

November 17, 2005

Mr. Keith Jenkins
Code EV21KJ
Naval Facilities Engineering Command, Atlantic
6505 Hampton Boulevard
Norfolk, VA 23508 1278

October 2005 Draft EIS for Proposed Onslow Bight Sonar Range

Dear Mr. Jenkins:

I am writing to express strong concern about a major deficiency in a very focused matter concerning the subject EIS.

My concern about North Carolina water quality, fish habitat and the whole aquatic ecosystem runs deep in my veins. My Spruill ancestors settled in Tyrrell County in the late 1600s and immediately began to earn part of their livelihood by fishing on the Albemarle Sound. Later generations fished the western reaches of the Albemarle out of Washington County. They have fished for everything they could catch and sell from eels to sturgeon with rock, white perch, shad, herring and catfish in between. I feel a strong affinity with everyone who is trying to make an honest living by commercial fishing the waters of NC. I am a recreational fisherman, and I commit a substantial amount of volunteer time and a bit of my money to coastal environmental work primarily associated with my roles as directors of NC Coastal Federation, PenderWatch & Conservancy and Audubon NC.

EIS and Finfish

In general the EIS gives only perfunctory consideration of finfish. For example, section ES.5.3 states “...*suggested effects to fish are not anticipated with implementation of the proposed action. There is no information available that suggest that exposure to non-impulsive acoustic sources results in fish mortality.*” Section 4.4.2.1 states “*as discussed in Subchapter 4.2, there would be no adverse effects to fish or EFH (essential fish habitat) with construction or operation of the proposed USWTR. Therefore, no impact on fishery stocks is expected.*” This is convenient circular logic since Subchapter 4.2 offers no such scientific analysis or proof. To casually dismiss the impact of active sonar on the mortality of fish, their migratory patterns and their food chain is weak science and self-serving.

Catadromous and Anadromous Fish That Frequent NC Waters

Several species of anadromous species of fish and one species of catadromous fish that regularly transit the proposed range are very important to the sounds, rivers and creeks of Eastern North Carolina. In all the hundreds of pages in the EIS, the term *anadromous* is used only once and the term *catadromous* is never used. This is glaring evidence that the effect on finfish was really not considered in any depth.

Our one species of catadromous fish is the American eel. There is substantial commercial fishing for these eels in the sounds and rivers of North Carolina. The primary market for these eels is to ship them alive to certain western European and Asian markets and secondarily to sell them for live bait in eastern US. Even school children are taught that after these eels spend five or more years reaching sexual maturity in all types of fresh and brackish waters in North Carolina, they all migrate for their single and terminal spawning run to the depths of the Sargasso Sea in the North Atlantic southeast of North Carolina. After the eggs hatch, the larva begins a multi-month journey in the Gulf Stream to the waters of North Carolina. The outbound migrations for at least some of the male and female adults and the in migrations of the tiny juveniles are through the proposed sonar range.

The American eel is certainly not a charismatic fish, but a very important one in the food chain. For example, this year a Fayetteville fisherman caught a new state record 78 pound flathead catfish in the Cape Fear River using a live American eel for bait. This fisherman did not train that giant cat to like to eat eels; it had been eating eels for years! Increasingly recreational fishermen are realizing how much striped bass love to eat eels and so are using live eels for bait.

The major species of anadromous fish that call North Carolina home for spawning include striped bass, two species of herring (generally called river herring), and two species of shad. All of these species, unlike the eel, make multiple, annual spawning runs. Therefore, the adults migrate into the depths of the Atlantic after they spawn in our fresh waters.

Of these anadromous species, the one with the highest profile is the striped bass. Our NC Division of Marine Fisheries spends a material amount of time and resources focused on returning the striper to the once tremendous place it held for our commercial fishermen and recreational fishermen in our ocean, sound and river waters. There is a growing winter recreational fishing for stripers in the ocean near Cape Lookout.

Two other species of fish that move in and out of the ocean and our sounds are the striped mullet (called jumping mullet to some of us), and menhaden. Both species spawn offshore, including probably in the area of the proposed range. They are both very important food fish for many species of larger fish, marine mammals and seabirds. The menhaden is considered so important food for the king mackerel that this year a North Carolina legislator introduced a bill to limit offshore commercial catches of the menhaden.

Importance of the River Herring

The river herring holds a tremendous place in history for much of eastern North Carolina. The Algonquian Indians were catching herrings using weirs across streams when the European settlers arrived. Whole communities in the Albemarle region were formed in Colonial times to support the seining, cleaning and salting of herring. Later in 1869 the pound net was adopted and modified primarily to catch the herring. Salted and smoked herring were a staple food for much of the Atlantic coast. Its succulent roe has been prized for hundreds of years and continues to be canned at one cannery in North Carolina.

The herring migrates in and out of all the great rivers of North Carolina. Therefore, it passes in and out of all our inlets into the Atlantic. While the herring is no longer a major food fish for American human consumption, its importance in the food chain, like that of the menhaden and mullet, is as important as it ever was. The adult herring, both before and after spawning, is a favorite food of the striper. There will never be sustainable striper fishing if there is not a viable herring migration into our waters. Further, as the herring fry grow in our rivers from their spring spawn until their fall return to the Atlantic, they are a major food source for every species of fish in our waters, including largemouth bass.

Who Answers the Questions?

Anyone with the most basic knowledge of finfish biology and behavior knows that fish are very vulnerable to unnatural water sounds. It seems likely that some of the above named juvenile and adult anadromous and catadromous fish, mullets and menhaden will be severely affected by acoustic or other environmental effects if they are in the area during certain exercises, perhaps even leading to a fatal result if they become "trapped" in a killing field of high powered sonar. Even if the effect is not fatal, they may well become disoriented by the sonar and therefore may not be successful in mating or making their migrations into or out of our inside waters.

The disastrous effects of these things are not likely to be immediately obvious. Thousands of dead herring fingerlings or adults are not likely to wash up on the North Carolina beaches. Rather, the ocean will grind up their bodies and some will be eaten by scavenging birds. Only after a few years and many studies by marine biologists, would it become obvious what has happened to our herring stocks.

I proudly served as a destroyer Navy officer during the Viet Nam War. As a member of the Weapons Department and a fleet-qualified Officer of the Deck, it was my duty to have a strong knowledge of Anti-Submarine Warfare tactics and sonar. I have made a point of maintaining a reasonable working knowledge of ASW and sonar since completing my Navy service. I feel that I have a good appreciation for the very desirable characteristics of sonar and the very dangerous aspects of it.

Even with my working knowledge of ASW and sonar, it is totally unfair to ask me as a citizen to prove the detrimental impact that this sonar range will have on our river herring

and the other fish that I have described. Rather, it is fair and proper for this EIS to address these finfish matters with full and proper science and to expand this impact study to fully address the significant risks to the fish population. We now know that there is existing relevant, impartial scientific research that sheds light on these risks. That research could be expanded by additional studies as necessary.

Very truly yours,

John R Spruill