

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

**January 21, 2016**

**9:00 – 12:00**

**DWR – West Sacramento – Room 119**

DFW- Alice Low, Stacy Sherman, Rosie Hartman, Dave Contreras, Bonnie Wang, Vanessa Tobias, Hilde Spautz, Dave Zezulak, Sakura Evans (phone)

DWR – Eric Loboschefskey, Gina Bengino, Gina Darin, Louise Conrad, Randy Mager, Steve San Julian, Joy K., Anitra Pawley, Gardner Jones (phone), Heather Green, Cindy Garcia

SFEI – April Robinson

DSP – Maggie Christman, Karen Kayfetz, Martina Koller (phone),

DSC – Daniel Huang

USGS - Larry Brown, Bryan Downing, Jon Burau, Fred Feyrer, Judy Drexler, Tara Morgan,

ESA - Ramona Swenson

USFWS – Lori Smith, Steve Culberson, Heather Swinney (phone)

SS-Bruce Orr

Bruce Herbold

HT Harvey and Associates - Pete Nelson (phone)

1. Introductions/Housekeeping
2. Meeting addition – MWQP pre-project Cache Slough restoration monitoring
  - a. The project began in Sept. 2013
  - b. This project collects discrete water samples twice per month
    - i. Reason behind sampling is drinking water concern
3. USGS Study Plan for Little Holland Tract/Ryer Island (by Fred Feyrer)
  - a. The planned USGS studies will be more research- based rather than status and trends that the FRP will be doing
  - b. Work will be done in the North Delta (Little Holland Tract) and confluence (Roe and Ryer Island)
    - i. Study will look at spatial-temporal habitat variability within regions
      1. In Little Holland Tract, based on water modeling there are three different water zones
    - ii. Study will also examine trophic dynamics and predation
    - iii. A goal of the study is to determine what will happen when wetlands are restored
    - iv. Another goal of the study is to determine what's going on with the fish and their food within the wetland, in littoral and channel habitat
      1. In addition, they will monitor water quality and larval fish flux in and out of island
  - c. The study will evolve year to year based on what is learned from the data and is funded through 2019.

4. Stunted planted growth in the Wildlands Property (by Judy Drexler)
  - a. This pilot study looked to understand the causes of stunted vegetation at Wildlands compared to a historic marsh at north of Little Holland Tract
    - i. The study compared tules from wildlands to Little Holland Tract, South Holland Tracy, and South Prospect Island
      1. Tule diameter and shoot length in Wildlands was lower than other sites
      2. Wildlands total carbon, organic carbon, and organic nitrogen was lower than other sites, but this was not statistically significant
      3. Pesticides in wildlands were higher in June and found to be the 2<sup>nd</sup> highest contaminated compared to other sites the subsequent two months
      4. Herbicides were found in all sites
      5. Wildlands had higher elevations vs. N. Holland Tract
    - ii. It is thought the stunted plant community is because the area was built to support plants and riparian habitat in the mean high high water, but most wetland plants are below MHHW
      1. To “fix” the wildlands plant community, Wildlands should be re-graded with a gentle slope
  - b. The group discussed what these results meant in terms of future restoration. Since the credit release on the site was not tied to vegetation shoot length or diameter, there is no incentive to regrade the site. It is unclear what effect the stunted plant growth will have on fish. It is definitely important to learn from this when choosing elevations on future restoration sites. There needs to be better understandings of tidal datums in the area.
5. Update on 2016 Pilot Monitoring – FRP Program
  - a. Fish sampling occurred in the Lindsey Slough Restoration Area using the otter, kodiak, and lampara. The lampara beach seine sampling occurred in Liberty Island the day after the USFWS conducted their beach seine.
  - b. Invertebrate sampling begins sampling in February.
6. Meeting addition – EET meetings may occur again, but will be based on interest. Contact Bruce Herbold or Karen Kafetz for more information.
7. Update on Conceptual Model Text
  - a. The vegetation and contaminants models still need work. Once completed, they are slated to be submitted as an IEP Technical Report. A slimmed down version will be submitted to SFEWS.

8. Update on Development of Decision Tool for Monitoring Framework
  - a. Metrics and methods were ranked by various scientists
    - i. The easiest metrics ranked highest and fish methods ranked 39<sup>th</sup>
    - ii. Based on results, we do not want the decision tool to dictate a monitoring plan
    - iii. We will provide the scoring tables as an appendix to the plan, and will use the tables to evaluate methods within metrics to make determinations in choosing the appropriate method
  
9. The FRP had meeting discussions on:
  - a. Additional IEP monitoring to complement tidal wetland monitoring
    - i. Talked with DWR and long term DFW studies to see if they could add stations near wetland restoration sites
    - ii. The FRP is currently discussing with DFW if the sites can be done and who will do them
  - b. Reference site monitoring
    - i. Potential reference sites were identified by the FRP team and discussed with local scientists.
      1. Identified reference sites:
        - a. In Suisun Bay: Rush Ranch, Peytonia Slough, Joice Island, and Blacklock
          - i. Roe and Ryer Island also identified but may not be comparable due to location
        - b. In Confluence: Browns and Sherman islands
          - i. Lots of fish data in various areas in the confluence.
          - ii. Consider Big Break, Mildred Island, etc.
        - c. Cache Slough Region: Liberty Island, Little Holland Tract, Lindsey Slough Restoration Site, Lindsey Slough (ancient), Prospect Island West
        - d. North East Delta: Delta Meadows, Consumnes River Preserve, and Grizzly Slough
      2. Tule Red may have an analog reference site in Honker Bay.
      3. Perhaps open up comparison site monitoring to not only other wetlands and adjacent channels, but other habitat types such as big break, Mildred, etc.
      4. Rosie will distribute one-page briefing documents on each of the potential reference sites for comment.