



September 23, 2014

Mr. Adam Zerrenner  
United States Fish and Wildlife Services  
Austin Ecological Services Field Office  
107011 Burnet Road, Suite 200  
Austin, Texas 78758

RE: Clarification of Condition M of the Incidental Take Permit #TE-63663A-0

On behalf of the Edwards Aquifer Authority, the City of New Braunfels, the City of San Marcos, the San Antonio Water System, and Texas State University, (the Permittees), I am seeking a Clarification on our interpretation of Condition M in the Incidental Take Permit (ITP) #TE-63663A-0. The Permittees do not wish to change the substance of Condition M, but wish to seek clarification on Condition M, paragraphs 1.b and 2.b, in order for the Permittees to implement habitat restoration and riparian restoration activities during reduced flows while maintaining compliance with the conditions in the ITP.

In general, the Permittees seek your response on their interpretation of Condition M as it applies to habitat mitigation and restoration activities as identified in Chapter 5 of the Edwards Aquifer Habitat Conservation Plan (EAHCP). Currently, the Permittees have suspended implementing all habitat mitigation and restoration activities. Exhibit 1 includes the details of the Permittees' interpretation of Condition M.

To ensure transparency in the implementation of the EAHCP, the Implementing Committee<sup>1</sup> provided the public the opportunity to comment on the clarification of Condition M during its June 19, 2014, August 21, 2014 and September 18, 2014 meetings. The agendas from these meetings are included as Exhibits 2, 3 and 4 and the minutes from the meetings are included as Exhibits 5, 6 and 7.

The Implementing Committee also requested input to the Clarification from the EAHCP Science Committee to help clarify the issues with Condition M. At their August 6, 2014 meeting, the Science Committee discussed and considered the intent of Condition M and endorsed the need for a clarification of Condition M. Additionally, the Science Committee recommended what and how

---

<sup>1</sup> The Implementing Committee is comprised of the five Permittees as voting members and the Guadalupe-Blanco River Authority as a non-voting member.

specific habitat mitigation and restoration activities should be continued during reduced flows, while maintaining compliance with Condition M. I have included all of the Science Committee's input in Exhibit 1. The agenda and minutes from the August 6, 2014 Science Committee meeting are included as Exhibits 8 and 9.

Finally, the Implementing Committee acknowledges the numerous conversations and meetings the U.S. Fish and Wildlife Service (USFWS) had with the Permittees where Condition M was discussed. The Committee would also like to thank Mr. Kevin Connally for his attendance at their August 21, 2014 meeting.

The reduced springflows in both the Comal and San Marcos systems for several weeks calls attention to the need for clarifying Condition M of the ITP. With this said, the Implementing Committee and I believe this letter and its exhibits clarifies our interpretation of Condition M as it relates to the implementation of habitat mitigation and restoration activities during reduced flows. We appreciate your consideration and response on this issue.

Respectfully,

Nathan Pence  
Program Manager  
Edwards Aquifer Habitat Conservation Plan

cc: EAHCP Implementing Committee

Exhibit 1: Clarification of ITP# TE-63663A-0 Condition M

The Permittees understand the USFWS’s need to include reasonable and prudent measures, such as Condition M, to minimize the incidental take of the covered species. However, based on our numerous discussions with USFWS biologists who advised us that the intent of Condition M was to ensure the Covered Species were protected especially during reduced flows, the Permittees offer the following Clarification of Condition M that specifies which habitat mitigation and restoration activities should not be suspended, but should continue at reduced flows in order to protect the Covered Species.

The Permittees interpret that the following specific habitat mitigation and restoration activities will either not disturb the substrate, water quality, plants, and animals or invertebrates, or will reduce the amount of disturbance when it is unavoidable to the substrate, water quality, plants, and animals or invertebrates. The tables below separate the Clarification by each Springs system.

Comal Springs System

For the Comal Springs system, the Permittees provide the following details on our interpretation of Condition M, which include those habitat mitigation and restoration activities, specifically designed to benefit the Covered Species during reduced flows and that may continue at all flows.

<b>Comal Springs Conservation Measure</b>	<b>Interpretation</b>	<b>Specific activities that may continue at all flows.</b>
Management of river flow between old and new channels of the Comal River (Section 5.2.1)	The actual management of the flow that is split between the New Channel and the Old Channel is designed to minimize and mitigate the impacts of incidental take in reduced flow conditions.	Manipulation of gates in accordance with the City of New Braunfels flow-split system standard operating procedures to be in accordance with EAHCP Table 5.3.
Restoration and maintenance of native aquatic vegetation (Section 5.2.2)	Maintenance of native aquatic vegetation includes gardening to increase preferred fountain darter habitat during reduced flow conditions.	Gardening, such as removal of non-native vegetation, in previously restored areas such as in the Old Channel and Landa Lake. Extra precautions, such as minimizing the number of gardeners in water, working from downstream to upstream and not tilling the substrate to remove vegetation will be employed to reduce disturbance of sediment.

<b>Comal Springs Conservation Measure</b>	<b>Interpretation</b>	<b>Specific activities that may continue at all flows.</b>
Management of public recreational use (Section 5.2.3)	Continuing management of public recreation areas assures minimal impact and disturbance from recreational users.	Printing and distribution of educational materials, signage, and workshops.
Removal of decaying vegetation and dissolved oxygen management (Section 5.2.4)	The removal of the vegetative mats and the implementation of a dissolved oxygen management program helps to maintain healthy, preferred fountain darter habitat during reduced flows.	Gardening, such as the removal of decaying vegetation by working from a flat-bottom boat or kayak when practical, minimizing the number of workers in the water and working upstream to downstream to limit increased disturbance, such as pushing floating vegetative mats downstream. When Comal springflows drop below 80 cfs, the City of New Braunfels will deploy artificial aerators.
Management of harmful non-native animal species (Sections 5.2.5 and 5.2.9)	Low flow conditions reduce the area that non-native fish have, making it easier to spear or net them. Greater numbers will be removed from the system at a time when they are most likely to cause damage.	Spear and bow fishing of non-native animals from bank, flat-bottom boat, or barge.
Prohibition of hazardous material transport (Section 5.2.7)	Not conducted in the aquatic ecosystem.	No further detail needed.
Live bait prohibition (Section 5.2.9)	Not conducted in the aquatic ecosystem.	No further detail needed.
Litter collection and floating vegetation management (Section 5.2.10)	The removal of litter and removal of floating vegetation management has a positive effect on the system by helping to maintain habitat with a very limited impact on the substrate.	Removal of floating vegetation and litter by working from a barge, flat-bottom boat or kayak when practical, with a minimum number of workers in the water that limits increased disturbance, such as pushing floating vegetative mats downstream. All areas for maintenance will be represented in vegetation maps.

<b>Comal Springs Conservation Measure</b>	<b>Interpretation</b>	<b>Specific activities that may continue at all flows.</b>
Management of golf course diversions and operations (Section 5.2.11)	Continued planning and management of the Golf Course assures minimal impact or disturbance of the aquatic ecosystem.	No further detail needed.
Management of household hazardous wastes (Section 5.7.5)	Management of household, hazardous wastes is a terrestrial activity.	No further detail needed.

San Marcos Springs System

For the San Marcos Springs system, the Permittees provide the following details on our interpretation of Condition M, which include those habitat mitigation and restoration activities, specifically designed to benefit the Covered Species during reduced flows and that may continue at all flows.

<b>San Marcos Springs Conservation Measure</b>	<b>Interpretation</b>	<b>Specific activities that may continue at all flows.</b>
Enhancement and restoration of Texas Wild Rice (Sections 5.3.1 and 5.4.1)	Suspending gardening and maintenance of restored areas will allow non-native plants to regrow, negating the work already done.	Gardening, such as the removal of non-native plant regrowth, in previously restored areas, Sewell and City Park, in a manner that limits increased disturbance.
Management of public recreational use (Sections 5.3.2 and 5.4.2)	Continuing management of public recreation areas assures minimal impact and disturbance from recreational users.	University students are trained to assist the public, increase the awareness of the issues.
Management of aquatic vegetation and litter below Sewell Park (Section 5.3.3 and 5.4.3)	The removal of litter and removal of floating vegetation management has a positive effect on the system by helping to maintain habitat with a very limited impact on the substrate.	Removal of floating vegetation and litter by working from a barge, flat-bottom boat or kayak when practical, with a minimum number of workers in the water to limit increased disturbance, such as pushing floating vegetative mats downstream. All areas for maintenance will be represented on vegetation maps.
Prohibition of hazardous materials transport (Section 5.3.4)	Management of household, hazardous wastes is a terrestrial activity	No further detail needed.

<b>San Marcos Springs Conservation Measure</b>	<b>Interpretation</b>	<b>Specific activities that may continue at all flows.</b>
Reduction of non-native species introduction (Section 5.3.5 and 5.4.11)	Not conducted in the aquatic ecosystem.	No further detail needed.
Management of non-native plant species (Sections 5.3.8 and 5.4.12)	Removal of non-native plants is more efficient during low flows. Suspending this activity will allow non-native plants to regrow, negating work already done.	Gardening, such as removing one-meter sections adjacent to restored Texas Wild Rice stands from Spring Lake to Ramon Lucio park. All areas for maintenance will be represented on vegetation maps.
Management of harmful non-native and predator species (Sections 5.3.9 and 5.4.13)	Low flow conditions reduce the area that non-native fish have, making it easier to spear or net them. Greater numbers will be removed from the system at a time when they are most likely to cause damage.	Bow fishing of non-native animals from shore or flat-bottom boats. Spear fishing will be done in the water.
Research programs in Spring Lake (Section 5.4.8)	Continuing review and education of researchers to ensure there is no impact on the Covered Species.	No further detail needed.
Management of golf course and grounds (Section 5.4.9)	Continued planning and management of the Golf Course assures minimal impact or disturbance of the aquatic ecosystem.	No further detail needed.
State Scientific Areas (Section 5.6.1)	Continuing management of public recreation assures minimal impact or disturbance of the aquatic system at reduced flows.	Maintenance and installation of signage and barriers, by standing from a boat.
Implementation of septic system registration and permitting program (Section 5.7.3)	Not conducted in the aquatic ecosystem.	No further detail needed.
Management of potentially contaminated runoff (Section 5.7.4)	Construction of two sedimentation ponds to help reduce contaminated materials will not disturb covered species habitat.	No further detail needed.
Management of household hazardous wastes (Section 5.7.5)	Management of household, hazardous wastes is a terrestrial activity.	No further detail needed.



## NOTICE OF OPEN MEETING

Available at [eahcp.org](http://eahcp.org)

As required by Section 7.7.4 of the Funding and Management Agreement (FMA), an interlocal agreement made pursuant to Texas Government Code Chapter 791 by and among the Edwards Aquifer Authority (EAA), the City of New Braunfels (New Braunfels), the City of San Marcos (San Marcos), the City of San Antonio acting by and through its San Antonio Water System (SAWS), Texas State University (TSU), and the Guadalupe-Blanco River Authority (GBRA), a meeting of the **Implementing Committee** of the **Edwards Aquifer Habitat Conservation Plan Program** is scheduled for **Thursday, June 19, 2014, 9:00 a.m., at the New Braunfels Civic Center, 375 S. Castell Ave.**

Members of this committee include: Roland Ruiz (EAA), Steve Ramsey (New Braunfels), Tom Taggart (San Marcos), Chuck Ahrens (SAWS), Andrew Sansom (TSU), and Todd Votteler (GBRA). At this meeting, the following business may be considered and recommended for committee action:

1. Call to order--Establish that all Committee members are present or represented- 9:00 a.m.
2. Public Comment.
3. Approval of minutes from the May 15, 2014 Implementing Committee meeting (Attachment 1).
4. Receive report from the Program Manager on general topics related to the implementation of the Habitat Conservation Plan and operation of the Implementing Committee.
  - River and Index Well Levels.
  - May Expense Report (Attachment 2)
  - Update on City of New Braunfels Flow Split Infrastructure Installation.
  - Applied Research RFP Process.
  - ASR update (Attachment 3).
5. Staff Presentation: VISPO update (Attachment 4).

Purpose: To provide the Implementing Committee more details about current enrollment.  
Action: None required.
6. Consider approval of the 2014 Drought Outreach Press Packet (Attachment 5)

Purpose: To consider approval of the provided Press Packet for outreach use.  
Action: To approve the suggested Press Packet as provided by the 2014 Drought Outreach Work Group.
7. Staff Presentation: ITP Provision M  
Purpose: To provide the Implementing Committee members the latest details pertaining to Provision M.

Action: Give directive for moving forward.

8. Consider approval of the New Braunfels Low Impact Development Program.  
Purpose: To provide the Implementing Committee the opportunity to make comments and possibly approve the City of New Braunfels' LID program plans as previously presented and discussed.  
Action: To approve the City of New Braunfels' implementation of their LID program as proposed.
9. Consider approval of all 2015 EAHCP Work Plans (Attachment 6-8).  
Purpose: To consider approval of the presented Work Plans for 2015.  
Action: To approve the 2015 EAHCP Work Plans.

**Break**

10. Consider and take possible action on the creation of and charge for a Science Committee Member Nomination Work Group (Attachment 9).  
Purpose: To construct a work group to explore candidates to fill the vacancy in the Science Committee.  
Action: To approve a membership and charge for the workgroup.
11. SWIFT Money- Region L (Attachment 10).  
Purpose: To provide further information about the possibility of acquiring state funds for future HCP projects.  
Action: None required.
12. Probability analysis of future recharge.  
Purpose: To provide the Implementing Committee with the requested information on potential recharge estimates.  
Action: None required
13. Presentation of legal implications of 7.1 and budget forecast  
Purpose: To present to the Implementing Committee information pertaining to Table 7.1 of the HCP.  
Action: None required.
14. Consider future meetings, dates, locations, and agendas.
  - The next Implementing Committee Meeting is scheduled for July 17<sup>th</sup> at the Edwards Aquifer Authority.
    - Information distribution process to Implementing Committee and Stakeholder Committee.
15. Questions from the public.
16. Adjourn.



## NOTICE OF OPEN MEETING

Available at [eahcp.org](http://eahcp.org)

As required by Section 7.7.4 of the Funding and Management Agreement (FMA), an interlocal agreement made pursuant to Texas Government Code Chapter 791 by and among the Edwards Aquifer Authority (EAA), the City of New Braunfels (New Braunfels), the City of San Marcos (San Marcos), the City of San Antonio acting by and through its San Antonio Water System (SAWS), Texas State University, and the Guadalupe-Blanco River Authority (GBRA), a meeting of the **Implementing Committee** of the **Edwards Aquifer Habitat Conservation Plan Program** is scheduled for **Thursday, August 21, 2014, 1:00 p.m., at the New Braunfels Civic Center, 375 S. Castell Ave, New Braunfels, TX.**

Members of this committee include: Roland Ruiz (EAA), Steve Ramsey (New Braunfels), Tom Taggart (San Marcos), Chuck Ahrens (SAWS), Andrew Sansom (Texas State University), and Todd Votteler (GBRA). At this meeting, the following business may be considered and recommended for committee action:

17. Call to order--Establish that all Committee members are present or represented- 1:00 a.m.

18. Public Comment.

19. Approval of minutes from the June 19, 2014 Implementing Committee meeting (Attachment 1).

20. Receive report from the Program Manager on general topics related to the implementation of the Habitat Conservation Plan and operation of the Implementing Committee.

- River and Index Well Levels
- J-17 Forecast (Attachment 2)
- ASR and VISPO update (Attachment 3 &4)
- June and July Expense Report (Attachment 5 & 6)
- HCP Reserve Projection (Attachment 7)
- Refugia research update
- Tour of spring systems

21. Presentation and discussion pertaining to Provision M of the Incidental Take Permit (ITP) by USFWS.

Purpose: To provide the Implementing Committee the rationale for current springflow numbers found in the provision and specific intent used in protecting the species.

Action: None required

22. Discussion and possible action pertaining to Provision M.

Purpose: To allow the Implementing Committee the ability to discuss and provide direction to the Program Manager regarding the clarification of Provision M for the Comal and San Marcos Spring systems' habitat restoration and riparian restoration activities.

Action: Agree to next steps pertaining to Provision M.

23. Presentation of the Stakeholder Committee ASR/VISPO Work Group recommendations and possible action to approve suite of recommendations provided to be considered and implemented by the EAA (Attachment 8).

Purpose: To provide the Implementing Committee an opportunity to comment on suite of recommendations compiled and approved by the Stakeholder Work Group.

Action: To consider approval of suite of recommendations for EAA and implementation.

24. Presentation from the Science Committee Nomination Work Group for possible action to approve the recommended candidate for the Science Committee (Attachment 9).

Purpose: To present the Implementing Committee with the Science Committee Nomination Work Group Report.

Action: To consider approval of the recommended candidate for the Ecological Modeling position on the Science Committee.

25. Consider future meetings, dates, locations, and agendas.

- The next Implementing Committee Meeting is scheduled for September 18<sup>th</sup> at the Edwards Aquifer Authority.
  - Tour of systems in Fall
  - HCP Amendments
  - 2015 Meeting Dates

26. Questions from the public.

27. Adjourn.



## NOTICE OF OPEN MEETING

Available at [eahcp.org](http://eahcp.org)

As required by Section 7.7.4 of the Funding and Management Agreement (FMA), an interlocal agreement made pursuant to Texas Government Code Chapter 791 by and among the Edwards Aquifer Authority (EAA), the City of New Braunfels (New Braunfels), the City of San Marcos (San Marcos), the City of San Antonio acting by and through its San Antonio Water System (SAWS), Texas State University, and the Guadalupe-Blanco River Authority (GBRA), a meeting of the **Implementing Committee** of the **Edwards Aquifer Habitat Conservation Plan Program** is scheduled for **3:00 pm on Thursday, September 18, 2014 at the City of New Braunfels Landa Hause, 360 Aquatic Cir., New Braunfels, TX.**

Members of this committee include: Roland Ruiz (EAA), Steve Ramsey (New Braunfels), Tom Taggart (San Marcos), Chuck Ahrens (SAWS), Andrew Sansom (Texas State University), and Todd Votteler (GBRA). At this meeting, the following business may be considered and recommended for committee action:

1. Call to order--Establish that all Committee members are present or represented- 2:30 pm.
2. Public Comment.
3. Approval of minutes from the August 21, 2014 Implementing Committee meeting (Attachment 1).
4. Receive report from the Program Manager on general topics related to the implementation of the Habitat Conservation Plan and operation of the Implementing Committee.
  - ASR/VISPO Update (Attachment 2 & 3)
  - ASR/VISPO Work Group Implementation Update
  - Budget Update (Attachment 4)
  - Annual Report Process (Attachment 5)
  - Funding Application Submittal
  - Update Benefits of Edwards Aquifer Programs
5. Presentation of and possible approval authorizing the EAHCP Program Manager to submit a Clarification to Condition M of the Incidental Take Permit to the USFWS.
  - Purpose: To provide the Implementing Committee with a draft Clarification to Condition M to be considered for submission to the USFWS.
  - Action: To approve submission of the Clarification of Condition M.
6. Consider creation of a Regional Water Conservation Program (RWCP) Work Group, possible appointment of members and approval of draft Work Group Charge.

Purpose: To determine whether a Work Group is necessary to acquire more Edwards Water into the RWCP, who will be appointed to the Work Group, and agree on a charge.

Action: To consider creation of a RWCP Work Group, appointment of members, and approval of charge.

7. Discussion pertaining to the spring systems tour.

Purpose: To allow all committee members a chance to comment on specific aspects of the systems' condition and HCP projects currently underway.

Action: None required.

8. Consider future meetings, dates, locations, and agendas.

- The next Implementing Committee Meeting is scheduled for October 16<sup>th</sup> at the Edwards Aquifer Authority.

9. Questions from the public.

10. Adjourn.



## IMPLEMENTING COMMITTEE MEETING MINUTES

June 19, 2014

1. **Call to order--Establish that all Committee members are present or represented-** 9:10 a.m.  
In attendance were: Tom Taggart (Chair), City of San Marcos; Chuck Ahrens, San Antonio Water System (SAWS), Juan Guerra represented Texas State University for Andy Samson; Steve Ramsey, City of New Braunfels; Roland Ruiz, Edwards Aquifer Authority (EAA); and Todd Votteler, Guadalupe-Blanco River Authority.
2. **Public Comment.**  
No comment.
3. **Approval of minutes from the May 29, 2014 Implementing Committee meeting.**  
Chuck Ahrens requested removing the word "that" from item 8 on page 3. With that change, Chuck Ahrens motioned for approval of the May 29, 2014 minutes. Juan Guerra seconded. There were no objections.
4. **Receive report from the Program Manager on general topics related to the implementation of the Habitat Conservation Plan and operation of the Implementing Committee.**
  - **River and Index Well Levels.**  
Nathan Pence provided the Implementing Committee with current aquifer levels and springflows. The committee discussed the differences in current agricultural activities and also discussed the good condition of the habitat as reported in Bio-West's biological monitoring reports.
  - **May Expense Report.**  
No questions on the May budget.
  - **Update on City of New Braunfels Flow-Split Infrastructure Installation.**  
Nathan Pence gave a presentation to the committee about progress in New Braunfels' Flow-Split Management Project.
  - **Applied Research RFP Process.**  
EAA General Manager Roland Ruiz provided a presentation to the committee about the process for the 2015 Applied Research request for proposals (RFPs). Specifically, he stated that EAA decided not allow Science Committee members to propose in future research projects. Discussion followed.
  - **Stakeholder ASR/VISPO Work Group.**  
The first meeting of this Work Group was on June 17, 2014 where the Work Group approved their charge and schedule for future meetings.
  - **ASR update.**  
Julia Velez gave a presentation about current enrollment. The acquisition for 2014 leases has stopped.
5. **Staff Presentation: VISPO update.**  
Nathan Pence provided information about VISPO numbers and an update on how these numbers are represented in the monthly agenda update. Discussion followed.

**6. Consider approval of the 2014 Drought Outreach Press Packet.**

John Boggess with Boggess Communications presented the committee with an overview of the Drought Outreach Work Group's Press Packet. The Committee members commented on the clarity and utility of this press packet. Chuck Ahrens recommended removing the language regarding Provision M's waiver/variance. Roland Ruiz moved to approve with the changes recommended. Steve Ramsey seconded. There were no objections.

**7. Staff Presentation: ITP Provision M**

Nathan Pence presented a detailed explanation of the origins of Provision M from the Incidental Take Permit (ITP) and the issues and potential changes the Implementing Committee could propose.

A discussion followed on the rationale for last year's precedent of approving a waiver/variance request in 2013. There was a decision to request further documentation about the rationale for Provision M as well as request for the United States Fish and Wildlife Service (USFWS) to attend the next Implementing Committee meeting. Discussion followed. The Committee asked for a clear record of current and future conditions of the restoration projects and requested future communication with the USFWS include documentation of the communication.

Roland Ruiz proposed an option to simply add language to the current Provision to include a waiver/variance process. The Committee requested the Science Committee provide an opinion, supported by literature on the systems, on a rationale for a more realistic trigger. Nathan Pence listed the detailed steps for staff regarding Provision M clarification. Additionally, any endorsement or recommendation from the Science Committee on July 9<sup>th</sup> will be placed on the agenda to help define the steps for moving forward. Nathan Pence stated he will draft an email for Committee review requesting information needed from USFWS.

**8. Consider approval of the New Braunfels Low Impact Development Program.**

Zac Martin with the City of New Braunfels provided the Committee with some additional edits to the 2015 City of New Braunfels Work Plan concerning the New Braunfels Low Impact Development (LID) program. He stated discussions with SAWS provided more clarity about the details of the separation of the City's Municipal Separate Stormwater Sewer Systems (MS4) and LID programs. Chuck Ahrens moved for approval for the New Braunfels LID program. Roland Ruiz seconded. There were no objections.

**9. Consider approval of all 2015 EAHCP Work Plans.**

Alicia Reinmund-Martinez presented the process and timeline for approval of the 2015 Work Plans. The packet provided to the committee included the changes to the work plans previously presented. Nathan Pence provided additional detail on the specific comments received. Discussion followed.

Chuck Ahrens commented on the addition of quantifiable acre-foot goals to the Regional Water Conservation Program (RWCP) Work Plan. He added the focus of the RWCP should not include finding other sources of water but rather on using current sources more efficiently. Discussion followed.

Juan Guerra motioned for the approval of all EAHCP Work Plans with the condition the RWCP Work Plan be edited per recommendations from a subcommittee comprised of EAA and SAWS. Chuck Ahrens seconded. There were no objections.

**Break**

After the break Roland Ruiz and Chuck Ahrens asked the committee to reconsider the former motion and move to approve all Work Plans, including the RWCP with the following edits: strike

performance measure #7 and keep performance measure #8. Juan Guerra made a motion for final approval; Chuck Ahrens seconded the motion. There were no objections.

**10. Consider and take possible action on the creation of and charge for a Science Committee Member Nomination Work Group.**

Alicia Reinmund-Martinez provided information about the former Science Committee Appointment Work Group. She asked the Committee to consider adopting the former Work Group's charge and revise its membership in order to solicit recommendations and provide nominations for this year's Science Committee appointment. The Committee recommended replacing Patrick Shriver (SAWS) with John Waugh (SAWS) and replacing Myron Hess (National Wildlife Federation) with Tyson Broad (Sierra Club).

Tom Taggart motioned for approval of new membership and proposed charge. Steve Ramsey seconded the motion. There were no objections.

**11. SWIFT Money- Region L.**

Alicia Reinmund-Martinez presented information on the TWDB's State Water Implementation Fund for Texas (SWIFT) compiled for the Committee's review. Program manager, Nathan Pence explained since this program is a loan program, it is not specifically applicable for the EAHCP but may be useful for communities participating in the Regional Water Conservation Program.

**12. Probability analysis of future recharge.**

EAA staff Jim Winterle presented his probability analysis for future Edwards Aquifer recharge as requested by the Implementing Committee. Tom Taggart mentioned that USFWS could use this information to give them an idea of the probability of triggering Provision M.

**13. Presentation of legal implications of 7.1 and budget forecast**

Darcy Frownfelter gave a legal background on the EAHCP budget table "Table 7.1" and Nathan Pence presented the modified version of table 7.1, titled "7.2."

**14. Consider future meetings, dates, locations, and agendas.**

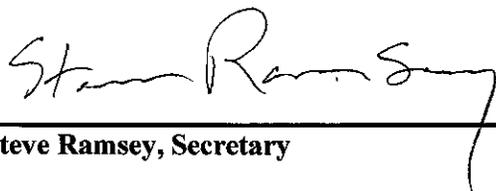
- The next Implementing Committee Meeting is scheduled for July 17<sup>th</sup> at the Edwards Aquifer Authority.
  - Information distribution process to Implementing Committee and Stakeholder Committee.
  - USFWS to provide additional information about Provision M
  - Implementing Committee's approval of a Texas State University application for United States Department of Agriculture (USDA) funding to study crops in the Uvalde area.

**15. Questions from the public.**

No comment.

**16. Adjourn.**

12:38 p.m.




---

Steve Ramsey, Secretary



**MEETING MINUTES**  
**Available at eahcp.org**

**Thursday, August 21, 2014, 1:00 p.m., at the New Braunfels Civic Center**

1. **Call to order - Establish that all Committee members are present or represented-1:04 p.m.**  
In attendance were: Tom Taggart (Chair), City of San Marcos; Chuck Ahrens, San Antonio Water System, Juan Guerra represented Texas State University for Andy Samson; Steve Ramsey, City of New Braunfels; Roland Ruiz, Edwards Aquifer Authority; and Todd Votteler, Guadalupe-Blanco River Authority.
2. **Public Comment.**  
No comment.
3. **Approval of minutes from the June 19, 2014 Implementing Committee meeting.**  
Chuck Ahrens moved to approve the June 19, 2014 minutes. Roland Ruiz seconded. There were no objections.
4. **Receive report from the Program Manager on general topics related to the implementation of the Edwards Aquifer Habitat Conservation Plan (EAHCP) and operation of the Implementing Committee.**  
Nathan Pence, Program Manager, began with an update describing how EAA is in the process of modeling the benefits of the Edwards Aquifer Habitat Conservation Plan. EAA will present to the Implementing Committee the results of the model as soon as possible.
  - **River and Index Well Levels.**  
Nathan Pence provided the Implementing Committee with current aquifer levels and springflow conditions. There was no discussion.
  - **J-17 Forecast.**  
Nathan Pence briefly presented EAA's forecast for the remainder of 2014 for the J-17 San Antonio pool index well. Three forecasts were presented. There was no discussion.
  - **Aquifer Storage and Recovery (ASR) and Voluntary Irrigation Suspension Program Option (VISPO) updates.**  
EAA staff, Rick Illgner, gave an update on VISPO and presented a positive outlook on 2014 enrollment. Julia Velez, from San Antonio River Authority presented the updated ASR acquisition numbers.

- **June and July Expense Report.**  
EAA staff, Shelly Hendrix presented the EAHCP June and July expense reports. There was no discussion.
- **EAHCP Reserve Projection.**  
Shelly Hendrix also gave a presentation on the EAHCP budget reserve projection. Her report included what it would look like if the trigger<sup>1</sup> for the VISPO Implementation payments is or is not reached.
- **Refugia Research update.**  
Nathan Pence presented an update on what is currently underway in the Request for Proposals (RFP) process for Refugia Research. Mr. Pence discussed the importance of the program to stay in compliance with the Incidental Take Permit (ITP). Roland Ruiz discussed the current request from the Texas Attorney General on an opinion on EAA's contract with U.S. Fish and Wildlife Service (USFWS) on Refugia.
- **Tour of spring systems.**  
Nathan Pence discussed the idea of a tour of the spring systems for all committees on September 18 – the next scheduled meeting of the Implementing Committee meeting. The Committee expressed a general consensus on the benefit of a systems tour, but was hesitant to replace a September meeting if current springflow conditions continue. The Committee agreed to an abbreviated official agenda on September 18 following the systems tour.

**5. Presentation and discussion pertaining to Provision M of the Incidental Take Permit (ITP) by USFWS.**

Kevin Connally, of the USFWS, gave a presentation on the details and rationale behind the threshold springflows defined in Condition M of the Incidental Take Permit. Condition M was meant to reduce the harm to the species during low springflow conditions. He stated the condition was never meant to be a “whole-sale” stop of all activities. For example the removal of vegetation mats on the surface of Texas Wild Rice, should not stop because this activity provides a benefit to the species at all flows. He stated a clarification can be constructed to identify the proper interpretation of what activities can continue at reduced springflows.

**6. Discussion and possible action pertaining to Provision M.**

Mr. Pence identified the committee could direct him to coordinate with USFWS to construct language for a clarification of Condition/Provision M to be presented and approved by the Implementing Committee before submitted.

Steve Ramsey moved to direct Nathan Pence to coordinate with USFWS in constructing a clarification letter on Provision M of the ITP. Juan Guerra seconded. There were no objections.

---

<sup>1</sup> If the water level at the J-17 index well in San Antonio is at or below 635 feet on October 1, EAA will notify VISPO program participants to suspend the use of the enrolled water for the following year, resulting in EAA's payment to participants for their temporary suspension of pumping.

**7. Presentation of the Stakeholder Committee ASR/VISPO Work Group recommendations and possible action to approve suite of recommendations provided to be considered and implemented by the EAA.**

Myron Hess, chair of the Stakeholder Committee ASR/VISPO Work Group, presented the Work Group's Recommendations Report which had been approved by the Stakeholder Committee for recommendation to the Implementing Committee.

The Implementing Committee discussed the EAA conducting further investigation of all recommendations represented in the Work Group's report and coordinating with SAWS to analyze specific details when necessary. The Committee further discussed that when proper investigation and analysis is complete, EAA will present to the Implementing Committee, the final recommendations with implementation details, including market analysis, via a Work Plan, budget, or informational report. Tom Taggart suggested some of the recommendations be brought back to the Implementing Committee sooner rather than later.

The Implementing Committee decided to make approval for each recommendation one- by- one:

- *ASR Recommendation #1: July-November Lease Option – when SAWS is in Recovery.* Committee approved for further investigation. There were no objections.
- *ASR Recommendation #2: July-November Lease Option – when SAWS is Injecting.* Committee approved for further investigation. There were no objections.
- *ASR Recommendation #3: Pooling Un-Pumped Withdrawal Rights.* Committee approved for further investigation. There were no objections.
- *ASR Recommendation #4: Long term Lease Escalator.* Committee approved for further investigation. There were no objections.  
The Committee discussed the intent of this recommendation was to provide a more attractive leasing option for ground water rights holders. The Committee discussed the option of raising payment rates to allow flexibility with the market rather than locking the program in an automatic price escalator.
- *ASR Recommendation #5: Implementation of Additional Tiers Beyond Tier 1.* Committee approved for further investigation. There were no objections
- *ASR Recommendation #6: Compensation Alternatives and Tax Deductions.* Committee approved for further investigation. There were no objections.
- *VISPO Recommendation #1: Distribution of a VISPO Marketing Message.* Committee approved with no further investigation needed. There were no objections.
- *VISPO Recommendation #2: Extend VISPO Enrollment Past October 1, if VISPO Triggers.* Committee approved for further investigation. There were no objections.
- *VISPO Recommendation #3: Compensation Alternatives and Tax Deductions.* Committee approved for further investigation. There were no objections.

**8. Presentation from the Science Committee Nomination Work Group for possible action to approve the recommended candidate for the Science Committee.**

Tyson Broad, Science Committee Nomination Work Group member, presented the Work Group's recommendation of Dr. Conrad Lamon as the replacement for the ecological modeling specialist for the EAHCP Science Committee. Roland Ruiz motioned approval of the Work Group's recommendation. Chuck Ahrens seconded. There were no objections.

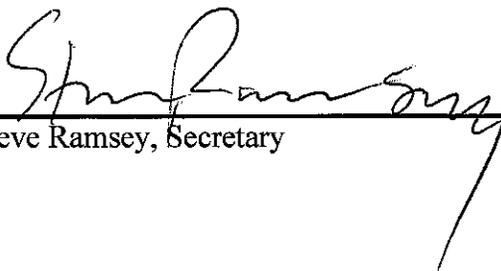
**9. Consider future meetings, dates, locations, and agendas.**

The next Implementing Committee Meeting is scheduled for Thursday, September 18 at Landa Haus after the tour of the spring systems. Possible agenda items include the 2015 meeting dates and Provision M clarification. Additionally, Nathan Pence mentioned the upcoming National Academy of Sciences report and it will be analyzed and developed.

**10. Questions from the public.**

Dianne Wassenich mentioned to the Implementing Committee about the consideration of constructing a Regional Water Conservation Program Work Group.

**11. Adjourn- 2:28 p.m.**



---

Steve Ramsey, Secretary



## MEETING MINUTES

September 18, 2014

Available at [eahcp.org](http://eahcp.org)

1. **Call to order - Establish that all Committee members are present. - 3:00 p.m.**  
In attendance were: Tom Taggart (Chair), City of San Marcos; Chuck Ahrens, San Antonio Water System (SAWS); Steve Ramsey, City of New Braunfels; Roland Ruiz, Edwards Aquifer Authority (EAA); Andy Samson, Texas State University and Todd Votteler, Guadalupe-Blanco River Authority (GBRA).
2. **Public Comment**  
Tyson Broad, Lone Star Chapter of the Sierra Club, made a comment to thank EAA for the coordination of the systems tour. He also mentioned the need to communicate specific information about Landa Lake and current conditions in the Comal System, specifically the ongoing construction around sensitive habitat. Tim Lookingbill, a member of the community, made specific comments about the importance of a study pertaining to Comal system turbidity.
3. **Approval of minutes from the August 21, 2014 Implementing Committee meeting**  
Andy Sansom motioned for approval. Chuck Ahrens seconded. There was no objection.
4. **Receive report from the Program Manager on general topics related to the implementation of the Edwards Aquifer Habitat Conservation Plan (EAHCP) and operation of the Implementing Committee.**
  - **ASR/VISPO Update**  
Nathan Pence, Program Manager, presented the current numbers of the ASR program. Rick Illgner, EAA Staff, gave updated figures of VISPO enrollment. The expected number for VISPO enrollment to be presented next month will exceed 35,000 acre-feet out of the 40,000 acre-foot goal.
  - **ASR/VISPO Work Group Implementation Update**  
Mr. Pence mentioned status of coordination between EAA Staff and SAWS.
  - **Budget Update**  
Mr. Pence opened the floor to any question about the budget. No comments were made.
  - **Annual Report Process**  
Alicia Reinmund-Martinez, EAHCP Director, introduced this year's contractor for the drafting of the 2014 Annual Report, Blanton and Associates. She also presented the current timeline of all deliverables. No comments were made.
  - **Funding Application Submittal**

Mr. Pence mentioned that the 2015 funding applications from the permittees are due on October 1<sup>st</sup>.

- **Update Benefits of Edwards Aquifer Programs**  
Roland Ruiz, EAA General Manager, presented an update on a report being prepared by EAA that will attempt to quantify the general benefits of all Edwards Aquifer Authority's EAHCP programs. This report is expected to be presented at the October Implementing Committee meeting.
- **Additional updates**  
Mr. Pence mentioned the recent conference in Kansas City where he and several other integral members of the EAHCP planning and implementation process had presented and participated in a panel discussion about successes and challenges of the EAHCP.

In anticipation of the storm-event on September 17<sup>th</sup> SWCA, the consultant hired to perform the monitoring for the HCP this year, was mobilized. The group demobilized because rains never came, and missed a large water quality sampling opportunity when the storm developed in the early morning hours.

It was reported HDR has been contracted to ensure that all EAHCP activities are properly covered and permitted with the appropriate entities. A general summary of this effort will be brought back to the committee at a later date.

**5. Presentation of and possible approval authorizing the EAHCP Program Manager to submit a Clarification to Condition M of the Incidental Take Permit to the USFWS.**

Mr. Pence summarized past conversations the Implementing Committee has had with staff and USFWS about the draft Clarification of Condition M. Discussion followed.

Mr. Pence summarized the content of the letter and mentioned a section of the table found in Exhibit 1, which described the boating activities in Spring Lake, which needed to be changed to read "no further details needed." Andy Sansom motioned to approve the Clarification of Condition M with the text change. Steve Ramsey seconded. There was no objection.

**6. Consider creation of a Regional Water Conservation Program (RWCP) Work Group, possible appointment of members and approval of draft Work Group Charge.**

Mr. Pence explained the rationale for creating the RWCP Work Group and how the draft of the Work Group Charge reads. Additionally, the proposed membership for this Work Group was presented to the committee as well. Roland Ruiz asked how staff will go about replacing any members proposed that are not willing to participate. Mr. Pence described some back-up individuals that could be considered if the others are not willing to serve.

Mr. Pence described this action item will require: a motion to approve creation of the Work Group, a motion to approve the charge, and a motion to approve the membership as presented.

Mr. Pence read off the names found in the Draft Work Group Charge: Possible members could include the following: an EAA representative (*Rick Illgner*), a Large Municipality representative (*Karen Guz, SAWS*), Small Municipality representatives (*Joe Cardeñas, City*

of Uvalde, if Mr. Cardenas cannot participate, EAHCP staff will contact representatives from Universal City, Avery Lunsford, or Randy Luensmann, for a small municipality), an Environmental Group representative (*Dianne Wassenich*), an Industrial representative (*Dr. Richard Szecsy*, Texas Aggregate and Concrete Association), an at-large representative (*Dr. Dante Fenolio* - San Antonio Zoo) and a representative from another non-profit organization (*Tyson Broad* - Sierra Club). If any of those presented are not willing to participate, new possible members will be brought back for committee consideration.

After committee discussion Tom Taggart proposed to include Colette Barron-Bradsby, Texas Parks and Wildlife, in the Work Group, and Todd Votteler proposed to add Charlie Hickman, Guadalupe-Blanco River Authority.

Roland Ruiz motioned to approve. Tom Taggart seconded. There was no objection.

**7. Discussion pertaining to the spring systems tour.**

Mr. Pence presented the current Index Wells and Springflow measurements.

The committee had a discussion pertaining to the Systems Tour conducted throughout the day. Tom Taggart mentioned the potential benefits an annual systems tour could have on committee perspective and community involvement. Steve Ramsey discussed how clear it is that some restoration activities that have been stopped should be continued, specifically vegetation mat removal. Discussion followed.

**8. Consider future meetings, dates, locations, and agendas.**

- The next Implementing Committee Meeting is scheduled for October 16<sup>th</sup> at the Edwards Aquifer Authority. The Committee discussed the need to change the meeting date for October. Staff will be providing proposed dates soon.

Some agenda items to consider:

- Summary of benefits of the EAA EAHCP programs
- Drought outlook
- VISPO Trigger discussion.

**9. Questions from the public**

Steve Ramsey moved to adjourn. Andy Sansom seconded. There was no objection.

**10. Adjourn-3:40 pm**



---

Steve Ramsey, Secretary



## NOTICE OF OPEN MEETING

Available at [eahcp.org](http://eahcp.org)

As required by Section 7.7.4 of the Funding and Management Agreement (FMA), an interlocal agreement made pursuant to Texas Government Code Chapter 791 by and among the Edwards Aquifer Authority (EAA), the City of New Braunfels (New Braunfels), the City of San Marcos (San Marcos), the City of San Antonio acting by and through its San Antonio Water System (SAWS), Texas State University, and the Guadalupe-Blanco River Authority (GBRA), a meeting of the **Science Committee** for the Edwards Aquifer Habitat Conservation Plan Program is scheduled for **Wednesday, August 6, 2014, at 9:00 a.m. at the San Marcos Rec Hall (Lions Club Tube Rental at City Park), 170 Charles Austin Dr., San Marcos, TX.** Lunch will be available.

Members of this committee include: Tom Arsuffi, Doyle Mosier, Charles Kreidler, Jacquelyn Duke, Jackie Poole, Floyd Weckerly, Chad Norris, Glenn Longley, Janis Bush, and Robert Mace. At this meeting, the following business may be considered and recommended for committee action:

1. Call to Order.
2. Public Comment.
3. Approval of minutes from the May 8th and May 12th Science Committee meetings (Attachment 1 & 2).
4. Receive Report from the EAHCP Program Manager.
  - NAS update
  - 2015 Science Committee Dates
  - 2015 Applied Research Request for Proposals
  - Science Committee Field Tour
  - Science Committee Nomination Process update
  - Science Committee Approach and Participation
5. Presentation of the 2014 Water Quality Monitoring update.  
Purpose: To provide an update on the 2014 Water Quality Monitoring program.  
Action: None required.
6. Presentation of the 2013 Biological Monitoring Report (Attachment 3 & 4).  
Purpose: To present information and data gathered in the 2013 Biological Monitoring program.  
Action: None required.
7. Introduction to Provision M of the Incidental Take Permit (ITP) and its implication on the implementation of the Habitat Conservation Plan (Attachment 5-8).

Purpose: To provide the Science Committee with information about the ITP and Provision M.

Action: None required

8. Presentation and discussion on restoration activities specific to the San Marcos System for Science Committee's input and possible action for Implementing Committee recommendation (Attachment 9).

Purpose: To provide the Implementing Committee with scientific input and advice related to the clarification of Provision M and the implementation of restoration activities in the San Marcos system defined in Chapter 5 of the HCP.

Action: Agree on input, advice and recommendations to the Implementing Committee about various restoration activities in the San Marcos system.

9. Presentation and discussion on restoration activities specific to the Comal System for Science Committee's input and possible action for Implementing Committee recommendation (Attachment 9).

Purpose: To provide the Implementing Committee with scientific input and advice related to the clarification of Provision M and the implementation of restoration activities in the Comal system defined in Chapter 5 of the HCP.

Action: Agree on input, advice and recommendations to the Implementing Committee about various restoration activities in the Comal system.

10. Future agenda items and meeting dates.

- The next Science Committee meeting is scheduled for **September 11<sup>th</sup>** at the San Marcos Rec Hall.

11. Questions and comments from the public.

12. Adjourn



## MEETING MINUTES

**Wednesday, August 6, 2014**

Available at [eahcp.org](http://eahcp.org)

Members of Edwards Aquifer Habitat Conservation Plan (EAHCP) Science Committee include: Tom Arsuffi, Doyle Mosier, Charles Kreidler, Jacquelyn Duke, Jackie Poole, Floyd Weckerly, Chad Norris, Glenn Longley, Janis Bush, and Robert Mace. At this meeting, the following business may be considered and recommended for committee action:

**1. Call to order- 9:09 am**

Tom Arsuffi, Doyle Mosier, Charles Kreidler participating via Skype, Jacquelyn Duke, Jackie Poole, Floyd Weckerly, Chad Norris, and Glenn Longley were present. A quorum was confirmed.

**2. Public Comment**

There was no public comment.

**3. Approval of Minutes**

Dr. Weckerly motioned to approve both the May 8, 2014 and the May 12, 2014 minutes. The motion was seconded by Dr. Longley. The motion passed.

**4. Project Manager Report**

Nathan Pence, EAHCP Program Manager provided the following updates:

- The National Academy of Science (NAS) meeting in August will be a closed meeting in Washington D.C.
- The 2015 meetings dates will be compiled soon. The committee was asked if they had any specific input on meeting dates.
- The Stakeholder and Implementing committees have expressed interest in a field tour. There will be a tour date sometime this fall.
- Alicia Reinmund-Martinez, Director of the EAHCP reported that the Science Committee Nomination Work Group unanimously decided to recommend Dr. Conrad Lamon to the Science Committee. This recommendation will be presented to the Implementing Committee for their consideration at their next meeting on August 21.
- Nathan Pence, discussed the future approach the EAHCP staff will bring materials to the Science Committee. Future meetings with the committee will focus on asking for scientific input rather than formal approval.
- The 2015 Applied Research RFPs will be distributed soon. To prevent any conflict of interests, Science Committee members will be prohibited from being considered for any Applied Research project from this date forward.

## **5. Water Quality Monitoring Presentation**

EAA staff gave a presentation about the status of the 2014 Water Quality monitoring program. Powerpoint slides are posted on the Science Committee meeting website.

## **6. Biological Monitoring Presentation**

Ed Oborny with Bio-West presented the results of the 2013 and 2014 Biological Monitoring program. Powerpoint slides are posted on the Science Committee meeting website.

There was specific comments from the committee about pursuing subsurface sampling near dry spring runs. The committee had questions pertaining to the continued representativeness of the Rio Vista to I-35 reach. Mr. Oborny explained the reduction of vegetation after Rio Vista dam construction was completed.

## **7. Provision M of ITP Presentation**

Alicia Reinmund-Martinez gave a presentation about Provision M of the Incidental Take Permit and what EAHCP staff is requesting from the Science Committee. Powerpoint slides are posted on the Science Committee meeting website.

## **8. San Marcos System Activities**

Melani Howard from the City of San Marcos/Texas State University gave a presentation of a list of activities found to be appropriate to continue at any flows. Powerpoint slides are posted on the Science Committee meeting website.

Ms. Howard and the Science Committee provided the following comments and feedback:

- Sessom Creek Sand Bar Removal- a finite project. Will not begin until flow normalize above 120 cfs.
- Bank Stabilization- complete but maintenance will continue.
- Riparian Restoration- a finite project but maintenance is long term.

Comments from the above activities are seen to have no effect by flow.

Question about the methods of riparian restoration and how moving forward, how San Marcos/Texas State University can mitigate the woody debris. Jackie Poole requested a clarification on the methods used in the protection of riparian restoration.

The level of maintenance experienced in recent days can give reason to take maintenance on the bank stabilization at a case-by-case basis. Dr. Duked states that if maintenance is done on a continual basis, rather than only at flows above 120 cfs, there would be less negative impact. The longer maintenance is left undone the more negative impact the system would experience.

- Invasive plant species removal- If work is stopped than the work already completed will be reversed. Jackie Poole discussed the increased sediment when removing plants like elephant ears. Dr. Duke made the distinction about maintenance of elephant ears on the banks of the river is much less disruptive than large scale removal elsewhere. This would be a project that would not include beginning new areas of concern, just maintenance of previously removed stands. (Maintenance and Gardening).
- Floating Vegetation and litter collection- Melani Howard mentioned this program is specifically important in low-flow conditions. Doyle Mosier mentioned including a net

downstream to collect any lost vegetation to limit increased disturbance, “manage loss of mats downstream.” This particular project does not disrupt wild rice stands but rather leaving vegetation mats could cause excess damage.

- Invasive species removal- spear fishing and bow fishing would not necessarily disrupt sediment. The committee stated that this particular project may not be effective enough to continue as it currently stands. Yet, there is not a concern in low flows.
- Dredging- obvious disturbance of sediment. Not considered for clarification.
- Aquatic Vegetation Planting- To significantly lower the disturbance of sediment the removal of vegetation should not be considered. There was a recommendation to continue maintenance with extra thought to be done on what plants are considered and where these plants are going. All areas for maintenance will be represented by vegetation maps.
- Conservation Crew - Education, litter removal,
- State Scientific Area (SSA) maintenance and maintenance of riparian areas. Committee agrees with Dr. Kreitler that this is a maintenance activity that is particularly important once flows drop (high use during summer times). SSAs are actually required to be placed at 120 cfs so preventing the maintenance of these barriers would harm broader goals.
- Household Hazardous Waste- No particular reason to suspend this project at any flow.
- Golf Course Management- No particular reason to suspend this project at any flow.
- Reducing Non-native species- No particular reason to suspend this project at any flow.
- Spring Lake Activities- Research Programs, Diving Classes, Boating. All programs are up for clarification except for boating.
- Clarification that the following activities should go on at any flow (short term or long term):
  1. Texas Wild-Rice Enhancement and Restoration: Should continue planting using discretion at all flows. No objections
  2. Management of Recreation in Key Areas: should continue due to the importance at low flows. No objections
  3. Management of Aquatic Vegetation and Litter Below Sewell Park: More critical at low flow
  4. Prohibition of Hazardous Materials Transport Across the San Marcos River and its Tributaries: unable to disrupt sediment
  5. Reduction of Non-Native Species Introduction: continue at all flows
  6. Control of Non-Native Plant Species: Gardening and maintenance only
  7. Texas Wild-Enhancement and Restoration: Gardening and maintenance only
  8. Management of Recreation in Key Areas: continues at all flows
  9. Management of Vegetation: Gardening and maintenance only
  10. Diversion of Surface Water: continues at all flows
  11. Research Programs in Spring Lake: not effected by flows due to the location. Motion for Dr. Hardy to pull together a list of current and future research project. No objections
  12. Management of Golf Course and Grounds: Needs to continue. No possible disruptive.
  13. Reduction of Non-Native Species Introduction: Continue at all flows
  14. Control of Non-Native Plant Species: Continue at all flows
  15. Control of Harmful Non-Native and Predator Species: Continue at all flows
  16. State Scientific Areas: Continue at all flows
  17. Expanded Water Quality Monitoring: Continue at all flows

- 18. Septic System Registration and Permitting Program: Continue at all flows
- 19. Minimizing Impacts of Contaminated Runoff: Continue at all flows
- 20. Management of Household Hazardous Wastes: Continue at all flows

## 9. Comal System Activities

Zackary Martin from the City of New Braunfels gave a presentation of a list of activities found to be appropriate to continue throughout any flows. Powerpoint slides are posted on the Science Committee meeting website.

Zac Martin and the Science Committee provided the following comments and feedback:

- Gill Parasite- a request to continue water column sampling. Tom Arsuffi stated that this specific problem will only become more apparent at lower flows thus could increase the need for continued sampling. Dr. Longely stated that contractors should use the most non-intrusive way as possible.
- Non-native species removal- No reason to suspend.
- Decaying Vegetation Removal and DO management- recommendations to continue maintenance only.
- Riparian Improvements: CSRB Habitat- Restoration and maintenance of slope along water line to protect CSRB habitat. Recommendations to continue maintenance of this project with additional prudence to include protection of runoff (ex. mulch sock) in case of major rain event.
- Bank Stabilization- Because the Old Channel is managed at 50 cfs until system drop below 80 cfs it may give a reason to continue work in the Old Channel despite full system flow drop. Dr. Kreitler did mention the concern that flows may drop below 80 cfs, which may affect the Old Channel, while construction is underway. The committee ultimately decided to put this project on hold till flow conditions normalize above 130 cfs.
- Flow Split Management- manipulation of the system will never disrupt sediment due valve use. The committee agrees to maintain this project despite flows.
- HCP Internal projects which include the hazardous waste program, golf course management plan, education and signage, and hazardous materials transportation routes is requested to continue despite flows.
- Floating Vegetation- typical methods do not include any walking or disruption of sediment.
- The following programs should be continued at all flows:
  1. Flow-Split Management in the Old and New Channel
  2. Native Aquatic Vegetation Restoration and Maintenance
  3. Management of Public Recreational Use of Comal Springs and River Ecosystems
  4. Decaying Vegetation Removal and Dissolved Oxygen Management
  5. Control of Harmful Non-Native Animal Species
  6. Monitoring and Reduction of Gill Parasites
  7. Prohibition of Hazardous Material Transport Across the Comal River and its Tributaries
  8. Reduction of Non-Native Species Introduction and Live Bait Prohibition
  9. Litter Collection and Floating Vegetation Management
  10. Management of Golf Course Diversions and Operations
  11. State Scientific Areas

- 12. Expanded Water Quality Monitoring
- 13. Management of Household Hazardous Wastes

**10. Future Meeting dates**

Sessom Creek Sand Bar removal methodology up for committee comment.

**11. Questions from the public**

There were no comments.

**12. Adjourn- 1:22 pm**