UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

APR 28 2005

Colonel Yvonne J. Prettyman-Beck
District Engineer
Norfolk District
U.S. Army Corps of Engineers
803 Front Street
Norfolk, VA 23510-1096

RE: CENAO-TS-REG Public Notice # 05-VR0222 (Tri-City Properties, L.L.C.)

Dear Colonel Prettyman-Beck:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced Public Notice proposing construction of a master planned, mixed-use community development in Chesapeake, Virginia, known variously as Centerville Properties, Transamerica or Tri-City Properties. The project calls for construction of about 1100 homes and apartments plus several commercial site developments on a 428-acre parcel which drains to Stumpy Lake to the north, and to Gum Swamp to the south, both tributaries to the North River Landing Ecosystem.

The proposed project involves filling of over 144 acres of unique and productive forested, non-tidal wetlands for commercial and residential development, a non-water dependent activity. In an April 4, 2005 letter to your District's Regulatory Branch, EPA's Environmental Assessment and Innovation Division Director, John R. Pomponio, recommended denial of the proposed permit for this project. If this project is authorized as designed, it would represent one of the largest permitted wetland fills in Virginia in recent years.

As set forth in more detail in the enclosure, EPA believes that the proposed project will result in substantial and unacceptable adverse effects on Aquatic Resources of National Importance, including Stumpy Lake, Gum Swamp and the North Landing River Natural Preserve Area and watershed. The forested wetlands on this parcel are part of a larger unique and valuable wetland ecosystem. Therefore, should the Corps of Engineers choose to issue a permit authorizing the fill of 144.6 acres of wetlands to construct this project, EPA reserves the option to elevate the decision in accordance with Section 404(q) of the Clean Water Act, and requests that the Corps provide EPA with the appropriate notice of its intent pursuant to Part IV of the 1992 *Clean Water Act Section 404(q) Memorandum of Agreement Between the Environmental Protection Agency and the Department of the Army.*

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The Tri-City Properties site has a long history at both the Federal and state levels. In May 2000, EPA issued an Administrative Compliance Order for unpermitted fill activities throughout much of the site. In 2002, after review of a permit application from Tri-City Properties, the Virginia Department of Environmental Quality (DEQ) worked diligently and effectively to limit project impacts, reducing affected wetlands by more than 100 acres compared with the initial development proposal. In addition, DEQ was able to negotiate several environmentally beneficial project features, including improved storm water management and the establishment of a significant mitigation package that involved both wetland restoration and preservation components, including utilizing low impact development technology. These exemplary efforts reflect the Commonwealth's commitment to restoring and preserving Virginia's wetlands and we recognize the value that they add to both the historical and current context.

Despite these improvements, which were largely designed to compensate for the wetlands filled by the development, EPA continues to have concerns regarding the consistency of the project with our CWA Section 404(b)1 Guidelines. Specifically, we do not believe that appropriate mitigation sequencing (avoidance, mitigation, compensation) has fully occurred, and that additional opportunities exist to avoid and minimize direct impacts from the development (see *Memorandum of Agreement between the Department of the Army and the Environmental Protection Agency concerning the Determination of Mitigation under the Clean Water Act Section 404(b)(1) Guidelines).*

In that regard, we note that the Corps' Public Notice for this proposal cites a preliminary review indicating that an Environmental Impact Statement (EIS) may be required. Given the scale and scope of this proposal, we believe it may be appropriate for the Corps of Engineers to develop an EIS should permit issuance remain an option. The applicant should examine both offsite and onsite alternatives and identify the least damaging practicable alternative. The applicant should also provide documentation to ensure that the proposed project is not part of a larger plan of development in the area. Once the impacts have been fully avoided and minimized, the compensation package negotiated during issuance of the state permit may serve as a building block for compensating the remaining unavoidable impacts.

Thank you for the opportunity to comment on this project. Should you have any questions or desire to discuss this matter further, please contact John R. Pomponio, Director, Environmental Assessment and Information Division, at (215) 814-2702.

Sincerely,

Donald S. Welsh
Regional Administrator

Enclosure

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ENCLOSURE
Detailed Technical Comments
CENAO-TS-REG Public Notice # 05-VR0222 (Tri-City Properties, L.L.C.)

According to the applicant's prior Joint Permit Application submitted to the Corps and Virginia DEQ, approximately 60% of the 428-acre subject site is currently wetlands. Of that total, the proposed project will directly impact 144.6 acres of older growth forested wetlands. The project site abuts the Stumpy Lake Nature Preserve that is part of the 1,422-acre Stumpy Lake Natural Area. The forested wetlands on the site provide quality habitat for mammalian, avian, reptilian, and amphibian species. The Virginia Department of Game and Fisheries has recognized potential impacts of this project on state or federally threatened or endangered species, in this case including the bald eagle, Canebrake rattlesnake and Dismal Swamp southeastern shrew.

From a landscape perspective the wetlands on the subject parcel are associated with some of the largest and most significant wetland tracts remaining in the densely populated coastal plain of the mid-Atlantic region. Stumpy Lake which is about 1000 feet from the property is a large open water lake fringed by bald cypress and water tupelo trees which is considered one of Virginia's rare natural environments. The lake supports large and diverse populations of waterfowl, including great blue herons, great egrets, mallards, black ducks and wood ducks and songbirds. Bald eagles have been observed and have a nest on the western shoreline.

Stumpy Lake is also a reserved source of drinking water for the City of Virginia Beach. The lake was created around 1910 when the head of Gum Swamp was dammed to provide an emergency drinking water reservoir for the City of Norfolk. It is our understanding that the intake was sold to the City of Virginia Beach several years ago. If needed, the City of Virginia Beach can pump water from the intake at the rate of 6 MGD (million gallons per day) and transport it to the In-Town Reservoir which is owned by the City of Norfolk. Water from the reservoir is treated at the Moores Bridges Treatment Plant (also owned by the City of Norfolk) and then piped back to the City of Virginia Beach.

Extensive tracts of forested wetlands surround the lake. Just south of Stumpy Lake is the 4,150 acre Gum Swamp Natural Area. Two miles to the east is the 1,610 acre Upper West Neck Creek Natural Area. Each of these unique wetland areas includes stands of old growth cypress-tupelo and bottomland hardwood swamp. They have been recognized as significant natural areas by the Virginia Department of Conservation and Recreation. Together, these two areas form the headwaters of the extensive North Landing River Wetland Ecosystem, which is located approximately a mile south of the site.

The North Landing River Wetland Ecosystem is Virginia's largest natural area preserve and one of the largest expanses of undisturbed freshwater marsh along the entire eastern Seaboard (The Nature Conservancy, 2005). Covering more than 15,000 acres in the cities of Chesapeake and Virginia Beach, it is comprised of wetland communities including five of which are rare in Virginia. The unique wetland communities and forested swamps and freshwater tidal marshes support more than 35 species or rare plants and animals.

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Forested wetland systems have been rapidly disappearing in the Virginia Tidewater area due to an explosion of residential and commercial development. For example, during 1998 and 1999, more than 2,500 acres of non-tidal wetlands in Virginia were ditched for development. Eighty percent of estimated losses of freshwater vegetated wetlands (mostly palustrine-forested systems) occurred in the Coastal Plain. Wetland trends for the Norfolk/Hampton region of Virginia indicate a loss of about 4,800 acres of vegetated wetlands between 1982 and 1989/90 (Tiner and Foulis, 1994).

These wetlands make important contributions to the health of aquatic systems on a watershed basis by purifying water, filtering runoff, abating floods, and decreasing erosion. In addition, wetlands provide habitat for countless numbers of plants and animals including over 40% of all federally listed threatened or endangered species. Many wetland plants and animals support recreation and commercial industries. For example, wetlands act as nurseries for over 80% of coastal fisheries. In addition, millions of Americans are annually drawn to wetlands for bird watching, hunting, fishing, and enjoying the natural beauty of wetland ecosystems.

While wetlands can be impacted directly by filling or draining, their functions and values can also be damaged indirectly by adjacent land use changes. For example paving of nearby areas may speed runoff and reduce the ability of wetlands to filter water, recharge ground water and provide flood storage. The loss of nearby trees may reduce habitat value.

The considerable population and economic growth experienced by the City of Chesapeake will increase another 28% by 2026 according to the Hampton Roads Planning District. To date the most intensive development has primarily occurred north and west of the subject property. As a consequence of this development, regional storm water management issues and degradation of surface water quality are impacting Stumpy Lake, Gum Swamp and other natural resource areas to the south and east of the site. The wetlands surrounding Stumpy Lake protect Gum Swamp and the North Landing River ecosystem by providing vital natural filtration and reducing sediment loading of runoff from neighboring urbanized areas.

Accordingly, in addition to our concerns regarding direct wetland loss we believe more effort to evaluate the onsite and offsite management of storm water is necessary. The drainage study shows storm water from the development being directed into Stumpy Lake and Gum Swamp. Post-development drainage calculations show flow from the site being directed into both Stumpy Lake and Gum Swamp. However, in one post-development scenario onsite grading increases the total volume flowing into Gum Swamp and decreases the total volume going to Stumpy Lake. The potential changes to the hydrology, water quality and ecology of the Stumpy Lake/Gum Swamp wetland systems require evaluation. Additional information is also needed on the low impact design options to be implemented including quantifying reductions. Under Section 402 of the Clean Water Act, National Pollutant Discharge Elimination System Program, surface waters are not to be used as treatment systems. Consequently, storm water management facilities must be located outside of waters of the United States.

Once the lots, storm water facilities, and roads are constructed, indirect impacts will occur that could be detrimental to the adjacent wetland system. These include run-off from impervious surfaces, downstream flooding, vehicle pollution, noise, increased sedimentation and pollutant levels in surface and ground water. Although these impacts are not quantified, they

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have the potential to cause significant damage to sensitive environmental resources.

In addition, there appears to be a question of segmentation and whether the proposed project is part of a larger plan of development in the area and whether granting the permit would promote additional development that would have additional environmental impacts. Cumulative impacts resulting from the development of large parcels of land adjacent to or in the vicinity of the subject property, combined with other large scale public or private development or infrastructure projects, warrant further examination.

The existing site plan shows a roadway that abruptly ends at the boundary to an adjacent parcel that is also owned by the applicant. In addition to the subject parcel the applicant owns several other large properties nearby: an adjacent parcel east of the site, a parcel west of the Centerville Turnpike and a parcel south of Elbow Road. An application for rezoning the 700-acre parcel south of the subject property is currently before the City of Chesapeake in anticipation of developing it. The proposed Southeastern Expressway bisects the southern corner of the property.

EPA is concerned about the direct, indirect and cumulative impacts of the proposed project to onsite and offsite wetlands as well as other environmental resources in the area and the potential that this project may represent part of a larger plan for development. Therefore, we recommend that an Environmental Impact Statement (EIS) be prepared to assess direct, indirect and cumulative impacts of the proposed project, bearing in mind the pending development of other large proximate parcels owned by the applicant or other interested parties. In addition, as set forth below, we believe that an EIS may help to identify additional opportunities for avoidance and minimization of aquatic and other environmental resource impacts.

EPA also has concerns regarding mitigation. Under Section 404 of the Clean Water Act, projects must first avoid, then minimize, and finally compensate for potential wetland impacts. Only after impacts to wetland systems are avoided and minimized to the maximum extent practicable may compensatory mitigation be considered. EPA is concerned that appropriate mitigation sequencing has not been followed, and that there remain significant opportunities for avoidance and minimization. In addition, EPA has concerns regarding compensatory mitigation for this project. Compensation ratios vary depending on functions and values of wetland types. In this case, conducting a Habitat Evaluation Procedures (HEP) analysis and using the results for developing mitigation proposals may be warranted. The compensatory mitigation site(s) should be located in the same sub-watershed as the project, and preferably in close proximity to the impacted resource area. A detailed compensatory mitigation plan that addresses the long-term management of these resources is required to ensure that the functions and values lost are recreated, preserved and sustainable into the future.

EPA questions whether the conversion of cropland at one of the proposed mitigation sites would adequately compensate for the loss of older growth forested wetlands on the impacted site, or achieve the goal of no net loss. Fragmentation of a contiguous ecosystem and loss of wetlands, in this case 144.6 acres of older growth forested wetlands that are adjacent to a unique and ecologically valuable wetland system, would represent an irreplaceable loss to the functions and values provided by this system.

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In conclusion, EPA believes that the issues identified above need to be addressed before the Corps reaches a final decision on the permit application. The proposal that is the subject of this Public Notice must be reduced in size and scope to comply with the CWA Section 404(b)(1) Guidelines which stress that avoidable impacts must not be permitted. The applicant should explore other alternatives that would avoid and minimize direct impacts to jurisdictional waters and to aquatic resources of national importance, and reduce indirect and cumulative impacts to the environment in this area.

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