

# Owens River Water Trail Final EIR Overview & Board Recommendation

Inyo County Water Commission  
CEQA Adequacy Review

# What the Commission Is Being Asked to Do



Assess the adequacy  
of the EIR under  
CEQA



Determine whether  
environmental impacts  
are fully disclosed



Recommend  
certification of the EIR  
and adoption of  
mitigation measures

# Quick Project Overview



6.3-mile non-motorized water trail on the Lower Owens River for kayaks, canoes, and paddleboards

Establish designate all-abilities launch and take-out locations

Clear river of emergent vegetation blockages to open river to boats access

## LONE PINE STAGING AREA

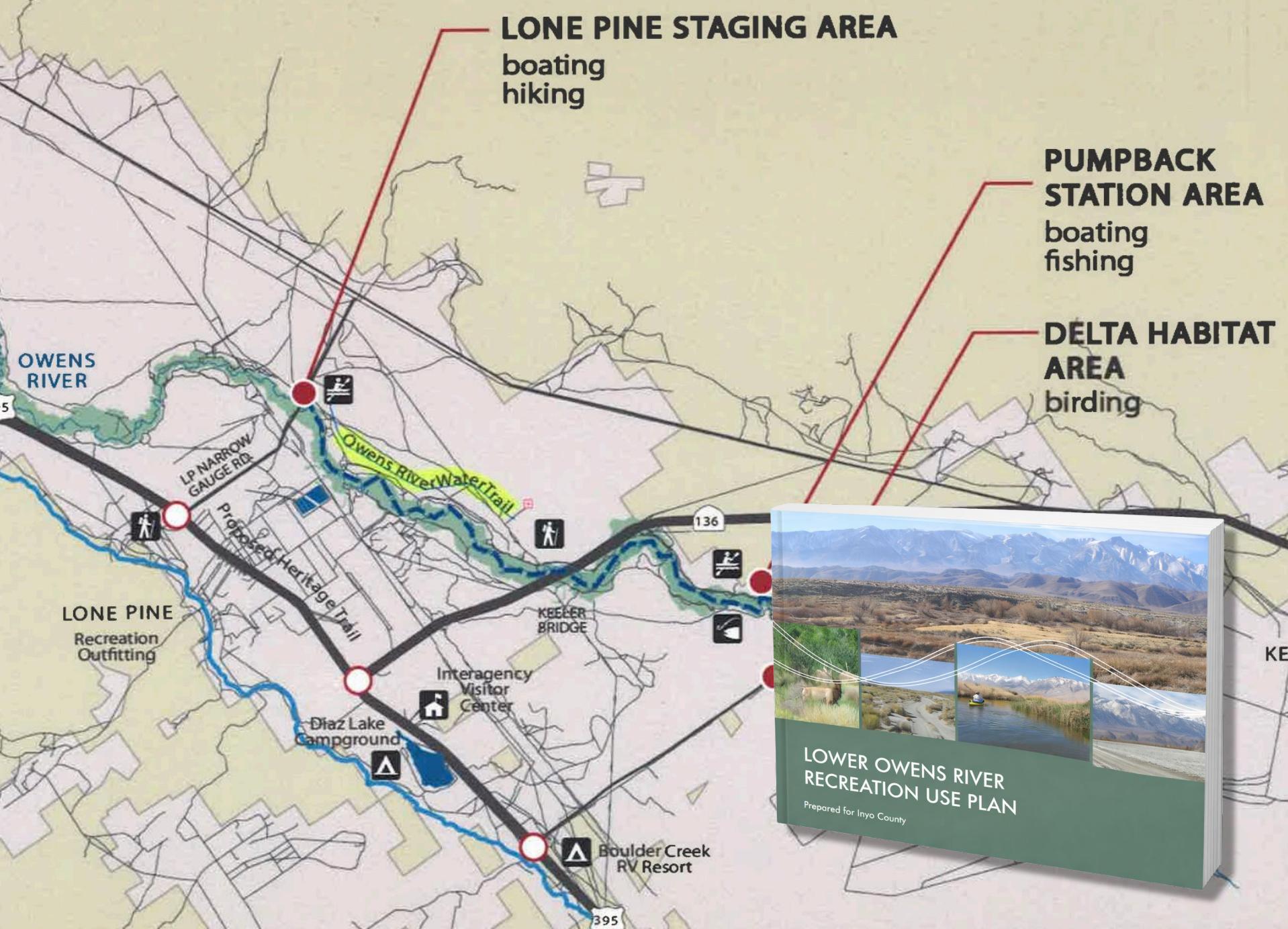
boating  
hiking

## PUMPBACK STATION AREA

boating  
fishing

## DELTA HABITAT AREA

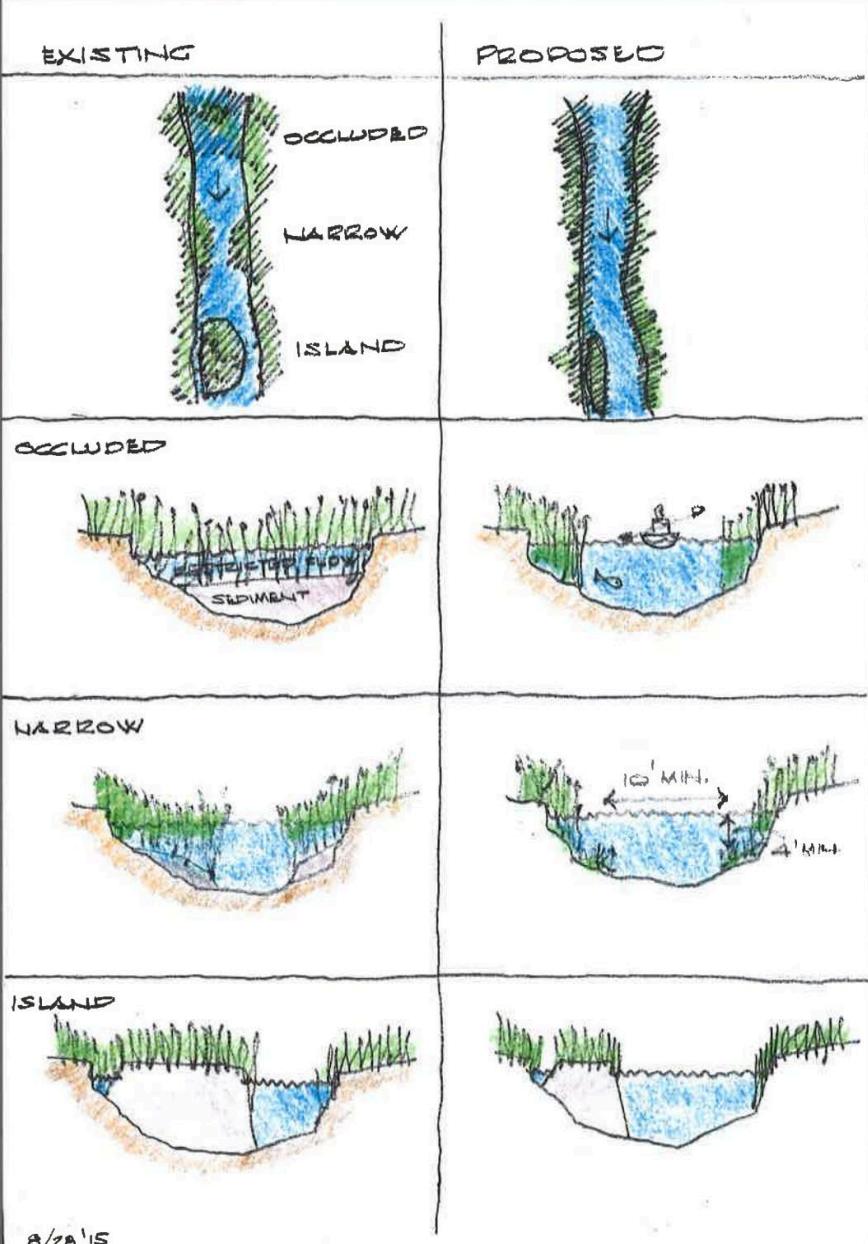
birding



### LOWER OWENS RIVER RECREATION USE PLAN

Prepared for Inyo County

# CHANNEL IMPROVEMENTS





# What Gets Built



Selective in-channel  
vegetation clearing



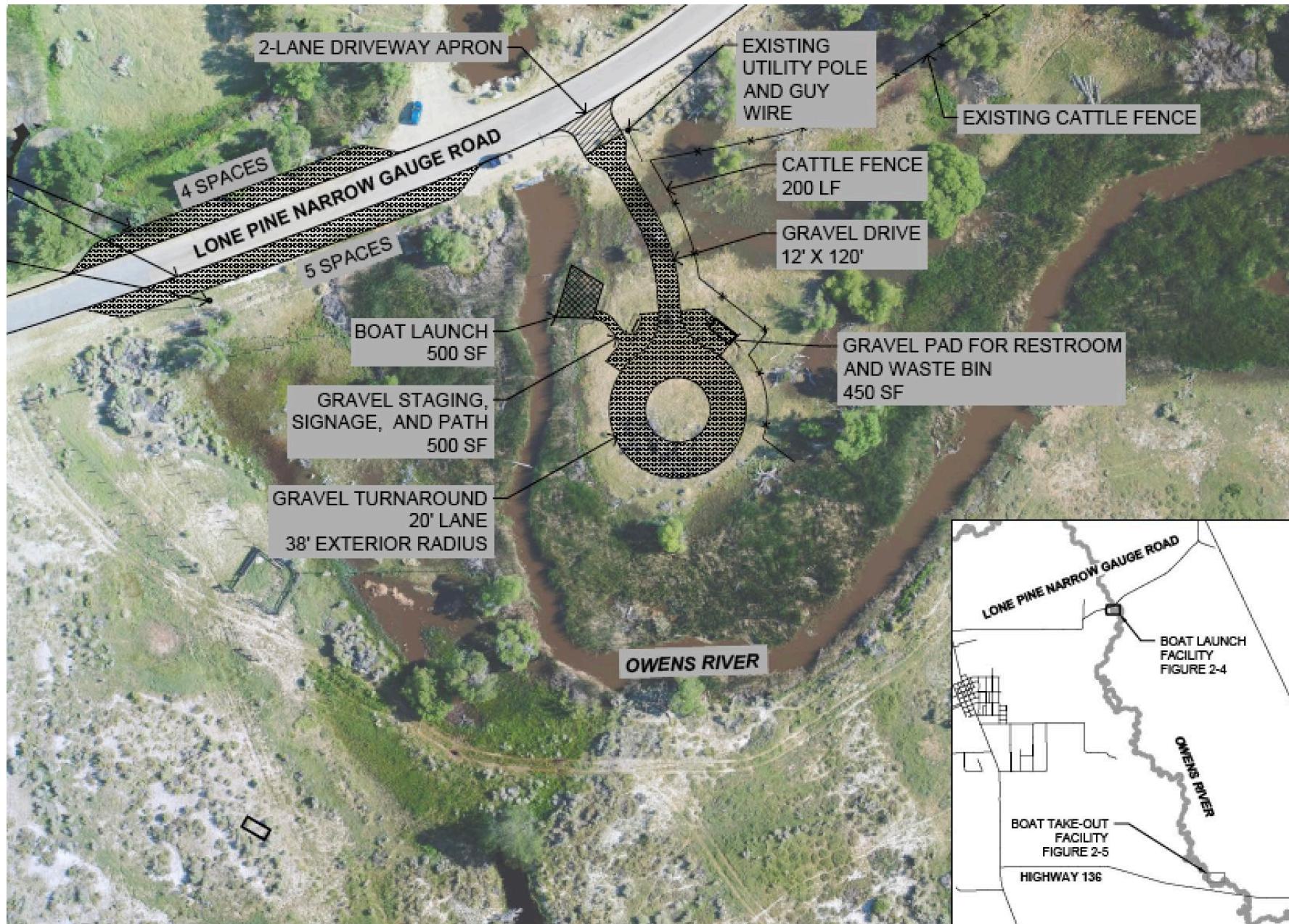
Removal of localized  
obstructions

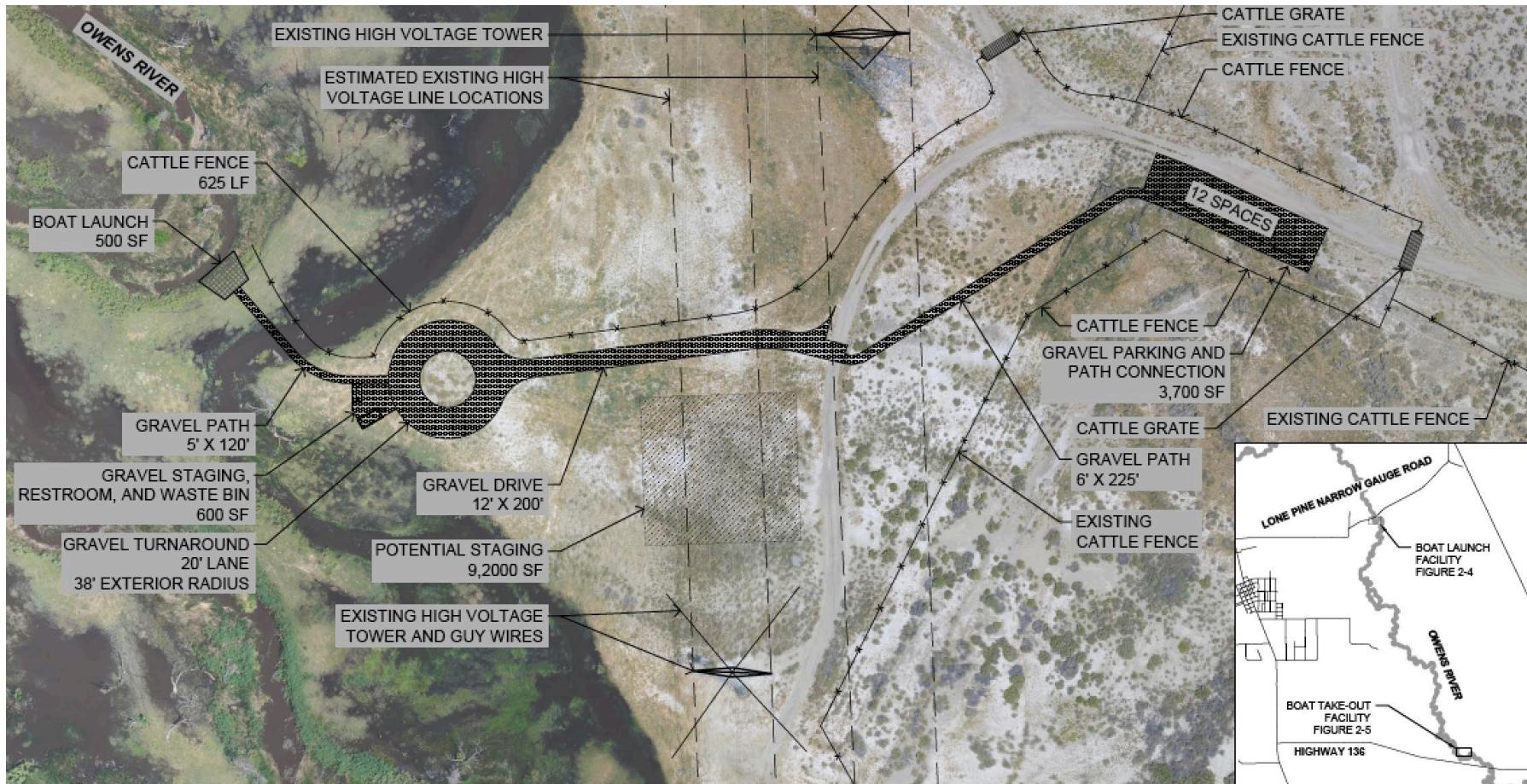


Two ADA-oriented  
launch/take-out facilities



Signage, safety markers,  
wildlife-proof trash, and  
vault restroom





## NATURAL-SURFACE LAUNCH DESIGN

Launch construction with natural soil surfaces work best with fine mineral soils, including clays and loams. Natural bedrock outcroppings can also act as highly functional launch sites. Crushed stone is used when subsoils are unstable. Blend launches and trails with existing topography as much as possible to minimize adverse impact and to avoid costly costs (Figure 3A-6).

The type of launch construction can lend itself to volunteer effort, increasing the sense of local ownership of the water trail. However, volunteer projects require the same level of design and planning by qualified professionals as other launch designs. Construction without appropriate professionals guidance can quickly cause stream and riparian damage. Helped volunteer construction projects can also be problematic in terms of maintaining future interest and involvement in the water trail.

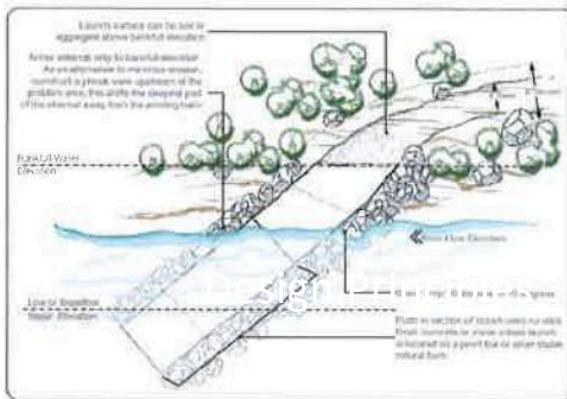


Figure 3A-6  
Natural-Surface Launch Design

Trail slopes or steepness depends on existing topography. In general, the greater the slope, the more likely it is to cause erosion. Erosion can be significantly reduced by constructing trails that traverse slopes, rather than run down them. Low-slope segments are also friendlier for water trail users.

- Paving-to-launch trail maximum slope should be 10 percent to the extent possible
- Portage trail maximum slope should be 12.5 percent to the extent possible
- Maximum trail cross slope should be 2 percent to the extent possible

Most trails, even those with low slopes, change surface drainage and have the potential to cause soil erosion. Eroded soil is one of the most common water pollutants in home. While no trail design minimizes the potential of introducing erosion, some design characteristics minimize the chance. Avoid using drainage culverts because they concentrate stormwater and turn gullies. Use non-surface crossings for small drainage amounts or small underground structures for larger volumes as alternatives. Establishing early vegetation coverage of trails is advised because it filters and decreases stormwater runoff, and increases stormwater infiltration. Minimizes the length of trail that drains to a specific low point, known as a dip (Figure 3C-1).

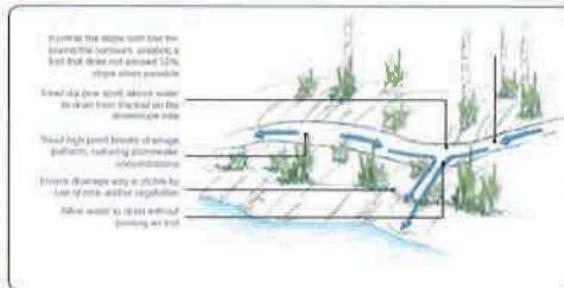


Figure 3C-1.  
Minimizing Dip

# Design Principles

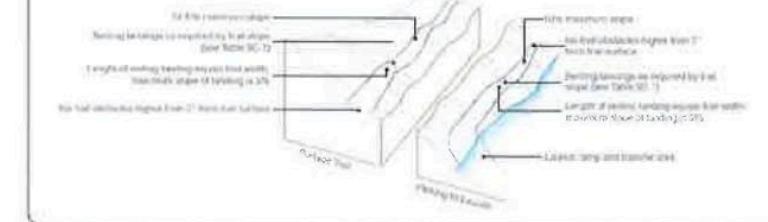


Figure 3C-4.  
ADA Accessible ADA Standards for Trail Slope

Water trail developers are encouraged to design and construct trails to meet Accessible ADA standards. Differences between accessible and non-accessible trails include slope, resting intervals, trail width, and height of protrusions. Figures 3C-4 and 3C-5 illustrate trail elements designed to meet ADA standards for accessible design.

Required resting intervals are a reliable difference between accessible and non-accessible trail design. Resting intervals are raised-level surfaces placed at varying distances between trail risers (Table 3C-1). On water trail launches designed to meet universal design standards, a hard-surface staging area is required adjacent to either the accessible parking stalls or the loading area (Figure 3C-6).

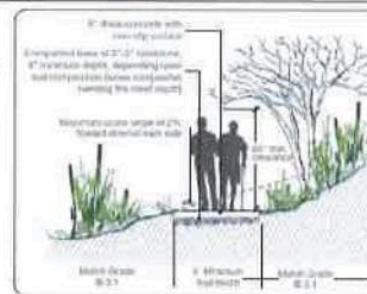


Figure 3C-6.  
Typical Accessible ADA Trail

# Operations and Maintenance



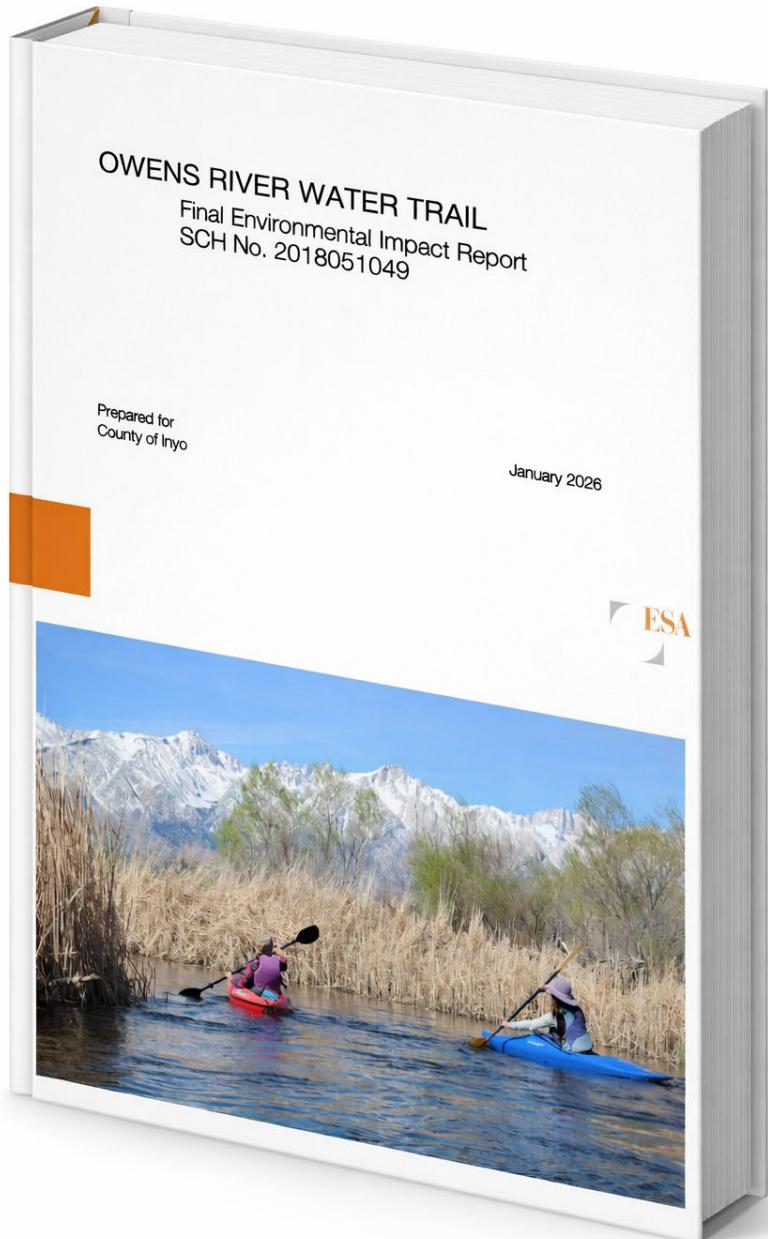
- Seasonal vegetation cutting only



- No routine excavation of riverbed



- Maintenance intensity declines over time



## **Chapter 1**

### Introduction

## **Chapter 2**

### Comments and Responses

## **Chapter 3**

### Modifications to the DEIR

## **Chapter 4**

### Mitigation Monitoring and Reporting Program

## **Appendix G**

### Biological Resources Technical Report

# CEQA Process and Public Review



**NOTICE OF  
PREPARATION  
AND PUBLIC  
SCOPING**

May 24, 2018 -  
June 25, 2018



**DRAFT EIR  
CIRCULATED  
FOR  
COMMENT**

May 8, 2019 -  
June 21, 2019



**30 COMMENT  
LETTERS  
RECEIVED**



**FINAL EIR  
INCLUDES  
RESPONSES  
AND  
REVISIONS**

# Key Areas of Focus in the EIR



Biological resources  
and wetlands



Hydrology and  
water quality



Cultural and  
paleontological  
resources



Recreation and  
ranching compatibility

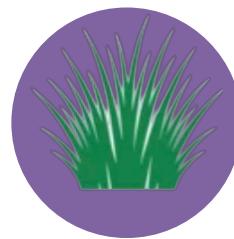
# Biological Resources and Mitigation



PRE-CONSTRUCTION  
SURVEYS



WORK  
WINDOWS TO  
AVOID SENSITIVE  
PERIODS



REVEGETATION  
AND RECOVERY  
MONITORING



ADAPTIVE  
MANAGEMENT  
IF RECOVERY  
FAILS

# Construction Methods and Spoils

Emergent vegetation removed to restore navigable channel



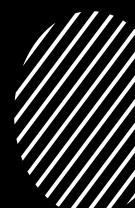
Excavated material thin-spread in designated areas to compost



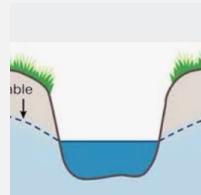
Spoils areas monitored for recovery



# Hydrology



Analysis assumes  
conservative  
surface-water  
modeling



Multiple data  
sources show a  
gaining river reach



Monitoring triggers  
added for sensitive  
resources

# Cultural Resources Protections

Qualified  
archaeologist  
on site

Tribal monitor  
on site

Worker  
training

Inadvertent  
discovery  
procedures

Coordination  
with Tribes and  
local museums

# Ranching and Recreation Compatibility

## What could conflict

Active grazing

Conflicts with cattle (stress,  
gates/fences, safety)



## How impacts are addressed (FEIR/MMRP)

Concentrate use at designated launch/take-out facilities (controlled access)

Seasonal separation (Practice of pasturing winter to spring outside recreation high season)

Signage (stay on water, respect livestock)

Facility design to discourage wandering (defined paths, barriers where needed)

Minimal cattle exclusion fencing at facilities

# Mitigation Monitoring and Reporting Program

Identifies each mitigation measure

Assigns responsibility

Defines timing and verification

Requires documentation of compliance

Resource Area	Identified Impact	Mitigation Approach	Monitoring / Enforcement
Biological Resources	Temporary disturbance to riparian vegetation and wetlands from channel clearing, access routes, and spoils placement	Seasonal work windows; avoidance of sensitive resources; revegetation and recovery requirements	Pre- and post-construction surveys; recovery monitoring; escalation if recovery fails
Hydrology / Wetlands	Localized changes in water surface elevation under construction scenarios	Conservative surface-water modeling; reliance on gaining-reach conditions	Monitoring triggers for sensitive vegetation and special-status plants
Cultural Resources	Potential disturbance of unknown archaeological or paleontological resources	Qualified archaeologist oversight; worker training; stop-work procedures; coordination with Tribes and museums	Inadvertent discovery protocols; documentation and notification
Recreation / Land Use	Increased public use and potential conflicts with ranching operations	Designated access points; signage; fencing at facilities where needed	Ongoing site management and compliance with facility design constraints

# What Board Certification Means

EIR adequately  
informs  
decision-makers

Environmental  
impacts disclosed  
and mitigated

Project decisions  
and approval may  
proceed separately

# Closing

- The Final EIR discloses impacts
- Significant impacts are mitigated
- Monitoring ensures accountability
- Staff recommends certification