On Thursday, July 24th, a small group of classroom teachers from throughout Georgia ventured out on the Research Vessel Savannah. It was an amazing experience that I will remember forever. The lessons and this once in a lifetime experience will impact me forever as an educator. There was so much I learned, but for the purpose of this blog, I am going to focus on water quality. I learned on my trip how important the role of monitoring water quality is to our coastal waterways. The RV Savannah has state of the art equipment aboard specifically designed to monitor water wherever the RV Savannah travels. Our group was able to launch equipment several times during our cruise that gathered water samples from various depths in one drop. You can see me in the picture with the machine. After we launched the equipment, we were able to go inside the research vessel and see exactly on the big screen the data collected. The "big screen" showed conductivity, temperature, depth, salinity, pH, dissolved oxygen, chlorophyll and turbidity. One thing that really surprised our group was that conductivity is measured. I also am thrilled that we have access to the data and are able to access it from our classrooms. I definitely want to take this back to my classroom, and also do some research of our own. My plan is to contact the Adopt a Stream program and get my students involved. The Research Vessel Savannah was impressive because of the equipment. I did learn that we could actually do this in my classroom using chemistry. I think this is important for the young scientists in my classroom to see and practice. In addition, I think it is important for my students to see how modern scientists do the same thing with fancy equipment. I can't wait to share the photos of my voyage with my students. One of my biggest excitements is showing my students careers that are available in the marine science area.

According to my research, the water in the coastal waterways has shown contaminants, but at Gray's Reef National Marine Sanctuary, the water is still considered "pristine". This is important to the sustainability of Gray's Reef. Because of the location on the reef, it is far enough off shore not to be affected by contaminants. Grey's Reef National Marine Sanctuary researchers continue to monitor the water at the surface and at the bottom of the water column to make sure everything is safe for the reef.

I also learned about the Rivers to Reef program. One of the interesting pieces of research done recently was they put fluorescent dye at the mouth of the Altmaha Sound. They tracked the dye and it actually ended up at Gray's Reef. This study was so important, because it lets people like me know how fast nutrients and contaminants can travel from inland to Gray's Reef. It shows how fast the water travels. I plan to make sure my students know the water in our local community will travel to Gray's Reef. The way we treat our local waterways will affect Gray's Reef. I want my students to know the importance of Gray's Reef National Marine Sanctuary and its importance to our ecosystem.