities, excess sediment and other materials that are removed from waterways are sometimes transported to appropriate disposal facilities. Materials are transported for disposal to facilities with sufficient capacity. Impacts associated with solid waste disposal at area landfills would be less than significant.

**g) No Impact.** Implementation of routine maintenance activities would not preclude LADWP from complying with federal, state, and local statutes and regulations related to solid waste. Any waste in the form of vegetation or sediment will be placed on adjacent existing stockpiles and/or taken off site for proper disposal. No impact would occur.

2.3.19 Mandatory Findings of Significance

Issues and Supporting Information Sources	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion:

a) **Less than Significant with Mitigation Incorporated.** Routine maintenance activities are ongoing in existing waterways. This work does not currently, and would not be expected in the future to result in: degradation of the quality of available habitat, substantial reductions in the habitat of a fish or wildlife species, a fish or wildlife population dropping below self-sustaining levels, elimination of a plant or animal community, reduction in the number or restriction of the range of a rare or endangered plant or animal, or elimination of important examples of the major period of California history or prehistory. Mitigation measures and BMPs associated with biological and cultural resources would be implemented to reduce potential effects from routine maintenance activities. Therefore, impacts would be less than significant with mitigation incorporated.

b) **Less than Significant Impact.** Section 15065(a)(3) of the CEQA Guidelines defines “cumulatively considerable” as the incremental effects of an individual project that are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. The routine maintenance activities described in this Initial Study are a set of on-going activities. Routine maintenance was previously permitting by CDFW and the Regional Board, and found to be exempt from CEQA. An exception to the

exemption was not identified; the cumulative impact of successive projects of the same type in the same place, over time, was not found to be significant. The routine maintenance activities that are on-going and planned for the future are of the same type and will be conducted in the same locations as past routine maintenance activities.

Owens Valley, Mammoth Lake and Mono Basin are non-attainment areas for PM10. Since maintenance is generally conducted in wet or moist conditions, the impact of the routine maintenance activities on air quality would not be cumulatively considerable. Significant cumulative impacts for other resources (i.e., biology, water quality and hydrology), are not identified, and the routine maintenance activities would not contribute to an existing or anticipated significant impact. The routine maintenance activities are on-going and a part of the baseline in the project area, and they would not contribute to any cumulative impact when viewed in combination with any other projects.

Specific reasonably foreseeable future projects, such as development projects, that would impact the same waterways as the on-going routine maintenance activities are not known. Should any be identified in the future, compliance with regulatory requirements and mitigation measures would ensure that the ongoing operations under the routine maintenance activities would not incrementally contribute to cumulatively considerable impacts.

- c) **Less than Significant Impact.** The short-term and relatively minor environmental effects resulting from the routine maintenance activities would primarily occur away from sensitive receptors and inhabited locations. Therefore, project-related environmental effects would not cause substantial adverse effects on human beings, either directly or indirectly, and impacts would be less than significant.

# Section 3 – References and Report Preparation

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## 3 References and Report Preparation

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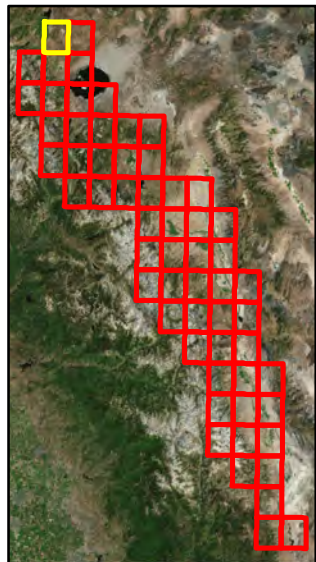
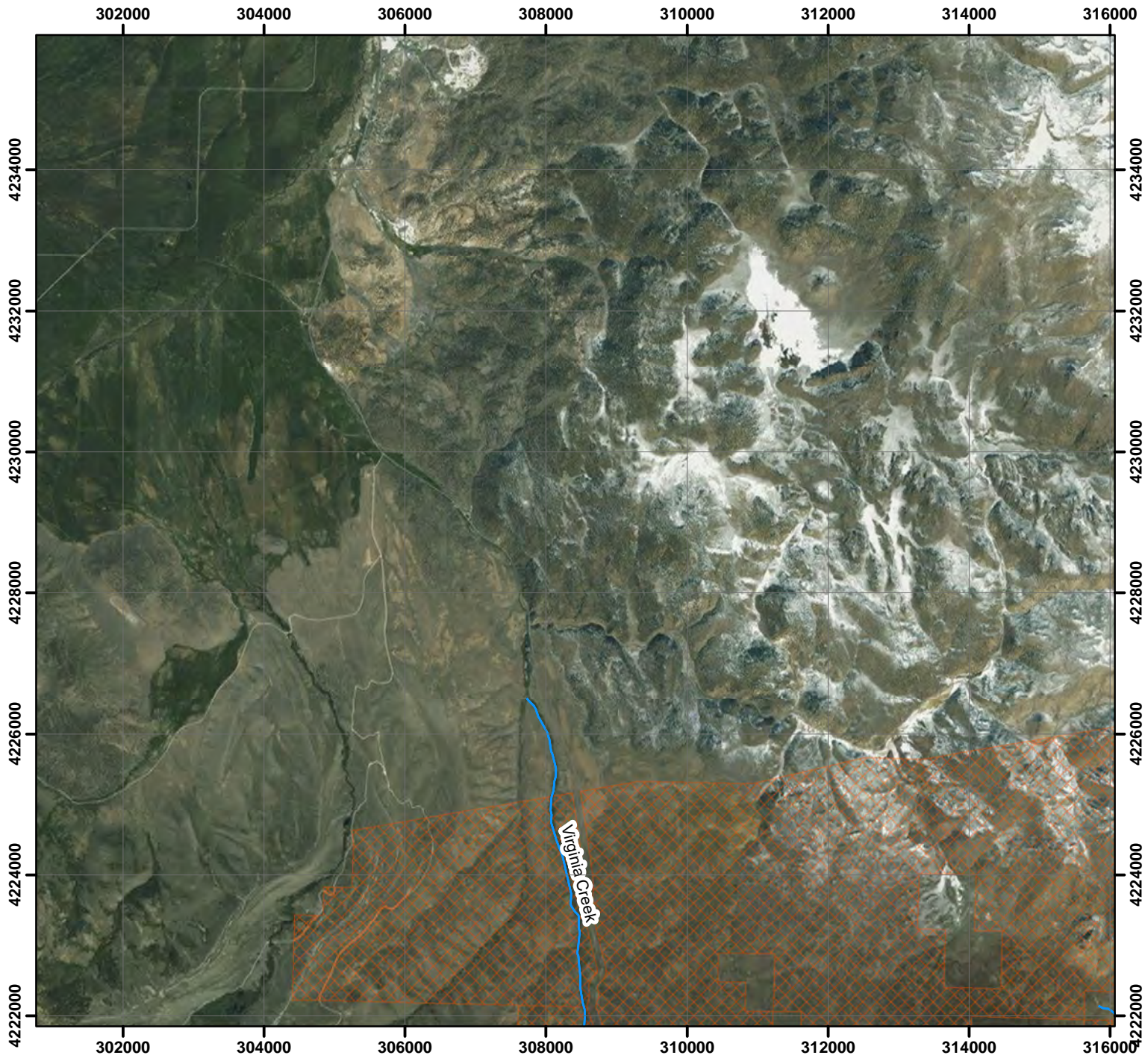
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Sarah Garber, PMP, CPP, Project Manager








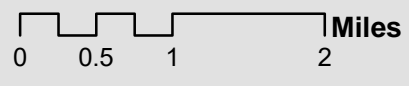
# **Appendix A**

## **Waterways Mapbook**

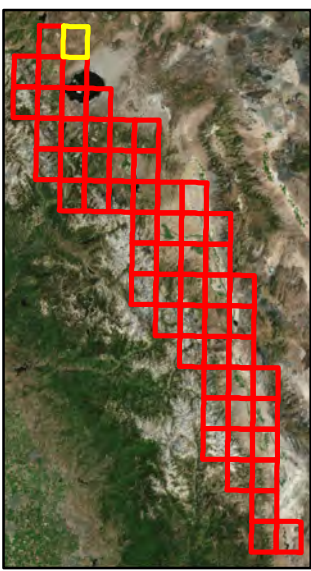
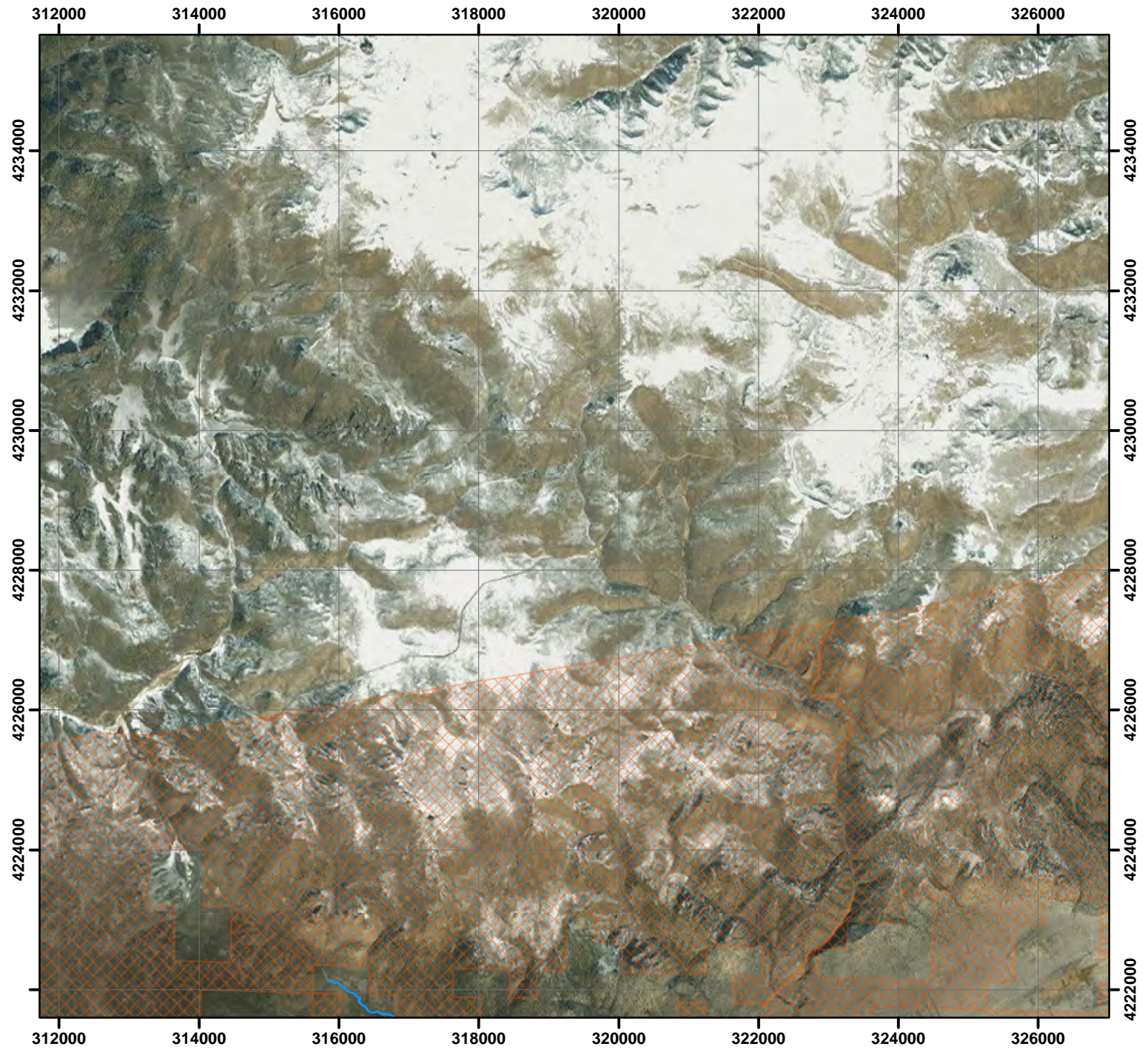


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-  BLM
-  Inyo National Forest







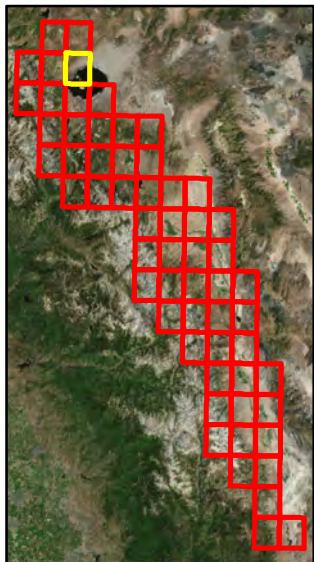
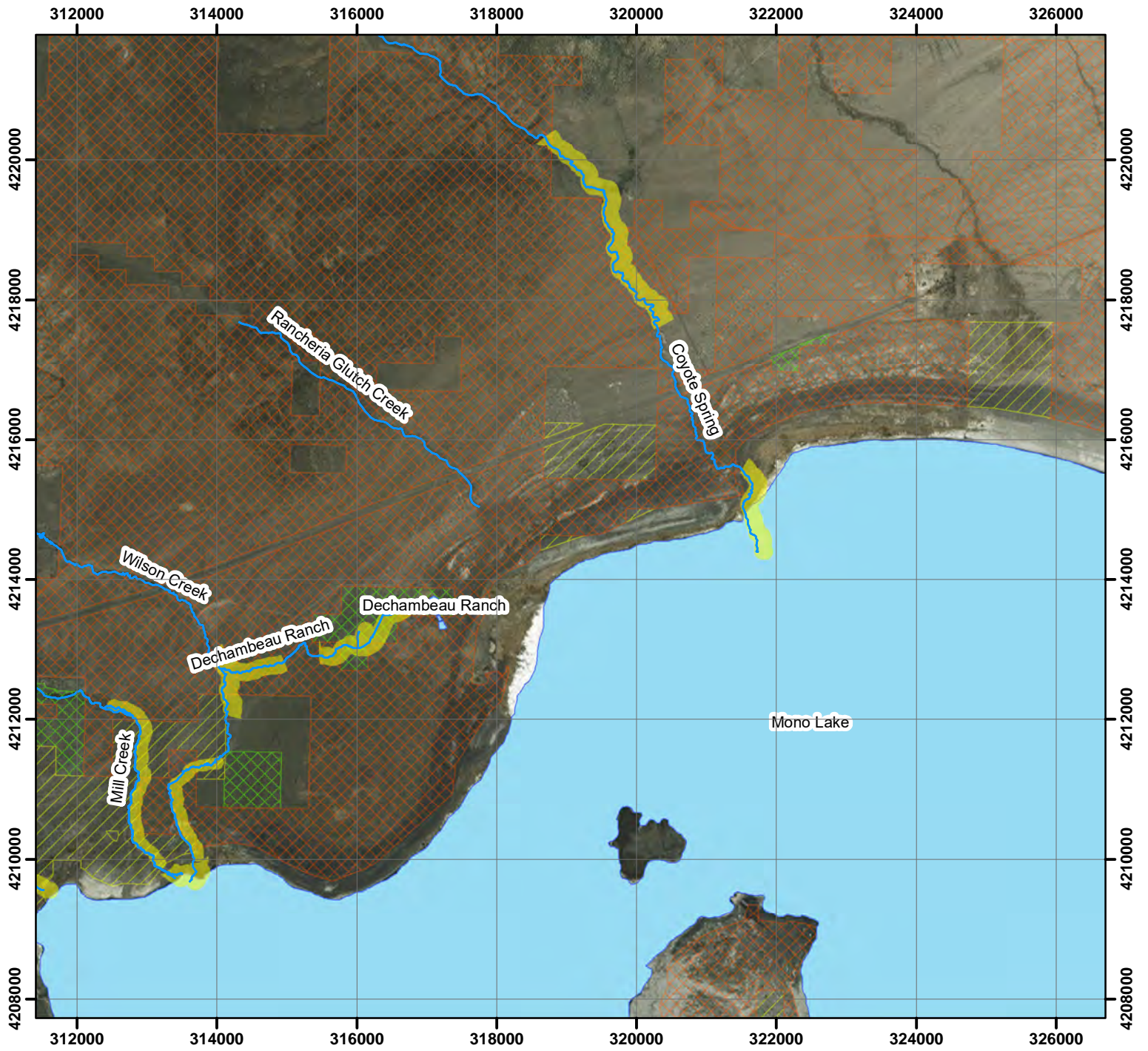
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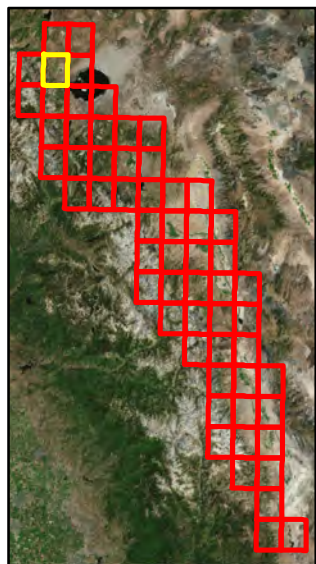
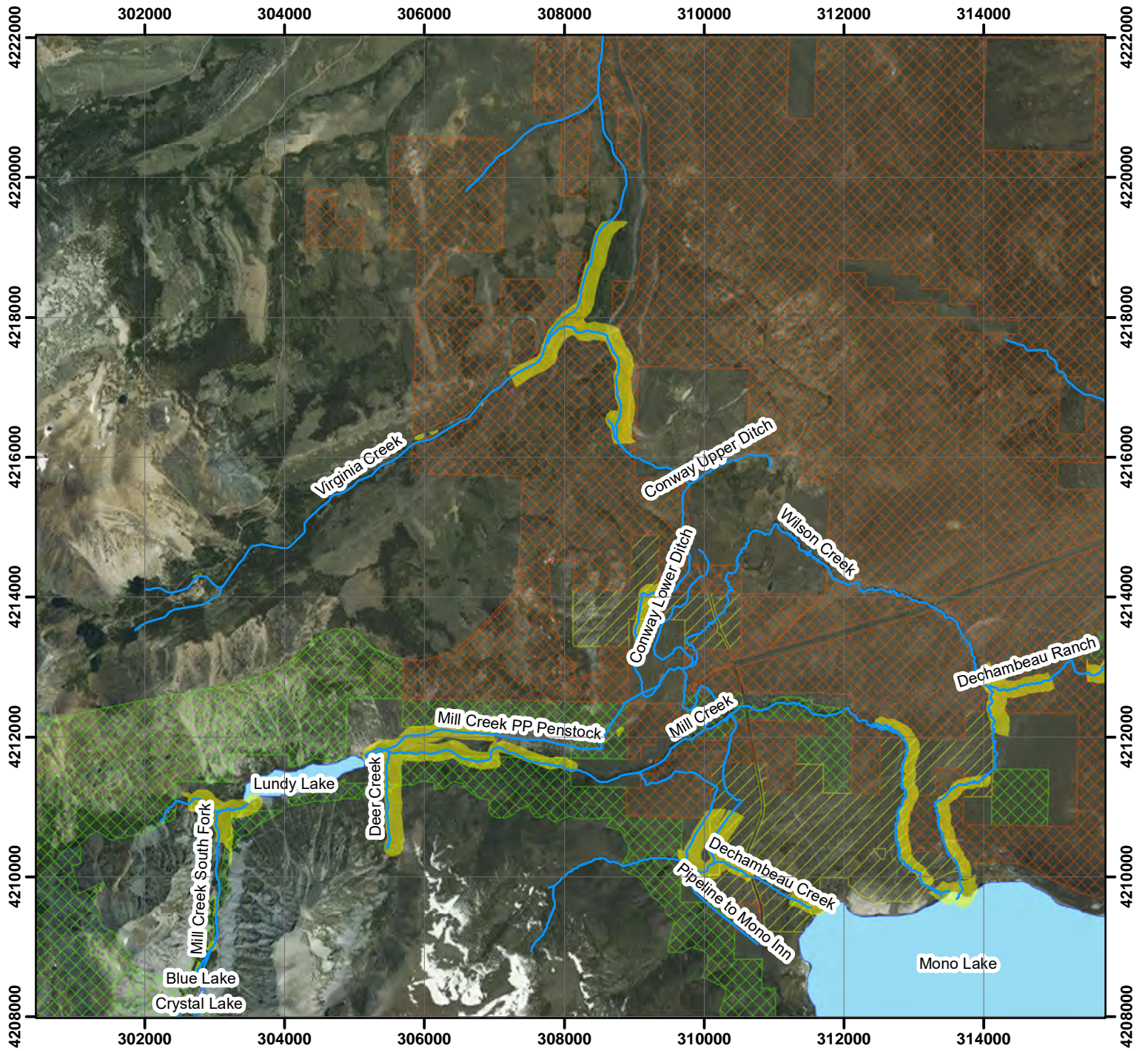


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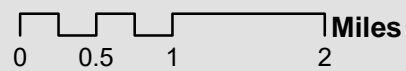




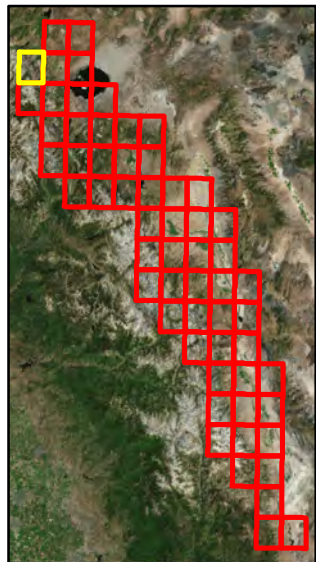
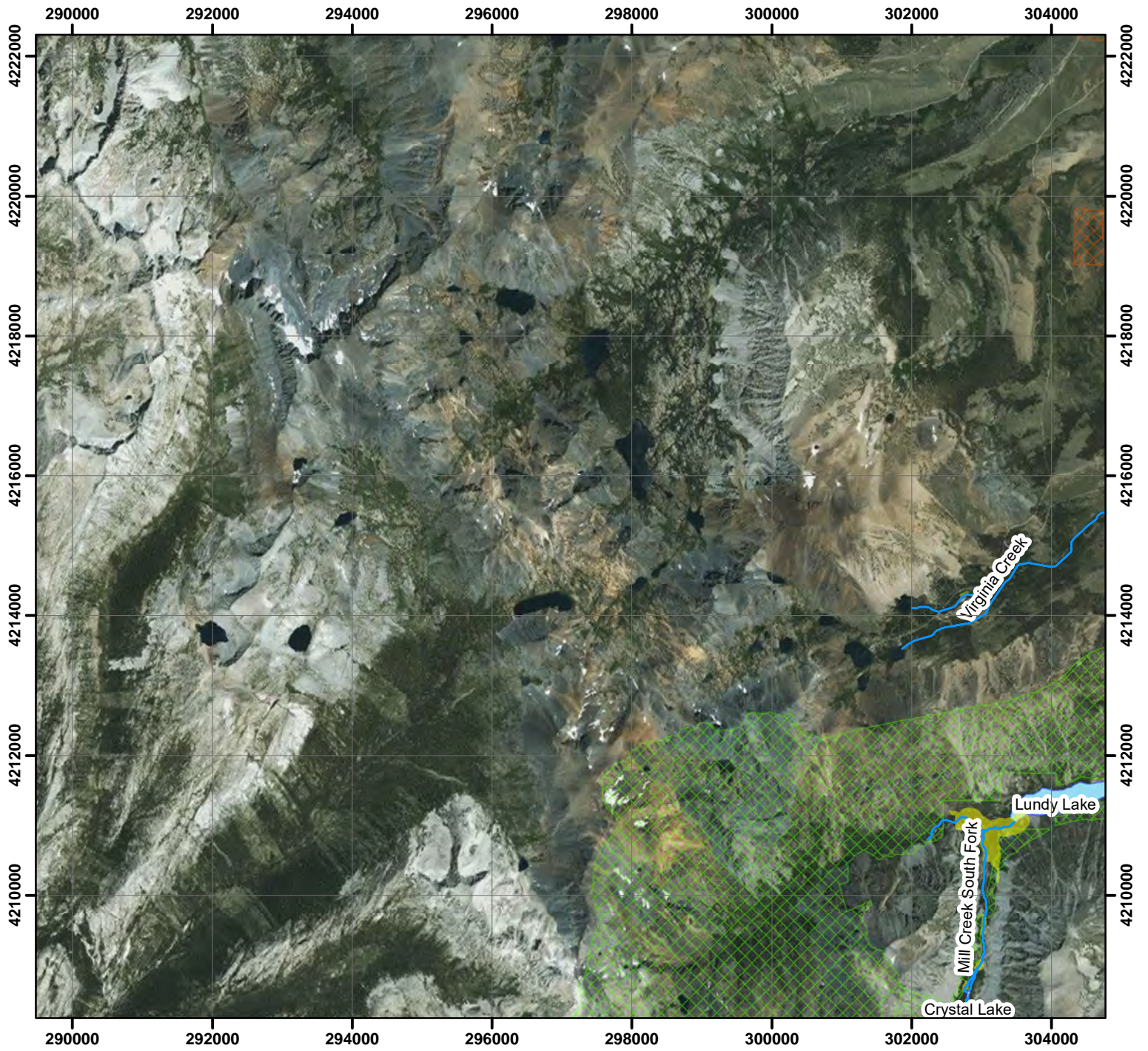


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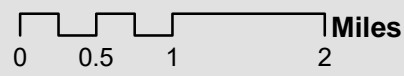




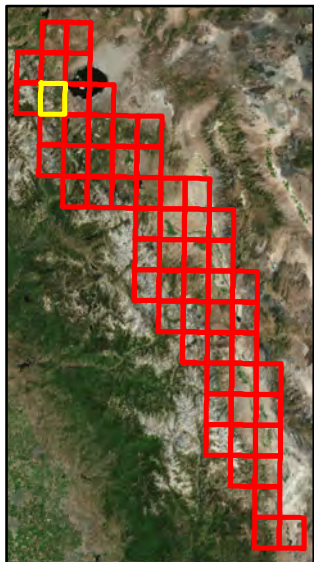
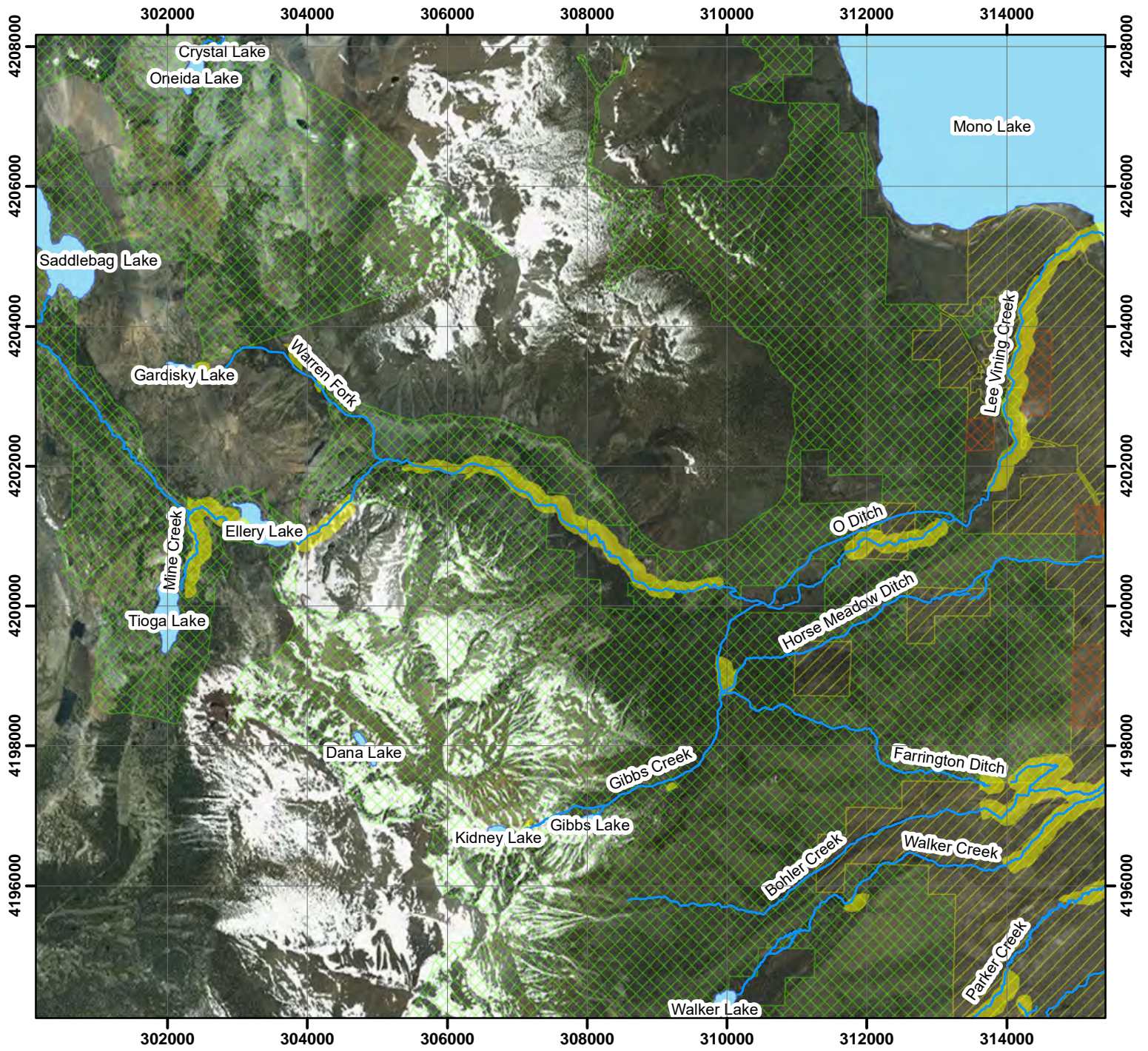


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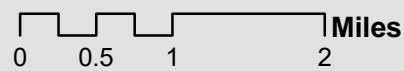




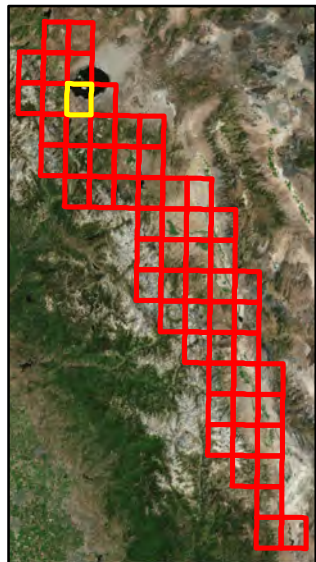
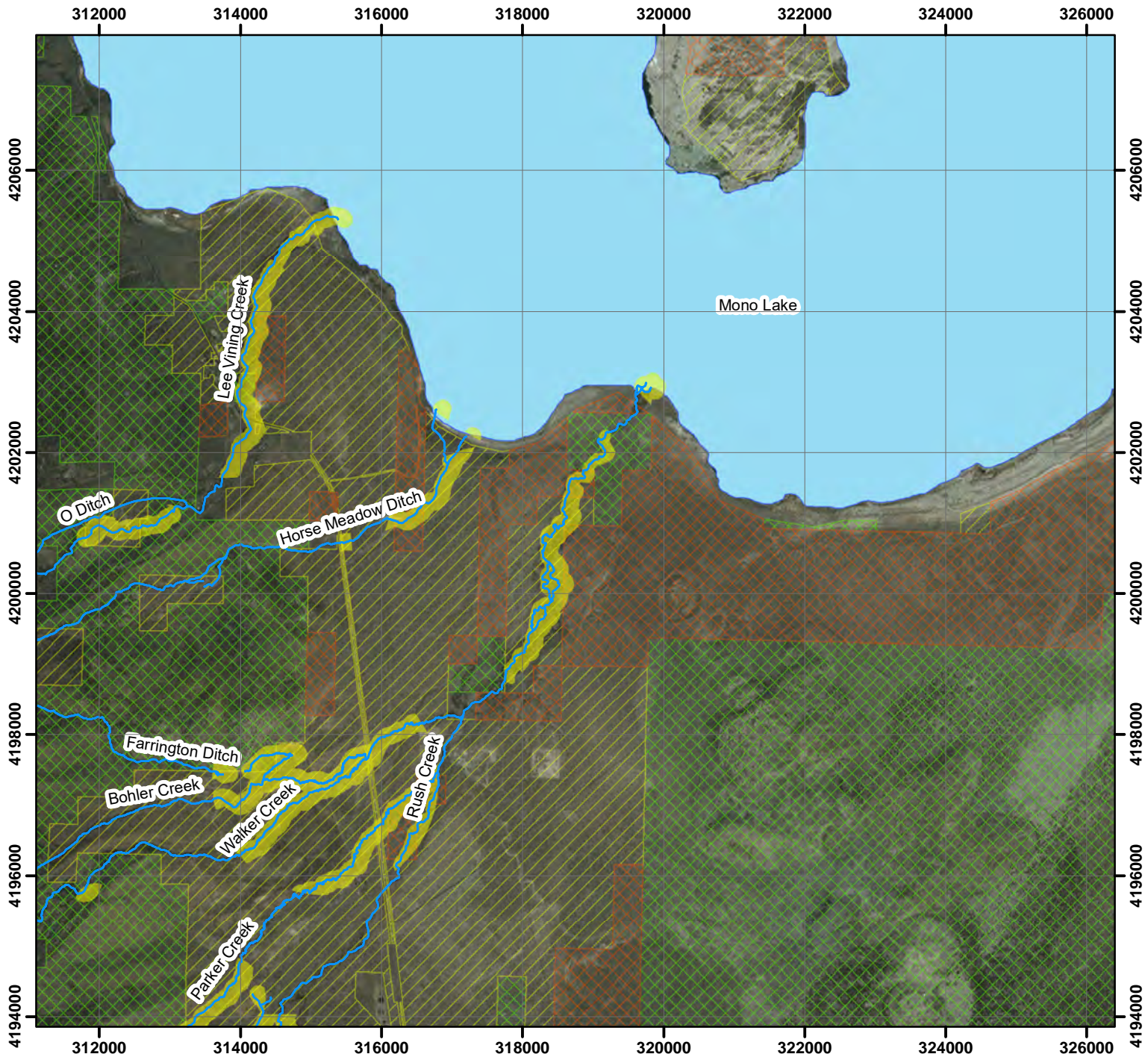


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- BLM
- Inyo National Forest





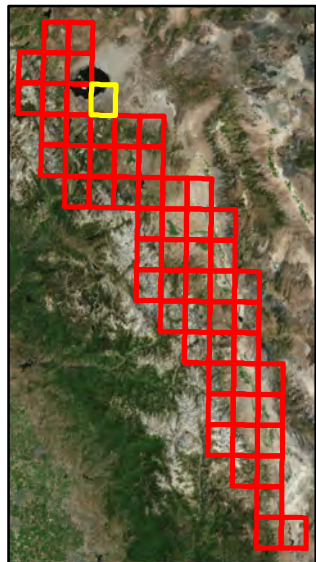
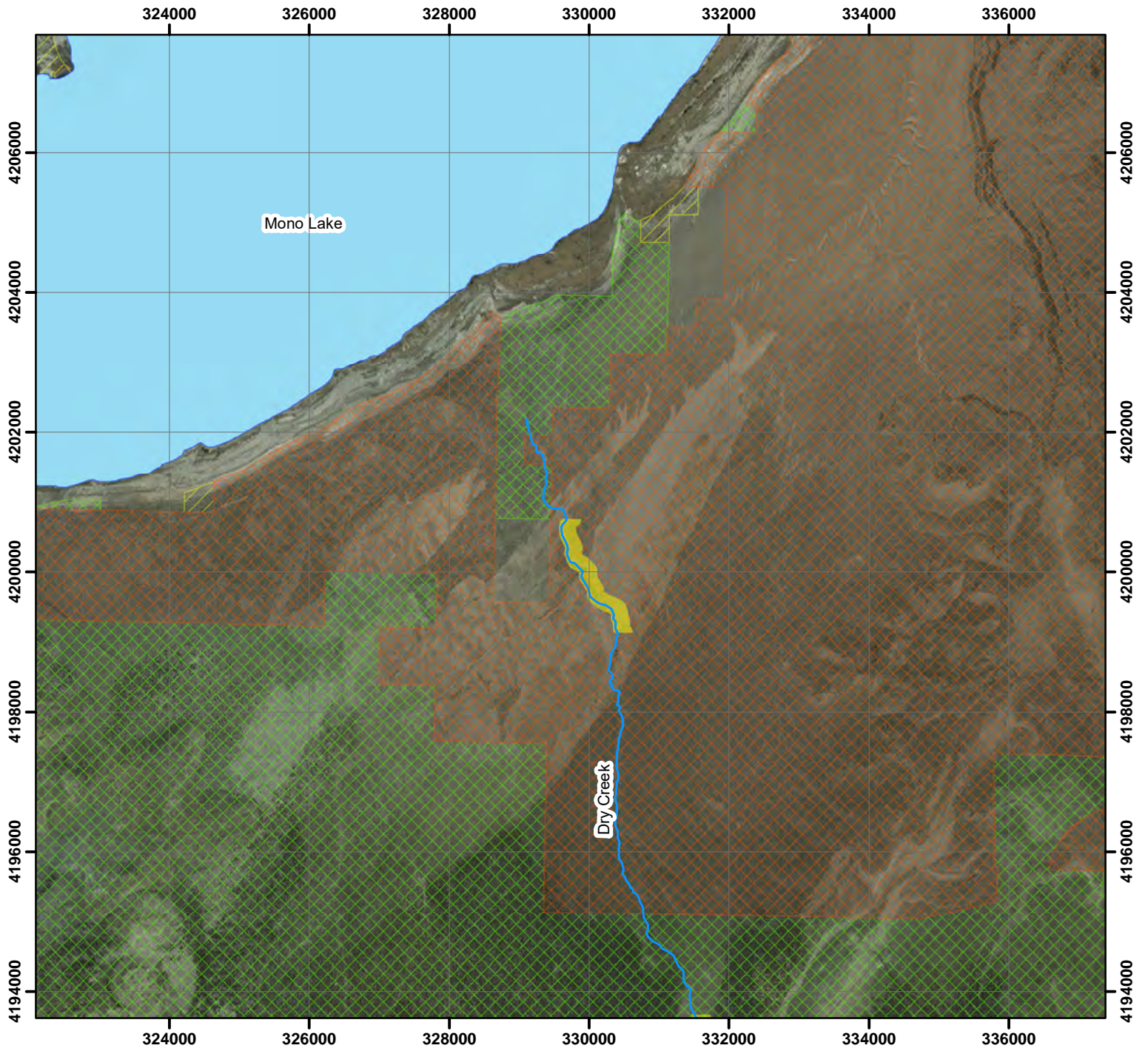


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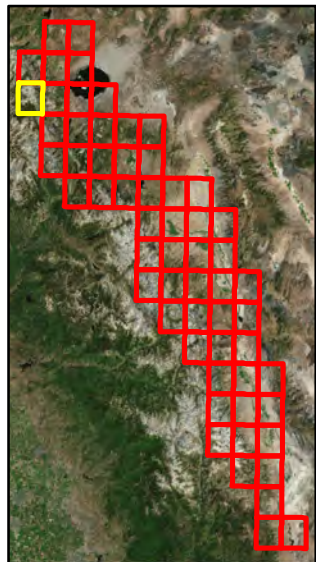
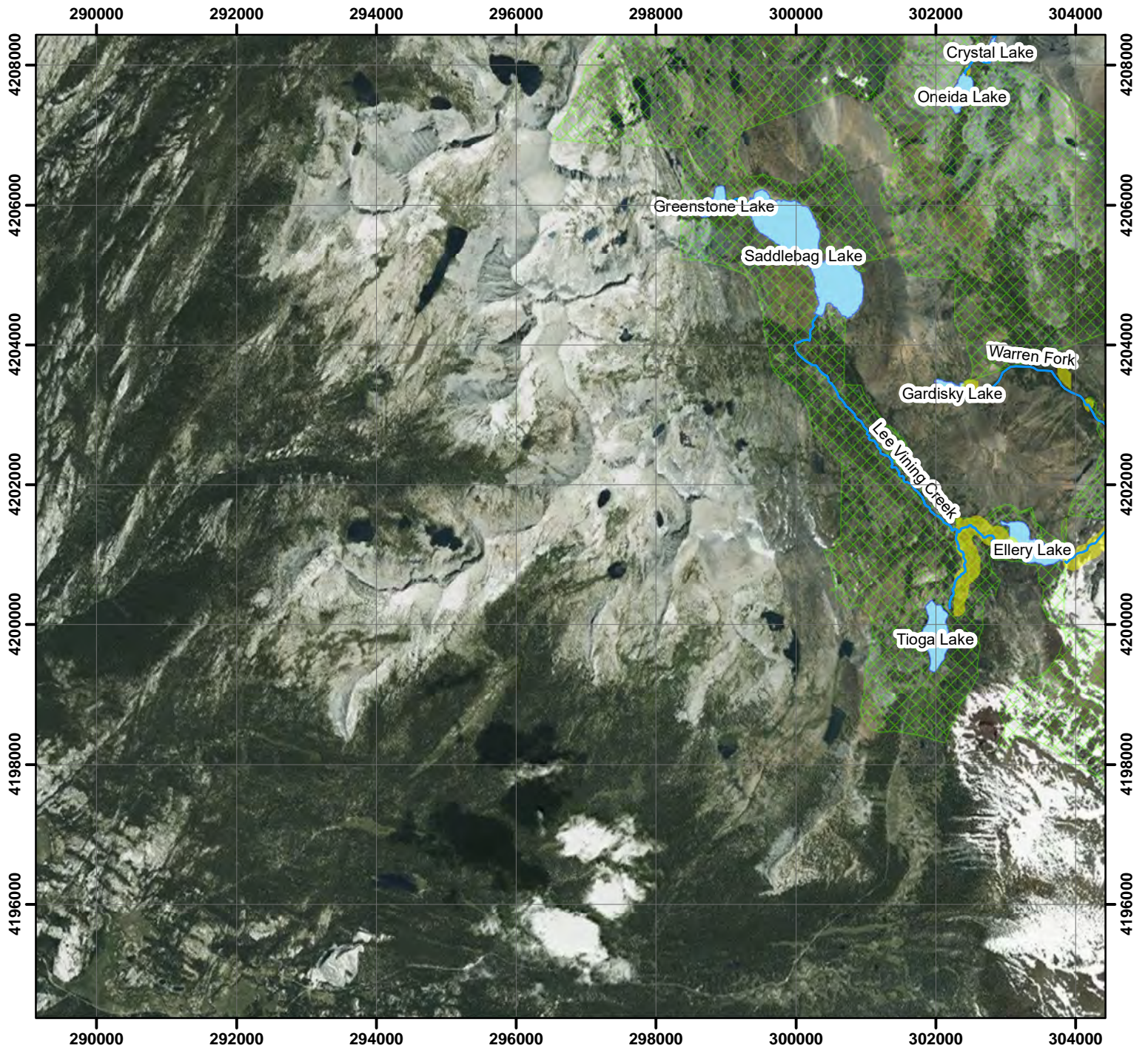
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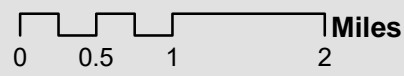




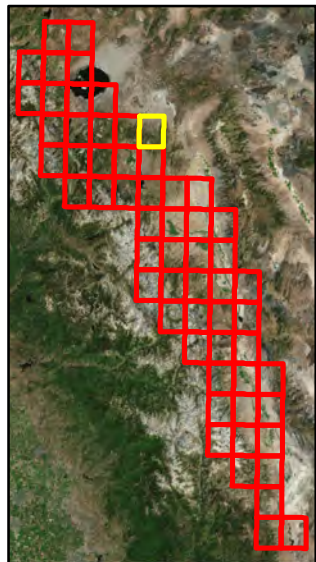
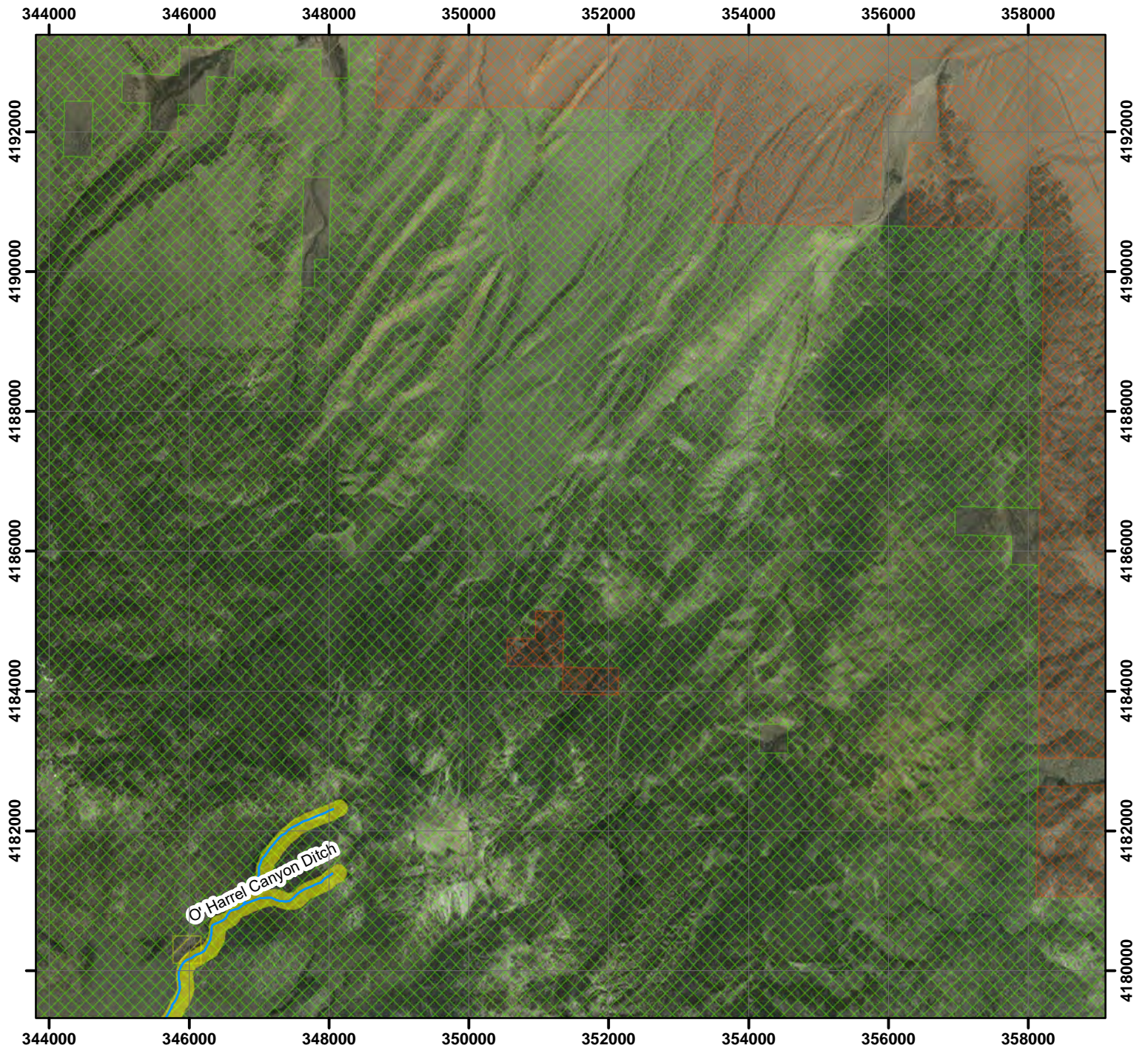


### Quad: TIOGA PASS

-  RMA Waterways
-  CNDDDB Occurance Record
-  LADWP
-  BLM
-  Inyo National Forest





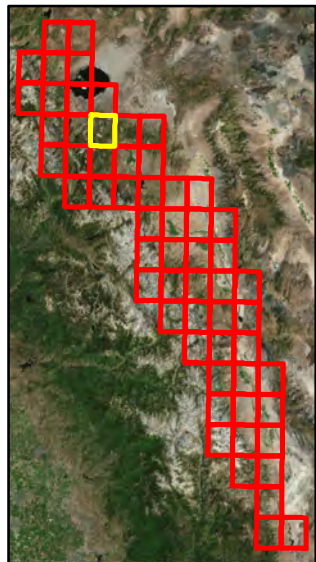
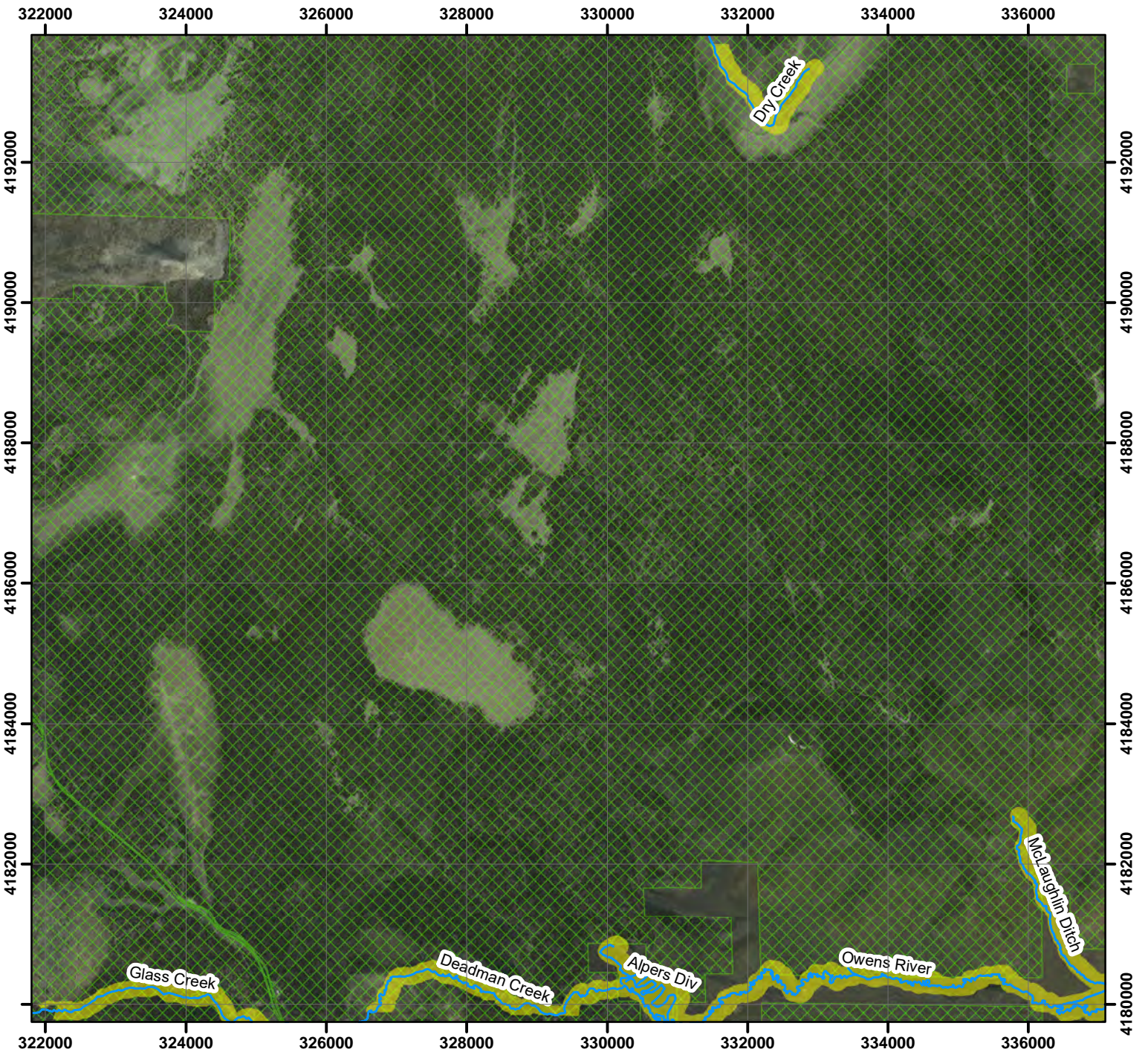


### Quad: GLASS MOUNTAIN

-  RMA Waterways
-  CNDDDB Occurance Record
-  LADWP
-  BLM
-  Inyo National Forest

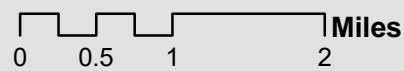




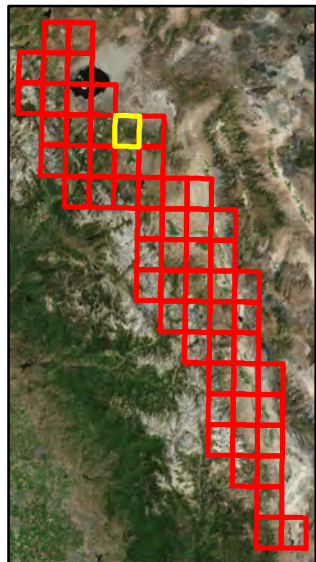
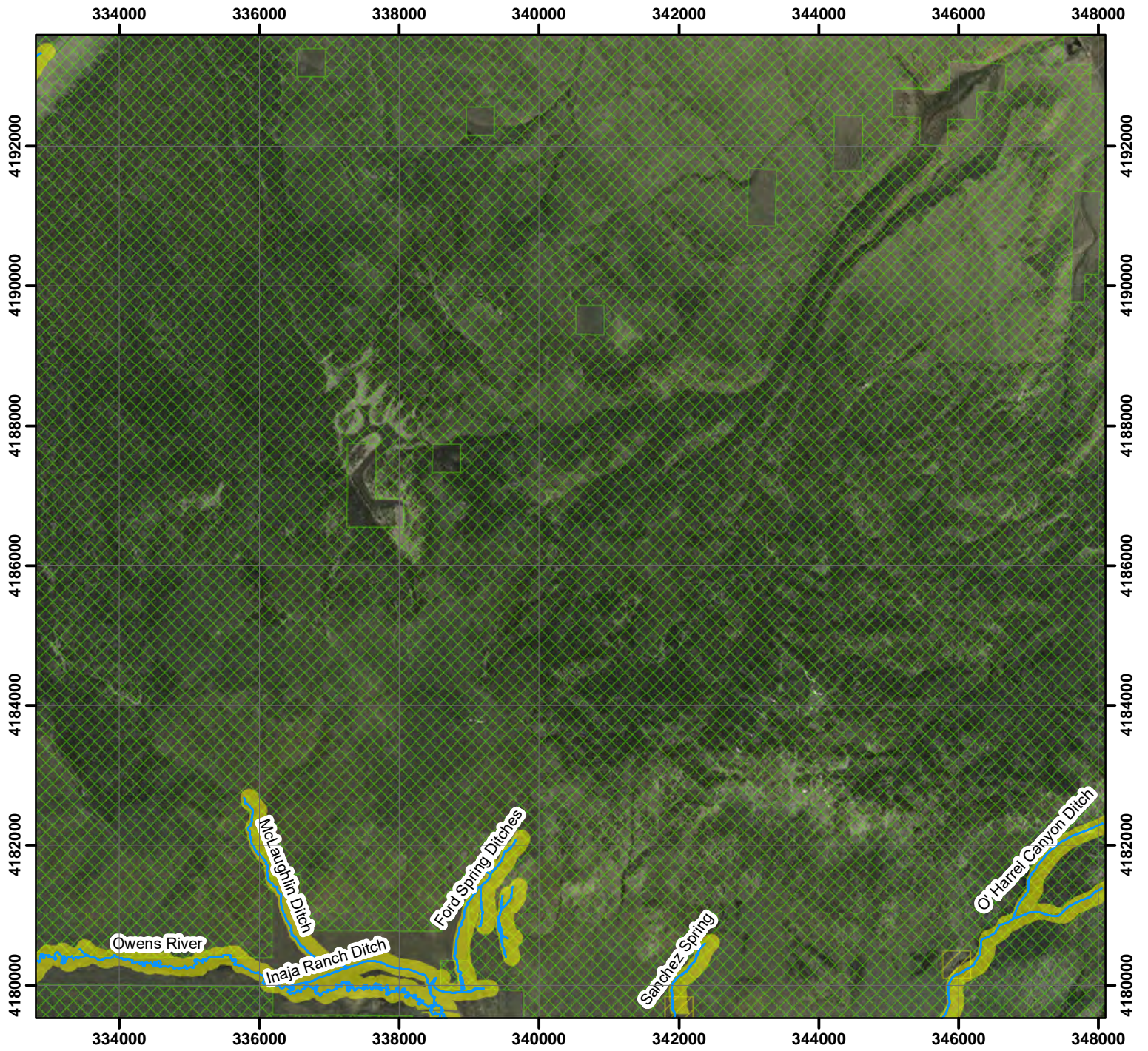


### Quad: CRESTVIEW




- RMA Waterways
- CNDDDB Occurrence Record
- LADWP
- BLM
- Inyo National Forest





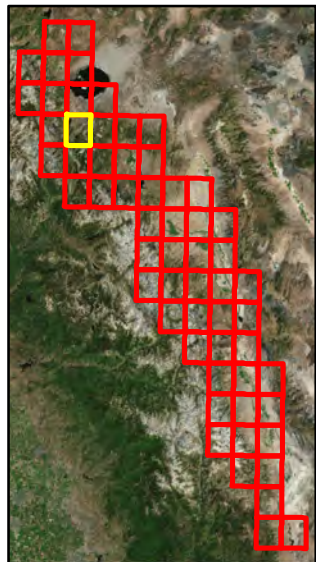
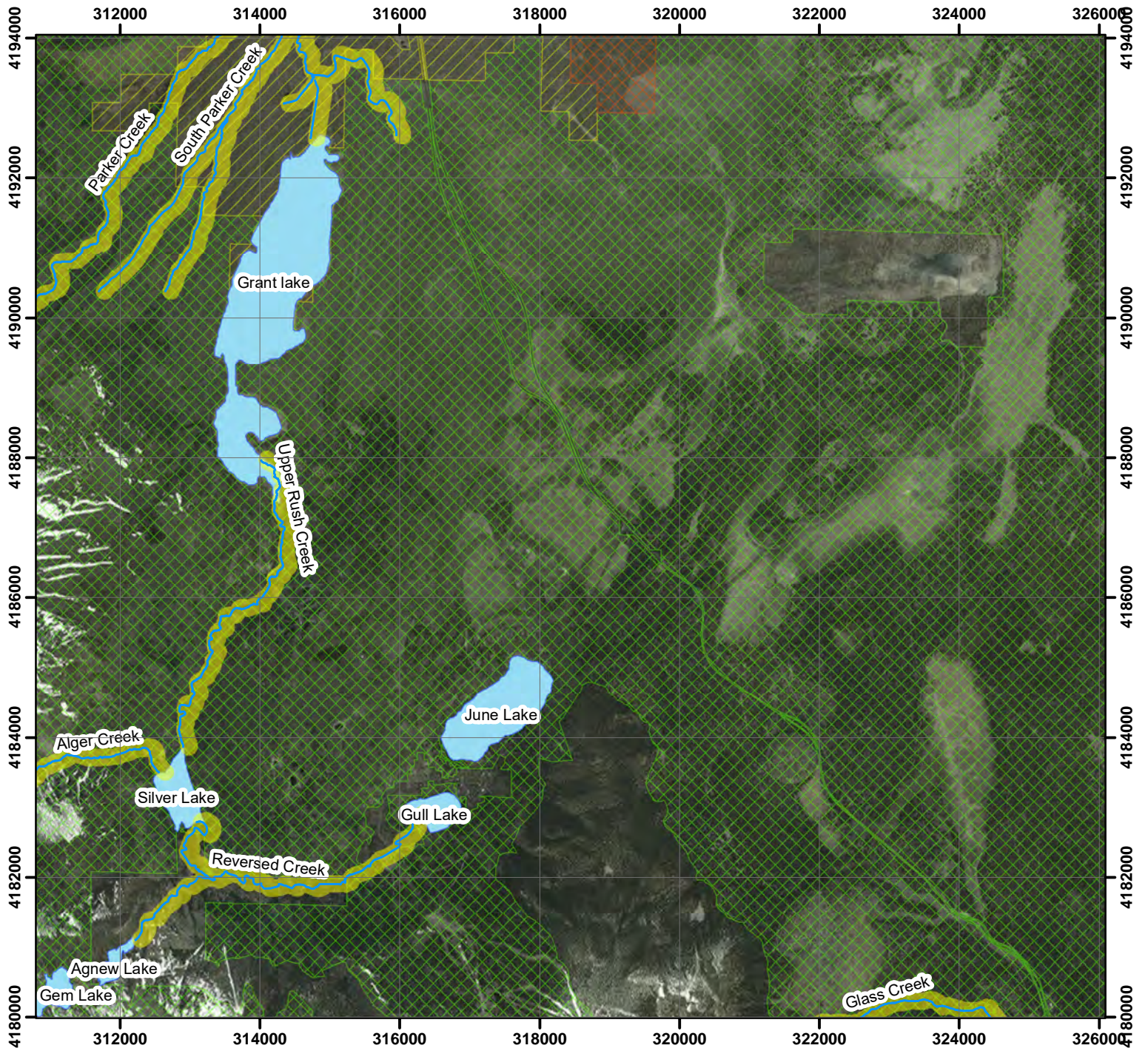


### Quad: DEXTER CANYON

-  RMA Waterways
-  CNDDDB Occurance Record
-  LADWP
-  BLM
-  Inyo National Forest

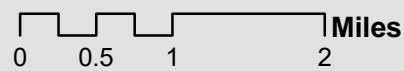




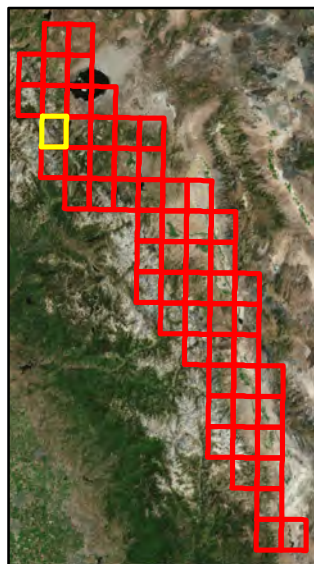
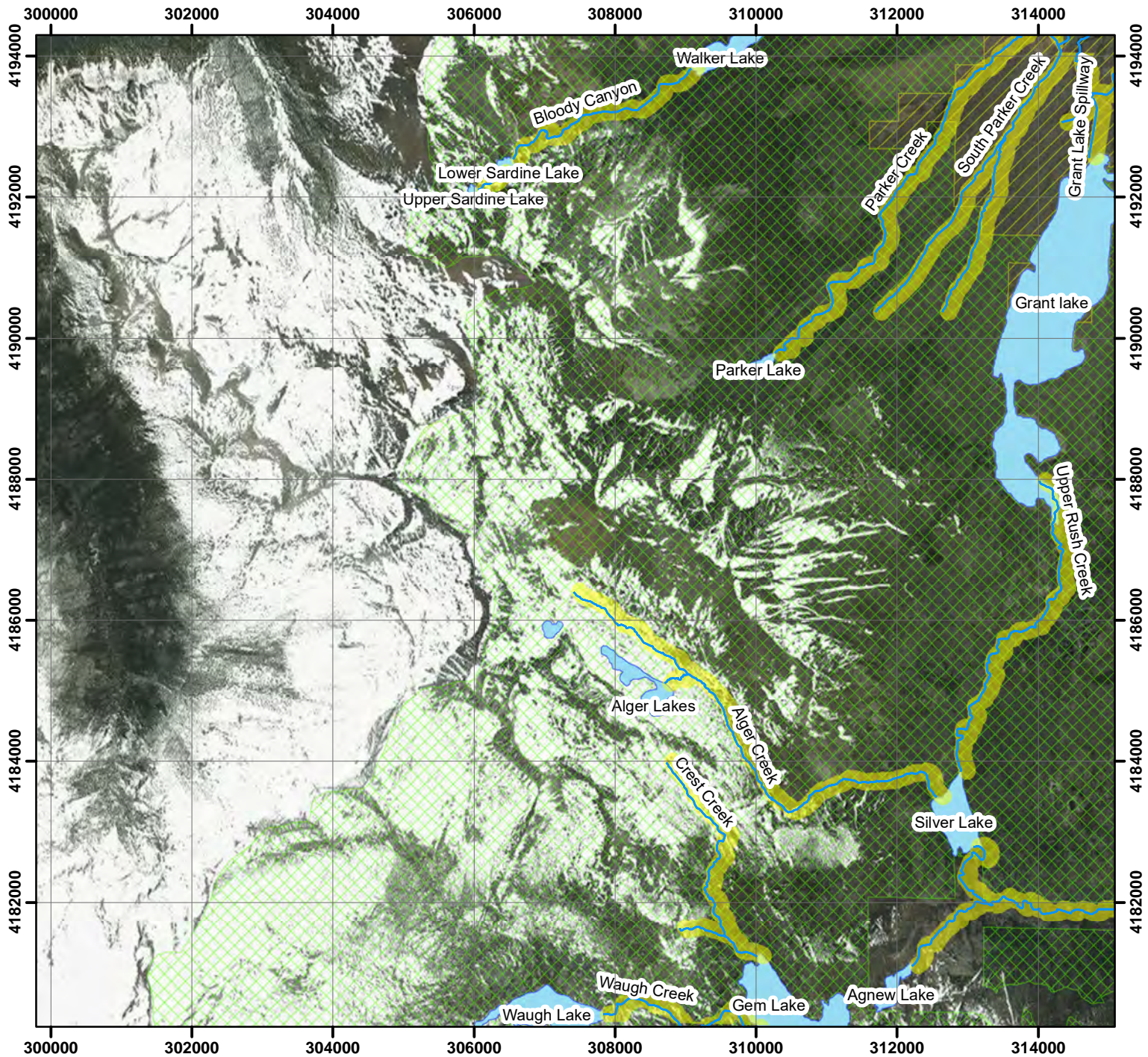


### Quad: JUNE LAKE

-  RMA Waterways
-  CNDDDB Occurrance Record
-  LADWP
-  BLM
-  Inyo National Forest

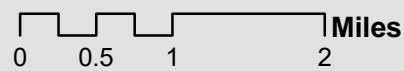




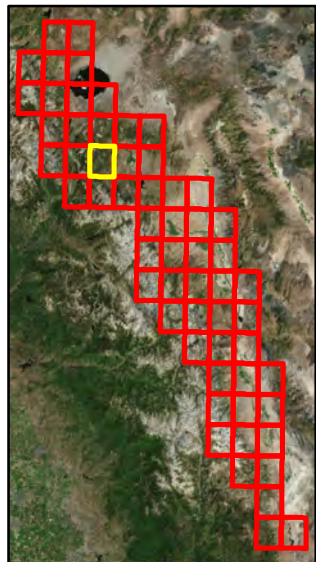
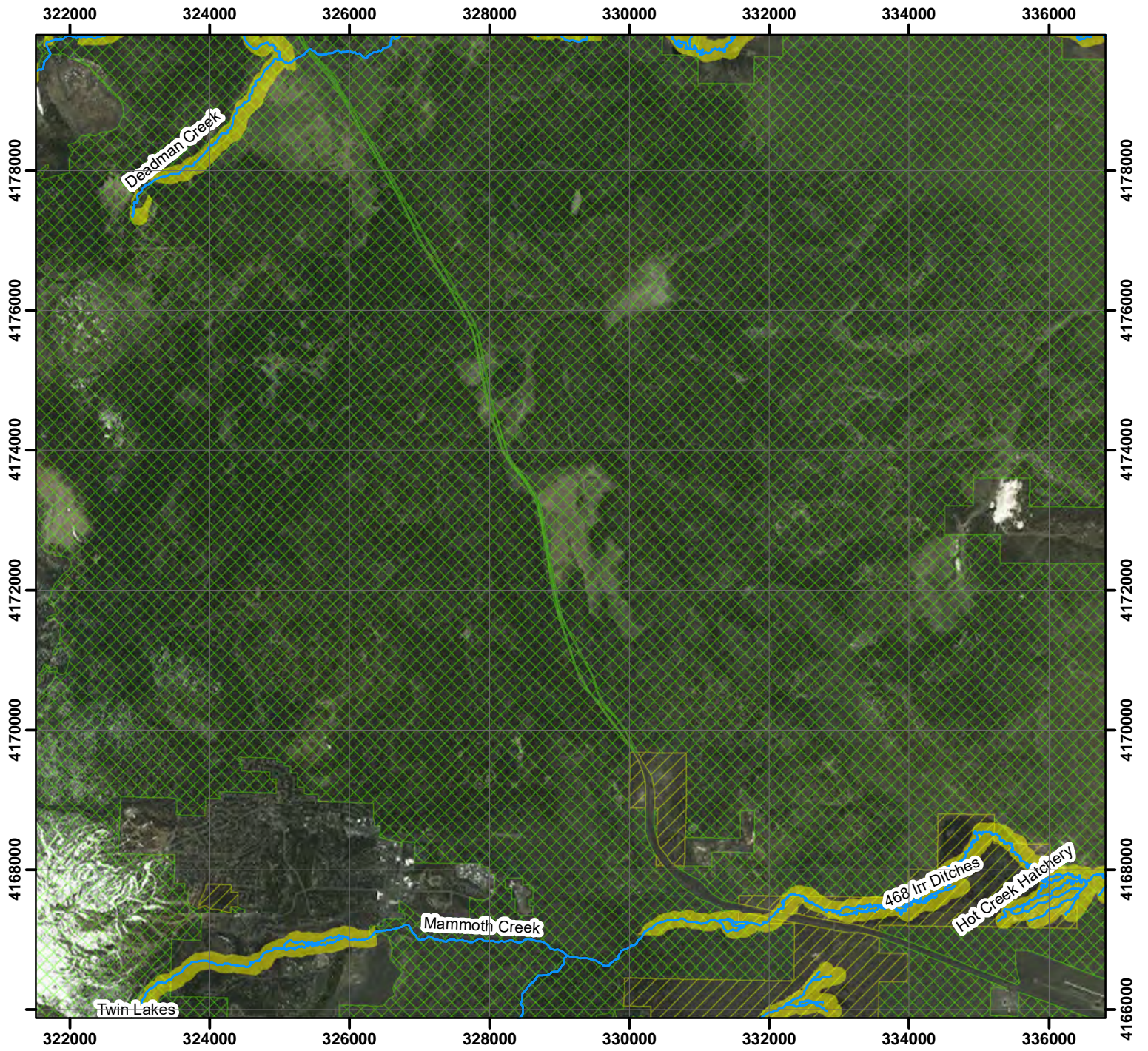


### Quad: KOIP PEAK




-  RMA Waterways
-  CNDDB Occurrence Record
-  LADWP
-  BLM
-  Inyo National Forest





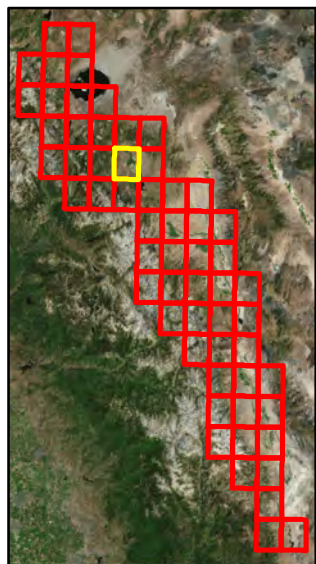
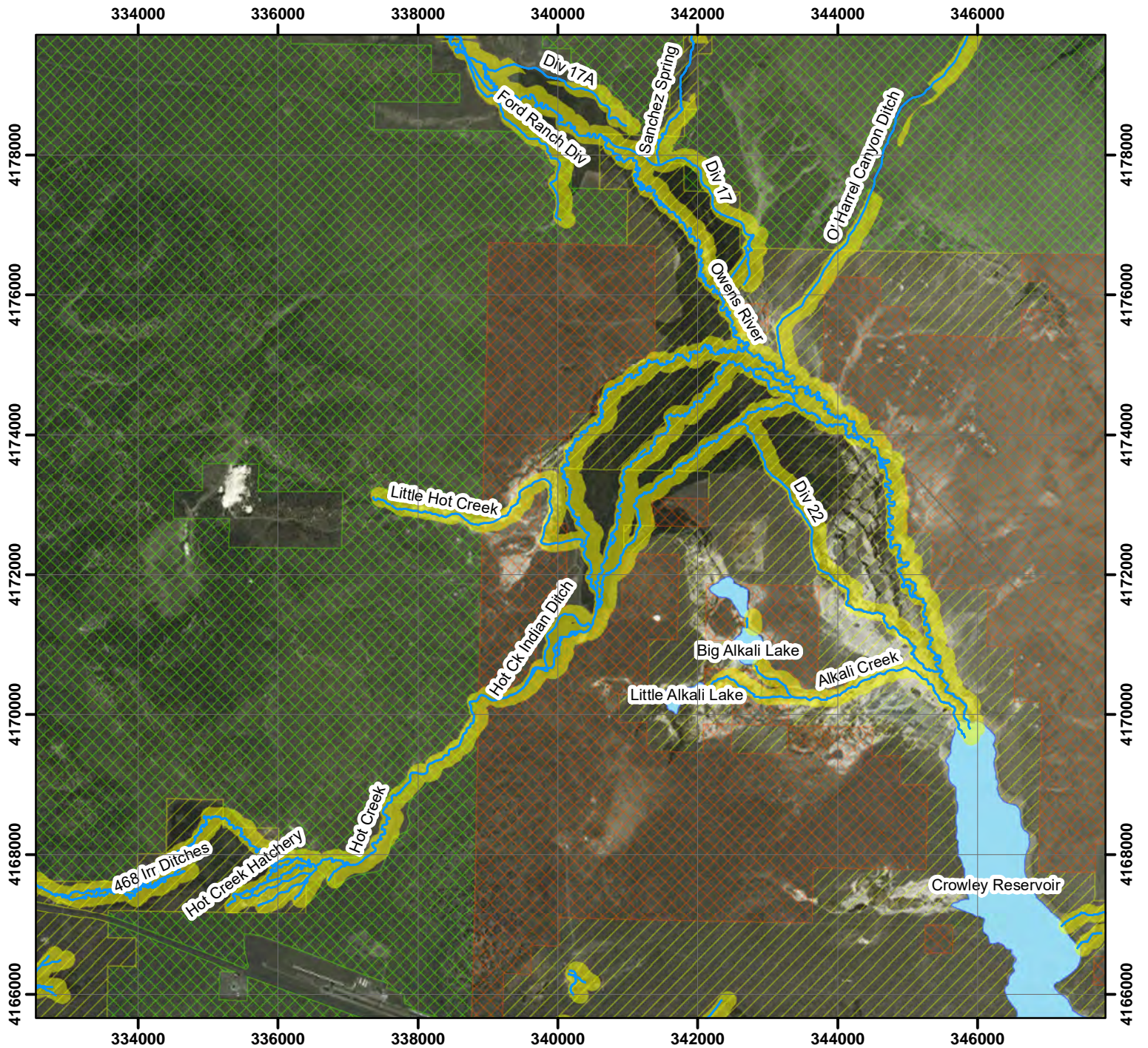


### Quad: OLD MAMMOTH

-  RMA Waterways
-  CNDDB Occurrence Record
-  LADWP
-  BLM
-  Inyo National Forest





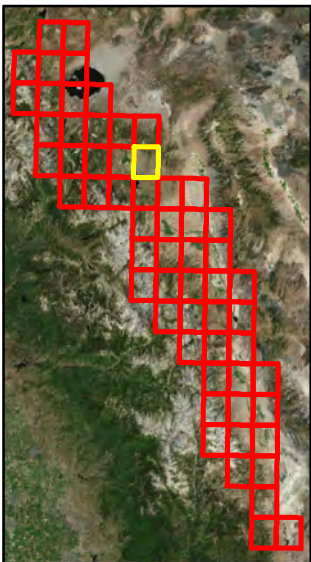
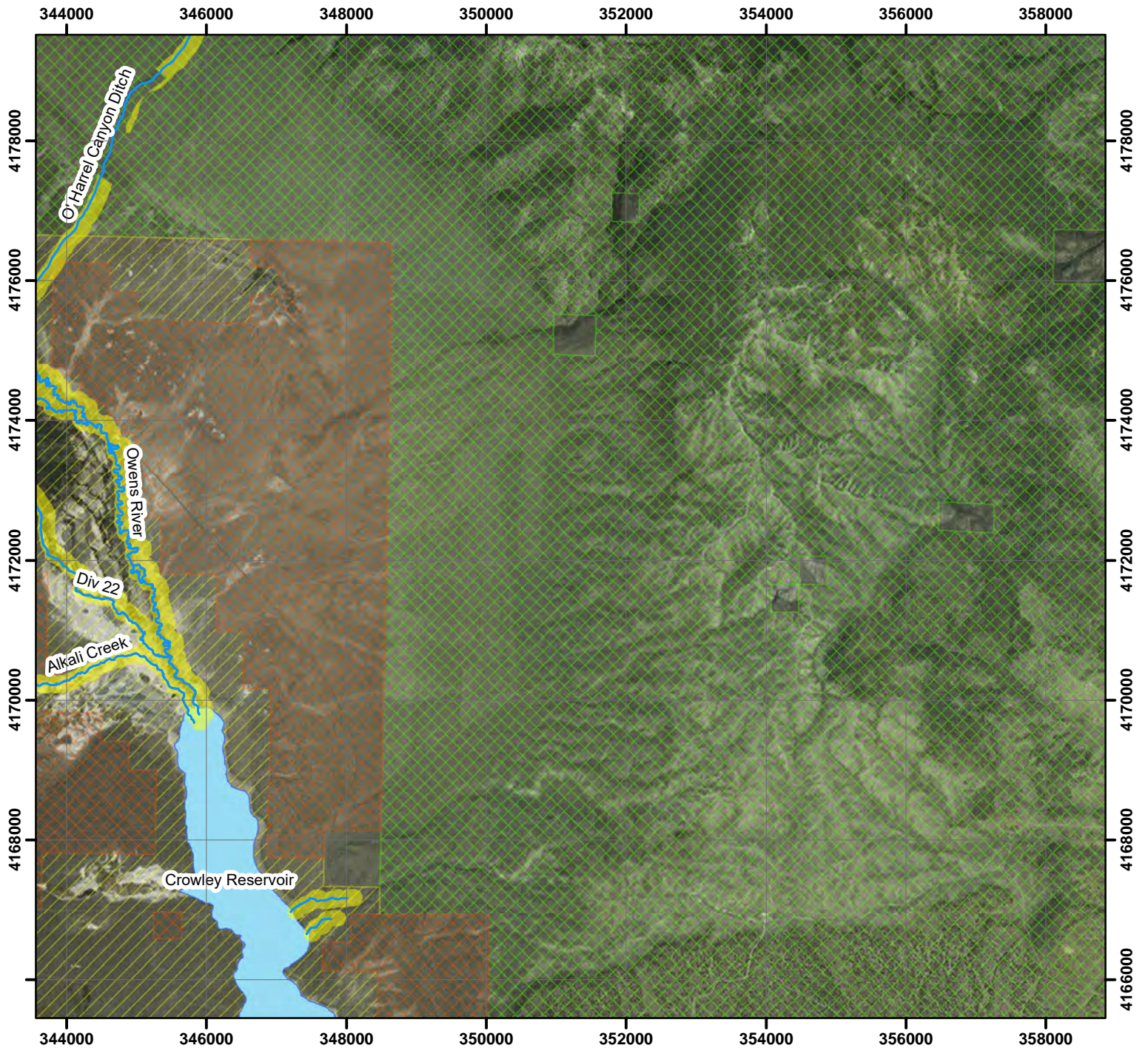


### Quad: WHITMORE HOT SPRINGS

- RMA Waterways
- CNDDDB Occurrence Record
- LADWP
- BLM
- Inyo National Forest





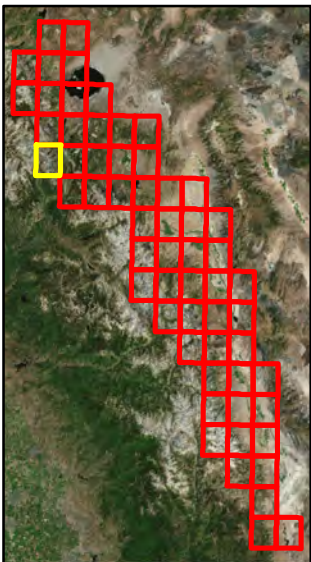
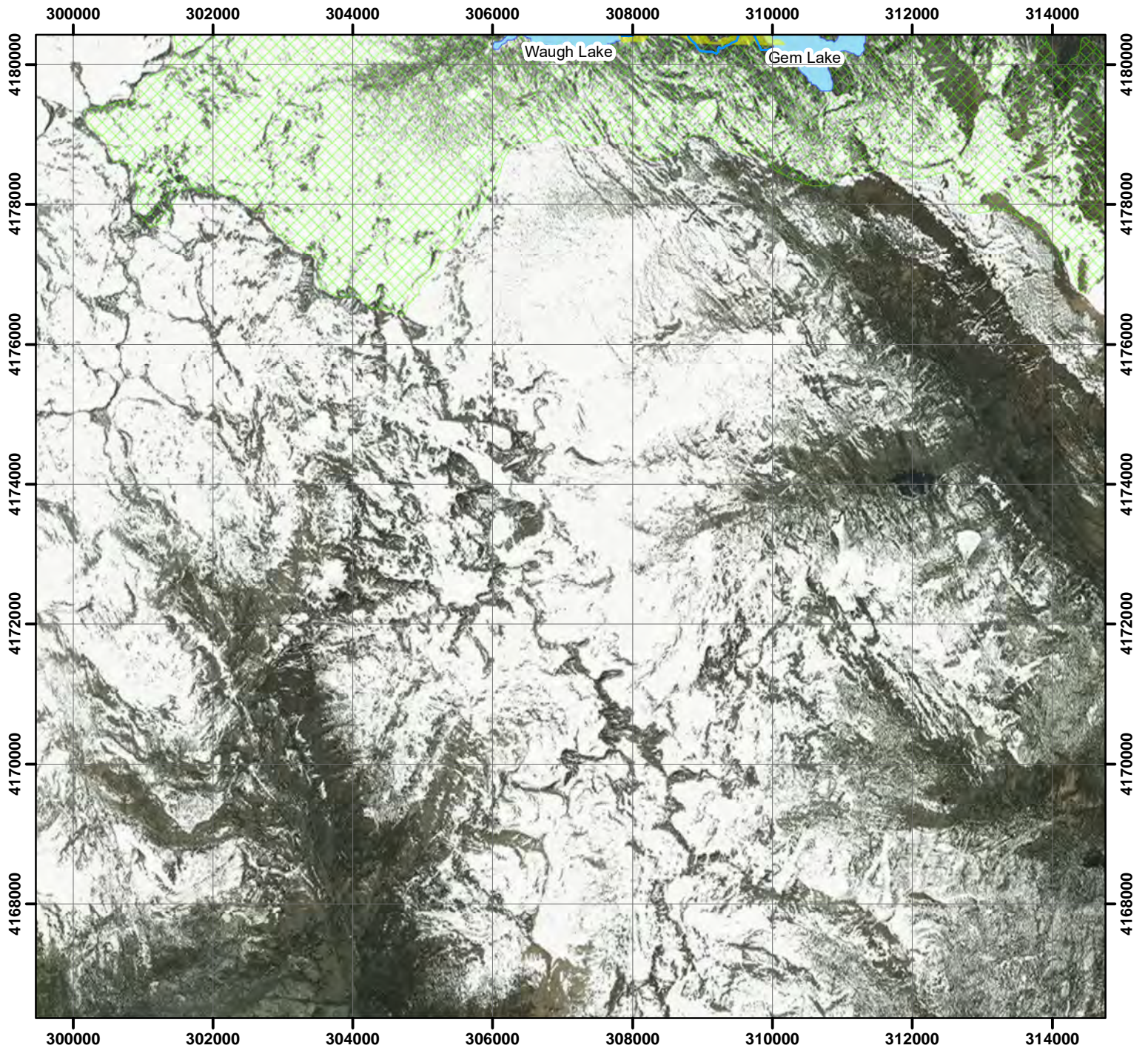


**Quad: WATTERSON CANYON**

- RMA Waterways
- CNDDDB Occurance Record
- LADWP
- BLM
- Inyo National Forest

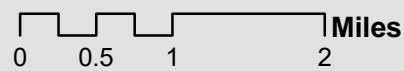
0 0.5 1 2 Miles



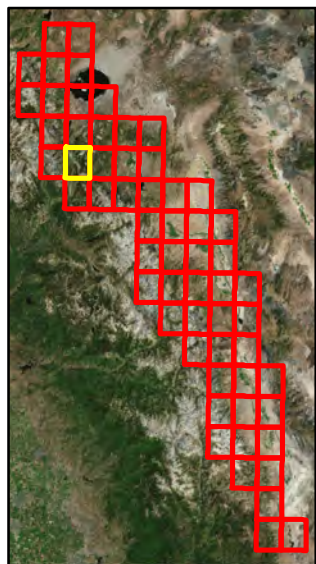
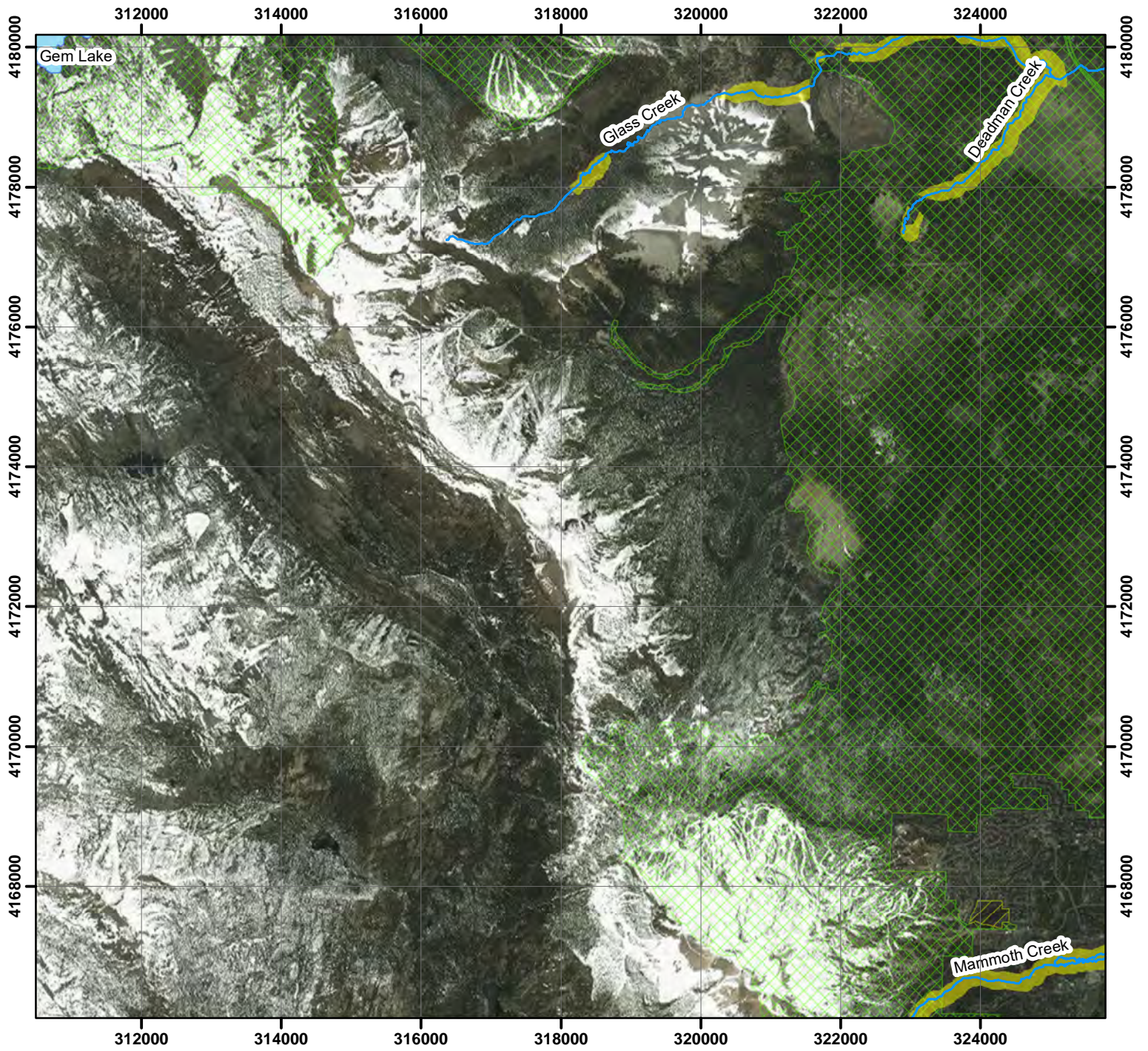


### Quad: MOUNT RITTER

-  RMA Waterways
-  CNDDB Occurance Record
-  LADWP
-  BLM
-  Inyo National Forest

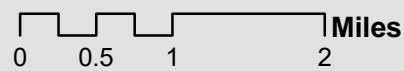




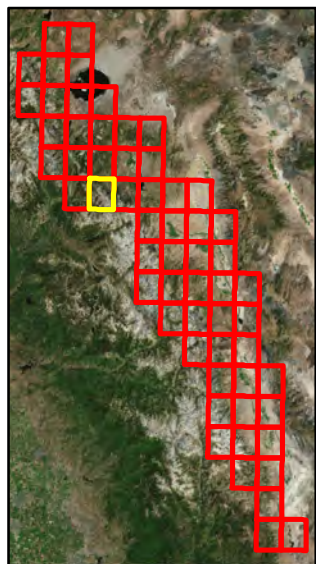
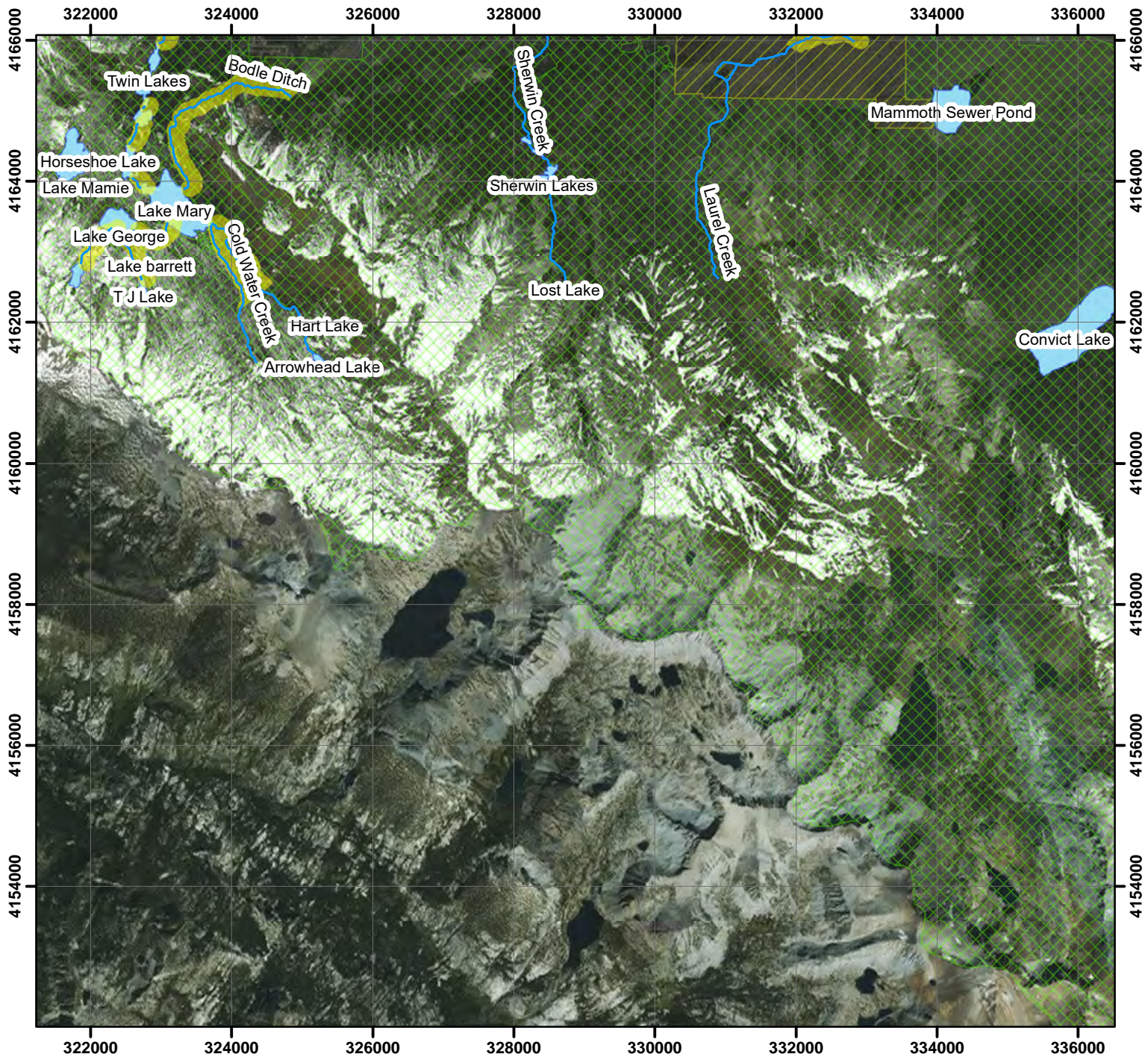


### Quad: MAMMOTH MOUNTAIN

- RMA Waterways
- CNDDDB Occurrence Record
- LADWP
- BLM
- Inyo National Forest





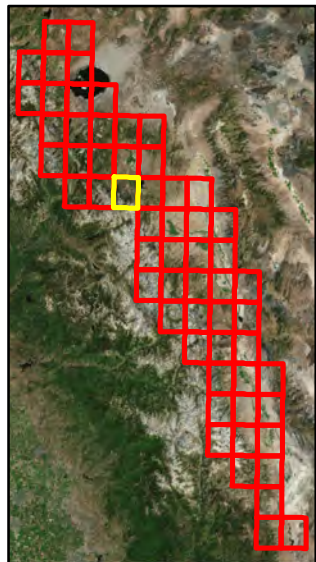
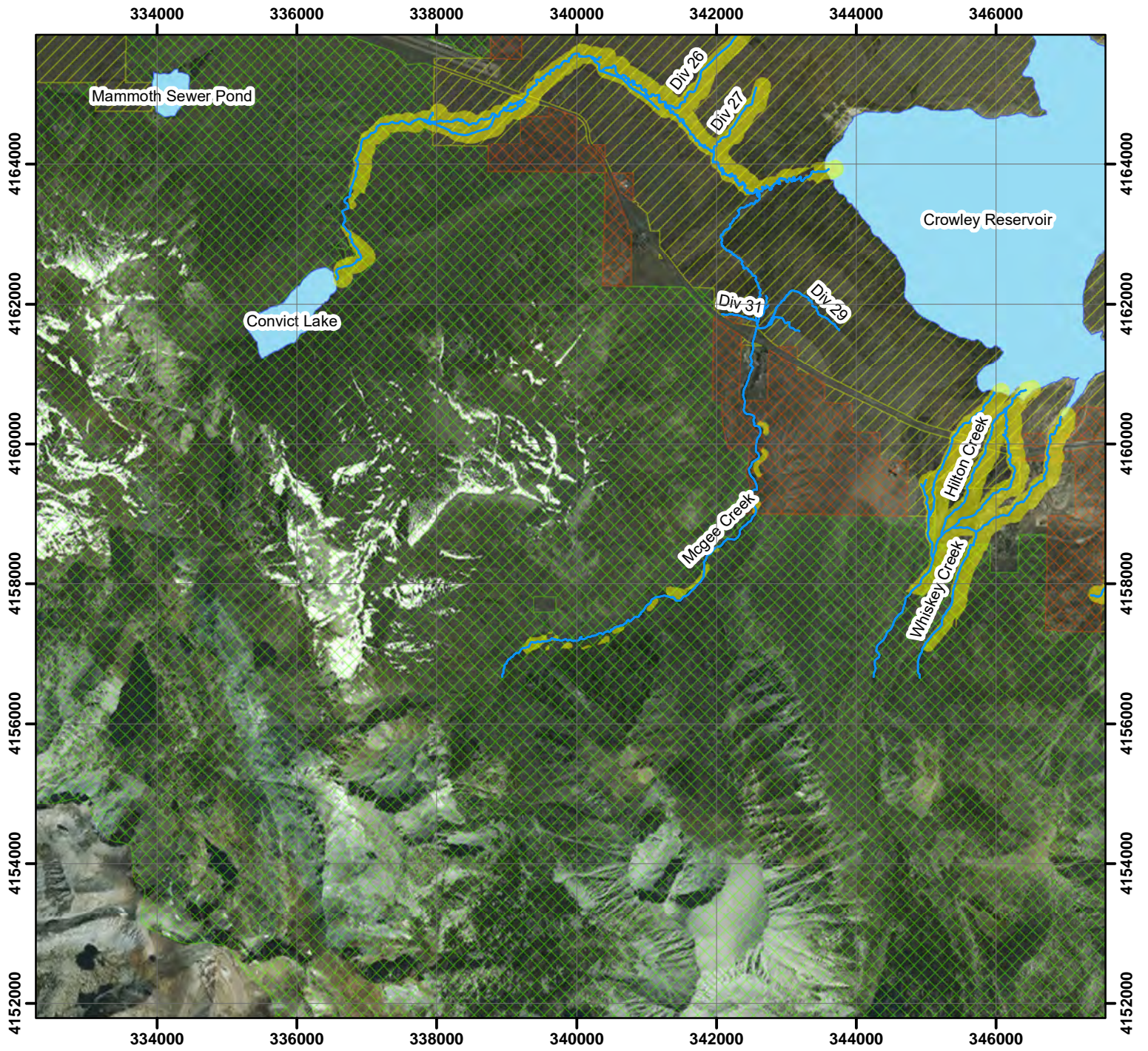


### Quad: BLOODY MTN

- RMA Waterways
- CNDDB Occurance Record
- LADWP
- BLM
- Inyo National Forest





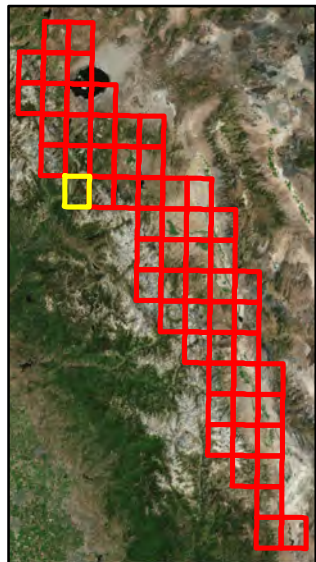
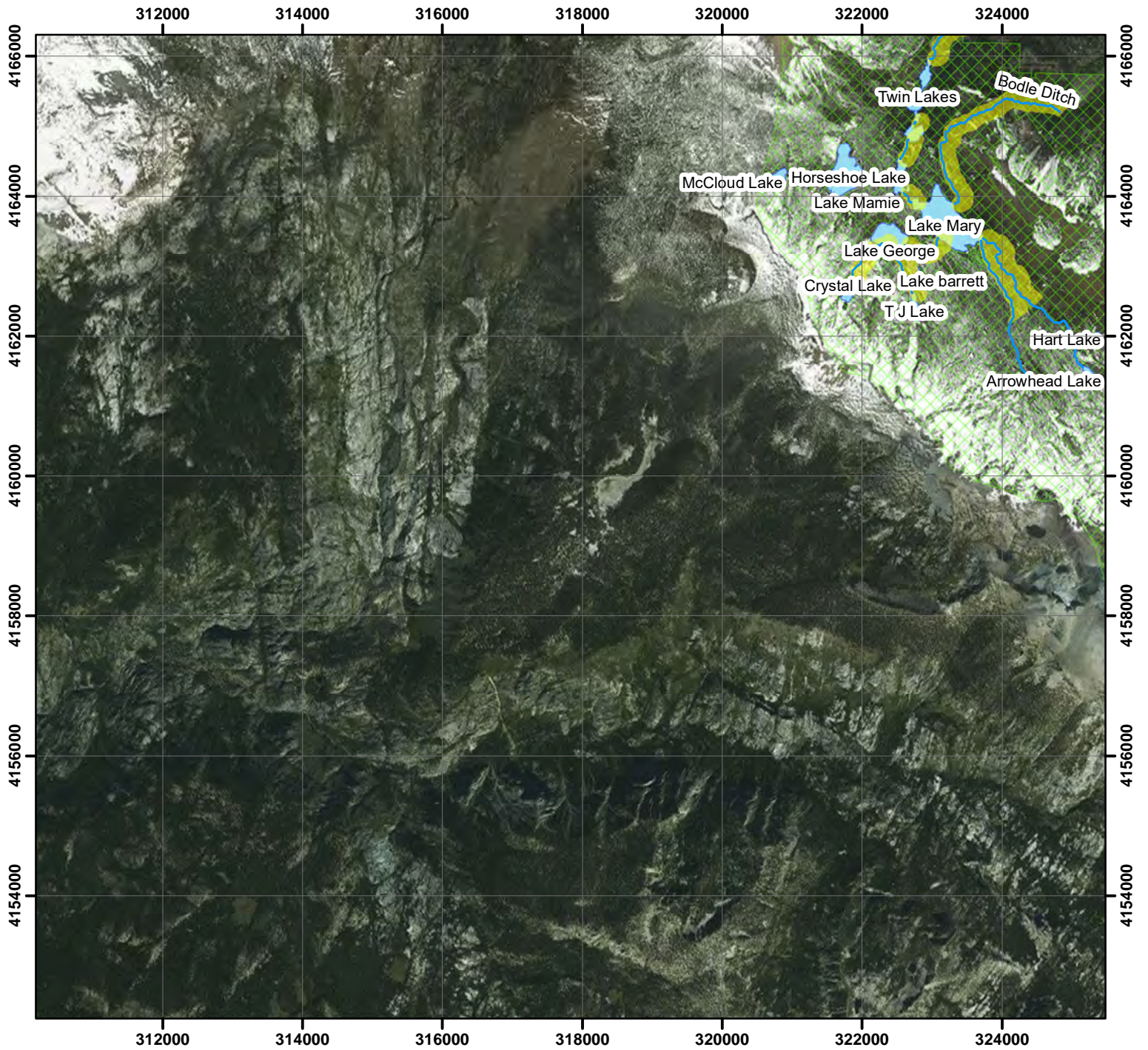


### Quad: CONVICT LAKE

- RMA Waterways
- CNDDDB Occurance Record
- LADWP
- BLM
- Inyo National Forest





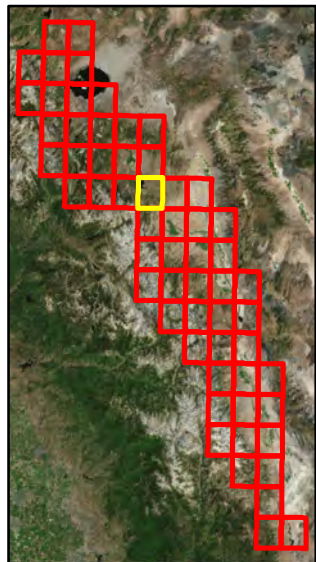
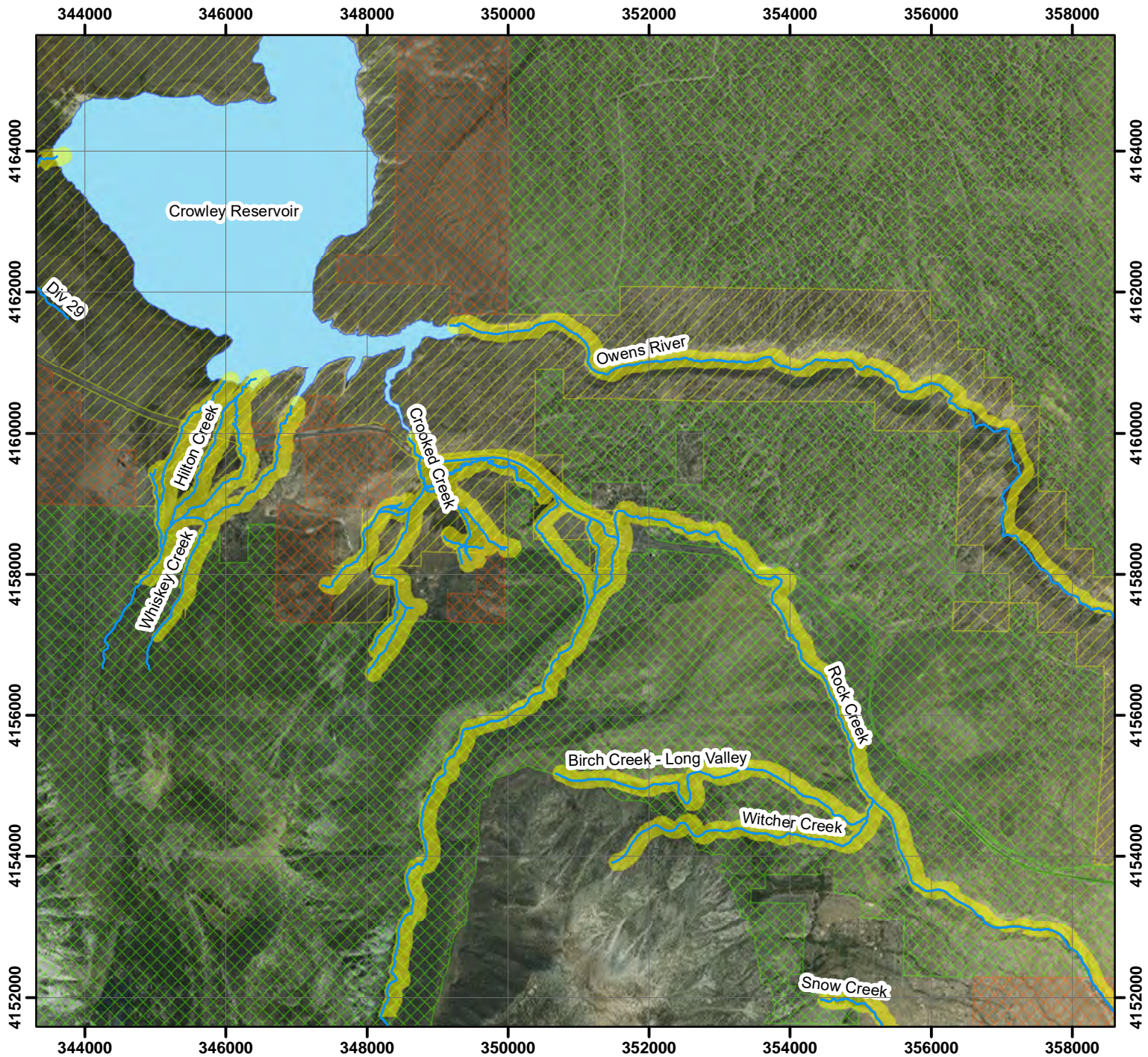


### Quad: CRYSTAL CRAG

-  RMA Waterways
-  CNDDDB Occurrence Record
-  LADWP
-  BLM
-  Inyo National Forest





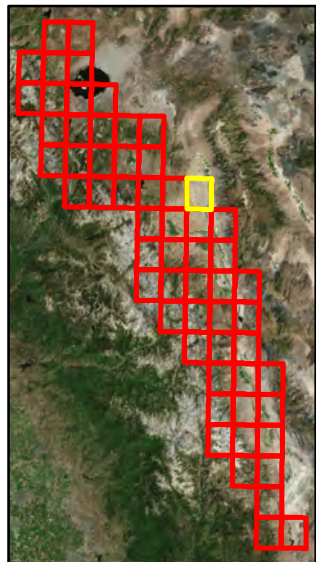
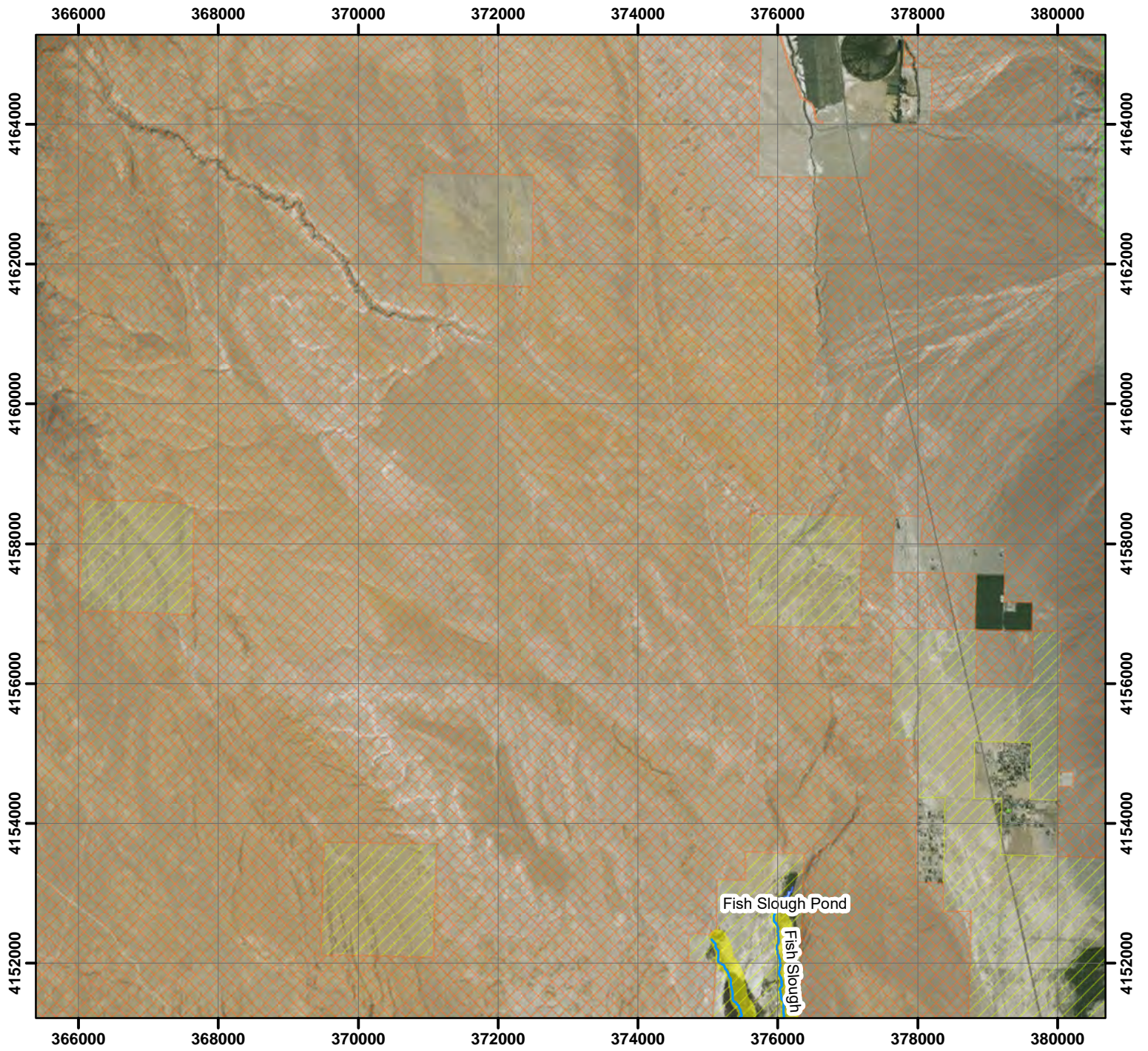


### Quad: TOMS PLACE

- RMA Waterways
- CNDDB Occurrence Record
- LADWP
- BLM
- Inyo National Forest







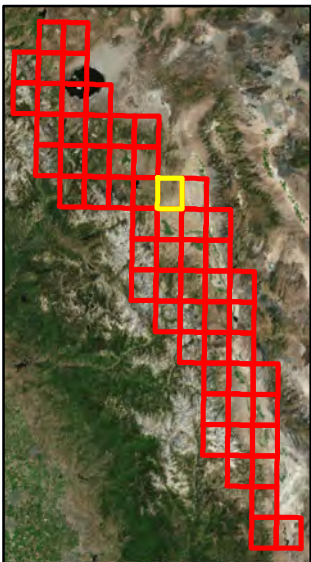
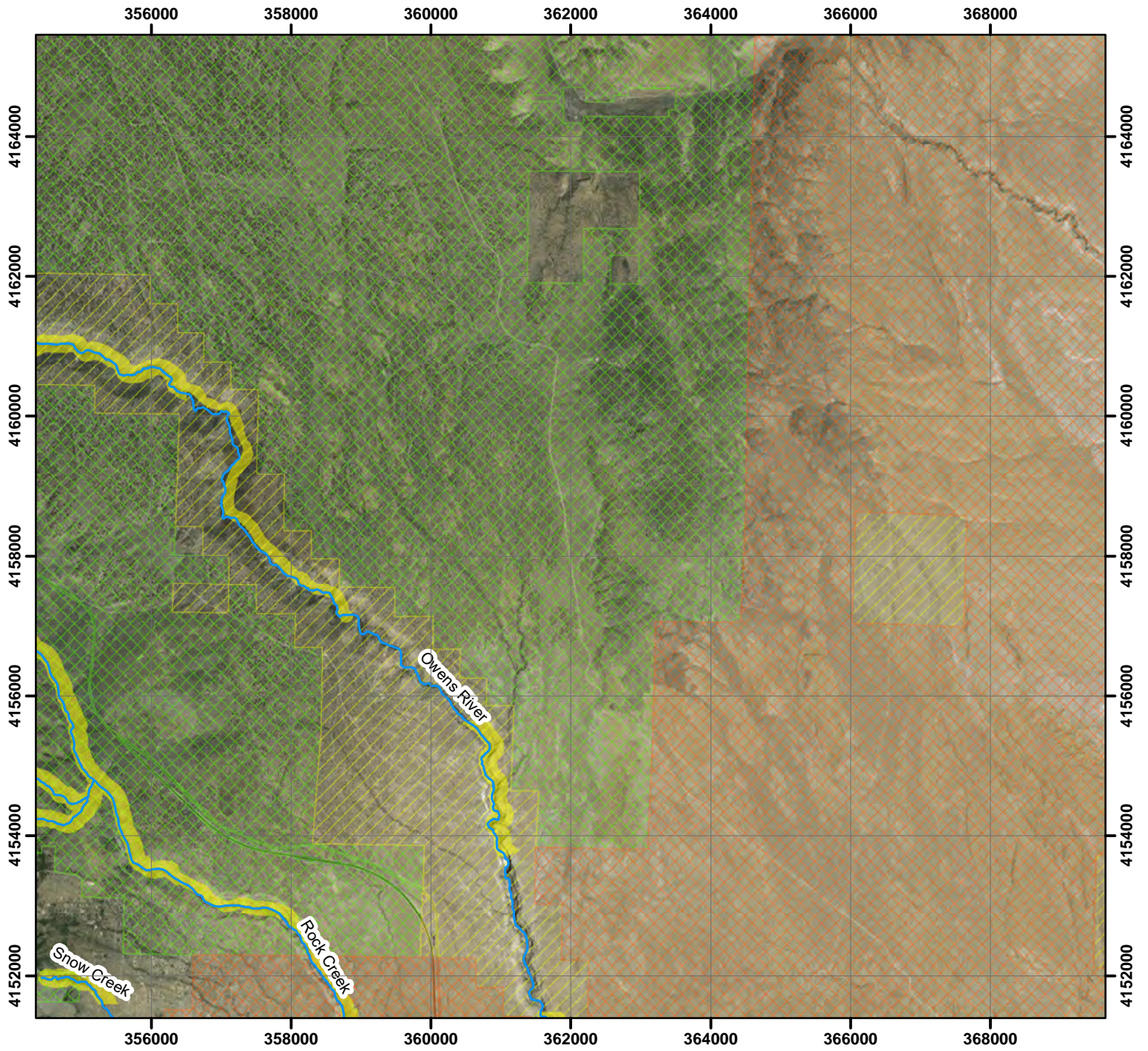
**Quad: CHIDAGO CANYON**

-  RMA Waterways
-  CNDDDB Occurrence Record
-  LADWP
-  BLM
-  Inyo National Forest




 Miles





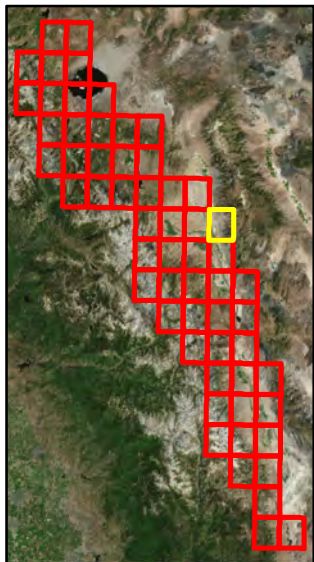
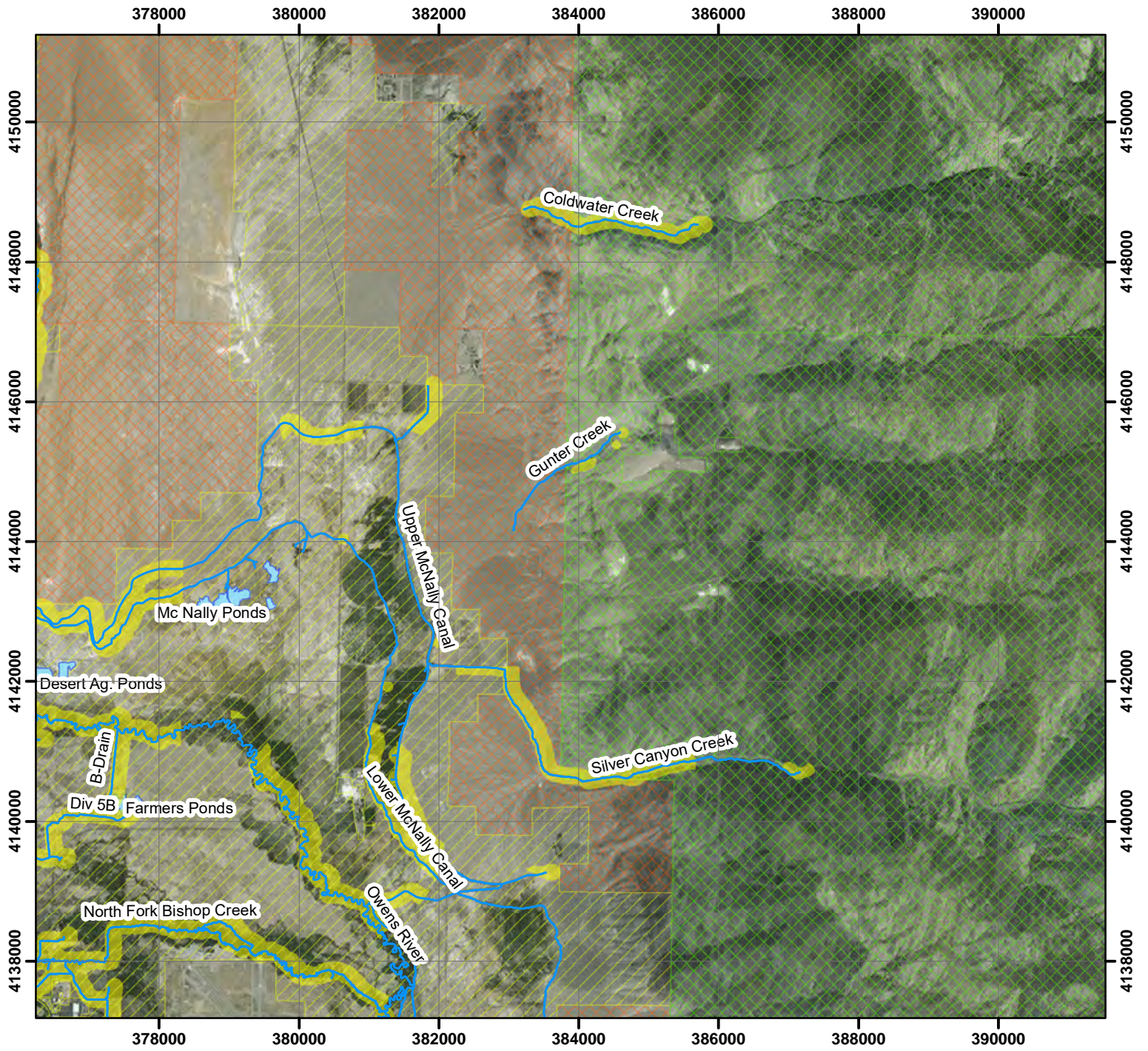


**Quad: CASA DIABLO MOUNTAIN**

-  RMA Waterways
-  CNDDDB Occurrence Record
-  LADWP
-  BLM
-  Inyo National Forest





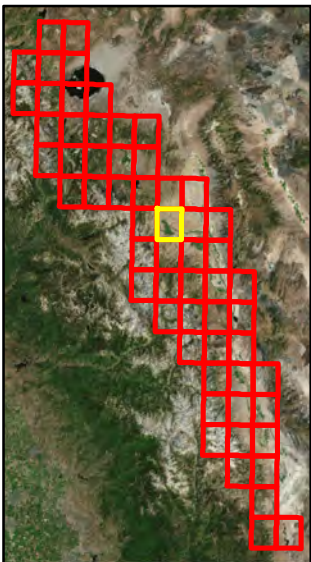
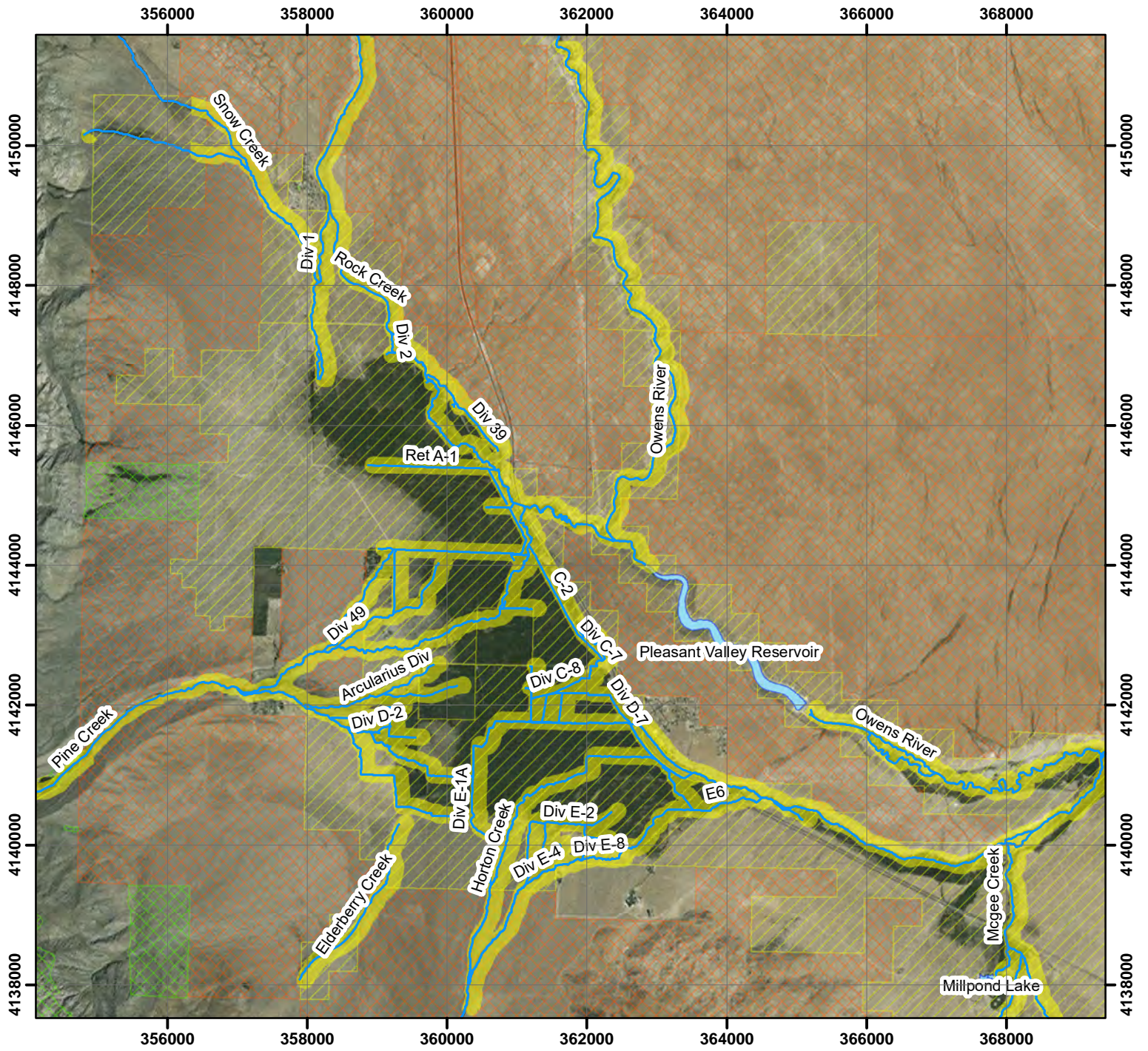


### Quad: LAWS

-  RMA Waterways
-  CNDDDB Occurance Record
-  LADWP
-  BLM
-  Inyo National Forest





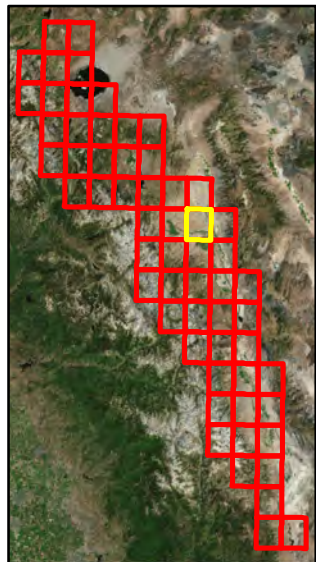
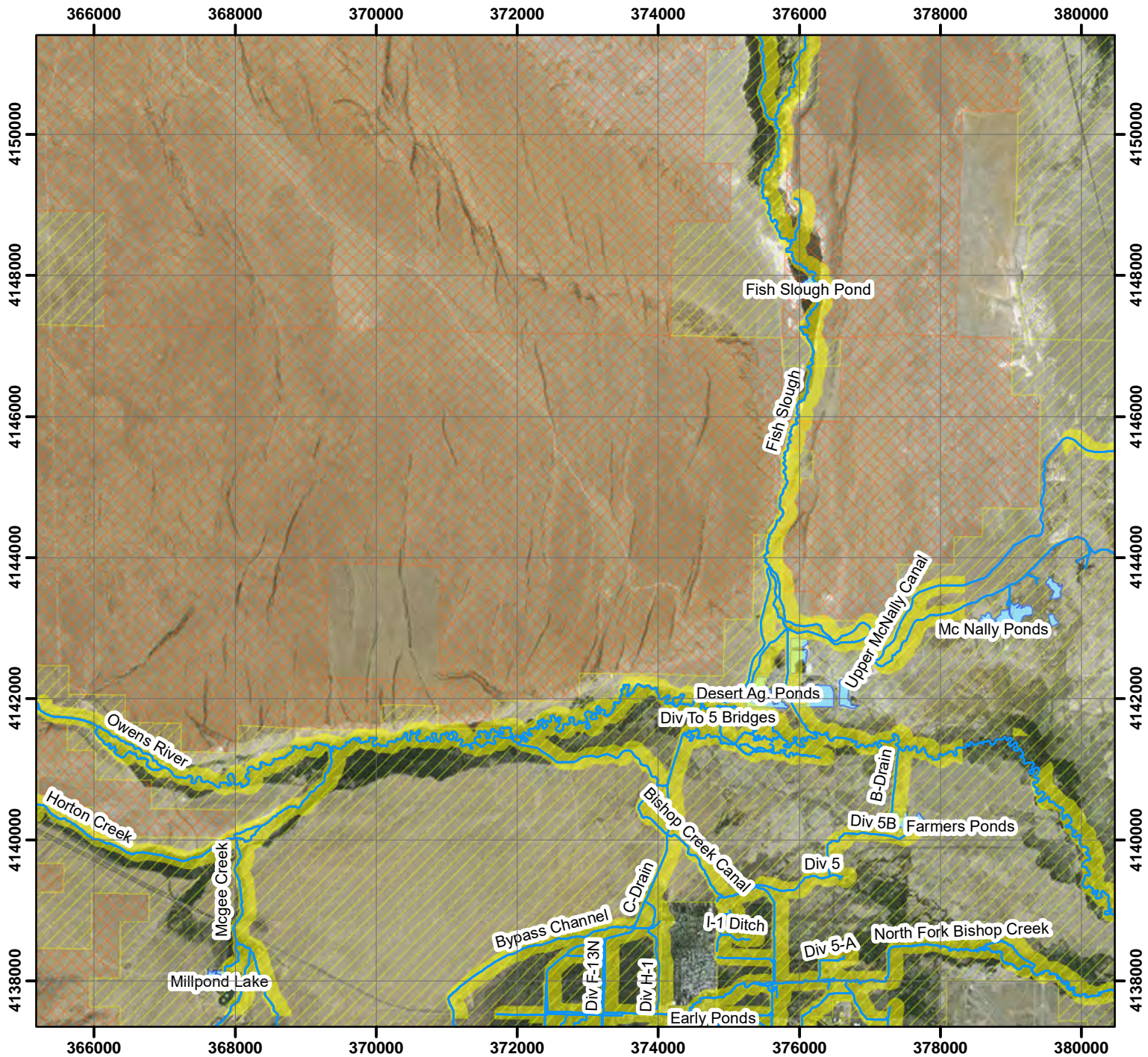


**Quad: ROVANA**

- RMA Waterways
- CNDDDB Occurance Record
- LADWP
- BLM
- Inyo National Forest

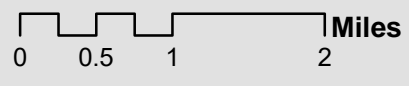
0 0.5 1 2 Miles



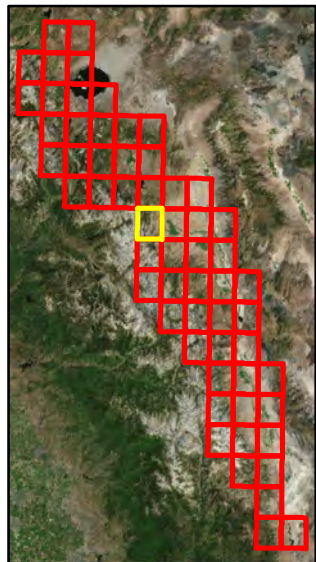
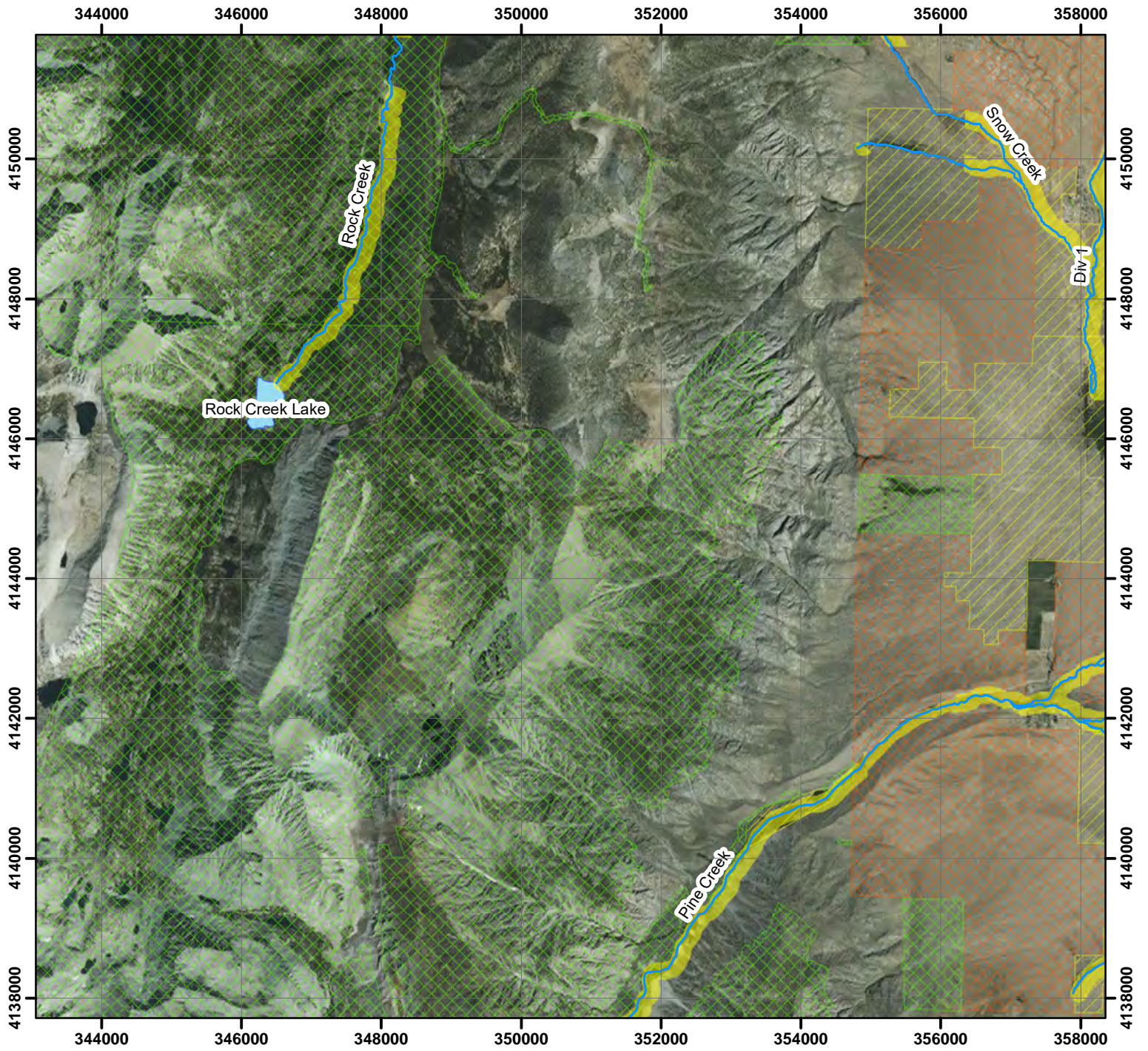


### Quad: FISH SLOUGH






- RMA Waterways
- CNDDDB Occurance Record
- LADWP
- BLM
- Inyo National Forest





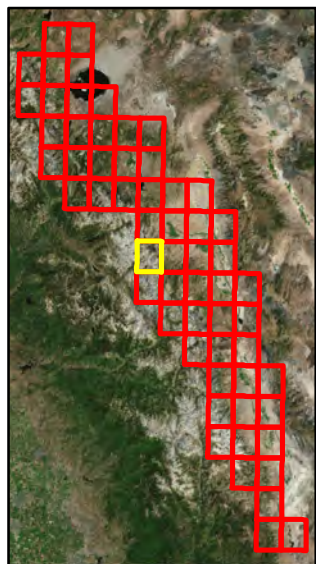
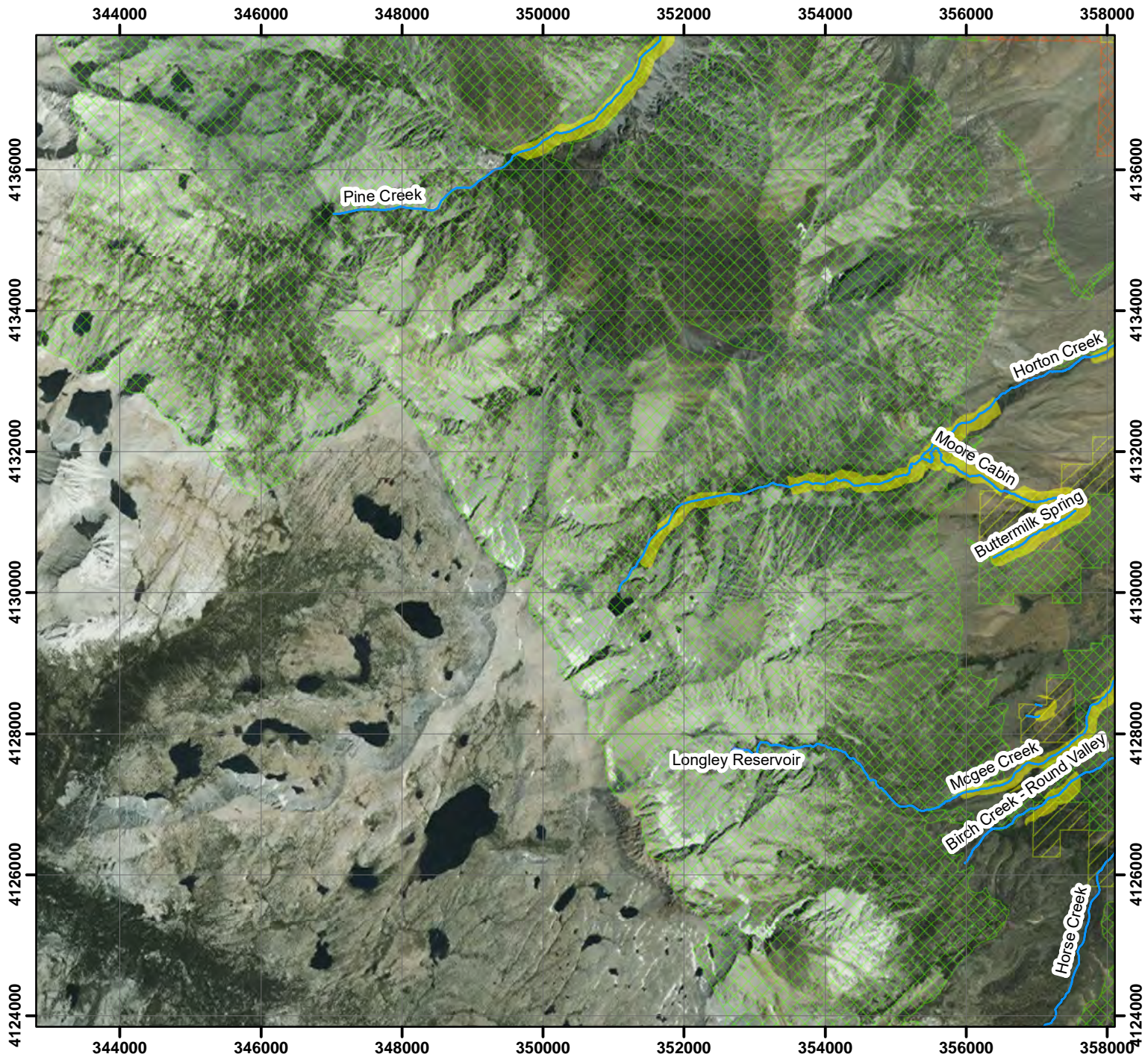


**Quad: MOUNT MORGAN**






-  RMA Waterways
-  CNDDDB Occurrence Record
-  LADWP
-  BLM
-  Inyo National Forest





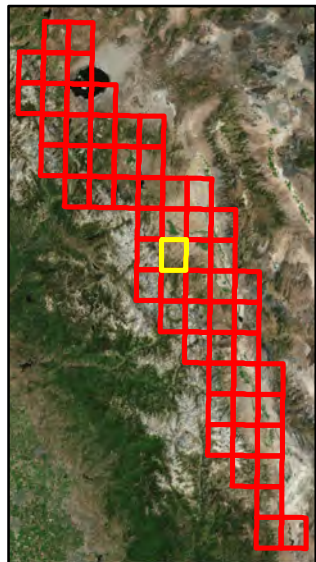
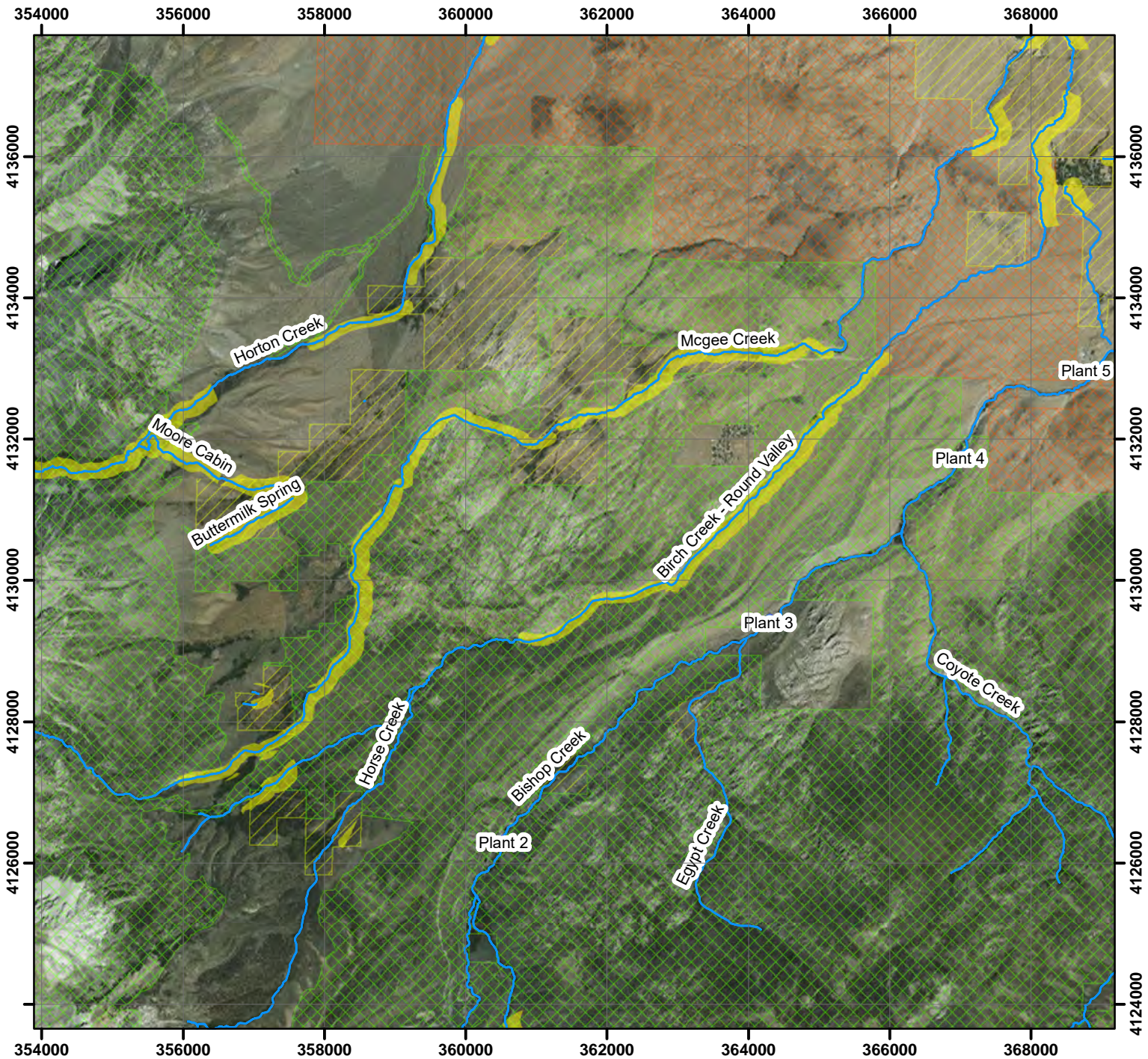


### Quad: MOUNT TOM

-  RMA Waterways
-  CNDDDB Occurance Record
-  LADWP
-  BLM
-  Inyo National Forest





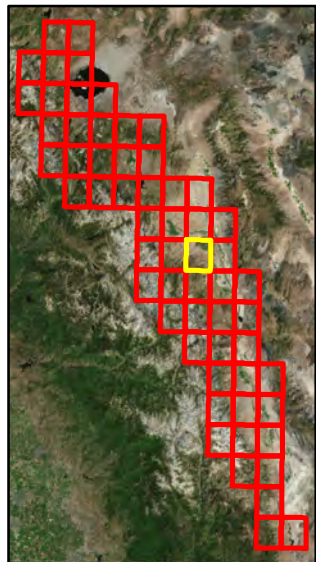
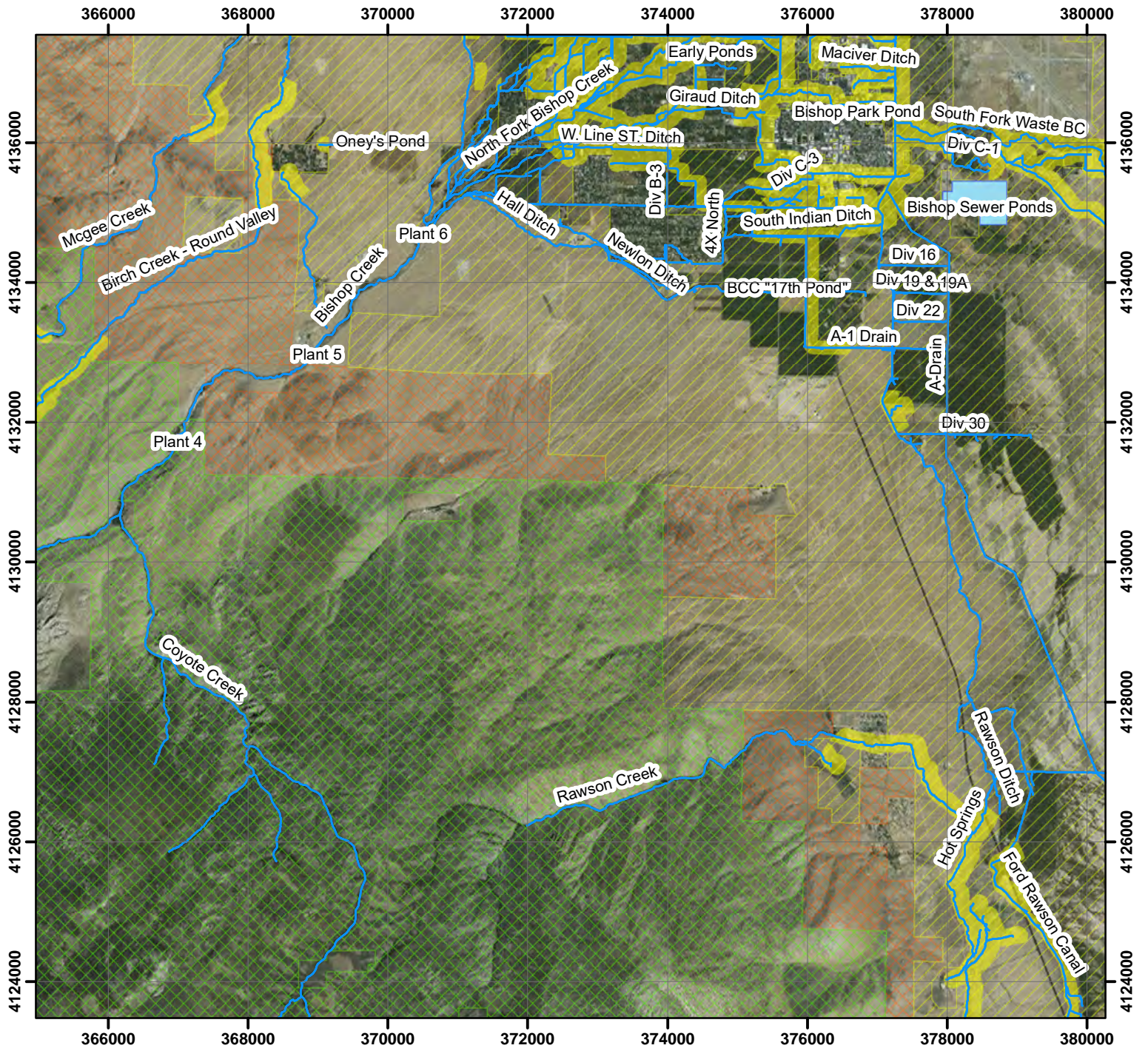


### Quad: TUNGSTEN HILLS

- RMA Waterways
- CNDDDB Occurrence Record
- LADWP
- BLM
- Inyo National Forest





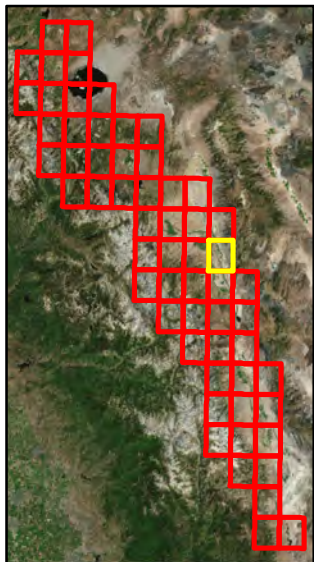
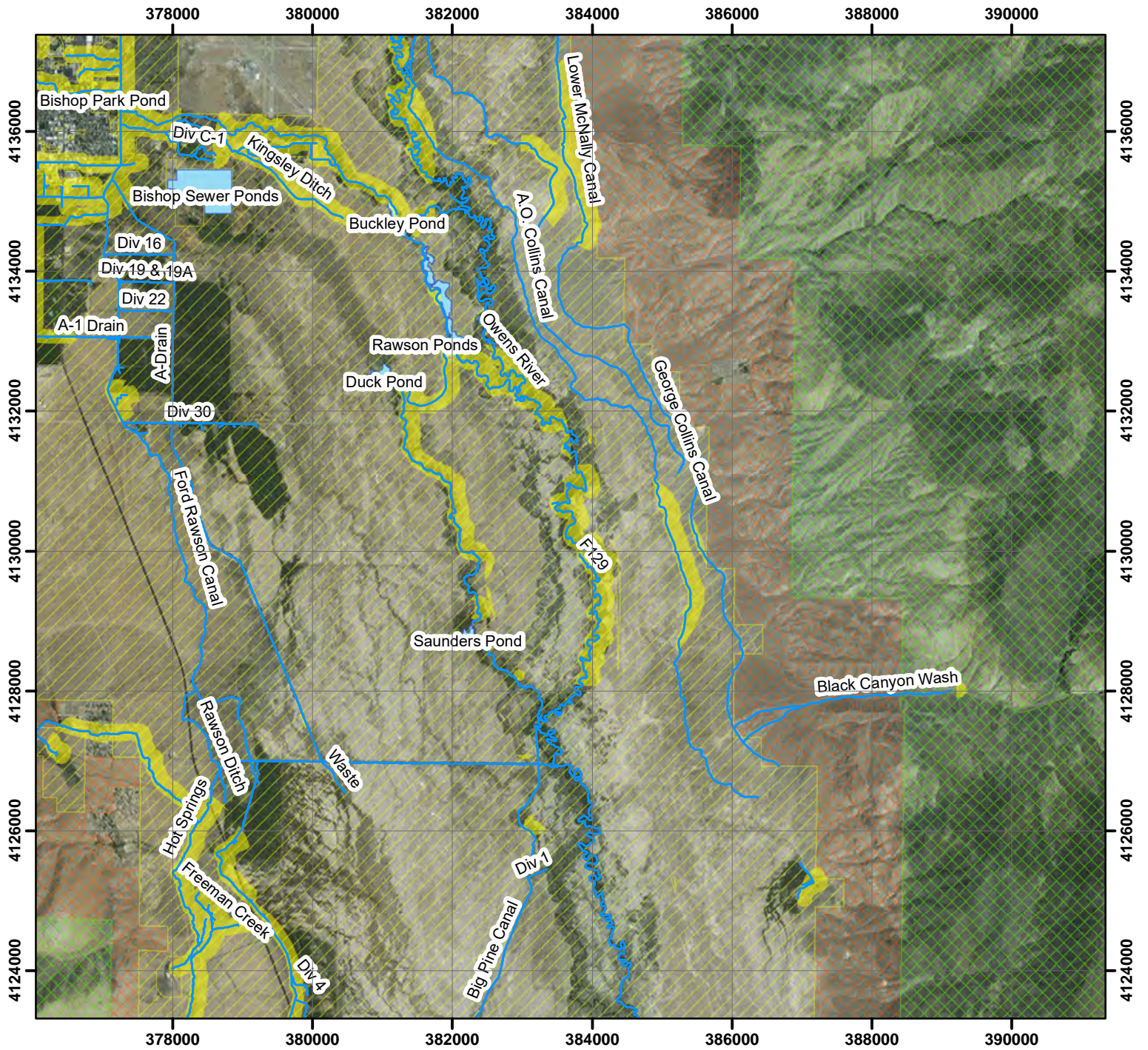


**Quad: BISHOP**

- RMA Waterways
- CNDDB Occurrence Record
- LADWP
- BLM
- Inyo National Forest

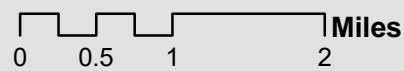
0 0.5 1 2 Miles



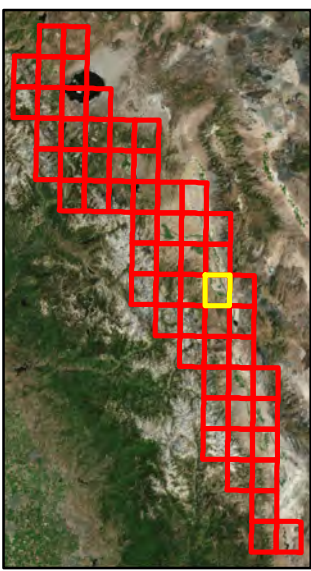
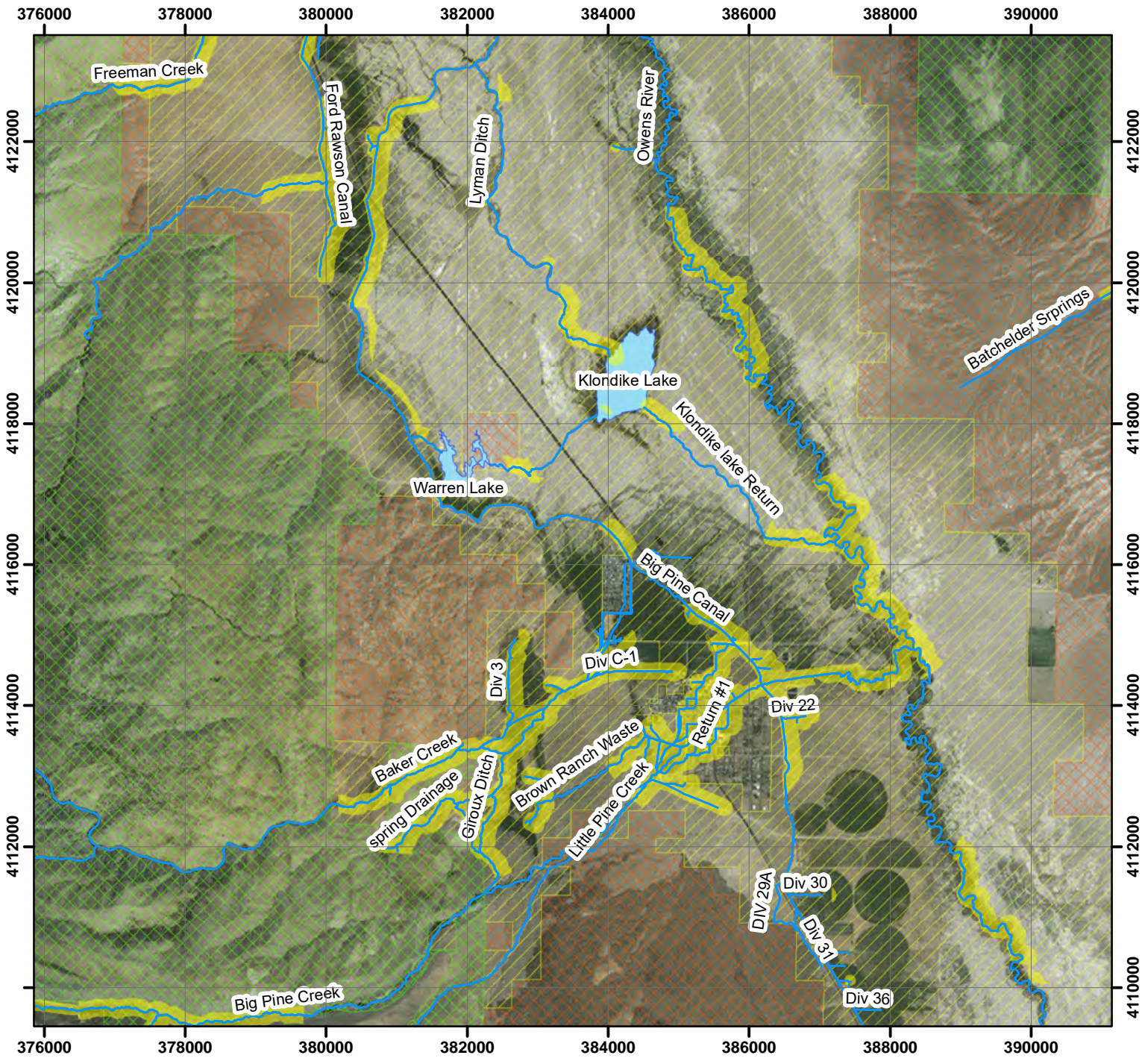


### Quad: POLETA CANYON

- RMA Waterways
- CNDDB Occurance Record
- LADWP
- BLM
- Inyo National Forest





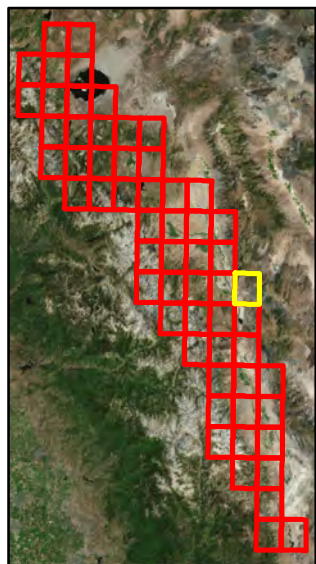
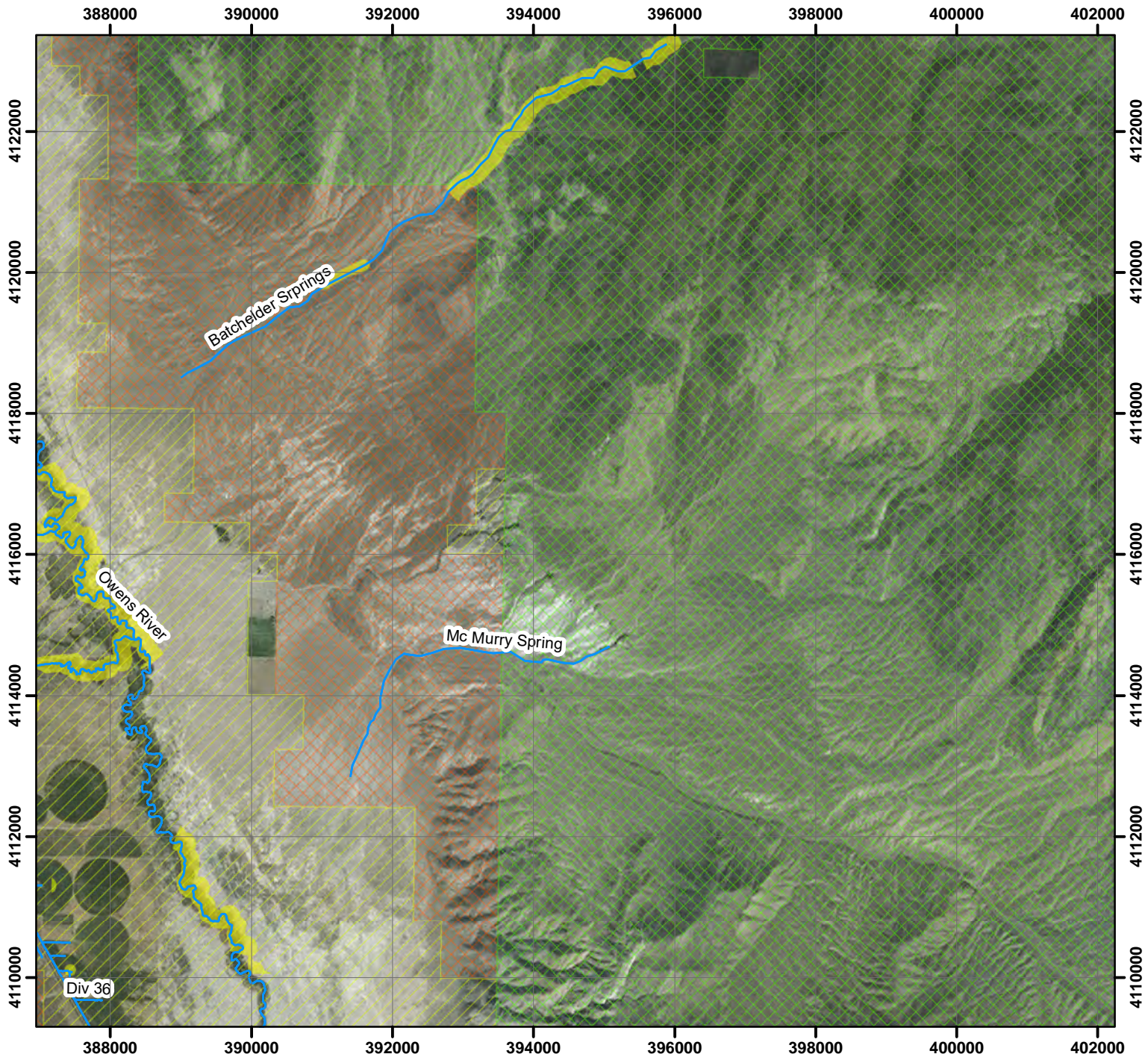


**Quad: BIG PINE**

- RMA Waterways
- CNDDB Occurrence Record
- LADWP
- BLM
- Inyo National Forest

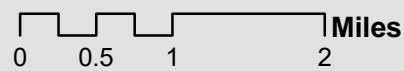
0 0.5 1 2 Miles



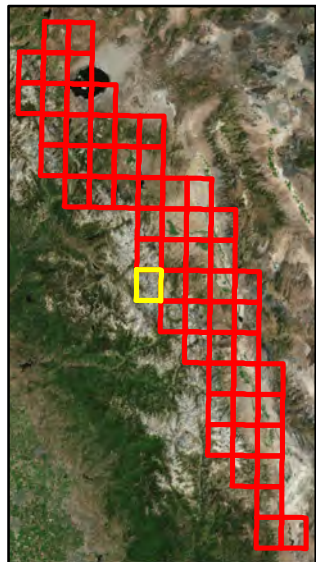
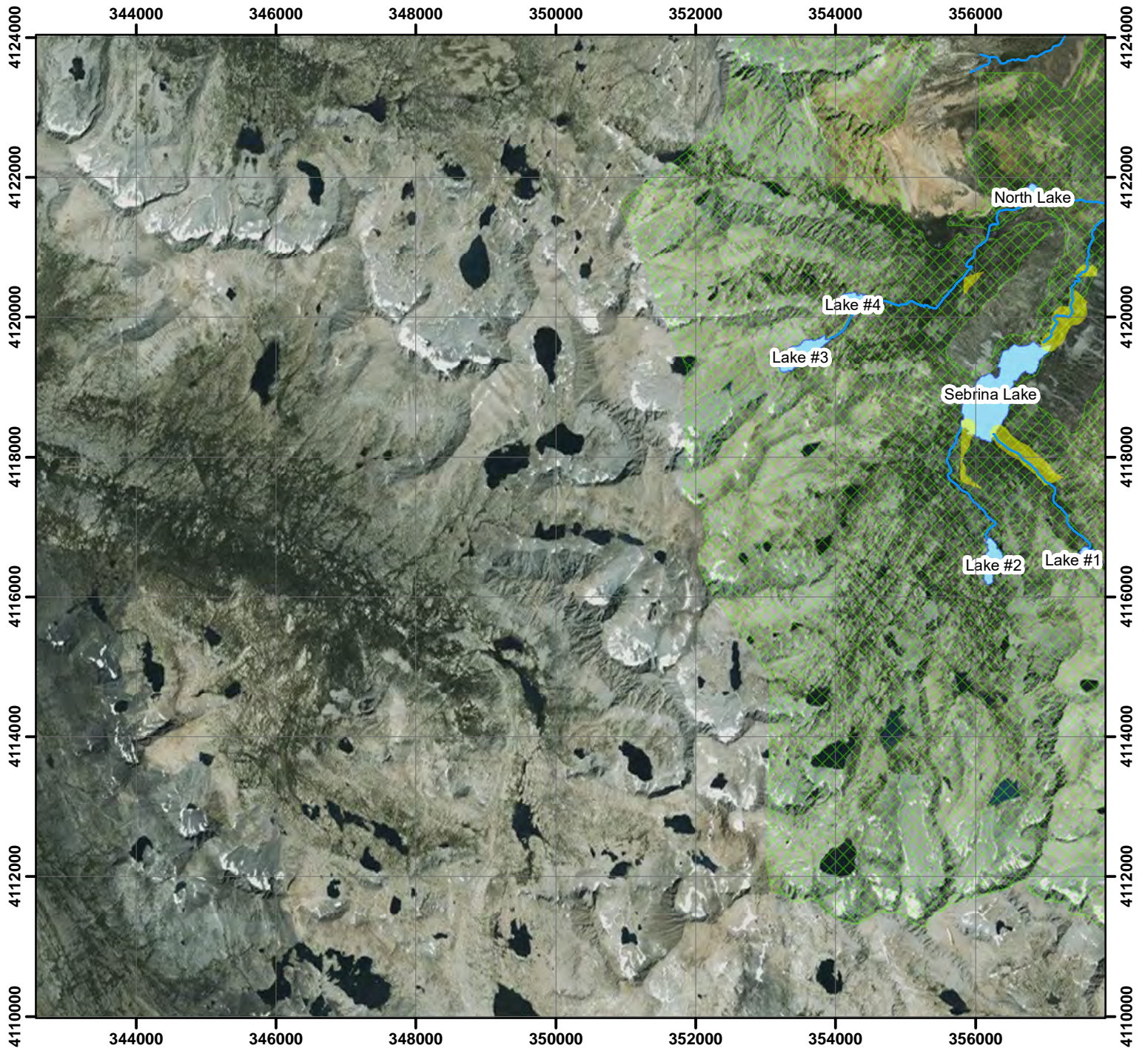


### Quad: UHLMeyer SPRING




- RMA Waterways
- CNDDB Occurrence Record
- LADWP
- BLM
- Inyo National Forest





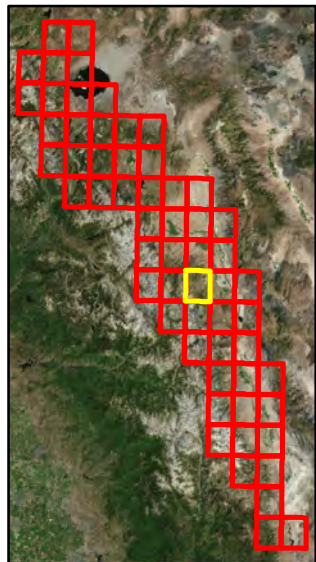
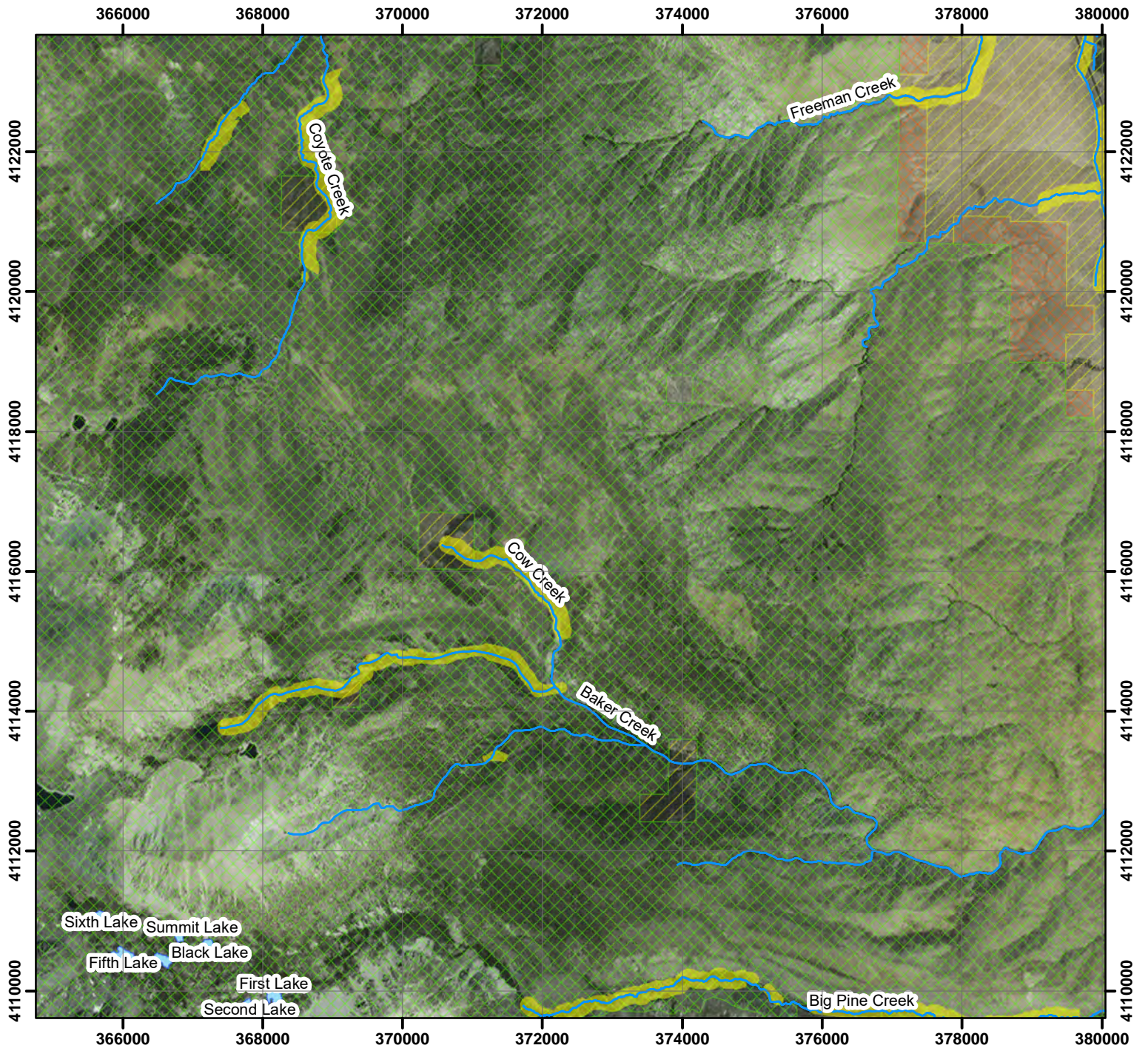


**Quad: MT DARWIN**




-  RMA Waterways
-  CNDDDB Occurrence Record
-  LADWP
-  BLM
-  Inyo National Forest





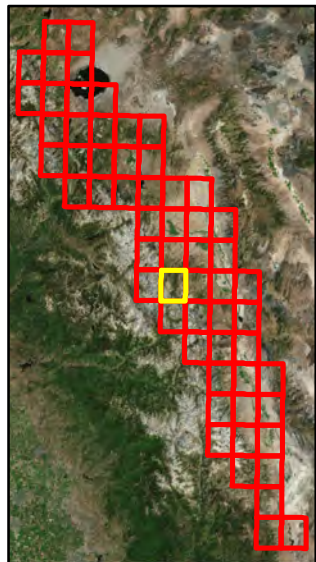
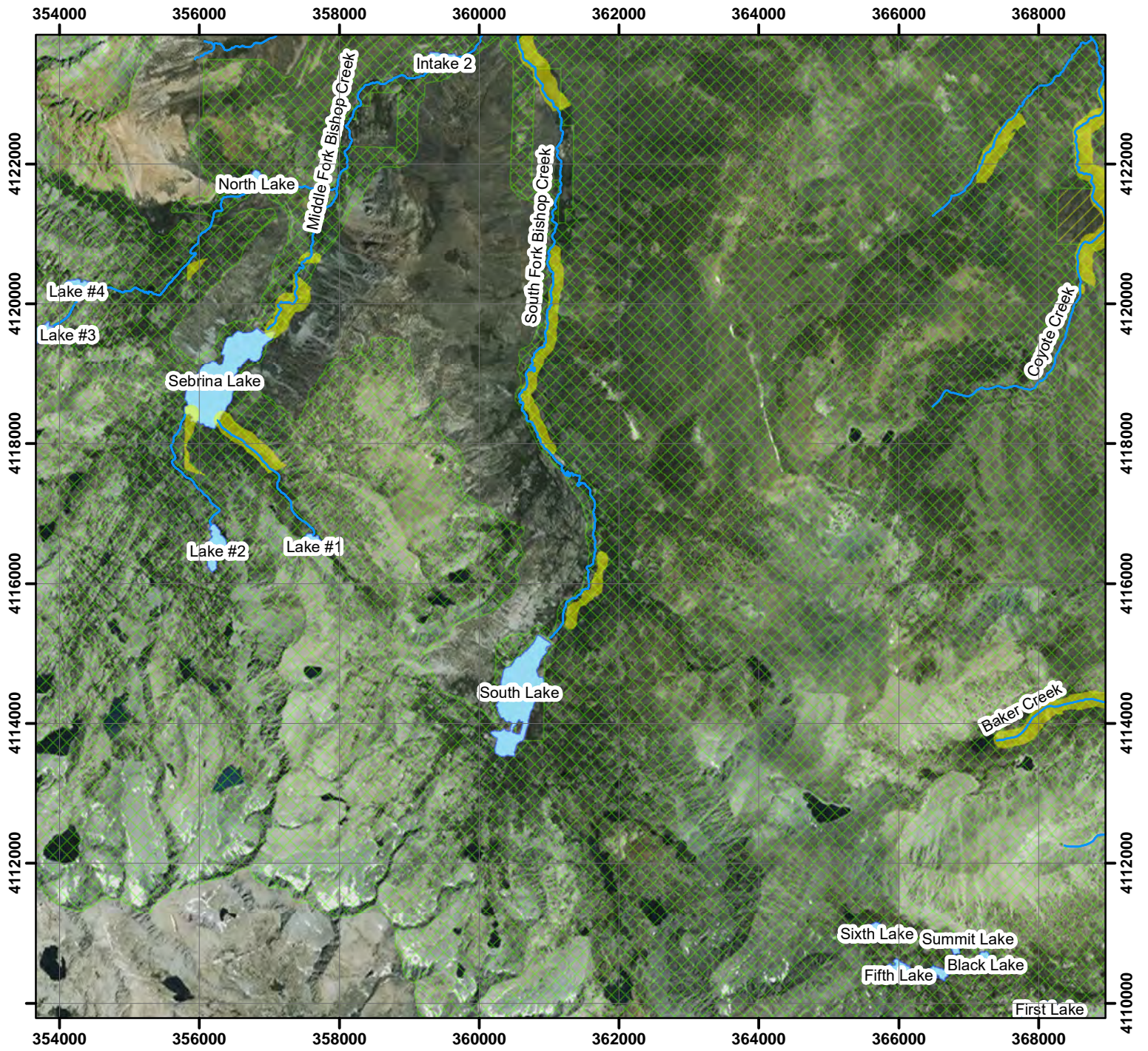


### Quad: COYOTE FLAT

-  RMA Waterways
-  CNDDDB Occurrence Record
-  LADWP
-  BLM
-  Inyo National Forest





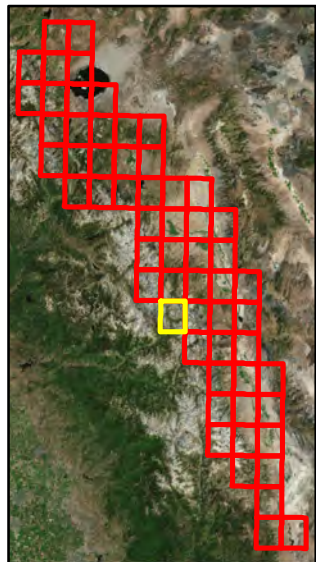
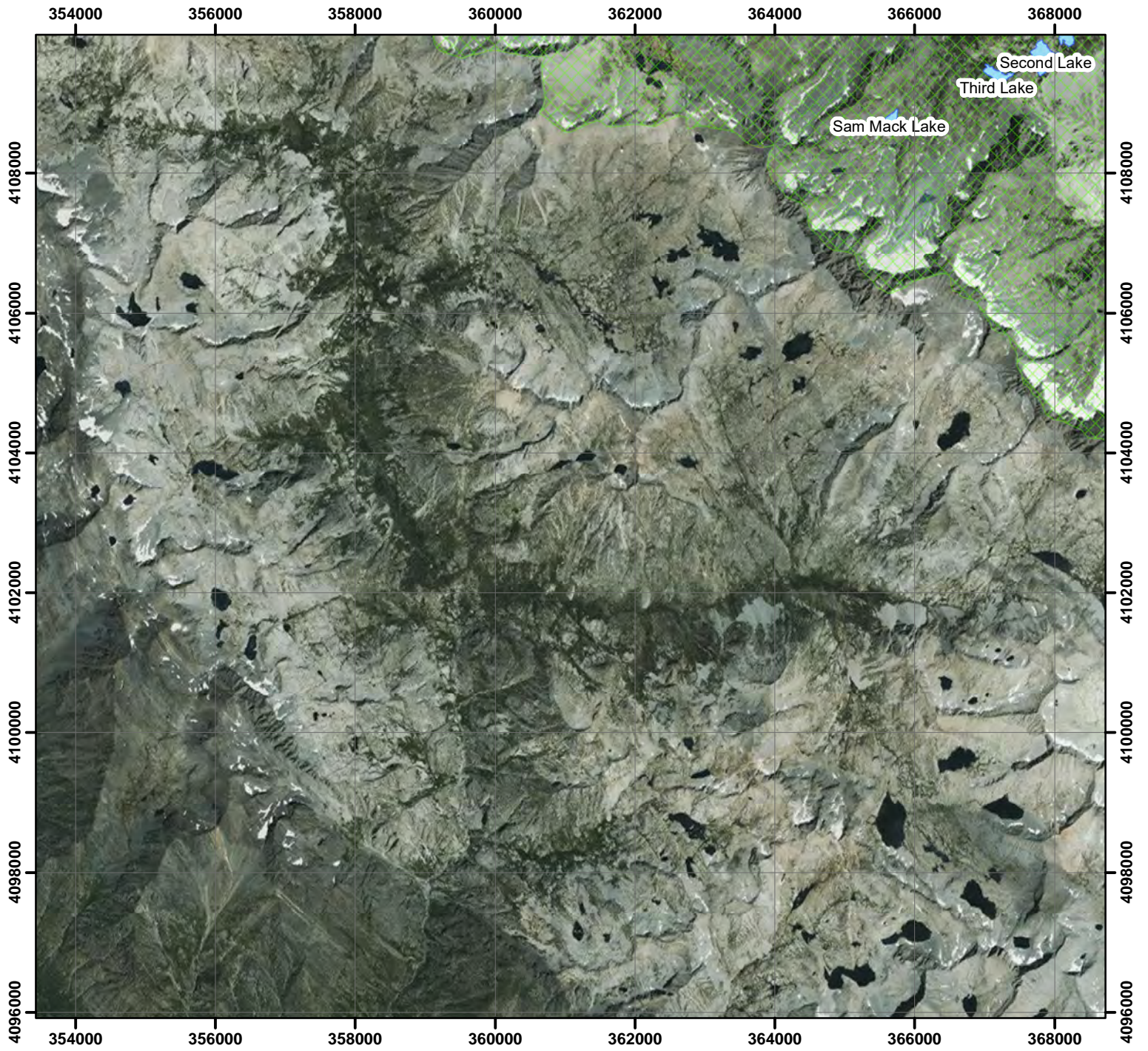


### Quad: MOUNT THOMPSON






- RMA Waterways
- CNDDDB Occurrence Record
- LADWP
- BLM
- Inyo National Forest

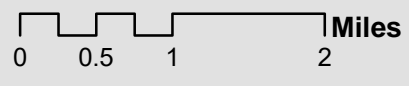




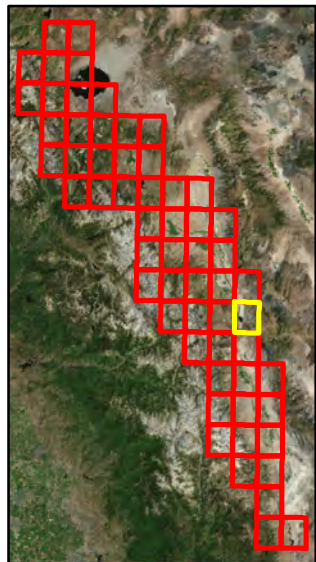
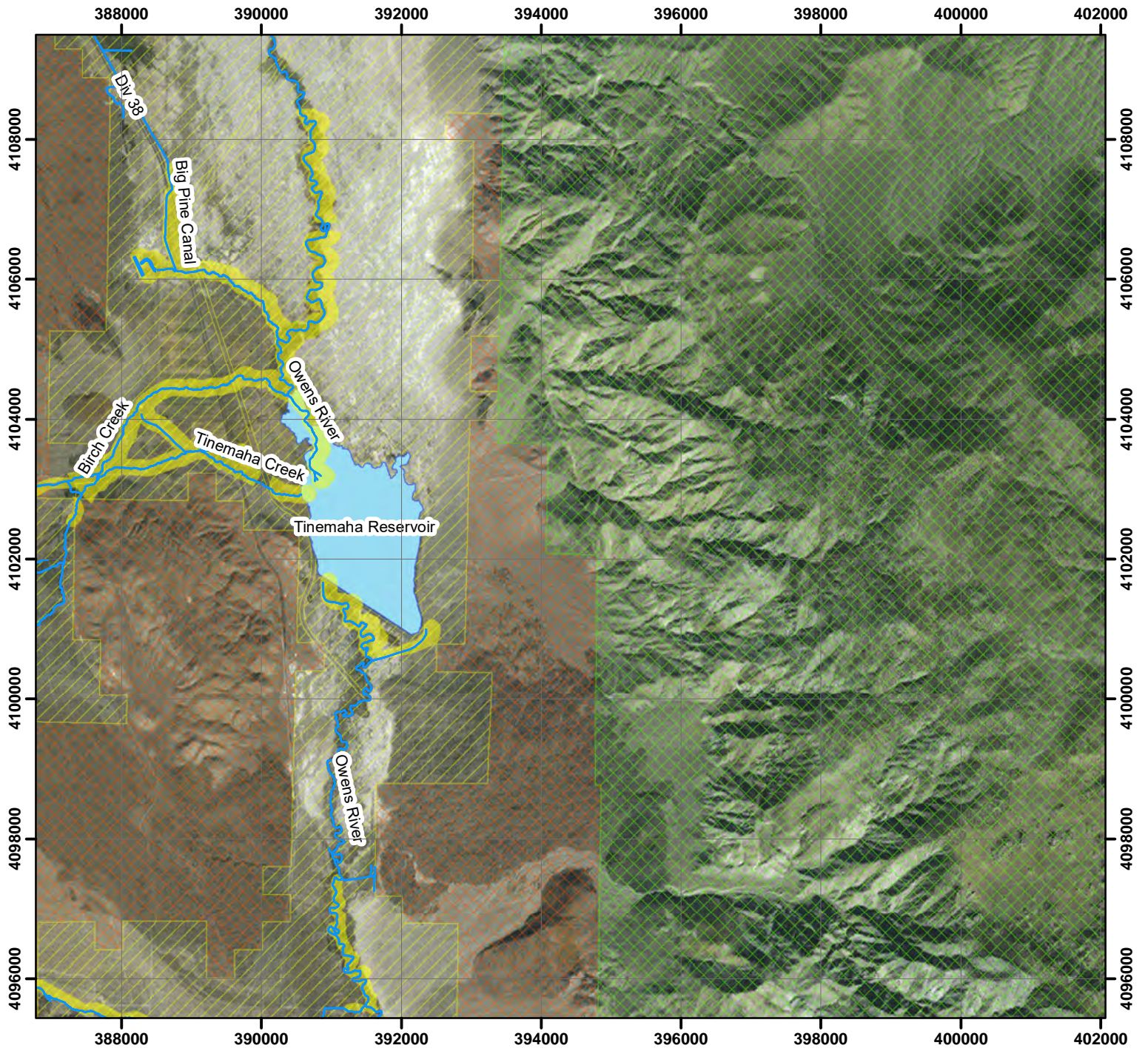


**Quad: NORTH PALISADE**

-  RMA Waterways
-  CNDDB Occurance Record
-  LADWP
-  BLM
-  Inyo National Forest

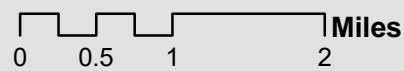




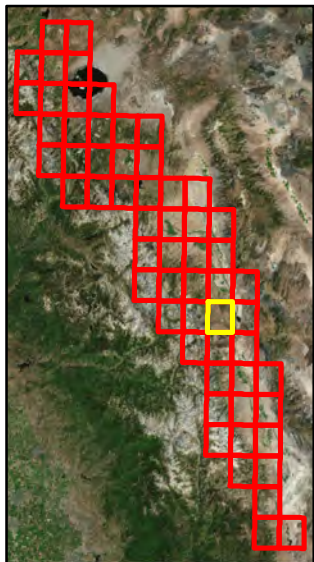
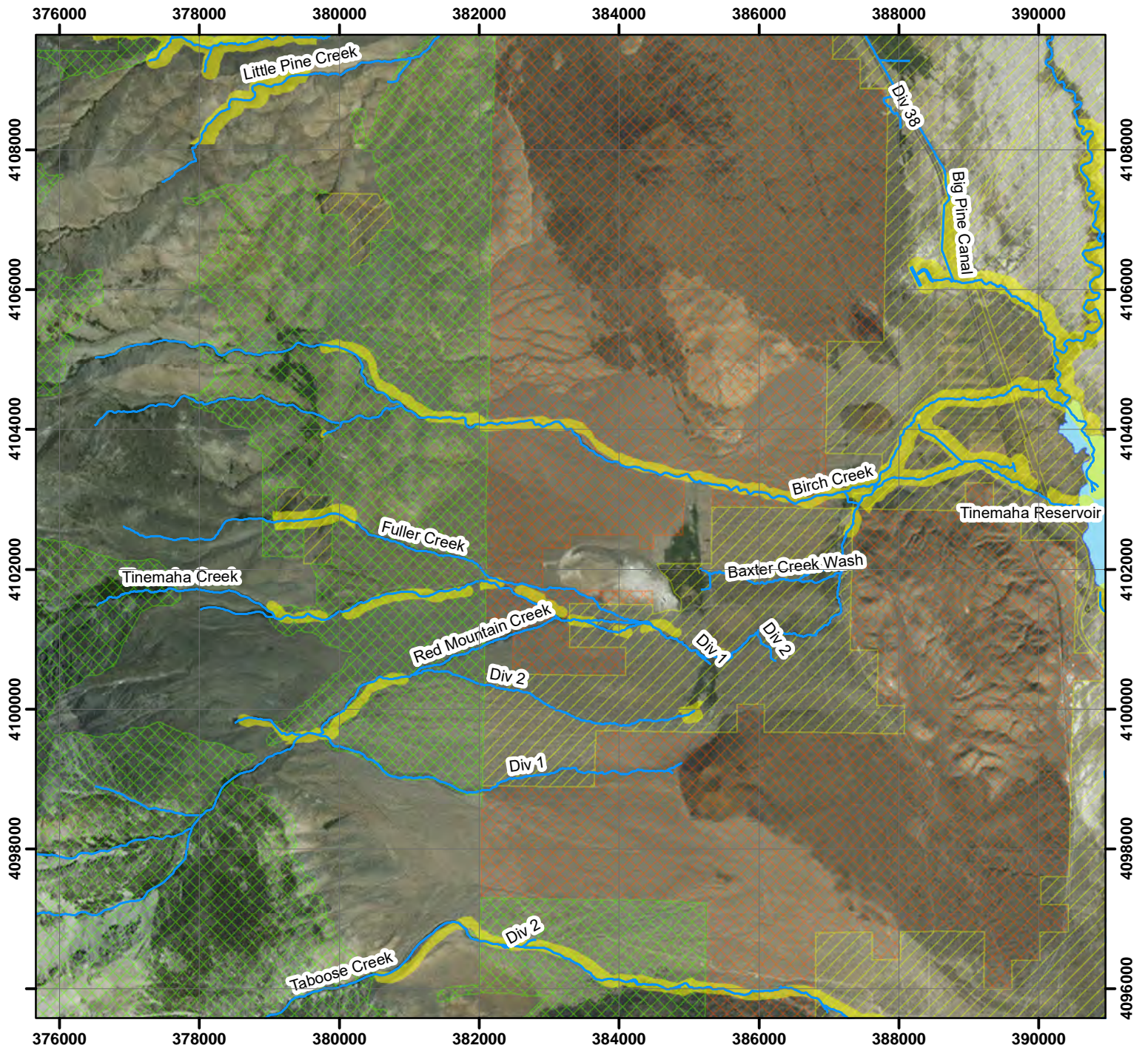


### Quad: TINEMAHA RESERVOIR

-  RMA Waterways
-  CNDDB Occurrence Record
-  LADWP
-  BLM
-  Inyo National Forest





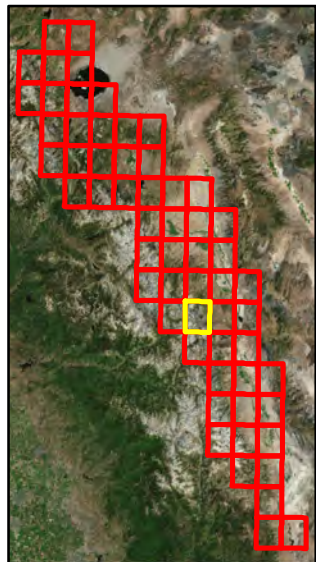
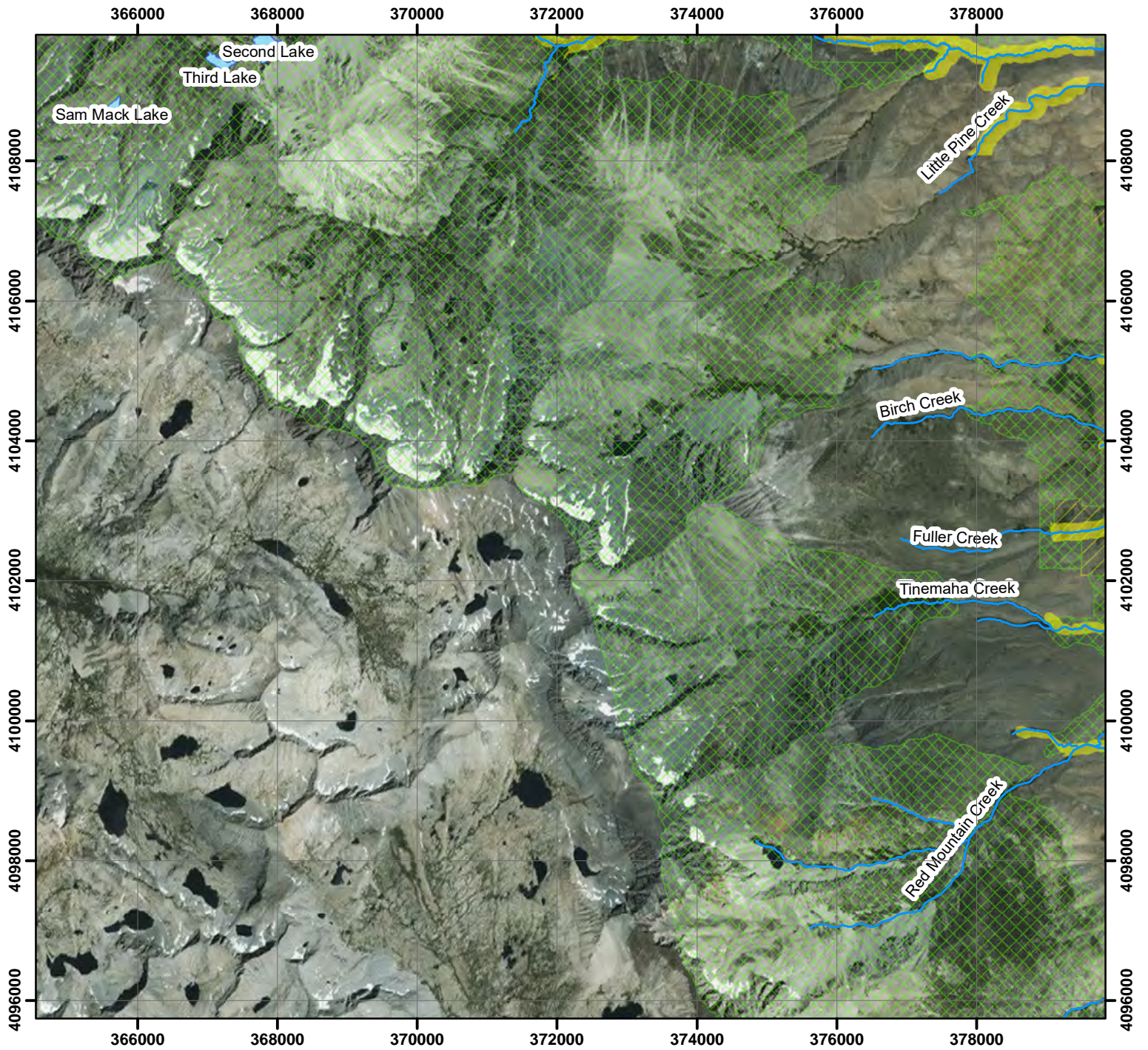


### Quad: FISH SPRINGS






- RMA Waterways
- CNDDDB Occurrence Record
- LADWP
- BLM
- Inyo National Forest

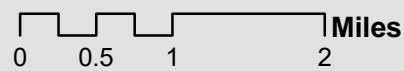




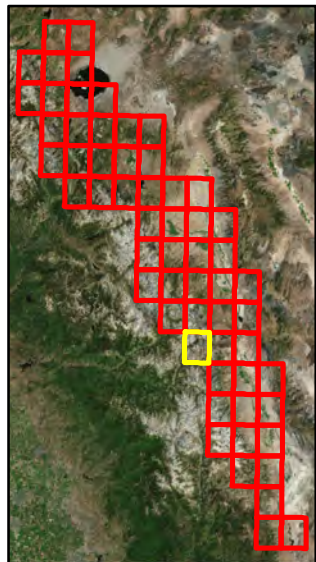
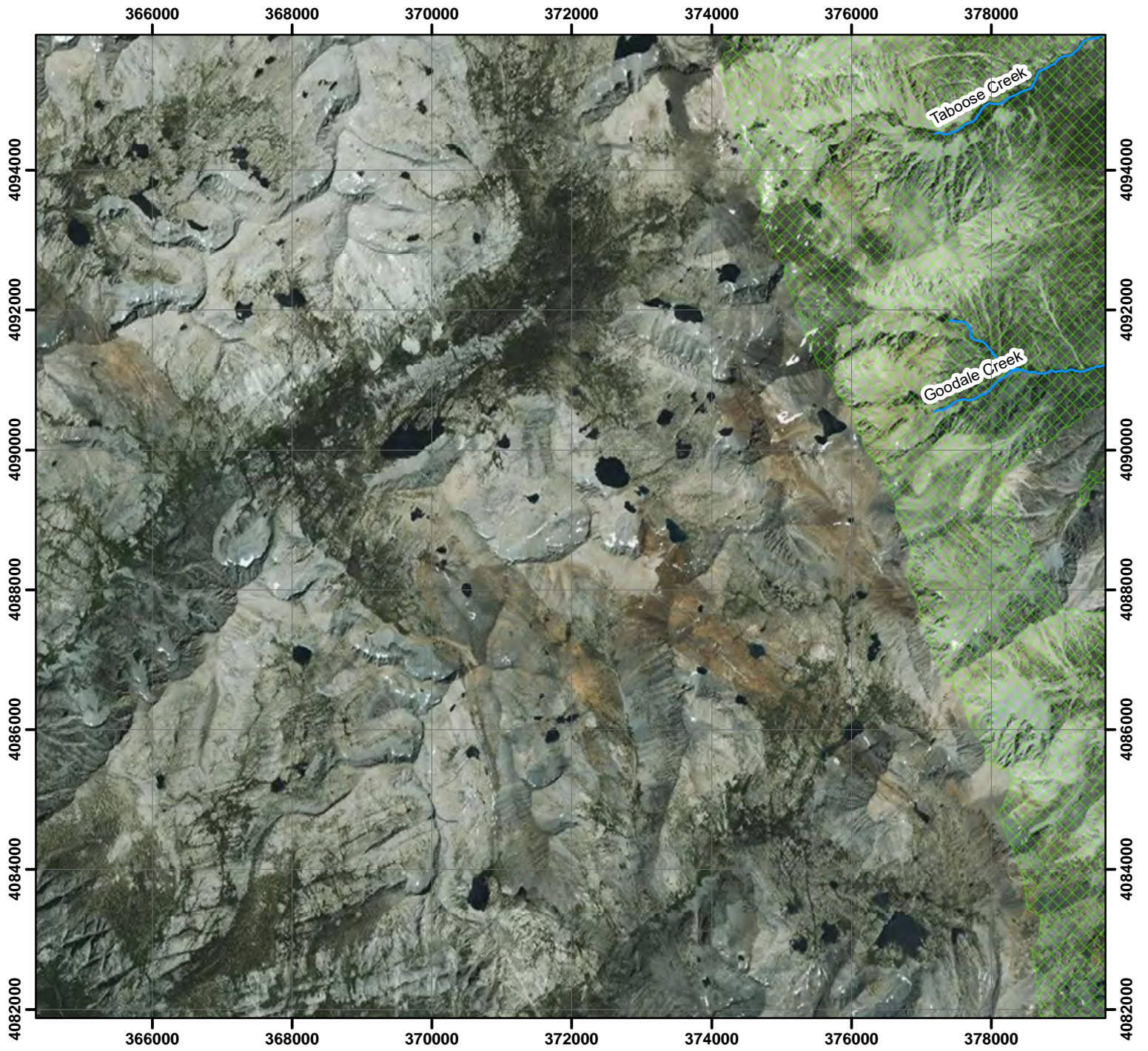


### Quad: SPLIT MOUNTAIN

-  RMA Waterways
-  CNDDDB Occurrence Record
-  LADWP
-  BLM
-  Inyo National Forest





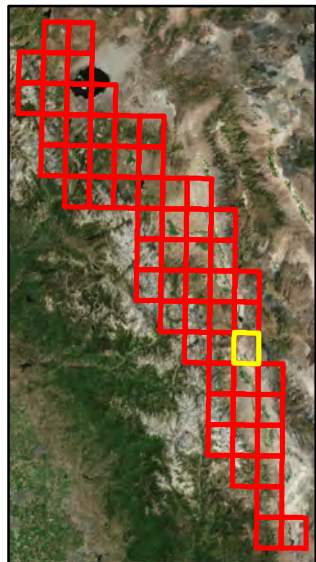
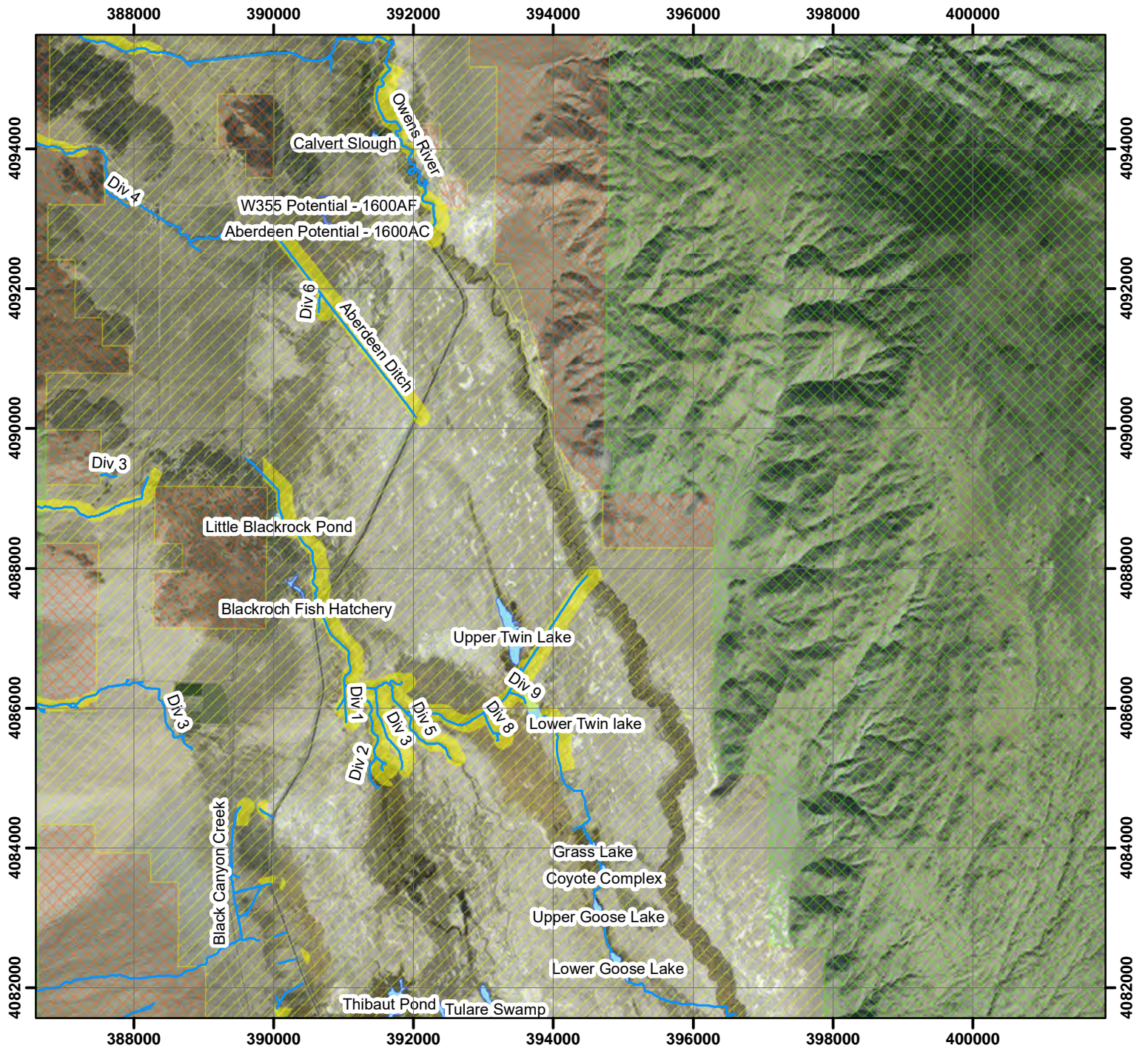


**Quad: MOUNT PINCHOT**

-  RMA Waterways
-  CNDDDB Occurance Record
-  LADWP
-  BLM
-  Inyo National Forest

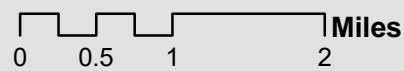




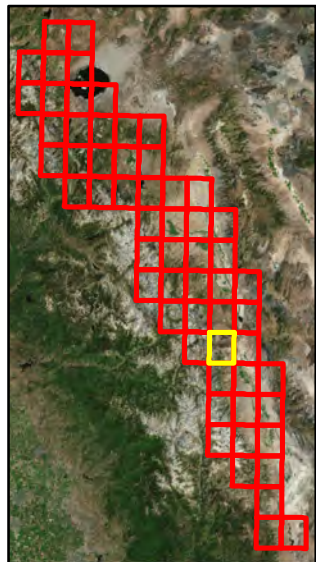
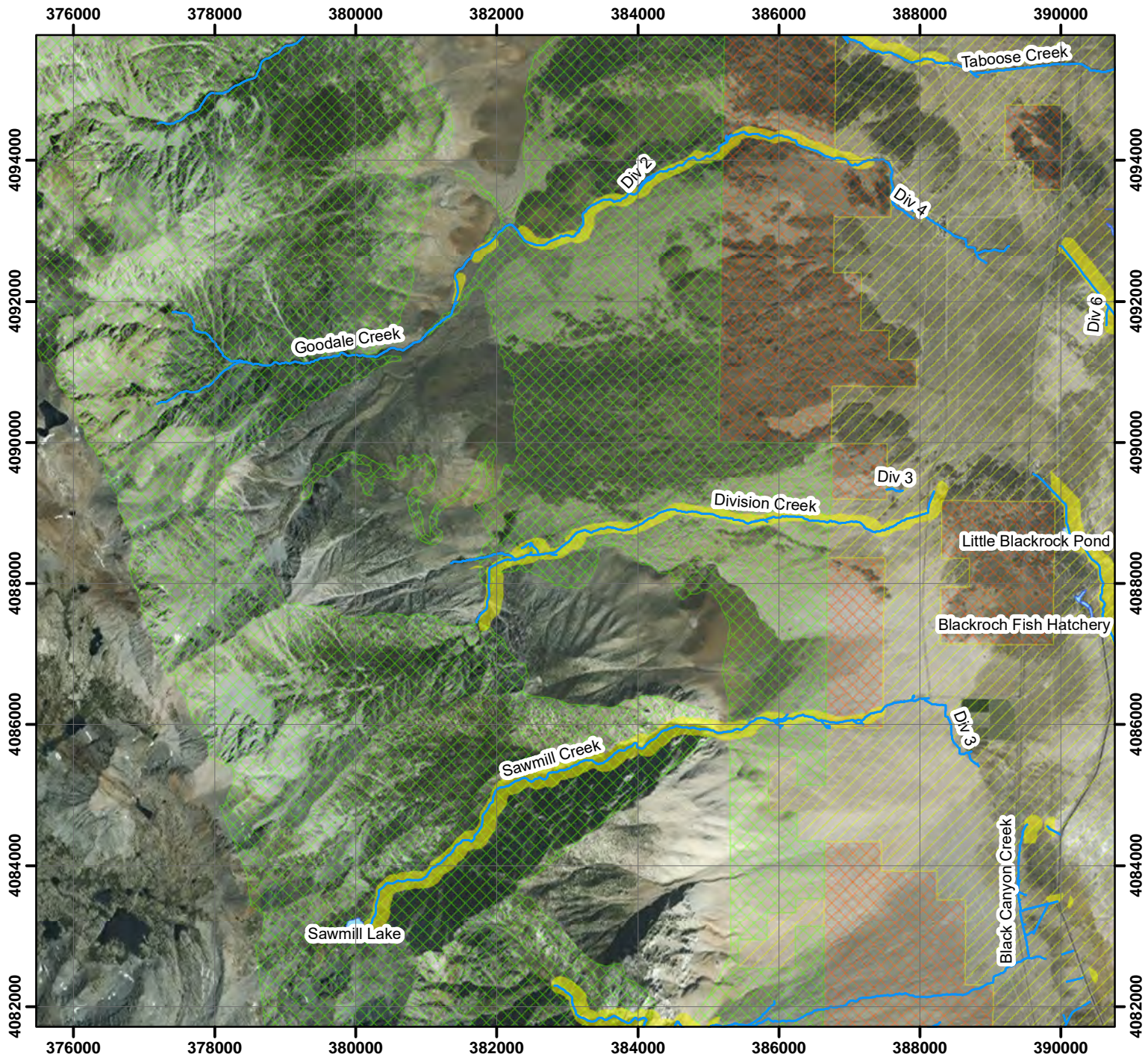


### Quad: BLACKROCK




- RMA Waterways
- CNDDDB Occurance Record
- LADWP
- BLM
- Inyo National Forest





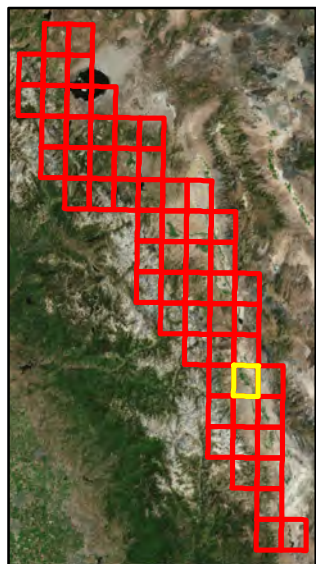
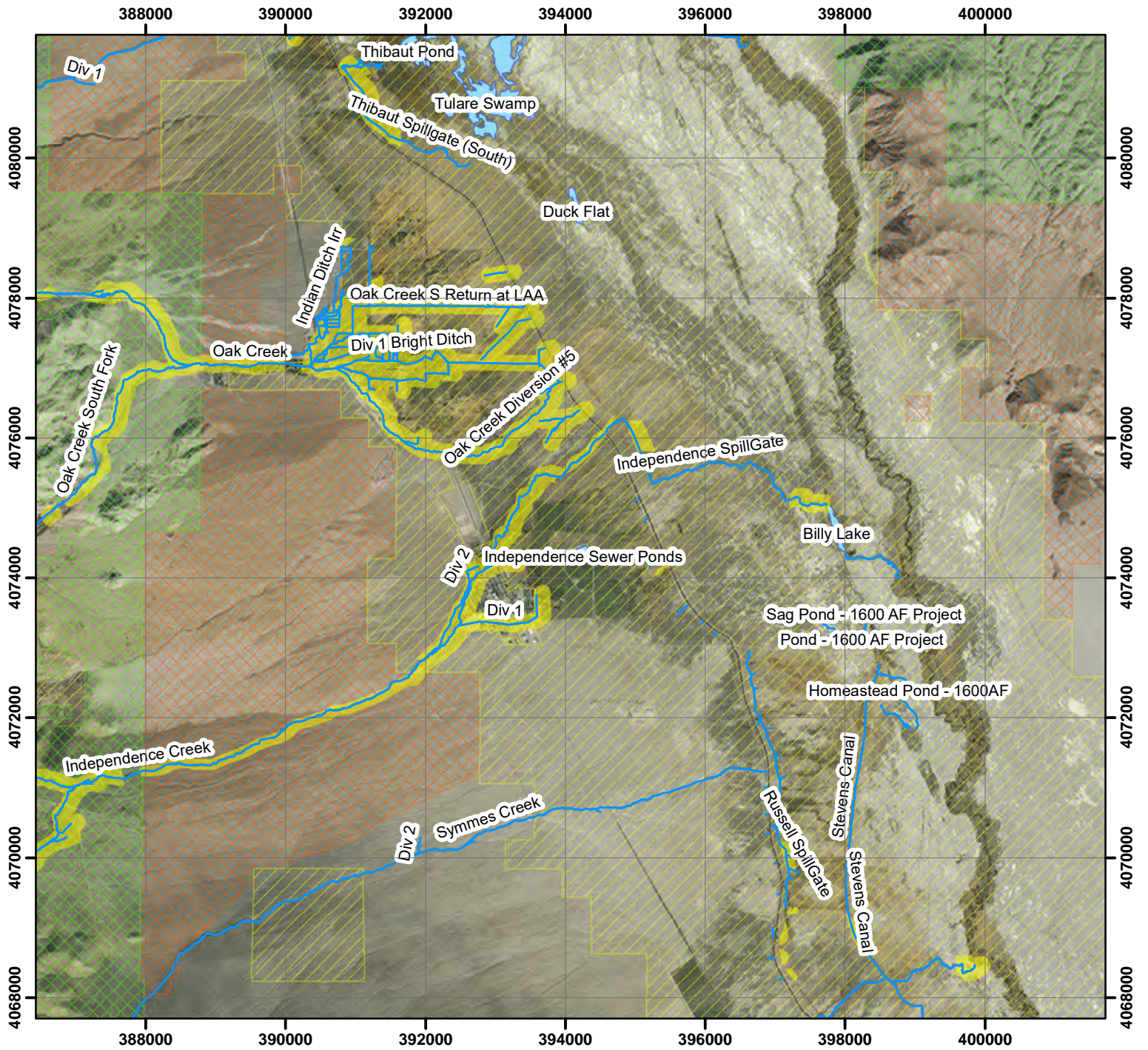


**Quad: ABERDEEN**

-  RMA Waterways
-  CNDDDB Occurance Record
-  LADWP
-  BLM
-  Inyo National Forest

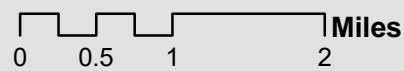




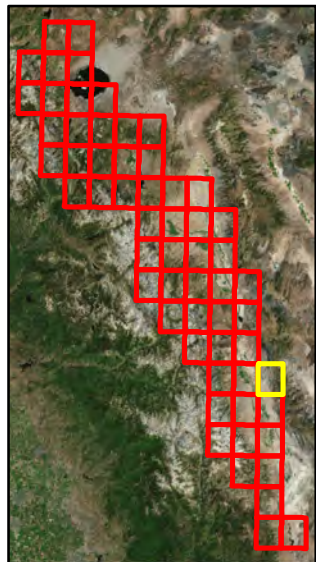
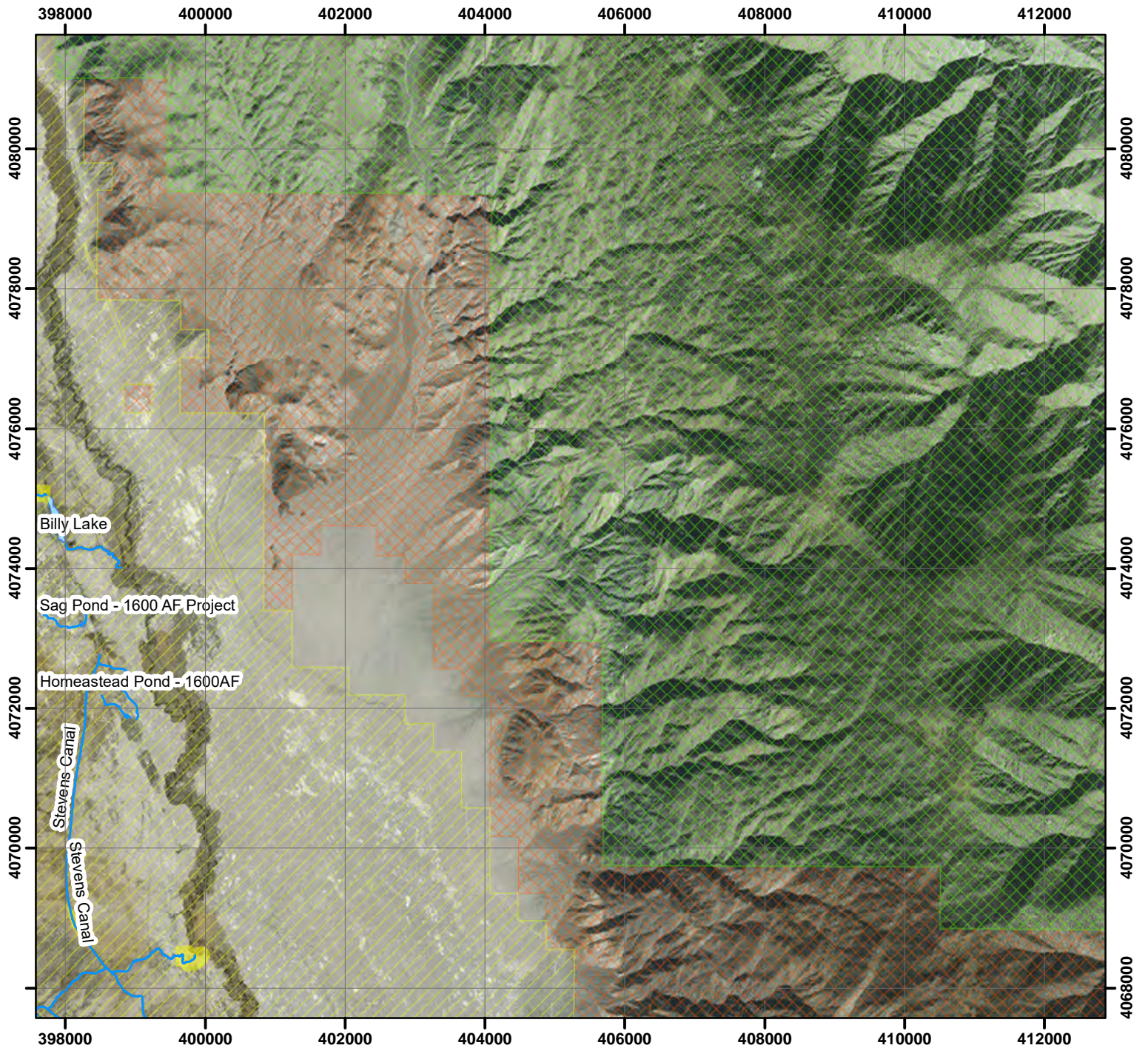


### Quad: INDEPENDENCE






- RMA Waterways
- CNDDB Occurance Record
- LADWP
- BLM
- Inyo National Forest

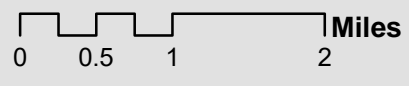




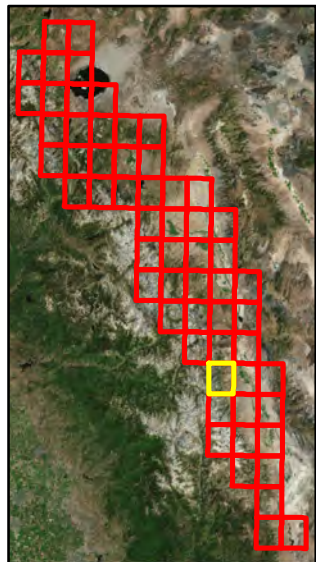
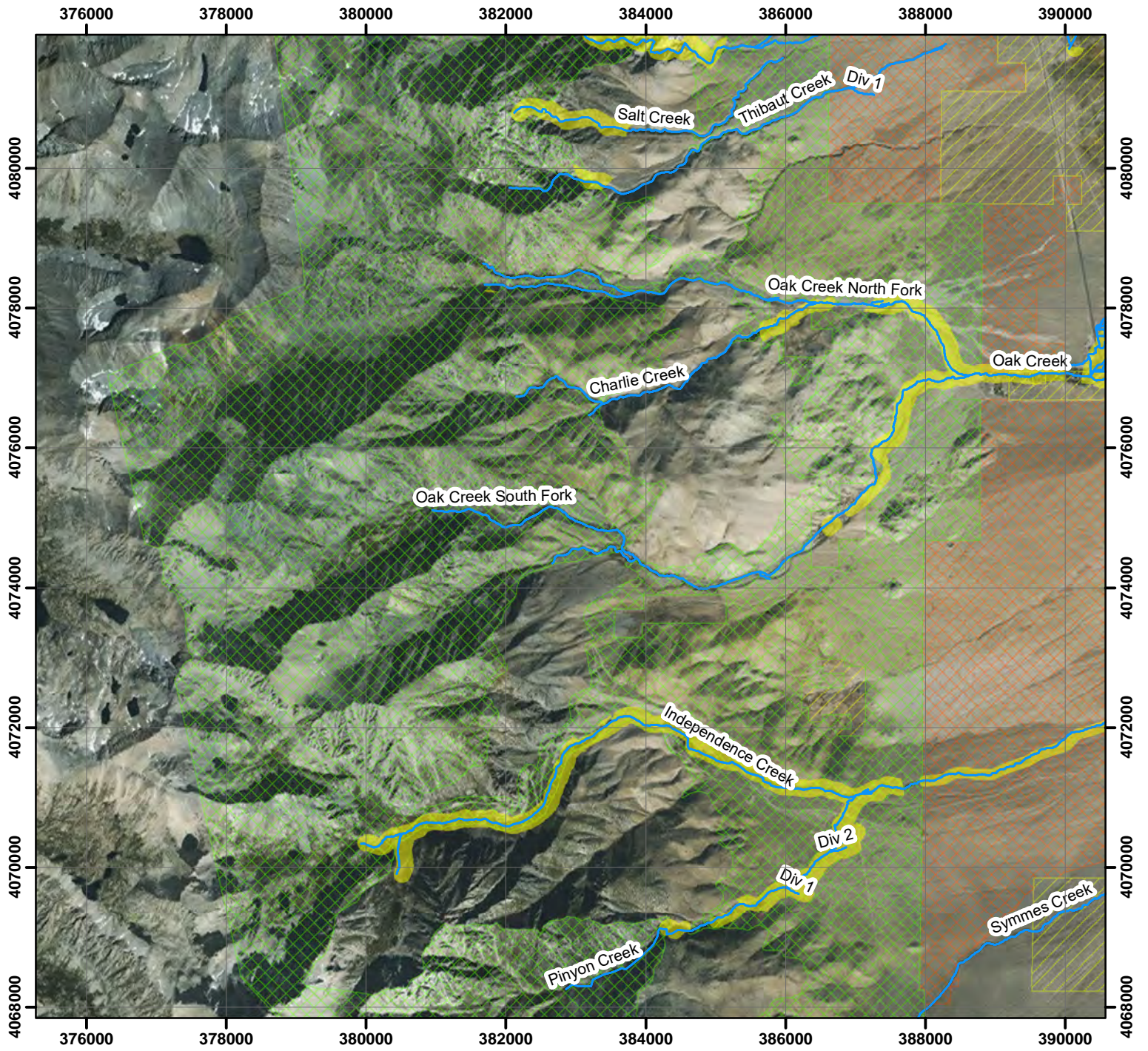


### Quad: BEE SPRINGS CANYON

-  RMA Waterways
-  CNDDB Occurance Record
-  LADWP
-  BLM
-  Inyo National Forest

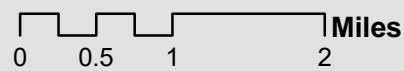




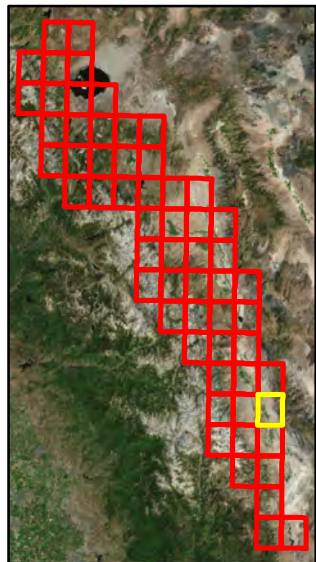
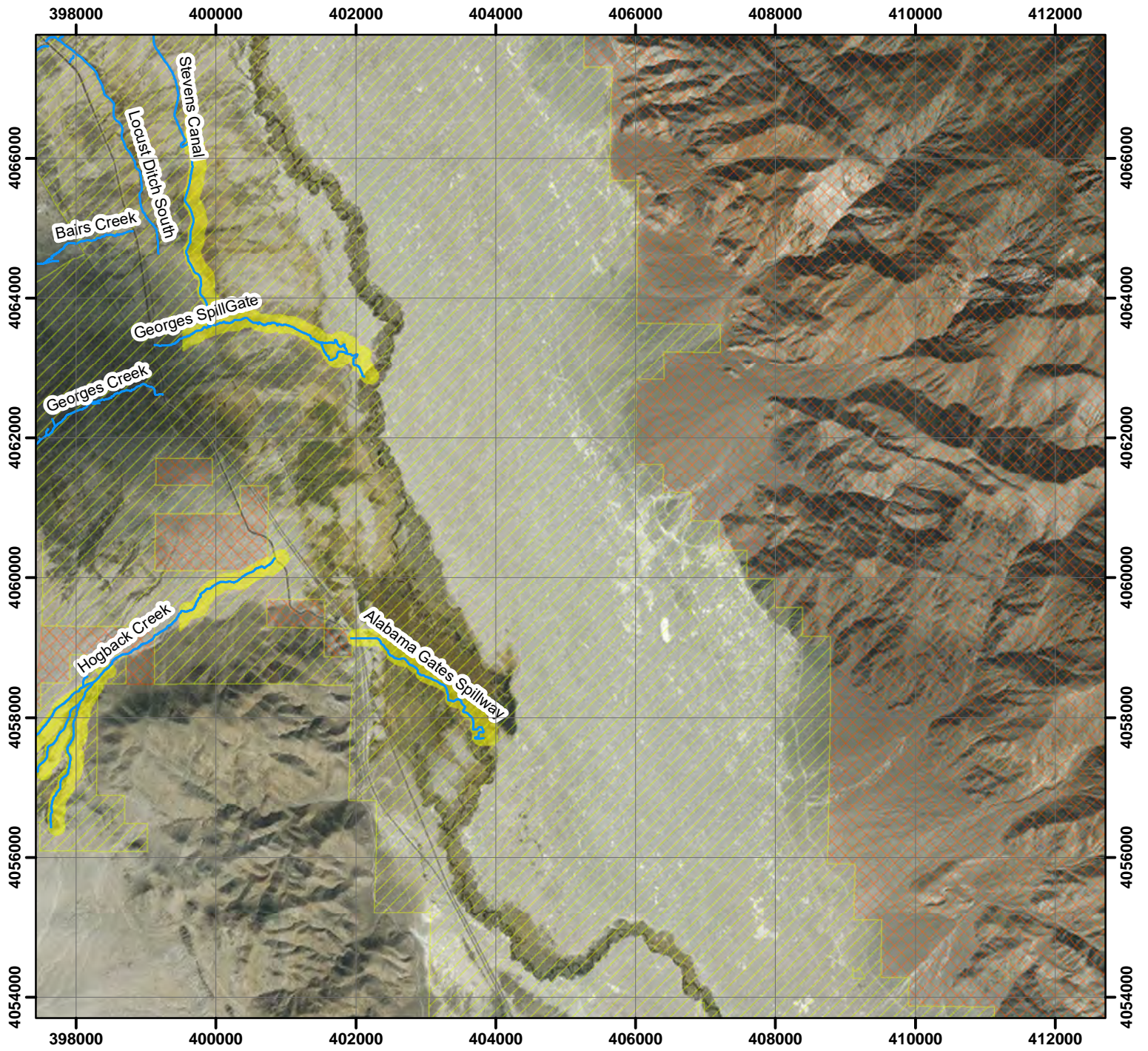


### Quad: KEARSARGE PEAK

- RMA Waterways
- CNDDDB Occurance Record
- LADWP
- BLM
- Inyo National Forest





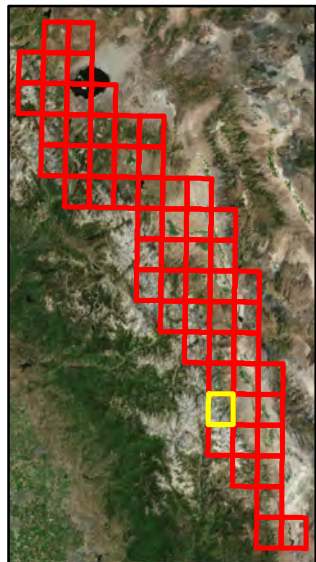
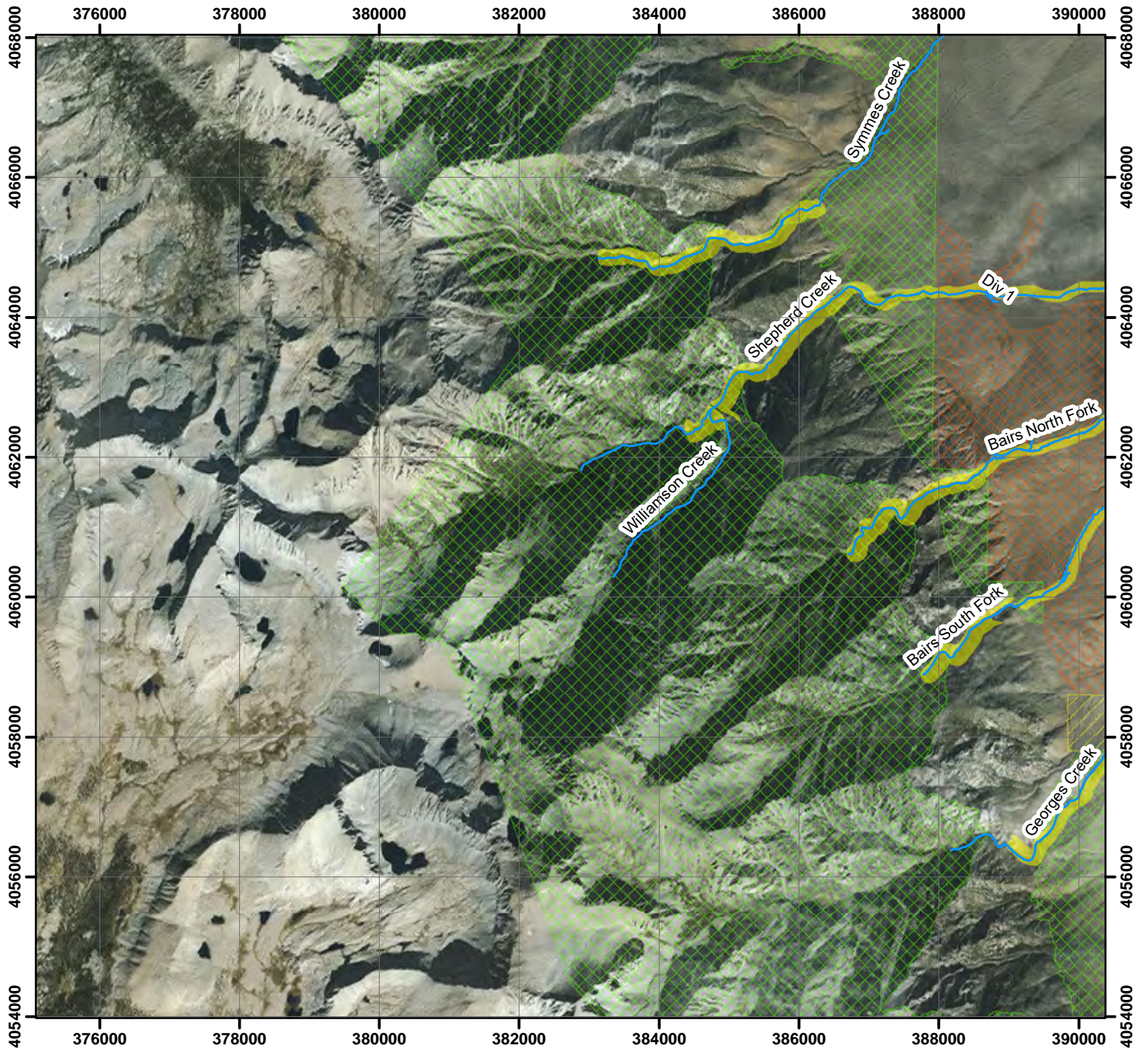


### Quad: UNION WASH

- RMA Waterways
- CNDDDB Occurance Record
- LADWP
- BLM
- Inyo National Forest





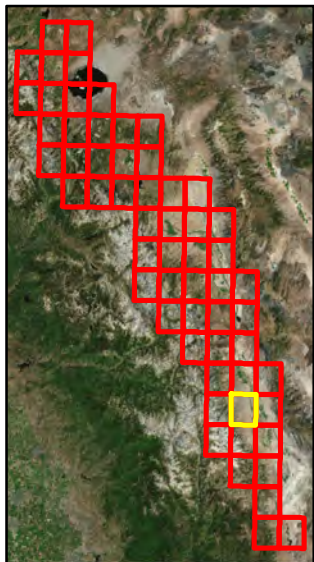
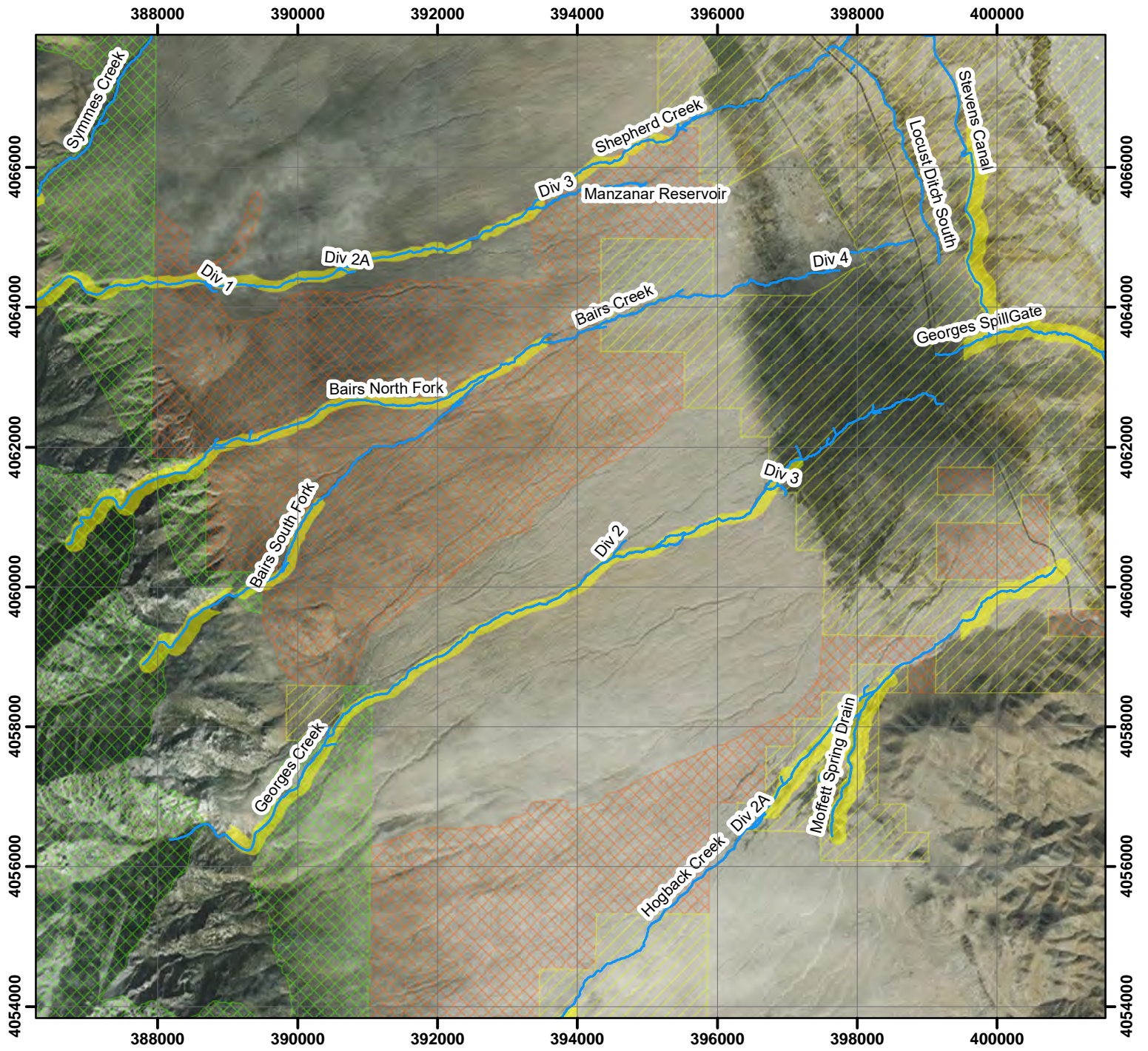


### Quad: MOUNT WILLIAMSON






- RMA Waterways
- CNDDDB Occurrence Record
- LADWP
- BLM
- Inyo National Forest





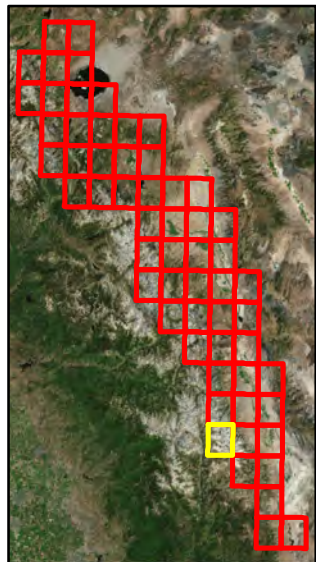


**Quad: MANZANAR**




-  RMA Waterways
-  CNDDB Occurrence Record
-  LADWP
-  BLM
-  Inyo National Forest





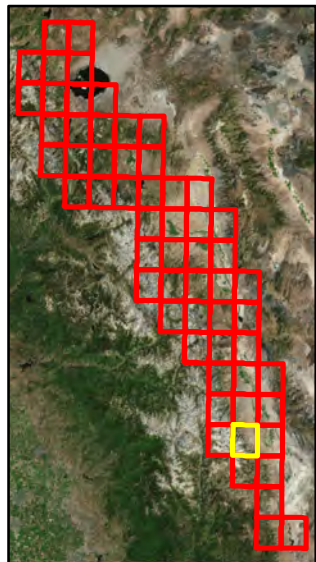
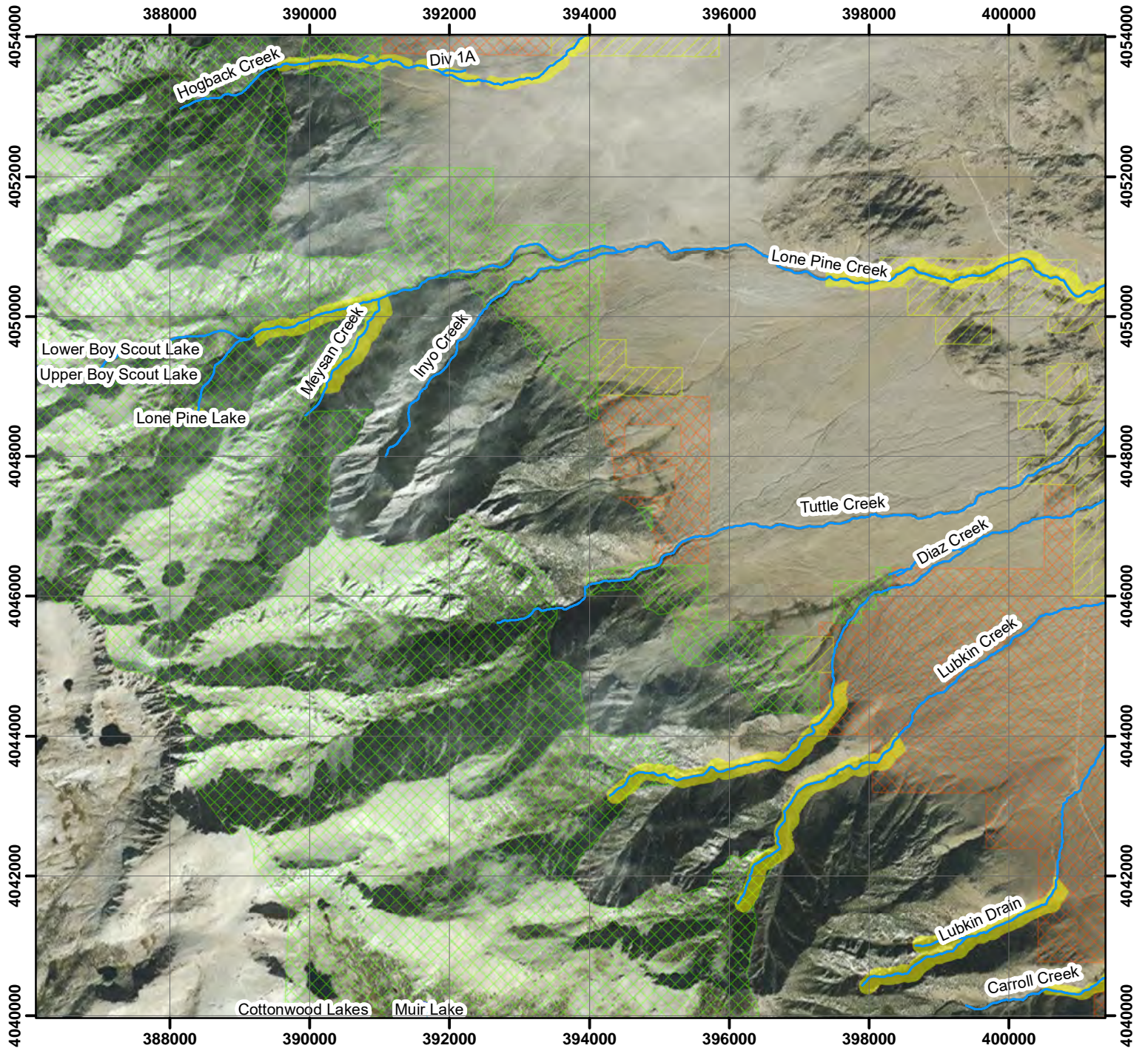


**Quad: MOUNT WHITNEY**

-  RMA Waterways
-  CNDDB Occurance Record
-  LADWP
-  BLM
-  Inyo National Forest

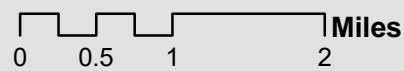




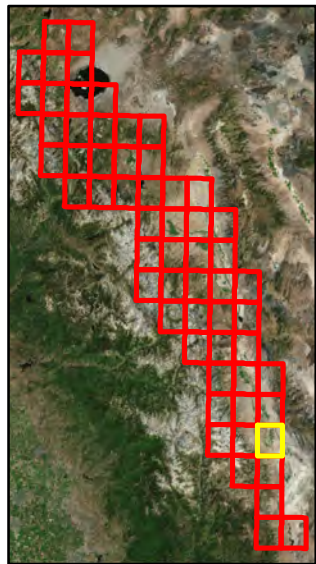
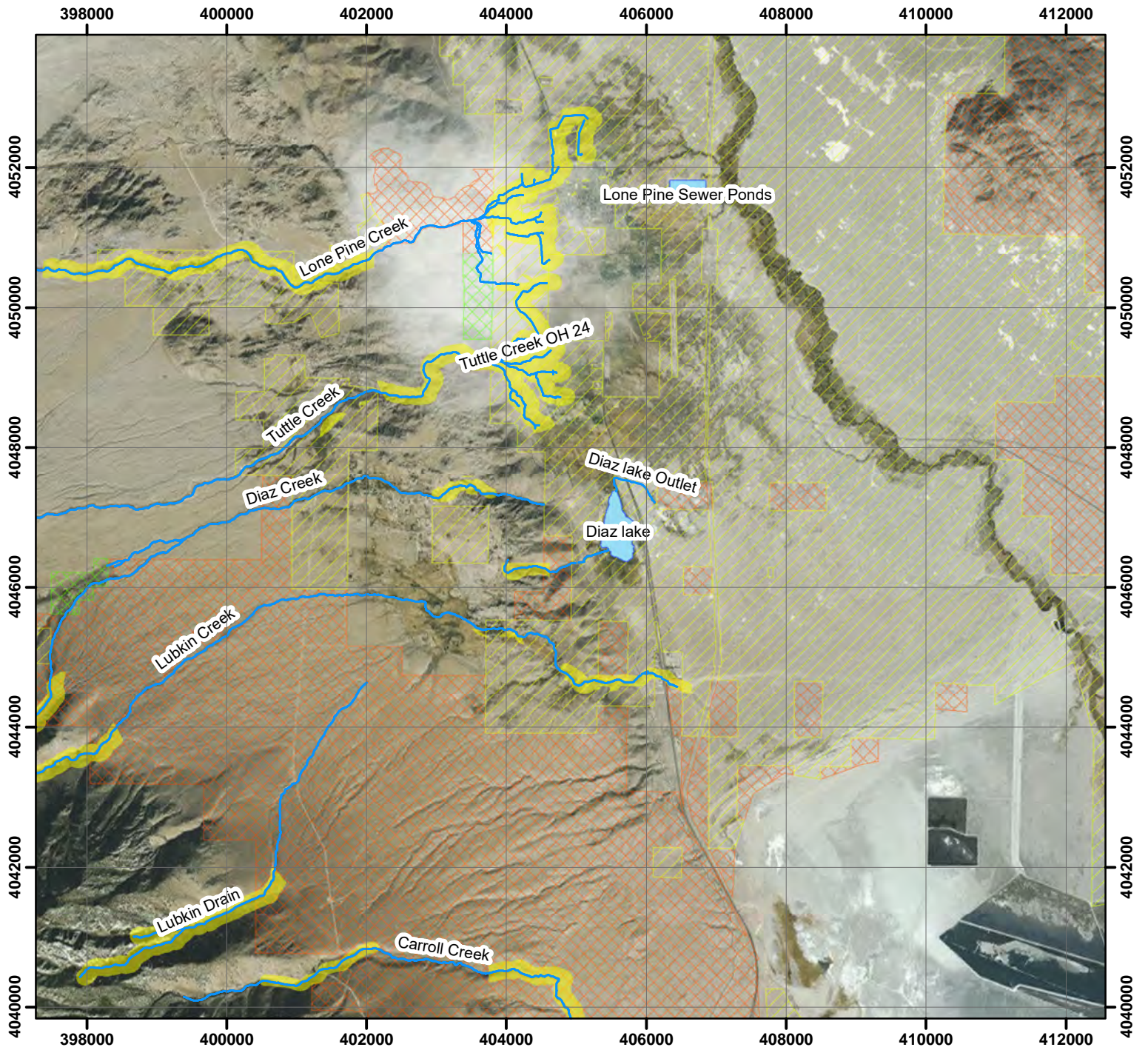


### Quad: MOUNT LANGLEY

- RMA Waterways
- CNDDB Occurrence Record
- LADWP
- BLM
- Inyo National Forest

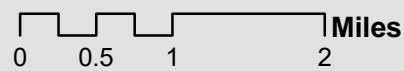




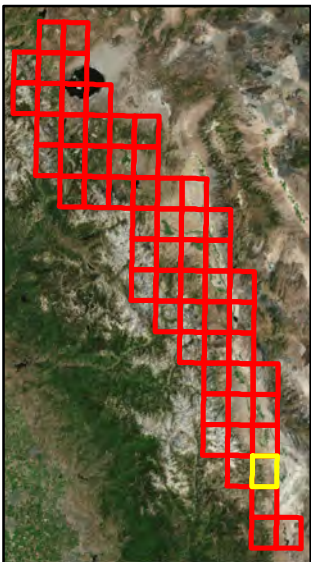
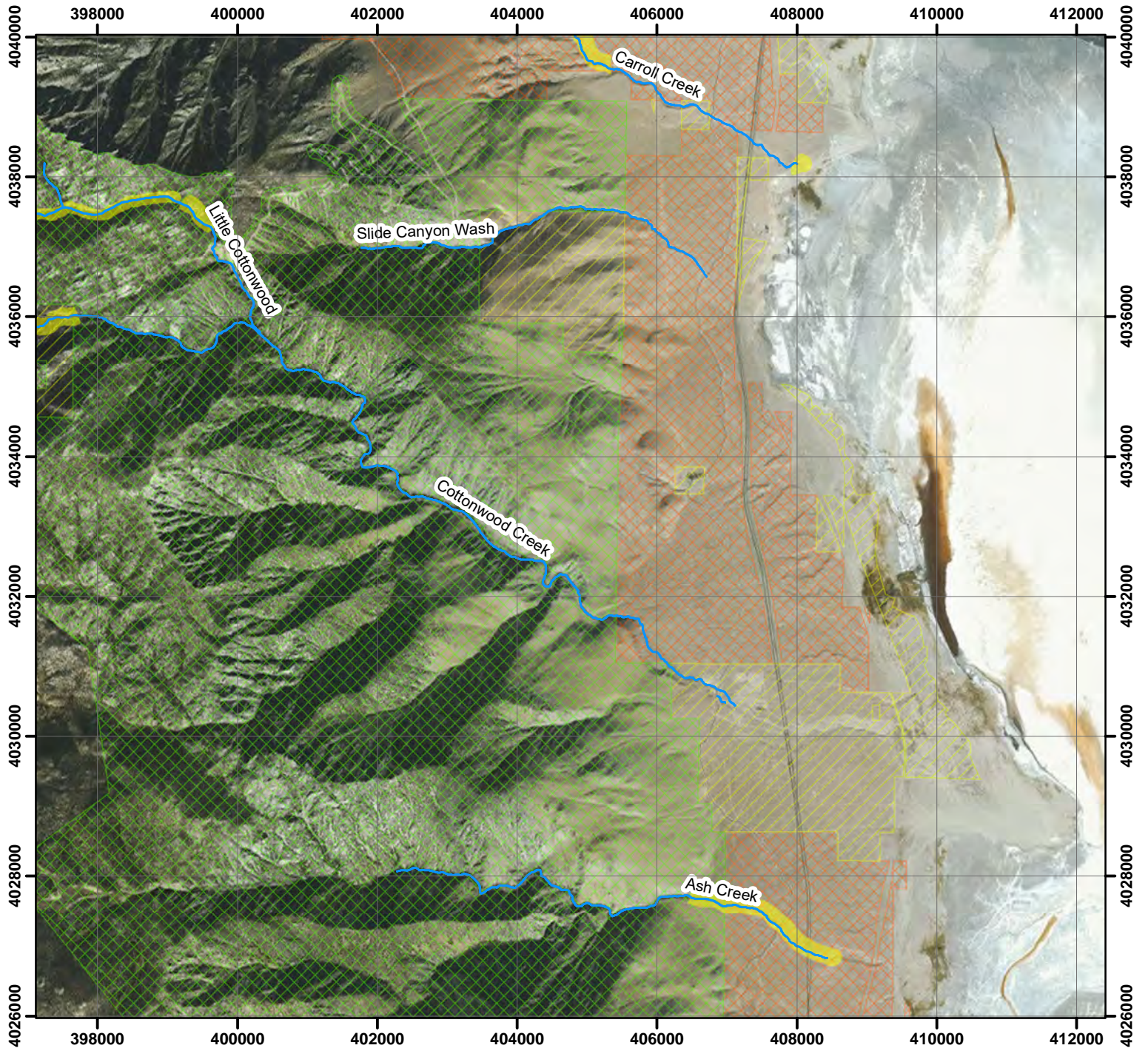


### Quad: LONE PINE



- RMA Waterways
- CNDDDB Occurrence Record
- LADWP
- BLM
- Inyo National Forest







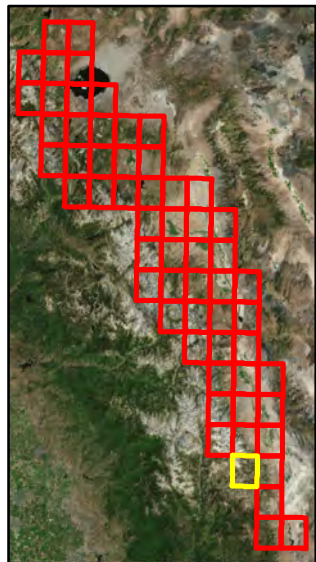
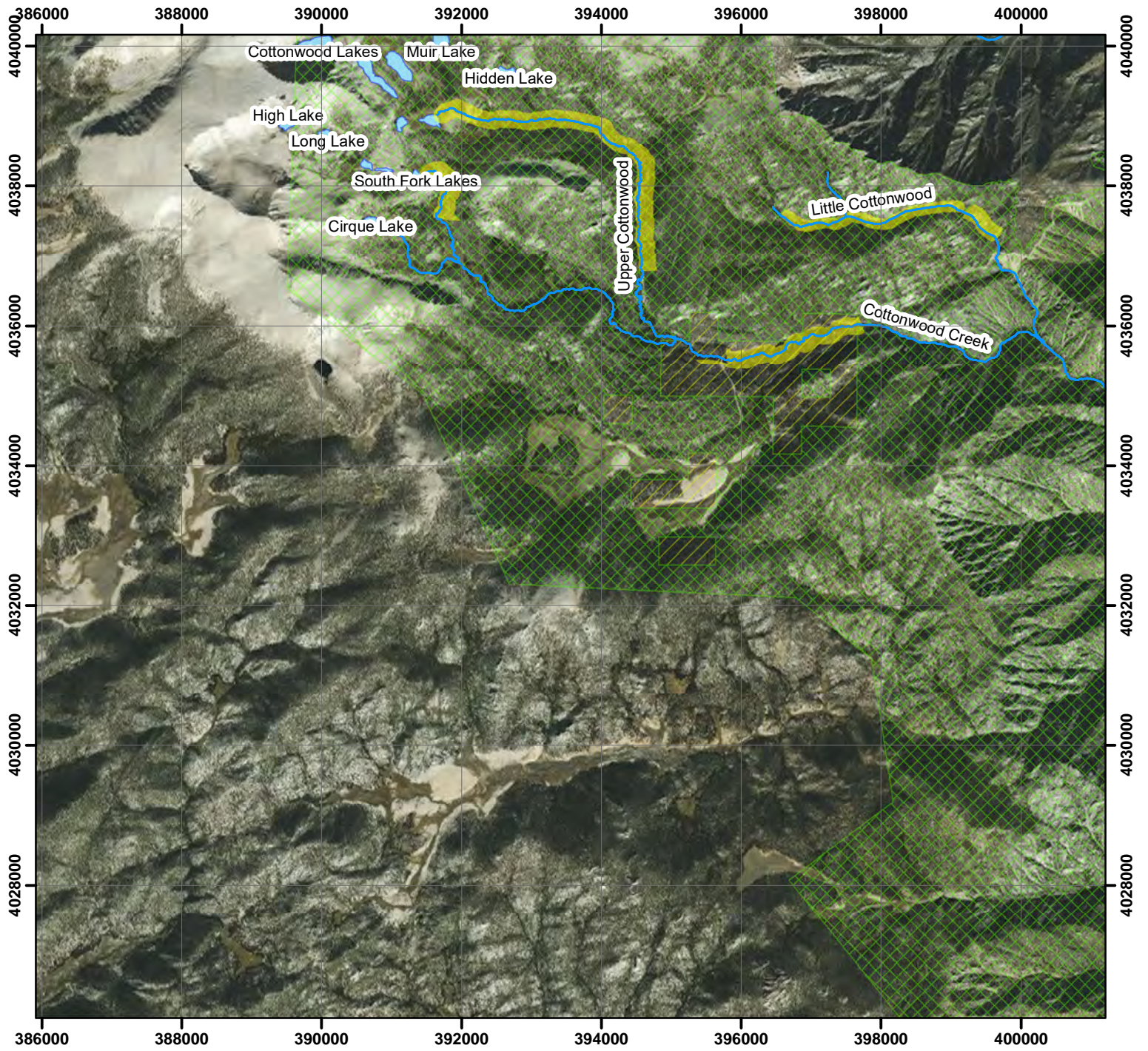
**Quad: BARTLETT**

-  RMA Waterways
-  CNDDB Occurrence Record
-  LADWP
-  BLM
-  Inyo National Forest

 Miles





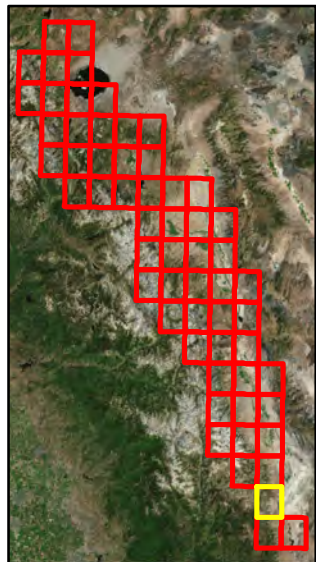
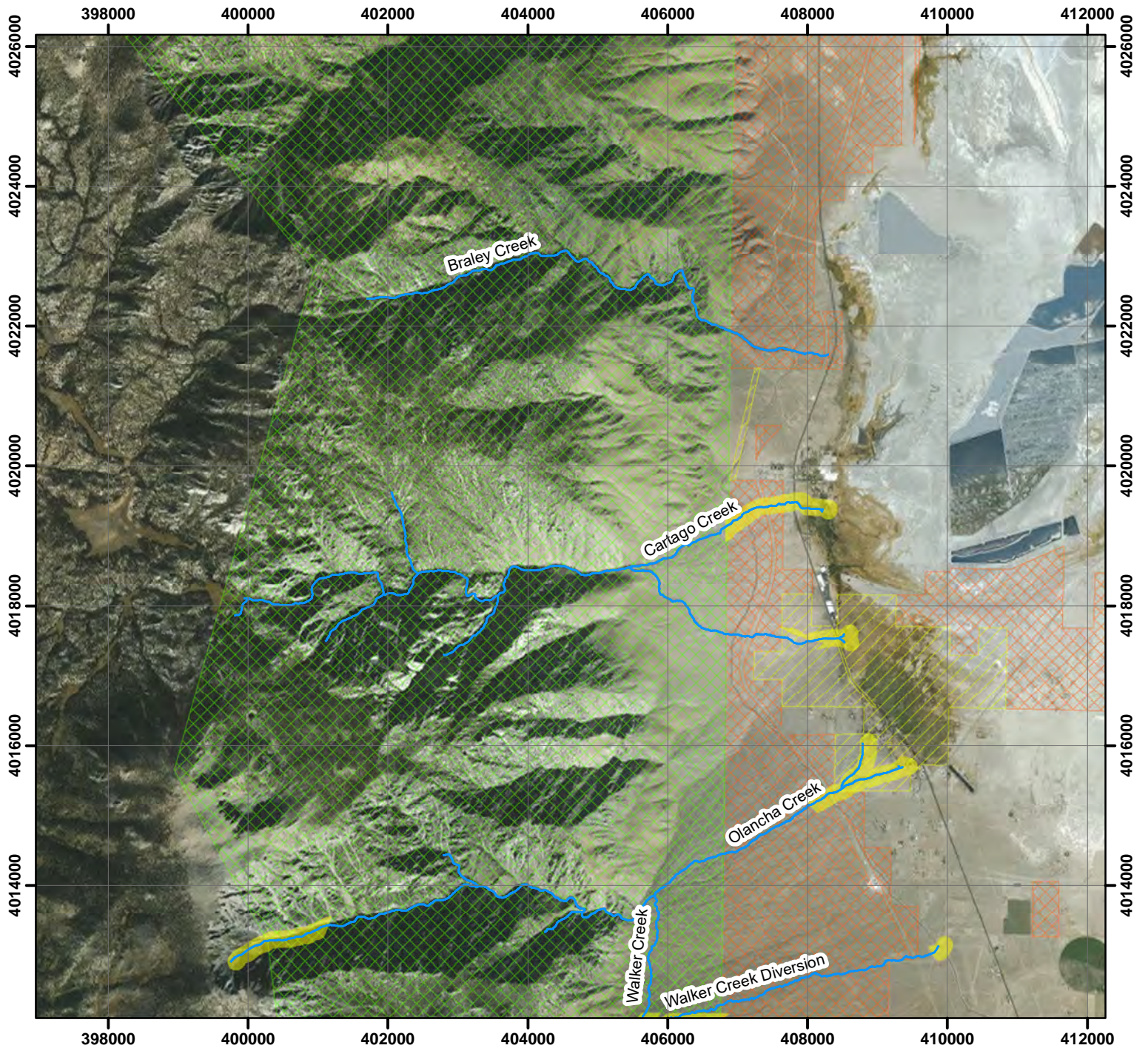


### Quad: CIRQUE PEAK

- RMA Waterways
- CNDDDB Occurrence Record
- LADWP
- BLM
- Inyo National Forest

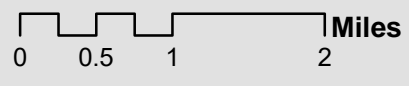




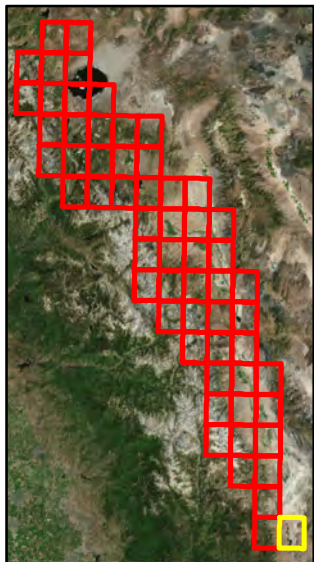
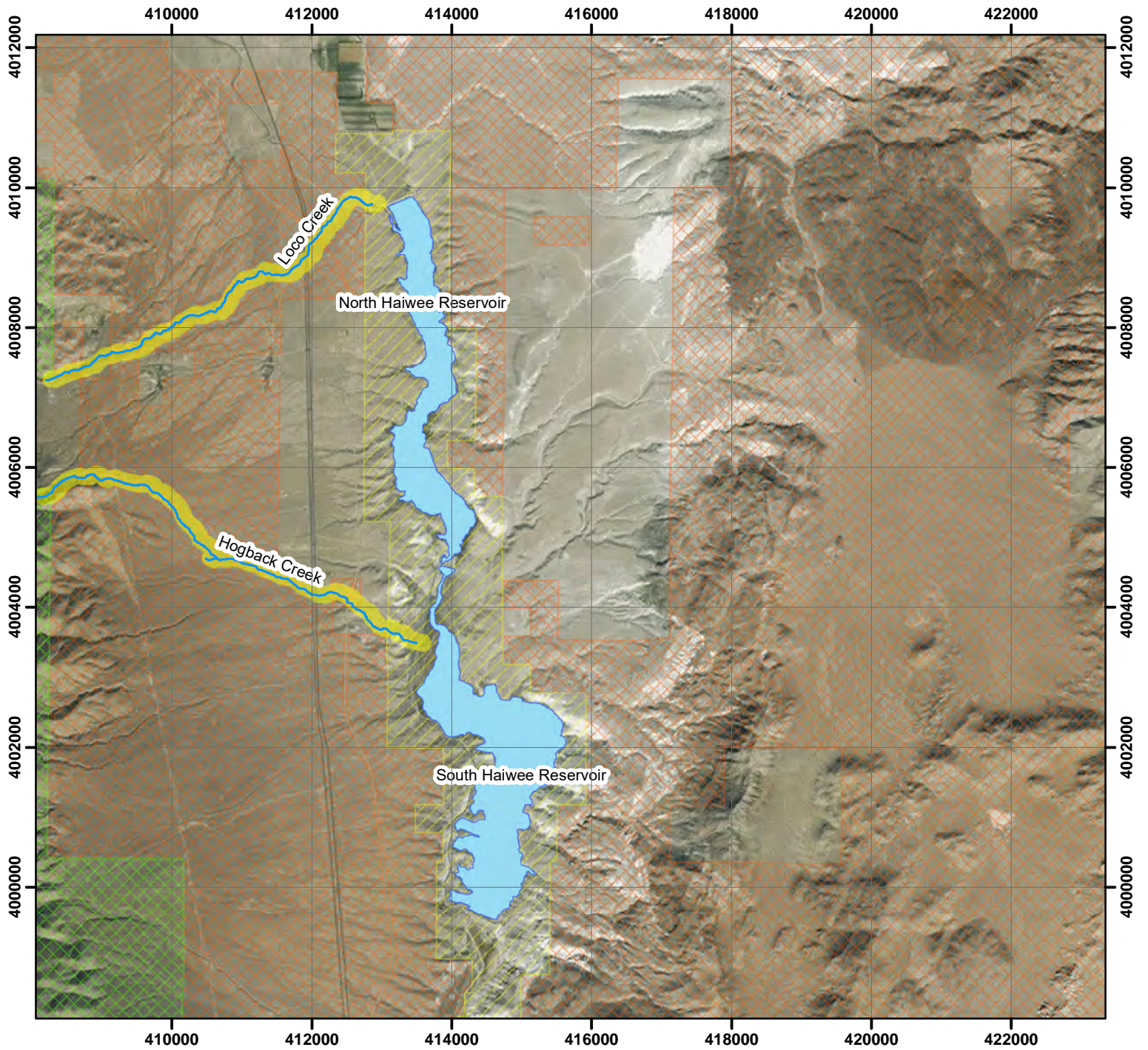


### Quad: OLANCHA





- RMA Waterways
- CNDDB Occurrence Record
- LADWP
- BLM
- Inyo National Forest

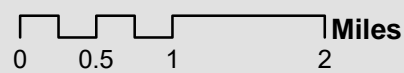




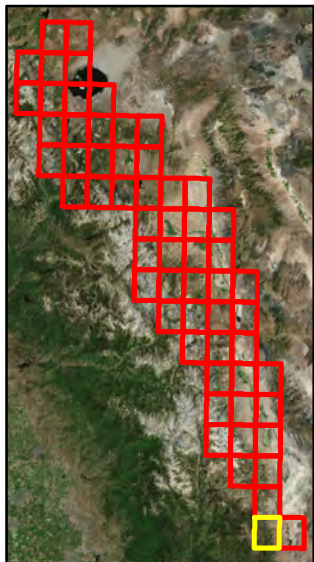
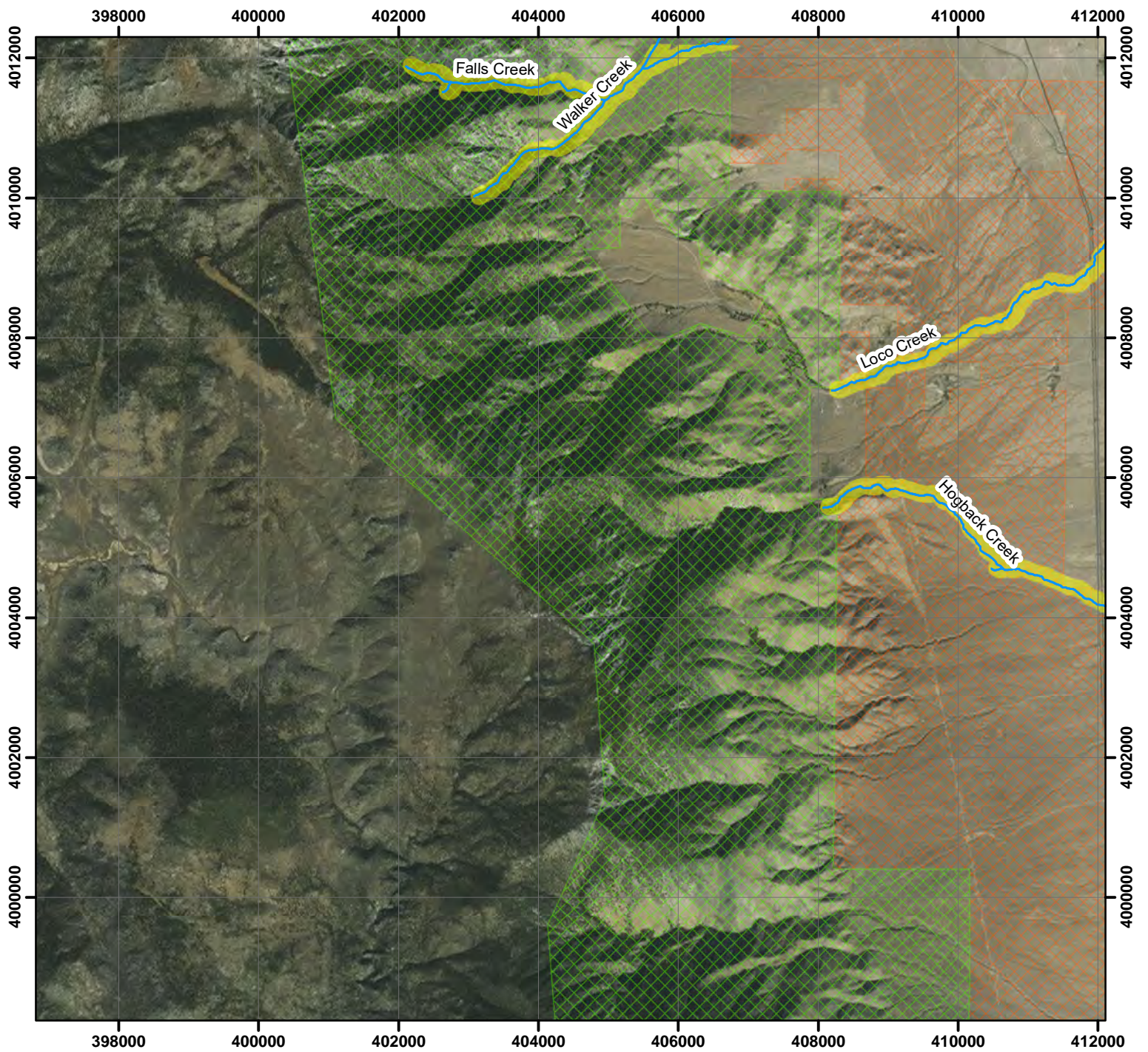


### Quad: HAIWEE RESERVOIRS






-  RMA Waterways
-  CNDDDB Occurrence Record
-  LADWP
-  BLM
-  Inyo National Forest

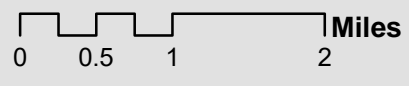






### Quad: HAIWEE PASS

-  RMA Waterways
-  CNDDDB Occurrence Record
-  LADWP
-  BLM
-  Inyo National Forest



**Appendix B**  
**Master Waterways List**



## Master Waterways List

Name	Constructed in Uplands	Modified or Re-Routed Reaches of Natural	Terminal	Returns	Classification in the RMA	District
Alabama Gates Drain Ditch A, B, C	Yes	No	yes		Intermittent man-made waterway	Independence
Alabama Gates Spill Return to the River South	Yes	No	No	Owens River	Intermittent man-made waterway	Independence
Alabama Gates Spill Return to the River East	Yes	No	No	Owens River	Intermittent man-made waterway	Independence
Blackrock Diversions	Yes	No			Intermittent man-made waterway	Independence
1 (Lacey),	Yes	No	yes		Intermittent man-made waterway	Independence
2 (Winterton)	Yes	No	yes		Intermittent man-made waterway	Independence
3 Drew	Yes	No	yes		Intermittent man-made waterway	Independence
4 Drew	Yes	No	yes		Intermittent man-made waterway	Independence
5 (Wagonner 2),	Yes	No	yes		Intermittent man-made waterway	Independence
8 (Wagonner Main),	Yes	No	yes		Intermittent man-made waterway	Independence
9, Tillemans,	Yes	No	No	Goose Lake	Intermittent man-made waterway	Independence
10 (to Upper Twin)	Yes	No	yes		Intermittent man-made waterway	Independence
Blackrock Hatchery Diversion	Yes	No	No	LAA	Intermittent man-made waterway	Independence
Blackrock Hatchery Siphon	Yes	No	No	Owens River	Intermittent man-made waterway	Independence
Diaz Diversions A	Yes	No	yes		Intermittent man-made waterway	Independence
Diaz Diversions B	Yes	No	yes		Intermittent man-made waterway	Independence
Diaz Outlet Diversions	Yes	No	yes		Intermittent man-made waterway	Independence
Diaz Siphon Spillgate	Yes	No	yes		Intermittent man-made waterway	Independence
Hines Spring Well 355 Ditch	Yes	No	yes		Intermittent man-made waterway	Independence
Homestead Project Ditches	Yes	No	yes		Intermittent man-made waterway	Independence
Independence Creek Diversions 1, 2, 3	Yes	Yes	yes		Intermittent man-made waterway	Independence
LAA Diversion -Thibaut South Diversion	Yes	No	yes		Intermittent man-made waterway	Independence
LAA Diversion-Thibaut East Diversion	Yes	No	yes		Intermittent man-made waterway	Independence
LAA Diversion-Russell Spillgate Diversion	Yes	No	yes		Intermittent man-made waterway	Independence
LAA Diversion-Dean Spillgate Diversion	Yes	No	yes		Intermittent man-made waterway	Independence
LAA Diversion-Georges Spillgate Diversion	Yes	No	No	Owens River	Intermittent man-made waterway	Independence
LAA Diversion-Indian/Spainhower Spillgate Diversion	Yes	No	yes		Intermittent man-made waterway	Independence
Locust Ditch South	Yes	No	yes		Intermittent man-made waterway	Independence
Locust Ditch Locust Return to River	Yes	No	No	Owens River	Intermittent man-made waterway	Independence
Locust Spillgate -South	Yes	No	yes		Intermittent man-made waterway	Independence
Locust Spillgate - East Div	Yes	No	No	Owens River	Intermittent man-made waterway	Independence
Lone Pine Creek Diversions	Yes	Yes			Intermittent man-made waterway	Independence
Lone Pine Creek Diversions -Overheads (OH) 8	Yes	Yes	yes		Intermittent man-made waterway	Independence
Lone Pine Creek Diversions -Overheads (OH) 10	Yes	Yes	yes		Intermittent man-made waterway	Independence
Lone Pine Creek Diversions -Overheads (OH) 12	Yes	Yes	yes		Intermittent man-made waterway	Independence
Lone Pine Creek Diversions -Overheads (OH) 14	Yes	Yes	yes		Intermittent man-made waterway	Independence
Lone Pine Creek Diversions -Overheads (OH) 20	Yes	Yes	yes		Intermittent man-made waterway	Independence
Lone Pine Creek Diversion 7	Yes	Yes	yes		Intermittent man-made waterway	Independence
Lone Pine Creek Diversion 9	Yes	Yes	yes		Intermittent man-made waterway	Independence
Lone Pine Creek Diversions -Overhead (OH) 19 sandtrap	Yes	Yes	No	LAA	Intermittent man-made waterway	Independence
Oak Creek Diversion - Kemp	Yes	Yes	No	LAA	Intermittent man-made waterway	Independence
Oak Creek Diversion - Bright	Yes	Yes	yes		Intermittent man-made waterway	Independence

Name	Constructed in Uplands	Modified or Re-Routed Reaches of Natural	Terminal	Returns	Classification in the RMA	District
Oak Creek Diversion - Diversion 5	Yes	Yes	No	LAA	Intermittent man-made waterway	Independence
Reinhackle Ditch (north of spring and south to HWY 395)	Yes	No	yes		Intermittent man-made waterway	Independence
Stevens Ditch	Yes	No	yes		Intermittent man-made waterway	Independence
Taboose Creek Diversion 7	Yes	No	No	Owens River	Intermittent man-made waterway	Independence
Taboose Creek Diversion 9	Yes	No	No	Owens River	Intermittent man-made waterway	Independence
Tuttle Creek Diversion OH 23 Lone Pine Golf Course	Yes	Yes	yes		Intermittent man-made waterway	Independence
Tuttle Creek Diversion OH 24 Lone Pine Golf Course	Yes	Yes	yes		Intermittent man-made waterway	Independence
Tuttle Creek Diversion OH 25	Yes	Yes	yes		Intermittent man-made waterway	Independence
Tuttle Creek Diversion OH 26	Yes	Yes	yes		Intermittent man-made waterway	Independence
Tuttle Creek Diversion OH 27	Yes	No	No	LAA	Intermittent man-made waterway	Independence
Well 349 Impoundment	Yes	No	yes		Intermittent man-made waterway	Independence
Well 349 Ditch	Yes	No	No	Owens River	Intermittent man-made waterway	Independence
Ditches Below Spreading Diversion Structures on all creeks	Yes	No	yes		Intermittent man-made waterway	Independence
Well Ditches	Yes	No	yes		Intermittent man-made waterway	Independence
4X Ditch	Yes	No	No	BCC	Intermittent man-made waterway	Bishop
4H Ditch	Yes	No	No	BCC	Intermittent man-made waterway	Bishop
A-1 Drain (east of diversion to Bishop Creek Canal)	Yes	No	No	BCC	Intermittent man-made waterway	Bishop
B-3 Ditch (From N. Indian)	Yes	No	No	BCC	Intermittent man-made waterway	Bishop
Baker Creek Diversions	Yes	Yes	No	BPC	Intermittent man-made waterway	Bishop
Baker Creek Return	Yes	No	No	BPC	Intermittent man-made waterway	Bishop
Baker Creek Bypass	Yes	No	No	BPC	Intermittent man-made waterway	Bishop
Bell Canyon Ditch	Yes	Yes	No	BPC	Intermittent man-made waterway	Bishop
Big Pine Canal Diversions	Yes	No	No	Owens River	Intermittent man-made waterway	Bishop
Big Pine Canal	Yes	No	No	Owens River	Intermittent man-made waterway	Bishop
Big Pine Creek to Fish Springs	Yes	Yes	No	Owens River	Intermittent man-made waterway	Bishop
Bishop Creek Canal Diversions	Yes	No	No	Owens River	Intermittent man-made waterway	Bishop
C1 Ditch (Round Valley)	Yes	No	No	Owens River	Intermittent man-made waterway	Bishop
C-1 Return Ditch (Round Valley)	Yes	No	No	Owens River	Intermittent man-made waterway	Bishop
C-3 Return (Round Valley)	Yes	No	No	Owens River	Intermittent man-made waterway	Bishop
Cement Ditch	Yes	No	No	BCC	Intermittent man-made waterway	Bishop
Cemetery Ditch	Yes	No	No	Owens River	Intermittent man-made waterway	Bishop
Cesprino Ditch	Yes	No	No	Owens River	Intermittent man-made waterway	Bishop
Convict Creek Diversions 3	No	Yes	yes		Intermittent man-made waterway	Bishop
Convict Creek Diversions 23	No	Yes	yes		Intermittent man-made waterway	Bishop
Convict Creek Diversions 25	No	Yes	yes		Intermittent man-made waterway	Bishop
Convict Creek Diversions 26	No	Yes	No	Owens River	Intermittent man-made waterway	Bishop
Convict Creek Diversions 27	No	Yes	No	Owens River	Intermittent man-made waterway	Bishop
Convict Creek Diversions Eaton	No	Yes	No	Owens River	Intermittent man-made waterway	Bishop
Dairy Ditch	Yes	No	No	BCC	Intermittent man-made waterway	Bishop
Duggan Ditch	Yes	No	No	BCC	Intermittent man-made waterway	Bishop
F-10 Ditch	Yes	No	No	BCC	Intermittent man-made waterway	Bishop
Farmer's Ditch	Yes	No	yes		Intermittent man-made waterway	Bishop
Ford Rawson Canal	Yes	No	No	BCC	Intermittent man-made waterway	Bishop



Name	Constructed in Uplands	Modified or Re-Routed Reaches of Natural	Terminal	Returns	Classification in the RMA	District
George Collins Canal	Yes	No	No	Owens River	Intermittent man-made waterway	Bishop
George Ditch (Bishop)	Yes	No	No	BCC	Intermittent man-made waterway	Bishop
George Ditch (Big Pine)	Yes	No	No	BPC	Intermittent man-made waterway	Bishop
Gibbs Creek Diversions	No	No	No	Mono Lake	Intermittent man-made waterway	Bishop
Giraud Ditch	Yes	No	No	BCC	Intermittent man-made waterway	Bishop
Giroux Ditch (Big Pine)	Yes	No	No	BPC	Intermittent man-made waterway	Bishop
Giroux Ditch (Bishop)	Yes	No	No	BCC	Intermittent man-made waterway	Bishop
Grant Reservoir Spillway Flume	Yes	No	No	Mono Lake	Intermittent man-made waterway	Bishop
Hall Ditch	Yes	No	No	BCC	Intermittent man-made waterway	Bishop
Harry Matlick Ditch	Yes	No	No	BCC	Intermittent man-made waterway	Bishop
Hession Ditch	Yes	Yes	No	BPC	Intermittent man-made waterway	Bishop
Hilton Creek West Branch Diversion	Yes	Yes	No	Crowley Lake	Intermittent man-made waterway	Bishop
Horton Creek Diversions	No	Yes	No	Owens River	Intermittent man-made waterway	Bishop
Hot Creek Diversions	No	Yes	No	Crowley Lake	Intermittent man-made waterway	Bishop
Indian Ditch	Yes	No	No	BCC	Intermittent man-made waterway	Bishop
I - 1 Ditch	Yes	No	No	BCC	Intermittent man-made waterway	Bishop
I - 2 Ditch	Yes	No	No	BCC	Intermittent man-made waterway	Bishop
Indian B Ditches	Yes	No	No	BCC	Intermittent man-made waterway	Bishop
Indian C Ditches	Yes	No	yes		Intermittent man-made waterway	Bishop
Indian D Ditches	Yes	No	No	BCC	Intermittent man-made waterway	Bishop
Indian (North)	Yes	No	No	BCC	Intermittent man-made waterway	Bishop
Indian (South)	Yes	No	No	BCC	Intermittent man-made waterway	Bishop
Indian Ditch (Big Pine)	Yes	No	yes		Intermittent man-made waterway	Bishop
Kingsley Ditch	Yes	No		BCC	Intermittent man-made waterway	Bishop
Klondike Lake Return	Yes	No		Owens River	Intermittent man-made waterway	Bishop
Knight Diversion Ditch	Yes	No		BPC	Intermittent man-made waterway	Bishop
Laws Waste	Yes	No		Owens River	Intermittent man-made waterway	Bishop
Lee Vining Creek Diversion	No	Yes		Mono Lake	Intermittent man-made waterway	Bishop
Lyman Ditch	Yes	No		Owens River	Intermittent man-made waterway	Bishop
Maciver Ditch	Yes	No		BCC	Intermittent man-made waterway	Bishop
Maciver Return Ditch	Yes	No		BCC	Intermittent man-made waterway	Bishop
Mammoth Creek Diversions	No	Yes		Crowley Lake	Intermittent man-made waterway	Bishop
Mason Ditch	Yes	No		BCC	Intermittent man-made waterway	Bishop
Matlick Return Ditch	Yes	No		BCC	Intermittent man-made waterway	Bishop
McGee Creek Diversions	No	Yes		Crowley Lake	Intermittent man-made waterway	Bishop
McNally (Upper) Canal & Diversions	Yes	No	yes		Intermittent man-made waterway	Bishop
McNally (Lower) Canal & Diversions	Yes	No	yes		Intermittent man-made waterway	Bishop
Mendenhall Ditch	Yes	No		BPC	Intermittent man-made waterway	Bishop
Mikey's Slough	Yes	No	yes		Intermittent man-made waterway	Bishop
Mill Creek Diversions	No	Yes		BCC	Intermittent man-made waterway	Bishop
Nelligan Ditch	Yes	No		BCC	Intermittent man-made waterway	Bishop
Newlon Ditch	Yes	No		BCC	Intermittent man-made waterway	Bishop
Noble Ditch	Yes	No		BCC	Intermittent man-made waterway	Bishop

Name	Constructed in Uplands	Modified or Re-Routed Reaches of Natural	Terminal	Returns	Classification in the RMA	District
Noren Ditch	Yes	No		BCC	Intermittent man-made waterway	Bishop
A. O. Collins Canal	Yes	No		Owens River	Intermittent man-made waterway	Bishop
Orcier Ditch	Yes	No		BCC	Intermittent man-made waterway	Bishop
Otey Ditch	Yes	No		BCC	Intermittent man-made waterway	Bishop
Owens River Canal	Yes	No	yes		Intermittent man-made waterway	Bishop
Owens River Diversion #17	No	Yes		Owens River	Intermittent man-made waterway	Bishop
Parker Creek Diversions	No	Yes	yes		Intermittent man-made waterway	Bishop
Paiute Creek Ditch	Yes	No	yes		Intermittent man-made waterway	Bishop
Pine Creek Diversions	No	Yes		Owens River	Intermittent man-made waterway	Bishop
Production Well Conveyance Ditches	Yes	No		Owens River	Intermittent man-made waterway	Bishop
Red Hill Ditch	Yes	No	yes		Intermittent man-made waterway	Bishop
Red Mountain Creek Diversions #1	Yes	No	yes		Intermittent man-made waterway	Bishop
Red Mountain Creek Diversions #2	Yes	No	yes			
Rock Creek Bypass Ditch	Yes	No		Crowley Lake	Intermittent man-made waterway	Bishop
Rock Creek Diversions	No	Yes		Crowley Lake	Intermittent man-made waterway	Bishop
Saddle Club Ditch	Yes	No		Owens River	Intermittent man-made waterway	Bishop
Schildor Return (West side of Brockman)	Yes	No		BCC	Intermittent man-made waterway	Bishop
Sanger Ditch	Yes	No	yes		Intermittent man-made waterway	Bishop
Sierra Street Ditch (LA owns diversion struc., ditch is on private pr	Yes	No		BCC	Intermittent man-made waterway	Bishop
Silver Canyon Creek Ditch (downstream of upper flume)	Yes	Yes	yes		Intermittent man-made waterway	Bishop
Stewart Ditch	Yes	No		BPC	Intermittent man-made waterway	Bishop
Tatum Return Ditch	Yes	No		BCC	Intermittent man-made waterway	Bishop
Thompson Main	No	No		Mono Lake	Intermittent man-made waterway	Bishop
Thompson (Upper)	No	Yes		Mono Lake	Intermittent man-made waterway	Bishop
Tinemaha Creek Diversions	Yes	Yes	yes		Intermittent man-made waterway	Bishop
Tom Key Ditch	Yes	No		BCC	Intermittent man-made waterway	Bishop
Tommy Smith Ditch	Yes	No		BCC	Intermittent man-made waterway	Bishop
Tule Elk Ditch	Yes	No		Tinemaha	Intermittent man-made waterway	Bishop
Wonacott Ditch	Yes	No		BCC	Intermittent man-made waterway	Bishop
Yaney Ditch	Yes	No		BCC	Intermittent man-made waterway	Bishop
Yaney Return Ditch	Yes	No		BCC	Intermittent man-made waterway	Bishop
Young Ditch	Yes	No		BCC	Intermittent man-made waterway	Bishop
Talus Creek	No	Yes	yes		Intermittent Streams and Washes	Independence
Richter Creek	No	Yes	yes		Intermittent Streams and Washes	Independence
Blackrock Ditch from Los Angeles Aqueduct	Yes	No		Owens River	Perennial Man-made Waterway	Independence
Goose Lake Return	Yes	No		Owens River	Perennial Man-made Waterway	Independence
Independence Spill Gate to River	Yes	No		Owens River	Perennial Man-made Waterway	Independence
Los Angeles Aqueduct	Yes	No		LAFP	Perennial Man-made Waterway	Independence
A Drain	Yes	No		Owens River	Perennial Man-made Waterway	Bishop
A-1 Bypass	Yes	No		BCC	Perennial Man-made Waterway	Bishop
A-1 Drain (west of diversion to Bishop Creek Canal)	Yes	No		BCC	Perennial Man-made Waterway	Bishop
B Drain	Yes	No		BCC	Perennial Man-made Waterway	Bishop
Big Pine Canal (Intake to Big Pine Creek)	Yes	No		Owens River	Perennial Man-made Waterway	Bishop



Name	Constructed in Uplands	Modified or Re-Routed Reaches of Natural	Terminal	Returns	Classification in the RMA	District
Bishop Creek Canal	Yes	No		Owens River	Perennial Man-made Waterway	Bishop
C Drain	Yes	No		BCC	Perennial Man-made Waterway	Bishop
Evans Drain	Yes	No		BCC	Perennial Man-made Waterway	Bishop
Fish Springs Canal	Yes	No		Owens River	Perennial Man-made Waterway	Bishop
Fish Slough Return	Yes	No		Owens River	Perennial Man-made Waterway	Bishop
Indian (Main) Ditch	Yes	No		BCC	Perennial Man-made Waterway	Bishop
Keough Ditch	Yes	No		BCC	Perennial Man-made Waterway	Bishop
Matlick Ditch	Yes	No		BCC	Perennial Man-made Waterway	Bishop
Mill Ditch	Yes	No		Mono Lake	Perennial Man-made Waterway	Bishop
Rawson Canal	Yes	No		BCC	Perennial Man-made Waterway	Bishop
Saunders Pond Return	Yes	No		Owens River	Perennial Man-made Waterway	Bishop
South Fork Waste	No	No		Owens River	Perennial Man-made Waterway	Bishop
Warm Springs ponds and ditches	Yes	No		Owens River	Perennial Man-made Waterway	Bishop
Ash Creek	No	Yes	No	LAA	Perennial Streams	Independence
Bairs Creek (North & South)	No	Yes	No	LAA	Perennial Streams	Independence
Black Canyon Creek	No	Yes	No	LAA	Perennial Streams	Independence
Bralee Creek	No	Yes	No	LAA	Perennial Streams	Independence
Carrol Creek	No	Yes	No	LAA	Perennial Streams	Independence
Cartago Creek	No	Yes	No	Owens Lake	Perennial Streams	Independence
Cottonwood Creek	No	Yes	No	LAA	Perennial Streams	Independence
Diaz Creek	No	Yes	No	LAA	Perennial Streams	Independence
Division Creek	No	Yes	No	Owens River	Perennial Streams	Independence
Georges Creek	No	Yes	No	LAA	Perennial Streams	Independence
Goodale Creek	No	Yes	No	Owens River	Perennial Streams	Independence
Haiwee Canyon Creek	No	Yes	No	LAA	Perennial Streams	Independence
Hogback Creek	No	Yes	No	LAA	Perennial Streams	Independence
Independence Creek	No	Yes	No	LAA	Perennial Streams	Independence
Laurel Creek	No	Yes	No	LAA	Perennial Streams	Independence
Loco Creek	No	Yes	No	LAA	Perennial Streams	Independence
Lone Pine Creek	No	Yes	No	Owens River	Perennial Streams	Independence
Lubkin Creek	No	Yes	No	LAA	Perennial Streams	Independence
Oak Creek (North)	No	Yes	No	LAA	Perennial Streams	Independence
Oak Creek (South)	No	Yes	No	LAA	Perennial Streams	Independence
Oak Creek (below junction of N & S)	No	Yes	No	LAA	Perennial Streams	Independence
Olancha Creek	No	Yes	No	Owens Lake	Perennial Streams	Independence
Owens River	No	Yes	No	LAA	Perennial Streams	Independence
Pinyon Creek	No	Yes	No	LAA	Perennial Streams	Independence
Red Mountain Creek	No	Yes	No	Owens River	Perennial Streams	Independence
Sanchez Spring #17B	No	Yes	No	Owens River	Perennial Streams	Independence
Sawmill Creek	No	Yes	No	LAA	Perennial Streams	Independence
Scotty's Spring	No	Yes	No	Owens River	Perennial Streams	Independence
Shepards Creek	No	Yes	No	LAA	Perennial Streams	Independence
Symmec Creek	No	Yes	No	LAA	Perennial Streams	Independence

Name	Constructed in Uplands	Modified or Re-Routed Reaches of Natural	Terminal	Returns	Classification in the RMA	District
Taboose Creek	No	Yes	No	Owens River	Perennial Streams	Independence
Thibaut Creek	No	Yes	No	Owens River	Perennial Streams	Independence
Tinemaha Creek	No	Yes	No	Owens River	Perennial Streams	Independence
Tuttle Creek	No	Yes	No	LAA	Perennial Streams	Independence
Walker Creek	No	Yes	No	LAA	Perennial Streams	Independence
Baker Creek	No	Yes	No	Owens River	Perennial Streams	Bishop
Big Pine Creek	No	Yes	No	Owens River	Perennial Streams	Bishop
Birch Creek ( Big Pine)	No	Yes	No	Owens River	Perennial Streams	Bishop
Birch Creek ( Bishop)	No	Yes	No	Owens River	Perennial Streams	Bishop
Bishop Creek	No	Yes	No	Owens River	Perennial Streams	Bishop
Bohler Creek	No	Yes	No	Mono Lake	Perennial Streams	Bishop
China Slough	No	Yes	No	Owens River	Perennial Streams	Bishop
Coldwater Canyon Creek	No	Yes	Yes		Perennial Streams	Bishop
Convict Creek	No	Yes	No	Crowley Lake	Perennial Streams	Bishop
Coyote Creek	No	Yes	No	Bishop Creek	Perennial Streams	Bishop
Crooked Creek	No	Yes	No	Crowley Lake	Perennial Streams	Bishop
Dechambeau Creek	No	Yes	No	Mono Lake	Perennial Streams	Bishop
Egypt Creek	No	Yes	No	Bishop Creek	Perennial Streams	Bishop
Fish Slough	No	Yes	No	Owens River	Perennial Streams	Bishop
Flowing Wells	Yes	No	No	Owens River	Perennial Streams	Bishop
Freeman Creek	No	Yes	No	BPC	Perennial Streams	Bishop
Fuller Creek	No	Yes	No	Mono Lake	Perennial Streams	Bishop
Gibbs Creek	No	Yes	No	Mono Lake	Perennial Streams	Bishop
Gunter Creek	No	Yes	No	Mono Lake	Perennial Streams	Bishop
Hilton Creek	No	Yes	No	Crowley Lake	Perennial Streams	Bishop
Horton Creek	No	Yes	No	Owens River	Perennial Streams	Bishop
Hot Creek	No	Yes	No	Crowley Lake	Perennial Streams	Bishop
Laurel Creek	No	Yes	No	Crowley Lake	Perennial Streams	Bishop
Lee Vining Creek	No	Yes	No	Mono Lake	Perennial Streams	Bishop
Little McGee Creek	No	Yes	No	Owens River	Perennial Streams	Bishop
Little Pine Creek	No	Yes	No	Big Pine Creek	Perennial Streams	Bishop
Lower Rock Creek	No	Yes	No	Owens River	Perennial Streams	Bishop
Malone Springs	No	Yes	Yes		Perennial Streams	Bishop
Mammoth Creek	No	Yes	No	Crowley Lake	Perennial Streams	Bishop
McGee Creek	No	Yes	No	Crowley Lake	Perennial Streams	Bishop
Mill Creek (Mono Basin)	No	Yes	No	Mono Lake	Perennial Streams	Bishop
Owens River	No	Yes	No	LAA	Perennial Streams	Bishop
Parker Creek	No	Yes	No	Mono Lake	Perennial Streams	Bishop
Pine Creek	No	Yes	No	Owens River	Perennial Streams	Bishop
Rawson Creek	No	Yes	No	Owens River	Perennial Streams	Bishop
Red Mountain Creek	No	Yes	Yes		Perennial Streams	Bishop
Rock Creek	No	Yes	No	Owens River	Perennial Streams	Bishop
Rush Creek	No	Yes	No	Mono Lake	Perennial Streams	Bishop



Name	Constructed in Uplands	Modified or Re-Routed Reaches of Natural	Terminal	Returns	Classification in the RMA	District
Silver Canyon Creek	No	Yes	Yes		Perennial Streams	Bishop
Tinemaha Creek	No	Yes	No	Owens River	Perennial Streams	Bishop
Walker Creek	No	Yes	No	Mono Lake	Perennial Streams	Bishop
Wilson Creek	No	Yes	No	Mono Lake	Perennial Streams	Bishop
Buckley Ponds (Perennial)	Yes	No	No	Owens River	Ponds	Bishop
Duck Pond	Yes	No	No	Owens River	Ponds	Bishop
Duck Pond Drain canal to Saunders Pond	No	Yes	No	Owens River	Ponds	Bishop
Farmer's Ponds (Intermittent)	Yes	No	Yes		Ponds	Bishop
Rawson Pond	Yes	No	No	Owens River	Ponds	Bishop
Rawson Pond #3 Drain Canal	Yes	No	No	Owens River	Ponds	Bishop
Saunders Pond	Yes	No	No	Owens River	Ponds	Bishop
All Well Ditches (directly adjacent to LAA)	Yes	No	No	LAA	Other	Independence
Cottonwood Springs Ditch and Measuring Station	No	No	No	Owens Lake	Other	Independence
Haiwee Toe Drains	Yes	No	Yes		Other	Independence
Tinemaha Toe Drains (All)	Yes	No	No	Owens River	Other	Independence

**Appendix C**  
**Biological Resources Report for**  
**Routine Maintenance on Waterways**  
**in Inyo and Mono Counties**



# **BIOLOGICAL RESOURCES REPORT FOR ROUTINE MAINTENANCE ON WATERWAYS IN INYO AND MONO COUNTIES**

**May 2017**



**Prepared by:**

**Ms. Lori Gillem, Ms. Debbie House, Ms. Tammy Branson,  
Mr. Sherman Jensen, and Mr. Stuart Richardson**

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## Introduction

Ongoing activities by the Los Angeles Department of Water and Power (LADWP) in Inyo and Mono Counties include water gathering, water distribution, hydroelectric power production, and continuation of other land uses. To support water gathering and distribution, LADWP performs routine maintenance of flumes, measuring stations, water intake and diversion structures, sand traps or sediment basins, and spillgates. Routine maintenance ensures the continued safe and reliable operation of these waterways and facilities. This biological resources report has been prepared to support renewal of an existing Routine Maintenance Agreement from the California Department of Fish and Wildlife (CDFW) under Section 1602 of the Fish and Game Code, and a long-term maintenance permit from the Lahontan Regional Water Quality Control Board (Regional Board). This report contains a description of existing biological resources conditions for the relevant waterways, describes impacts related to maintenance activities and details measures that are implemented during maintenance for the protection of natural resources.

## Project Area

The project area includes all waterways in Inyo and Mono Counties where LADWP measuring stations and diversions are present, and where routine maintenance activities are conducted. Work within these waterways for water conveyance has been performed in some locations for the last 100 years. The project area was defined to encompass each waterway with an associated buffer of 800 feet total (400 feet on each side of each waterway from the center of the channel out to the banks, capturing the extent of the riparian limits into upland habitat). Although routine maintenance activities identified under the project are not expected to occur beyond the bed, bank or channel of these waterways, an extensive buffer was created to analyze all potential impacts to species, including potential noise impacts to nesting birds and other breeding wildlife.

To display the waterways identified in the project area, associated buffer, and the ArcGIS and California Natural Diversity Database (CNDDDB) special-status species occurrence records, a pdf mapbook was generated (Appendix A of the IS/MND for Long-Term Routine Maintenance Activities for Waterways in Inyo and Mono Counties). A query was also performed in the waterway layer to determine the total length of each category of waterway for the entire project area. Table 1 depicts the total length of waterways by category within Inyo and Mono Counties. The total linear length of all waterways is approximately 1363.3 miles, of this distance approximately 151 miles of waterways are routinely maintained. The 151 miles of maintained waterways assumes that the entire length of canals (Bishop, Big Pine, Ford Rawson, George Collins, Upper



and Lower McNally, Blackrock Ditch, and Owens River) are maintained and that 100 feet above and below 1695 structures and culverts is also maintained. The locations of the waterways, structures, and culverts that are summarized in Tables 1 and 2 are shown in Figure 1.

**Table 1. Total waterway length by category within the project area.**

<b>Waterway Description</b>	<b>Waterway Length (miles)</b>
Canal	87.1
Creek	819.3
Ditch	214.0
Diversion	115.5
River	127.4
<b>Grand Total</b>	<b>1363.3</b>

**Table 2. Structures and Culverts within the Project Area**

<b>Type</b>	<b>Count</b>
Structure	1148
Culvert	547
<b>Total</b>	<b>1695</b>

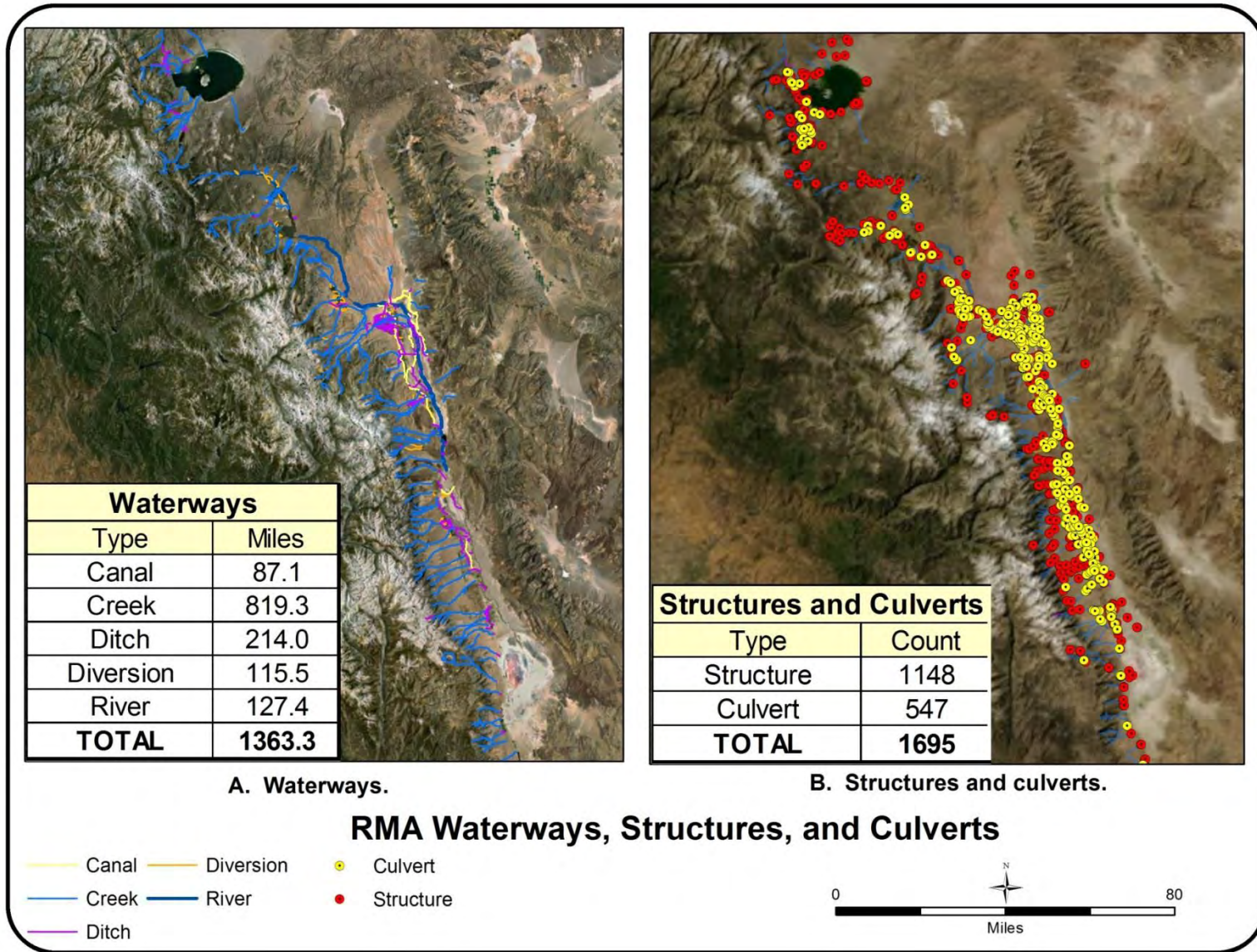


Figure 1. Locations of Waterways, Structures, and Culverts

## Natural Communities

Vegetation in the Owens Valley is controlled by the arid to semi-arid conditions, the high salinity of soil, and the presence of a shallow water table. Vegetation communities within the maintenance area include emergent wetland, alkali meadow, rush-sedge meadow, riparian forest and riparian shrub (modified from Cheatham and Haller 1975).

Emergent wetlands occur throughout the maintenance area in locations with surface water and near surface water. Dominant species include cattail (*Typha* spp.) and bulrush or tule (*Schoenoplectus acutus*). Under some conditions, these native species become invasive and efforts to control them are ongoing.

Alkali meadow and rush sedge meadow communities occur throughout the maintenance area in locations with high water tables. Dominant alkali meadow species are tolerant of high salinity and alkalinity. These species include alkali sacaton (*Sporobolus airoides*) and salt grass (*Distichlis spicata*). The rush-sedge meadow communities are dominated by Nebraska sedge (*Carex nebraskensis*) and Baltic rush (*Juncus balticus*).

Riparian forest and shrub communities occur along the Owens River and along streams draining from the Sierra Nevada. Common tree species include Fremont cottonwood (*Populus fremontii*), Gooding's black willow (*Salix gooddingii*), and red willow (*Salix laevigata*). Understory species include coyote willow (*Salix exigua*), Woods' rose (*Rosa woodsii*), grasses, rushes and sedges. Saltcedar (*Tamarix ramosissima*) and perennial pepperweed (*Lepidium latifolium*), nonnative species, have invaded many riparian areas in the maintenance area, and efforts to eradicate them are ongoing.

## Common Wildlife

Wildlife species are closely associated with the various vegetation communities described above.

The aquatic communities in the maintenance area include aquatic invertebrates such as nonnative Crayfish (*Procambarus clarkii* and *Pacifastacus leniisculus*), native Mussels (*Anodonta* spp.), Spring Snails (*Pyrgulopsis* spp.), nonnative invasive New Zealand Mud Snails (*Potamopyrgus antipodarum*) and Asian Clam (*Corbicula fluminea*). Common macroinvertebrates include Chironomidae (midge), Amphipoda (scud), and Bivalvia (clams). These aquatic communities are dominated by predatory fish species introduced for recreational fishing, such as Largemouth Bass (*Micropterus salmoides*), Brown Trout (*Salmo trutta*), Rainbow Trout (*Oncorhynchus mykiss*), and Black Bullhead Catfish (*Ameiurus melas*) and the Brown Bullhead Catfish (*Ameiurus nebulosus*) as well as the Owens Sucker (*Catostomus fumeiventris*). Mosquitofish (*Gambusia affinis*), also a nonnative species, were introduced in many areas for mosquito control.

Emergent wetlands, alkali and rush-sedge meadows, and riparian forest communities provide habitat for species such as the introduced American Bullfrog (*Lithobates*



*catesebeiana*), Sierra Tree Frog (*Pseudacris sierra*), Marsh Wren (*Cistothorus palustris*), Common Yellowthroat (*Geothlypis trichas*), Savannah Sparrow (*Passerculus sandwichensis*), Red-winged Blackbird (*Agelaius phoeniceus*), Western Meadowlark (*Sturnella neglecta*) and Botta's Pocket Gopher (*Thomomys bottae*). The introduced Tule Elk (*Cervus canadensis nannodes*) typically occurs in meadows around the Owens River and tributaries, moving into irrigated pastures to forage, and making seasonal movements into surrounding upland vegetation and onto alluvial fans.

Wet meadow and riparian areas typically support amphibian species such as Western Toad (*Anaxyrus boreas*), Great Basin Spadefoot (*Spea intermontana*) and the introduced American Bullfrog. There are minimal lizard species in these habitats, however snakes, such as Sierra Garter Snake (*Thamnophis couchii*) and Wandering Garter Snake (*Thamnophis elegans vagrans*) are frequently found. Riparian areas, including associated wet meadow habitats, support a multitude of breeding bird species, depending on elevation and vegetation structure: Red-breasted Sapsucker (*Sphyrapicus ruber*), Hairy Woodpecker (*Picoides villosus*), House Wren (*Troglodytes aedon*), American Robin (*Turdus migratorius*), Yellow Warbler (*Setophaga petechia*), Song Sparrow (*Melospiza melodia*), and Brewer's Blackbird (*Euphagus cyanocephalus*). Mammal species in these areas include Mule Deer (*Odocoileus hemionus*), the American Beaver (*Castor canadensis*) and Owens Valley Vole (*Microtus californicus vallicola*).

More mesic alkali meadow and riparian communities provide habitat for amphibians such as Sierran Treefrog (*Pseudacris sierra*), Pacific Treefrog ( )Western Toad, Great Basin Spadefoot, and nonnative Tiger Salamander (*Ambystoma tigrinum*). Bird species found breeding in most riparian areas are Bewick's Wren (*Thryomanes bewickii*), House Wren, Nuttall's Woodpecker (*Picoides nuttallii*), Northern Flicker (*Colaptes auratus*), Spotted Towhee (*Pipilo maculatus*), and Song Sparrow. Mammals that typically utilize these communities include Raccoon (*Procyon lotor*), Striped Skunk (*Mephitis mephitis*), Desert Woodrat (*Neotoma lepida*), and American Beaver. Large mammals typically have large home ranges, thus they may utilize many different vegetation communities, but prefer the riparian habitats and commonly include Coyote (*Canis latrans*), Gray Fox (*Urocyon cinereoargenteus*), and Mule Deer. Less common mammals in the project area include Bobcat (*Lynx rufus*) and Mountain Lion (*Felis concolor*).

### **Special Status Species**

Special-status species are defined as those animals that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by federal, state, or other agencies as under threat from human-associated activities. Some species receive specific protection that is defined by federal or state endangered species legislation. Others have been designated as special-status on the basis of adopted policies and expertise of state resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. Special-status species include:

- Species listed or proposed for listing as threatened or endangered, or are candidates for possible future listing as threatened or endangered, under the federal Endangered Species Act or the California Endangered Species Act;
- Species that meet the definitions of rare or endangered under California Environmental Quality Act (CEQA) Guidelines Section 15380;
- Species covered under an adopted Natural Community Conservation Plan / Habitat Conservation Plan (NCCP/HCP);
- Species designated by CDFW as species of special concern;
- Wildlife "fully protected" in California (California Fish and Game Code Sections 3511, 4700, and 5050);
- Wildlife protected by the Migratory Bird Treaty Act (MTBA);
- Plants protected under the California Desert Native Plants Act (CDNPA); and
- Plants protected under California Penal Code Section 384a.

## Literature Review

Database queries were conducted to identify recorded and potential occurrences of special-status plant and wildlife species as well as natural communities in the project area, and the surrounding vicinity. Queries and reviews included: a geographic information system review of the CNDDDB, Rarefind 5 (59-quad search that included all quads with waterways with a buffer of 800 feet total (400 feet on each side of each waterway from the center of the channel out to the banks, capturing the extent of the riparian limits and extending into upland habitat); the CDFW CNDDDB January 2017 Special Animals List; the California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants of California; and Calflora, information on California plants. Also incorporated were data from focused species surveys and general wildlife surveys of specific project areas conducted by LADWP staff. LADWP data were available for the following projects: Owens River Gorge avian point counts and bat acoustical monitoring (LADWP 2002a, LADWP 2002b), Owens River Gorge Southwestern Willow Flycatcher surveys (LADWP 2008), Yellow-billed Cuckoo surveys of Baker Creek and Hogback Creek management areas 2007-2012, and Burrowing Owl surveys and bat acoustical inventory surveys of Haiwee Reservoir in 2014. Observations from "eBird,"

the online citizens' science bird reporting program developed by Cornell Lab of Ornithology were downloaded and queried for observations of special status bird species in the project area. All species occurrence data were clipped to capture the waterway plus 800 foot buffer of the project area.

This review identified 54 special-status wildlife species and 130 special-status plant species that may occur in the project area (Table 2 and Table 3). Extensive review was then conducted to determine habitat suitability for each generated species as well as each species' potential to be impacted by project activities. Each species was then assigned to one of four "potential for impacts" categories defining their potential to occur and to be negatively affected by the proposed project: Unlikely, Low, Medium, or High. Factors taken into consideration when assigning a species to a category included: previously recorded occurrences, on-site vegetation and habitat quality, topography, elevation, soils, surrounding land uses, habitat preferences, geographic ranges, Watershed Resources Staff reports, monitoring data, and local expert knowledge.

The "potential for impacts" categories are defined as follows:

- **Unlikely:** The project area and/or immediate vicinity do not support suitable habitat for a particular species, and therefore the project will not have direct or indirect impacts to the species.
- **Low Potential:** The project area and/or immediate vicinity only provide limited habitat for a particular species. In addition, the known range for a particular species may be outside of the immediate project area. No direct impacts from the project will occur but there could be potential indirect impacts.
- **Medium Potential:** The project area and/or immediate vicinity provide suitable habitat for a particular species, and project activities may directly or indirectly impact this species.
- **High Potential:** The project area and/or immediate vicinity provide ideal habitat conditions for a particular species and/or known populations occur in the immediate area. Project activities may directly impact this species.



**Table 2. Special-status Plant Species with Potential for Impact within the Project Area**

Species	Common Name	Status	Potential for Impact
<i>Agrostis humilis</i>	mountain bent grass	2B.3	unlikely
<i>Aliciella ripleyi</i>	Ripley's aliciella	2B.3	unlikely
<i>Aliciella triodon</i>	coyote gilia	2B.2	unlikely
<i>Allium atrorubens</i> var. <i>atrorubens</i>	Great Basin onion	2B.3	unlikely
<i>Astragalus argophyllus</i> var. <i>argophyllus</i>	silver-leaved milk-vetch	2B.2	unlikely
<i>Astragalus geyeri</i> var. <i>geyeri</i>	Geyer's milk-vetch	2B.2	unlikely
<i>Astragalus hornii</i> var. <i>hornii</i>	Horn's milk-vetch	1B.1	unlikely
<i>Astragalus johannis-howellii</i>	Long Valley milk-vetch	1B.2	unlikely
<i>Astragalus lemmonii</i>	Lemmon's milk-vetch	1B.2	high
<i>Astragalus lentiginosus</i> var. <i>piscinensis</i>	Fish Slough milk-vetch	1B.1; FT	high
<i>Astragalus monoensis</i>	Mono milk-vetch	1B.2	unlikely
<i>Astragalus ravenii</i>	Raven's milk-vetch	1B.3	unlikely
<i>Astragalus serenoii</i> var. <i>shockleyi</i>	Shockley's milk-vetch	2B.2	unlikely
<i>Atriplex argentea</i> var. <i>hillmanii</i>	Hillman's silverscale	2B.2	unlikely
<i>Atriplex gardneri</i> var. <i>falcate</i>	falcate saltbush	2B.2	low
<i>Atriplex pusilla</i>	smooth saltbush	2B.1	medium
<i>Blepharidachne kingie</i>	King's eyelash grass	2B.3	unlikely
<i>Boechera bodiensis</i>	Bodie Hills rockcress	1B.3	unlikely
<i>Boechera cobrensis</i>	Masonic rockcress	2B.3	unlikely
<i>Boechera dispar</i>	pinyon rockcress	2B.3	unlikely
<i>Boechera pinzliae</i>	Pinzl's rockcress	1B.3	unlikely
<i>Boechera shockleyi</i>	Shockley's rockcress	2B.2	unlikely
<i>Boechera tiehmii</i>	Tiehm's rockcress	1B.3	unlikely
<i>Boechera tularensis</i>	Tulare rockcress	1B.3	unlikely
<i>Botrychium ascendens</i>	upswept moonwort	2B.3	unlikely
<i>Botrychium crenulatum</i>	scalloped moonwort	2B.2	unlikely
<i>Botrychium lineare</i>	slender moonwort	1B.1	unlikely
<i>Botrychium lunaria</i>	common moonwort	2B.3	unlikely
<i>Botrychium minganense</i>	Mingan moonwort	2B.2	unlikely
<i>Calochortus excavates</i>	Inyo County star-tulip	1B.1	high
<i>Calyptidium pygmaeum</i>	pygmy pussypaws	1B.2	unlikely
<i>Carex davyi</i>	Davy's sedge	1B.3	unlikely
<i>Carex duriuscula</i>	spikerush sedge	2B.3	unlikely
<i>Carex petasata</i>	Liddon's sedge	2B.3	unlikely
<i>Carex praticola</i>	northern meadow sedge	2B.2	unlikely
<i>Carex scirpoidea</i> ssp. <i>Pseudoscirpoidea</i>	western single-spiked sedge	2B.2	unlikely

Species	Common Name	Status	Potential for Impact
<i>Carex tiogana</i>	Tioga Pass sedge	1B.3	unlikely
<i>Carex vallicola</i>	western valley sedge	2B.3	unlikely
<i>Chaetadelpha wheeleri</i>	Wheeler's dune-broom	2B.2	unlikely
<i>Claytonia megarhiza</i>	fell-fields claytonia	2B.3	unlikely
<i>Cordylanthus eremicus</i> ssp. <i>Kernensis</i>	Kern Plateau bird's-beak	1B.3	unlikely
<i>Crepis runcinata</i>	fiddleleaf hawksbeard	2B.2	unlikely
<i>Cryptantha circumscissa</i> var. <i>rosulata</i>	rosette cushion cryptantha	1B.2	unlikely
<i>Cryptantha incana</i>	Tulare cryptantha	1B.3	unlikely
<i>Cusickiella quadricostata</i>	Bodie Hills cusickiella	1B.2	unlikely
<i>Cymopterus ripleyi</i> var. <i>saniculoides</i>	sanicle cymopterus	1B.2	unlikely
<i>Dedeckera eurekaensis</i>	July gold	1B.3	unlikely
<i>Deinandra mohavensis</i>	Mojave tarplant	1B.3; SE	unlikely
<i>Diplacus parryi</i>	Parry's monkeyflower	2B.3	unlikely
<i>Draba asterophora</i> var. <i>asterophora</i>	Tahoe draba	1B.2	unlikely
<i>Draba cana</i>	canescent draba	2B.3	unlikely
<i>Draba incrassate</i>	Sweetwater Mountains draba	1B.3	unlikely
<i>Draba lonchocarpa</i>	spear-fruited draba	2B.3	unlikely
<i>Draba praealta</i>	tall draba	2B.3	unlikely
<i>Draba sharsmithii</i>	Mt. Whitney draba	1B.3	unlikely
<i>Draba sierra</i>	Sierra draba	1B.3	unlikely
<i>Elymus salina</i>	Salina Pass wild-rye	2B.3	unlikely
<i>Elymus scribneri</i>	Scribner's wheat grass	2B.3	unlikely
<i>Eremothera boothii</i> ssp. <i>Boothii</i>	Booth's evening-primrose	2B.3	unlikely
<i>Eremothera boothii</i> ssp. <i>intermedia</i>	Booth's hairy evening-primrose	2B.3	unlikely
<i>Erigeron calvus</i>	bald daisy	1B.1	unlikely
<i>Erigeron compactus</i>	compact daisy	2B.3	unlikely
<i>Eriogonum mensicola</i>	Pinyon Mesa buckwheat	1B.3	unlikely
<i>Eriogonum wrightii</i> var. <i>olanchense</i>	Olanca Peak buckwheat	1B.3	unlikely
<i>Erythranthe calcicola</i>	limestone monkeyflower	1B.3	unlikely
<i>Erythranthe utahensis</i>	Utah monkeyflower	2B.1	unlikely
<i>Festuca minutiflora</i>	small-flowered fescue	2B.3	unlikely
<i>Fimbristylis thermalis</i>	hot springs fimbristylis	2B.2	low
<i>Grusonia pulchella</i>	beautiful cholla	2B.2	unlikely
<i>Hackelia sharsmithii</i>	Sharsmith's stickseed	2B.3	unlikely
<i>Helodium blandowii</i>	Blandow's bog moss	2B.3	unlikely
<i>Hulsea brevifolia</i>	short-leaved hulsea	1B.2	unlikely
<i>Hulsea vestita</i> ssp. <i>Inyoensis</i>	Inyo hulsea	2B.2	unlikely
<i>Hymenopappus filifolius</i> var. <i>nanus</i>	little cutleaf	2B.3	unlikely

Species	Common Name	Status	Potential for Impact
<i>Ivesia campestris</i>	field ivesia	1B.2	unlikely
<i>Ivesia kingii</i> var. <i>kingie</i>	alkali ivesia	2B.2	medium
<i>Jaffueliobryum wrightii</i>	Wright's jaffueliobryum moss	2B.3	unlikely
<i>Kobresia myosuroides</i>	seep kobresia	2B.2	unlikely
<i>Loeflingia squarrosa</i> var. <i>artemisiarum</i>	sagebrush loeflingia	2B.2	unlikely
<i>Lomatium foeniculaceum</i> ssp. <i>Macdougali</i>	Macdougall's lomatium	2B.2	unlikely
<i>Lupinus duranii</i>	Mono Lake lupine	1B.2	unlikely
<i>Lupinus magnificus</i> var. <i>hesperius</i>	Mcgee Meadows lupine	1B.3	unlikely
<i>Lupinus padre-crowleyi</i>	Father Crowley's lupine	1B.2	unlikely
<i>Lupinus pusillus</i> var. <i>intermontanus</i>	intermontane lupine	2B.3	unlikely
<i>Meesia longiseta</i>	long seta hump moss	2B.3	unlikely
<i>Mentzelia inyoensis</i>	Inyo blazing star	1B.3	unlikely
<i>Mentzelia torreyi</i>	Torrey's blazing star	2B.2	unlikely
<i>Mentzelia tridentate</i>	creamy blazing star	1B.3	unlikely
<i>Micromonolepis pusilla</i>	dwarf monolepis	2B.3	unlikely
<i>Monardella beneolens</i>	sweet-smelling monardella	1B.3	unlikely
<i>Myurella julacea</i>	small mousetail moss	2B.3	unlikely
<i>Oryctes nevadensis</i>	Nevada oryctes	2B.1	unlikely
<i>Parnassia parviflora</i>	small-flowered grass-of-Parnassus	2B.2	high
<i>Pedicularis crenulata</i>	scalloped-leaved lousewort	2B.2	high
<i>Petrophytum caespitosum</i> ssp. <i>Acuminatum</i>	marble rockmat	1B.3	unlikely
<i>Phacelia gymnoclada</i>	naked-stemmed phacelia	2B.3	unlikely
<i>Phacelia inyoensis</i>	Inyo phacelia	1B.2	unlikely
<i>Phacelia nashiana</i>	Charlotte's phacelia	1B.2	unlikely
<i>Physocarpus alternans</i>	Nevada ninebark	2B.3	unlikely
<i>Plagiobothrys parishii</i>	Parish's popcornflower	1B.1	high
<i>Poa lettermanii</i>	Letterman's blue grass	2B.3	unlikely
<i>Pohlia tundra</i>	tundra thread moss	2B.3	unlikely
<i>Populus angustifolia</i>	narrow-leaved cottonwood	2B.2	high
<i>Potamogeton robbinsii</i>	Robbins' pondweed	2B.3	low
<i>Potentilla morefieldii</i>	Morefield's cinquefoil	1B.3	unlikely
<i>Ranunculus hydrocharoides</i>	frog's-bit buttercup	2B.1	high
<i>Sabulina stricta</i>	bog sandwort	2B.3	unlikely
<i>Salix brachycarpa</i> var. <i>brachycarpa</i>	short-fruited willow	2B.3	unlikely
<i>Salix nivalis</i>	snow willow	2B.3	unlikely
<i>Sarcobatus baileyi</i>	Bailey's greasewood	2B.3	unlikely
<i>Sidalcea covillei</i>	Owens Valley checkerbloom	1B.1; SE	high
<i>Sidalcea multifidi</i>	cut-leaf checkerbloom	2B.3	unlikely
<i>Silene oregana</i>	Oregon champion	2B.2	unlikely



Species	Common Name	Status	Potential for Impact
<i>Solorina spongiosa</i>	fringed chocolate chip lichen	2B.2	unlikely
<i>Sphaeromeria potentilloides</i> var. <i>nitrophila</i>	alkali tansy-sage	2B.2	high
<i>Sphenopholis obtusata</i>	prairie wedge grass	2B.2	high
<i>Streptanthus gracilis</i>	alpine jewelflower	1B.3	unlikely
<i>Streptanthus oliganthus</i>	Masonic Mountain jewelflower	1B.2	unlikely
<i>Stuckenia filiformis</i> ssp. <i>Alpina</i>	slender-leaved pondweed	2B.2	high
<i>Tetradymia tetramers</i>	dune horsebrush	2B.2	unlikely
<i>Thelypodium integrifolium</i> ssp. <i>Complanatum</i>	foxtail thelypodium	2B.2	medium
<i>Thelypodium milleflorum</i>	many-flowered thelypodium	2B.2	unlikely
<i>Townsendia condensate</i>	cushion townsendia	2B.3	unlikely
<i>Townsendia leptotes</i>	slender townsendia	2B.3	unlikely
<i>Transberingia bursifolia</i> ssp. <i>virgata</i>	virgate halimolobos	2B.3	unlikely
<i>Trichophorum pumilum</i>	little bulrush	2B.2	unlikely
<i>Trifolium dedeckerae</i>	Dedecker's clover	1B.3	unlikely
<i>Triglochin palustris</i>	marsh arrow-grass	2B.3	low
<i>Viola pinetorum</i> var. <i>grisea</i>	grey-leaved violet	1B.3	unlikely
<i>Viola purpurea</i> ssp. <i>Aurea</i>	golden violet	2B.2	unlikely

Definitions
FT = Listed as threatened under the Federal Endangered Species Act (ESA)
SE = Listed as endangered California Endangered Species Act (CESA)
1B = Rare, threatened or endangered in California and elsewhere
2B = Rare, threatened or endangered in California but more common elsewhere
0.1 = Seriously threatened in California
0.2 = Moderately threatened in California
0.3 = Not very threatened in California

Table 3 summarizes scientific and common names, federal and state regulatory status and potential for impact for each special-status wildlife species known to occur in the 59 quads surrounding the project area.

**Table 3. Special-status Wildlife Species with Potential for Impact within the Project Area**

Scientific Name	Common Name	Status	Potential Impact
<b>Fishes</b>			
<i>Oncorhynchus clarkii henshawi</i>	Lahontan Cutthroat Trout	FT	Medium
<i>Oncorhynchus clarkii seleniris</i>	Paiute Cutthroat Trout	FT	Unlikely
<i>Oncorhynchus mykiss aguabonita</i>	California Golden Trout	SSC	Unlikely
<i>Rhinichthys osculus</i> ssp. 2	Owens Speckled Dace	SSC	High
<i>Rhinichthys osculus</i> ssp. 5	Long Valley Speckled Dace	SSC	Low
<i>Siphateles bicolor snyderi</i>	Owens Tui Chub	FE; SE; FP	Low
<i>Catostomus fumeiventris</i>	Owens Sucker	SSC	High
<i>Cyprinodon radiosus</i>	Owens Pupfish	FE; SE; FP	Low
<b>Amphibians</b>			
<i>Batrachoseps campi</i>	Inyo Mountain Slender Salamander	SSC	Low
<i>Anaxyrus canorus</i>	Yosemite Toad	SSC	Unlikely
<i>Lithobates pipiens</i>	Northern Leopard Frog	SSC	Low
<i>Rana muscosa</i>	Southern Mountain Yellow-legged Frog	FE; SE	Unlikely
<i>Rana sierra</i>	Sierra Nevada Yellow-legged Frog	FE; ST	Unlikely
<b>Reptiles</b>			
<i>Gopherus agassizii</i>	Desert Tortoise	FT; ST	Low
<i>Elgaria panamintina</i>	Panamint Alligator Lizard	SSC	Low
<b>Birds</b>			
<i>Centrocercus urophasianus</i>	Greater Sage-grouse	SSC	High
<i>Ixobrychus exilis</i>	Least Bittern	SSC	Medium
<i>Accipiter gentilis</i>	Northern Goshawk	SSC	Low
<i>Aquila chrysaetos</i>	Golden Eagle	FP	Medium
<i>Buteo swainsoni</i>	Swainson's Hawk	ST	Medium
<i>Circus cyaneus</i>	Northern Harrier	SSC	High
<i>Haliaeetus leucocephalus</i>	Bald Eagle	SE; FP	Medium
<i>Charadrius nivosus</i>	Snowy Plover (inland pop.)	SSC	Low
<i>Charadrius montanus</i>	Mountain Plover	SSC	Low
<i>Coccyzus americanus occidentalis</i>	Western Yellow-billed Cuckoo	FT; SE	Medium
<i>Asio otus</i>	Long-eared Owl	SSC	Medium
<i>Athene cunicularia</i>	Burrowing Owl	SSC	Low
<i>Strix nebulosi</i>	Great Gray Owl	SE	Unlikely
<i>Empidonax traillii</i>	Willow Flycatcher	SE	High

Scientific Name	Common Name	Status	Potential Impact
<i>Empidonax traillii extimus</i>	Southwestern Willow Flycatcher	FE; SE	High
<i>Lanius ludovicianus</i>	Loggerhead Shrike	SSC	Medium
<i>Vireo bellii pusillus</i>	Least Bell's Vireo	FE; SE	Low
<i>Riparia riparia</i>	Bank Swallow	ST	Medium
<i>Toxostoma lecontei macmillanorum</i>	Le Conte's Thrasher	SSC	Unlikely
<i>Icteria virens</i>	Yellow-breasted Chat	SSC	High
<i>Setophaga petechia</i>	Yellow Warbler	SSC	High
<i>Piranga rubra</i>	Summer Tanager	SSC	Low
<i>Xanthocephalus xanthocephalus</i>	Yellow-headed Blackbird	SSC	High
<b>Mammals</b>			
<i>Sorex lyelli</i>	Mount Lyell Shrew	SSC	Unlikely
<i>Antrozous pallidus</i>	Pallid Bat	SSC	High
<i>Corynorhinus townsendii</i>	Townsend's Big-eared Bat	SSC; SC	High
<i>Euderma maculatum</i>	Spotted Bat	SSC	Medium
<i>Eumops perotis californicus</i>	Western Mastiff Bat	SSC	Low
<i>Brachylagus idahoensis</i>	Pygmy Rabbit	SSC	Low
<i>Lepus townsendii townsendii</i>	Western White-tailed Jackrabbit	SSC	Low
<i>Aplodontia rufa californica</i>	Sierra Nevada Mountain Beaver	SSC	Low
<i>Xerospermophilus mohavensis</i>	Mohave Ground Squirrel	ST	Low
<i>Microtus californicus vallicola</i>	Owens Valley Vole	SSC	High
<i>Vulpes vulpes necator</i>	Sierra Nevada Red Fox	FC; ST	Low
<i>Gulo gulo</i>	California Wolverine	FC; ST, FP	Unlikely
<i>Pekania pennanti</i>	Fisher - West Coast DPS	FC; SSC; SC	Unlikely
<i>Taxidea taxus</i>	American Badger	SSC	Low
<i>Ovis canadensis nelsoni</i>	Desert Bighorn Sheep	FP	Unlikely
<i>Ovis canadensis sierrae</i>	Sierra Nevada Bighorn Sheep	FE; SE; FP	Low

Definitions

1. Federal status: USFWS Listing, other non-CA specific listing

FE = Listed as endangered under the federal Endangered Species Act (ESA)

FT = Listed as threatened under ESA

USFWS:FC=US Fish and Wildlife Serve Federal Candidate Species

2. State status: CDFG Listing

SE = Listed as endangered under the California Endangered Species Act (CESA)

ST = Listed as threatened under the CESA

SC = Candidate for listing (threatened or endangered) under CESA

SSC = Species of Special Concern as identified by the CDFW

LC = Species of Least Concern as identified by the CDFW

FP = Listed as fully protected under CDFW code



## Special-Status Plants

Of the 130 special-status plant species identified, 12 special-status plant species were determined to have high potential, 3 to have medium potential, 4 to have low potential and 111 are unlikely to be affected, or are not within the vicinity of the project area. For the purposes of this biological assessment, species that are unlikely to be impacted do not have suitable habitat within the project area, and will not be further discussed. Refer to Table 2 for the species that are unlikely to be impacted. Species with a high, medium or low potential for impact are discussed below.

### High Potential

#### **Lemmon's milk-vetch (*Astragalus lemmonii*)**

Lemmon's milk-vetch is a perennial herb in the Fabaceae and is listed as 1B.2; rare, threatened or endangered in California and elsewhere, fairly threatened in California. It is known to occur in Inyo and Mono Counties within the Mount Morgan, Toms Place, and Whitmore Hot Springs quads. The CNDDDB search revealed occurrences in the Upper Owens River, Hot Creek, Whiskey Creek, and Rock Creek (CNDDDB 2016). It occurs in great basin scrub within meadows, seeps, marshes, and swamps at an elevation between 1007-2200 meters. Peak blooming period is May-August (CNPS 2016).

#### **Fish Slough milk-vetch (*Astragalus lentiginosus* var. *piscinensis*)**

Fish Slough milk-vetch is a perennial herb in the Fabaceae and is federally threatened and listed as 1B.1; rare, threatened or endangered in California and elsewhere, seriously threatened in California. It is known to occur in Inyo and Mono Counties within the Fish Slough, Bishop, White Mountain Peak, and Chidago Canyon quads (CNPS 2016). It is endemic to Fish Slough, California. Fish Slough is a desert spring-fed wetland ecosystem, consisting of alkali habitat, located in Inyo and Mono counties, California. This species occurs in alkaline playas at an elevation of 1130-1300 meters. Peak blooming period is June-July. At the present, Fish Slough milk-vetch is restricted to the same range as it was at the time of listing, a 10 kilometer (km) (6 mile (mi)) stretch of alkaline flats paralleling Fish Slough. The slough supports the species on less than 540 acres (219 ha) (USFWS 2009). There is a potential to impact this species when maintaining waterways and replacing existing structures within Fish Slough. However, pre-project surveys are performed in areas with habitat and all plants are avoided.

#### **Inyo County star-tulip (*Calochortus excavatus*)**

Inyo County star-tulip is a perennial, bulbiferous herb in the Liliaceae and is listed as 1B.1; rare, threatened or endangered in California and elsewhere, seriously threatened in California. It occurs in Inyo and Mono Counties in Union Wash, Manzanar, Mt. Langley, Lone Pine, Blackrock, Independence, Kearsarge Peak, Tinemaha Reservoir, Big Pine, Coyote Flat, Split Mtn., Fish Springs, Deep Springs Lake, Laws, Fish Slough, Bishop, Poleta Canyon, Rovana, Chidago Canyon,

Chalfant Valley, Convict Lake, River Spring, Benton Hot Springs, and Big Alkali quads (CNDDDB 2016). This species occurs in chenopod scrub within meadows and seeps at an elevation of 1150-2000 meters. Peak blooming period is April to July (CNPS 2016). Populations have been monitored for decades and tend to overlap with Owens Valley checkerbloom.

**Small-flowered grass-of-Parnassus (*Parnassia parviflora*)**

Small-flowered grass-of-Parnassus is a perennial herb in the Parnassiaceae and is listed as 1B.2; rare, threatened or endangered in California and elsewhere, fairly threatened in California. It is known to occur in Inyo and Mono Counties within the Tungsten Hills, White Mountain Peak, Hammil Valley, Toms Place, Convict Lake, and Mount Dana quads. The CNDDDB search revealed occurrences along Convict, Whiskey, Horton, and McGee Creeks (CNDDDB 2016). This species occurs in meadows and seeps at an elevation of 2000-2855 meters. The peak blooming period is August to September (CNPS 2016).

**Scalloped-leaved lousewort (*Pedicularis crenulata*)**

Scalloped-leaved lousewort is a perennial herb in the Orobanchaceae and is listed as 2B.2; rare, threatened or endangered in California, but more common elsewhere, fairly threatened in California. It is known to occur in Mono County in the Convict Lake quad. The CNDDDB search revealed only one occurrence in California, near Convict Creek (CNDDDB 2016). This species occurs in meadows and seeps at an elevation of 2100-2300 meters. The peak blooming period is June to July (CNPS 2016). LADWP has no population information on this species.

**Parish's popcorn flower (*Plagiobothrys parishii*)**

Parish's popcorn flower is an annual herb in the Boraginaceae and is listed as 1B.1; rare, threatened or endangered in California and elsewhere, seriously threatened in California. It is known to occur in Inyo and Mono Counties within the Olancho, Union Wash, Lone Pine, Independence, Big Pine, Laws, Fish Slough, Chidago Canyon, Chalfant Valley, and Benton Hot Springs quads (CNDDDB). This species is known in California from only a few occurrences, one of which is north of Cartago, Inyo County (CNPS 2016). It occurs in Great Basin scrub, Joshua tree woodland, wetland/riparian habitats at an elevation of 750-1400 meters (Calflora 2017). The blooming period is March to June (CNPS 2016).

**Narrow-leaved cottonwood (*Populus angustifolia*)**

Narrow-leaved cottonwood is a deciduous tree in the Salicaceae and is listed as 2B.2; rare, threatened or endangered in California, but more common elsewhere, fairly threatened in California. It is known to occur in California from only five occurrences, one of which is in Inyo County within the Aberdeen quad, specifically in upper Division Creek (CNDDDB 2016). It occurs in riparian forests at an elevation of 1200-1800 meters. Blooming period is March to April (CNPS 2016). Narrow leaved cottonwood is a conspicuous, riparian, tree species, making it easily identifiable.

**Frog's-bit buttercup (*Ranunculus hydrocharoides*)**

Frog's-bit buttercup is a perennial, aquatic, herb in the Ranunculaceae and is listed as 2B.1; rare, threatened or endangered in California, but more common elsewhere, seriously threatened in California. It is known to occur in Inyo and Mono Counties within the Kearsarge Peak, Mt Thompson, Bishop, River Spring, and Lundy quads (CNDDDB 2016). Frog's-bit buttercup has been identified in some waterways in the Bishop area, such as in Yaney Ditch, Bishop Creek, Sierra Street, and the Owens River. It occurs in fresh water marshes and swamps at an elevation of 1100-2700 meters (CNPS 2016).

**Owens Valley checkerbloom (*Sidalcea covillei*)**

Owens Valley checkerbloom is a perennial herb in the Malvaceae and is State endangered and listed as 1B.1; rare, threatened or endangered in California and elsewhere, seriously threatened in California. It is endemic to the Owens Valley with only 44 known populations. It occurs in the Haiwee Reservoirs, Olancha, Union Wash, Manzanar, Mt. Langley, Lone Pine, Independence, Big Pine, Fish Springs, Laws, Fish Slough, Bishop, Poleta Canyon, Rovana, and Mount Tom quads (CNDDDB 2016). Populations have been monitored for the past 4 decades by both DWP and the Inyo County Water Department. This species occurs in chenopod scrub within meadows and seeps at an elevation of 1095-1415 meters. Peak blooming period is April to June (CNPS 2016). There are known populations adjacent to LADWP-managed waterways and associated infrastructure and there is a potential to impact this species when maintaining waterways and replacing existing structures in the vicinity. LADWP performs pre-project surveys to ensure plants are not impacted by our maintenance activities.

**Alkali tansy-sage (*Sphaeromeria potentilloides* var. *nitrophila*)**

Alkali tansy-sage is perennial herb in the Asteraceae and is listed as 2B.2; rare, threatened or endangered in California, but more common elsewhere, fairly threatened in California. It occurs in Mono County in the Whitmore Hot Springs, River Spring, Bridgeport, Dome Hill, and Fales Hot Springs quads (CNDDDB 2016). It occurs in meadows, seeps, and playas at an elevation of 2100 to 2400 meters. Peak blooming period is June to July (CNPS 2016).

**Prairie wedge grass (*Sphenopholis obtusata*)**

Prairie wedge grass is a perennial herb in the Poaceae and is listed as 2B.2; rare, threatened or endangered in California, but more common elsewhere, fairly threatened in California. It is widespread across California and nationwide. In Inyo and Mono Counties it occurs in the Fish Springs, Laws, and Bridgeport quads (CNDDDB 2016). It prefers cismontane woodland, meadows, and seeps at an elevation of 300-2000 meters. Peak blooming period is April to July (CNPS 2016). The CNDDDB clip revealed approximate occurrences along Taboose Creek and the Upper McNally canal near Dry Lake Spring.



**Slender-leaved pondweed (*Stuckenia filiformis* ssp. *Alpina*)**

Slender-leaved pondweed is a perennial, rhizomatous, herb in the Potamogetonaceae and is listed as 2B.2; rare, threatened or endangered in California, but more common elsewhere, fairly threatened in California. It is widespread across California and nationwide. In Mono County it occurs in the Whitmore Hot Springs quad (CNDDDB 2016). It prefers marshes and swamps at an elevation of 300-2150 meters. Blooming period is May to July (CNPS 2016). The CNDDDB clip revealed an occurrence along Hot Creek, where the Owens River Road crosses the creek.

**Medium Potential**

**Smooth saltbush (*Atriplex pusilla*)**

Smooth saltbush is an annual herb in the Chenopodiaceae and is listed as 2B.1; rare, threatened or endangered in California, but more common elsewhere, seriously threatened in California. It is known to occur in Mono County in the Whitmore Hot Springs and Fales Hot Springs quads (CNDDDB 2016). It prefers great basin scrub, meadows, seeps (hot springs) at an elevation of 1300 to 2000 meters. The blooming period for this species is June to September (CNPS 2016). The CNDDDB clip revealed occurrences in Long Valley, specifically the Hot Creek Region.

**Alkali ivesia (*Ivesia kingii* var. *kingii*)**

Alkali ivesia is a perennial herb in the Rosaceae and is listed as 2B.2; rare, threatened or endangered in California, but more common elsewhere, fairly threatened in California. It is known to occur in Inyo and Mono Counties in the Laws, Fish Slough, Rovana, Chidago Canyon, Watterson Canyon, Whitmore Hot Springs, Sing Peak, River Spring, Indian Meadows, and Benton Hot Springs quads (CNDDDB 2016). It prefers great basin scrub, alkaline meadows, seeps, and playas at an elevation of 1200-2130 meters. The blooming period is May to August (CNPS 2016). The CNDDDB search revealed populations in Fish Slough, Long Valley, and Laws. Alkali ivesia occurs with Fish Slough milk-vetch and has been documented during rare plant surveys.

**Foxtail thelypodium (*Thelypodium integrifolium* ssp. *Complanatum*)**

Foxtail thelypodium is an annual/perennial herb in the Brassicaceae and is listed as 2B.2; rare, threatened or endangered in California, but more common elsewhere, fairly threatened in California. It is known to occur in Inyo and Mono Counties in the Blackrock, Fish Springs, Last Chance Mtn., Crooked Creek, Westgard Pass, Laws, Fish Slough, Poleta Canyon, Chidago Canyon, Toms Place, Sulphur Pond, and Lundy quads (CNDDDB 2016). It prefers great basin scrub, meadows, and seeps at an elevation of 1100-2500 meters. The blooming period for this species is June to October. The CNDDDB search revealed populations near Sherwin Summit, Silver Canyon, and in Fish Slough.

## Low Potential

### **Falcate saltbush (*Atriplex gardneri* var. *falcate*)**

Falcate saltbush is a perennial herb in the Chenopodiaceae and is listed as 2B.2; rare, threatened or endangered in California, but more common elsewhere, fairly threatened in California. It is known to occur in Inyo County in the Poleta Canyon quad (CNDDDB 2016). This species prefers chenopod scrub and great basin scrub at an elevation of 1200-1700 meters. Peak blooming is May to August (CNPS 2016). The CNDDDB search revealed an old occurrence record near the lower McNally Canal, SE of Bishop.

### **Hot springs fimbristylis (*Fimbristylis thermalis*)**

Hot springs fimbristylis is a perennial, rhizomatous, herb in the Cyperaceae and is listed as 2B.2; rare, threatened or endangered in California, but more common elsewhere, fairly threatened in California. It occurs in Inyo, Kern, Los Angeles, Mono, and San Bernardino Counties. In Inyo and Mono Counties, it occurs in Shoshone, Panamint, Furnace Creek, Chloride City, Nevares Peak, Ubehebe Peak, Thimble Peak, Ubehebe Crater, Fish Slough, Bishop, Poleta Canyon, and Chidago Canyon quads (CNDDDB 2016). It occurs in alkaline meadows and seeps near hot springs at an elevation of 1100-1340 meters. Peak blooming is from July to September (CNPS 2016). Populations have been documented in Long Valley where plants grow near the hot springs. Most of the populations are on Bureau of Land Management (BLM) land.

### **Robbins' pondweed (*Potamogeton robbinsii*)**

Robbins' pondweed is a perennial, rhizomatous, aquatic, herb in the Potamogetonaceae and is listed as 2B.3; rare, threatened or endangered in California, but more common elsewhere, not very threatened in California. It is widespread across California and nationwide. In Inyo and Mono counties it occurs in the Big Pine, Coyote Flat, Mt. Thompson, Mammoth Mtn., and Crystal Crag quads (CNDDDB 2016). It occurs in marshes and swamps (deep water, lakes) at an elevation of 1530-3300 meters. Peak blooming is from July to August (CNPS 2016). The CNDDDB clip revealed one occurrence at the upper end of Walker Lake. This species occurs well outside of the jurisdiction of the project and therefore, maintenance activities covered under the project would not impact Robbins pondweed.

### **Marsh arrow-grass (*Triglochin palustris*)**

Marsh arrow-grass is a perennial, rhizomatous, herb in the Juncaginaceae and is listed as 2B.3; rare, threatened or endangered in California, but more common elsewhere, not very threatened in California. It is known from only 10 occurrences in California, but is widespread nationwide. In Inyo and Mono Counties it occurs in the Mt. Williamson, Mount Whitney, Mt. Morgan, Whitmore Hot Springs, Bloody Mountain, and Tioga Pass quads (CNDDDB 2016). This species prefers mesic meadows, seeps, marshes, swamps, and subalpine coniferous forests at an elevation of 2285-3700 meters. The blooming period is from July to August (CNPS 2016). No occurrences were found within the CNDDDB clip, so work under the project would not impact this species.

## Special-Status Wildlife

Of the 54 special-status wildlife species identified, 12 were determined to have a high potential, 10 to have a medium potential, 19 to have a low potential and 13 are unlikely to occur in the project area or to be impacted by the project. For the purposes of this biological assessment, species that are unlikely to be impacted do not have suitable habitat within the project area, and will not be further discussed. The species unlikely to be impacted include: Paiute Cutthroat Trout, California Golden Trout, Yosemite Toad, Southern Mountain Yellow-legged Frog, Sierra Nevada Yellow-legged Frog, Desert Tortoise, Great Gray Owl, Le Conte's Thrasher (subspecies *macmillanorum*), Mount Lyell Shrew, Mohave Ground Squirrel, California Wolverine, Fisher (West Coast), and Desert Bighorn Sheep. Species with a high, medium or low potential for impact are discussed below.

## High Potential

### Owens Speckled Dace (*Rhinichthys osculus ssp. 2*)

Owens Speckled Dace is a California Species of Special Concern and is a subspecies of *Rhinichthys osculus* within the Cyprinidae or minnow family. Little is known about the biology of this subspecies. Historically, Owens Speckled Dace may have occurred from Benton Valley to Little Lake, in the Owens River, low elevation springs, streams, and lakes. Currently this species is known to occur in irrigation ditches associated with Bishop Creek including Giroud Ditch, China Slough, and the A-drain; McNally ditch near Laws; lower Horton, North Fork of Bishop, Rock, and Pine Creeks; C-2 return Ditch in Round Valley; and Fish Slough (CDFW unpublished data). In the Owens Valley, Speckled Dace have been documented in water up to 88 degrees Fahrenheit, in small creeks, spring-fed marshes, thermal springs, ditches, as well as natural and private ponds (CDFW unpublished data). Owens Speckled Dace are most abundant in areas where predatory fishes are absent, often in man-made ditches and canals (Sada 1989, Becker 1999). Since this species does occur within the project area within creeks, ditches, and canals, potential impacts from routine maintenance activities are possible. The maintenance of ditches and other waterways for irrigation separate from the main Owens River system provides suitable rearing and spawning habitat. CDFW (2015) found juvenile Speckled Dace appeared in late July in one ditch, indicating a single spawning and recruitment period during July.

### Owens Sucker (*Catostomus fumeiventris*)

Owens Sucker is currently designated a Species of Special Concern by the state of California, although the CDFW species account identifies this species to be of low conservation concern. They prefer habitat with long runs and few riffles characterized



by fine substrate with lesser amounts of gravel and cobble, water temperatures of 7-13 degrees Celsius. Spawning for this species takes place from May through July (Moyle 1976). Owens Sucker are endemic to the Owens River drainage and are a species that is widely distributed in streams and rivers of the Owens River watershed, including the Owens River and Bishop Creek. They are most abundant in Crowley Reservoir (Mono County) and are also found in Convict Lake (Mono County) and Lake Sabrina (Inyo County). Owens Suckers are still abundant in most of their range, primarily due to their ability to adapt to life in Crowley Reservoir as well as the highly modified Owens River (Moyle 2002). Their populations in the river have increased as a result of restoration activities that began in the early 1990s (Parmenter, pers. comm. 2013). Because of their widespread occurrence, impacts to Owens Sucker from project activities are possible.

### **Brown Trout (*Salmo trutta*)**

Brown Trout are a non- native species originally from Europe, North Africa, and western Asia. They were introduced to California in 1893 and are now present in a high percentage of suitable waters in the interior of the state, on both sides of the Sierra Nevada Mountains, from fish stocking operations. The Brown Trout is a medium-sized fish, capable of growing to 20 lb or more in some localities, although a mature weight of 2 pounds or less is common in many waterways in the project area. Brown Trout are cold-water fish, preferred temperatures are 12-20°C; therefore temperature is an important factor limiting Brown Trout distribution. Spawning occurs in fall with seasonal cues triggering movement to spawning locations. Spawning occurs in gravel substrate. After spawning, eggs hatch on average in 7-8 weeks and juveniles emerge from the gravel after another 3-6 weeks.

Brown Trout currently stocked by CDFW are diploids (Buckmaster, 2017). While Brown Trout can prey upon native aquatic species, there are local economic benefits of a sustainable Brown Trout fishery in some waterways. Although they are not a special status species identified in Table 3, maintenance activities are, and will be, avoided around the Brown Trout spawning season. Regardless of Brown Trout presence, if native fish occur in a given location, measures will be prioritized to protect native populations (CDFW personal comm.).

### **Greater Sage-Grouse (*Centrocercus urophasianus*)**

Greater Sage-Grouse is a ground-dwelling bird of sagebrush steppe listed as a California Species of Special Concern. Greater Sage-Grouse are dependent on large areas of contiguous sagebrush (Patterson 1952, Connelly et al. 2004, Connelly et al. 2011a, 2011b, Wisdom et al. 2011) interspersed with mesic areas including wet meadows or riparian areas but specific habitat requirements vary by season. Greater Sage-Grouse in the project area are part of the Bi-State population of sage-grouse

which constitutes a Distinct Population Segment of this species as birds in this region are genetically unique and reproductively isolated from Greater Sage-Grouse populations throughout the remainder of their range (Bi-State Technical Advisory Committee 2012, Federal Register FR 13910).

Greater Sage-Grouse are a permanent resident in all sagebrush habitats of the project area in Mono County. Although Sage-Grouse associated primarily with sagebrush habitats, sage-grouse are found in mesic habitats during the reproductive season. In the project area, Greater Sage-Grouse gather in large numbers in spring on meadows or open areas in sagebrush called “leks” to perform mating displays. In late summer, female sage-grouse move their broods to riparian habitats and meadows for feeding and cover (National Resources Conservation Service 2014).

Greater Sage-Grouse are highly sensitive to disturbance during the lekking season and project activities have a high potential to impact this species mid-March to May. Sage-grouse may also be impacted in mid-late summer (late June to September, depending on habitat conditions) as birds are feeding along riparian areas and ditches.

#### **Northern Harrier (*Circus cyaneus*)**

Northern Harrier is listed as a California Species of Special Concern. This species occurs throughout the state of California. Northern Harriers can be found in fresh water marshes, brackish and saltwater marshes, wet meadows, weedy borders of lakes, rivers and streams, annual and perennial grasslands (including those with vernal pools), weedy fields, ungrazed or lightly grazed pastures, some croplands, sagebrush flats and desert sinks. Northern Harriers nest on the ground, mostly within patches of dense, often tall, vegetation in undisturbed areas (Shuford, W.D., et al. 2008) and have a high potential to be impacted by the project during nesting activities from March through September.

#### **Willow Flycatcher (*Empidonax traillii*)**

California supports three subspecies of breeding Willow Flycatcher (*Empidonax traillii*), all of which are considered state-endangered. The Southwestern Willow Flycatcher (*Empidonax t. extimus*) breeds throughout southern California from the Mexican border north to northern Inyo County. The “Little” Willow Flycatcher (*Empidonax t. brewsteri*) breeds from Tulare County north, along the western side of the Sierra Nevada and Cascades, extending to the coast in northern California (Craig and Williams 1998). The “Mountain” (*Empidonax t. adastus*) breeds east of the Sierra/Cascade axis (Harris et al 1987).

Willow Flycatchers require extensive thickets of low, dense willows on edge of wet meadows, ponds and backwaters for nesting and roosting. Willow Flycatchers are known to breed at elevations from near sea level to 8,000 feet in elevation (Grinnell and

Miller 1944, Zeiner et al. 1990). Nesting sites in California are usually near languid streams, standing water, or seeps. Male Willow Flycatchers establish territory boundaries prior to pair formation and maintain them early in the season by singing from elevated perches (Zeiner et al. 1990). There is a high potential to impact Willow Flycatchers from May through September in the project area as this species is a common migrant and uncommon breeding species in the waterways.

### **Southwestern Willow Flycatcher (*Empidonax traillii extimus*)**

Southwestern Willow Flycatcher (*Empidonax traillii extimus*) is a federal and state endangered species. Southwestern Willow Flycatchers occupy dense streamside vegetation dominated by willows, baccharis (*Baccharis* spp.), and arrowweed (*Pluchea* spp.), or where other plants occur in thickets, usually in association with Fremont cottonwood and other riparian tree overstory. Southwestern Willow Flycatchers breed in substantially different types of riparian habitat across a large geographical area and elevational range. Southwestern Willow Flycatcher is found primarily in lower elevation riparian habitats, but occurs from sea level up to 8,200 feet (USFWS 2002a). Nesting sites usually have dense foliage from the ground level to about 13 feet above ground. Southwestern Willow Flycatchers only establish nests near surface water or saturated soil (Sogge et al. 1997b, Whitfield et al. 1997). Water may dry up later in the season, and is not necessarily present at the later stages of the breeding cycle. At the South Fork Kern River, the distance from Southwestern Willow Flycatcher nests to nearest water averaged 70 feet with almost half of the nests above water at the time they were built (Whitfield et al. 1997). Along Rush Creek, the average distance from nests to surface water was 423 feet (McCreedy and Heath 2004).

Comprehensive surveys in 2015 of all suitable habitat in the Owens Management Unit documented 38 Willow Flycatcher territories along the Owens River and its tributaries from Pleasant Valley Reservoir downstream to Tinemaha Reservoir (Greene 2015). Genetic studies of birds in the Pleasant Valley area of the project area support assignment of these birds as *E. t. extimus* (Paxton 2000). A small population of Willow Flycatchers also exists along Rush Creek in the Mono Basin. The population on Rush Creek is within the boundary zone between the three subspecies and genetic and colorimetric analyses have shown the population on Rush Creek to show signs of intergradation (Paxton et al 2010). Thus, based on available data, the Rush Creek population cannot be assigned to a subspecies, and are best referred to as Willow Flycatcher. There is a high potential to impact Southwestern Willow Flycatchers from May through September in the project area as this species is a common migrant and uncommon breeding species in the waterways.



### **Yellow-breasted Chat (*Icteria virens*)**

Yellow-breasted Chat is listed as a Species of Special Concern in the state of California. The species has a patchy distribution throughout California. It is most abundant in the northwest, in Humboldt, Shasta, and Siskiyou counties. It is mostly absent from the Central Valley, and fairly common in select riparian systems in eastern California. Yellow-breasted Chats occupy early successional riparian habitats with a well-developed shrub layer and an open canopy. Nesting habitat is usually restricted to the narrow border of streams, creeks, sloughs, and rivers and seldom forms extensive tracts. Blackberry (*Rubus* spp.), wild grape (*Vitis* spp.), willow, and other plants that form dense thickets and tangles are frequently selected as nesting strata (Shuford, W.D., et al. 2008). Observations of Yellow-breasted Chat are most abundant along waterways of the project area in northern Inyo County, and at sites with dense cover such as Hogback Creek and Baker Creek. Yellow-breasted Chat is not expected to breed in project areas in Mono County, although it may occur as a rare migrant. This species is expected to have a high potential to be impacted in waterways of the project area, particularly in Inyo County, from May through September.

### **Yellow Warbler (*Setophaga petechial*)**

Yellow Warbler is listed as a Species of Special Concern in the state of California. Yellow Warbler is considered one of the most abundant warblers North America. The breeding range covers most of North America. Historically, Yellow Warbler was a common to locally abundant breeder throughout California, except for most of the Mojave Desert and all of the Colorado Desert and higher elevations of the Sierra Nevada. Currently, Yellow Warblers occupy much of their former breeding range, except for the Central Valley, where they are close to extirpation. Yellow Warblers generally occupy riparian vegetation in close proximity to water along streams and in wet meadows. Throughout their range, they are found in willows and cottonwoods, and in California they are found in numerous other species of riparian shrubs or trees, varying by biogeographic region (Shuford, W.D., et al. 2008).

Locally, Yellow Warblers are abundant in migration throughout the project area. In the Eastern Sierra, breeding Yellow Warblers are more abundant in riparian areas of greater width, greater grass cover, and increased elevation (Heath and Ballard 2003). Breeding birds are more localized at lower elevations in Owens Valley, but more numerous at higher elevations along waterways in Mono County. There is a high potential to impact Yellow Warblers from May through September in the project area as this species is a common migrant and common breeding species in the waterways.

### **Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*)**

Yellow-headed Blackbird is listed as a Species of Special Concern in the State of California. It breeds widely and abundantly across western Canada and the United States, but is patchily distributed in the southwestern portion of its breeding range. It migrates broadly across western and central North America, to wintering grounds largely in western and northern Mexico. The greatest breeding densities are found in regions with large and productive marshes. Yellow-headed Blackbird breeds throughout California, with high densities in the northeast. This species breeds almost exclusively in marshes with tall emergent vegetation, such as tules (*Scirpus* spp.) or cattails (*Typha* spp.), generally in open areas and edges over relatively deep water. Water is an important component, and if too shallow, they will not use the habitat (Shuford, W.D., et al. 2008). There is a high potential to impact Yellow-headed Blackbirds from April through September in the project area as this species is a regular migrant and uncommon breeding species in the waterways.

### **Pallid Bat (*Antrozous pallidus*)**

Pallid Bat is designated by CDFW as a Species of Special Concern. It is found in a variety of habitats including, but not limited to, desert scrub, grassland, shrubland, woodland, and forests. Rock outcrops are typically used as roosting sites, but this species will also utilize mines, caves, trees, buildings, and bridges. This species roosts alone, in small groups (2 to 20 bats), or gregariously, up to hundreds of individuals. Day and night roosts include crevices in rocky outcrops and cliffs, caves, mines, trees, and various human structures such as bridges, barns, porches, bat boxes, and human-occupied as well as vacant buildings. Pallid Bats are opportunistic generalists that glean a variety of arthropod prey from surfaces, but also capture insects on the wing (Brown and Berry 1997).

Foraging habitat occurs within the project area, and roosting habitat may occur adjacent to work areas. Pallid Bat has a high potential to be impacted within the project area.

### **Townsend's Big-eared Bat (*Corynorhinus townsendii*)**

Townsend's Big-eared Bat is designated by CDFW as a Species of Special Concern. This species is associated with desert scrub, mixed coniferous forest, and pinyon-juniper forests. Distribution is strongly correlated with the availability of caves and cave-like roosting habitat, including abandoned mines and structures. Foraging habitat includes: edge habitats along streams, adjacent to and within a variety of wooded habitats. These bats often travel large distances while foraging, including movements of over 150 kilometers during a single evening (Brown et. al. 1994) feeding primarily on moths. Roost sites show high site fidelity (Sherwin et. al. 2000) and summer maternity colonies range in size from a few individuals to several hundred individuals. Of

particular concern is this species sensitivity to disturbance in their roost, as they have been known to abandon roosts, including maternity colonies, following human disturbance (Humphrey and Kunz 1976). The primary threat to this species is almost certainly related to disturbance and/or destruction of roost sites.

Roosting and foraging habitat occurs throughout the project area. This species is difficult to detect with acoustical surveys due to their low intensity calls and since they are adept at avoiding mist nets (WBWG 2012). Available records include the Owens Gorge (LADWP 2002b), and CNDDDB records in Round Valley, south and east of Bishop, Lone Pine area, and Haiwee Reservoir. Townsend's Big-eared Bats are expected to have a high potential to be impacted by project activities during the maternity season.

### **Owens Valley Vole (*Microtus californicus vallicola*)**

Owens Valley Vole is designated by CDFW as a Species of Special Concern. Little is known about this subspecies of California Vole but it appears to be associated with mesic environments including meadows, riparian corridors, and agricultural areas (Nelson 2004) unlike some other California vole subspecies that may be found in more xeric habitats. Voles breed throughout the year, and reach population peaks if food and cover are abundant. Their life span averages 6-12 weeks. Voles feed on leafy parts of grasses, sedges, and herbs by clipping them at the base forming a network of runways around their burrows.

Owens Valley Vole occurs in the Owens Valley throughout the project area in grass-dominated habitats. This species is not expected to occur outside Owens Valley north into Long Valley or the Mono Basin. This species is expected to have a high potential to be impacted by project activities.

## **Medium Potential**

### **Lahontan Cutthroat Trout (*Oncorhynchus clarkii henshawi*)**

Lahontan Cutthroat Trout (LCT) were listed as federally endangered in 1970 and downlisted to threatened in 1975. This species prefers cold waters of the Lahontan Basin in a wide variety of cold water temperatures and habitat conditions. Generally, they occur in cool flowing water with available cover of well-vegetated and stable stream banks, in areas where there are stream velocity breaks, and in relatively silt free, rocky riffle-run areas (USFWS 2014). They require gravel riffles in streams for spawning (Rarefind, 2017a). Threats include presence of non-native species and hybridization and altered aquatic ecosystems (USFWS 2014).



In the Mono Basin there are two strains of LCT: one is the federally threatened species (recovery species) with recovery goals for downlisting; the other is a non-threatened wild strain stocked for recreational purposes. The recovery strain of LCT are present in the upper reaches of O'Harrel Canyon Creek at elevations much higher upstream than routine maintenance activities occur for the project. The wild stocked strain is present in the June Lake Loop (between Reversed Creek and Grant Lake). There may also be small populations of this wild stocked strain in tributaries to Crowley Lake where there is possible spring spawning habitat present (i.e., Crooked Creek, Hilton Creek, McGee Creek, and Convict Creek) (Emery pers. comm. 2017). The special status recovery population of this species is not expected to be impacted by the project; however, the wild stocked species has a medium potential to be impacted by maintenance activities during the spawning season.

### **Rainbow Trout (*Oncorhynchus mykiss*)**

Rainbow Trout are originally from Coastal water and streams of the Pacific basin and have been stocked in eastern California. Now all stocked trout are sterile hatchery raised fish, however some feral Rainbow Trout persist. CDFW anticipates that stocked Rainbow Trout will be diploid in the Owens Basin by 2018 (Buckmaster, 2017). Self-sustaining Rainbow Trout fisheries are rare in the Eastern Sierra. Rainbow Trout spawn at the time of peak run-off, therefore typically high flow conditions scour eggs and larvae from spawning beds. There is potential for maintenance activities to impact spawning habitat.

Rainbow Trout are not a special status species. However, there will be ancillary benefits of avoiding work during the bird nesting season. Additionally, LADWP will collaborate with CDFW to avoid work during spawning periods for any self-sustaining Rainbow Trout locations.

### **Least Bittern (*Ixobrychus exilis*)**

The Least Bittern is a secretive marsh-dwelling bird listed as a California Species of Special Concern. Least Bitterns build nests over water on platforms of live and dead vegetation in fresh and brackish marsh (Shuford, W.D. and Gardali 2008). This species has been detected at various sites along the lower Owens River (LADWP unpublished data), and within the project area, Least Bitterns have been recorded at Billy Lake and Nik and Nik ponds. There is a medium potential to impact Least Bittern from May through September in the project area as this species is a rare to uncommon breeding species in the waterways.

### **Golden Eagle (*Aquila chrysaetos*)**

Golden Eagle is designated as fully protected by the state of California. Golden Eagles nest in high densities in open and semi-open habitat, but also may nest at lower densities in coniferous habitat when open space is unavailable. They can be found from the tundra, through grasslands, woodland-brushlands, and forested habitat, south to arid deserts, including Death Valley (Pagel, et. al. 2010). Locally, Golden Eagles may nest wherever high cliffs offer protection from predators. Golden Eagles are particularly sensitive to disturbance around nest sites. There is a medium potential to impact Golden Eagles from March through September in the project area as this species is a regular breeding species in the waterways, and should be anticipated in areas of mountainous terrain or sites where high cliffs offer potential nest sites such as the Owens River Gorge or canyons in high altitude project locations.

### **Swainson's Hawk (*Buteo swainsoni*)**

Swainson's Hawk is a state-threatened species in California. Swainson's Hawks breed in the western United States and Canada and winter in South America. Studies have documented that the California population winters in Central America and Mexico. Swainson's Hawk is a raptor adapted to the open grasslands and has become increasingly dependent on agriculture, particularly alfalfa crops. In California where 95% of the population occurs in the Central Valley (Anderson et al 2005), the species often nests peripheral to riparian systems. They will also use lone trees in agricultural fields or pastures and roadside trees (CDFW 2015).

In the project area, Swainson's Hawk occur primarily in the vicinity of alfalfa fields in migration and during nesting. Areas of abundance are Laws, Big Pine, and Independence area. Nests sites include lone trees in agricultural fields or pastures and roadside trees or larger riparian trees along natural and manmade waterways. This species is an uncommon but regular breeder in the Owens Valley. This species is not expected to nest in Long Valley or the Mono Basin. Project activities are expected to have a medium impact on this species during the nesting season. There is a medium potential to impact Swainson's Hawk from April through September in the project area as this is a regular breeding species in trees along manmade and natural waterways, particularly those near alfalfa fields.

### **Bald Eagle (*Haliaeetus leucocephalus*)**

Bald Eagle was delisted under the Federal Endangered Species Act, but is still listed as endangered and fully protected in the state of California. In winter, this species can be found throughout most of California at lakes, reservoirs and rivers. The state's breeding habitats are mainly in mountain and foothill forests and woodlands near reservoirs, lakes and rivers. Most breeding territories are in northern California, but the eagles also

nest in scattered locations in the central and southern Sierra Nevada Mountains and foothills (CDFW 2015). Bald Eagle occurs at the reservoirs and lakes in the project area as a rare breeding species, and uncommon migrant and wintering species. There is a medium potential to impact Bald Eagles year round in the project area as this is an uncommon but regular migrant and wintering species in all project areas, and rare breeding species in Mono county.

**Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*)**

Western Yellow-billed Cuckoo was listed as federally-threatened in 2014 and has been a state-endangered species since 1988. In the Owens Valley, Baker Creek and Hogback Creek are the locations with the most recent sightings of cuckoos, one in 2009 and 2012, respectively. However, no nesting was confirmed.

Yellow-billed Cuckoo is listed as Threatened under the Federal Endangered Species Act, and Endangered in the state of California. This species occupies large patches of riparian habitat, particularly woodlands with mature cottonwoods and mid-successional willows. Historically, the species was common in riparian habitat throughout much of lowland California. Presently, Yellow-billed Cuckoos are limited to the Sacramento River from Red Bluff to Colusa, and the South Fork Kern River. Smaller populations exist sporadically in other riparian systems throughout the state. Riparian habitats consistently used by cuckoos along the Kern and Sacramento Rivers in California are characterized by high canopy cover, structural diversity, and an extensive understory. Habitat patch size is a very important landscape feature for cuckoos. The trend towards increased occupancy with increased patch size is significant (McNeil et al. 2011).

The species has been documented in Inyo County, near Lone Pine and Big Pine (Laymon, S. A. 1998) and along the Owens River near Tinemaha Reservoir. This species is rare in Inyo County, occurring in appropriate habitat within the project area some years. There is a medium potential to impact Yellow-billed Cuckoo from June through September in the project area as this species is a summer resident in the waterways.

**Long-eared Owl (*Asio otus*)**

Long-eared Owl is designated by CDFW as a Species of Special Concern. This species breeds throughout the entire state of California, excluding higher elevations in the Sierra Nevada. Long-eared Owls nest in conifer, oak, riparian, pinyon-juniper, and desert woodlands that are either open or are adjacent to grasslands, meadows, or shrublands. Like other large owls, this species nest in vacant nest of other birds such as hawk, magpies and crows (Beedy and Pandolfino 2013). A secretive owl that prefers



dense cover (Shuford et al. 2008), this species can be very difficult to detect. This species often gathers at communal roosts in dense tree or shrub vegetation when not nesting (Beedy and Pandolfino 2013). This species is known to nest and roost in areas of dense cover throughout the project area and has a medium potential to be impacted by disturbance during both the breeding and non-breeding periods.

### **Loggerhead Shrike (*Lanius ludovicianus*)**

Loggerhead Shrike is designated by CDFW as a Species of Special Concern. It can often be found in desert scrub, grassland, savannah woodland, or other dry, open habitats. This species requires a hunting perch (such as a tall shrub or tree), open areas for hunting, and a large shrub or tree for nest placement (Shuford 2008). This is a frequently encountered species in this region and numerous records exist for the project area. Although somewhat common, Loggerhead Shrike has a medium potential for impact as it is primarily an upland species. The Loggerhead Shrike is an early nesting species, potentially nesting as early as February in some years. This species has a medium potential to be impacted as they frequently are encountered along waterways in a desert environment where trees or shrubs may serve as attractive nest and perch sites, and suitable prey are found.

### **Bank Swallow (*Riparia riparia*)**

Bank Swallow is California state-Threatened species. The species is extirpated from southern California, and the majority of the California population is centered along the Sacramento and Feather rivers. Bank Swallows are colonial breeders that may nest by the hundreds or thousands as they excavate their own burrows in vertical river banks or erosive banks of sand or gravel (CDFG 1992, Beedy and Pandolfino 2013). This species is common throughout the project area as a migrant. Significant colonies are known from a gravel quarry in the project area along the Owens River at Five Bridges Road, and at Crowley Reservoir. This species is considered to have a medium potential for impact in the project area due to specific habitat requirements needed for nesting.

### **Spotted Bat (*Euderma maculatum*)**

Spotted Bat is designated by CDFW as a Species of Special Concern. Limited information is available on this species' life history and population trends. They can be found in different areas from low deserts to high-elevation coniferous forests. They appear to be solitary animals but occasionally roost or hibernate in small groups. Roost sites include cracks, crevices, and caves, usually high in fractured rock cliffs (Wai-ping and Fenton 1989). They show high roost fidelity, using the same roosts nightly, and forage primarily on moths. They forage high, at or above treetops, and have a loud high pitched echolocation call clearly audible by humans (Harvey et. al 1999). Roosting and foraging habitat occurs in the project area, most notably the Owens Gorge where this

species has been encountered (LADWP 2002b). Spotted Bat is expected to have a moderate potential to be impacted in or around the project site.

## **Low Potential**

### **Long Valley Speckled Dace (*Rhinichthys osculus ssp. 5*)**

Long Valley Speckled Dace is a California Species of Special Concern and a subspecies of *Rhinichthys osculus* within the Cyprinidae or minnow family. Little is known about the biology and habitat preferences of this subspecies. Historically, Long Valley Speckled Dace may have been widespread in Long Valley. Historic collections were made in springs feeding the Little Alkali Lake area, Whitmore Springs, Hot Creek, and near Benton Crossing Bridge (Sada 1989). Currently, this species occurs at Whitmore Springs and Becky's pond (a private pond in Bishop; CDFW unpublished data). The Little Alkali area population has not been observed since 1998 when presence of mosquito fish was also documented (Malengo 1998). There is an effort to eradicate mosquito fish and reestablish Speckled Dace on BLM land above City Property (CDFW pers. comm. 2016).

There is an old abandoned measuring station at the Whitmore springs that LADWP no longer utilizes. Project activities no longer occur in this area and therefore, given the current distribution, no impacts to Long Valley Speckled Dace are expected.

### **Owens Tui Chub (*Siphateles bicolor snyderi*)**

Owens Tui Chub was listed as state endangered in 1989 and federally endangered in 1994. This species prefers water with low velocities such as portions of the Owens River, associated tributaries, springs, sloughs, drainage ditches, and irrigation canals with dense aquatic vegetation. There are three existing natural Owens Tui Chub populations. These are at the Owens River Gorge and the source springs of the CDFW's Hot Creek Hatchery. Additional populations of Owens Tui Chub have been established in cooperation with land owners at BLM's Mule Spring, Little Hot Creek in Inyo National Forest, and at the University of California White Mountain Research Station owned by LADWP. Hybridization with the Lahontan Tui Chub is common and threatening the genetic purity of Owens tui chub (Chen et al. 2006). These introgressed tui chub are common in waterways throughout the Owens Valley. Only activities in the Owens River Gorge have a potential to impact non-introgressed Owens tui chub.

### **Owens Pupfish (*Cyprinodon radiosus*)**

The Owens Pupfish was listed as federally endangered on March 22, 1967. In 1971, the Owens Pupfish was listed as endangered by the State of California. It is also a fully

protected species under California Fish and Game Code § 5515. Owens Pupfish is an Owens Valley endemic species that historically was wide-spread and abundant in the Owens River, and in springs, sloughs, irrigation ditches, swamps, and flooded pastures from Fish Slough to the Owens River delta (USFWS 1998). Today, Owens Pupfish are only found in isolated refuges at Fish Slough (BLM Spring, the Letter Ponds, Marvin's Marsh – LADWP property), Mule Spring, and Artesian Well 368 (LADWP 2016). This range reduction has been attributed primarily to the establishment of nonnative predatory fishes. Owens Pupfish will occupy most aquatic habitat if it is predator-free, has warm water, and food is plentiful. Due to lack of project activities conducted within the isolated refuge populations, this species is expected to have a low potential to be impacted by the project.

### **Inyo Mountains Slender Salamander (*Batrachoseps campi*)**

The Inyo Mountains Slender Salamander is designated by California as a Species of Special Concern. This species is endemic to the Inyo Mountains, where surface water is present under rocks and in steep crevices (Rarefind 2017a). It inhabits desert riparian habitat typically in canyons with rocky terrain in the immediate vicinity of springs, seeps, and their associated riparian growth at elevations of 4,700 to 8,000 feet in elevation. Although they have been found on both slopes of the Inyo Mountains, they are more widely distributed on the east side. The Inyo Mountains Slender Salamander does not breathe through lungs. This species conducts respiration through their skin and their mouth tissues, which requires them to live in damp environments on land and to move about on the ground only during times of high humidity (Marlow et. al., 1979).

There are three CNDDDB occurrence records for the Inyo Mountains Slender Salamander from 1988 within Locust Ditch, Hogback Creek and the Alabama Gates Spillway. As no findings along the valley floor have been found in almost 30 years and this species is generally restricted to canyons in the Inyo Mountains, there is a low potential that the Inyo Mountains Slender Salamander occurs within the project area and will be impacted by project activities.

### **Northern Leopard Frog (*Lithobates pipiens*)**

The Northern Leopard Frog is designated as a California Species of Special Concern and is widely distributed in North America, but uncommon and localized in California. Highly aquatic, Leopard Frogs occur in or near quiet, permanent and semi-permanent water with abundant aquatic vegetation. The origins of the state's populations are uncertain, but many appear to be introduced. Shoreline cover, submerged and emergent aquatic vegetation are important habitat characteristics (CDFW 2016). The most recent occurrence record for this species is from 1976 on the Owens River, just above Aberdeen. CDFW conducted surveys in spring/marsh systems within Tinemaha



and Birch Creeks in 2009 but found no sign of this species (CDFW unpublished data 2009). Due to lack of positive sightings in the Owens Valley for four decades, the Northern Leopard Frog has a very low potential to be impacted and is not expected to occur within the project area.

### **Panamint Alligator Lizard (*Elgaria panamintina*)**

The Panamint Alligator Lizard occurs in canyons, deep gullies and rocky areas near permanent water (Marlow 2000). The six mountain ranges of Inyo and Mono County that this species has been found in are White, Inyo, Nelson, Coso, Argus and Panamint (Clause et al 2015). To date, all confirmed localities are on federal land, with the majority in Inyo County. While the CNDDDB dataset lists an occurrence for Division Creek within the project area, this record is erroneous as the specimen available for this record has been reviewed by experts and museum staff and has been identified as a Southern Alligator Lizard (*Elgaria multicaudata*) (Clause et al 2015). This species has a low potential for impacts due to its presence in Coldwater and Silver Canyon where LADWP has infrastructure on federal land.

### **Northern Goshawk (*Accipiter gentilis*)**

The Northern Goshawk is designated by CDFW as a Species of Special Concern. This species occurs in mature coniferous forest over much of their range in California, and in mature quaking aspen stands within aspen-shrub steppe vegetation east of the Sierra Nevada (Shuford 2008). In the project area, this species is most likely to be encountered along waterways in the Mono Basin. This species has a low potential for impacts due to limited overlap of appropriate habitat and the project area.

### **Snowy Plover (interior pop.) (*Charadrius nivosus*)**

Snowy plover (Interior population) is designated by CDFW as a Species of Special Concern. In California, the interior population is concentrated at a few alkali lakes in northeastern California, the southern deserts and at agricultural evaporation ponds or remnant alkali playas in the San Joaquin Valley. In winter, these birds retreat from higher elevations and, in the interior, concentrate in the Tulare Basin and at the Salton Sea. In the interior of California, Snowy Plovers breed on barren to sparsely vegetated flats and along shores of alkaline and saline lakes, reservoirs, ponds, braided river channels, agricultural wastewater ponds, and salt evaporation ponds. (Shuford, W.D., et al. 2008). Snowy Plovers breed at Owens Lake, Mono Lake, and occasionally at Crowley Lake when lake levels are low. Snowy Plover occupy Owens Lake where the City implements various dust control activities on City Property and other leased property to mitigate dust emissions. These activities are performed with mitigation measures under various Environmental Impact Reports (EIRs), including the 2008 SIP EIR (District), Owens Lake Phase 7a Dust Control Measures EIR (LADWP 2013), and the Owens Lake Dust Mitigation Program Phase 9/10 Project Final EIR (LADWP 2015). Since Snowy Plover populations are locally confined to playa and flats of local lakes and reservoirs, this species has a very low potential to be impacted in the project area.

### **Mountain Plover (*Charadrius montanus*)**

Mountain Plover is listed as a Species of Special Concern in the state of California. Mountain Plover is a grassland species that generally only occurs in the Central Valley, Antelope Valley, the Colorado River Valley, and Imperial Valley. (Shuford, W.D., et al. 2008). There have been several reports of Mountain Plover at Owens Lake and other sites in the Owens Valley, but the species is a rare visitor in migration. There is low potential for this species to occur and be impacted by the project.

### **Burrowing Owl (*Athene cunicularia*)**

Burrowing Owl is designated by CDFW as a Species of Special Concern. This species occurs throughout the state of California with the exception of the coastal and interior mountain ranges. It is primarily a grassland species, but persists and even thrives in some landscapes highly altered by human activity. Preferred habitat includes burrows for roosting and nesting and relatively short vegetation with only sparse shrubs and taller vegetation (Shuford, W.D., et al. 2008). Burrowing Owls are scarce in the Owens Valley and the potential for impacts by project activities for this species is low due to pre-project surveys in potential habitat.

### **Least Bell's Vireo (*Vireo bellii pusillus*)**

Least Bell's Vireo is listed as Endangered under the Federal Endangered Species Act. It is also listed as Endangered in the state of California. Historically, Least Bell's Vireo was a common breeder in the Owens Valley. It was extirpated from the Owens Valley and most of its historic range in California, and by the time of its listing in 1986, there were only 300 pairs statewide confined to eight counties south of Santa Barbara. By 1998 the population size had increased to 2,000 pairs, and the species began to expand back into its historic range. It is still a rare occurrence in the Owens Valley (Kus B. 2002). Least Bell's Vireo is a riparian obligate species that prefers dense first successional vegetation. Habitat for this species occurs in the project area, however due to its rarity in Inyo County, there is a low potential to be impacted by the proposed project.

### **Summer Tanager (*Piranga rubra*)**

Summer Tanager is designated by CDFW as a Species of Special Concern. In California, this species breeds primarily in mature riparian forests with extensive Fremont cottonwood overstory (Shuford 2008). Summer Tanagers are rare in the project area, and possibly sporadic breeders. Summer Tanagers have been observed in the Bishop area, Baker and Hogback Creek, and in the Mono Basin. Some of these sightings involved a male and female together, thus raising the possibility of nesting. Due to its rarity in Inyo County, there is a low potential for Summer Tanagers to be impacted by the proposed project.

**Western Mastiff Bat (*Eumops perotis californicus*)**

Western Mastiff Bat is designated by CDFW as a Species of Special Concern. This species is primarily cliff-dwelling, where maternity colonies of 30 to several hundred individuals (typically fewer than 100) roost generally under exfoliating rock slabs (WBWG 2012). The Western Mastiff Bat is found in a variety of habitats, from desert scrub to chaparral to oak woodland and into the ponderosa pine belt and high elevation meadows of mixed conifer forests. Individuals have been estimated to forage as much as 2,000 feet above the ground and may forage in flocks. They have been heard in open desert, at least 15 miles from the nearest possible roosting site (Vaughan 1959). This species is believed to be rare in the project area and there are only two occurrences of Western Mastiff Bat in the CNDDDB database from 1999. Both of these records are from the same day and location on the northwest side of Mono Lake. Due to its rarity in the area this species is expected to have a low potential for impacts by project activities.

**Pygmy Rabbit (*Brachylagus idahoensis*)**

Pygmy Rabbit is designated by CDFW as a Species of Special Concern. Pygmy Rabbits are associated with big sagebrush habitat (*Artemisia tridentata*) in areas supporting deep loose soils (Weiss and Verts 1984, Green and Flinders). Pygmy Rabbits dig their own burrows in sagebrush habitats where soil deposition occurs at microhabitat sites such as the leeward sides of hills, the base of hills, and alluvial fans (Utah Division of Wildlife Resources 2003). Pygmy Rabbits spend the majority of their lives within 30 meters of their burrow, which may have multiple entrances. Pygmy rabbits are generally active only at dusk and dawn, and thus can be difficult to observe. Surveys conducted by BLM and University of Nevada Reno (unpublished data), as well as observations by LADWP staff, support the presence of this species throughout Long Valley and the Mono Basin. The potential for impacts is considered low for this species as it is primarily associated with upland sites.

**White-tailed Jackrabbit (*Lepus townsendii townsendii*)**

The White-tailed Jackrabbit is designated by CDFW as a Species of Special Concern. The White-tailed Jackrabbit is a large jackrabbit generally found at higher elevations than the more familiar Black-tailed Jackrabbit (*Lepus californicus*). This species is found in a variety of habitats from sagebrush, perennial grassland, wet meadow, juniper woodland, and coniferous forest (Zeiner 1990). Like other hares, this species does not burrow, but seeks shelter and bares its young in a shallow depression in the ground under shrubs (Zeiner 1990). CNDDDB records and LADWP staff observations (D. House pers. comm) support the presence of this species in the project area in Long Valley and the Mono Basin. The potential for impact is considered low for this species as it is not common in the project area, and uses a variety of habitats.



### **Sierra Nevada Mountain Beaver (*Aplodontia rufa californica*)**

The Sierra Nevada Mountain Beaver is designated by CDFW as a Species of Special Concern. This species is mostly nocturnal and requires dense growth of small deciduous trees and shrubs and an abundance of forbs in the Sierra Nevada Mountains (CNDDDB 2017). They are found scattered throughout the Cascade, Klamath and Sierra Nevada ranges. However, populations are uncommon in the Sierra Nevada. They feed on the vegetative parts of plants, specifically ferns, willows and grasses. The Mountain Beaver does not build their homes in streams, creating dams out of sticks and rocks as the North American beaver builds; rather, they dig burrows in deep friable soils with a cool moist microclimate, storing vegetation at their burrow entrance or in underground chambers (Zeiner et. al. 1998-1990). There is one CNDDDB occurrence record in the project area from 2013 describing collection localities on the Valentine Reserve and Mammoth Creek. Because this species is uncommon in the Sierra Nevada and does not burrow within waterways, potential impacts are expected to be low.

### **Mohave Ground Squirrel (*Xerospermophilus mohavensis*)**

Mohave Ground Squirrel (MGS) is small, grayish, diurnal squirrel that is currently listed under the California Endangered Species Act as a threatened species. MGS occur in the western half of the Mojave Desert. The northern limits of the range are near Owens Dry Lake, in the north, and through China Lake Naval Weapons Station and Fort Irwin Military base, in the east. The western limits loosely follow Highway 14 and the foothills of the southern Sierra Nevada escarpment (Leitner 2008). MGS are dormant in the fall and winter months. They emerge from hibernation in February and begin pair bonding and mating during March. If rainfall is adequate, MGS will reproduce. If rainfall levels do not provide sufficient rainfall to support significant annual plant growth, then MGS will merely forage on herbaceous perennials and shrubs in order to gain enough body mass to survive another prolonged period of dormancy and will not reproduce in that year (Leitner and Leitner 1998). There are two CNDDDB occurrence records within the project area for MGS within the upland habitat buffers near Walker Creek and Loco Creek west of north Haiwee Dam. However, because this species does not inhabit riparian habitats, impacts from project activities are not expected to occur.

### **Sierra Nevada Red Fox (*Vulpes vulpes necator*)**

The Sierra Nevada Red Fox is a federal candidate species and is listed as threatened by the state of California. This species is rare in the Sierra Nevada, but widely distributed in lowlands in central and southern California. They prefer forests for denning and reproduction, interspersed with meadows or alpine fell-fields for hunting (Zeiner et. al., 1988-1990). Most sightings in Sierra Nevada have occurred above 7000 feet, but have ranged from 3900-11,900 feet (Schempf and White 1977). The Sierra Nevada population has been reduced by grazing in meadows, which reduces prey populations, and by trapping, logging, and recreational disturbance. Recent sightings occurred in 2014 in the Sonora Pass vicinity, outside of the project area. Older occurrence records in the CNDDDB are from the 1980s near Deadman Creek north of Mammoth Lakes and the Lee Vining area. Because of its rare occurrence in the Sierra Nevada and its ability to disperse, the Sierra Nevada Red Fox is not expected to be impacted by project activities.

### **American Badger (*Taxidea taxus*)**

The American Badger is designated by CDFW as a Species of Special Concern. This species inhabits level, open areas in grasslands, agricultural areas, and open shrub habitats. They dig large burrows in dry, friable soils and feed mainly on fossorial mammals such as ground squirrels, gophers, rats, and mice. This species is primarily active during the day, but may become somewhat nocturnal when occurring in close proximity to humans. During summer and fall, they range more frequently, with the mating season generally occurring in November. One to three burrows may be dug from foraged out prey holes in a day, used for a day to a week, and then abandoned, with possible returns later, and other small wildlife utilize abandoned burrows in the interim. Natal dens are dug by the female and are used for extended periods, but litters may be moved, probably to allow the mother to forage in new areas close to the nursery (Messick and Maurice 1981). Three to five young are born from late March to early April. The average home range of badgers has been estimated to be 667 to 1,550 acres (Lindzey 1978). There are CNDDDB occurrence records for American Badger within the 59 quad search but no records within the project area. Due to their large home ranges, there is a potential for this species to cross through the project area. However, because their foraging and denning habitats occur outside of riparian areas, impacts to American Badger from project activities are not expected to occur.

### **Sierra Nevada Bighorn Sheep (*Ovis canadensis sierra*)**

Sierra Nevada Bighorn Sheep are federally and state endangered, as well as fully protected by the state of California. This species lives exclusively in the Sierra Nevada of California. Historically they inhabited an extensive region that spanned from Sonora Pass in the north to Olancho Peak in the south; they also were found as far west as the Mineral King region within Sequoia National Park. Today Sierra Nevada Bighorn Sheep occupy 10 of 16 herd units identified for recovery. This species prefers terrain that is rough, rocky and steep; it also encompasses alpine meadows, summit plateaus, and hanging meadows fed by springs within escape terrain. This topography allows them an advantage in avoiding predation through easy access to escape terrain adjacent to areas where more forage may be available (CDFW 2017b).

There are CNDDDB occurrence records in upper Pine Creek on the Wheeler Crest, as well as the upper elevations of Sawmill Creek, Black Canyon Creek, Salt Creek and Thibaut Creek. However, these occurrences are at much higher elevations than any measuring stations and infrastructure and maintenance activities are not conducted in these areas. Bighorn Sheep may come down from higher snow-covered elevations in the spring to forage on vegetation emerging on the alluvial fans. However, impacts from project activities are not expected as Bighorn Sheep would forage in open areas with visible escape routes rather than riparian corridors.

## Discussion

This document is designed to address potential impacts that could result from the project, including routine maintenance of water ways, their existing structures and associated infrastructure within Inyo and Mono Counties.

### Plants

Routine maintenance activities are conducted to maintain water conveyance and in some cases, maintain or even enhance rare plant populations. For example, Owens Valley checkerbloom can be found adjacent to waterways in wet alkali meadows. Spreading water via spreading diversions (irrigating meadows) helps to maintain alkali meadow systems, and therefore, checkerbloom habitat.

When internal population information is lacking on a certain species (i.e. Lemmon's milk-vetch), or if occurrence information is outdated, surveys will be conducted prior to maintenance activities being conducted, as indicated in mitigation measure **BIO-5**. When a species is present within the water way (i.e. frog's-bit buttercup), pre-maintenance surveys will be conducted so the population can be flagged and avoided.

Lemmon's milk-vetch, small-flowered grass-of-Parnassus, scalloped-leaved lousewort, narrow-leaved cottonwood, frog's-bit buttercup, and prairie wedge grass have a high potential to be impacted by project activities. These species prefer habitat that may be present directly in the waterway where project activities may be conducted. To minimize potential impacts to these species, mitigation measure **BIO-5** will be implemented.

Fish Slough milk-vetch, Inyo County star-tulip, Parish's popcorn flower, Owens Valley checkerbloom, alkali tansy-sage, and slender-leaved pondweed also have a high potential to be impacted by project activities. These species prefer habitat that may be present adjacent to project activities. To minimize potential impacts to these species, mitigation measures **BIO-1** and **BIO-8** will be implemented.

Smooth saltbush, alkali ivesia, and foxtail thelypodium have a medium potential to be impacted by project activities. These species prefer habitat that may be present adjacent to project activities. To minimize potential impacts to these species, mitigation measures **BIO-1** and **BIO-8** will be implemented.

Hot springs fimbristylis, Robbin's pondweed, marsh arrow-grass, and falcate saltbush have a low potential to be impacted by project activities. These species prefer habitat that may be present adjacent to project activities. To minimize potential impacts to these species, mitigation measures **BIO-1** and **BIO-8** will be implemented.



By adhering to mitigation measures, the take of special-status plant species will be avoided and in some cases, populations may be maintained or even enhanced.

### **Fishes**

Owens Speckled Dace and Owens Sucker have a high potential to be impacted by project activities. CDFW recommended limiting disturbance to Speckled Dace occupied waters when Speckled Dace eggs and young are in the substrate and vulnerable. The listed recovery population of Lahontan Cutthroat Trout will not be impacted by the project; however, the wild population stocked for recreational purposes has a medium potential to be impacted during the spring spawning season within some tributaries into Crowley Lake as well as one small area between Reversed Creek and Grant Lake where project activities are conducted within a flume and forebay. To avoid potential impacts to these native fish species, mitigation measure **BIO-3** will be implemented. LADWP will work in coordination with CDFW regarding specific timing of seasonal spawning avoidance. Implementing mitigation measures **BIO-1** and **BIO-9** will minimize potential impacts on fishes.

Owens Tui Chub have a low potential to be impacted by project activities. Of the two existing populations, project activities only occur at the Crowley toe drain to the main weir (where the Owens River Gorge population occurs in critical habitat). Project activities below the Crowley weir include spot cleaning obstructions. CDFW will be notified at least 5 days prior to conducting work in this area to ensure that tui chub, if extant, are not impacted. No project activities are performed by LADWP at the Hot Creek fish hatchery, however CDFW maintains and operates a fish hatchery and uses springflow from tui chub habitat in hatchery operations.

Owens Pupfish are expected to have a low potential to be impacted by the project due to their restricted location. Project activities are not conducted within the current isolated refuge populations. Long Valley Speckled Dace also have a low potential to be impacted by the project. Because the measuring station at Whitmore springs has been abandoned, there will be no impacts to this species.

Although they are not a special status species, maintenance activities will be conducted to avoid the Brown Trout spawning season in areas with catchable trout to help maintain a recreational fishery. Regardless of Brown Trout presence, if native fish occur in a given location, measures will be prioritized to protect native populations (CDFW personal comm.). To minimize impacts to the recreational fishery, mitigation measure **BIO-10** will be implemented. In areas where Brown Trout could conflict with native sensitive fishes, only mitigation measure **BIO-3** will be implemented which may enhance the native fish assemblage.

### **Amphibians and Reptiles**

The Inyo Mountain Slender Salamander, the Northern Leopard Frog and the Panamint Alligator Lizard all have a low potential to be impacted by project activities.

Implementing mitigation measures **BIO-1** and **BIO-9** will minimize potential impacts to these species.

Because the Inyo Mountain Slender Salamander is endemic to the Inyo Mountains and typically restricted to rocky canyons and springs in this mountain range, the likelihood for this species to occur in the project area and be impacted by project activities is low. However, since there are occurrence records from 1988, mitigation measure **BIO-7** will be implemented, which includes a one-time survey in the drainages where the CNDDDB records occurred in the project area.

Northern Leopard Frog has not been documented in the project area in over four decades, including absence during 2009 surveys conducted by CDFW in spring/marsh systems within Tinemaha and Birch Creeks. It is not expected to occur or be impacted by project activities.

Panamint Alligator Lizard has been recently documented up Silver Canyon Creek drainage. Inspections on LADWP infrastructure occur weekly up this drainage and project maintenance activities occur quarterly. The infrastructure in this area has a high rate of disturbance; therefore Panamint Alligator Lizard is not expected to occur or be impacted by the project where high activity and human disturbance is prevalent.

### **Birds**

Accidental deaths to bird species covered under the Migratory Bird Treaty Act Bird and impacts to sensitive bird species discussed above will be minimized by implementation of mitigation measure **BIO-2**. Bird species most likely to be impacted by project activities are those that breed in riparian or marsh vegetation, or are particularly sensitive to disturbance at certain times of the year (e.g. Greater Sage-Grouse, nesting raptors). Waterway types in the project area vary in their attractiveness to nesting birds and areas such as perennial streams generally support more woody riparian and marsh vegetation than man-made waterways. In addition, perennial streams and perennial man-made waterways are more likely to support more nesting birds than lower cover or more xeric sites such as intermittent native and man-made waterways.

Impacts to sensitive bird species as well as all native nesting bird species covered under the MBTA will be minimized by seasonal avoidance to the extent possible through implementation of mitigation measures **BIO-1**, **BIO-2** and **BIO-9**. A priority will be

placed on seasonal avoidance in perennial streams or other areas supporting significant woody riparian or marsh vegetation. In addition, seasonal avoidance will be a priority in areas known to support specific sensitive species (Sage Grouse leks, nesting sensitive raptors, etc). If seasonal avoidance cannot be achieved, a nesting bird survey will be conducted as described in **BIO-2**, or measures will be taken to reduce disturbance in the case of Sage-Grouse (such as limited work windows).

### **Mammals**

Pallid Bat and Townsend's Big-eared Bat have a high potential to be impacted by project activities while Spotted Bat has a moderate impact potential. Although Pallid and Townsend Big-eared Bats emerge at dusk to forage and roost during the day, they are extremely sensitive to roost disturbance and have been known to abandon roosts, including hibernation and maternity colonies, following human disturbance. Spotted and Western Mastiff Bats, although less sensitive to roost disturbance compared to Pallid and Townsend's Bats, can still be impacted during the pup-rearing season (April-August), when young are present, but not yet ready to fly. To minimize potential impacts to bat species, mitigation measure **BIO-6** will be implemented, which will investigate any bat observations to look for and protect potential roost sites from maintenance activities within the project area.

The Owens Valley Vole is active year round. It has a short life-span and is a prolific breeder. Based on a 2011 study conducted by CDFW, the Owens Valley Vole appears to have healthy breeding populations throughout its range. Although this species has a high potential for impacts by project activities because it occurs throughout the project area, with implementation of mitigation measures **BIO-1** and **BIO-9**, vole runway tunnels and burrows will not be significantly impacted. Only existing disturbed areas will be used and vegetation will be removed only as needed for project activities.

Sierra Mountain Beaver is an uncommon species in the Sierra Nevada but has been found along Mammoth Creek. This species does not burrow within waterways, but along the fringes of riparian and upland habitats where soils are friable. They may be found foraging in riparian habitat within minimal drainages in the Mono Basin; however implementation of mitigation measures **BIO-1** and **BIO-9** will minimize potential impacts to this species.

Pygmy Rabbit, Western White-tailed Jackrabbit, Sierra Nevada Red Fox, American badger and Sierra Nevada Bighorn Sheep all have a low potential to be impacted by project activities. This group of species may pass through the project area during migration or foraging activities but prefer upland or alpine habitats such as sagebrush scrub or coniferous forests and do not rely on riparian habitats for survival.



Implementing mitigation measures **BIO-1** and **BIO-9** should avoid any potential impacts to these species.

## **Mitigation Measures**

Potentially significant impacts to biological resources from project implementation would be minimized or avoided by the mitigation measures described below.

**BIO-1:** Potentially significant impacts to plants, fish and wildlife shall be minimized to less than significant levels by: using existing roads for ingress and egress to work locations; confining work to the smallest footprint possible and to previously disturbed areas associated with water conveyance infrastructure; removing vegetation only when necessary; and placing staging and spoil piles in predetermined locations away from waterways, wetlands, and riparian habitats. Watershed Resources staff shall perform pre-project surveys to find a location for staging and access that will minimize impacts to surrounding vegetation and avoid sensitive resources.

**BIO-2:** To the maximum extent feasible, maintenance work shall be conducted outside of the bird nesting season, March 1 to September 1; however, if species are active earlier or later, surveys shall be performed. If maintenance activities cannot be feasibly avoided between March 1 and September 1, nesting bird surveys shall be conducted by qualified biologists prior to the start of work. If a nest is found or nesting suspected, project activities shall cease within suitable nesting habitat or within 300 feet of nesting habitat (within 500 feet for raptor nesting habitat). Any active bird nests located shall be protected and work postponed until after young have fledged. If a special status bird species is found present in a specific area, no maintenance work shall occur in that area during the breeding season.

**BIO-3:** Work activities shall not be conducted between March 15 and July 1 to avoid impacts to spawning trout, redds, and embryos in identified tributaries to Grant Lake and Crowley Lake.

Work activities shall not be conducted in waterways with known Speckled Dace during the spawning season (late spring into summer) to avoid impacts to spawning Cypriniform fishes (e.g., Owens Suckers, Speckled Dace). Specific locations and timing will be coordinated with CDFW. Known locations of Speckled Dace are shown in Appendix C. If work is conducted in these waterways from June to August, water quality data will be collected during maintenance activities. If aquatic life and fish are showing signs of stress, a reasonable effort will be made to capture and relocate stressed or stranded aquatic life. Capture methods may include fish landing nets, dip nets, buckets, and by hand. Captured aquatic life shall be released immediately into the waterway in

reaches where fish are likely to survive. If fish capture is necessary, LADWP shall consult with CDFW for capture and relocation guidance and assistance.

**BIO-4:** Banks on waterways shall not be graded. Vegetation shall be cut down to no lower than 2 inches to leave roots that promote waterway bank stability and regrowth. Any native vegetation with DBH of 4 inches or greater shall be left intact. LADWP shall consult with CDFW and prepare a mitigation plan prior to removing any riparian vegetation with a DBH equal to or greater than 4 inches. Replacement-to-impact ratios will be discussed as necessary. Any area that has not been mowed annually shall be assessed prior to mowing by a Watershed Resources Specialist to determine if there are any resource concerns.

**BIO-5:** If maintenance activities are proposed to occur within a specific waterway where special status plants, such as frogs-bit buttercup are known to exist, a qualified Watershed Resources staff member shall conduct surveys prior to work activities and ensure that any populations of special status plants are avoided. If a specific waterway contains an outdated occurrence record for a special status plant, a survey shall be conducted prior to work activities. If a waterway has not been cleaned for more than 5 years, a rare plant survey shall be conducted prior to work activities both in the waterway and in appropriate adjacent habitat. All records shall be submitted to the CNDDDB.

**BIO-6:** If a bat is observed in daylight hours during project activities, qualified LADWP Watershed Resources Staff shall be contacted to come to the project area and investigate the observation. A daylight observation may indicate that the bat is sick, or has been disturbed from a sensitive day roost or maternity roost containing multiple individuals and/or pups. If this type of roost is discovered, project activities shall not occur within 100 feet of the roost until the bats are no longer utilizing the area for hibernation or pup-rearing.

**BIO-7:** LADWP Watershed Resources Staff shall conduct surveys in Locust Ditch, Hogback Creek, and the Alabama Gates Spillway during March and November when the Inyo Mountain Slender Salamander are most active, to determine if this species is extant or extirpated from these areas. LADWP shall consult with CDFW to determine the state-approved protocol, monitoring techniques, and interval.

**BIO-8:** Equipment shall be cleaned with a high-pressure washer before traveling between waterways to avoid the spread of invasive species. Information shall be shared as it becomes available regarding the presence and prevention of any observed invasive species including botanical (e.g., pepperweed, knapweed, etc.) and aquatic

invasive species (e.g., New Zealand Mudsnails, Quagga/Zebra Mussels, etc.) in or near waterways. LADWP currently treats both pepperweed and tamarisk annually with chemical and mechanical removal techniques to reduce the spread of known populations

**BIO-9:** Worker Environmental Awareness Training shall be provided annually to all LADWP personnel involved in conducting and managing routine maintenance activities. This training shall cover authorized maintenance activities, permit conditions, required pre-maintenance biological surveys and protective measures that must be followed to avoid inadvertent impacts to biological, cultural and historic resources.

**BIO-10:** Maintenance activities shall be avoided during the fall/early winter spawning season for the protection of Brown Trout spawning beds when eggs and larvae could occur. Specific locations for avoidance shall be identified in coordination with CDFW. The following criteria will be used to identify locations where measures will be implemented:

- a) There is known or suspected fishing pressure, and
- b) Habitat conditions support catchable Brown Trout in the 2-3 pound range.

**BIO-11:** Beaver dams shall only be removed if they are causing excessive flooding, restricting flow substantially, or are inhibiting the development of diverse vegetation types within specific waterways. During beaver dam removal, water quality monitoring (dissolved oxygen, temperature, pH, and turbidity) shall be conducted. Work shall be halted immediately if fish stress is observed or water quality is substantially reduced.

**BIO-12:** When replacing existing facilities, water shall be diverted around the worksite to ensure fish remain in good condition, or facilities shall be replaced when the waterway is dry. When it is not possible to complete work while a waterway is dry, an appropriate water diversion method will be utilized. The selection of the method used will be based on site conditions and may involve the use of coffer dams, culverts, and open trenches and all water diversions shall be discussed with CDFW prior to implementation. Trenches and culverts are typically placed in previously disturbed areas to minimize additional vegetation disturbance.



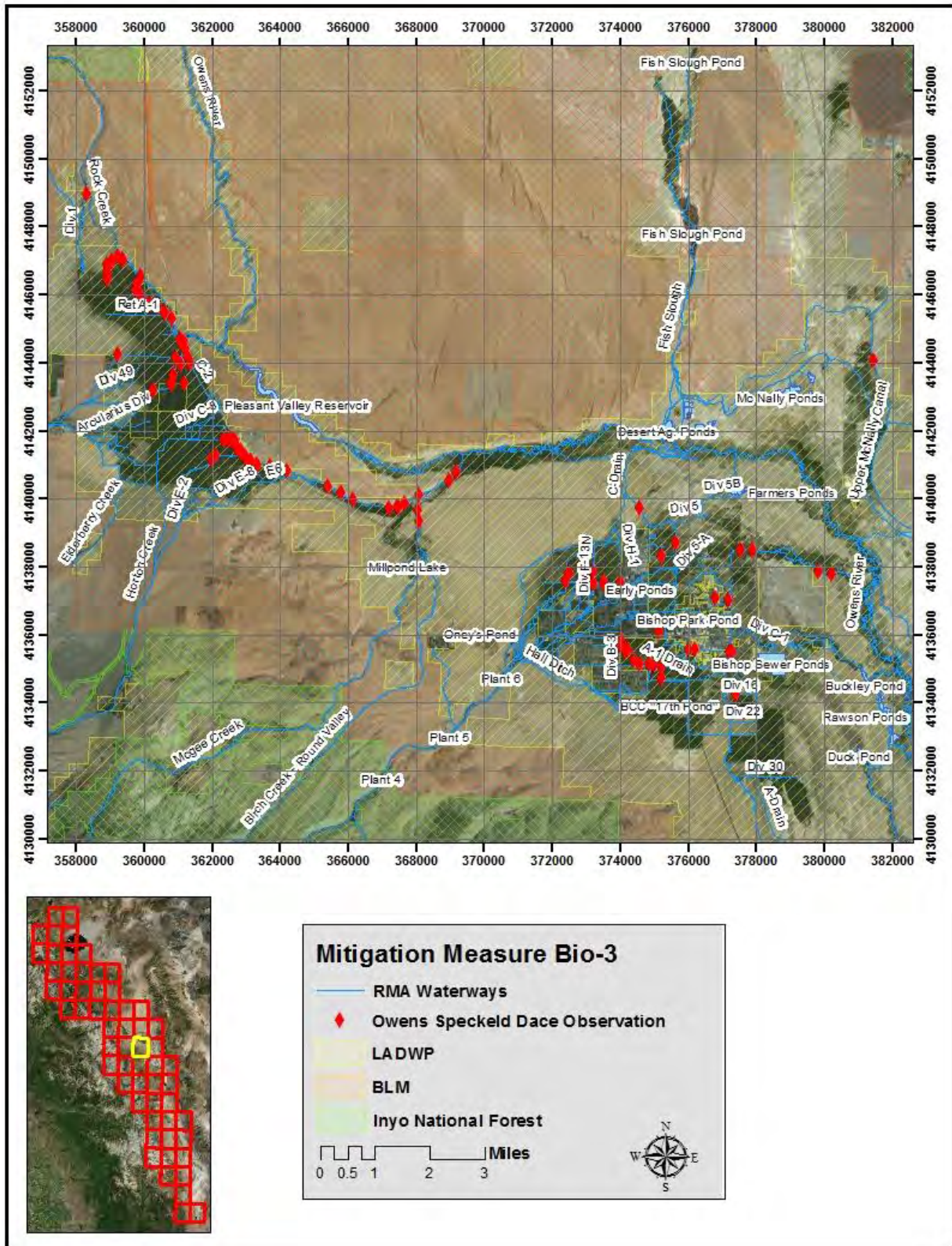


Figure 2. Mitigation Measure BIO-3 depicting known locations of Speckled Dace as determined by point surveys within the project area.

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**Appendix D**  
**Conditions from Streambed Alteration Agreement**  
**#1600-2007-0111-R6**

**Conditions from Streambed Alteration Agreement #1600-2007-0111-R6 Between CDFW and  
LADWP for Routine Maintenance Work in Waterways in Inyo and Mono Counties**

CONDITIONS: The following conditions apply to routine maintenance work covered by this agreement in all waterways listed in Attachment "A":

- A. LADWP shall locate staging and storage areas for its construction equipment, sediment, and other materials outside of waterways and any associated wetland or riparian habitat. LADWP shall check and maintain on a daily basis any equipment or vehicles driven or operated within or adjacent to a waterway to prevent the leaking of oil or other materials that could be deleterious to fish or wildlife resources. LADWP shall not perform any equipment maintenance within or near any waterway where oil or other materials deleterious to fish and wildlife resources could enter the waterway under any flow conditions.
- B. LADWP will make every effort to access all work areas using routes that will minimize damage or disturbance to fish and wildlife resources, recognizing personnel safety and equipment needs have to be considered.
- C. LADWP shall comply with all litter and pollution laws. LADWP shall immediately commence the clean-up of any discharge or spill of a pollutant and consult with the Department regarding the clean-up.
- D. Unless otherwise specified in this agreement, all spoils will be placed on existing adjacent spoils sites so that material will not wash back into the waterway, and will not be stockpiled on existing riparian and/or wetland habitats. LADWP shall implement measures to prevent sediment or materials deleterious to fish and wildlife resources from being deposited into a waterway covered by this section, or placed where they could be washed into such a waterway. These measures may include, but are not limited to, the installation of sediment curtains, certified weed free straw bales, certified weed free straw waddles, and/or silt fences depending on what is appropriate for site specific conditions.
- E. LADWP may remove all human-generated debris, such as lawn and farm cuttings, garbage, and trash. Such debris shall not be placed in a waterway or on its bank.
- F. LADWP shall ensure that its employees, representatives, agents, contractors, and subcontractors have read and are familiar with the terms and conditions of this agreement. LADWP shall ensure that a copy of this agreement is readily available at all work sites at all times during all work periods and shall be presented to any Department employee upon request.
- G. Whenever LADWP is clearing vegetation from a waterway covered by this section, it shall inspect any displaced water and vegetation for fish. LADWP is authorized by this agreement to attempt to immediately and carefully rescue stranded fish by using nets, buckets, or similar effective means and return them to the waterway or place them in downstream reaches where they are likely to survive.
- H. LADWP shall perform routine maintenance activities covered by this agreement during the time periods specified in this agreement, and specifically in Attachment "A" except that LADWP may at any time remove sediment within an area up to 100 feet upstream and 100 feet downstream of intake and diversion structures and sand traps if LADWP, when necessary as conditions warrant, first places silt

filter barrier material or sediment curtains to prevent sediment and materials deleterious to fish and wildlife resources from passing into downstream reaches.

I. LADWP may remove *Arundo* (*Arundo donax*) and other non-native plant species by hand, using construction equipment, or with herbicides. LADWP shall make every effort to avoid native vegetation when using herbicides.

J. LADWP is encouraged to continue its current weed control and abatement program, which involves herbicide spraying and partnerships with the Agriculture Commissioner and private contractors for control and removal of non-native invasive plant species. LADWP shall make sure that all equipment is thoroughly cleaned with a high pressure washer before traveling from areas of known infestation to avoid the spread of non-native invasive plant species and their seeds.

K. LADWP shall not disturb or remove vegetation along waterways in excess of what is necessary to accomplish maintenance activities described in this agreement or as otherwise authorized by the Department.

L. Structures and other obstacles that are not designed to withstand high seasonal flows shall be removed from waterways to areas above the normal high water mark before such flows occur.

M. All LADWP operators shall carry a suitable oil spill containment kit.

N. LADWP shall make sure that all equipment is thoroughly cleaned with a high pressure washer before traveling between waterways to avoid the spread of invasive species. LADWP and the Department shall share information as it becomes available regarding the presence of any newly observed invasive species (e.g. New Zealand mudsnails, quagga/zebra mussels, etc.) in or near waterways covered under the agreement.

O. When work in a flowing waterway is unavoidable, sufficient stream flow shall be diverted around the work area and bypassed to downstream reaches so as to support aquatic life both above and below the work area. Flow diversion shall be conducted in a manner to prevent pollution and reduce sediment transport, and which shall provide required flows to downstream reaches at all times to support aquatic life. Pre-project flows shall similarly be restored to the effected waterway upon completion of work activities.

P. LADWP agrees that the Department may enter the project site at any time to conduct onsite inspections relevant to this agreement and as necessary to determine the impact of the project on fish and wildlife and evaluate if agreement conditions continue to protect fish and wildlife resources (FGC Section 1605). When approaching operating equipment, Department representatives will first get the attention of the operator before approaching and approach once the equipment is turned off. Alternatively, if Department representatives must work near operating equipment, they will coordinate with the equipment operator and wear a hard hat and orange vest.



CONDITIONS FOR PERENNIAL WATERWAYS: The following conditions apply to routine maintenance work covered by this agreement in perennial waterways, including perennial canals and drains, and perennial streams:

A. LADWP shall be responsible for restoring any fish and wildlife resources that are damaged or impaired as a direct or indirect result of performing routine maintenance work covered by this agreement in perennial waterways resulting from LADWP's failure to comply with the terms and conditions of this agreement; or as a result of performing work that is not covered by this agreement.

B. If native riparian vegetation with DBH equal to or greater than 4 inches needs to be removed, LADWP shall consult with the Department prior to beginning work. When native riparian trees split into several trunks close to ground level, the DBH shall be measured for each trunk and added together to get the value for that individual. All native riparian trees removed with DBH equal to or greater than 4 inches requires mitigation. LADWP shall mitigate for adverse impacts to native riparian trees by planting a replacement-to-impact ratio of 3:1 from a local source at a location approved by the Department. A mitigation and monitoring plan identifying success criteria of the plantings shall be developed and approved by the Department prior to beginning work.

C. LADWP may not perform routine maintenance work in waterways in a specific area of woody vegetation from March 1 to September 1 where nesting birds could be adversely affected if activities will result in woody vegetation disturbance unless a qualified LADWP staff biologist or other qualified biologist approved by the Department first surveys the area for nesting birds and determines none are present.

D. The perennial aquatic herb, Frog's-bit buttercup (*Ranunculus hydrocharoides*), has been documented in very limited areas of the canal and stream systems of the LAA where LADWP performs maintenance work. The Frog's-bit buttercup (CNPS List 2) has been documented in Inyo and Mono County. LADWP shall implement a monitoring program on years that authorized work has occurred where Frog's-bit buttercup is present. When clearing waterways that may contain Frog's bit buttercup, LADWP shall send email notification to the Department on the results of presence/absence surveys, prior to work being conducted in these areas. If Frog's bit buttercup is present, LADWP shall work cooperatively with the Department to identify ways to minimize or avoid impacts to the Frog's-bit buttercup.

E. If LADWP intends to replace existing facilities or perform routine maintenance work at a location for longer than 2 days and swallow nests exist and/or swallows are actively nesting the Department shall be consulted. If it is determined that the work could adversely affect nesting swallows, LADWP shall remove all swallow nests outside the nesting season (i.e., between September 2 and February 28) that the work could adversely affect. LADWP may discourage the building of new swallow nests in places where the nests are likely to be disturbed by future maintenance work in the waterways covered by this section using methods developed by the Department in consultation with LADWP.

# **Appendix E**

## **General Best Management Practices**

# Appendix E



General Best Management Practices  
Used During Maintenance and Repair Projects in Owens Valley

1. LADWP will implement Best Management Practices as indicated below and will coordinate with the Lahontan Regional Water Quality Control Board to ensure that the Water Quality Objectives as stipulated in the Basin Plan are met. Testing for constituents as outlined in the Basin Plan will include Temperature, Dissolved Oxygen, pH, and Total Suspended Solids.
2. Best Management Practices inspections and water quality testing results will be reported periodically, as required, to the Lahontan Regional Water Quality Control Board to maintain project compliance.
3. LADWP shall locate staging and storage areas for its construction equipment, sediment, and other materials outside of waterways and any associated wetland or riparian habitat.
4. LADWP shall check and maintain on a daily basis any equipment or vehicles driven or operated within or adjacent to a waterway to prevent the leaking of oil or other materials that could be deleterious to fish or wildlife resources.
5. LADWP shall not perform any equipment maintenance within or near any waterway where oil or other materials deleterious to fish and wildlife resources could enter the waterway under any flow conditions.
6. LADWP will make every effort to access all work areas using routes that will minimize damage or disturbance to fish and wildlife resources, recognizing personnel safety and equipment needs have to be considered.
7. LADWP shall comply with all litter and pollution laws
8. All spoils will be placed on existing or suitably located spoils sites so that material will not wash back into the waterway, and will not be stockpiled on existing riparian and/or wetland habitats.
9. LADWP shall implement measures to prevent sediment or materials deleterious to fish and wildlife resources from being deposited into a waterway covered by this section, or placed where they could be washed into such a waterway. These measures may include, but are not limited to, the installation of sediment curtains, certified weed free straw bales, certified weed free straw wattles, and/or silt fences depending on what is appropriate for site specific conditions.
10. LADWP may remove all human-generated debris, such as lawn and farm cuttings, garbage, and trash. Such debris shall not be placed in a waterway or on its bank.
11. Whenever LADWP is clearing vegetation from a waterway, it shall inspect any displaced water and vegetation for fish. LADWP is authorized by Department of Fish and Wildlife to attempt to immediately and carefully rescue stranded fish by using nets, buckets, or similar effective means and return them to the waterway or place them in downstream reaches where they are likely to survive. LADWP may remove *Arundo* (*Arundo donax*) and other non-native plant species by hand, using construction equipment, or with herbicides. LADWP shall make every effort to avoid native vegetation when using herbicides.
12. LADWP shall not disturb or remove vegetation along waterways in excess of what is necessary to accomplish maintenance activities.
13. Structures and other obstacles that are not designed to withstand high seasonal flows shall be removed from waterways to areas above the normal high water mark before such flows occur.
14. All LADWP operators shall carry a suitable oil spill containment kit and be trained in its use. Personnel shall follow existing procedures for notification of Department personnel to take appropriate action when a spill occurs.
15. LADWP shall make sure that all equipment is thoroughly cleaned with a high pressure washer before traveling between waterways to avoid the spread of invasive species. LADWP and the Department shall share information as it becomes available regarding the presence of any newly observed invasive species (e.g. New Zealand mudsnails, quagga/zebra mussels, etc.) in or near waterways.
16. When work in a flowing waterway is unavoidable, sufficient stream flow shall be diverted around the work area and bypassed to downstream reaches so as to support aquatic life both above and below the work area. Flow diversion shall be conducted in a manner to prevent pollution and reduce sediment transport, and which shall provide required flows to downstream reaches at all times to support aquatic life. Pre-project flows shall similarly be restored to the effected waterway upon completion of work activities.