



United States Department of the Interior



FISH AND WILDLIFE SERVICE

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In Reply Refer To:
FWS/Region 5/009604

NOV 27 2002

Senior Counselor Branden Blum
National Oceanic and Atmospheric Administration
U.S. Department of Commerce
1305 East-West Highway
Silver Spring, Maryland 20910

Dear Mr. Blum:

Thank you for your September 26, 2002, letter to Director Steven Williams regarding the opportunity to provide you with comments for your evaluation of an appeal of a New York State Department of State (NYSDOS) decision to deny Coastal Zone Management Act (CZMA) section 307(c)(3)(A) consistency for the proposed U.S. Army Corps of Engineers (Corps) authorization of a permit for a proposed crossing of the Hudson River at Haverstraw Bay (Crossing), a State-designated significant coastal habitat and a National Marine Fisheries Service (NMFS)-designated Essential Fish Habitat area. Director Steven Williams has asked us to respond.

Our comments are with respect to CZMA objectives (1) through (3). We believe that our input will be most helpful with respect to CZMA objective (2), which requires an evaluation of whether the adverse effects of the proposed activity outweigh its contribution to the national interest, when those effects are considered separately or cumulatively. While NYSDOS looked at many issues during their review, our comments only address potential impacts to fish and wildlife resources.

The U.S. Fish and Wildlife Service (FWS) has recommended denial of the Crossing's Corps permit. This recommendation is based on our evaluation of the Crossing's probable impacts to fish, wildlife, and their habitats, including cumulative impacts as defined under the National Environmental Policy Act and the Clean Water Act.

Our evaluation considers the balance between the benefits and reasonably foreseeable detriments of the proposed activity on the public interest. We believe that the Crossing will contribute directly to the degradation of important fish and wildlife habitats and may lead to increased secondary impacts associated with the construction of laterals and compressor stations. The public benefits of an additional pipeline do not exceed public losses with respect to public trust resources, including fish, wildlife, and their habitats. For additional information, please see the enclosed materials: the FWS's responses to the Supplemental Draft Environmental Impact

Statement (Draft EIS) and the Final Environmental Impact Statement (Final EIS), and a March 5, 2002, letter to the Corps summarizing the FWS's concerns about the proposed Crossing.

Summary of Resources at Crossing Site

The Crossing proposes to cross the Hudson River at Haverstraw Bay, which is classified as a Significant Coastal Habitat Complex (USFWS 1997) and provides habitat for the federally listed, endangered shortnose sturgeon (*Acipenser brevirostrum*). Haverstraw Bay provides habitat for a variety of fish species such as striped bass (*Morone saxatilis*), American eel (*Anguilla rostrata*), Atlantic tomcod (*Microgadus tomcod*), American shad (*Alosa sapidissima*), and blueback herring (*Alosa aestivalis*). Haverstraw Bay also provides important wintering habitat for bird species such as black duck (*Anas rubripes*), Canada goose (*Branta canadensis*), canvasback (*Aythya valisineria*), and the federally listed, threatened bald eagle (*Haliaeetus leucocephalus*). As previously stated, Haverstraw Bay is a State-designated significant coastal habitat and a NMFS-designated Essential Fish Habitat area.

Adverse Effects to Coastal Resources

Temporary impacts during construction, i.e., increases in turbidity, direct mortality of benthic organisms, and potential resuspension of contaminated sediments, were documented in the Crossing's Final EIS. Other potential impacts, such as those resulting from pipeline leaks or ruptures, were not evaluated in the Final EIS. A literature review of pipeline failures and releases is summarized by S.A. Patin (1999). The majority of the research and testing related to underwater pipeline failures and natural gas releases has been done in marine systems.

In addition to direct mortality of fish and aquatic species resulting from any pipeline failure, methane gas releases have been shown to have toxic effects on aquatic organisms. Medium to heavy methane intoxication affects the nervous and cardiovascular systems in fish and can result in leukocytosis and irreversible damage to the cerebrum and heart tissue.

Data collected after accidental gas blowouts in the Sea of Asov in 1982 and 1985 showed elevated methane levels detected in the water column at least 500 meters from the pipeline. The data also indicated that fish suffered abnormalities indicative of acute poisoning. These abnormalities included impaired coordination, pathologies of organs and tissues, and modifications of protein synthesis. These symptoms were similar to anomalies found in test fish kept for 4 to 5 days in cages near the blowout site (Patin 1999).

The Millennium Pipeline Company (Millennium) has indicated that any gas released in Haverstraw Bay would bubble to the surface and quickly dissipate. The FWS agrees that methane is relatively insoluble in water compared to other gases such as carbon dioxide and oxygen, but a pipeline leak would still allow a significant volume of gas to enter the water column. For example, the Crossing at maximum operating pressures (1,000 pounds per square inch) with 34,200 cubic feet of gas is equivalent to 2.3 million cubic feet of gas at standard atmospheric pressure. Although Millennium has argued that they would immediately detect a leak and shut down the pipeline at the nearest valve, response times would likely be significantly longer than for leaks in more accessible areas.

The Final EIS documented relatively low incidences of pipeline failure, and the FWS believes that there is significant risk of undetected failure in Haverstraw Bay. The monitoring of the condition of the pipeline is conducted less frequently in undeveloped areas relative to residential areas, which may reduce the likelihood of detecting damage to the pipe caused by anchor drag, corrosion, or other forces.

The Final EIS did not evaluate the above information and therefore, did not fully state the potential impacts to Haverstraw Bay that would result from a significant leak or rupture. The FWS has requested that Millennium and the Federal Energy Regulatory Commission (FERC) assess the potential impacts resulting from a "worst case" accident in Haverstraw Bay.

If a crossing of the Hudson River is deemed necessary by the permitting agencies, the FWS has already requested in response to the Draft EIS and the Final EIS, that the Corps and the FERC evaluate and quantify the impacts of the Hudson North and Tappan Zee alternatives on wetlands, waterbodies, and terrestrial habitat. This data, comparing all of the alternatives, is needed to determine which route would be the least environmentally damaging, practicable alternative as required by the Clean Water Act.

Summary

The FWS maintains our recommendations to the Corps to deny a permit, and for the NYSDOS's denial of coastal zone consistency be upheld for this Crossing due to unacceptable impacts to aquatic resources of national importance. Haverstraw Bay has been recognized as an important natural resource by NMFS, the FWS, and the State of New York.

Significant temporary impacts to Haverstraw Bay are associated with the construction of this Crossing, as well as the possibility of pipeline failure. Given the significance of the resource to be impacted and the numerous alternatives available (newly constructed and proposed pipelines, and alternative routes), we recommend that the Secretary of Commerce maintain the NYSDOS's denial of coastal zone consistency for the Crossing.

For further information, please contact Mr. David Stilwell, Supervisor, New York Field Office, at 607-753-9334.

Sincerely,

A handwritten signature in black ink, appearing to read "MAMIE PARKER", with a stylized flourish at the end.

Dr. Mamie A. Parker
Regional Director

Enclosures

Senior Counselor Branden Blum

Literature Cited:

Patin, S.A. 1999. Environmental Impact of the Offshore Oil and Gas Industry. Ecomonitor Publishing. East Northport, New York.

USFWS. 1997. Significant Habitats and Habitat Complexes of the New York Bight Watershed. U.S. Department of the Interior, Fish and Wildlife Service, Southern New England - New York Bight Coastal Ecosystems Program, Charlestown, Rhode Island.