

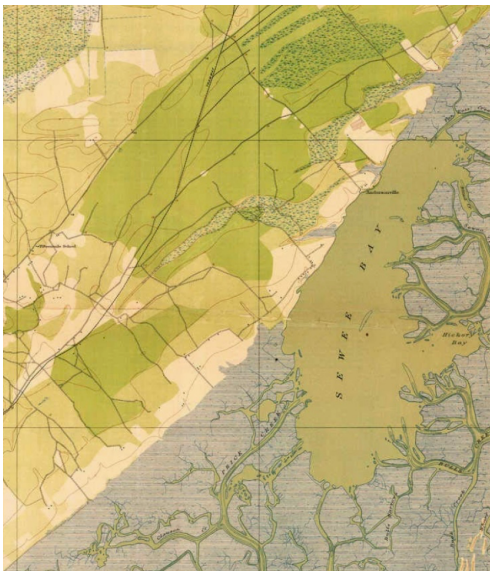
## Charles Mauro, MD

6155 Caravelle Court  
Awendaw, SC 29429  
Cmauro4@yahoo.com

Drew,

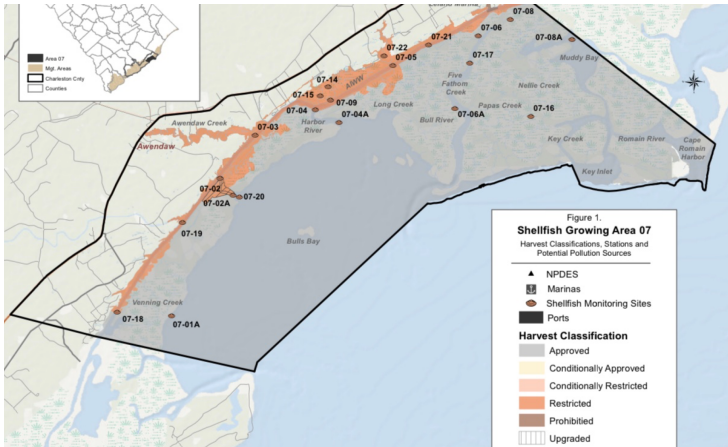
Price Inlet, Bulls Bay and Cape Romain Harbor have the designation ORW, defined as “freshwaters or saltwater which constitute an outstanding recreational or ecological resource or those freshwaters suitable as a source for drinking water supply purposes with treatment levels specified by the Department”(SCDHEC 2012b). Bulls Bay is centrally connected to Anderson Creek, Venning Creek, and Bull creek, among others. These deep creeks that exchange most of the water on the southern end of Bulls Bay are also considered ORW, because “In tidal areas, where an unlisted tributary may affect or flows between two differently classified waterbodies, regardless of whether the location is upstream or downstream, the more stringent numeric standards apply to the listed tributary”(SCDHEC 2012c). These deep creeks interchange water directly with the Atlantic Intra-coastal Waterway.

The Atlantic Intra-coastal Waterway (AICW) is only regarded as SFH between Santee River and the Ben Sawyer Bridge. However, development of the AICW has not changed the overall flow of water south of Venning Creek according to the study performed by U.S. Department of the Interior Fish and Wildlife Service in 2013, and published as *Water Resource Inventory and Assessment: Cape Romain National Wildlife Refuge*. The research shows the hydrologic changes of the AICW formation on the flow of water in and around Bulls Bay are on the NW portion of The AICW. In fact, if one examines older maps of Sewee Bay before the development of the AICW, the creeks are largely unchanged.

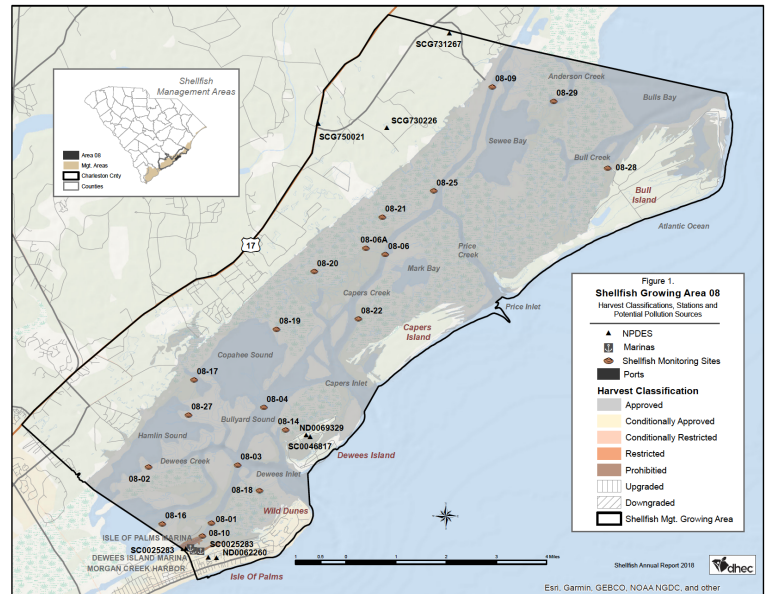


These ORW deep creeks are responsible for the outstanding quality of the waters in this location. If one looks at the Shellfish Monitoring station data, starting at station 07-18, and moving South on the AICW, all of the station data shows unrestricted, Approved sites.

The intrusion of fresh water from Awendaw Creek and the Santee and other sources have caused the water quality to deteriorate all the way to test site: 7-19. However, the individual data at site 07-18 remains excellent, because of the flow from Venning Creek, and Anderson Creek. However, the Shellfish Growing Area remains Restricted because Site 07-18 is grouped with the entire unit.



From Shellfish Water Quality Sampling Stations Between  
January 1, 2015 and December 31, 2017

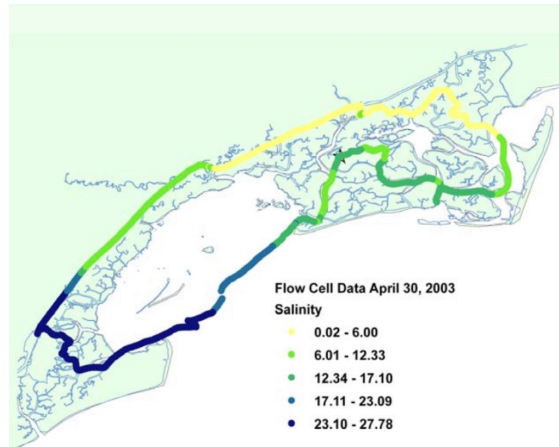


Station #	1	2	3	4	6	6A	9	10	14	16
Samples	35	34	35	35	35	35	35	35	35	35
GeoMean	4.2	2.1	2	2.1	2	2.3	2.7	3.4	2.8	2.1
90th %ile	19	6	5	5	3	5	9	10	8	4
Water Qlty	A	A	A	A	A	A	A	A	A	A
Classification	A	A	A	A	A	A	A	P	A	A

Station #	17	18	19	20	21	22	25	27	28	29
Samples	35	35	35	35	35	35	35	35	35	35
GeoMean	3.4	3.1	2.2	2.2	2.8	2.1	2.5	2.2	2.7	2
90th %ile	22	12	5	5	8	5	6	5	6	3
Water Qlty	A	A	A	A	A	A	A	A	A	A
Classification	A	A	A	A	A	A	A	A	A	A

A - Approved    CA - Conditionally Approved    R - Restricted  
RND - Restricted/No Depuration    P - Prohibited

It is easily seen in the study performed by NOAA titled *Spacial and Temporal Characterization of Water Quality at Cape Romain National Wildlife Refuge* that the flow of water from Bulls Bay and Bull Harbor keeps the salinity level high in the AICW from Venning creek and South. Another similar stretch of the AICW from the end of the Stono to the Edisto, has similarly outstanding water, and it is in fact designated correctly as ORW.



The waters of Bulls Bay, Sewee Bay, the and the AICW from Venning Creek to Morgan Creek at the North of Isle of Palms, are some of the most outstanding waters in the state and they should be designated as such. These waters are inextricable linked, have the same unrestricted quality, and should have the same classification: Outstanding Resource Waters.

Thank you very much for reviewing this material and considering this reclassification to protect this most precious resource.

Regards,

Charles Mauro, MD

Awendaw, SC