



March 2024

### NextGen Webinar Dates

- **March 20**  
**Gary Ervin**  
**MS State University**  
**\*watch posted seminar on EcoMod website\***
- **April 17**  
**Vanessa Quintana**  
**USACE Army ERDC**
- **May 6-10**  
**NextGen Annual Meeting San Marcos, TX**

**Ashley Schutt**  
Technician

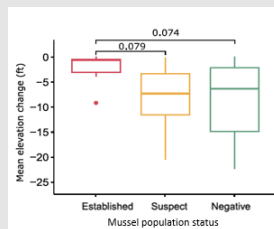
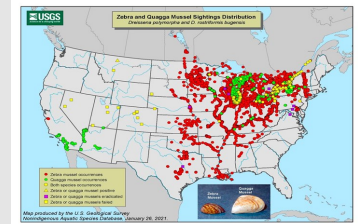


As the team and their project portfolio grew, they recognized the need for managing budgets and communication. Ashley Schutt came from a business background. She was tasked with overseeing the team's goals and monitoring progress. This requires collaborating with Branch Analysts, Comms teams, and Program Managers. Communicating expectations and achievements is an imperative part of EcoMod's research. Ashley maintains the team's website, <https://ecomod.erd.c.dren.mil>, which showcases EcoMod's work!

# Team EcoMod News

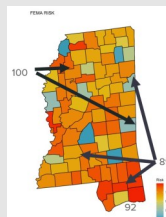
## Continuing Collaboration with the Bureau of Reclamation

EcoMod has worked with the Bureau of Reclamation (BOR) since 2014. The newest project to emerge from this partnership is the development of a quantitative toolkit to forecast potential dispersal of invasive mussels and quantify if water levels are correlated with established populations. Our partner Dr. Amy Yarnall, of the Coastal Ecology team, is focusing on the importance of drawdown events in invasive species prevention. A final report and journal article were also submitted, and will be available on our website



## Data Visualization Summit

Iris Foxfoot attended the Environmental Data Science Summit in Santa Barbara, CA this February. The theme was 'Communicating and Translating Environmental Data', and featured speakers and a group project. Iris' team focused how communities use climate risk tools, and the gaps in data available to the public. They studied the importance of identifying root causes of these gaps, which means taking a closer look at barriers present in specific communities.



## Data Visualization Contest

Data visualization is a prevailing theme for Team EcoMod this year! Through the Next Generation Ecological Modeling program, we are challenging students working on NextGen projects to submit their best example of scientific illustration, infographic, video, etc. We want to impress the importance of communicating the science to your audience. For details and examples, visit our website [ecomod.erd.c.dren.mil](https://ecomod.erd.c.dren.mil).

**2024 Data Visualization Challenge**

## Model Spotlight: Comprehensive (Comp) Marsh Model

Marsh dynamics includes many interacting components, and require an integrated modeling framework to capture the complexity of the system. The Comp Marsh Model includes hydrodynamics, morphology, and ecosystem dynamics. This model was created using the python-based Landlab Toolkit developed by Community Surface Dynamics Modeling System (CSDMS). It couples tidal flow, morphology, and vegetation components.

Publication available at <https://hdl.handle.net/11681/48131>

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