



Defending the Planet One Beat at a Time

**102 Dogwood Lane
Pittsburgh, Pennsylvania 15237**

May 11, 2004

VIA U.S. CERTIFIED MAIL & ELECTRONIC MAIL

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Virginia Marine Resources Commission
King William Reservoir Project
Habitat Management Division
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**Re: King William Reservoir Project
Public Notice for Comment
Agreement for Supplemental Hearing in Settlement of Litigation
Comment Period Ending May 12, 2004**

Dear Commissioners:

The members of Rock the Earth (“RtE”), a national nonprofit corporation, hereby submit these comments with regards to the King William Reservoir Project Public Notice as identified above. It is our understanding that the City of Newport News, on behalf of the Regional Raw Water Study Group, submitted an amendment to their original application to the Virginia Marine Resources Commission (“VMRC”). By virtue of a settlement agreement between the VMRC and the City of Newport News, the VMRC must consider granting authorization for the installation of a raw water intake structure in the Mattaponi River, the installation of water distribution lines at several separate locations, and the construction of a discharge structure in Beaverdam Creek. As such, the VMRC is soliciting public comment on the potential impacts of the proposed Mattaponi River raw water intake for the King William Reservoir (“KWR”) on the early life stages of American shad that utilize the Mattaponi River as spawning and nursery grounds and other fishery resources the VMRC is entrusted to protect.

Rock the Earth is a Pennsylvania 501(c)(3) tax exempt nonprofit corporation with a national membership of concerned citizens who believe that the waters of the United States, including wetland and stream ecosystems, are critical to the maintenance and health of a sustainable and healthy environment, important for all forms of life on this planet. Such waters not only serve as places of recreational opportunity, but also impact interstate commerce. RtE members regularly utilize the waters of the United States for recreational activities, including, but not limited to fishing, hunting, boating, water skiing, picnicking, camping, as well as the opportunity to observe, photograph, and appreciate a variety of bird and animal life, all of which result in impacts to interstate commerce.

RtE's members will be directly affected by the proposed KWR project in that the project's environmental impacts as described below will not only affect the ability of RtE's membership to adequately enjoy these waters, but the project will also have a detrimental effect to the local wetland ecosystem, thereby impacting commerce.

Rock the Earth agrees with the Alliance to Save the Mattaponi ("Alliance") on the following issues:

- Agricultural withdrawals do not appear to have been factored into the salinity modeling conducted in assessments by numerous agencies.
- The scale of the intake system does not accurately reflect the permitted size of the reservoir.
- The impacts to fisheries in the riverine system are numerous. As noted by the Alliance in its May 10, 2004 letter to the VMRC, numerous scientific studies detail the negative impacts of the project to local fisheries. For example:
 1. Impacts are anticipated to the recovery of the American shad.
 - a. Studies indicate that the most suitable areas for releasing hatchery larvae may be within the zone of influence of the intake structure. A recent study suggests that American shad prefer the Mattaponi River as a spawning ground. Another author went so far as to state that the Mattaponi River is the most important shad spawning ground in the state.
 - b. The Virginia Institute of Marine Science ("VIMS") does not recommend the construction and operation of the intake structure in the Mattaponi River due to the River's importance as a spawning and nursery habitat. Studies conducted between 1997 and 1999 indicated the presence of large numbers of American shad and white perch eggs and American shad,

herring, white perch, and yellow perch larvae in the zone of influence of the intake structure.

- c. Studies indicate that the low densities of egg and larvae distributions of the American shad are the result of severely depressed stocks from natural mortality and harvesting. The effects of water withdrawal from the KWR project are anticipated to further increase this trend.
2. Although a pumping hiatus has been proposed as a control measure, the effects of the operating pumping regime on the early life stages of several fish species (most notably, white and yellow perch, striped bass, American shad, and river herrings) have not been adequately studied to determine whether such a hiatus will indeed prevent adverse impacts to these species.
 3. Declines in river herring populations have been documented in the watershed. Evidence suggests that river herrings along with American shad are the primary food source for striped bass.
 4. Changes in salinity loading to the tidal wetland ecosystem supported by the Mattaponi system have not been studied. Wetlands are a critical component to fisheries survival. A decision should not be made without this type of information.
 5. The Sensitive Joint Vetch (*Aeschynomene virginica*), a federally listed threatened species, inhabits the area and is likely to be impacted by the KWR project. It is located in two distinct areas of the Mattaponi River.
 - a. Critical habitat for the lower population of the Sensitive Joint Vetch ("SJV") could be impacted due to changes in water chemistry (most notably salinity) resulting in the predicted migration of Big Cordgrass into SJV habitat. (Big Cordgrass is an accepted indicator of a saltwater environment). Studies indicate that the species tends to spawn in the same location from year to year which suggests that the habitat for the SJV is fixed. As such, the species may be unable to migrate into less saline water.
 - b. The upper population of the SJV is located in Garnett's Creek Marsh. Critical habitat for this population of SJV may be negatively impacted by the proposed back flushing of the intake structures. The Alliance contends that undesirable species of seeds or living rhizome entrained in the intake structure's filters would be liberated through the back flushing process, and provided with suitable conditions, invade Garnett's Creek Marsh. (A survey of sub-aquatic vegetation by the Alliance indicated the presence of the non-native plant *Hydrilla verticillata* above the intake site).

Additionally, the Corps of Engineers, in its Record of Decision, expressed concern of the propagation of a Cordgrass (*Phragmites Australis*) due to construction disturbances. The Cordgrass is known to invade and overpopulate wetlands.

- Historical American shad fisheries in the watershed are at all time lows. The Alliance indicates that the Chesapeake Bay Foundation reports that shad populations are presently at six percent of historical levels. Sub-aquatic vegetation, critical for habitat as well as an indicator of water quality health is presently at 12 percent of historical levels. A once vibrant fishing industry and its resulting interstate commerce has been destroyed.
- Other documented detrimental aspects of the proposed project:
 1. An increase of predators in the vicinity of the intake structure.
 2. Pre-existing water rights held by the Mattaponi Tribe will be negatively impacted. The Tribe fishes the river for shad and operates a shad nursery on the River. Both the Tribe's historic water rights as well as their preexisting nursery operation will be adversely affected by the project.
 3. A decrease in food resources for early life stages of several fish species.
 4. Noise impacts from project operations.
 5. Legal inconsistencies. Management plans require the protection, enhancement, and restoration of migratory spawning stocks of American shad, hickory shad, and river herrings. Based on the scientific evidence documented above and throughout the scientific community, it would appear that the development of the KWR is contrary to this mandate. In addition, the State of Virginia is directed to insure that water withdrawal effects (e.g. the intake structure) do not result in fishery stock declines. Based on the Advisory documents, the KWR is in fact, likely to cause such a decline.

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In conclusion, it is RtE's opinion, based on the wealth of information regarding the KWR, that the Commission, whose mandate as entrusted by the people of Virginia is to protect fisheries and marine resources, must deny the permit required to construct and operate the Mattaponi River water intake structure.

Thank you in advance to your attention to our concerns. We would kindly ask that you please keep RtE informed of all developments.

Sincerely,

Marc A. Ross
President
Rock the Earth