

Watershed Game Coast Models Project Development Update

This project extends the original versions of the Watershed Game through the development of a new Local Leader Version and a Classroom Version focusing on coastal communities. These new Coast Models will focus on improving water quality (nitrogen, phosphorus, and sediment) while increasing community resilience to flooding.

Project Timeline: 2019 – 2020

The Watershed Game Coast Models are being developed by Minnesota Sea Grant, Mississippi-Alabama Sea Grant Consortium, Alabama Water Institute, Dauphin Island Sea Lab, NOAA Office for



Coastal Management, and the University of Minnesota Water Resources in response to repeated requests from local leaders, educators, researchers, and water professionals to expand the current Watershed Game to include a focus on the unique needs and priority issues of coastal and estuarine environments.

Project Progress

- Overall status – significant progress has been made even with the current challenges of the pandemic. Redesign of the prototype tested earlier in the year is underway and should be completed by the end of summer.
- Pilot workshops – In early 2020, two workshops were held (New Orleans and Mobile) to pilot test the prototypes with approximately 50 participants. Input received has been instrumental in revisions. A third workshop (Savannah) was cancelled due to the pandemic.



Figure 1 Pilot workshop in Mobile, February 2020.

Highlights of revisions and progress

- A revised Game Board featuring new representation of coastal communities is complete.
- 50 tool cards representing practices and policies to help reduce nutrient pollution and increase community resilience to flooding have been chosen. *Pilot implementation helped us reduce this from nearly 70 and narrow in on the best opportunities for education and implementation.*
- Prototypes of participant guides and worksheets developed. In the new Coast Models, participants have to simultaneously manage nonpoint source pollution reductions and try to increase community resilience to flooding. These guides and worksheets will help participants track their progress.

- New program funds obtained from NOAA Central Region and Gulf Coast Collaboration Teams and from the National Sea Grant Office.
- Manuscript published [Development of Coast Models of the Watershed Game: A report summarizing the methods and data captured to identify and synthesize priority coastal issues](#). (2020). Mississippi-Alabama Sea Grant Consortium. MASGP-20-034

Next Steps

- ✚ **Release target timeline** - We anticipate final versions of the Coast Models this fall. This will include new game boards, complete set of tool cards, worksheets, instructions, and appendices
- ✚ **Workshops, webinars and training**
- ✚ **Exploring virtual delivery platforms**
- ✚ **Production of kits**
- ✚ **Expanding Watershed Game Extension Educator capacity at Minnesota Sea Grant**
- ✚ **Presentations at conferences**

Project Support

The development of the Watershed Game Coast Models was made possible through the financial and in-kind support from the following: Minnesota Sea Grant, University of Minnesota Water Resources Center, Mississippi-Alabama Sea Grant Consortium, the NOAA Office for Coastal Management, Louisiana Sea Grant, Georgia Sea Grant, and the Alabama Water Institute.

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