NERRS Science Collaborative Progress Report for the Period 03/01/12 through 08/31/12
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: 11/15/2011
Report compiled by: Sally Morehead Palmer
Contributing team members and their role in the project:

Sally Morehead Palmer: 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 some of these research barriers and provide additional information and data for the Senate Bill 3 adaptive management plan. During this performance period the project team hosted several project team conference calls, several intended user meetings, media outreach, began equipment procurement, and data collection.

B. Working with Intended Users:

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

- On 1/6/12 some of the project team members hosted an informal stakeholder meeting with local fisher people in Port Aransas, Texas at the Estuarine Research Center. The purpose of this meeting was to gather information from these fishers on local circulation knowledge about the area and advice (i.e., thief deterrent, reef avoidance, unique circulation patterns already known…)
- On 1/17/13 the project team hosted a stakeholder meeting in Port Aransas, Texas at the Estuarine Research Center. The purpose of this meeting was to present research conducted to date and to continue the mediated modeling component.

Unanticipated challenges or opportunities

- Freshwater inflow is a challenging problem and our NSC project addresses several components of the issue. It has been a challenge getting stakeholders to understand how, seemingly different, components work together in the

short amount of time available for meetings (without meeting burnout). At the next stakeholder meeting we will develop a better presentation and short activity to help alleviate this problem and provide connectivity.

- Several stakeholders have indicated that they are interested in the health of the estuary. Several have also mentioned that they are concerned about the temporal determination of this 'health," but how do you get them all on one-page. At the next stakeholder meeting we will post flip charts with questions that participants can answer during the breaks to help begin to provide a common agreement (if possible).
- It is difficult to tie mediated modeling to policy decisions. At the next stakeholder meeting we will help alleviate this problem by sharing a story of previous example.

Collaboration

- The model is continuing to be developed with suggested revisions from stakeholders.
- Keypad polling is a mechanism that is being used to generate feedback from participants with the other three components.

C. Progress on project objectives for this reporting period:
Several meetings were held to involve stakeholders in the research conducted to date and the mediated model development. Presentations were presented to intended users to familiarize them with the project and upcoming information needs to be gathered. Data collection is continuing on and is on track Additional leveraging has occurred to conduct additional research projects (I.e, Environmental Cooperative Science Center with Rangia clams, and additional juvenile blue crab work). During the next six months it is anticipated that the project team will have a workshop with intended users to continue mediated model development. Data collection and instrumentation deployment will also begin during the next six months.

D. Benefit to NERRS and NOAA:
Freshwater inflow is the biggest issues in Texas as well as many other states. This project will provide much needed information on freshwater inflow management. Results from this project will be highlighted in a "Teachers On The Estuary" training in summer of 2014. The mediated modeling component is of interest to the NERRS. There has been discussion amongst TAMU and Wells NERR about future collaborations.

<u>Meetings Held or Participated in</u>:

10/19/12	Project Update to San Antonio Master Naturalist (Kiersten Madden)
11/7-11/10/12	Presentation at the Gulf Estuarine Research Society (Kimberly Bittler)

12/6/12	Fishers meeting (Lindsay Scheef, Catherine Buschalski)
12/6/12	Project Update and Presentation to Texas Commission on Environmental Quality representatives to (Zack Darnell)
12/13/12	Project Update to Texas State Soil Conservation Board (Kiersten Madden)
2/18-2/22/13	Presentations and posters at the Association of Limnology and Oceanography (Kiersten Madden, Lindsay Scheef, and Catherine Buchalski)