



United States Department of the Interior

FISH AND WILDLIFE SERVICE
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April 29, 2008

Mr Donald Silawsky
Office of Petroleum Reserves (FE-47)
US Department of Energy
1000 Independence Avenue, SW
Washington, DC20585-0301

Dear Mr Silawsky:

The following comments are offered in response to the Department of Energy's (DOE) Notice of Intent to prepare a supplemental environmental impact statement (SEIS) on the DOE decision to locate a new Strategic Petroleum Reserve (SPR) facility at Richton, Mississippi. The NOI was published in the *Federal Register* on March 5, 2008.

These comments are intended to supplement previous or other comments you may have received from the US Fish and Wildlife Service (FWS) regarding the Richton SPR facility and reflects a review specifically from the perspective of inland federal trust fisheries resources. My principal comment is that the SEIS should consider potential effects on three additional fish species, all of which are diadromous (i.e., migrate between inland and marine waters), and only one of which (American eel, *Anquilla rostrata*) was mentioned in the existing EIS *Site Selection for the Expansion of the Strategic Petroleum Reserve* (DOE/EIS-0385). The other two species are the striped bass (*Morone saxatilis*) and Alabama shad (*Alosa alabamae*).

Striped bass are native to the Pascagoula River system, including the Leaf River. The current state record trophy striped bass was caught in the Bouie River, a tributary of the Leaf. The species is anadromous, spawning in fresh water, and may spend part of the year in coastal waters as adults. The historic range of the native Gulf race striped bass extended from the Suwannee River in Florida to the Lake Pontchartrain rivers of Louisiana and southeastern Mississippi. The native striped bass race was extirpated by the 1960s in the Pascagoula and most other Gulf rivers in which it occurred and survived only as a remnant population in the Apalachicola-Chattahoochee-Flint (ACF) rivers system of Alabama, Florida and Georgia. Although the Gulf race striped bass is not listed as a federal or state endangered or threatened species, it is the subject of a focused effort by state and federal government agencies and organizations to restore self-sustaining populations in rivers within its historic range, including the Pascagoula. At the current time the Pascagoula and Leaf rivers support a very minimal population and recreational fishery for striped bass, sustained primarily by the stocking of hatchery-released fingerlings. However, the ultimate goal of the

restoration program, restoration of a self-sustaining population, could be affected by construction and operation of the proposed Richton SPR facility in ways substantially similar to those described in the EIS for the Gulf sturgeon. An important aspect of striped bass biology that makes the species potentially vulnerable to effects from projects that withdraw river water is their need for cool water refuge areas in rivers in order to survive the hot summer conditions of the Gulf coast. Additional information on the Gulf race striped bass and the restoration program is available in the fishery management plan (FMP) for striped bass in Gulf of Mexico rivers (Frugé 2006).

The Alabama shad is another anadromous species native to Gulf of Mexico rivers from the Suwannee River westward to and including the Mississippi River system. Historically Alabama shad were known to occur well upstream in the Mississippi River system into the Ohio and Missouri rivers. The species has been collected in the Pascagoula River and tributaries, including the Leaf. Alabama shad are currently rare or have been extirpated from many rivers within its historical range. Although construction of dams and the consequent blockage of migration to spawning areas are believed to have been major factors in the species' decline, the relatively small populations of the species in rivers which do not have major dams, such as the Pascagoula, indicate that other habitat factors may also be playing a role in the species' status. Similarly to the striped bass, the largest Alabama shad population is currently believed to occur in the Apalachicola river system in Florida. The Alabama shad is currently classified as a "species of concern" by the National Oceanic and Atmospheric Administration (NOAA) Fisheries Service (*Federal Register* 19975, Vol. 69, No. 73, April 15, 2004). In Mississippi the species is listed as "Rank S1" on the state's list of endangered species. There is currently no substantial fishery for the species. Additional information on Alabama shad can be found in Laurence and Yerger (1966), Mettee and O'Neal (2003), Mickle (2006) and Ross (2001).

American eels are catadromous, with a life cycle opposite that of anadromous species in that they spawn in the ocean and ascend rivers to grow and mature. All American eels spawn and are hatched in the Sargasso Sea in the Atlantic Ocean between the West Indies and the Azores. The young eels may ride ocean currents for years before reaching freshwater streams. The species is found in rivers from southern Greenland southward along the American coast to Venezuela and northern Brazil. American eel populations are in decline range-wide, and in 2004 the FWS and the NOAA Fisheries Service were petitioned to list the species under the Endangered Species Act. A status review of the species completed in 2007, however, concluded that listing of the species under the ESA was not warranted at that time (*Federal Register* 4967, Vol. 72, No. 22, February 2, 2007). The species occurs in the Pascagoula River basin, but there are no good data on status and trends, and Ross (2001) stated that population fluctuations are probably more related to oceanic conditions than factors in the rivers. Additional information on the species can be found in the two references cited in this paragraph.

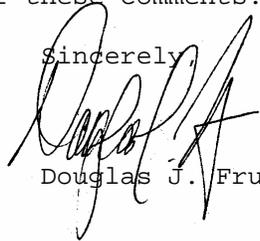
In addition to considering potential effects on the three above species, the SEIS should provide a more in-depth analysis of potential effects on Gulf sturgeon (*Acipenser oxyrinchus desotoi*), particularly with respect to resting habitats that may be located downstream from the raw water intake structure in the Leaf or Pascagoula River. It should be noted that the only currently known spawning site for the species in the Pascagoula River system is in the

Bouie River, a Leaf River tributary. The Gulf Sturgeon Recovery/Management Plan (USFWS/GSMFC 1995) should be consulted for additional information on the species.

Although I realize the purpose of the NOI was not to solicit comments on the existing EIS, I noted in review of the document that on Page 3-311, in the fifth paragraph of Section 3.6.5.1.2, the last sentence states that the "RWI point is well upstream of the fall line, . . .". While this is not of great practical significance to the analyses contained in this section, it should be noted that the entire Pascagoula River drainage is in the Gulf Coastal Plain physiographic province and well south of the fall line. Also, Appendix D, Common and Scientific Names of Species, lists many species only at the generic or family level, and does not include some prominent species at all (i.e., Gulf sturgeon). Also, the appendix lists "trout" as family salmonidae. In south Mississippi, the common name "trout" usually refers to one of the sciaenid (drum) species, most commonly the spotted seatrout (*Cynoscion nebulosus*). There are no native or wild salmonids in the Pascagoula river. The SEIS should list all species addressed in the document by full species name.

I appreciate the opportunity to provide these comments to the DOE. Please contact me at the address or telephone number above or at doug_fruge@fws.gov if you have any questions about any of these comments.

Sincerely,



Douglas J. Frugé

Literature Cited

- Frugé, D.J. (editor). 2006. The striped bass fishery of the Gulf of Mexico, United States: A regional management plan. Gulf States Marine Fisheries Commission, Ocean Springs, Mississippi.
- Laurence, G. C., and R. W. Yerger. 1966. Life history studies of the Alabama shad, *Alosa alabamae*, in the Apalachicola River, Florida. Proceedings of the Annual Conference of the Southeastern Association of Fish and Wildlife Agencies 20(1966):260-273.
- Mettee, M.F., and P. O'Neil. 2003. Status of Alabama shad and skipjack herring in Gulf of Mexico drainages. Pages 157-170 In: K.E. Limburg and J.R. Waldman, editors. Biodiversity, Status, and Conservation of the World's Shads. American Fisheries Society Symposium 35.
- Mickle, P. 2006. Habitat use and size differences of the juvenile Alabama shad between rivers within the Pascagoula River drainage. Masters Thesis. University of Southern Mississippi, Hattiesburg, Mississippi.
- Ross, S.T. 2001. The inland fishes of Mississippi. University Press of Mississippi, Jackson, Mississippi.

US Fish and Wildlife Service and Gulf States Marine Fisheries Commission
(USFWS/GSMFC). 1995. Gulf Sturgeon Recovery/Management Plan. Atlanta,
Georgia.

Attachment

cc: Executive Director, GSMFC, Ocean Springs, MS
ARD, FR, FWS, Atlanta, GA
Field Supervisor, ES, FWS, Jackson, MS
Environmental Coordinator, ES, FWS, Atlanta, GA

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