

Meeting Summary

Edwards Aquifer RIP - Science Subcommittee Meeting April 21, 2008, San Marcos, TX

ACTIONS ITEMS

PREVIOUS:

- Define “pool”(no regulatory definition) and “critical period” (**Robert Gulley**)
- Obtain and add science subcommittee 3/17 meeting presentations to web page (**Susan and Anna**)
- Take pictures of science subcommittee members for science subcommittee web page and send to Susan (**Robert Mace - COMPLETED**)
- Ask Geary Schnidel to provide a bullet list of other work applicable to k(1), (2), (3) (**Susan**)

NEW:

- Set-up a photo-sharing webpage for sharing field trip photos (**Steve Bereyso**)
- Make SSC colored nametags (**Susan**)
- Budget & re-imbursement money process/logistics (**Susan/Robert Gulley**)
- How do you want SSC documents/website organized (**ALL members, give input to Anna**)
- Prepare & distribute a template for SSC members’ bio pages (**Susan**)
- Turn Dr. C. Kreitler’s document into PDF, post to website/distribute (**Anna**)
- Report to Expert Science Subcommittee on other EARIP workgroups efforts & conclusions to avoid duplication of effort **Robert Gulley**)
- Email Susan SSC member photos (**Robert Mace**)
- Provide Susan copies of presentations made at this meeting and past meetings so that Anna can post on website. (**Presenters**)
- Take first cut at report outline (**Robert Mace**)
- Develop a travel/meeting expense reimbursement form (**Susan**)

COMPLETED:

- Put Will Amy Definitions on science subcommittee web page (**Anna Munoz (Completed: USFWS Glossary of ESA Terms)**)
- At March 17, 2008 science subcommittee meeting Will Amy (section 10) and Robert Gulley (sections 7 & 9) will give Habitat Conservation Plan (HCP) presentation (**Action Item – Will Amy, Robert Gulley- COMPLETED**)
- Anna Munoz will work on creating a science subcommittee area under general EARIP website (**Action Item – Anna Munoz - COMPLETED**)
- Compile and distribute list of science subcommittee email/phone numbers to committee members (**Action Item – Susan - COMPLETED**)
- Someone from the science subcommittee should attend the bylaws meeting on February 27 (**Action Item – Susan will attend - COMPLETED**)
- Send basic USF&W “definitions” to Susan for distribution to science subcommittee (**Action Item – Will Amy - COMPLETED**)
- Under EARIP science subcommittee website Anna will create an area to put reports/papers/etc. of interest to science subcommittee (**Action Item - Anna & student – Ongoing**)

- Science subcommittee members will review charge and provide input on what areas of expertise the science subcommittee might need. Provide input to Susan by Feb 29 (**Action Item – Science Subcommittee Members – Ongoing**)
- Anna Munoz will look at other RIP's to see if there are any similar final reports for science subcommittee to take a look at (**Anna Munoz – COMPLETED - links on SSC web page**)
- Get examples of salmon reports (see Independent Scientific Advisory Board ISAB) and put on science subcommittee web page (**Anna Munoz - COMPLETED - links on SSC web page**)

GENERAL

- Correction to March 17, 2008 SSC meeting summary, Sam Vaugh was not in attendance
- EARIP Steering Committee has approved a budget of \$400 per Science Subcommittee meeting to cover member travel and meeting expenses. Travel will be reimbursed at rates consistent with A&M per diem.
- **Presentations to Science Subcommittee on April 21, 2008:**
 - Chris Nice, a professor at Texas State University: “Edwards Aquifer Species Genetics & Conservation.”
 - George Ozuna, USGS: Science Activities in the Edwards Aquifer
 - George Ozuna, USGS: Comal Flowpath Study
 - Todd Votteler: Analysis of How Well J-17 Predicts Springflow
 - Doyle Mosier: Habitat & Minimum Springflows
 - Jackie Poole & Mara Alexander: Texas Wild-Rice & Refugia Operations
- **Roundtable/Thoughts & Discussions among Science Subcommittee Members**
 - Springs and hatchery field trips were a huge success. Thank you to Doyle Mosier (TPWD), Tom Brandt (USFWS), Pat Connor (USFWS) and Nathan Pence (NBU) for leading the field trips. Thank you to Michael Gonzales (SARA) for providing a van to transport field trip participants, and to those of you who supplied canoes/kayaks.
 - Doyle Mosier, offered to host a future springs tour
 - Tom Brandt, offered to host a future hatchery tour
 - Nathan Pence, offered to host future tours of Comal Springs and parks
- **Roundtable/Discussion of Topics for Future Agendas**
 - Possible speakers for next Science Subcommittee meeting:
 - Tom Brandt (USFWS) - refugia
 - Larry Land (HDR/former USGS) – comparisons of various historical Edwards recharge estimates for the Blanco/Upper San Marcos, Guadalupe, Dry Comal, and Cibolo recharge basins
 - Rick Lindgren (USGS) – MODFLOW, assumptions around San Marcos Springs, calibration success/difficulties in calibration, sources of uncertainties, northern & western aquifer boundaries & inputs (uncertainty source, how handled?), Trinity inflows, other topics as necessary
 - Chris Nice (Texas State Univ.) – return to finish riffle-beetle genetics presentation
 - Doyle Mosier (TPWD) & Mike Gonzales (SARA) – instream flows presentation

- Robert Mace (TWDB) - Trinity model/chemistry
 - Norman Boyd (TPWD) - Bay & estuary inflows
 - Doug Slack - Models of & effects on whooping cranes
 - At next meeting SSC members will discuss k(1), (2), (3) and list knowns/unknowns – to facilitate getting this process, Susan will get an email dialogue going
 - Comment: k(1), (2), (3) brainstorming should focus on what is relevant, not relevant but interesting, irrelevant, etc.
 - SSC members will start to compile list of “The next great Edwards study would be...”
- **Public Comment:**
 - **Carol Patterson**

Here are some suggestions for focus in addressing the K (1) (2) & (3) charges:

 - K(1) In what area does most of the water saved by pumping reductions go to San Marcos Springs, and how can we find this out?
 - K(2) What are alternatives for maintaining species? A comprehensive list is needed, although I do not think the subcommittee must complete full-blown studies of all options it may propose. Some suggestions include:
 - What is the role of refugia “flow” in maintaining species, including restoration?
 - What is the possibility for “in situ” refugia in streambeds for maintaining species?
 - What is the “regime” of flow required to maintain species in the wild?
 - From a comment earlier in the meeting, what is the potential for recharge to maintain springflows?
 - K(3) What is the effect at San Marcos Springs of changing critical period triggers in different sections of the aquifer?
 - **Cheryl Gilpin**
 - Commented on being mindful of the bad-water line in refugia operations.

NEXT SCIENCE SUBCOMMITTEE MEETING:

Monday, May 19th, 2008
Texas Rivers Systems Institute, San Marcos, TX,
7:30AM-3:30PM

REMAINING 2008 SCIENCE SUBCOMMITTEE MEETING DATES:

May 19, June 16, July 21, August 18, September 15, October 20, November 17, December 15

Note: July 21st meeting will be held at SARA – more information forthcoming.

**APRIL 21, 2008 SCIENCE SUBCOMMITTEE
MEETING ATTENDANCE**

- **Persons in attendance at this meeting were:**
 - **Science Subcommittee Members:**
 - Susan Aragon-Long
 - Mary Ambrose
 - Tom Brandt
 - Glenn Longley
 - Charles Kreitler
 - Robert Mace
 - Alan Dutton
 - Jackie Poole
 - Doyle Mosier
 - Norman Boyd
 - John Waugh
 - Sam Vaugh
 - Ron Green
 - Rene Barker
 - Mike Gonzales (nominee)
 - Ed Oberney (unable to attend)
 - **Other Attendees:**
 - Robert Gulley (EARIP Program Manager)
 - Anna Munoz (A&M)
 - Carol Patterson (Regional Clean Air and Water)
 - Kirk Patterson (Regional Clean Air and Water)
 - Patrick Connor (USFWS)
 - Steve Bereyso (USFWS)
 - Chris Nice (TSU)
 - Larry Hoffman
 - Mark Taylor
 - Dianne Wassenich (SMRF)
 - Tom Wassenich (SMRF)
 - Tyson Broad (Sierra Club)
 - Mara Alexander (USFWS)
 - Nathan Pence (NBU)
 - Jim Bower (Garden Ridge)
 - Jack Fairchild (SMRF)
 - Dan Laroe Jr. (Lake Dunlap)
 - Shirley Wade (TWDB)
 - Will Amy (USFWS)
 - Steve Musick
 - Todd Vottler (GBRA)
 - Rick Ilgner (EAA)
 - Tom Taggart (GBC/San Marcos)
 - George Ozuna (USGS)
 - Cindy Loeffler (TPWD)
 - Cheryl Gilpin