



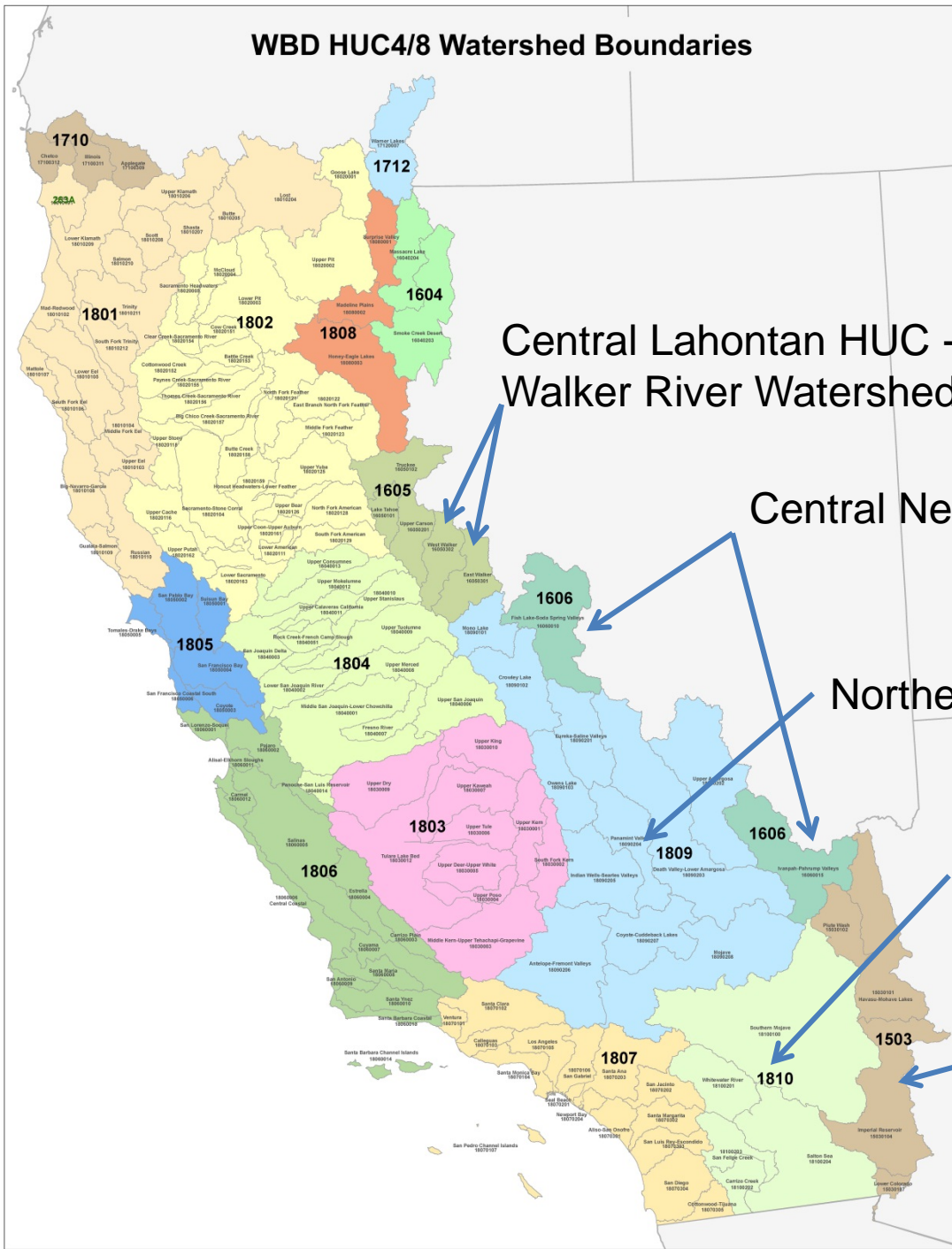
# State Wildlife Action Plan 2015 Update

Walker River Watershed (HUC 160503)  
and Stream Habitats (HUC 1606, 1809 & 1810)

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October 28, 2013

# WBD HUC4/8 Watershed Boundaries



Central Lahontan HUC -6 160503  
Walker River Watershed

Central Nevada Desert Basins  
(no fish)

Northern Mojave-Mono Lake

Southern Mojave-Salton Sea

Lower Colorado

# North Lahontan - HUC 1605 Walker River Basin



Walker River Basin  
Calwater Hyrdologic Sub-Areas

Source: NHD, Calwater 22, Lgustafson 10/10/13



# Target: Walker River HUC 160503

## Native Fish Assemblage

- Distribution limited to a few drainages
- Unique species to HUC 1605



# SGCNs Associated with Target

## Lahontan cutthroat trout



# SGCNs Associated with Target (Cont.)

## Mountain sucker



# SGCNs Associated with Target (Cont.)

## Mountain whitefish





# SGCNs Associated with Target (Cont.)

## Paiute Sculpin



# SGCNs Associated with Target (Cont.)

## Lahontan reside



# SGCNs Associated with Target (Cont.)

## Lahontan speckled dace



Photo Credit: USFWS

# SGCNs Associated with Target (Cont.)

## Tahoe sucker



# SGCNs Associated with Target (Cont.)

## **Mountain yellow legged frog**

CDFW & federally listed - Endangered



# Environmental Stresses

- Change in ecosystem development
- Change in spatial extent of fish community
- Change in biotic interactions
- Habitat fragmentation
- Change in water chemistry
- Change in natural fire regime
- Change in groundwater table



# Human Related Impacts

- Invasive plants and animals
- Introduced genetic material
- Dams and water management
- Livestock farming and ranching
- Roads and railroads



UGA2149075

# Strategies

- Conjunctive water management
- Co-management partnerships
- Translocation or re-introductions
- Data gathering and analysis
- Manage invasive species
- Develop BMPs for grazing
- Outreach and education





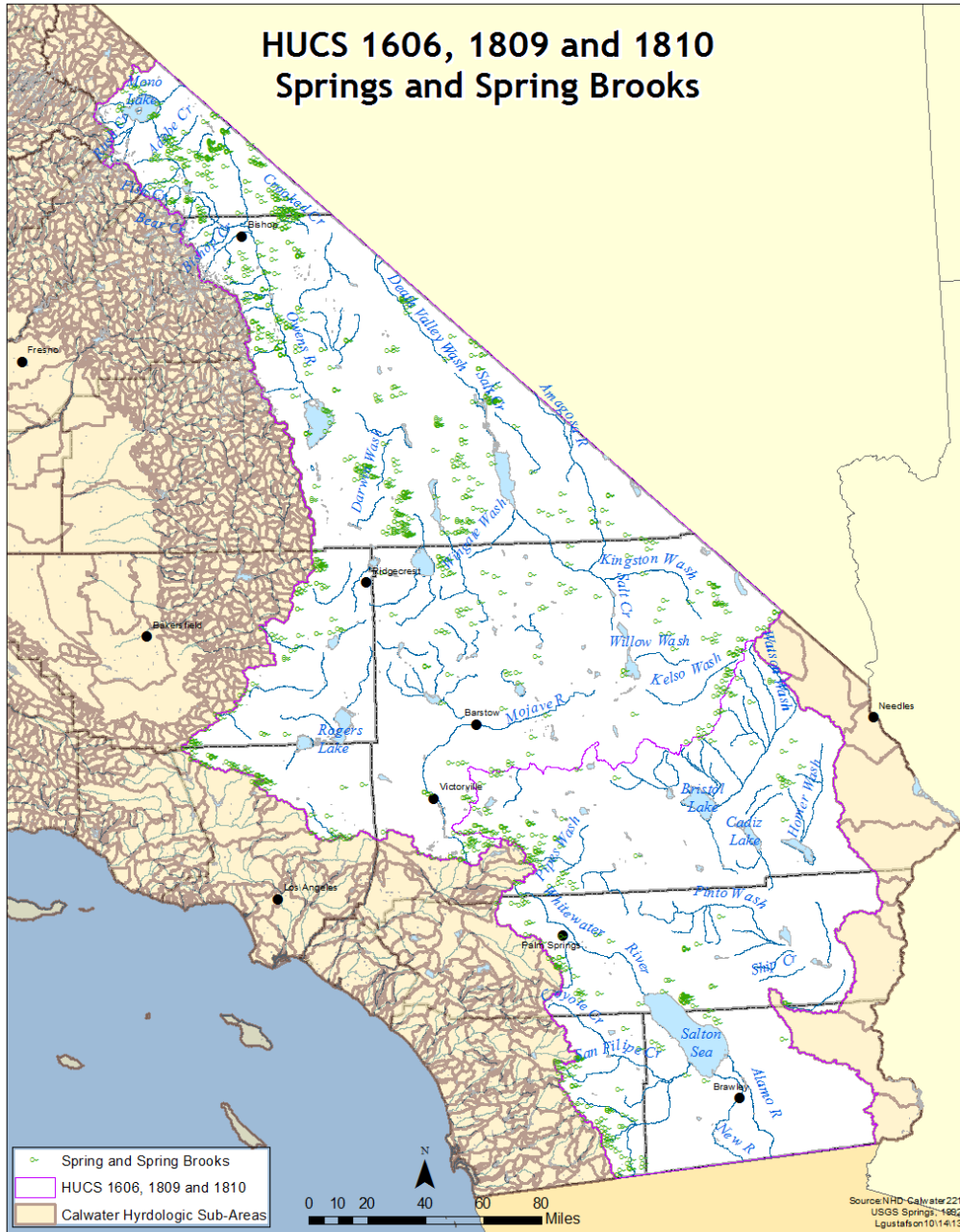
# Funding

- State Wildlife Grant
- Section 6 Threatened and Endangered Species Funding
- Multi species habitat conservation plans
- Co-operative partnerships
- Legislative funding
- Bond funding
- Project impact mitigation



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## HUCS 1606, 1809 and 1810 Springs and Spring Brooks



- Mono Lake Watershed is the northern boundary
- Nevada state line and Colorado River watershed are the eastern boundary
- Mexican border is southern boundary
- Watershed draining the east side of the Sierra, San Gabriel, San Bernardino, San Jacinto and Palomar Mountains from the western boundary.

# Target: Springs and Spring Brooks

- Based on Desert Fish Habitat Partnership
- Smaller spring-fed pool and run systems which occur throughout the arid west.



# Other Desert HUC Targets:



Cienega

Streams



# Other Desert HUC Targets:

# Other Desert HUC Targets:



Refuges

Anthropogenic



# SGCNs Associated with Target



**Owens Pupfish**

**Owens tui chub**



# SGCNs Associated with Target (Cont.)

**DESERT PUPFISH**



**Desert pupfish**

**Cabin Bar Tui Chub**





# SGCNs Associated with Target (Cont.)



**Owens Speckled Dace**



**Shoshone pupfish**

# SGCNs Associated with Target (Cont.)



**Cottonball Marsh Pupfish**

**Saratoga Springs  
Pupfish**



# SGCNs Associated with Target (Cont.)



**Arroyo Toad**

**Southwestern  
pond turtle**



# Other SGCNs Associated with Target (Cont.)

- Shoshone pupfish
- Long Valley Speckled dace

# Environmental Stresses

- Change in community structure and composition
- Change in spatial extent of fish community
- Habitat fragmentation
- Change in runoff and river flow
- Change in natural fire regime
- Change in groundwater table



# Human Related Impacts

- Invasive plants and animals
- Renewable energy development and operations
- Dams and water management



# Strategies

- Manage dams and barriers
- Co-management partnerships
- Translocation or re-introductions
- Data gathering and analysis
- Manage invasive species
- Input on project planning and decision making process
- Outreach and education



# Funding

- State Wildlife Grant
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Thank you for coming

We appreciate your input

Questions?