

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

20 September 2011 Meeting – 9:00 AM-11:30 AM

### Interstate Stream Commission

#### Actions

- Stacey Kopitsch will email the document of potential categories for data synthesis, and the current Water Quality SOW to the ScW to review for the October ScW meeting. completed
- Non-federal ScW members interested in serving a term as co-chair can email Stacey Kopitsch (PMT Liaison).
- Alison Hutson will email directions to the ISC Refugium to the ScW.
- ScW members will research (1) what is being done at their agencies to address the effects of the salt cedar leaf beetle; and (2) what possible projects could be implemented by the Program to address the effects. (*continued from July 19<sup>th</sup>*)
- Alison Hutson will inform the PVA of the ScW recommendation that the PVA work group address the SADD Fish Passage peer review recommendation #2 (determine the factors that are imposing major controlling constraints). (*continued from June 21<sup>st</sup> meeting*)

#### Decisions

- The August 16<sup>th</sup>, 2011 ScW meeting minutes were approved with the following edit for clarification on page 4 (*changes in italics*): “It was agreed that a preemptive salvage operation, *in response to ash flow*, would not be implemented (yet) this year.”
- ScW members agreed to recommend that synthesis of water quality should be the first category to be addressed as a SOW has already been developed and in the meantime the ScW can further review the potential categories and develop a plan for the synthesis. There was agreement that the work should be contracted out, rather than handled by ScW participants.

#### Meeting Summary

- Jen Bachus brought the meeting to order and introductions were made. It was announced that USGS will be doing recon for the Mesohabitat Mapping Study on September 26<sup>th</sup> through September 27<sup>th</sup>; anyone interested in accompanying USGS should email Mick Porter. The agenda was approved with the addition of a discussion on the elections process for ScW Co-Chairs.
- Alison Hutson’s 1-year term as ScW Co-Chair will come to an end at the end of September. According to the ScW Charter, co-chairs are appointed for one year, with their term not to exceed 2 consecutive years. Non-federal ScW members interested in serving a term as co-chair can email Stacey Kopitsch (PMT Liaison). If needed, Alison can continue her term for 1 more year.
- The August 16<sup>th</sup>, 2011 ScW meeting minutes were approved with the following edit for clarification on page 4 (*changes in italics*): “It was agreed that a preemptive salvage operation, *in response to ash flow*, would not be implemented (yet) this year.”
- Meeting attendees viewed a presentation from Eric Gonzalez (SWCA) on the Gear Evaluation Study. The study is looking at the relative efficiency for sampling silvery

minnow for several common gear types used in the Rio Grande. The primary gear types evaluated were small beach seines, a bag seine, a backpack electrofishing unit, and double-wing fyke nets.

- Conclusions from the study include: (a) At low silvery minnow abundance, all the gear types tested had a high coefficient of variation regardless of the habitat sampled; (b) during average to above average spring runoff floodplain sampling with backpack electrofishing, beach seines, and fyke nets all yield relatively precise silvery minnow CPUE data; (c) beach seines consistently performed well relative to other gear types for estimating species richness but not for assessing silvery minnow CPUE; (d) bag seines may detect species that other gear types may miss and could be used to supplement ongoing population monitoring; (e) when sample sizes are sufficient, silvery minnow size structure is best described by fyke nets; and, (f) fyke nets had the best precision of all gear types for collecting silvery minnow from floodplain and side channel habitats during 2010 but not during 2011.
- Next steps include: (a) Main channel monitoring in October 2011 and March 2012; (b) possible floodplain and side channels sampling in May and June 2012 (if study continues); (c) possible main channel sampling in October 2012 and March 2013 (if study continues); (d) additional data analysis; and, (e) the Final Report.
- It was shared that the first draft of the report has been submitted to Bureau of Reclamation (Reclamation) and should soon be available to the ScW.
- Attendees performed an action item review. All action items were completed with the exception of two ongoing actions items.
- Alison Hutson gave a presentation on the first year of the Interstate Stream Commission (ISC) Spawning Study. The purpose of the study is to compare velocity, water temperature and quality, and fish movement in the channel and overbank in relation to spawning. Though the silvery minnow did not spawn and no eggs were collected during the study, the equipment for the study was able to be tested. It's not known why the fish did not spawn but it could be due to a lack of turbidity, a permitting setback that resulted in the silvery minnow having an extremely short acclimation to the Refugium and undergoing stress from tagging right before spawning.
  - Findings for this year include: (a) overall velocity was low with overbank areas having an average velocity of 0; (b) there was nothing outside of the acceptable parameters in regard to water quality; (c) day and night temperature fluctuations were seen and were between 80 and 55 degrees Fahrenheit, though the overbank areas were colder at night and hotter in the day there was not a significant difference; (d) at this time no trends on fish movement have been found.
  - The plans for the upcoming year are to have the study set up basically the same but to tag and stock the fish earlier in order to give the fish several months to acclimate before spawning.
- Meeting attendees discussed how to proceed with the CC's request for the ScW to develop a plan for the synthesis of silvery minnow literature/data. A document of potential categories was distributed, developed from the categories used in the LTP and the ISC's submittal for the Service's 5-year Status Review. ScW members will determine if these categories capture every category relevant to the silvery minnow and how the

synthesis should move forward. Attendees were in general agreement that the majority, if not all, of the data synthesis would be contracted out. The ScW was also updated that the CC has recommended that synthesis of water quality data be included in this effort.

- ScW members agreed to recommend that synthesis of water quality should be the first category to be addressed as a SOW has already been developed and in the meantime the ScW can further review the potential categories and develop a plan for the synthesis. The ScW work group will review the "Evaluate Water Quality in the Middle Rio Grande in relation to the RGSM" SOW to get an idea of what a data synthesis task might look like. At the October 5<sup>th</sup> CC meeting, ScW would like to request from the CC more information on what the plan for synthesis of minnow literature/data should contain.
- Stacey Kopitsch will email the document of potential categories for data synthesis, and the current Water Quality SOW to the ScW to review and discuss at the October ScW meeting.
- Meeting attendees reviewed the LTP activity summary "Better understand fish movement" to adjust the study to address fish movement in response to drying and related to fish passage. It was discussed that the activity summary should determine the frequency of RGSM movement, distance and magnitude of movement in response to several factors including season. There was general agreement that the activity would also inform implementation of habitat restoration and other fish management on the river as well as fish passage. Attendees agreed that the revised version, with edits from this meeting incorporated, is ready for CC review.
- In order to accommodate tagging in October the ScW agreed to reschedule the regularly scheduled October ScW meeting to Thursday October 13<sup>th</sup>, 2011. The meeting will be at the ISC Refugium from 9:00 AM to 11:30 AM. Alison Hutson will email directions to the ISC Refugium to the ScW.
- Attendees received a Program Update:
  - The Executive Committee (EC) is meeting today; the agenda mostly consisted of planning for the November 3<sup>rd</sup>, all day EC meeting at the Corps.
  - The CC is working on reviewing the draft LTP; agency comments are due by October 14<sup>th</sup>, 2011.
  - The Program Open house is on October 21<sup>st</sup> and 22<sup>nd</sup>, 2011. A detailed agenda for the technical presentations on October 21<sup>st</sup> will soon be available.

**Next Meeting: October 13<sup>th</sup>, 2011 from 9:00 AM to 11:30 AM at the ISC Refugium**

- Tentative agenda items include: (1) potential categories and plan for data synthesis; (2) briefing on the TX/NM/MEX Salt Cedar Biological Control Consortium held on October 4<sup>th</sup> and 5<sup>th</sup>; (3) salt cedar beetle LTP activity development;
- **November 15<sup>th</sup>, 2011-** Joint work group meeting

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

20 September 2011 Meeting – 9:00 AM-11:30 AM

Interstate Stream Commission

## Final Notes

### Introductions and agenda

- Jen Bachus brought the meeting to order and introductions were made.
- It was announced that USGS will be doing recon for the Mesohabitat Mapping Study on September 26<sup>th</sup> through September 27<sup>th</sup>; anyone interested in accompanying USGS should email Mick Porter.
- The agenda was approved with the addition of a discussion on the election process for ScW Co-Chairs.

### Co-Chair Election Process Discussion

- The ScW Charter indicates that co-chairs are appointed for one year with a term not to exceed 2 consecutive years. Alison Hutson's 1 year term as non-federal co-chair will end after September 2011. The co-chair position is elected based on majority vote of members present. The work group will further discuss co-chairs at the October ScW meeting; Alison Hutson volunteered to continue as co-chair in the interim and if needed will continue to serve as co-chair for a 2<sup>nd</sup> year.

**Action:** Any non-federal ScW members interested in serving as co-chair should email Stacey Kopitsch (PMT Liaison).

### Approve August 16<sup>th</sup>, 2011 ScW Meeting Minutes

- The August 16<sup>th</sup>, 2011 ScW meeting minutes were approved with the following edit for clarification on page 4 (*changes in italics*): "It was agreed that a preemptive salvage operation, *in response to ash flow*, would not be implemented (yet) this year."

### SWCA presentation on Gear Evaluation Study

- Meeting attendees viewed a presentation from Eric Gonzalez (SWCA) on the Gear Evaluation Study. The study is looking at the relative efficiency for sampling silvery minnow for several common gear types used in the Rio Grande. The primary gear types evaluated were small beach seines, a bag seine, a backpack electrofishing unit, double- and wing fyke nets,
  - Attendees were reminded that in Task 1 of the study, data collected in the Rio Grande was reviewed focusing on silvery minnow and in Task 2 a literature review of work completed in other basins was performed. Tasks 1 and 2 suggest that beach seines were the most effective gear type for monitoring silvery minnow abundance based on: (a) suitability for sampling silvery minnow adults; (b) suitability for sampling silvery minnow juveniles; (c) suitability for sampling silvery minnow larvae and eggs; (d) suitability for sampling the fish community in a medium sandbed river; (e) logistical ease of use; (f) gear purchase cost; and, (g) reliability for quantitative information. The purpose of Task 3 is to determine

how well beach seines detect the fish that are present and to determine what additional information about the silvery minnow population and associated fish community may be gained by using additional sampling gears.

- The objectives of this portion of the study are to do a paired comparison of methods to sample silvery minnow on floodplains (May-June 2010, 2011) and to do a paired comparison of methods to sample silvery minnow in the main channel during early spring (pre-runoff) and fall baseflow periods (October 2010 and March 2011).
- In 2010, two floodplain sites (Alameda and I-40) and two side channel sites (Paseo Del Norte) were sampled. In 2011, one floodplain site (Alameda) and two side channel sites (Paseo Del Norte and I-40) were sampled. There are 3 independent sampling locations at each site and sampling locations have a fixed area.
- Results for floodplain and side channels:
  - Species richness - Fewer species per sample area were caught in 2011 than in 2010; there was also less inundation in 2011. Species richness varied by gear type for each year with the beach seine getting the highest species richness; the fyke nets had the lowest species richness.
  - Floodplain and side channel species detection- The same trend was seen of 2011 having fewer species per sample area than 2010. There was not a significant difference for species detection for gear type though the beach seine tended to have slightly higher species detection.
  - Species Composition -
    - 2010 - For all data combined, silvery minnow made up the majority of the species collected with the backpack electrofishing unit and the fyke net. Fyke nets collected the most silvery minnow.
    - In 2011, fewer silvery minnow were collected with all gear types. 40% of the species caught with the back pack electrofishing unit were silvery minnow, 35% of beach seine collections were silvery minnow, and 55% of fyke net collections were silvery minnow.
  - Floodplain and side channel silvery minnow CPUE – The mean number of silvery minnow collected at each study site varied during 2010 but in 2011 the fyke net tended to collect more per 4-hour set.
  - Silvery minnow catch rate – Low silvery minnow abundance affects catch rates for all gear types; for all three gear types used in 2011, in 2/3 of the samples 0 silvery minnow were collected.
  - A regression analysis shows that when fish are in high abundance each gear type picks up that trend but when fish are at a lower abundance the data are more variable.
  - Silvery minnow size –
    - In 2010 the size of silvery minnow varied significantly among gear types with 28% of silvery minnow collected with fyke nets being larger than 62 mm standard length; about 18% of silvery minnow collected with a beach seine and electrofishing device were larger than 62 mm standard length.

- In 2011, the size of silvery minnow collected did not vary significantly among gear types with the mode being 72 mm standard length.
- For the main channel a backpack electrofishing unit, beach seines, a bag seine, and fyke nets were used for sampling. Five representative 1-km sites were selected, one from each of the major channel geomorphology types in the MRG: (1) moderate incision; (2) low to moderate incision; (3) no recent incision; (4) high incision; and, (5) slightly aggrading. Each 1-km sites was divided into three 300 m blocks and each block was randomly assigned to a gear type. In October 2010, four of the five sites were sampled (site #5 was dry), and in March 2011 all five sites were sampled but no fyke nets were used on site #5.
- Results for main channel:
  - Species richness – Species richness varied by gear type during October 2010 but not during March 2011. Electrofishing had the highest species richness during October 2010, while beach seines had the highest species richness during March 2011.
  - Species detection – There were no significant differences in species detection among gear types; however the fyke net had the poorest overall species detection. It was noted that though the bag seine was not used at all sites, the bag seine found silvery minnow at a site where they were missed by the other gear types.
  - Species composition of catch – In 2010, red shiners were the predominant species collected by the beach seine and bag seine while channel catfish were the predominant species collected by the fyke net. In 2011, red shiners were the most common species collected with all gear types; silvery minnow were fairly common with the fyke net (21%), but less common with the beach seine, bag seine, and backpack electrofishing device.
  - The number of silvery minnow collected per mesohabitat sample varied among gear types in 2010 but not in 2011. The bag seine and the electrofishing device collected the most in October 2010 and the fyke net collected the most in March 2011.
  - Correlation of silvery minnow site CPUE was in general agreement among gear types in October 2010 but not in March 2011. All gear types are able to pick up trends when abundance is high but there is a break down in relationship when there is a lower abundance.
  - No differences in silvery minnow length were found among gear types in either October 2010 or March 2011. It was also noted that no small silvery minnow (<40 mm) were collected by any gear type in either October 2010 or March 2011.
  - A power analysis was used to evaluate the precision of the data collected in 2010 and 2011 and to determine the sample sizes necessary for detecting change in CPUE of silvery minnow. A resampling statistical analysis was conducted following Blank et al. 2001 involving bootstrapping and Monte Carlo.

- In the main channel, backpack electrofishing CPUE data is more precise when standardized by time while data seems to be more precise for the floodplain when standardized by area.
- For the floodplain and side channel habitats fyke nets seem to be more precise than other gear types when fish are in high abundance but performs similarly to other gear when fish are in low abundance. All three gears have good precision when the floodplain is inundated.
- For monitoring silvery minnow CPUE in the main channel the backpack electrofishing device seemed to perform consistently well. The fyke net also performed well though this could be due to the fyke net being placed in habitats that the fish are known to prefer.
- In a comparison of sampling cost/effort among gears for the main channel habitats it was found that the amount of time needed to collect one sample is different among gear types. The backpack electrofishing unit is the most expensive gear type due to the upfront cost of the gear. The backpack electrofishing unit takes 21 minutes per mesohabitat sample; the beach seine takes 10.5 minutes, the fyke net takes 60 minutes, and the bag seine takes 20 minutes.
- Summary and Conclusions
  - At low silvery minnow abundance all the gear types tested had high coefficient of variation regardless of the habitat sampled and this was reflected by the lack of correlation for data collected from main channel habitats in March, and floodplain and side channel habitats in May and June 2011.
  - During average to above average spring runoff floodplain sampling with backpack electrofishing, beach seines, and fyke nets all yield relatively precise silvery minnow CPUE data.
  - Beach seines consistently performed well relative to other gear types for estimating species richness but not for assessing silvery minnow CPUE.
  - Bag seines may detect species that other gear types may miss and could be used to supplement ongoing population monitoring.
  - When sample sizes are sufficient, silvery minnow size structure is best described by fyke nets. Supplemental fyke net sampling could be used to help better describe the silvery minnow population length structure.
  - Fyke nets had the best precision of all gear types for collecting silvery minnow from floodplain and side channel habitats during 2010 but not during 2011.
    - More side channel habitats were sampled than floodplain habitats during 2011 due to a reduced spring runoff
    - This gear type provides precise data but only for off-channel and low velocity habitats.
- Recommendations:

- CPUE main channel trend monitoring for silvery minnow should be conducted in October – time when precision for all tested gear type in main channel habitats was best.
- When floodplain habitats are available then fyke nets could be used to supplement ongoing monitoring for determining silvery minnow size and structure
- When silvery minnow occur at low densities in main channel habitats then bag seines could be used for species detection surveys.
- Next steps include:
  - Main channel monitoring in October 2011 and March 2012.
  - Possible floodplain and side channels sampling in May and June 2012 (if study continues)
  - Possible main channel sampling in October 2012 and March 2013 (if study continues)
  - Additional data analysis
  - Final report.
- It was shared that the first draft of the report has been submitted to Bureau of Reclamation (Reclamation) and should soon be available to the ScW.
- Questions:
  - *Question:* Do you remember the average area sampled with the beach seine and the number of seine hauls that were needed to cover the area? *Response:* The area was about half the size of the ISC main conference room and about 3 to 6 seine hauls were needed. The backpack electrofishing unit took about 200 seconds and the fyke nets were soaked for 4 hours.
  - *Question:* Is velocity a factor when using the fyke net? *Response:* Yes. The fyke nets were set up in areas where the velocity was low; this information is included in the appendices of the report. There was no real difference in the mean velocities for the different mesohabitats in the main channel when using fyke nets, because there tends to be similar velocities where sampling is feasible. In the side channel habitats the flows were fast and the fyke nets were being hit pretty hard. Though the fyke nets do not sample the whole area, and polygons are not standardized by area, they give a different perspective of the number of fish moving through the habitat.
  - *Question:* Did turbidity affect the backpack electrofishing unit? *Response:* Turbidity definitely affects capture efficiency with a backpack electrofishing unit because you need to be able to see the fish near the surface and walking through the water increases the turbidity. This was easier in the main channel.
  - *Question:* What would you look for in the next runoff that would strengthen the data? *Response:* The relationships could be strengthened by analyzing the faster channels separately from the slower polygon sites. This could be done with the data that already exists. It would be interesting to get an abundance of silvery minnow that is in the middle or greater than the main sample surveys that have already been conducted. There might be a better regression if the data from the last two years are combined.



**Action Item Review** – Meeting attendees reviewed the August 2011 action items and other outstanding actions items.

- **Douglas Tave will email Tetra Tech his revisions to the July 19<sup>th</sup> 2011 ScW meeting notes.**
  - Complete; email was sent on 8/16/2011.
- **Yvette Paroz will check on the expected timing of the implementation of the genetics peer review.**
  - Complete. The peer review should begin this fiscal year with a target of having a final report in 2012.
- **Grace Haggerty will distribute the Tetra Tech Water Quality Management Data Synthesis document to ScW members.**
  - Complete.
- **Stacey Kopitsch will send out the water quality references found in the "Evaluate WQ in the MRG" statement of work to ScW members.**
  - Completed on 8/17/2011.
- **ScW members will talk to their supervisors to determine their availability to commit to taking on the data synthesis project and specifically a trial task of water quality management synthesis.**
  - Complete. This will be discussed during today's meeting.
- **Stacey Kopitsch will distribute the LTP activity summary "better understand fish movement (RGSM longitudinal movement)."** 
  - Completed on 8/17/2011. The "Better understand fish movement (RGSM longitudinal movement)" activity summary will be discussed during today's meeting.
- **Gina Dello Russo will ask the Tamarisk Coalition if they've been to the Middle Rio Grande to see some of the areas with beetle presence. If not, is this something they would be interested in doing in September?**
  - Complete; the presentation will occur after today's ScW meeting.
- **Dana Price will help Gina Dello Russo develop an agenda and requested topics for the Tamarisk Coalition presentation.**
  - Complete.
- **ScW members will discuss possible attendance to the TX/NM/MEX Salt Cedar Biological Control Consortium to be held October 4<sup>th</sup> and 5<sup>th</sup> in Alpine TX with their supervisors.**
  - Complete; a Program-wide announcement was distributed via email.
- **Outstanding and Continued Actions**
  - **Additional site recommendations or feedback on the mesohabitat mapping project should be emailed to Mick Porter no later than Friday, July 22<sup>nd</sup>. (continued from July 19<sup>th</sup>)**
    - Complete.
  - **ScW members will research (1) what is being done at their agencies to address the effects of the salt cedar leaf beetle; and (2) what possible projects could be implemented by the Program to address the effects. (continued from July 19<sup>th</sup>)**
    - Ongoing. Agency information and ideas will be discussed at the October ScW meeting.
  - **Alison Hutson will inform the Population Viability Analysis (PVA) work group of the ScW recommendation that the PVA work group address the SADD Fish Passage peer review recommendation #2 (determine the factors that are imposing major controlling constraints). (continued from June 21<sup>st</sup> meeting)**
    - Ongoing. A PVA work group meeting is scheduled for the end of September.

- In response to a question about the Program Open House it was shared that the Program will still be having an open house in October and a request from the Program Manager for volunteers with more information will be distributed via email.
- In regard to an older action item to see if the Pilot Database Management System (DBMS) would be able to run queries on reports, attendees were updated that the DBMS will not be able to run queries on reports until it is fully deployed in summer 2012.

### **Interstate Stream Commission (ISC) Spawning Study Presentation**

- Alison Hutson gave a presentation on the 1<sup>st</sup> year of the ISC Spawning Study.
  - The purpose of the study is to compare velocity, water temperature and quality, and fish movement in the channel and overbank in relation to spawning within the ISC Refugium (the Refugium). Though the fish did not spawn and no eggs were collected during the study, the equipment for the study was able to be tested.
  - When the study was designed it was originally planned for the fish to be tagged in January 2011 and stocked into the Refugium in February 2011; however, due to permitting issues the fish were tagged much later than anticipated and were not stocked until the end of April 2011. This left only 9 days for the fish to acclimate before the floodplain was inundated.
  - For the study sandbags were used to block off ponding and backwater areas in order to limit variables.
  - Because of the height of the PIT Tag readers, they were positioned above the water so that the fish could swim underneath them. Two of the readers were positioned on the overbank area and 2 were in the channel.
  - 450 minnows were used from Dexter (VIE-tagged at Dexter), along with 140 Phase I minnows of which 89 were PIT-tagged.
  - Of the 89 fish PIT-tagged for the study, a total of 53 survived and were stocked into the Refugium. Because of the issues with permitting, the fish used for the study were not fed as brood fish would normally be fed; this could have been a contributing factor as to why the fish did not spawn. The fish undergoing stress from tagging right before spawning might also have been a reason that the fish did not spawn.
  - Study findings:
    - There was not much of a difference in velocity between the overbank and the channel. At 15 inches the velocity was at its highest. Information on the velocities at specific times and gate heights were collected. Overall velocity was low with overbank areas having an average velocity of 0.
    - There was nothing outside of the acceptable parameters in regard to water quality. Day and night temperature fluctuations were seen and were between 80 and 55 degrees Fahrenheit, though the overbank areas were colder at night and hotter in the day there was not a significant difference from the channel temperatures.
    - Because only 53 PIT-tagged fish were released into the Refugium, the PIT Tag readers were set to read every tag. One issue with the setup of the study was that the fish tended to stay underneath the PIT tag readers. No trends in the PIT tag data have been found, but the data are still being analyzed.

- The plans for the upcoming year are for the study to have the same basic set up but for the fish tagging and stocking to occur earlier in order to give the fish several months to acclimate before spawning. Turbidity may also have contributed to the fish not spawning; this could be an issue as the Refugium is built to not have turbidity.
- Questions
  - *Question:* It was asked if there is a way to reconfigure the PIT tag readers so that the fish do not sit underneath them. *Response:* There should be a way to configure the readers so that the fish cannot stay beneath them.
  - *Question:* Are there any other structures in the channel besides the PIT tag readers? *Response:* No, during the spawning season the channel is cleaned in order to keep the velocity as high as possible.
- Attendees also viewed some video from the DIDSON camera. Though it is possible to tell the difference between trout and salmon from DIDSON video it's not believed that you can distinguish silvery minnow from other fish of similar size. It was mentioned that Steve Hiebert may have tried and found it difficult for small-bodied fish. There could be a way to set up a laboratory experiment with silvery minnow and fish of a similar size to see if they can be distinguished from one another.

#### **Decision Item – How to proceed with the CC's request for ScW to develop a plan for the synthesis of literature/data**

- Meeting attendees discussed how to proceed with the CC's request for ScW to develop a plan for the synthesis of literature/data. It was clarified from last month's ScW meeting that the ScW has been directed to take the lead for developing *a plan* for the synthesis and not to undertake the synthesis themselves. The ScW was updated that the CC has also decided that the synthesis of water quality data (a ScW recommended activity) be included in the data synthesis task. Meeting attendees received a document of potential categories developed from categories used in the LTP and the ISC's submittal for the Service's 5-year Status Review.
  - Meeting attendees were in general agreement that the majority, if not all, of the data synthesis would be a contracted effort.
  - One suggestion was that water quality data be the first category for synthesis as a SOW has already been developed and in the meantime the ScW can further review the potential categories and develop a plan for the entire synthesis effort.
    - Meeting attendees were in agreement that water quality be the first category to move forward for synthesis; review of this SOW could give ScW members an idea of what a data synthesis task might look like, and the SOW could eventually be modified to be more consistent with the data synthesis task. At the October 5<sup>th</sup> CC meeting, ScW would like to request from the CC more information on what the plan for synthesis of minnow literature/data should contain.
  - It was discussed that though data synthesis will guide adaptive management and development of the LTP, adaptive management and the LTP will be worked on concurrently as the data are being synthesized.
  - It was also discussed that though, ideally, the ScW would like to utilize the DBMS for the data synthesis effort it is understood that data synthesis needs to

start as soon as possible and there is not time to wait for completion of the DBMS.

- It was pointed out that the data synthesis task may help to guide the DBMS and guide the Program in coming to consensus on data sets. It was suggested the SOW for the water quality synthesis task include a link so it is available to the DBMS effort.

**Decision:** ScW members agreed to recommend that synthesis of water quality should be the first category to be addressed as a SOW has already been developed and in the meantime the ScW can further review the potential categories and develop a plan for the synthesis. There was agreement that the work should be contracted out, rather than handled by ScW participants.

**Action:** Stacey Kopitsch will email the document of potential categories for data synthesis, and the current Water Quality SOW to the ScW to review for the October ScW meeting.

### **Review of revised LTP activity summary “Better understand fish movement”**

- In a working session, meeting attendees reviewed the LTP activity summary “Better understand fish movement” to adjust the study to address fish movement in response to drying and relate the activity to fish passage.
  - It was discussed that verbiage listing the aspects of fish movement that the study is not intended to address be removed from the project in order to avoid limiting the creativity of those bidding on the project.
  - It was also discussed that looking at fish movement during different seasons should remain in the project as this will yield information on when a fish passage would need to operate. Looking at fish movement during different seasons would also give information on whether silvery minnow are moving due to migratory cues or if it’s due to environmental conditions.
  - It was discussed that the activity should determine the frequency of silvery minnow movement and distance/magnitude of movement in response to several factors including season.
  - There was general agreement that the activity would also inform implementation of habitat restoration and other fish management on the river, as well as determine how movement impacts the need for a fish passage.
  - Attendees agreed that the revised version, with edits from this meeting incorporated, is ready for CC review.

### **Rescheduling of October ScW Meeting**

- In order to accommodate tagging in October the ScW agreed to reschedule the regularly scheduled October ScW meeting to Thursday October 13<sup>th</sup>, 2011. The meeting will be at the ISC Refugium from 9:00 AM to 11:30 AM. Alison Hutson volunteered to provide directions to the ISC Refugium.

**Action:** Alison Hutson will email directions to the ISC Refugium to the ScW.

### **Program Update**

- Attendees received a Program Update:
  - The Executive Committee (EC) is meeting today; the agenda mostly consisted of planning for the November 3<sup>rd</sup>, all day EC meeting at the Corps.

- The CC is working on reviewing the draft LTP; agency comments are due by October 14<sup>th</sup>, 2011.
- The Program Open house is on October 21<sup>st</sup> and 22<sup>nd</sup>, 2011. A detailed agenda for the technical presentations on October 21<sup>st</sup> will soon be available.
  - Because the Program was unable to have a topic on the Salt Cedar Leaf Beetle for the Program Technical Presentations the PMT is looking into having an all day workshop devoted to the beetle.

**Next Meeting: October 13<sup>th</sup>, 2011 from 9:00 AM to 11:30 AM at the ISC Refugium**

- Tentative agenda items include: (1) potential categories for data synthesis; (2) briefing on the TX/NM/MEX Salt Cedar Biological Control Consortium held on October 4<sup>th</sup> and 5<sup>th</sup>; (3) salt cedar beetle LTP activity development;
- **November 15<sup>th</sup>, 2011-** Joint work group meeting

**Science Work Group  
September 20, 2011 Meeting Attendees**

	NAME	AFFILIATION	PHONE NUMBER	EMAIL ADDRESS	Primary, Alternate, Other
1	Stacey Kopitsch	FWS	761-4737	stacey_kopitsch@FWS.gov	O
3	Alison Hutson	ISC	841-5201	alison.hutson@state.nm.us	P
4	Douglas Tave	ISC	841-5202	douglas.tave@state.nm.us	A
5	John Caldwell	NMDGF		john.caldwell@state.nm.us	O
6	Dana Price	USACE	342-3378	dana.m.price@usace.army.mil	A
7	Andrew Monie	NMDGF	476-8105	Andrew.monie@state.nm.us	P
8	Mark Brennan	FWS	761-4756	mark_brennan@fws.gov	O
9	Jen Bachus	FWS	761-4714	jennifer_bachus@fws.gov	P
10	Michael Porter	USACE	342-3264	dana.m.price@usace.army.mil	P
	Yvette Paroz	Reclamation	462-3581	yparoz@usbr.gov	P
11	Christine Sanchez	Tetra Tech	881-3188 ext. 139	christine.sanchez@tetrattech.com	O