



# United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Mississippi Field Office  
6578 Dogwood View Parkway, Suite A  
Jackson, Mississippi 39213  
April 14, 2004

52-009

Dr. Michael T. Masnik  
Office of Nuclear Reactor Regulation  
Nuclear Regulatory Commission  
Mail Stop: O11F1  
Washington, D.C. 20555-0001

Dear Dr. Masnik:

In a letter dated January 21, 2004, the U.S. Fish and Wildlife Service (Service) provided your agency with information on federally listed threatened and endangered species as it pertained to the preparation of an Environmental Impact Statement (EIS) for the construction of one or more new nuclear power plants in Claiborne County, Mississippi. Since that correspondence, another listed species, the endangered fat pocketbook mussel (*Potamilus capax*), has been identified in the project area. Our comments are provided in accordance with the Endangered Species Act (ESA) of 1973, as amended, (16 U.S.C. 1531 et seq.).

In August 2003, Mississippi Museum of Natural Science biologists collected two fresh dead shells of the fat pocketbook in the Ben Lomond Dike Field near Vicksburg in the Mississippi River channel. The Service was notified of the new record and confirmed the identification of the specimens. Service biologists conducted cursory mussel surveys in the area and collected 14 fresh dead shells and one live fat pocketbook.

The fat pocketbook is a broad, rounded, inflated, and slightly angular near the hinge. The anterior margin is very narrow and rounded. The valves do not close perfectly on each other but gape at the posterior margin. The nacre is white or bluish white and often iridescent. The beaks are curved over the hinge ligament.

Fat pocketbooks occur primarily in sand and mud substrates, although the species has been found in fine gravel and hard clay occasionally. Water depth ranges from a few inches to several feet. The life cycle of fat pocketbooks is similar to that of other freshwater mussels, in which the glochidia (larvae) require a fish host to transform to the juvenile stage. Fat pocketbooks are long-term brooders, with females becoming gravid in the fall, retaining glochidia over winter, and releasing the progeny during spring and summer. The fish host for this species is primarily freshwater drum.

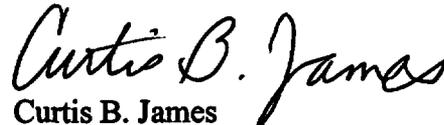
The historic range of the fat pocketbook included the upper and middle Mississippi, Ohio,

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Wabash, White, St. Francis, Black, Spoon, Illinois, Des Moines, Iowa, Cumberland, and Neosho Rivers. However, during the past decade, three populations have been discovered in the lower Mississippi River in Mississippi, and the species was recently discovered surviving in the White River of Arkansas. The greatest impact on the fat pocketbook throughout its historic range has been from activities resulting in the loss of habitat and a reduction in water quality.

Although there is little data regarding the presence of the fat pocketbook mussel in the immediate project vicinity, potential project impacts to this species should be considered during the EIS preparation process. If you have any questions, please feel free to contact Kathy Lunceford in this office, telephone: (601) 321-1132.

Sincerely,



Curtis B. James  
Assistant Field Supervisor

cc: Pacific Northwest National Laboratory, Richland, WA  
Attn: Jim Becker, Amoret L. Bunn  
Mississippi Museum of Natural Science, Jackson, MS  
Attn: Tom Mann