

### GOALS

1. By 2025, 5 areas or streams courses will have flow regimes modified to provide an increase in suitable habitat for native fishes.
2. By 2025, identify non-native invasive aquatic species populations and reduced their distribution by 5%.
3. By 2025, the area occupied by assemblage of native fishes is increased by 10% in the 160503 HUC6-Walker Basin.
4. By 2025, the presence of all life stages of the populations has been increased by 10% to ensure their sustainability.
5. By 2025, barriers which restrict access to suitable habitat and aid in fragmentation of native species population will be identified and solutions developed to remove the barriers or provide access around 5% of the barriers.

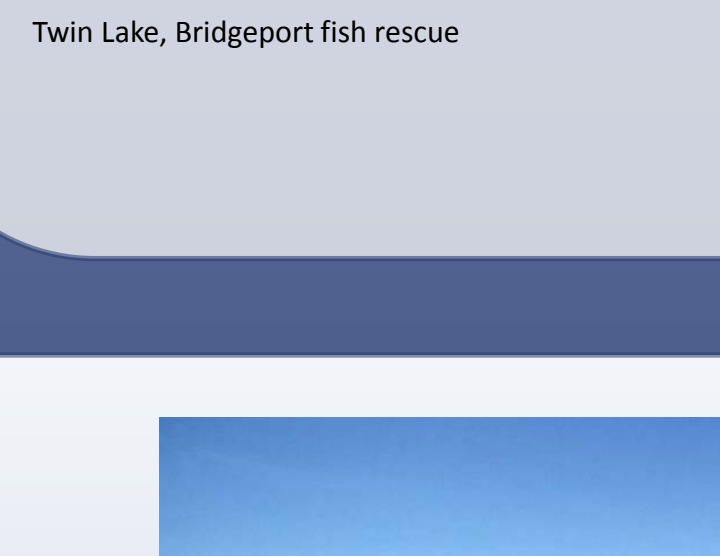


The State Wildlife Action Plan examines the health of wildlife and prescribes actions to conserve wildlife and vital habitat before they become more rare and more costly to protect. The plan also promotes wildlife conservation while furthering responsible development and addressing the needs of a growing human population.

### SENSITIVE SPECIES

Lahontan cutthroat trout  
Mountain sucker  
Mountain whitefish  
Paiute sculpin  
Lahontan Creek tui chub  
Lahontan redbelly  
Lahontan speckled dace  
Tahoe sucker  
Freshwater mussels

(Anodonta, possibly Margaritifera)



### ENVIRONMENTAL STRESSES

- Change in air temperature
- Change in precipitation
- Change in snow pack
- Change in snow cover period
- Change in frequency and intensity of extreme events
- Change in sediment erosion-deposition regime
- Change in Natural fire regime
- Change in runoff and river flow
- Change in water levels and hydroperiod
- Change in flood occurrence, frequency and intensity
- Change in groundwater tables
- Change in water nutrients
- Change in spatial extent of target
- Change in community structure or composition
- Change in biotic interactions (altered community dynamics)
- Habitat fragmentation
- Change in water chemistry



### HUMAN RELATED IMPACTS

- Roads & Railroads
- Dams & water management/Use
- Introduced genetic material
- Invasive plants/animals
- Inappropriate livestock farming and ranching



### STRATEGIES, OBJECTIVES AND ACTIVITIES

1. Advocate for Effective Enforcement of Laws
  - a. Objectives
    - i. CDFW fosters LED capacity for enforcement of water laws
  - b. Activities
    - i. Identify laws and regulations governing riparian areas and work with governing agencies to apply effectively
    - ii. Make recommendations to enhance enforcement of existing laws and regulations
    - iii. Provide law enforcement with maps of critical problem areas
    - iv. Provide funding for CDFW enforcement to enforce laws protecting streams and flows
    - v. Obtain funding for strategy implementation
    - vi. Develop LED Academy curriculum emphasizing water law
2. Translocation or reintroduction of species
  - a. Objectives
    - i. Establish self-sustaining and genetically viable native fish populations
  - b. Activities
    - i. Identify source populations
    - ii. Remove invasive or problematic species from historic native fish habitat
    - iii. Create geo-referenced map/data base for native fish habitats
    - iv. Develop basin plan for native fish management
    - v. Obtain funding for strategy implementation
    - vi. Coordinate management actions with natural resource agencies, NGOs and private landowners
    - vii. Collect/analyze genetic data to define priorities
3. Conjunctive water management
  - a. Objectives
    - i. Manage water for beneficial uses of native species
  - b. Activities
    - i. Coordinate with water agencies
    - ii. Identify/coordinate with key stakeholders
    - iii. Collaborate with state and federal agencies for management plan development and review
    - iv. Collaborate with stakeholders to develop vegetation management plan.
    - v. Identify and quantify water needs by species
    - vi. Evaluate existing occupied habitats
    - vii. Obtain funding for plan implementation
4. Reduce impacts with BMPs
  - a. Objectives
    - i. Use BMPs to reduce impacts to native fish community from roads and Railroads
    - ii. Use BMPs to reduce impacts to native fish community from invasive species
  - b. Activities
    - i. Collaborate with partner in development of BMPs
    - ii. Collaborate with state and federal agencies and land owners
    - iii. Identify existing BMPs, develop BMPs database
    - iv. Establish working group to define BMPs
    - v. Obtain funding to implement strategy

### TEAM

Name	Organization	Role
Steve Parmenter	CDFW-R6	Team Member
Mike Giusti	CDFW-R6	Leader/Manager
Glenn Yoshioka	CDFW-FB	Team Member
Duane Baker	CDFW-R6	Team Member
Judy Holman	USFWS	Team Member
David Vigil	CDFW-R6	Team Member
Junko Hoshi	CDFW-HCPB	Team Member

