

**Meeting Notes from the  
Upper Basin Pallid Sturgeon Recovery Workgroup Governing Board Meeting**

**August 14-15, 2019**

**Billings, MT**

The following are the notes from the August, 2019, meeting of the Upper Basin Pallid Sturgeon Recovery Workgroup Governing Board. A summary of the action items assigned during the meeting appears at the end of the meeting notes.

Zach Shattuck, Rob Holm, Ryan Wilson, Mat Rugg, Luke Holmquist, Alyssa Fellow, Ken Staigmillier, Landon Pierce, Wayne Nelson-Stastny, Yvette Converse, Kevin Kappenman, Tyler Haddix, Pat Braaten and Bob Snyder were present at the meeting.

**Wednesday, August 14**

Alyssa and Zach began the meeting with opening remarks. Alyssa encourages WAPA contractors to send in their itemized invoices.

**Wayne – Recovery and MRRP updates**

No one was hired for the Pallid Sturgeon Technical Coordinator position. It will be re-advertised.

The Middle Basin Workgroup meeting will be in a couple of weeks. The main issue for the Lower Basin Workgroup is hybridization.

Test flows from Fort Peck Dam is currently the biggest MRRP topic (Fort Peck AM Framework). The ISRP review of the flow release plan should be available today.

**AI** – Zach will send David Galat a request for GB and others to participate in the Fort Peck webinar.

The Fish Workgroup meets September 18.

**AI** – Zach will distribute the webinar invite via email.

Work on habitat interception project is moving forward in the Middle Basin.

The Coalition to Protect the Missouri River doesn't like the MRRP process. They are meeting with the USACE, USFWS, MRRIC in St. Louis.

The fall Science meeting (November 18) will allow for more discussion than last year's meeting. The plenary session is scheduled for November 19-20. Dave Marmoreck with ESSA has replaced Rob Jacobsen as head of the Fish Tech Team.

Recovery implementation planning – The Recovery Team is tentatively scheduled to meet in January, 2020. The main topics are hybridization, future of RPMA 3, and, perhaps, inclusion of RPMA 1 in the MRRP process.

Ed Heist has been contracted to look at Pallid Sturgeon population genetic structure and summarize information for USFWS.

**AI** – Get project scope of work from Yvette.

**Use of Gavins Point NFH F2 progeny for conservation stocking** – Wild-source progeny and captive broodstock F2s were used for the 2019 larval drift study. Some past crosses are not represented or are under-represented in the Upper Basin stocked populations. Twelve family groups can be stocked in 2020. There will be a recommendation from geneticists (Jeff, Meredith and Ed), using data from Rob, whether to stock these families. The consensus of the UB biologists is to stock missing crosses into RPMAs where they are needed to improve RPMA-specific effective population size.

**AI** - Biologists will provide comments about the use of F2s to Zach by Monday. Zach will send a memo from the GB soon after.

Rob would like to know the numbers to be stocked by April.

Tyler believes (95% sure) he is finding YOY Pallid Sturgeon that were released during the 2019 larval drift study.

### **Zach - Update from the Chair**

The new ESA changes affect mostly newly-listed species. Wayne stated that the changes to climate change policy and “foreseeable future” language to not affect Pallid Sturgeon. Although there is new language about “transparency of economic analysis”, decisions still will be science-based.

At the June gathering at the confluence improving and coordinating telemetry work was discussed. It was noted that the Upper Basin does a good job of communicating among the different agencies and telemetry teams.

An electronic data sheet is being developed.

Two chubs (sickle fin and sturgeon) have been petitioned for listing. FWP is willing to provide any information that the USFWS needs. USFWS will soon work out the timeline and process for information collection.

### **Ken – Fish Health**

A Pallid Sturgeon health assessment is still in the works. Lacey Hopper leading the effort. Miles City Fish Hatchery has an experimental lot of Pallid Sturgeon from eggs from the captive broodstock to evaluate fin curl management at MCFH.

### **Rob – Propagation update**

Approximately two months post-spawn three broodstock (one male, two female) died a day apart. The rainbow trout forage in their tank also died. Remaining six radio tagged fish were immediately returned to the confluence. Necropsy of the dead fish didn't reveal any apparent issues. Tissue samples sent off to Bozeman FHC were post-mortem and as a result no cause could be identified histologically. Additional trout were restocked into the two brood tanks and are doing fine. A cause for these mortalities has yet to be identified.

Molly Webb, Hilary Treanor and Wendy Sealey from the Bozeman FTC are doing a food study to investigate larval sturgeon diets that would result in improved larval transition to feed and survival. Three feed types were tested with results pending. The staff at Garrison Dam NFH had a concurrent feed study which identified survival differences between female lots and feed types. None of the three feeds used in the study had remarkably improved survival, although an alternative diet (fed outside the study) did show promise. This work will continue in 2020 using the alternative diet.

The sturgeon building at GDNFH is scheduled to be replaced. GDNFH will not be able to spawn or rear pallid sturgeon in that facility during construction. The isolation room at GDNFH could be used for production fish in limited numbers. MCSFH may be able to help with the holding and spawning of broodstock and potentially production if the fin curl issue is resolved. Currently there is no sign of fin curl in test fish at MCSFH.

### **Kevin – Stocking and Tagging Update**

We are switching back to L3 and R3 scute removal from L7 and R7.

**AI** – Ryan will send updated scute removal and VIE marking tables to Yvette.

BFTC can put on a small tagging and handling class if needed.

**AI** - Contact Kevin if there is a need for a tagging and handling class.

Aaron DeLonay is performing telemetry training for the Middle Basin.

### **Yvette – CPSP update**

All Pallid Sturgeon documents have been signed. Reports will have to be updated regularly. The CPSP evaluation plan is in an early draft, with some review by a small group.

### **Landon – RPMA 3 update**

High river flows limited sampling to trot lines. Eighty-four HOPS and 6 others (genetics ID pending) were captured. There was a much lower CPUE due to debris, especially below the Niobrara River. Sampling in RPMA 3 will be done every five years.

Over 12 Pallid Sturgeon were captured from Lake Sakakawea. Pallid Sturgeon are also captured in Fort Peck Reservoir.

**Thursday, August 15**

### **Luke – RPMA 1 update**

2019 was the first time Pallid Sturgeon were documented to move into the Teton River. These fish were non-reproductive.

Marias River flows were supposed to be constant, but USACE requested flows from Tiber Dam be reduced in May and June due to downstream flooding. Flows were reestablished in July.

A discussion of Section 7 consultation for RPMA 1 ensued. The probable process will be to engage the BuRec about the need. There will be a meeting to work with the BuRec in Pallid Sturgeon recovery in RPMA 1.

**AI** – Try to have Kim Smith or someone else in USFWS attend/listen in to RPMA 1 discussions.

### **Ryan – RPMA 2 population assessment update**

His crew has changed gear to improve adult capture. They caught 24 fish for telemetry: (replaced transmitters in 5, implanted transmitters in 19 “new” fish). Ryan is encouraged about the flexibility in adjusting PopAss 2.0 sampling.

There is a problem reading 20-year old PIT tags with the new HPRLite readers. Ryan suggests crews be prepared to scan fish with new and old readers.

**AI** – Have BioMark assist with transitioning to new system.

The Middle Basin uses real time data collection and reporting (Sturgeon Information Management System – SIMS). The eventual goal would be to access data via smartphone. The database would be updated daily. The Upper Basin should work to develop a similar system. Any system must be available to all crews, not just PopAss crews.

**AI** – Mat, Zach and Tyler will approach FWP IT to see how to implement SIMS.

Ryan’s shop will have a trial use of the system this winter.

### **Mat – RPMA 2 update**

Mat didn’t have a lot of Pallid Sturgeon that moved to Intake. Five Pallid Sturgeon (non-reproductive HOPS or wild males) were translocated. Approximately 200 sturgeon larvae were sampled at the mouth of the Powder River (most/all expected to be shovelnose).

The Intake reconstruction project has started.

There is a need to figure out a path to implement transition to the new telemetry equipment. A discussion ensued about such a transition. There is a problem with running out of codes using the old system. The new system allows for more codes. The new system will require capturing all telemeterized fish and replacing the existing transmitters. DeLonay is designing the news telemetry system and identifying system needs for the USACE.

**AI** – Request DeLonay’s report as soon as it is completed.

**AI** – UB biologists will work through transitioning to the new telemetry system.

A discussion of data collection, recording and sharing ensued.

### **Tyler – RPMA 2 update**

There weren’t high flows in the Missouri below Fort Peck Dam during the critical time period, so adult Pallid Sturgeon did not move into this reach of the Missouri. There were not many larval sturgeon captured until Fort Peck Dam spilled, beginning the second and third week of July.

Benthic trawling yielded lots of SNS juveniles and, hopefully, juveniles from the 2019 larval drift study and the Yellowstone River. Genetics testing of larvae captured during the drift study is the priority for testing by Ed. It appears that 1-day and 5-day old had good survival and capture rates and some have possibly established themselves in the Missouri above Lake Sakakawea.

### **Pat – Larval drift study update**

Water temperature during the 2019 drift study was approximately 14.5° C (relatively cold). One- and five-day old larvae were released. They had good survival and capture of released

larvae. DeLonay sampled “dead water” areas. Some free embryos were captured in the slow water zones, but their eventual fates are unknown.

Trawling to detect survivors began the week after the release. Twenty-five millimeter sturgeon have been captured, including some captured in the upper (non-anoxic, flow present) reach of Lake Sakakawea. Fish were captured above and below the Confluence.

### **Alyssa and Zach – WAPA funding**

There is \$176,000 available for new projects in FY2020. WAPA pays for genetics identification of PIT tagged recaptures.

**AI** – Snyder will talk with Lorelyn about MediaWorks budget needs and use of website.

### **New workplan**

The GB expressed a desire to repeat the Rotella survival estimates with possible additional queries. The last estimate of the adult population was performed in 2008 and there are three additional years of data since the last HOPS estimate.

Zach will send out a request for one-page proposals.

Wayne (and the USFWS) could use information to determine if or when SNS are surrogates for Pallid Sturgeon, especially during early life stages.

More work on carrying capacity could be done (temperature and bioenergetics, small fish densities, abundance and distribution of forage species, and expanding on Guy’s carrying capacity report.

Chris Guy is interested in a diet study of Pallid Sturgeon use of chubs.

### **Workgroup Chair selection**

Zach will continue as Workgroup Chair for two more years.

**AI** – Zach will send out a Doodle poll to select dates for the annual Workgroup meeting.

## List of Action Items

**Zach** will send David Galat a request for GB and others to participate in the Fort Peck webinar.

**Zach** will distribute the webinar invite via email.

**Bob** will get project scope of work of Ed's contract from Yvette.

**Biologists** will provide comments about the use of F2s to Zach by Monday. **Zach** will send a memo from the GB soon after.

**Ryan** will send updated scute removal and VIE marking tables to Yvette.

Contact Kevin if there is a need for a tagging and handling class.

Try to have Kim Smith or someone else in USFWS attend/listen in to RPMA 1 discussions.

Have BioMark assist with transitioning to new system.

**Mat, Zach** and **Tyler** will approach FWP IT to see how to implement SIMS.

Request DeLonay's report as soon as it is completed.

**UB biologists** will work through transitioning to the new telemetry system.

**Snyder** will talk with Lorelyn about MediaWorks budget needs and use of website.

**Zach** will send out a Doodle poll to select dates for the annual Workgroup meeting.