

NERRS Science Collaborative Progress Report for the Period 09/01/11 through 02/28/12

Project Title: *Freshwater Inflow: Determining flow regimes in the face of land use change, climate change, and other unknowns*

Principal Investigator(s): Ed Buskey

Project start date: Funding received in November 2011

Report compiled by: Sally Morehead

Contributing team members and their role in the project:

Sally Morehead: Project coordinator & Fiscal agent

Dr. Ed Buskey: Applied Science Investigator and Principal Investigator

Dr. Tarla Rai Peterson: Collaboration Lead

Dr. Ken Dunton and Dr. Norman Johns: Intended User Representative

Dr. Kiersten Madden and Dr. George Ward: Applied Science Investigator

A. Progress overview:

The overall goal of the project is to improve the quality of environmental flow recommendations for the Guadalupe/San Antonio Bay and Basin by collaborating with local stakeholders and scientists to overcome research barriers and provide additional information and data for the Senate Bill 3 adaptive management plan. During this performance period the project team began the project with a kick-off meeting, several conference calls, and introduction of the project to a subset of stakeholders.

B. Working with Intended Users:

Presentations: Intended users were integrated in the project by participation in several stakeholder meetings.

- On 1/9/12 Kiersten Madden and Sally Morehead gave a presentation to the Guadalupe/San Antonio Bay and Basin Area Stakeholder Committee (GSA BBASC) estuarine subcommittee. The presentation gave a general overview of the NERRS science collaborative project and was followed by a question and answer session. Notes from this meeting are available on BaseCamp.
- On 1/31/12 the project team had a kick-off meeting and included the intended user representative Dr. Ken Dunton. This meeting started off with a discussion of the freshwater inflow criteria development process and implementation of this process by the Science Advisory Committee (SAC), GSA BBASC, and Guadalupe/San Antonio Bay and Basin Expert Science Team (GSA BBEST). The majority of the meeting included discussion of each of the project components: land use/climate modeling, circulation model, priority or focal species project, and collaboration. Notes from this meeting are available on BaseCamp.
- On 2/1/12 several members of the project team participated in another meeting of the GSA BBASC estuary subcommittee in which they reviewed project ideas and ranked them for the adaptive management plan. Attendees at this meeting also included members of the Guadalupe/San Antonio Bay and Basin Expert Science Team (GSA BBEST), which are also intended users in this project. This meeting

enabled the project team to meet a broader group of intended users and get a better idea of the challenges they have faced during the Senate Bill 3 process.

- On 2/16/12 a subset of the project team attended a meeting of the entire GSA BBASC and provided a general overview of the NERRS science collaborative project, which was followed by a question and answer session.

Unanticipated challenges or opportunities:

- The GSA BBASC estuary subcommittee is currently ranking projects for their adaptive management plan and there has been some confusion about whether or not the priority rankings by the GSA BBASC will influence and drive the decision about what type of project the Science Collaborative project team will undertake. It was reiterated several times to the GSA BBASC estuary subcommittee by multiple members of the project team that input from the BBASC (and BBEST) is very important, but the Science Collaborative project team priority or focal species project would be selected by a larger stakeholder audience.

Collaboration: In the project team kick-off meeting it was discussed how collaboration would be woven into each of the other three components.

- It was determined that the Science Collaborative project would be introduced to the full BBASC committee (i.e., not just the estuary subcommittee) during their meeting on February 16th. This meeting will ask participants to begin to provide information on data needed for land use/climate model, additional locations for circulation instruments, and priority or focal species project. Ken Dunton, the intended user representative, will talk to the chair of the BBASC and arrange for a presentation from some members of the project team.
- A larger meeting with multiple stakeholders will be hosted by the Science Collaborative project team in May to refine priority or focal species project, and continue to gather information on land use/climate model and additional locations for circulation instruments.
- Stakeholders for the June meeting should include, at a minimum, the GSA BBASC, the GSA BBEST, The Aransas Project, Texas Water Development Board, San Antonio Bay Partnership, and the Coastal Bend Bays & Estuaries Program

C. Progress on project objectives for this reporting period:

Several meetings were held to further define the project scope. Presentations were given to intended users to familiarize them with the project and upcoming information that will need to be gathered. Since this project has only received funding recently, no data has been collected.

Progress in this period has helped to clarify methods, instrumentation to be deployed, and the integration of intended users. For example, Dr. Buskey and Dr. Ward have discussed the circulation study and instruments to be used. They have contacted the potential manufacturer and are proceeding with ordering the equipment. Dr. Madden has also had discussions with other project team members and intended users about additional potential models to be used in the land use/climate change modeling component of the project. Dr.

Peterson has established a listserv to improve communication with stakeholders, and she has also worked with other project team members to develop survey questions that will be used to evaluate stakeholder understanding at different points throughout the project. Finally, the entire project team worked together (along with staff from UNH) to develop a one-pager that describes the project.

During the next six months it is anticipated that the project team will have a workshop with intended users to refine priority or focal species project, and to continue to gather information on land use/climate model and additional locations for circulation instruments. Data collection and instrumentation deployment will also begin during the next six months.

In November, an announcement was posted about the availability of a post-doctoral position to work on the project – specifically focusing on the priority or focal species component. The notice was distributed on various list-serves and posted on the CERF and ASLO job sites. We received 45 applications and chose a short-list of five applicants for which we requested letters of recommendation. Based on the reference letters, three individuals were chosen for interviews. Lindsay Scheef was offered the position based on the interviews and she is scheduled to start June 1, 2012.

D. Benefit to NERRS and NOAA:

This project is still too new to identify project-related products, accomplishments, or discoveries that may be of interest to scientists or managers working on similar issues, or our peers in the NERRS, or to NOAA.