

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

16 August 2011 ScW Meeting – 9:00 AM-11:30 AM

Joint ScW/HR/MPT Meeting – 11:30AM -12:30PM

ISC

August 2011 Actions

- ✓ Douglas Tave will email Tetra Tech his revisions to the July 19th 2011 ScW meeting notes. – *completed 08/16/11*;
- Yvette Paroz will check on the expected timing of the implementation of the genetics peer review.
- Grace Haggerty will distribute the Tetra Tech Water Quality Management Data Synthesis document to ScW members.
- ✓ Stacey Kopitsch will send out the water quality references found in the "Evaluate WQ in the MRG" statement of work to ScW members. completed
- 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.
- ✓ Stacey Kopitsch will distribute the LTP activity summary “better understand fish movement (RGSM longitudinal movement.” completed
- 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?
- Dana Price will help Gina Dello Russo develop an agenda and requested topics for the Tamarisk Coalition presentation.
- ScW members will discuss possible attendance to the TX/NM/MEX Salt Cedar Biological Control Consortium to be held October 4th and 5th in Alpine TX with their supervisors.

Outstanding and Continued Actions

- 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 19th*)
- 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 21st meeting*)

Decisions

- The July 19th 2011 ScW meeting notes were approved for finalization with a few clarifications.

Recommendations

- ScW members recommended that maintenance of the DBMS include the appropriate oversight and goal of having the structure/framework needed to address the continuing synthesis of data and information.

Meeting Summary

- Alison Hutson brought the meeting to order and introductions were made. The agenda was approved with the addition of a Genetics & Propagation Meeting update. The July 19th ScW meeting notes were approved for finalization with the incorporation of Douglas Tave’s changes.

- Attendees then reviewed the July and other outstanding action items. All but one of the July actions were completed as assigned. Two of the outstanding actions items were discontinued and the remaining action will be addressed once the PVA work group meets again.
- In an update on the scope for the Sexing of Age/Growth Specimens, it was shared the SOW was submitted to Jericho Lewis. There are funds this year for this project. The ScW has finished all their responsibilities with this SOW and hopefully the work group will be kept informed and involved should it get awarded.
- Attendees then discussed the 2 requests from the CC: (1) ScW take the lead on synthesis of data/literature and use the ISC's submittal for the 5-year minnow review and the existing LTP categories to develop a plan for the synthesis of literature/data; and (2) ScW and HRW work to modify the ScW activity *Better understand fish movement (RGSM longitudinal movement)* to include research of minnow movement below San Acacia diversion dam and other diversion structures during the critical low flow summer months.
 - There are 2 options for addressing the synthesis task: (1) hire a contractor or (2) the work group members do the work themselves.
 - Concerns with hiring a contractor included a lack of knowledge and project intent as well as cost. However, work group attendees were also concerned that the work load and time demands of this task were excessive and beyond the availability of current members even if the categories were broken up and addressed one at a time. It was pointed out that of 16 signatories only 6 are regularly represented and those individuals are the same people who volunteer for and complete all of the ScW work. Another concern was the possibility for "wasted time" – attendees would hate to spend the time only to have the product dismissed or rejected at the other Program levels.
 - Even if the recovery plans, BAs, 5 year reviews, Program website, DBMS (once online) etc. have a large portion of the information (including references) the synthesis effort would be huge. There is also a concern with copy right laws and the accessibility of papers that are outside of the Collaborative Program.
 - It was then suggested that the work group use the Water Quality Management category as a "trial" synthesis to: (1) establish a framework for how the synthesis process should proceed; (2) determine what the outcomes should highlight (contradictions, controversies, etc.) and the outcomes should look like; and (3) to help to define the specific questions that need to be asked throughout each category. This exercise could inform the rest of the synthesis process.
 - Attendees agreed to discuss their availability with their supervisors before committing to the trial synthesis exercise. The work group will make a decision on how to proceed at the September meeting.
 - Regarding the task to modify the *Better Understand Fish Movement* activity, attendees agreed to review the most current activity summary and make recommendations for modifications. Two suggestions from today's meeting included: (1) to include some of the Big Bend monitoring work (ex. minnows found 17 miles upstream and 75 miles downstream from stocking sites) and (2) facility observations that 5 mm fish were distributed everywhere a day after introduced to the refugium and 20 mm fish were observed easily going over the sand bars.
- Gina Dello Russo updated the group on HR's current work to develop a series of tools for analyzing (1) existing flycatcher habitat quality; (2) the river dynamics that support successional flycatcher habitat quality; and (3) how the leaf beetle's presence in the system might affect existing territories and future restoration work. HR would like to work with ScW and SWM to develop these tools and strategies for consolidating efforts.

- The Tamarisk Coalition will be presenting next month – attendees discussed trying to schedule a joint presentation on September 22nd. If that date does not work, the alternate suggested date is September 20th.
- In the Program updates, it was shared that the EC is scheduled to meet this Thursday (August 18th). In addition to usual EC business, the agenda includes a presentation on a path forward to recovery program and a decision item on a presentation from EPA on their water-shed wide pilot water quality project. Reclamation's Biological Assessment will be available after presented to the EC on September 15th. The CC is scheduled to meet on September 7th. The deadline for comments on the Draft Version 1 of the Adaptive Management Plan has been extended until Friday, August 19th. In a brief report of the Genetics & Propagation meeting it was shared that between 250,000 and 300,000 fish will need to be released to the Middle Rio Grande this year. Currently, there are about 450,000 minnow available from all the facilities combined. After being tagged, the fish will be put back into the tanks for about 2 weeks to help reduce the stressors. This was a very successful process last year (i.e., the BioPark only lost 10 fish out of 28,000 tagged). It was agreed that a preemptive salvage operation, in response to ash flow would not be implemented (yet) this year.
- Following the completion of the ScW agenda, members stayed for a joint presentation from the USGS on the Mesohabitat Mapping at various flows in the Big Bend region of the Rio Grande and tentative plan for mesohabitat mapping in the Middle Rio Grande.
 - Mesohabitats (backwaters, forewaters, embayments, rapids, riffles, runs/glides, pools {eddy, main channel and isolated}, submerged channels and point bars) were mapped at the minnow release sites in the Big Bend Reach of the Rio Grande for 3 distinct flows: low flow (200-400 cfs), high flow (500-1500 cfs), and overbank flow (ca. 50,000 cfs) using the 2008 flooding event. An extreme low flow (<100 cfs) was mapped in May 2011. Fish assemblages were also collected within each mesohabitat.
 - The project website is being populated but currently contains a project overview, Google Map application, site locations, sample dates, and discharge estimates. <http://tx.usgs.gov/projects/bigbend/mappingSMhabitat.html> Final data products are also available.
 - The short term plans for the Middle Rio Grande mesohabitat mapping project are to (1) Finalize sites (max. of 20 in MRG reach); (2) complete site reconn. in mid to late September; (3) then expand the statement of work into a full Work Plan; (4) the 1st round of mapping and assessments to be completed during late fall to early winter low flow (2011); (5) the 2nd round of mapping and assessment to be completed during spring high pulse flow (2012); (6) draft reach maps expected in mid-summer 2012; and (7) final map report expected in fall of 2013. Right now, the project does not include collecting fish assemblage data. The presenters advocated for inclusion of this piece in order to assure that the data could be directly compared with the Big Bend work and to assure the highest quality final product (data rich).

Next ScW Meeting: September 20th, 2011 from 9:00 am to 11:30 am at Interstate Stream Commission

- Tentative Agenda Items include: (1) ISC Spawning Study presentation - Alison Hutson; (2) Decision item: how to proceed with Water Quality Management “trial” synthesis exercise; (3) SWCA presentation on Gear Evaluation study; (4) joint HR/ScW/SWM Tamarisk Coalition Presentation on Salt Cedar Beetle
- October: possible overlap of meeting with tagging or Big Bend stocking efforts – consider rescheduling or postponing; (1) briefing on the TX/NM/MEX Salt Cedar Biological Control

Consortium held October 4th and 5th; (2) salt cedar beetle LTP activity development;

- November Tentative Agenda Items: (1) Population Monitoring Efforts update; (2)

Joint HR/ScW/SWM Tamarisk Coalition Presentation: September 20th or September 22nd

Middle Rio Grande Endangered Species Act Collaborative Program

Science Work Group Meeting

16 August 2011 ScW Meeting – 9:00 AM-11:30 AM

Joint ScW/HR/MPT Meeting – 11:30AM -12:45PM

ISC

Meeting Minutes

Introductions and Agenda Approval

- Alison Hutson brought the meeting to order and introductions were made. The agenda was approved with the addition of updates from the Genetics & Propagation meeting.

Approve July 19th 2011 Meeting Minutes

- The July 19th 2011 ScW meeting notes were approved for finalization with a few clarifications.

Decision: The July 19th 2011 ScW meeting notes were approved for finalization with a few clarifications.

Action Item Review

- ✓ Additional site recommendations or feedback on the mesohabitat mapping project should be emailed to Mick Porter no later than Friday, July 22nd. – *unknown status*;
 - Mick has been out of the office so the status of this action is unknown. This action will be carried over until next month.
- ✓ Stacey Kopitsch will electronically distribute the list of upcoming and future ScW due dates to all ScW members. – *complete*;
- ✓ Stacey Kopitsch will resend the Database Management System (DBMS) pilot training email to ScW members. – *complete*;
- ✓ Yvette Paroz will determine when the last extension on the existing genetic grant will absolutely expire and if it is possible to extend the project another year in order for the genetic peer review to be completed and inform the new contract/grant. – *complete*;
 - The contract is up in 2012. A new scope of work will need to be written soon.
- ✓ Stacey Kopitsch will combine the last questions on the genetics program peer review list and will incorporate all recommended changes; she will distribute the revised questions to ScW members for additional comment/feedback. – *complete*;
- ✓ Additional comments/feedback on the genetics program peer review questions are due to Stacey Kopitsch by 9:00am on Friday, July 22nd. – *complete*;
- ✓ ScW members will discuss the work group's recommendation to *not* include the effects of augmentation on RGSM genetics questions in the genetics program peer review with their CC representatives. Justifications include: (1) they are not appropriate with the program-level peer review; (2) members believe that many of those questions have already been answered; (3) those questions could be informed, in some manner, through the questions that ScW members developed without the review panel being “steered” or “distracted.” – *complete*;
 - It was shared that Megan Osborne and Tom Turner have announced that they will be submitting paper to *Evolutionary Applications*. This will be a collation of all of their work from 1999 to today into a single paper. Megan has shared her opinion that most of the *effects of augmentation on genetics* questions had already been addressed and hopefully this newest “combination” paper would help to lay the issue to rest.

- The new Osborne-Turner paper may inform the genetics peer review but it doesn't impact the actual genetic peer review scope.
 - The population estimation and population monitoring peer review is just now getting underway. Attendees briefly discussed that the genetics peer review probably won't happen until 2012 even though it is funded with FY11 money.

Action: Yvette Paroz will check on the expected timing of the implementation of the genetics peer review.

- ✓ 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. – *complete*;
 - Feedback will be shared after Gina Della Russo's presentation later in this meeting.
- ✓ Yvette Paroz will coordinate with Stacey Kopitsch and will determine status/updates on the recent reports; she will report back at the August meeting. – *complete*;
 - The comments were given to the contractor(s) and their modified reports have been received (age/growth and pop monitoring). Yvette needs to complete a final check for completion and then the reports will be finalized and distributed. It is assumed the reports will be available within the next 10 days or so.
- ✓ Volunteers are requested to draft a SOW for the Sexing of Age/Growth Specimens project, which is needed by the Contracting Officer by COB this Friday, July 22nd. – *complete*;
 - This action was completed and submitted to Jericho Lewis.
- ✓ Mickey Porter will draft language on the techniques to be used for this project and email to Rick Billings and Stacey Kopitsch. – *complete*;
- ✓ Rick Billings and Stacey Kopitsch will fill in the standard SOW language and submit to the ScW and Contracting Officer by COB Friday, July 22nd. – *complete*;

Outstanding and Continued Actions

- 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 21st meeting*)
 - In a brief update, it was shared that the PVA group has not met since May 2011. It is unknown when they will meet again. The RAMAS model bid just closed so the next step will be proposal review and selection.
 - This action will be addressed when the PVA group begins meeting again.
- ~~Peter Wilkinson will ask NMED's new Water Quality Bureau Chief to provide a fish biologist. (*continued from May 2011*) – *unknown status; ongoing*;~~
 - It was shared that Peter has been out for a while for a personal health reason. Attendees agreed to omit this action from the list.
- ~~Peter Wilkinson will send augmentation articles from the west coast to all members. Article on salmon related to genetics work. (*continued from May 2011*) – *unknown status; on going*;~~
 - Although Alison volunteered to pull together the augmentation articles, members agreed this action could be omitted from the list at this time.
- ✓ Peter and Mickey volunteered to write the scope of work for adding sexing information to the Age and Growth study and get it on the June CC meeting agenda. (*continued from April 2011*) – *complete*;

Updates on Sexing of Age/Growth Specimen SOW

- The revised scope for the Sexing of Age/Growth Specimens was submitted to Jericho Lewis. There are funds this year for this project. The ScW has finished all their responsibilities with this project at this time and hopefully the work group will be kept informed and involved.

Program update

- *EC update*
 - The next EC meeting is scheduled for this Thursday (August 19th). In addition to usual EC business, the agenda includes a presentation on a path forward to a recovery program and a decision item on a presentation from EPA on their water-shed wide pilot water quality project (web meeting or a personal presentation). Reclamation's Biological Assessment will be available after presented to the EC on September 15th.
- *CC update*
 - The CC is scheduled to meet on September 7th.
- *Adaptive Management Update*
 - Draft Version 1 of the AM Plan was distributed Program wide. Consolidated agency comments were due to Yvette McKenna by August 10th but that deadline was pushed back until Friday, August 19th.
- *Genetics & Propagation*
 - In a brief report of the Genetics & Propagation meeting it was shared that between 250,000 and 300,000 fish will need to be released to the Middle Rio Grande this year based on the population monitoring numbers.
 - Currently, there is about 450,000 minnow available from all the facilities combined (~75,000 from the BioPark; ~125,000 for the MRG from Dexter; ~250,000 for Big Bend from Dexter; and ~10,000 from the Los Lunas Minnow Refugium).
 - After being tagged, the fish will be put back into the pools for about 2 weeks to help reduce the stressors. This was a very successful process last year (i.e., only lost 10 fish out of 28,000 tagged).
 - It was agreed that that a preemptive salvage operation would not be implemented (yet) this year.
 - The BioPark did a press release on the success with egg capture and captive spawning and praised the coordination of multiple agencies. The release can be found on the City's website.
 - There is no documented minnow kills resulting from the recent fires. There have been other instances of fish kills (red shiner and carp). This begs the question whether or not the minnow are actually killed or are they just so small that they are not noticed.
 - The City has been sending fire patrols onto the river about 3 times per week; they have not reported any fish kills either.

CC Requests

- *The CC requests that the ScW take the lead on synthesis of data/literature and use the ISC's submittal for the 5-year minnow review and the existing LTP categories to develop a plan for the synthesis of literature/data.*
 - ScW members have discussed the synthesis task in previous meetings. The difference with this request is the specific instruction to use the 5-year minnow review and LTP categories. There are 2 options: (1) hire a contractor to complete the work or (2) ScW members take the lead and complete the work themselves.

- Attendees pointed out that in previous discussions, the group recommended not starting the synthesis task until the Program's DBMS was online and available. It is understood that the DBMS will not be a synthesis of the information but it is going to be the central document and literature repository which will make the synthesis task easier.
 - The Program website contains a lot of information (albeit not easy to navigate) and the DBMS will be coming online soon. The DBMS should have reports, raw data, documents, and any and all Program work. There will even be links to other websites and published works. References to literature could be cited even if copy rights forbid replication.
 - Attendees then briefly discussed forming small subgroups to address subsets of the LTP category activities or to develop a framework for addressing each category – Themes? Contradictions? Controversies?
 - Regarding the work group members completing the task themselves, attendees were reminded that during the last discussion it was estimated that this task would take 2+ years to complete. It was also pointed out that only 6 to 7 signatory agencies are regularly represented during the ScW meetings – these few individuals are the same people who volunteer for and complete all of the work for the group (in addition to their regular jobs). Representatives usually only have 4 to 5 hours per month that they can volunteer.
 - It is assumed that 99% of the literature and documentation should be included between the 5-year review, recovery plans, and the 2 BAs.
 - A brief history of this task was shared. The San Acacia Diversion Dam (SADD) Fish Passage peer review panel called the lack of synthesized data “appalling.” There was not a central place where they could get a history of the Program and the existing knowledge base. They had to piece things together from multiple sources.
- Attendees then asked for clarification about what exactly is meant by “synthesis?”
 - One opinion is that a synthesis of data will require members to read everything available and reformat the information into an easier to read (few pages) synopsis that includes the topic highlights, controversies, contradictions, identification of other areas that need additional research, etc.
 - The CC thought that ScW was the appropriate group to lead this effort in order to have ownership of the scientific information coming into and being used by the Program.
 - Some members shared the concern that this task would likely turn into “a quagmire” and source of arguments.
 - Some members expressed concerns that the task is too huge for ScW to take on at this time. However, there are also concerns and foreseen problems that would be encountered if a contractor was hired to do the work (ex. lack of background/Program knowledge and project intent possibly resulting in a poor product). One benefit to hiring a contractor is the “impartial” stance of a 3rd party.
 - It was shared that some CC members wanted to see the data synthesis task completed before the LTP was finalized – this means within several months at the most.
 - Members discussed that even with an understanding of the category (field) and familiarity with much of the literature, synthesis would still take a lot of time. Collating all the different sides and organizing all the work is huge.
 - Some attendees shared the opinion that the work has already been done to some extent – ScW members could read the BAs and if there was agreement with the Corps' and Reclamation's view point(s), those documents could be used as the reference documents for future ScW work.

- The people who wrote the BAs should have already read and done some synthesis of the literature. And while the BO is the guiding document, the Program does not necessarily have to agree with the science (or context) included.
- Members agreed that the task is needed and doable (with enough time and volunteers) but it is still very daunting. Breaking the categories down might make it more manageable.
 - Concern was shared that even if ScW is able to reach consensus on topics, it still has to be vetted through the other work groups and then the CC and EC. Each topic is likely to be “debated” at each Program level. In an example of work group projects and priorities, some members shared their opinion that their time is often wasted because things get dismissed, shelved, or redone at the other Program levels.
 - Some attendees shared that they would be more likely to take on the task if there was a commitment from the CC to be directly involved (participate) in order to avoid having to redo work at each step.
- It was suggested that ScW could take the lead on deciding *how* the synthesis work could be approached.
 - The purpose is to know a state of the existing science – which does include the Program’s work.
 - One approach could be to develop one paragraph summaries of papers that included work group responses. One concern with this approach is that is it different when compiling information from a specific “angle” or viewpoint versus trying to do a general synthesis.
 - The time concern was reiterated: this task cannot be completed in any short period of time. In order to be done right, it will take time. If the work group agrees to move forward with this task, each monthly meeting agenda could be dedicated to one specific category. However, members would still have preparation work (reading, drafting initial summaries, etc.) prior to meeting. And there still needs to be a joint effort with the other work groups.
 - Science issues are very difficult to get consensus on.
 - Synthesis of information/data is needed before the Program can make real progress or move toward adaptive management. We need to understand where we are now in order to make informed decisions on where to go next.
 - This is a huge investment of time and there are not that many regular ScW attendees. Those who do attend also have their regular work. One member may have extensive knowledge of Topic A but another person only has fleeting knowledge. The “expert” will probably have to cover the bulk of the work.
 - During previous discussions, the work group had decided to revisit the synthesis task after the DBMS is available – since the database would be a logical starting place and would theoretically make the effort easier (even if it is not fully populated yet).
 - The database will allow for query by key words as well as other methods of search and organizing information by topic.
 - It was suggested that the work group pick a narrow category/topic and use it as a pilot exercise to establish a framework for how the synthesis should proceed and

what the outcomes might look like and define the specific questions that need to be asked throughout. This exercise could inform the rest of the process.

- Work group members then brainstormed potential categories that could be undertaken as a pilot synthesis exercise. It was agreed that Water Quality Management might be a good topic to experiment with.
 - The Program may not have a huge influence or authority on water quality, but the synthesis might highlight any issues that are affecting the species. There is already a lot of synthesis on this topic so it should be relatively easy to do.
 - The work group might be able to discover basic water quality parameters that need to be collected throughout the year (and not just looked at intensely for certain months). Where, when, how, how often is water quality information being collected? How is it used regularly?

Recommendation: ScW members recommended that maintenance of the DBMS include the goal of having the structure/framework needed to address the continuing synthesis of data and information and have the appropriate oversight included.

Action: Grace Haggerty will distribute the Tetra Tech Water Quality Management data synthesis document to ScW members.

Action: Stacey Kopitsch will send out the water quality references found in the "Evaluate WQ in the MRG" statement of work to ScW members.

Action: 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.

- *The CC requests that the ScW and HRW work to modify the ScW activity Better understand fish movement (RGSM longitudinal movement) to include research of minnow movement below San Acacia diversion dam and other diversion structures during the critical low flow summer months.*
 - This original task was again generated from the SADD Fish Passage peer review panel recommendations. The mentioned activity was one ScW recommended for the LTP and could be used to address the fish passage peer review panel recommendation.
 - **Question:** Is there anyway to use information from the work being done in Big Bend? For example, minnows being observed 17 miles upstream and 75 miles downstream from the stocking sites?
 - **Response:** Possibly. But remember that Big Bend doesn't dry like the Middle Rio Grand (MRG). The problem is that multiple drying locations can trap the fish but if the drying is gradual then the fish will be able to keep moving until they reach a blockage or place that prevents further movement. The disruptive drying pattern is a big concern.
 - It was shared that the Los Lunas Silvery Minnow refugium has observed that the day after being introduced to the refugium 5 mm fish were distributed everywhere. And last year the 20 mm were observed easily going over the sand bars.
 - The work group should add possible research to the activity to address if fish would move through the diversion structure and to include critical low flow periods.
 - There could also be field work to determine what the fish are attracted to; we need to have the data to support the facility observations. This activity could help determine how to move forward (1) to satisfy the BO on fish passage and 2) to determine the need for fish passage. We need to make sure a fish passage is going to work.

Action: Stacey Kopitsch will distribute the LTP activity summary "better understand fish movement (RGSM longitudinal movement)."

Updates on Leaf Beetle in MRG - HRW projects (Gina Dello Russo)

- Gina Dello Russo shared that the Habitat Restoration (HR) work group is in the process of developing a series of tools to analyze (1) existing flycatcher habitat quality; (2) the river dynamics that support successional flycatcher habitat quality; and (3) how the leaf beetle's presence in the system might affect existing territories and future restoration work (i.e., prioritizing areas for restoration work). HR would like to work with ScW and SWM to develop these tools and strategies for consolidating efforts. The purpose is to determine where we are now and how to best prepare for what is coming in the future. Suggestions for strategies to consolidating efforts and opinions were welcomed.
 - **Question:** What kind of monitoring is being done or could be done on the beetle?
 - **Response:** Several agencies and entities are conducting monitoring on their own. In fact, the Tamarisk Coalition will be presenting to HR (and maybe the EC) in terms of the monitoring protocol they use on the Colorado River and their analysis and decision making process. The TX/NM/MEX Salt Cedar Biological Control Consortium is scheduled for October 4th and 5th in Alpine, Texas.
 - The Tamarisk Coalition presentation is for informational purposes only. When/if the Program gets to the point that we are ready to do our own monitoring work, there are several groups who might be interested in assisting.
 - In order to schedule a joint meeting, attendees then discussed possible dates for the Tamarisk Coalition presentation. The best dates for the Coalition were September 13th, 14th, or 15th, and September 21st, 22nd, or 23rd. The next HR meeting is scheduled for September 20th, but that date did not work well for the Coalition members.
 - Attendees agreed to target September 22nd for the Tamarisk Coalition presentation to a joint work group session. September 20th, during the regular HR meeting, is the preferred alternate date.
 - There is the need to evaluate or determine the quality of mixed stands in preparation for beetle presence. There are also fire considerations.
 - Attendees discussed the process of evaluating LIDAR information to get a quantitative view of the structure of the riparian habitat. There are ways of using LIDAR information to tease out the structure of the forests. This might be one indicator of the value of the habitat along with overbank flow potential, distance to water, etc.
 - The Arkansas watershed invasive plant partnership (or ARKWIPP) has been discussing secondary invasives that establish after salt cedar removal.
 - The Program can request certain topics for the Tamarisk Coalition to present on. Suggested agenda topics included: (1) monitoring protocol; (2) decision making support; and (3) technical support recommended.
 - **Question:** Is there any comprehensive monitoring occurring with the beetle?
 - **Response:** Yes, in terms of overall dispersal. Agencies and states are tracking the movement. However, there is nothing comprehensive for the MRG because the occurrence is so new. The Pueblo of Santa Ana is aware of the beetle presence and very interested in determining possible impacts.
 - The Tamarisk Coalition website might provide information on tracking or monitoring.
 - The biological control was a USDA action but the state of Colorado has an insectarium (Palisade Insectary) that is actively developing bio control agents for that state.
 - Passive restoration techniques could be effective in the MRG if the sites were chosen well; the tendency for secondary invasive makes the first 5 years of oversight very critical.

- The monitoring plan team (MPT) will be out in the field at the end of this month and they have been discussing adding beetle monitoring to their work.
- Attendees then discussed adding salt cedar beetle activities to the LTP and the possibility of adding beetle monitoring protocol into the existing flycatcher monitoring work.
 - **Question:** Is anyone from the NMSU in entomology department (or an extension entomologist) involved with beetle work already:
 - **Response:** UNM entomologists are working with some of the pueblos - at the pueblo's request.
 - Universities might have been looking at the effects/impacts of the beetle for years now. This could be research that we would want to tap into.
 - There was a beetle release south of Las Cruces, so it is possible that NMSU has research.
 - Part of the analysis will have to be determining which beetle species we are most effective with/on. The beetles are starting to adapt to the local conditions.
 - Feedback from the Tamarisk Coalition and the Salt Cedar Biological Control Consortium could inform potential activities for the LTP.

Action: 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?

Action: Dana Price will help Gina Dello Russo develop an agenda and requested topics for the Tamarisk Coalition presentation.

Action: ScW members will discuss possible attendance to the TX/NM/MEX Salt Cedar Biological Control Consortium to be held October 4th and 5th in Alpine TX with their supervisors.

Next Meetings and Agenda Topics

- The ISC Spawning Study presentation and SWCA presentation on Gear Evaluation study will be scheduled for the September meeting.
- There is a possible scheduling conflict with the October meeting and tagging and Big Bend stocking efforts. Members will consider rescheduling or postponing this meeting. A briefing on the TX/NM/MEX Salt Cedar Biological Control Consortium held October 4th and 5th will be added to the October agenda.
- Population Monitoring Efforts updates will be added to the November agenda.
- A joint HR/ScW/SWM Tamarisk Coalition Presentation will be schedule for September 20th or September 22nd.

USGS Habitat Mapping presentation in joint session with MPT and HRW (11:30 to 12:30)

- The USGS mesohabitat presentation was captured as separate notes.

Next ScW Meeting: September 20th, 2011 from 9:00 am to 11:30 am at Interstate Stream Commission

- Tentative Agenda Items include: (1) ISC Spawning Study presentation - Alison Hutson; (2) Decision item: how to proceed with Water Quality Management "trial" synthesis exercise; (3) SWCA presentation on Gear Evaluation study; (4) joint HR/ScW/SWM Tamarisk Coalition Presentation on Salt Cedar Beetle
- October: possible overlap of meeting with tagging or Big Bend stocking efforts – consider rescheduling or postponing; (1) briefing on the TX/NM/MEX Salt Cedar Biological Control Consortium held October 4th and 5th; (2) salt cedar beetle LTP activity development;
- November Tentative Agenda Items: (1) Population Monitoring Efforts update; (2)

Joint HR/ScW/SWM Tamarisk Coalition Presentation: September 20th or September 22nd

**Science Work Group
16 August 2011 Meeting Attendees**

	NAME	AFFILIATION	PHONE NUMBER	EMAIL ADDRESS	Primary, Alternate, Other
1	Stacey Kopitsch	FWS	761-4737	stacey_kopitsch@FWS.gov	O
2	Brooke Wyman	MRGCD/CC co-chair	247-0234	brooke@mrgcd.us	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	Gina Dello Russo	FWS	575-835-1828	gina_dellorusso@fws.gov	O
6	Dana Price	USACE	342-3378	dana.m.price@usace.army.mil	A
7	Grace Haggerty	ISC	383-4042	grace.haggerty@state.nm.us	O
8	Mark Brennan	FWS	761-4756	mark_brennan@fws.gov	O
9	Rebecca Houtman	COA	248-8514	rhoutman@cabq.gov	P
10	Yvette Paroz	Reclamation	462-3581	yparoz@usbr.gov	A
11	Marta Wood	Tetra Tech	259-6098	marta.wood@tetrattech.com	O