

Sturgeon PWT Meeting
October 21, 2009
3500 Industrial Blvd., **Room 106**
West Sacramento, CA 95691
10:00 a.m. – 3:00 p.m.

AGENDA

- 1) Bay Delta Conservation Plan (10:00-10:10) – Zoltan Matica
 - a) Deadlines have become more realistic and have been extended an additional 18 months
 - b) Major focus is restoring tidal wetlands
 - c) A question was brought up about two-gates and Zoltan said it is believed that it may not benefit the species target (Delta smelt) and it may actually increase entrainment of juvenile sturgeon and other species

- 2) Yolo Bypass Restoration Opportunity Area (10:10-10:25) – Zoltan Matica
 - a) Planning on 4 sturgeon ramps to be built along Fremont Weir that will function at higher flows
 - b) A deep notch will be made in Fremont Weir that will be designed to be modifiable for the addition of different structures (adaptive management) to assist multispecies fish passage
 - c) Remove boards from current denil ladder and eventually widen this passage
 - d) Possibly create a smaller west side notch to assist with fish passage

- 3) Fishing Regulation Updates for the Sac River (10:25-10:30) – David Woodbury
 - a) CDFG is proposing to modify its fishing regulations to address what appears to be a targeted "catch and release" green sturgeon fishery on the upper Sacramento River. Proposed rules include prohibiting all sturgeon fishing from Keswick Dam downstream to either hwy 32 bridge (Hamilton City) or hwy 162 bridge (Butte City). Additionally, wire leaders and eel/shrimp baits would be prohibited. The closure would be in effect year-round. A public meeting was held in Chico on August 26. A few local fishers and a bait shop owner attended. In general they supported the closure, although they wanted the area between hwy 32 and 162 to remain open. Restricting other baits was discussed, but it might affect other fisheries, so was tabled. An analysis of the green sturgeon tracking data was conducted and it was determined that green sturgeon located between hwy 32 and 162 bridges appear, for the most part, to have started their downstream migration. There is another public meeting to be held in Woodland on Nov 5. A final decision on the regulation change will be made at the Dec 10 CDFG Commission meeting at the Radisson Hotel, LAX, Los Angeles.

- 4) Green Sturgeon Recovery Planning Updates (10:30-11:00) – David Woodbury

- a) NMFS has established a six member internal green sturgeon recovery team, which has started the process of recovery planning by drafting a recovery outline. An 11-member team of primarily green sturgeon experts has been formed, including Ray Beamesderfer, Richard Corwin, Dan Erickson, Marty Gingras, Josh Israel, Steve Lindley, Mary Moser, Eric Murray, Mike Parsley, Bill Poytress, and Alicia Seesholtz.
An initial meeting with these two groups will be held on Dec 10-11 in Sacramento. R. Beamesderfer has provided a green sturgeon recovery plan briefing document which should help, along with the recovery outline, to kick-start the process of developing a recovery plan for the sDPS green sturgeon. There will also be a stakeholder team, which will be an extremely valuable component. David anticipates that these groups will be broken up into separate sub-groups, perhaps by geographic areas or criteria (research being one). A publication in the Federal Register will soon announce NMFS intent to prepare a recovery plan for sDPS green sturgeon. It will also request identification of potential stakeholders. David will also send out an e-mail asking the PWT for a list of potential stakeholders.
 - b) On October 9, 2009, NMFS published the final rule designating critical habitat for sDPS green sturgeon. Designated areas include 1) the marine waters from the Strait of Juan de Fuca, WA to, and including, Monterey Bay, CA, to a depth of 60 fm, 2) several estuaries along the west coast, 3) inland waters from the Golden Gate to Keswick Dam on the upper Sacramento River, including the delta and head-of-tide in tributaries of the estuary, and 4) Sutter and Yolo bypasses. This designation becomes effective November 9.
 - c) The 4(d) rule that establishes take prohibitions for sDPS green sturgeon may be finalized in May 2010.
 - d) On December 2, 2009, in Oakland, the San Francisco Estuary Institute is hosting a green sturgeon symposium (funded by USACE). Preregistration (<http://www.sfei.org/cb/greensturgeon/>) is required to attend this free symposium. Although the primary focus will be on dredging, there will be two talks dealing with invasive species and exposure to vessel propellers that might interest folks. Josh Israel will give a talk on the life history of the species and the threats it faces. Pete Klimley's group will describe green sturgeon movements in the estuary based on data from tracking studies.
- 5) Sacramento River Sturgeon Egg & Larvae Studies (11:00-11:20) – Bill Poytress
- a) Bill gave an update on the 2009 Sacramento River green sturgeon egg sampling activities. They sampled at three new locations in addition to the three sampled in 2008 guided by 2008 and 2009 (real time) telemetry data. Preliminary results confirmed one new spawning site upstream of RBDD (RK 407.5) in addition to the three confirmed spawning sites where eggs were collected for a second year in a row. Sampling was conducted within pools only in waters ranging from 18 inches to 45 feet. Fifty-six eggs were sampled with 11 collected above RBDD, 2 at RBDD and 43 below RBDD. Only one or two of these eggs sampled were not fertilized. For genetic sampling to be successful at this point, eggs appear to need to be at the neurotation stage or higher.
 - b) Bill updated the group on larval sampling activities that occurred from April 29-July 28. They sampled three of the six sites that were sampled last year and conducted overnight sampling immediately below two egg sampling sites. Forty-eight larvae were sampled

with a benthic drift net, 32 at RBDD outfall and 16 at RK377 from 1 of 2 overnight experiments. Three larvae were also sampled in a fyke net in association with the overnight sampling. Larvae were collected in high velocity areas (4-6 f/s surface velocity). Catch peaked from about 22:00-24:00 and to a lesser degree at 03:00-05:00. An additional 30-40 larvae were collected by the rotary screw traps this year. Some of the larvae were able to be transferred to UC Davis researchers for eventual use in juvenile telemetry studies (CalFed funded work).

6) VPS system test results at Red Bluff Diversion Dam (11:20-11:35) - Robert Chase

- a) Gave a description of the process, problems, etc. The system appears to work well and should be able to provide the detail needed to determine which gates sturgeon are most likely to use as they move downstream.
- b) 434 sturgeon have been implanted with acoustic transmitters since 2004.

7) Other Study Updates or Items of Interest (11:35-12:00)

- a) A. Drauch-Schreier's lab may be working on a new study with WDFW (if receive funding)
 - i) Evaluate what species of sturgeon are being consumed by steller sea lions in the Columbia River.
 - ii) Extract DNA from scutes and cartilage pulled out of sea lion feces and use genetics to assign species identity.
 - iii) Sea lions have been observed eating white sturgeon but it is possible they are preying on green sturgeon as well.
 - iv) If successful, it might be worth doing in California to see if southern DPS greens are affected by sea lions.
- b) M. Gingras said that sturgeon tagging in the bays is still underway
 - i) DFG has had one boat in San Pablo Bay and one boat in Suisun Bay since early August
 - ii) Preliminary data suggests the green:white ratio is the highest in a long time
 - iii) Most of the greens have been caught in San Pablo Bay.
 - iv) DFG plans on quickly producing a **comprehensive 'Cruise Report'** after they finish tagging at the end of the month and **will send out the report as soon as it's completed.**
- c) The website is coming along and we currently have a place to store our library.
 - i) A. Seesholtz is **asking everyone for copies of articles to add to the library.** Groups with associated passwords will be set up by agency, entity or in some cases by individual to protect copyrighted materials. At this time, the articles can't be searched but this will become possible in the future when the new search engine is operational.
 - ii) **Photos are also being solicited.**
 - iii) A **template** is currently being created **for individual member information** that will be posted on the website and **will be sent out in a few weeks.**

- 8) *Draft* NOAA HQ research protocols (1:00-3:00) – David Woodbury, Jason Kahn & All
- a) **If you have additional comments or edits, please send them to D. Woodbury so they can be forwarded to Jason Kahn by December 1st.**
 - b) These protocols were not intended to be incorporated into the 4(d) but rather were meant to be used in general and that is why the document incorporates both should and shall terminology. **This will be clarified with the NMFS 4(d) team (D. Woodbury or J. Kahn).**
 - c) Several topics were discussed:
 - i) Expectations between field and lab work need to be considered – what works in one might not work for the other
 - ii) The use of anesthetics was not well received as most scientists feel that green sturgeon are likely to become more stressed out with the use of MS-222. However, we may be legally required to use them as part of the Animal Welfare Act.
 - iii) Standardizing the placement of PIT tags was debated especially concerning the juveniles. **M. Thomas volunteered to do a study using the fish he has in the lab now.**
 - iv) Suturing PIT tag holes was meant for juveniles only.
 - v) Tagging affects behavior. This could have serious consequences to spawners. Does the benefit of research outweigh the possibility of sturgeon aborting their runs? **D. Woodbury will be looking into the tracking data to look at patterns.**
 - vi) Concern was brought up that many good research projects may not go forward if the protocols are too rigid because it does not allow for thinking outside the box.

Attendees:

Full Name	Affiliation
Bellmer, Russ	DFG
Cavallo, Brad	Cramer Fish Sciences
Chase, Robert	USBR
Corwin, Richard	USBR
Gruber, Josh	USFWS
Hampton, Doug	NMFS
Hearn, Alex	UCD
Jackson, Zac	USFWS
Kahn, Jason*	NMFS
Klimley, Pete	UCD
LaCivita, Peter	USACE
Ledoux-Bloom, Cynthia	DWR
Lester, Aric	DWR
Liu, Qinqin	DWR
Malcolm*	NMFS
Mulvey, Brian	USACE
Matica, Zoltan	DWR
Miranda, Javier	DWR
Manuel, Matt	DWR/PSMFC
Poytress, Bill	USFWS
Schreier, Brian	DWR
Seesholtz, Alicia	DWR
Suda, Laurie*	USACE
Swenson, Ramona	Entrix
Thomas, Mike	UCD
Van Eenennaam, Joel	UCD
Wikert, JD	USFWS
Woodbury, David	NMFS

* Phoned in