

# Interagency Ecological Program Stakeholder Meeting

May 11, 2016  
1:30-3:30pm

Dept. of Water Resources  
3500 Industrial Blvd, Rm 119  
West Sacramento, CA 95691



**Interagency  
Ecological Program**  
COOPERATIVE ECOLOGICAL  
INVESTIGATIONS SINCE 1970

## Attendees:

Shawn Acuna, MWD	Chris Kwan, SWRCB
Randy Baxter, CDFW	Alice Low, CDFW
Marina Brand, DSP	Zoltan Matica, DWR
Alison Collins, MWD	Todd Miller, USFWS
Louise Conrad, DWR	Alicia Seesholtz, DWR
Kelsey Cowin, SFCWA	Bjarni Serup, DWR
Matt Dekar, USFWS	Steve Slater, CDFW
Gregg Erickson, CDFW	Christina Sloop, CDFW
Sakura Evans, CDFW	Lynda Smith, MWD
Rebecca Fris, CDFW	Ted Sommer, DWR
Karen Gehrts, DWR	Stephani Spaar, DWR
Joe Heublein, NMFS	Vanessa Tobias, CDFW
Brooke Jacobs, CDFW	Erwin Van Nieuwenhuyse, USBR
Rachel Johnson, NMFS	Dave Zezulak, CDFW
Alejo Kraus-Polk, UCD	
<b>Via Phone:</b>	
Frances Brewster, SCVWD	John McManus, GGSA
Allison Febbo, SWC	Deanna Sereno, CCWD
Dan Kratville, CDFW	Kim Webb, USFWS
Holly Long, SLDMWA	

## Next IEP Stakeholder Meeting:

August 10, 2016  
1:30-3:30pm  
Dept. of Water Resources  
3500 Industrial Blvd, Rm 119, West Sacramento, CA 95691

DISCLAIMER: Sharing presentations is at the discretion of the individual presenters.  
IEP does not own any of the presentations, or their content.

## 1. IEP Updates, Gregg Erickson

- Gregg Erickson, CDFW, Gregg.Erickson@wildlife.ca.gov
- Accomplishments in 2015
  - The IEP prioritized drought, which resulted in a redirection of funding
  - Goals identified in the business practices review were accomplished, and we are currently working on implementing the remaining mechanisms
  - 2016 IEP Science Agenda was completed
- 2016 Work Plan priorities
  - Drought was prioritized again
  - Historically low species numbers
  - 2017 work planning is in process right now
    - IEP Directors reviewing 2017 work plan in September 2016
  - Mid-year check-in planned with our regulatory counterparts
  - Mid-year check-in with IEP stakeholders
  - Currently, no funds identified for PSPs for 2017, but the IEP is working with Prop 1 and other agencies with RFPs to communicate these opportunities to everyone
  - Plan to share more about 2017 work plan at August stakeholder meeting, nothing firm at this time
  - The IEP always shares stakeholder feedback with Directors at quarterly meetings
- New for 2017
  - IEP will use the Science Agenda as a touchstone for 2017 work planning, as requested by the Directors
  - We are actively trying to avoid mid-year adjustments for the 2017 work plan
  - State supplemental drought funding may go away after June 2016
  - IEP tries to remain flexible enough to address emerging needs
  - Financially, the program is about the same size going into 2017
  - Solicited research is not projected for 2017
  - All extra money has gone to drought the last few years, and that money may not continue into 2017
  - Compliance will probably be the same, synthesis work will be the same, drought is unknown, Directed Studies will be determined in August, and no solicited research
- Questions:
  - What is happening with IEP Lead Scientist position?
    - DSP had to re-do the civil service exams, and will be holding new exams in the next month or so. They will be using a panel pulled from a variety of agencies, and hope to have a decision by mid-summer.
  - How do agencies identify Directed Studies and bring these into the work plan?
    - The science agenda is used to inform these agency level decisions. Consistent with internal agency priorities, member agencies can bring forward studies that fall in line with the science agenda and the overall interagency effort.

DISCLAIMER: Sharing presentations is at the discretion of the individual presenters.  
IEP does not own any of the presentations, or their content.

- Where does the money for Directed Studies come from?
  - The money for Directed Studies comes from the member agencies. These are projects funded internally at the discretion of the agency, and if it falls in line with the IEP, the PI submits a concept proposal for inclusion into the IEP work plan after receiving multiple levels of peer review. With the emphasis of collaboration among agencies.
- How are Directed Studies different from PSPs?
  - Unlike PSPs, Directed studies are not funded from pooled funds. They use the agency contracting mechanisms, and are agency priorities. Work directly done by the agency.
- Can we request additional details on individual project elements?
  - Of course, just communicate with Sakura or Gregg, and they can share information with those interested.

## **2. Update on CDFW Prop 1 funding for 2017, Rebecca Fris**

- Rebecca Fris, CDFW, [Rebecca.Fris@wildlife.ca.gov](mailto:Rebecca.Fris@wildlife.ca.gov)
- Rebecca provided a presentation on the 2017 Prop 1 funding cycle
  - This is a new branch within CDFW, and Rebecca is the Science Manager
  - Prop 1 Proposal Solicitation Notice for 2017 has been released
  - Prop 1 came into existence in 2014
  - Last year was the first round,
    - 190 proposals submitted
    - \$218M was available
    - 24 projects were funded
    - Delta is the only place where they are doing scientific studies
    - additional info available on the Prop 1 website  
[www.wildlife.ca.gov/Grants](http://www.wildlife.ca.gov/Grants)
- Multi-step process for proposal review
  - A lot of work on improving this process and sharing information about how to complete the application
- There are webinars available live or on the website,
- Proposals for the 2017 cycle are due June 24,
  - Proposals will be reviewed over the summer
  - Awards will be announced in November
- The executive panel consists of branch chiefs and deputy directors, but may also include others in sub-committees, maybe even people from outside the department

## **3. Presentation on SAIL Tech Team Recommendations, Rachel Johnson and Joe Heublein**

- Rachel Johnson, NMFS, [rachel.johnson@noaa.gov](mailto:rachel.johnson@noaa.gov)
- Joe Heublein, NMFS, [Joe.heublein@noaa.gov](mailto:Joe.heublein@noaa.gov)
- At the request of IEP Directors in 2015, IEP initiated winter-run and sturgeon (green and white) synthesis teams to develop a scientific framework for analyzing existing

DISCLAIMER: Sharing presentations is at the discretion of the individual presenters.  
IEP does not own any of the presentations, or their content.

information to identify critical knowledge gaps and prioritize monitoring and research studies to fill these gaps.

- SAIL teams developed parallel frameworks for winter-run Chinook salmon and sturgeon assessments in 4 stages: 1) developed conceptual models similar to Delta Smelt MAST to organize the approach by species, life stage and geographic regions; 2) evaluated current monitoring by reviewing programmatic documents and soliciting presentations by experts on key topics; 3) developed recommendations on monitoring improvements at biologically and management relevant life stages and geographic regions; 4) prepared three draft manuscripts for peer review by agency and stakeholders through IEP project work teams for submission to San Francisco Estuaries and Watershed Sciences in June 2016.
- Winter-run Chinook Salmon - 5 primary system-wide recommendations on how to use new approaches to quantify the presence, timing, survival, abundance, run identity, and condition of SRWRC at key life stages and locations necessary to inform water project operations, detect chronic or episodic population bottlenecks, and support synthesis tools that integrate how management actions influence population dynamics.
  - Run identification in monitoring network (genetics)
  - Abundance estimates at Sacramento and Chipps Island (trawl efficiencies using paired acoustic and coded wire tags)
  - Fish condition (pathology, growth)
  - Integrated water quality and acoustic survival monitoring (core monitoring program)
  - Life history diversity and Delta-rearing (otoliths, genetics)
- Sturgeon –
  - Recommendations developed in 4 system-wide categories (life stage surveys, life-history and tissue analyses, telemetry, and population modelling and synthesis) to improve monitoring and modelling of dynamic rate functions (recruitment, growth, and mortality/harvest) and evaluate large-scale management actions (e.g., harvest, reservoir releases)
  - Green sturgeon- develop surveys of relative abundance of age-0 green sturgeon (recruitment success), expand pilot run-size surveys with full-scale annual efforts, and develop stage-based life cycle models to improve estimates of abundance.
  - White sturgeon- refine stage-based life cycle models and improve precision of annual recruitment estimates and mark-based abundance and harvest estimates.
- Presentation on findings scheduled for June 2016 Directors' meeting. Work continuing in 2016 will focus on funding and implementation of key recommendations.

#### **4. Presentation on Drought-MAST final report and MAST next steps, Louise Conrad**

- Louise Conrad, DWR, Louise.Conrad@water.ca.gov
- Overview of Drought MAST methods (2002-2013)
  - Declining trend in winter inflow
  - Declining trend in export

DISCLAIMER: Sharing presentations is at the discretion of the individual presenters.  
IEP does not own any of the presentations, or their content.

- Perceive these results as a syndrome
- No clear pattern in temperature or turbidity
- Manuscript being submitted to a peer review journal for consideration
- Next steps for MAST
  - IEP Synthesis resources have been expanded recently, larger synthesis team
  - Continue multi-faceted synthesis approach in IEP
  - Potential areas for future MAST projects:
    - Invasive aquatic weeds, treatment patterns, and water quality impacts of SAV and FAV removal
    - Drought resilience, would be a long-term project, are there signals of resilience, and what are those signals? Any sign that we are recovering from the syndrome? To begin in 2017.
    - Winter run drought response > benefit of SAIL conceptual models, opportunity to examine those hypotheses and learn from them; May draw on work by Josh Israel
    - Longfin Smelt deserves more attention; do a full conceptual model work-up and mine the existing data sets to address hypotheses about the species
- Questions:
  - Will stakeholder input be used to help define the scope of future MAST projects?
    - We hope to pursue all ideas, and Louise is interested in stakeholder input at this time. Please contact Louise with suggestions.
  - Did the manuscript go through a PWT review like SAIL?
    - No, unfortunately there is no comparable PWT for MAST or drought. But, it is going through multiple levels of review.
  - Did you look at phytoplankton for abundance relationships with treatment patterns?
    - We did not and that is a good idea and should be considered.
  - Will you use the MAST to evaluate hypotheses for each year? Are you going to make predictions for what these metrics would look like in a given year?
    - Not at this time.
  - For aquatic weeds, Franks tract and Sherman, but where else is being considered? Boating and Waterways will be going into the north Delta very soon. Their permit will already be approved by 2017, so feedback for them would be helpful now.
    - We aren't sure yet, and probably won't make any recommendations for treatment this year. Maybe for 2017. But, we had a meeting with Boating and Waterways so there is communication happening, and hope to have them involved in a potential future aquatic weeds PWT.

## 5. Presentation on MWDs current and future activities, Shawn Acuna

- Shawn Acuna, MWD, [sacuna@mwdh2o.com](mailto:sacuna@mwdh2o.com)

DISCLAIMER: Sharing presentations is at the discretion of the individual presenters.  
IEP does not own any of the presentations, or their content.

- Mission of the Bay Delta Initiatives Science Program is to support and conduct research, protect the environment, inform management, and foster effective regulation
- Current Delta Smelt studies:
  - Genetics,
  - SmeltCam
  - Tagging
  - Survey data
- Finished work going through review and publication
  - Analysis of genetic diversity of Delta Smelt (not an abundance index) to determine whether they are recoverable; publication submitted and should be coming out soon
  - Determining if there is a way to tag fish similar to salmon work; adult Delta Smelt in March; successful tagging with PIT tags; technology still needs further development; paper is in review and should be out soon
  - Analysis on Longfin Smelt larvae and adults; awaiting results from this research; Longfin Smelt found in higher salinity than previously predicted (Grimaldo et al – in review right now);
- Salmonids –
  - Salmon predation study
    - CDFW predation PSP funding
    - In collaboration with ICF and Cramer, and in conjunction with projects from NMFS and UCSC
  - Spring and winter run habitat use study
    - Otolith microchemistry
- Habitat studies
  - Nutrients and phytoplankton
    - Glibert et al, 2014
    - More publications expected to come from this work
  - Aquatic weeds
    - Mechanical v. Chemical treatment
  - Wind and turbidity
  - Yolo bypass
  - Remote sensor data

## **6. Presentation of the 2016 IEP Science Agenda, and request for feedback, Steve Slater**

- Steve Slater, CDFW, Steve.Slater@wildlife.ca.gov
- The IEP Science Agenda approved by IEP Directors in March 2016 and is available on the IEP website
- Questions & Comments:
  - The first review will be the results of the first 2 years, and then you plan to do the 2<sup>nd</sup> iteration, is there enough time to accomplish all of that?
    - The IEP is struggling with that process right now. We are already thinking about how to do this, and we encourage stakeholder feedback on how to

DISCLAIMER: Sharing presentations is at the discretion of the individual presenters.  
IEP does not own any of the presentations, or their content.

- do this. We are anticipating that the next round will be more methodical about outreach to PWTs and stakeholders.
- The IEP is working on the 2017 Work Plan right now, and you have the Science Agenda. It would be interesting to see how iteratively this works with stakeholder feedback, across those two documents, and how those comments get addressed by the IEP. We want to understand how stakeholder feedback is being used, and is it being reflected in the document?
    - We are doing that right now by sharing this with the stakeholders and formally requesting your feedback. That is what we are asking of you today. And the next time, we will hopefully improve that process and build on this. We'd like to see a stack of ideas for how to improve, and this will be examined before we start the next Science Agenda. Also, we have to balance this with turning the Science Agenda and Work Plan into a bureaucratic monster.
  - It would be helpful to hear from the IEP about how you think stakeholders could provide you with helpful feedback.
    - We can definitely discuss this at a future meeting. We collected feedback from stakeholders before this first iteration, but it was not standardized and not everyone knew what their input was informing. We'll definitely change that for the next iteration.
  - There are no methods in the Science Agenda that discuss the process of how the Science Agenda was developed and how feedback was used in this development. It would be helpful to better understand this process.
    - We need to consider this further for the next iteration, and some parts weren't as organized as others. We attempted to do this in the appendix at the end, but it was rather haphazard. We were also working on a short timeframe and we'll improve on this for the next iteration. In particular, we'll focus on collecting standardized feedback in the future.
  - If the IEP is soliciting written comments, why not provide feedback to the commenters?
    - There are several variations on that, and something we could consider in the future.
  - Responding to individual comments can be a lot of work, but it would be helpful to bring it back to the stakeholders in some format for discussion, maybe at a future stakeholder meeting. All these programs are struggling with similar efforts, and it would be good to continue talking about it.
  - These comments will be addressed and folded into the next iteration?
    - The current agenda is final and will not be changed. But the next agenda will involve a review of stakeholder feedback.
- Deadline for feedback to Steve is May 25, 2016.

DISCLAIMER: Sharing presentations is at the discretion of the individual presenters.  
IEP does not own any of the presentations, or their content.