



Water color painting, "Cousins" with permission from biologist and artist Reñe C. Reyes

Reyes 2008

## CENTER FOR COASTAL OCEAN ISSUES AND DELTA SCIENCE PROGRAM SYMPOSIUM

# DELTA & LONGFIN SMELT: Is Extinction Inevitable?

March 29, 2016

UC Davis

Activities & Recreation Center,  
Ballroom A

8:30 am - 4:30 pm

Free and open to the public

Kindly RSVP **HERE** by 3/23

<http://cmsi.ucdavis.edu/events>

Is extinction inevitable for the Delta and longfin smelt? Despite extensive efforts investigating potential causes of their decline, their numbers have reached an all-time low; particularly for Delta smelt. These Sacramento-San Joaquin Delta fishes are protected by the federal endangered species listing (the endemic Delta smelt) and the State's threatened species listing (longfin smelt). Water supply "take restrictions" are directly influenced by their presence near the pumps, and river flows are regulated based on their life-cycle and known distribution.

As species near extinction, research and management priorities must keep pace. This day-long symposium will feature panels updating the species' status, links to population declines, and the exploration of how recovery planning, restoration and decision-making efforts intersect to sustainably manage Delta and longfin smelt.

PRESENTED BY:



DELTA STEWARDSHIP COUNCIL



UC DAVIS

COASTAL AND MARINE SCIENCES INSTITUTE

- 8:20 CHECK-IN
- 8:30 WELCOME  
**NANN FANGUE**, UC Davis Coastal and Marine Sciences Institute  
**CLIFF DAHM**, Delta Stewardship Council, Delta Science Program
- 8:45 - 9:45 THEME 1: WHAT DO WE KNOW ABOUT DELTA SMELT AND LONGFIN SMELT?  
 MODERATOR: **NANN FANGUE**
- TED SOMMER**, CA Department of Water Resources  
 The ecology and management of Delta smelt: New insights into the most important non-game fish in the United States
- JON ROSENFELD**, The Bay Institute  
 Longfin smelt wonder "Will humans evolve a spine before we fishes go extinct?"
- RANDY BAXTER**, CA Department of Fish & Wildlife  
 Slippery Slope - Documenting the declines of smelts in the San Francisco Estuary
- MANDI FINGER**, UC Davis  
 Population genetics of Delta smelt and longfin smelt
- 9:45 -10 BREAK
- 10 -11:45 THEME 2: CAUSAL LINKS TO POPULATION DECLINES AND DATA GAPS  
 MODERATOR: **JIM HOBBS**
- RANDY BAXTER**, CA Department of Fish & Wildlife  
 Putting pieces together - MAST conceptual model for investigating the decline of Delta smelt
- NANN FANGUE**, UC Davis  
 Why thinking mechanistically matters: Teasing apart multiple and interacting abiotic stressors
- TOM CANNON**, CA Sportfishing Protection Alliance  
 The year the smelt died - 1981
- BRIAN SCHREIER**, CA Department of Water Resources  
 What have we learned about predation on Delta smelt?
- BILL BENNETT**, UC Davis  
 Contributing causes of decline: Food web (exact title TBD)
- RICHARD CONNON**, UC Davis  
 Sublethal effects of contaminants regularly detected in the delta: Risks to smelt
- FRED FEYRER**, US Geological Survey  
 The role of ocean conditions on Delta smelt and longfin smelt in the San Francisco Estuary
- 11:45 - 1 LUNCH BREAK (ON YOUR OWN)
- 1 - 2 THEME 2: CAUSAL LINKS TO POPULATION DECLINES AND DATA GAPS CONT'D  
 MODERATOR: **JIM HOBBS**
- SWEE TEH**, UC Davis  
 A 3-year study of environmental stress on health of endangered Delta smelt
- LOUISE CONRAD**, CA Department of Water Resources  
 Drought: Is this the 'final straw'?
- LARRY BROWN**, US Geological Survey  
 How will climate change induced warming affect Delta smelt?
- JIM HOBBS**, UC Davis  
 Synthesis of the current biology, ecology and status of smelt in the San Francisco Estuary

2 - 2:45      THEME 3: INTERSECTION OF SPECIES' RECOVERY PLANNING, RESTORATION EFFORTS,  
AND DECISION MAKING: ADDRESSING HARD QUESTIONS

MODERATOR: **RICHARD CONNON**

**PETER MOYLE**, UC Davis

Extinction in California fishes: ecological, biological, legal, real

**LENNY GRIMALDO**, ICF International

Rearing habitat of larval and juvenile longfin smelt in the San Francisco Estuary: A case to move into uncharted waters

**ROSEMARY HARTMAN**, CA Department of Fish & Wildlife

Are tidal wetlands the new miracle cure?

2:45 - 3      BREAK

3 - 4:30      PANEL DISCUSSION: WHERE DO WE GO FROM HERE, A PATH FORWARD AMONG  
CONSIDERABLE UNCERTAINTY?

MODERATOR: **PETER MOYLE**

**SHAWN ACUÑA**, Metropolitan Water District of Southern California

**DAN CASTLEBERRY**, US Fish and Wildlife Service

**SCOTT HAMILTON**, Center for California Water Resources Policy & Management

**TED SOMMER**, CA Department of Water Resources

**CHRISTINA SWANSON**, Natural Resources Defense Council

**ERWIN VAN NIEUWENHUYSE**, US Bureau of Reclamation

**CARL WILCOX**, CA Department of Fish and Wildlife

SPEAKER AND PANELIST BIOGRAPHIES ARE AVAILABLE **HERE**.

Smelt Symposium Planning Committee: Marina Brand (Delta Science Program), Richard Connon (UC Davis), Jim Hobbs (UC Davis), Nann Fangue (Chair, UC Davis), Peter Moyle (UC Davis) and Shauna Oh (UC Davis)