

## Middle Rio Grande Endangered Species Act Collaborative Program Science Work Group Meeting

19 October 2010 Meeting – 9:00 AM-11:30 AM

### Interstate Stream Commission

#### Actions

- Alison Hutson will be contacting Jason Remshardt to see if temperatures are still a part of the RGSM Rescue/Salvage project.
- Stacey Kopitsch, Yvette Paroz, Anders Lundahl, and Alison Hutson will compile potential questions for the EMP high intensity monitoring joint ScW-MPT-HRW discussion scheduled for December.
- Anders Lundahl will confirm with Alison Hutson and Jeanne Dye that the MPT can make it to the December 14<sup>th</sup> ScW meeting.
- Alison Hutson will write up proposed changes to silvery minnow spawning in hatcheries and send out to the ScW for comments.

#### Decisions

- The September 28, 2010 ScW meeting minutes were approved with one minor change.

#### Meeting Summary

**Introductions and Agenda Approval** – The meeting was brought to order and introductions were made around the table. The agenda was approved with no changes.

**Approve 09/28/10 ScW Meeting Minutes** – The September 28, 2010 Science Workgroup (ScW) meeting minutes were approved with one minor change.

**Action Item Review** – All September action items were completed with exception to *Jeanne Dye will check to see if temperatures are still a part of the RGSM Rescue/Salvage project*. Alison Hutson will be contacting Jason Remshardt to see if temperatures are still a part of the RGSM Rescue/Salvage project.

**SWCA gear/sampling evaluation update** – ScW workgroup was shown a PowerPoint presentation “*Fish Community Monitoring and Sampling Methodology Evaluation*” by Eric Gonzales and Ann Widmer from SWCA. The presentation showed preliminary results from the gear/sampling evaluation. Evaluated gear included a small beach seine, backpack electrofishing unit, D-frame double wing fyke nets, and long seine in the floodplain, side channel, and main channel. The presentation also discussed additional data needs. The next step for data collection will be collection in the main channel in February 2011. *For specific details please see attached presentation.*

**EMP Research Questions** – Anders Lundahl joined the ScW for a discussion on whether the high intensity monitoring of the Effectiveness Monitoring Plan (EMP) should continue and/or should it be modified to focus on a specific research question. Currently the EMP answers the basic question of whether there is the presence or absence of silvery minnow at restored sites. This question can be answered by the low intensity monitoring which takes less effort and has less fish handling than the high intensity monitoring. The high intensity monitoring could be useful in answering life history questions in order to improve habitat restoration efforts. It was suggested that the Population Viability Analysis (PVA) questions with habitat components and the projects that ScW has put forward for FY11 funding be a starting point for developing potential research questions to be answered with high intensity monitoring. The December 14, 2010 ScW meeting will be a joint workgroup meeting with the Monitoring Plan Team (MPT) and Habitat Restoration Workgroup

(HRW) to discuss potential research questions. Though the HRW should be involved in question development it was felt that the ScW and MPT should take the lead in research question development. Stacey Kopitsch, Yvette Paroz, Anders Lundahl, and Alison Hutson will compile questions for the discussion. Anders Lundahl will confirm with Alison Hutson and Jeanne Dye that the MPT can make it to the December 14<sup>th</sup> ScW meeting.

**USGS Progress Summary** – The ScW workgroup was asked to review the USGS Progress Summary and discuss whether or not the project should be expanded or if it should change direction. The USGS project currently meets a requirement of the 2003 Biological Opinion (BO) however there has been recent concern that the project is not addressing issues it was originally intended to address. It was felt that the discussion should be tabled until individuals with concerns regarding the project are in attendance. The USGS Progress Summary will be further discussed at the November ScW meeting when individuals with knowledge on concerns regarding the USGS project are able to attend.

**Genetics Program Discussion** – Some meeting attendees discussed a recommended change to the silvery minnow spawning methods used in hatcheries. Under current methods small groups of males and females are put in the same tank to mate. It was suggested that the spawning methods be changed to paired mating and strip spawning as these methods would increase heterozygosity in hatchery fish. Changes to current spawning methods will need to be proposed to the Captive Propagation and Genetics Working Group. The group is open to receiving recommendations and any party is free to put forward suggestions. Alison Hutson will write up recommended changes to silvery minnow spawning in hatcheries and send out to the ScW for comments. These comments will come from the agency(-ies) that provide them, and not from the ScW as a whole.

#### **Program update**

- **EC update** – The Executive Committee (EC) will be meeting Thursday, October 21. Meeting notes from the September, 16 closed session EC meeting are expected to be posted soon.
- **CC update** – The next Coordination Committee (CC) meeting is Wednesday, October 27. The CC will be reviewing the projects that ScW proposed for FY11 Funding.
- **LTP update** – There is a deadline for a draft Long Term Plan to be presented to the EC at the end of March 2011.

**Next ScW Meeting November 16, 2010 from 9:00 am to 11:30 am at Interstate Stream Commission**

**Middle Rio Grande Endangered Species Act Collaborative Program**  
**Science Work Group Meeting**  
19 October 2010 Meeting – 9:00 AM-11:30 AM  
**Interstate Stream Commission**

## Meeting Minutes

### Introductions and Agenda Approval

- The meeting was brought to order and introductions were made around the table.
- The agenda was approved with no changes.

### Approve 09/28/10 ScW Meeting Minutes

- The meeting minutes were approved with the correction *that Jeanne Dye will contact the POC that works with Darrell Ahlers for guidance on the Develop a Program Flycatcher management plan activity.*

**Decision:** The September 28, 2010 ScW meeting minutes were approved with one minor change.

### Action Item Review

- Meeting attendees reviewed the September 28, 2010 Science Workgroup (ScW) action items.
  - **ScW members will review the USGS progress summary to discuss at the October 19, 2010 ScW meeting.**
    - The USGS progress summary is scheduled for discussion during today's meeting.
  - **Jeanne Dye will check to see if temperatures are still a part of the RGSM Rescue/Salvage project.**
    - Incomplete; Alison Hutson volunteered to work on this action item as she expects to be contacting Jason Remshardt soon.

**Action:** Alison Hutson will be contacting Jason Remshardt to see if temperatures are still a part of the RGSM Rescue/Salvage project.

- **Jeanne Dye will contact the POC who works with Darrell Ahlers for guidance on the Develop a Program Flycatcher management plan activity.**
  - Ongoing; Jeanne has contacted POC Hector Garcia who is in the process of contacting Darrell. The action item should be addressed by next month
- **Jen Bachus will check on the status of Jason Remshardt giving an augmentation update to the CC and EC in November and will request that Jason also present at an upcoming ScW meeting (either in October or November)**
  - Jason will be presenting at the November 18<sup>th</sup> Executive Committee (EC) meeting. Jason will present a PIT tag update at the January 18, 2011 ScW meeting.
- **ScW members will read the the 2009 RGSM Genetics Management and Propagation Plan (document can be found on the Program website: Library → Reference Documents) and the summary that Alison Hutson wrote on the genetics reports (the summary has been previously circulated through email).**
  - These documents are scheduled for discussion during today's meeting.

### SWCA gear/sampling evaluation update

- ScW workgroup was shown a PowerPoint presentation “*Fish Community Monitoring and Sampling Methodology Evaluation*” by Eric Gonzales and Ann Widmer from SWCA. The presentation showed preliminary results from the gear/sampling evaluation. Evaluated gear included a small beach seine, backpack electrofishing unit, D-frame double wing fyke nets, and long seine in the floodplain, side channel, and main channel. The presentation also discussed additional data needs. The next step for data collection will be collection in the main channel in February 2011. *For specific details please see attached presentation. Below are questions posed to the presenters and discussion that followed the presentation.*
- **Question:** Were seines or just dip nets used with electrofishing methods?
  - **Reply:** The area was not blocked off, only dip nets were used.
- **Question:** What time was used for electrofishing?
  - **Reply:** The time used depended on the size of the mesohabitat.
- **Question:** What is the next step in the process?
  - **Reply:** Data will be analyzed and a report will be given to the Program. The next step of data collection will be collecting in the main channel in February 2011. After that there will be refinement of the study.
- **Question:** How will costs be tackled and what will be the base?
  - **Reply:** Cost will be evaluated more qualitatively. The number of people that it will take to collect a number of samples, time and effort, and costs of the gear and associated maintenance will be considered. The costs per hour for technicians can vary from one company to another so it is often better to represent the cost in number of people days or hours.
- It was said that electrofishers and seines seemed to both be good techniques and that it would be good to look at using combinations.
- **Question:** When do think raw data will be available to the Program?
  - **Reply:** Mid November.
- **Question:** The presentation mentioned using a barge shocker, what would be the benefit?
  - **Reply:** 2 anodes are used at once so if the fish swim away from 1 anode they could be caught by the other.
  - More water is needed when using a barge shocker. A backpack electrofisher has better portability and fewer safety risks.
  - The Department of Game and Fish has a barge and Bureau of Reclamation has a generator so building a barge shocker could be an option for the Program.
- Present ScW members discussed how this information could be utilized.
  - The idea is to see if there is another method available to use for augmenting that picks up population changes better than current methods. The intent is not to get rid of the current method but to see if there is additional work that could complement it.
  - The information could also inform the quality of the sampling that is being done.
  - It was one opinion that this evaluation should be done over a number of water years and conditions.

- There was general agreement from discussion participants that the longer the evaluation goes on the better the data will be but there is not an indefinite time to do the evaluations.
- Going for even a couple more years will give a better idea of the amount of variability over different water years.
- Under the current contract there will only be one more sampling period in February 2011.
- There was general agreement that it would better to wait for the February 2011 sampling results before discussing an extension of the evaluation. Jericho and Jeanne will need to look at the current contract to see if there will be time to wait for the February results before having a discussion on contract extension.

### **EMP Research Questions**

- Anders Lundahl (Monitoring Plan Team (MPT) representative) joined the ScW for a discussion on whether the high intensity monitoring of the Effectiveness Monitoring Plan (EMP) should continue and/or should it be modified to focus on a specific research question.
- Currently the EMP answers the basic question of whether there is the presence or absence of silvery minnow at restored sites. This question can be addressed by the low intensity monitoring which takes less effort and has less fish handling than the high intensity monitoring. The MPT is considering refining the high intensity monitoring by using it to address specific research questions. ScW was asked if they could contribute research questions that are related to habitat restoration sites and the species use of those sites.
- It was asked what questions were considered when the MPT developed the protocols for the high intensity monitoring.
  - Meeting attendees were given a brief history of the process for developing the EMP. The monitoring itself ties into RPA S which concerns effectiveness and longevity of restored sites for the species. When the EMP was put together there were different viewpoints on whether low or high intensity monitoring should be included. The EMP ended up being a 2 year pilot with a hybrid of both high and low intensity monitoring.
  - The intention of the high intensity monitoring was to bring out any patterns or correlations that might be missed by the low intensity monitoring.
- It was brought up that components of habitat are still unknown. There is a lot of discrepancy about the importance of vegetation including whether type and density of vegetation is of importance.
- It was said that if silvery minnow are being found at sites where they were not found before restoration occurred then the habitat restoration is doing something right. The habitat restoration may only need to be refined in order to be more efficient. For example maybe by increasing a certain component there could be a reduction in area that is restored.
  - Answering questions that relate to life history could help in determining components that are needed to build effective habitat
  - It was suggested that the Population Viability Analysis (PVA) questions with habitat components and the projects that ScW has put forward for FY11 funding be a starting point for developing potential research questions to be answered with high intensity monitoring. Questions for projects from previous funding years could also be helpful in developing questions.

- It was suggested that this conversation be continued in a joint workgroup session with ScW, MPT, and Habitat Restoration Workgroup (HRW). It would be a good idea to have a list of questions with multiple workgroups contributing.
  - Though the HRW should be involved in question development it was felt that the ScW and MPT should take the lead in research question development since most of the questions should be related to life history. Data from the first year of the EMP should be ready for discussion by the December 14, 2010 ScW workgroup meeting. The December 14, 2010 ScW meeting will be a joint workgroup meeting with the MPT and HRW to discuss potential research questions.
  - In order to ensure an efficient meeting potential questions and ideas should be compiled for discussion.

**Action:** Stacey Kopitsch, Yvette Paroz, Anders Lundahl, and Alison Hutson will compile questions for the discussion.

**Action:** Anders Lundahl will confirm with Alison Hutson and Jeanne Dye that the MPT can make it to the December 14<sup>th</sup> ScW meeting.

- It was asked if there is data for restored sites before the restoration took place so that comparisons could be made.
  - Modeling was done to get inundation rates for sites that ISC has restored. This data shows that the sites are effective. However, other than whether water was previously present or not, there is not specific data for habitat characteristics.
- It was asked if the planned December meeting would leave enough time for RFP development. Jericho Lewis plans to work with the work groups so that the RFP can be developed after the December joint workgroup meeting.

### **USGS Progress Summary**

- The ScW workgroup was asked to review the USGS Progress Summary and discuss whether or not the project should be expanded or if it should change direction.
- The USGS project currently meets a requirement of the 2003 Biological Opinion (BO) however there has been recent concern that the project is not addressing issues it was originally intended to address.
- It was thought that the project was developed in 2008. Those who developed the project are no longer involved. It was thought that Mick Porter would have information about the intentions of the original project however he is not present for today's discussion.
- It was shared that there has been a recent article released that discusses that contaminants may be a concern for feminizing the silvery minnow. There was an opinion that since there are systems in which contaminants have been documented to be a serious problem it would not be off-base to study them in the middle Rio Grande.
- It was felt that the discussion should be tabled until individuals with concerns regarding the project are in attendance. The project is in phase 1 of 2 with the 2nd already having been funded, so there will be another year to decide if the project should be expanded to include a 3<sup>rd</sup> phase. The USGS Progress Summary will be further discussed at the November ScW meeting when individuals with knowledge on concerns regarding the USGS project are able to attend.

### **Genetics Program Discussion**

- Some meeting attendees discussed a recommended change to silvery minnow spawning methods used in hatcheries. There was concern that the current spawning methods are missing potential genetic variation.
- In order for changes to be made to the spawning methods a change will need to be made to the 2009 RGSM Genetics Management Propagation Plan, which is a U.S. Fish and Wildlife Service (Service) document.
  - Suggested changes to the 2009 RGSM Genetics Management and Propagation Plan will need to be sent to the Captive Propagation and Genetics Working Group. The group is open to receiving recommendations and any party is free to put forward suggestions.
  - Though the 2009 RGSM Genetics Management Propagation Plan is made available to the public it is not required by federal law to be published in a federal register for comments.
- It was suggested that the spawning methods could be changed to paired mating and strip spawning as these methods would increase heterozygosity in hatchery fish. This would be comparable to the paired spawning and strip spawning being used by the Service at other facilities for other endangered species.
- It was asked if heterozygosity could be maintained or expanded even with the bottlenecking of the genome that has already occurred.
  - The heterozygosity can be expanded by using more pairings in spawning.
  - Under current methods 6 males and 6 females are put in the same tank to mate. It can't be assumed that all 6 males are spawning with all 6 females but by using paired spawning and strip spawning this can be ensured and any variation that is present will be expanded.
- It was asked if there were any recommended changes for the Genetic Monitoring.
  - Changes to the Genetic Monitoring should not currently be addressed because if the methods for Genetic Monitoring change too much they will not be comparable to previous years.
- Alison Hutson will write up these recommended changes to silvery minnow spawning in hatcheries and send out to the ScW for comments. These comments will come from the agency(-ies) that provide them, and not from the ScW as a whole.

**Action:** Alison Hutson will write up recommended changes to silvery minnow spawning in hatcheries and send out to the ScW for comments.

### **Program update**

- **EC update**
  - The EC will be meeting Thursday, October 21. Meeting notes from the September 16 closed session EC meeting are expected to be posted soon.
- **CC update**
  - The next Coordination Committee (CC) meeting is Wednesday, October 27. The CC will be reviewing the projects that ScW proposed for FY11 Funding.
- **LTP update**

- There is a deadline for a draft Long Term Plan to be presented to the EC at the end of March 2011.

**Next ScW Meeting November 16, 2010 from 9:00 am to 11:30 am at Interstate Stream Commission**

A potential agenda item is a USGS Progress Summary discussion

**Science Work Group  
19 October 2010 Meeting Attendees**

NAME	AFFILIATION	PHONE NUMBER	EMAIL ADDRESS
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