

## **IEP Tidal Wetlands Monitoring Project Work Team**

**June 8, 2016**

**9:00 – 12:00**

**CDFW Yolo Wildlife Area Headquarters**

**Call-in Line: 888.363.4734, Code: 5446822.**

DFW- Alice Low, Stacy Sherman, Rosie Hartman, Dave Contreras, Alison Furler, Bonnie Wang, Vanessa Tobias, Dave Zezulak  
DWR – Ted Sommer, Louise Conrad, Erik Loboschfsky, Joy Khamphanh, Pascale Goertler (phone), Kris Jones (phone), Jamie Suria (phone)  
DSP – Karen Kayfetz (phone)  
DSC – Daniel Huang  
USGS – Larry Brown, Anke Mueller-Solger, Fred Feyrer, Dave Ayers, Oliver Patton  
ESA - Ramona Swenson  
MWD – Shawn Acuna  
USFWS – Lori Smith (phone), Steve Culberson  
SFWCA – Kelsey Cowin  
BOR – Ian Smith, Towns Burgess  
Bruce Herbold

1. Introductions
2. Announcements
  - a. FRP Phase I Monitoring Report complete. It will get posted to the website, sometime. We're working on getting a better website.
  - b. New Aquatic Vegetation PWT – Ted and Louise have drafted a proposal for a new aquatic weeds (invasive SAV and FAV) project workteam. They will distribute it to our PWT for comments, and would like comments by June 15<sup>th</sup>. Tasks they want to tackle:
    - Go further on the tidal wetlands PWT conceptual models, maybe more species-specific models
    - Develop hypotheses on effective removal strategies, and effect of aquatic weed removal
    - Synthesize data that is currently available
    - Plan for new long-term monitoring program for aquatic weeds
    - Work with Boating and Waterways on experimental targeted removal plan for 2017, funding for the removal experiment already secured. May be able to get more through prop 1. This would include a comprehensive look at the ecological effect of removal.
  - New R Users Group being started for people working on Bay-Delta issues and wants a forum for sharing new statistical techniques. Barb burns at NMFS has an R users group, may want to merge efforts.
    - i. People interested should contact Rosemary Hartman ([Rosemary.Hartman@wildlife.ca.gov](mailto:Rosemary.Hartman@wildlife.ca.gov)) to be added to the list, or

visit us at : <https://groups.google.com/forum/#!forum/bay-delta-r-users-group>

- c. Revived EET – Bruce and Karen Kayfitz are planning on reviving the Estuarine Ecology team as a forum to have more in-depth discussions of scientific studies in the Bay-Delta. Look for an email sometime in July.
3. Spring blooms
    - a. Anke presented some of the synthesis of chlorophyll monitoring data from April and May, tracking a large diatom bloom in the delta.
    - b. We have a lot of fluorimeters out there! 30-40. USGS wants to work on making sure they are all calibrated correctly.
    - c. Anke is leading a special session for the bay-delta science conference on the work going on right now looking at the bloom, and some new work delving into historic data to look at patterns of past blooms and whether they are tied to drought.
    - d. In related news, DWR is trying to do an experiment to get a modest pulse of water coming down the Yolo bypass in July (they wanted fall, but couldn't). They want interested people to help evaluate this.
      - i. Contact Ted Sommer if you would like to contribute.
    - e. Fred doing a study looked at spatial distribution of zooplankton in north delta.
    - f. Curtis Davis from OSU, has calibrated MODIS monitoring of chl<sub>a</sub>, turbidity, doc, temp, etc. Coverage every 2 days, 250m resolution; satellite may have captured the bloom.
4. Project Updates
    - a. Bruce finished the Dutch slough monitoring plan. Not sure about monitoring funding. They are planning to put 2 artificial seining substrates on the Emerson parcel.
    - b. Artificial seining substrates were not an option for Tule Red, too many problems with the San Francisco Regional Water Control Board not wanting any wetland fill.
    - c. Tule Red is still working out a few permitting issues, but has been certified consistent with the Delta Plan. They have a monitoring plan for food web metrics, but their fish monitoring will not be covered under the project Biological Opinion. Ramona is interested in coordinating with other people in the area to put on-site sampling in a broader context.
5. Draft Tidal Wetland Monitoring Framework - The FRP will email out the draft Tidal Monitoring Framework by the end of the week, along with a few questions to guide review.
    - We do not expect everyone to review the entire thing, but please review sections that reflect your area of expertise.

- We are most interested with the usability of the document. Have we missed anything? Is anything unnecessary?
  - Please give us your comments by August 1<sup>st</sup>.
6. USGS study: Assessing fish movement, habitat use, and behavior at the intersection of levee breaches, tidal wetlands and tidal channels (USGS)
    - a. Major questions of the study:
      - i. What are the drivers of fish flux?
      - ii. Are there patterns of lateral fish distribution with gradients in velocity distribution?
      - iii. Are there patterns of fish movement concomitant with velocity vector direction?
    - b. Preliminary results of data from acoustic cameras on Little Holland tract breach:
      - Found highest abundance of large fish during flood. More larger fish than smaller fish overall.
      - Clear patterns of large fish entering on flood, leaving on ebb tide.
      - Little Holland breach has much stronger velocity on one bank than the other.
      - Patterns of milling behavior, particularly in smaller fish
      - Planning new site at the Wildlands breach.
      - Ted isn't that interested in "fish flux", more generally interested in how fish are using the wetland. USGS says they aren't really looking at total flux, but trying to relate water movement to fish movement.
  7. FRP 2016 Pilot Monitoring
    - a. Most invertebrate samples have been collected
    - b. Still need to do some benthic trawls and ponar grabs
    - c. We are looking for people for Scientific Aide and Senior Laboratory Assistant positions. Let us know if you have any names!
    - d. Starting gill net versus e-fishing comparison.
    - e. One more month of Kodiak versus Otter versus Lampara net
    - f. Have had quite a bit of success with the Lampara versus beach seine comparison.
  8. Study Proposal: FRP 2017 Pilot Monitoring (Phase III)
    - a. We have submitted our proposed work to the IEP Science Management Team for review
    - b. Further refining methods
    - c. Comparing IEP channel data to littoral sampling
    - d. Working on recommendations for sample size and spatial/temporal sampling intensity.