California State Wildlife Action Plan Update 2015

Northern California Coast-Hydrologic Unit 1801

DRAFT STRATEGY: Native Fish Assemblage

GOALS

1. By 2025, reduce sediment input to attain balance in streams and rivers based on Basin Plan monitoring.

2. By 2025, preserve existing and/or increase water flow for beneficial use of aquatic species.

3. By 2025, increase salmonid populations by 300%

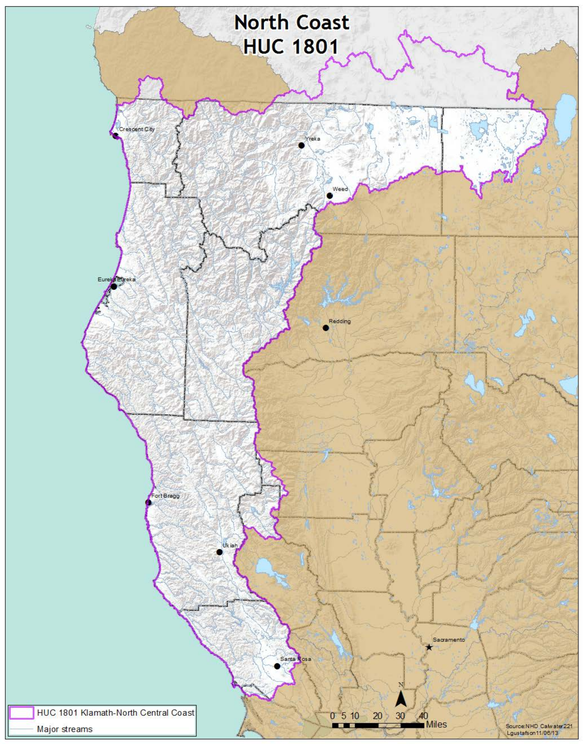
4. By 2025, delist sediment impaired (TMDL) streams

5. By 2025, Increase the number of stream miles where water temp. suits Coho salmon production by 30% in currently impaired rivers and streams. Where Coho salmon occur, maintain summer water temperatures not to exceed Max weekly average temp 63-65*F

6. By 2025, increase abundance and distribution of coastal cut-throat trout in the north, and Coho salmon throughout HUC.

7. By 2025, maintain appropriate flows in rivers and streams at proper time of year.

8. By 2025, over the next 10 years, maintain or increase current levels in species diversity and abundance in the HUC



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

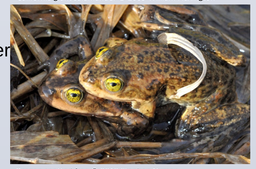
- Chinook salmon
- Coho salmon
- Steelhead
- Coastal cutthroat trout
- Pacific lamprey
- River lamprey
- Western brook lamprey
- Green sturgeon
- White sturgeon
- Tidewater goby
- Eulachon
- Longfin smelt
- Navarro roach
- Gualala roach
- Lost River sucker
- Shortnose sucker
- Klamath large scale sucker
- Blue chub
- Hitch
- Russian river tule perch
- Coastal tailed frog
- California giant salamander
- California red-legged frog
- Northern red-legged frog
- Cascade frog
- Oregon spotted frog
- Southern long toed salamander
- California tiger salamander
- Northern leopard frog
- Red-bellied newt
- Pacific pond turtle
- Crayfish
- California Linderiella
- California freshwater shrimp
- California floater mussel
- Western ridgemussel
- Other freshwater mussels


Chinook salmon


Green sturgeon


Tidewater goby © 2007 Bradford Norman


California giant salamander © 2009 William Flaxington


Oregon spotted frog © 2013 Stephen Nyman


Crayfish © 2007 California Academy of Sciences

ENVIRONMENTAL STRESSES

- Change in average annual temperature
- Change in average annual precipitation
- Change in snowpack
- Sea level rise
- Change in sediment/erosion deposition regime
- Change in extreme events
- Change in runoff and river flow
- Changes in water temperature
- Change in water chemistry
- Change in water levels and hydroperiod
- Change in flood occurrence
- Change in nutrients
- Change in pollutants
- Altered spatial distribution of habitat types
- Change in community structure or composition
- Loss or change in biotic interactions
- Change in functional processes of ecosystem
- Altered Community Dynamics
- Habitat fragmentation
- Avalanches and landslides
- Change is succcessional processes

HUMAN RELATED IMPACTS

- Fire and fire suppression
- Introduced genetic material
- Marine & freshwater aquaculture
- Illegal fishing & harvesting aquatic resources
- Invasive plants/animals
- Industrial & military effluents
- Agricultural & forestry effluents
- Household sewage & urban waste water
- Mining & quarrying
- Problematic native species (Parasites/pathogens)
- Renewable energy
- Logging & wood harvesting
- Roads & railroads
- Livestock farming and ranching
- Annual and perennial non-timber crops
- Housing in urban/rural areas
- Dams & Water Management/Use

TEAM

Name	Organization	Roles
Mark Wheetley	CDFW-R1	Leader/Manager
Joe Piscotto	CDFW-FB	Team Member
Laura Patterson	CDFW-WB	Team Member
Steve Canata	CDFW_R1	Team Member
Michelle Gilroy	CDFW-R1	Team Member

STRATEGIES, OBJECTIVES AND ACTIVITIES

1. Provide Education and Outreach
   - a. Objectives
     - i. Increase public awareness of BMPs for road construction and maintenance and impact of invasive species.
     - ii. Improved road maintenance BMP
     - iii. Educate water users about the stress and impact of water use and conservation
     - iv. Inform land owners on their responsibilities for water rights compliance
   - b. Activities
     - i. Partner with other agencies
     - ii. Provide technical assistance and funding to implement BMPs
2. Effective Law Enforcement
   - a. Objectives
     - i. Increased compliance with water rights and 1600 agreements
     - ii. Reduced illegal diversions
     - iii. Increase LED staffing levels
   - b. Activities
     - i. Include BMPs as enforceable condition of SAA and water right permit/license
     - ii. Coordinate with LED (Provide law enforcement with maps of critical problem areas)
     - iii. Advocate for opportunities to improve prosecutions of environmental laws
     - iv. Identify partners to improve enforcement capabilities
     - v. Identify laws and regulations governing riparian areas and work with governing agencies to apply effectively
3. Manage dams and other barriers
   - a. Objectives
     - i. Allow sufficient bypass flows to support biological requirements and geomorphology
     - ii. Modify or remove small diversion dams
     - iii. Remove impairments to fish passage
   - b. Activities
     - i. Coordinate with private landowners
     - ii. Inventory barriers and assess flow and water condition
     - iii. Develop plan for prioritization and construction or retrofits
4. Promote water conservation measures
   - a. Objectives
     - i. Increase efficient use of domestic water
     - ii. Improved agricultural use of water
   - b. Activities
     - i. Evaluate the efficacy of existing conservation measures
     - ii. Develop new or improve existing water conservation strategies
     - iii. Review existing policies and guides
     - iv. Develop partnerships for joint advocacy
     - v. Develop water banking/storage opportunities