



**NAS Recommendations Review Work Group: Report 1  
MEETING MINUTES**

June 26, 2015

**1. Call to Order.**

Members of this Work Group include: Cindy Loeffler (Texas Parks & Wildlife Department), Melani Howard (City of San Marcos and Texas State University), Roger Biggers (New Braunfels Utilities), Darren Thompson (San Antonio Water System), and Mark Hamilton (Edwards Aquifer Authority).

**2. Public Comment.**

No comment

**3. Receive report from the Program Manager on general topics related to the operation of the NAS Recommendations Review Work Group: Report 1.**

- Meeting Minutes

Nathan Pence, EAHCP Program Manager, mentioned the Work Group minutes are being captured and made available to the members for their review.

Cindy Loeffler made changes to the minutes presented. The revised minutes will be attached to the final Draft Implementation Plan.

- Revised Work Group meeting schedule

Mr. Pence presented the revised meeting schedule to the work group for their review.

**4. Discussion of and possible modification to the Biological Monitoring and Water Quality Monitoring sections of the Draft Implementation Plan.**

Mr. Pence presented the introduction to the report drafted by staff as well as identified the changes made to the Draft Implementation Plan from input provided at the June 5<sup>th</sup> Work Group meeting.

Changes to the implementation matrix included:

Recommendation #28- The group requested the addition of providing a cost-benefit analysis to the Biological Monitoring Work Group discussion.

Recommendation #31- The group mentioned many changes regarding the implementation being a “to be determined” rather than “no” and “yes” or “in progress” rather than “done.” Revisions to reflect this will be made and provided to the Work Group.

Mr. Pence introduced a discussion about various questions regarding the Comal Springs Riffle Beetle (CSRB) directed to Randy Gibson, USFWS, and Chad Norris, TPWD. Discussion specifically regarding the cotton lures in sampling CSRB and other potential ways to collect the species. Discussion followed.

**5. Discussion and possible modification to the Hydrologic Modeling section of the Draft Implementation Plan.**

Mr. Pence, began the discussion mentioning that EAA staff Jim Winterle was present for the Work Group if they had any question involving changes to the Hydrologic Modeling. The Work Group worked through the recommendations one at a time.

The Work Group made a unanimous decision to recommend to the EAA to conduct an Uncertainty Analysis sooner rather than later. This will be presented to the Implementing Committee at their next meeting.

There was discussion pertaining to the development of the Hydrologic Model. Comments were made that there are benefits to both MODFLOW and Finite Element model and the EAA is constantly working towards improving their modeling program. Discussion followed.

Changes to the implementation matrix included:

Recommendation #7- Referred to including error bars onto MODFLOW. Mr. Winterle and Jeremy White, USGS, commented that the goal of developing an uncertainty analysis would be to develop error bars. This resulted in a change to the status of implementation to “in progress.”

Recommendation #9- Referred to moving to a daily time-step for our Hydrologic Model, with comments from the group about the fundamental limitations to the development of a daily time-step. The current model can process daily time-step by averaging a monthly data feature but will not properly reflect daily pumping. Additionally, Mark Hamilton, EAA, wanted to clarify that the EAA is not 100% certain about recharge numbers in terms of the model so moving towards a daily time-step for pumping may be early in the process. Discussion followed about future goals and the cost-benefit of this recommendation.

**6. Discussion and possible modification to the Ecological Modeling section of the Draft Implementation Plan.**

Mr. Pence introduced the Ecological Modeling section of the Implementation Plan. Ed Oborny, BIO-WEST and Ecological Modeling Team Leader, was present to answer any questions the group had.

The Work Group discussed the Ecological Model timing and the NAS Report. Mr. Oborny mentioned many of these recommendations are included in the program currently. Discussion followed and edits to the matrix reflect those comments.

Suitability analysis for Texas wild-rice has been done; at this stage, Mr. Oborny suggested that our understanding of this species' needs can only be expanded by including additional dimensions that would be covered by a simulation model.

**7. Discussion and possible modification to the Applied Research section of the Draft Implementation Plan.**

Mr. Pence introduced the Applied Research recommendations. The Work Group determined that the specific research projects included in the NAS Report will be discussed by the Applied Research Work Group if created by the Implementing Committee.

The specific program recommendations were discussed individually. Discussion regarding various topics followed. Melani Howard commented that extending the Applied Research project contract to be more than one year is critical to both informing the process and including outside expertise. The Work Group agreed with Mrs. Howard's comment.

The Work Group's recommendation was that their expertise and/or charge does not include review and recommendation of specific research projects included in the report. Thus, these recommendations should be reviewed by the Applied Research Work Group. Mrs. Howard mentioned that the Texas wild-rice projects recommended are being done and can be answered if coordinated with restoration efforts.

**8. Discussion of next steps and request for any additional information needed by the Work Group members.**

Mr. Pence mentioned that at any point over the next couple of weeks if a question regarding an individual's expertise is needed then requests are welcome.

**9. Agenda Items for July 10th meeting:**

- Overarching Issues
- Prioritization
- Final Discussion and Approval of the Implementation Plan for NAS Report 1

**10. Questions from the Public.**

Lynn Fahlquist, USGS, asked for details about future Work Groups. Mr. Pence mentioned the process with approval by the Implementing Committee in the development of a Water Quality Monitoring Work Group, Biological Monitoring Work Group, and Applied Research Work Group.

Steve Bereyso, SAWS, mentioned CO2 input into the river for proper Texas wild-rice development below Rio Vista Dam.

**11. Adjourn- 12:01**