

# Owens Lake Master Project

Scoping Meeting  
for the Draft Environmental  
Impact Report



# Meeting Purpose & Agenda

- Master Project Background and Objectives
- Master Project Components
- CEQA Process and Requirements
- Public Comments



# Project Background

- For over 10 years LADWP has implemented dust control measures (DCMs) at Owens Lake to reduce emissions of particulate matter
  - 48.6 square miles of existing and approved Dust Control Areas (DCAs)
- LADWP has primarily relied on shallow flood to control dust emissions
  - Uses up to 80,500 acre-feet of water from the Los Angeles Aqueduct each year



## Owens Lake Master Project Existing and Approved DCAs

- Through Phases 9/10



# Project Background

- The Master Project was developed as an outgrowth of the Owens Lake Master Planning process, initiated in March 2010
- Stakeholder involvement has been a consistent and fundamental component
  - LADWP Advisory Committee

# Project Background

- The Advisory Committee was charged with making recommendations to LADWP on the Project Description for the Master Project
  - Habitat Work Group (HWG)
  - Groundwater Work Group (GWG)
  - Public Access and Recreation Work Group (PAR)



# Project Background

- Advisory Committee has submitted Recommendations to LADWP
  - HWG will finalize habitat-related resource protection protocols (RPPs)
  - GWG will finalize groundwater-related RPPs
- The Advisory Committee and Work Groups will continue to meet during implementation of the Master Project

# Project Objectives

- Develop and implement a flexible, adaptive management approach that reduces water use from the Los Angeles Aqueduct by 50 percent
- Ensure that DCMs at Owens Lake reduce emissions in accordance with applicable laws



# Project Objectives

- Maintain total lakewide habitat value
- Identify a sustainable amount of groundwater to be used for dust management to offset water from the Los Angeles Aqueduct

# Project Components



- Dust Control
- Modify up to 38 square miles of existing DCAs to implement waterless, water-efficient, or hybrid DCMs
  - An additional 4.8 square miles may require implementation of DCMs



# Project Components

- Groundwater
  - Evaluate adding groundwater to the portfolio of water supplies available for dust management
- Public Access
  - New facilities to enhance existing public access opportunities on the lakebed

# Dust Control

- Up to 38 square miles would be modified from shallow flood to DCMs that:
  - Are waterless, water-efficient, or hybrid
  - Maintain lakewide total habitat value
- Stepwise Approach
  - Each step would modify 6 to 7 square miles
  - Five steps / three years per step



# Dust Control Measures

- Best Available Control Methods (BACM) can be implemented anywhere on the lakebed and have been approved by Great Basin Unified Air Pollution Control District (GBUAPCD)
- Modified BACM or alternative measures may be used with GBUAPCD's approval to address site-specific issues
- New methods may be approved as BACM following GBUAPCD protocols

# Dust Control Measures

- Shallow Flood
- Irrigated Vegetation
- Gravel Cover
- Tillage
- Engineered Roughness
- Concrete Block Mats
- Alternative Dust Control Measures

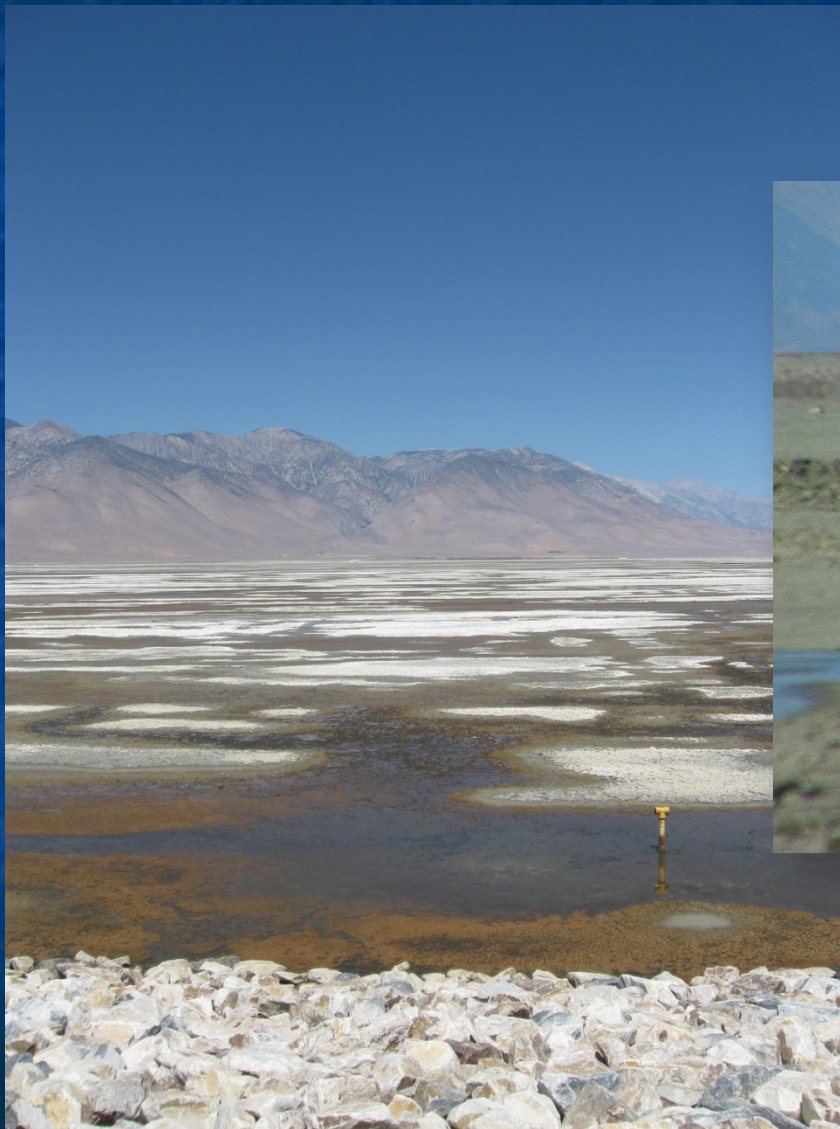


# Shallow Flood





# Shallow Flood





# Shallow Flood





# Tillage and TwB2





# Irrigated Vegetation



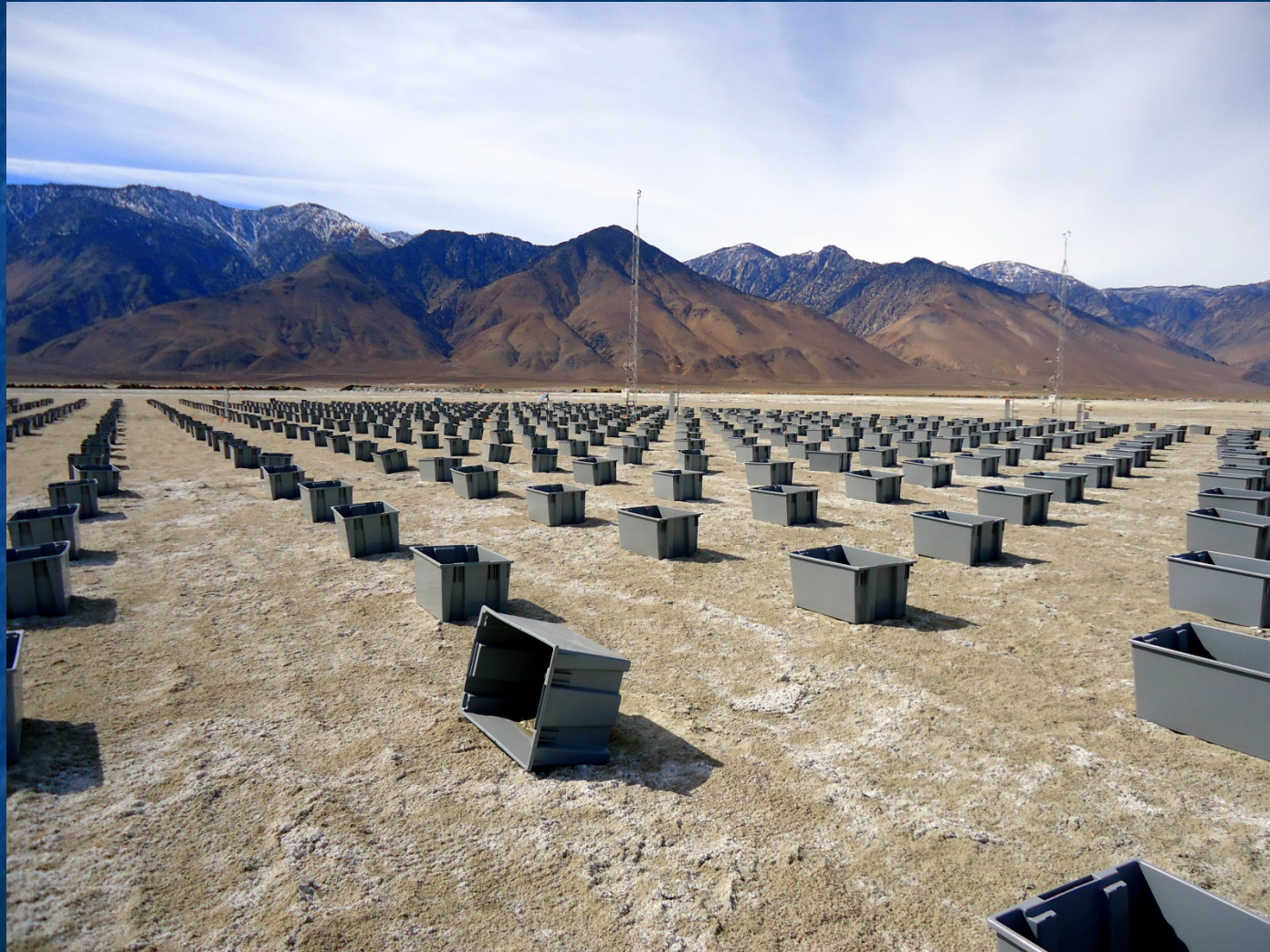


# Gravel Cover





# Engineered Roughness Elements





# Concrete Block Mats





# Hybrid





# Lake-wide Habitat Value

- As the DCAs are modified from water-based to waterless, water-efficient, or hybrid DCMs, total lake-wide habitat values would be maintained
- Habitat parameters would be designed, monitored, and managed to be maintained and enhanced using a Habitat Suitability Model (HSM)

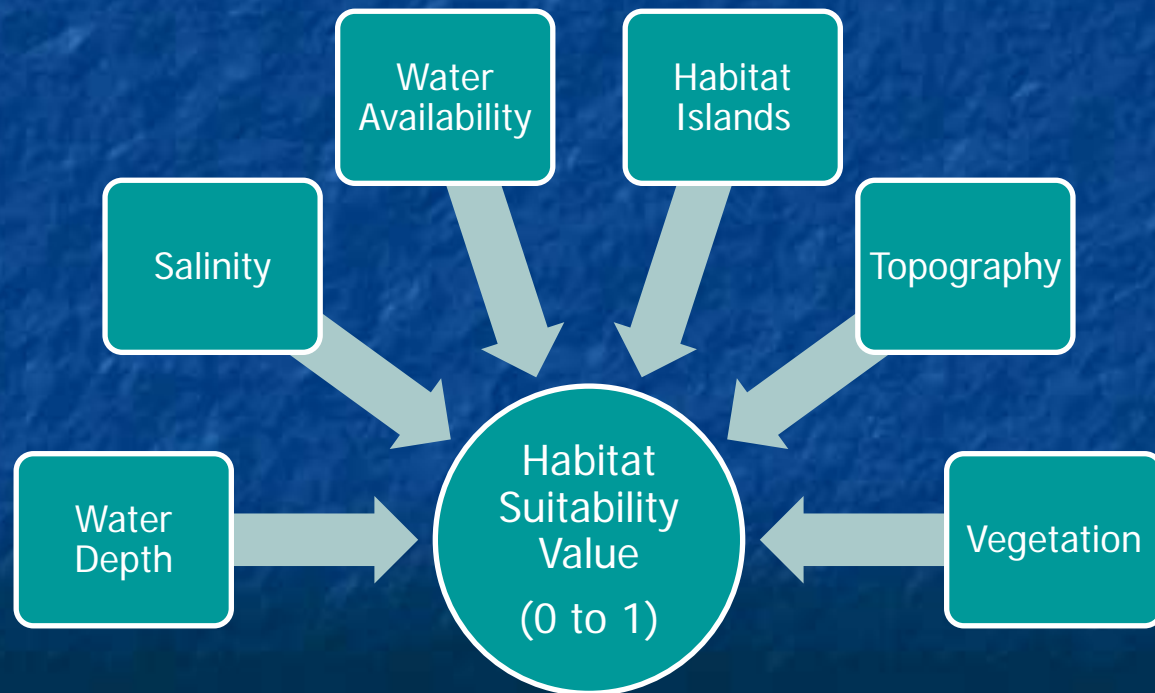


# What is the HSM?

- Uses preferred habitat relationships to predict not only the presence and absence of habitat but the relative value
- Based on empirical measurements of habitat and bird use at Owens Lake and literature
- Collaboratively developed

# What is the HSM?

- The HSM assigns value based on actual measurement of habitat conditions





# Habitat Suitability Models by Guild

- Alkali Meadow
- Diving Waterbirds
- Breeding Waterfowl
- Migrating Waterfowl
- Migrating Shorebirds
- Breeding Shorebirds

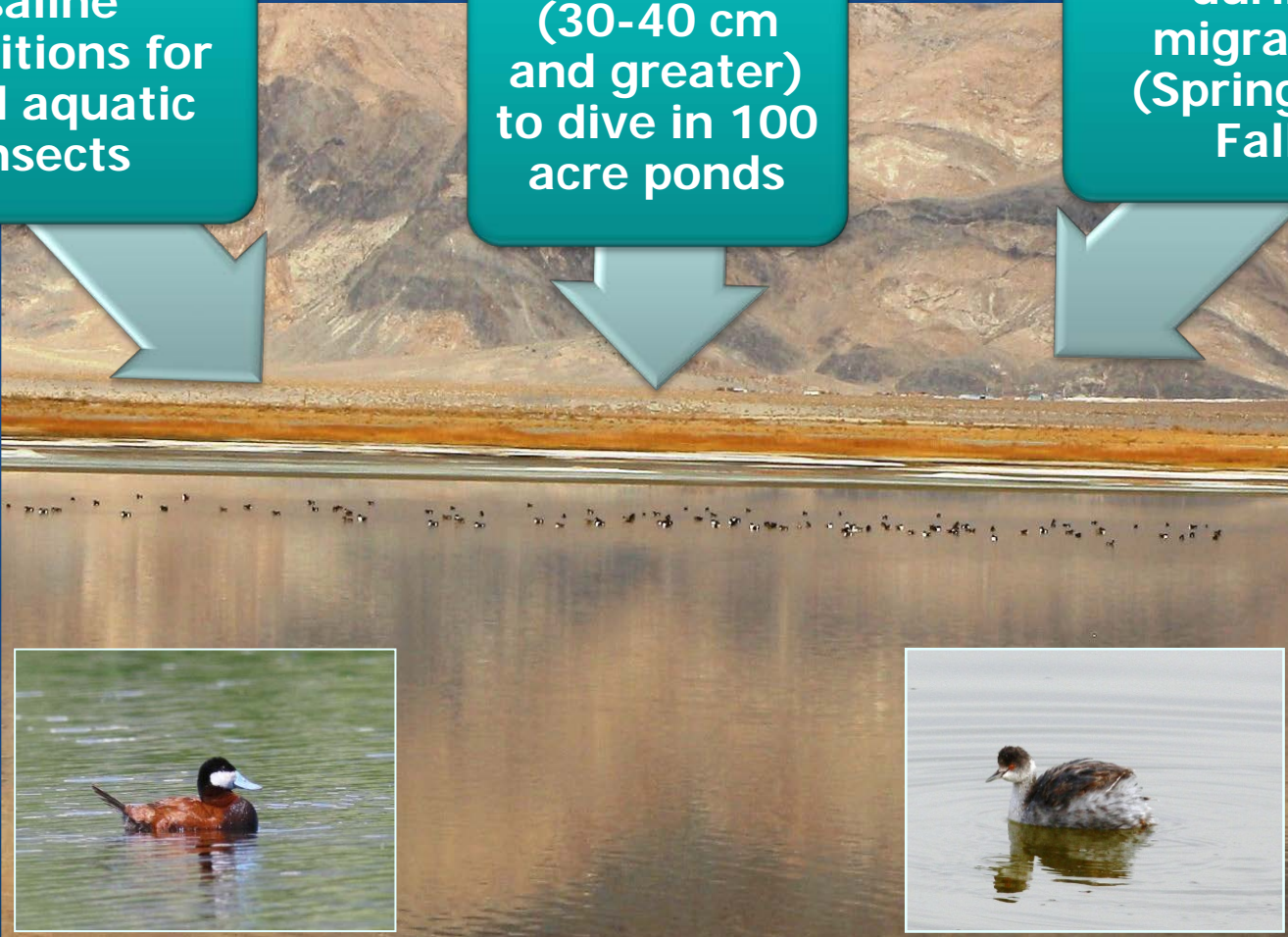


# Diving Waterbirds

Productive saline conditions for food aquatic insects

Deeper water (30-40 cm and greater) to dive in 100 acre ponds

Water available during migration (Spring and Fall)



Focal species: Ruddy Duck and Eared Grebe



# Breeding Shorebirds

Shallow water  
for foraging (0-  
10 cm deep)

Water  
available  
during  
breeding  
season (Spring  
and Summer)

Habitat  
islands and  
dry area for  
nesting

Topographic  
relief to conceal  
nests from  
predators

Productive  
saline water for  
food aquatic  
insects

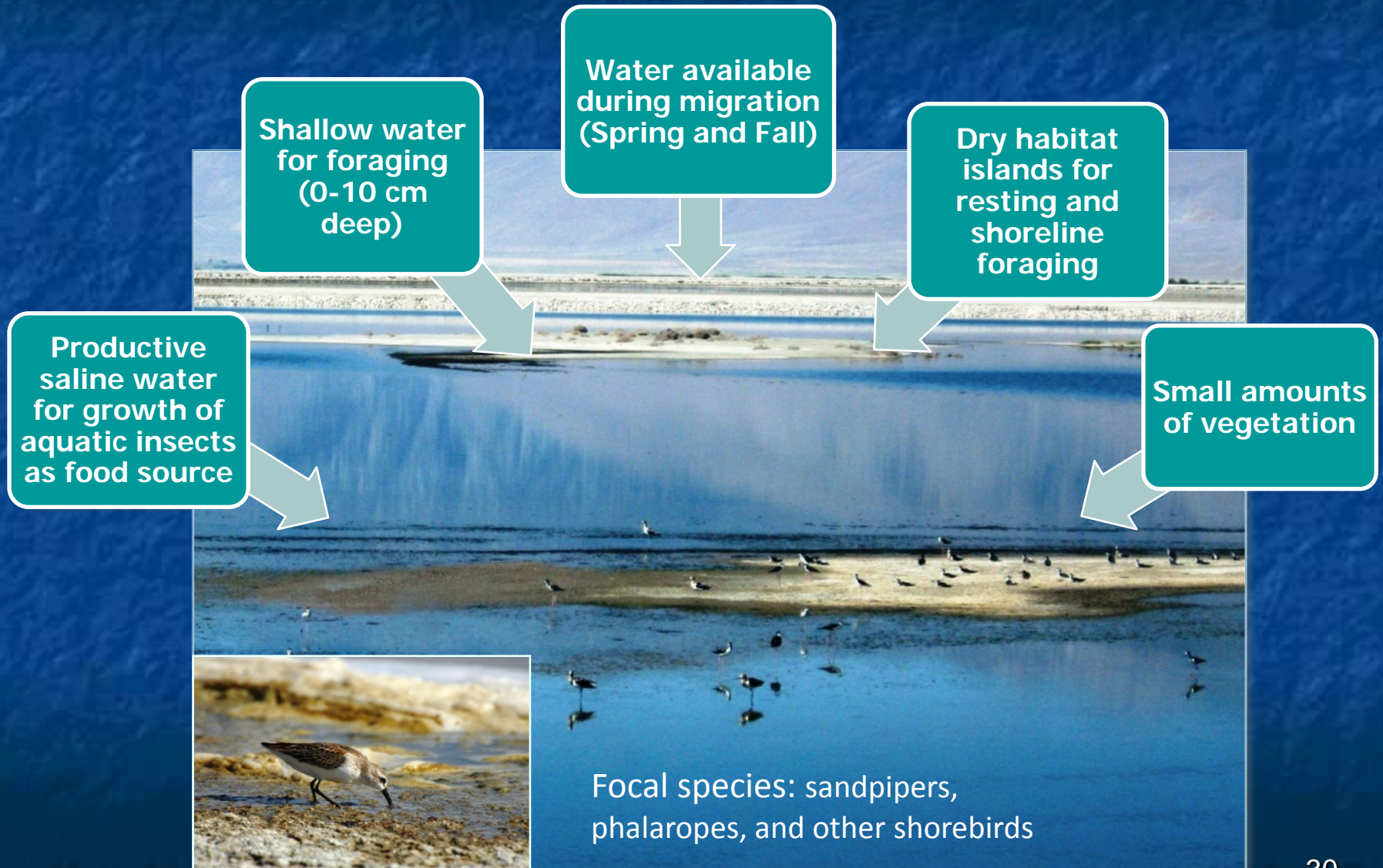
Little to no  
vegetation



Focal species: Snowy  
Plover and American  
Avocets

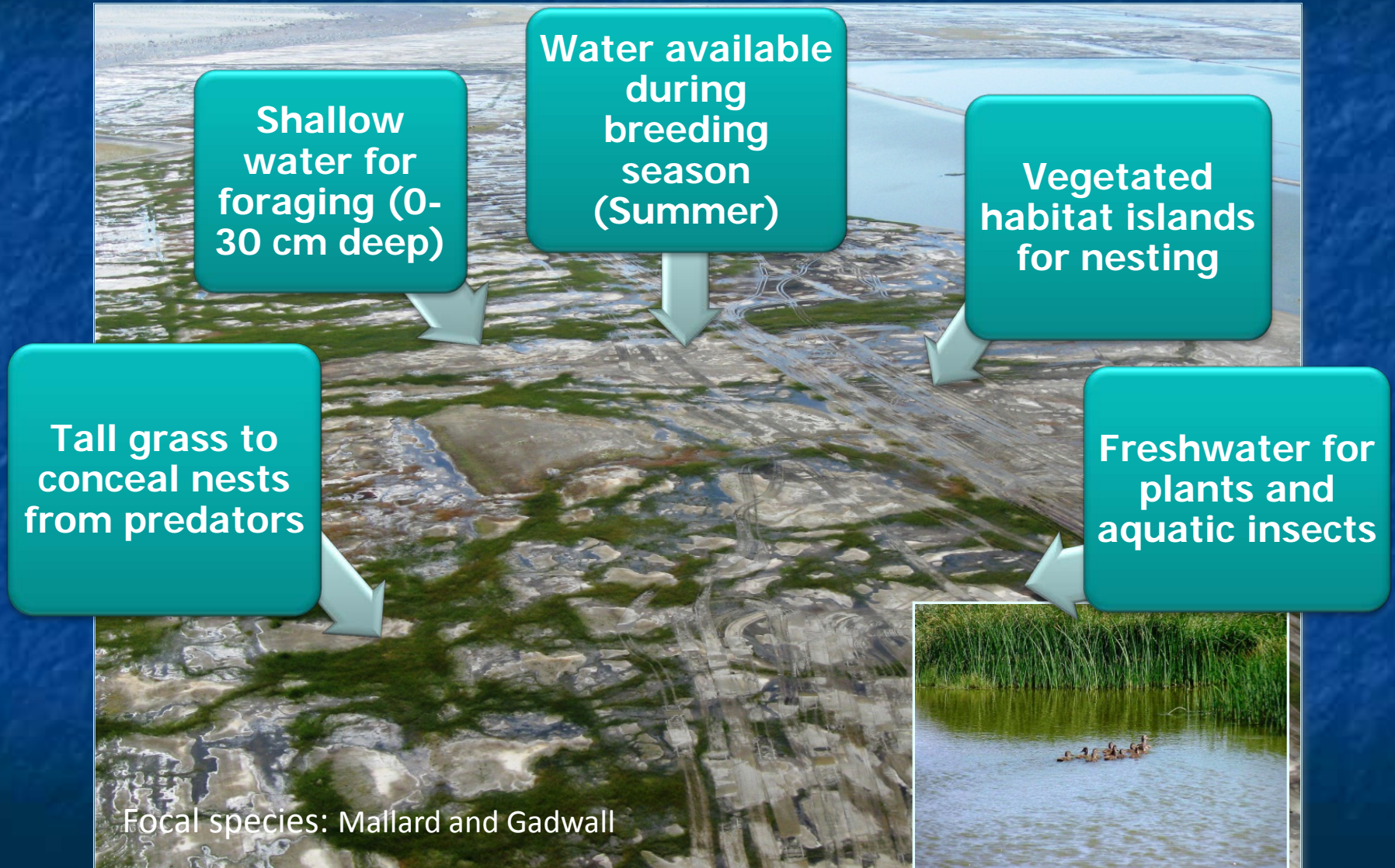


# Migrating Shorebirds





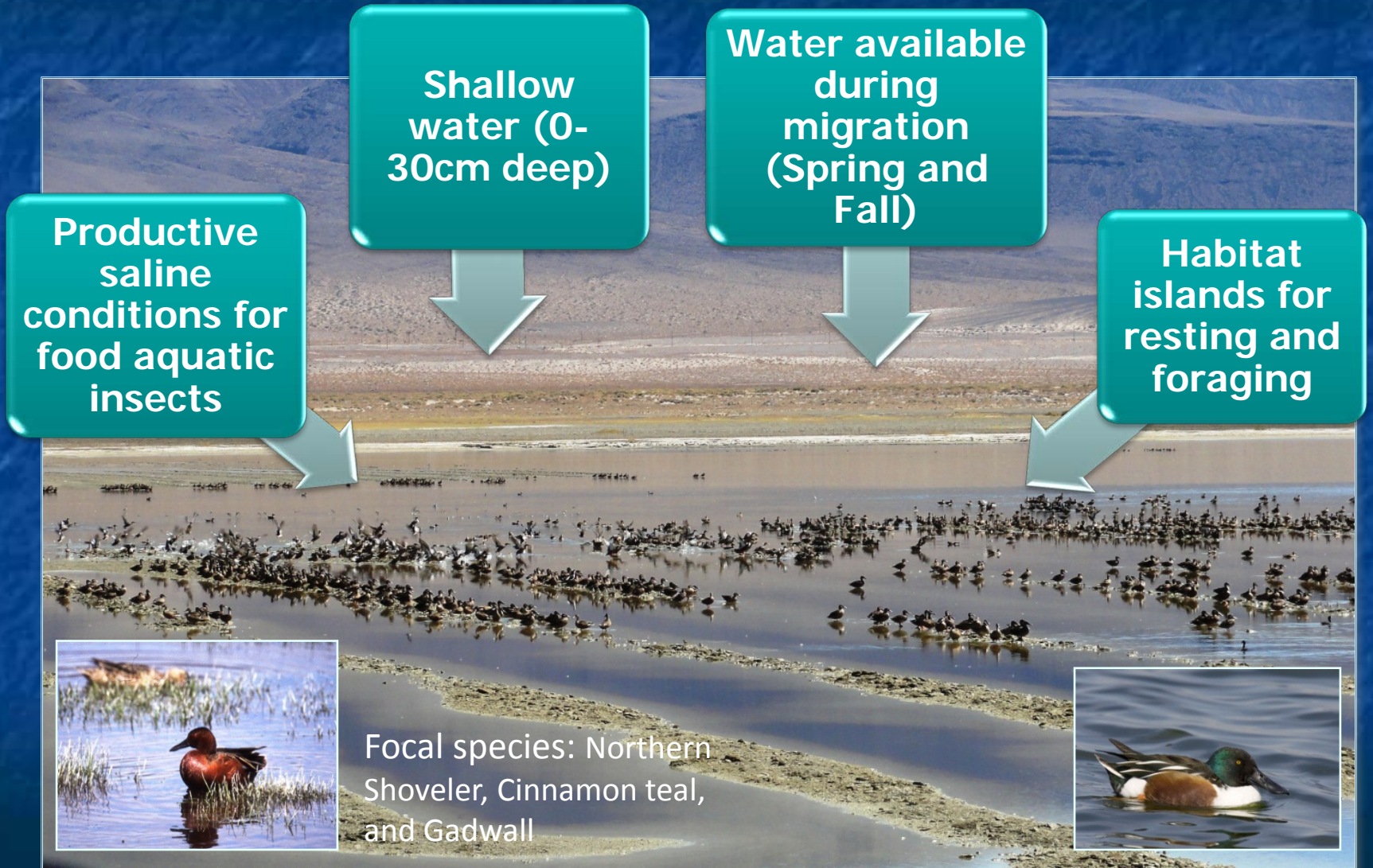
# Breeding Waterfowl



Focal species: Mallard and Gadwall



# Migrating Waterfowl





# Alkali Meadow Guild

High vegetative cover

High topographic diversity

Diverse plant species and heights

Soil with low salinity

Focal species: Tule Elk, Owens Valley Vole, various reptiles, Northern Harrier, Burrowing Owl

T30-1 May 2010



# Benefits of the HSM

- Superior to measuring wildlife use alone
  - Which can be affected by local climate and many offsite factors
- Provides functional and adaptive understanding of wildlife needs
- Allows for design and management of dust control for wildlife habitat
- Predicts how changes may affect wildlife
- Tracks habitat conditions over time



# Managing Dust and Habitat

- Owens Lake habitat has been inadvertently created through the incremental implementation of current dust control
- Design of hybrid DCMs would optimize the habitat parameters for each guild and incorporate other goals to maximize habitat value
- Integrated monitoring to inform management once constructed.

# Example

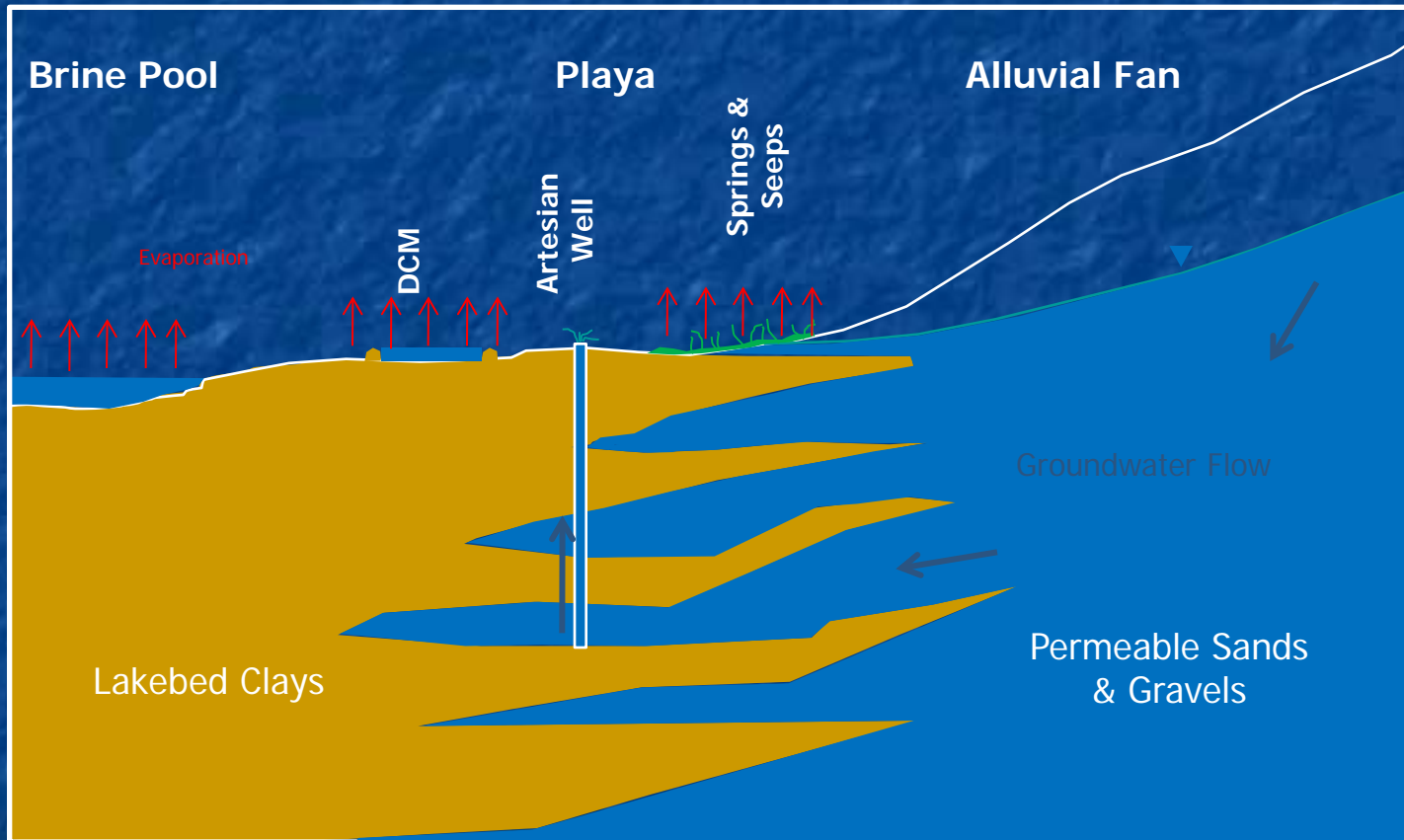




# Groundwater

- Preliminary studies determine that groundwater may be sustainably pumped from aquifers beneath and around Owens Lake
  - For dust management at the lakebed
  - Offset use of water from Los Angeles Aqueduct
- Wells would be installed adjacent to DCAs to minimize need for conveyance

# Groundwater



Generalized Hydrogeologic Cross Section of Owens Lake



# Groundwater

- Potentially affected resources:
  - Springs and associated alkali meadow
  - Non-LADWP wells
  - Land subsidence
  - Air quality
- Resource protection criteria and protocols being developed by HWG and GWG

# Public Access

- New amenities and facilities to enhance existing public access opportunities
  - Public viewing areas
    - Could include signage, viewing platforms, shade structures, vehicle turnouts
  - Informational kiosks
    - Potential locations: Sulfate Road, the Dirty Socks access road, Lake Minerals/Willow Dip Road, Boulder Creek
  - Up to three scenic driving loops



# Cultural Resources

- Area is rich in cultural resources
- Location and type of all Master Project components will take cultural resources into consideration
- LADWP will continue to work with Tribes to develop resource protection criteria

# Overview of CEQA EIR Process

- Under the California Environmental Quality Act (CEQA), LADWP must prepare an Environmental Impact Report (EIR) for any project that it proposes to carry out that may have a significant impact on the environment.

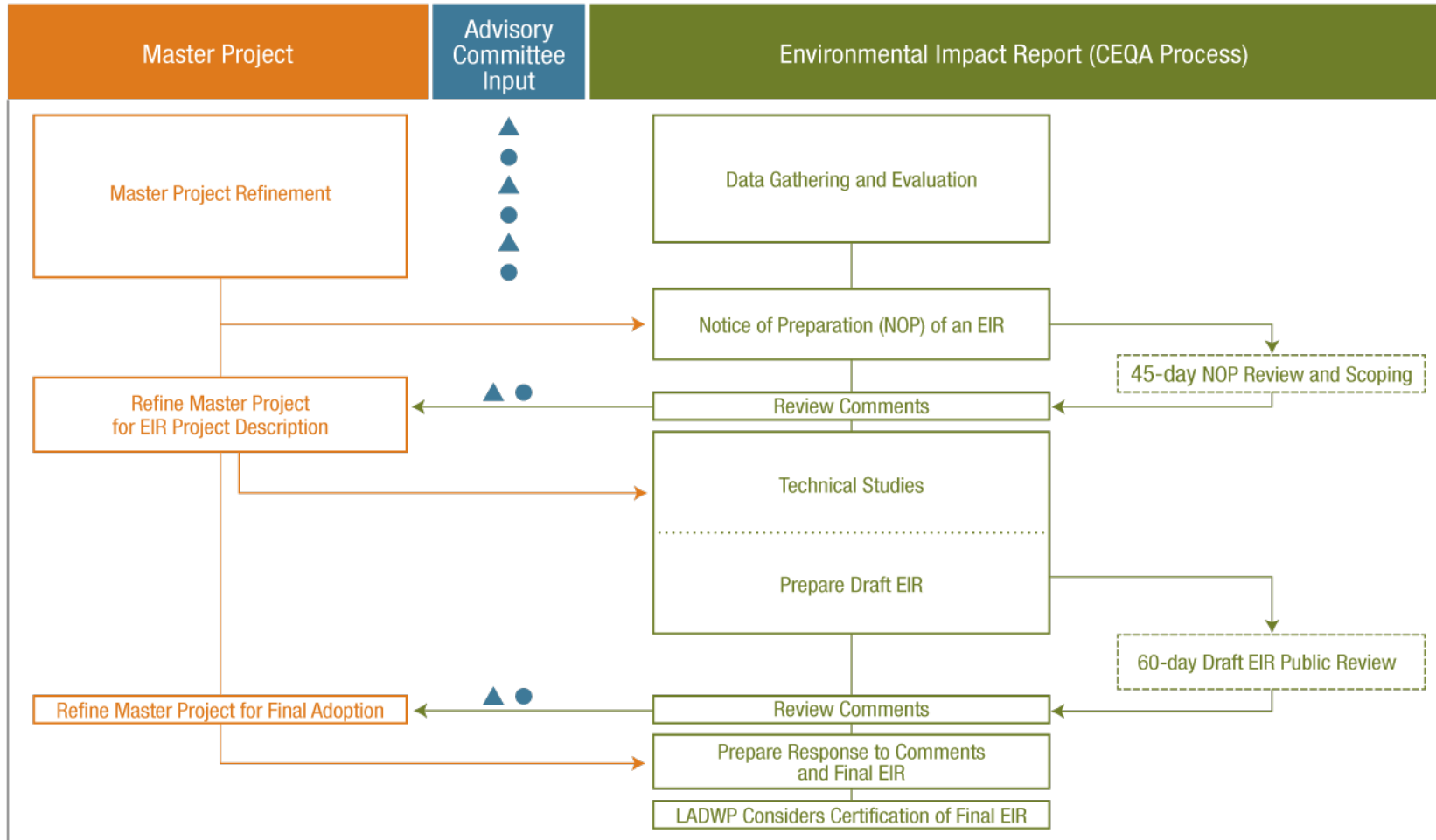
(Public Resources Code Section 21100[a])



# Overview of CEQA EIR Process

- Purposes of CEQA
  - Inform the public and decision makers about potential environmental impacts
  - Identify ways to avoid or reduce potential impacts

# Master Project CEQA Process



▲ Advisory Committee ● Subcommittees



# Potentially Significant Impacts to be Evaluated in the EIR

- Aesthetics
- Air Quality and Greenhouse Gases
- Biological Resources
- Cultural Resources
- Hydrology, Groundwater and Water Quality
- Transportation and Traffic

# Other Environmental Resources to be Evaluated in the EIR

- Agriculture and Forestry Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Utilities and Energy



# Approach to EIR Analysis

- Potential project effects to be analyzed relative to baseline environmental conditions
  - Direct & indirect impacts
  - Construction & operational impacts
- Strive to allow flexibility in project design, implementation, and management
  - Categories of DCM modifications & transitions
  - Maximum amount of DCMs in square miles

# Other CEQA Requirements

- Alternatives analysis
- Significant and unavoidable impacts
- Significant irreversible changes
- Cumulative impacts
- Growth Inducement



# CEQA Schedule & Opportunities for Public Comment

Notice of Preparation  
(Released 6/23/15)



Public Scoping Meetings  
(7/15/15 and 7/22/15)

**NOP 45-day Public Review Period**

Notice of Availability Draft EIR  
(Summer 2016)



Public Meeting on Draft  
EIR  
(Summer 2016)

**Draft EIR 60-day Public Review Period**

Response to Public Comments & Final EIR (Winter 2016)

# Scoping Comments

- Purpose is to gather input on the "scope of the EIR"
- LADWP is interested in your input on:
  - What environmental effects should be addressed in the EIR?
  - Do you have suggestions for project alternatives or mitigation measures?
  - Do you have project-related comments?
- The EIR analysis will take your comments into consideration



# Acknowledgments

*LADWP would like to thank stakeholders and Advisory Committee participants for contributing to development of the Master Project*

# To Submit Comments

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**Deadline: August 7, 2015**

For more information:

<http://www.ladwp.com/envnotices>



# Comments

