### **MEETING SUMMARY**

# San Joaquin River Restoration Program Fisheries Management Technical Feedback Group Meeting

Bureau of Reclamation 2800 Cottage Way, Sacramento, CA Tuesday, May 17, 2011 1 – 4 p.m.

### I. Meeting Overview

On May 17, 2011, the San Joaquin River Restoration Program (SJRRP) Fisheries Management Technical Feedback Group (TFG) held a meeting in Sacramento.

The objectives of the meeting were to:

- Update the TFG on the SJRRP strategy for implementing reintroduction of spring-run Chinook salmon to the San Joaquin River; and
- Solicit technical input on specific topics regarding the implementation strategy.

A list of meeting participants may be found in Appendix A. A copy of the meeting agenda may be found in Appendix B. Links to the PowerPoint presentations given during the meeting are located on the SJRRP website at <a href="https://www.restoresjr.net">www.restoresjr.net</a>.

### II. Updates on SJRRP Salmon Reintroduction

Following introductions and a review of the meeting agenda, SJRRP staff provided two presentations on the SJRRP strategy for implementing reintroduction of spring-run Chinook salmon to the San Joaquin River. Elif Fehm-Sullivan, National Marine Fisheries Service, presented an update on the regulatory process for spring-run salmon reintroduction, including the 10(j) rule. Kim Webb, U.S. Fish and Wildlife Service, then presented an update on the 10(a)1(A) permit application and supporting documents.

### III. Technical Feedback on Reintroduction Strategy for Spring-run Chinook Salmon

Kim Webb began the technical feedback session with a presentation of reintroduction implementation topics for which technical input is most needed. Following the presentation, the group provided input on the following key topics:

- a) Annual request for donor stock
- b) Donor stock collection
- c) Developing a self-sustaining salmon population

This section summarizes the input provided during the feedback session. The comments have been organized by the major topics and subtopics discussed.

### A. Annual Request for Donor Stock

- The annual request will receive scrutiny from donors.
  - Quantitative life cycle modeling can be used to inform the annual request.
- A strategy for fish rescue should be developed and integrated into the annual request.

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- There are several unknown considerations that present challenges, including:
  - The risk of survival for donor stock
  - The risk to donor stock populations
  - The benefit to the San Joaquin River
- The dichotomy of uncertainty between the risk to donor stocks and the benefit to the San Joaquin River can structure the framework for evaluating the annual request.
- Consider starting with the lowest risk fish populations, particularly the Feather River hatchery and salvage fish, to address concerns about negative impacts to donor stocks from donors.
- Stocks are already at risk; it might be prudent to take advantage of existing genetic diversity and take some risks with SJRRP salmon reintroduction since something significant is going to be needed to help the species recover.
- The spring-run reintroduction strategy can be informed by the fall-run (i.e., acoustic telemetry).
  - The reintroduction strategy should experiment with the fall-run when possible, which could:
    - Accelerate knowledge
    - Respond to criticism for the program and build momentum
- A body of data has been collected; this data should be used to inform the annual request.
  - Much of the information has not changed and can still be used (timelines, etc.).
- Ocean fisheries should be studied to inform the annual request. Salmon are also ocean fish.
- Experiments are temporal in nature, and this experiment will need to be flexible and iterative to reflect that.
- It is difficult to track the entire life cycle of a salmon; this presents a technical challenge.

#### **B.** Donor Stock Collection

- There are different selection pressures on fish introduced to the San Joaquin River than on fish from donor streams.
  - The process of creating or re-creating a San Joaquin salmon will need to be accelerated.
- Hills Ferry Barrier
  - Long-term management of the barrier has not been determined; criteria will need to be used to develop the strategy.
  - The nature of the river is challenging.
  - Perhaps the barrier could be moved upstream.
  - A segregation weir may be needed to separate spawning spring-run from spawning fall-run salmon.

- It is not clear that having fall-run and spring-run salmon interacting is actually a bad thing. It should be determined whether segregation is actually needed.
- The stock collection process will need to figure out the best way to encourage natural selection, which is unpredictable.
- Consider initiating a program that begins on September 1, 2011, where biologists collect brood stock (or other stock) and test them to address challenges.
  - One constraint is that the schedule is already aggressive and resources might be limited.
- It should be determined whether intentional hybridization should be part of the reintroduction strategy.
  - Hybridization is already happening unintentionally (i.e., Feather River Hatchery).
  - Lessons learned from the hybridization experiment should be incorporated into the reintroduction strategy.

### C. Self-Sustaining Population

- There are a number of challenges related to developing a self-sustaining population, including:
  - Straying
  - o Changes in the ocean
  - o Predation
  - Seasonal water temperatures
  - Water quality, especially during dry years
- The Vernalis Adaptive Management Plan (VAMP) study should be referenced to inform this goal.
- Redesign can help limit predation.
- Agency cooperation and management can also limit predation and other challenges. The goal is to help salmon move through the system quickly to limit predation.
- Addressing challenges of salmon reintroduction should be integrated into the SJRRP design (and other programs) as appropriate.
  - There is currently a great deal of work being done on Reaches 2B and 4B of the San Joaquin River; there is an opportunity to take advantage of this timing to help address reintroduction challenges.
- The effects of water quality on fish health and disease should be more clearly understood.
- Inter-agency expertise should be considered a resource.
- There is a lot of work being done on tributaries that can be used, even though the populations aren't necessarily thriving there.

## D. Other Comments on the Reintroduction Strategy for Spring-run Chinook Salmon

- A workshop should be organized with fisheries biologists to discuss design of the San Joaquin River and its impacts on the salmon reintroduction strategy.
- Some of the numerical targets for the reintroduction strategy seem unattainable.
- The process should be data-driven.

### IV. Suggested Topics for Next Fisheries Management TFG Meeting

The following topics were identified as potential key discussion items for the next Fisheries Management TFG meeting:

- Predation
- Practice session for development of the Donor Stock Collection Plan
- Coordination with Reaches 2B and 4B on design

## **Appendix A – Meeting Participants**

| Name                   | Agency/Organization  |
|------------------------|--|
| Elif Fehm-Sullivan     | National Marine Fisheries Service                                    |
| Carlos Garza           | National Marine Fisheries Service/Southwest Fisheries Science Center |
| Benjamin Gettleman     | Kearns & West (Facilitator)  |
| Margarita Gordus       | California Department of Fish and Game                               |
| Jason Guignard         | Fish biologist   |
| Chuck Hanson           | Hanson   |
| Colleen Harvey-Arrison | California Department of Fish and Game                               |
| Gerald Hatler          | California Department of Fish and Game                               |
| Josh Israel            | Bureau of Reclamation  |
| Tim Heyne              | California Department of Fish and Game                               |
| Bill Luce              | Friant Water Authority   |
| Stacy Luthy            | University of the Pacific  |
| Scott McBain           | Technical Advisory Committee   |
| Peter Moyle            | Technical Advisory Committee   |
| Eric Poncelet          | Kearns & West (Facilitator)  |
| Norm Ponferrada        | National Marine Fisheries Service                                    |
| Rhonda Reed            | National Marine Fisheries Service                                    |
| Monty Schmitt          | Natural Resources Defense Council                                    |
| Jeff Tupen             | CH2M Hill  |
| Kim Webb               | U.S. Fish and Wildlife Services                                      |
| Dennis Westcott        | San Joaquin River Group Authority                                    |

### Appendix B - Meeting Agenda



Fisheries Management Technical Feedback Group Meeting Tuesday, May 17, 2011 1:00 – 4:00 p.m. Bureau of Reclamation 2800 Cottage Way, Sacramento, CA 95825 Cafeteria Conference Rooms C1001 and C1002

### **Meeting Objectives**

- Update the Technical Feedback Group on the San Joaquin River Restoration Program's (SJRRP) strategy for implementing reintroduction of spring run Chinook salmon to the San Joaquin River.
- Solicit technical input on specific topics regarding the implementation strategy.

### Meeting Agenda

- 1. Introductions, meeting purpose, and agenda review
- 2. Status update on SJRRP salmon reintroduction
  - a. Presentation of Regulatory Process for Spring–Run Chinook Salmon Reintroduction
  - b. Presentation of 10(a)1(A) permit application and supporting documents
- 3. Provide technical feedback on reintroduction strategy for spring run Chinook salmon
  - a. Presentation of reintroduction implementation topics for which technical input is most needed
  - b. Discussion of challenges and potential strategies for reintroduction implementation
    - i. Annual request for donor stock
    - ii. Donor stock collection
    - iii. Developing a self-sustaining salmon population
    - iv. Other technical considerations

### **Links to Relevant Documents**

- Reintroduction Strategy for Spring-Run Salmon: <a href="http://www.restoresjr.net/program\_library/02-">http://www.restoresjr.net/program\_library/02-</a>
   <a href="Program Docs/ReintroductionStrategyFinal20110228.pdf">http://www.restoresjr.net/program\_library/02-</a>
   <a href="https://www.restoresjr.net/program\_library/02-">https://www.restoresjr.net/program\_library/02-</a>
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   <a href="https://www.restoresjr.net/program-library/02-">https://www.restoresjr.net/program-library/02-</a>
- Stock Selection Strategy: Spring-Run Chinook Salmon: <a href="http://www.restoresjr.net/program\_library/02-">http://www.restoresjr.net/program\_library/02-</a>
   <a href="program\_Docs/StockSelectionStrategy2010Nov.pdf">Program\_Docs/StockSelectionStrategy2010Nov.pdf</a>
- 10(a)1(A) Permit Application and supporting documents: http://www.restoresir.net/program\_library/02-Program\_Docs/index.html

## **Meeting Contact**

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