



**DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
CIVIL WORKS
108 ARMY PENTAGON
WASHINGTON DC 20310-0108**

19 JAN 2001

REPLY TO
ATTENTION OF

Honorable J. Charles Fox
Assistant Administrator for Water
United States Environmental Protection Agency
Washington, D. C. 20460

Dear Mr. Fox:

This is in response to your letter dated December 22, 2000, which requested my review of the proposed decision by the Army Corps of Engineers Baltimore District (District) to issue four Department of the Army permits to Baltimore County (three permits) and Anne Arundel County (one permit), Maryland. These permits would authorize dredging of channels in Chestnut Cove, Frog Mortor Creek, and Greyhound Creek in Baltimore County, Maryland and channels in Grays Creek in Anne Arundel County, Maryland. In addition, the District is proposing to authorize dredging in response to 42 additional permit applications to provide navigable access from the proposed county-dredged channels to private and commercial interests. The footprint or scope of this Section 404(q) referral request, therefore, includes all of the aforementioned dredging which will impact a total of 2.4 acres of submerged aquatic vegetation (SAV).

Pursuant to our Section 404(q) MOA, the Corps has completed its review of the administrative records for the aforementioned permit applications and discussed its review and findings with my staff and I. In addition, a representative of my staff conducted a meeting attended by representatives of Baltimore County and Anne Arundel County, Corps Headquarters, the District, Environmental Protection Agency (EPA) Headquarters, and EPA Region III on January 11, 2001.

I concur that the SAV in and surrounding the proposed dredging sites, is an aquatic resource of national importance (ARNI). In general, the Corps views SAV (unless composed of invasive or noxious aquatic species) to be one of the highest value aquatic ecosystems. The SAV beds in coastal areas, estuaries, along rivers and on larger lakes would typically be considered ARNIs and would warrant careful review and evaluation by the Corps of any proposed discharge of dredged or fill material. However, I do not agree that dredging 2.4 acres of SAV will result in substantial and unacceptable adverse effects in this situation for three reasons. First, SAVs are currently being adversely impacted by prop dredging as recreational and commercial craft attempt to navigate these areas without clearly defined deeper channels. This randomly destroys the vegetation and generates turbidity, throughout the boating season, causing associated secondary impacts to surrounding SAV. The proposed dredging will provide marked channels to help avert these impacts. Second, since the proposed channel

-2-

depths are consistent with those where SAV is currently found, we anticipate that SAV will colonize the channels, although there will be temporal impacts and, colonized SAV may be comprised of a different mix of species. Third, the District is proposing to condition the three permits for Baltimore County to provide for retrofitting storm drains in the watersheds of the areas proposed to be dredged (there are no point sources in Grays Creek to require this retrofitting condition in the Anne Arundel County permit). This will reduce the runoff of nutrients and fine sediments thereby reducing turbidity, which will improve water quality and conditions for SAV expansion in these water bodies. I do not believe that an undesirable precedent for dredging SAV will be established by these permit decisions. The District has conditioned the four permits to require reasonable follow-on surveys of SAV distribution. The District intends to incorporate the results of these surveys, as well as other developing information, into future permit decisions on projects of this nature. We believe that with these reasonable permit conditions, water turbidity will be reduced (because of the storm water retrofitting as well as the reduced prop dredging) and direct impacts from prop dredging will be reduced. We believe that these positive influences, along with increased flushing of the upper most portions of the creeks provided by the dredged channels, are likely to have an overall positive influence on SAV growth in the immediate area of the projects.

I believe the District's decisions in this case to be consistent with Army Corps of Engineers policies and regulations, the goals and agreements in support of the Chesapeake Bay Program, and the District's dredging policy. The District worked with the applicants and accomplished significant avoidance/minimization of SAV impacts through reconfiguring and eliminating channels, reducing channel lengths, widths and depths, and requiring piers to be lengthened.

You also raised concerns with the studies that the District proposed to be required by conditions to the permits. The District advises that it convened a group comprised of representatives of local, state, and federal agencies, the Chesapeake Bay program, and environmental groups, academicians, and scientists to design the study recommended by EPA. In fact, Baltimore County was requested to join the group as it was originally envisioned that their currently proposed dredging projects could serve as study sites. However, after the District determined that such a study exceeded its resource capabilities and that the involved agencies could not provide funds, the District consulted with the Corps Waterways Experiment Station to design a less expensive study to provide information of dredging impacts to SAV. We agree with the District that EPA's study approach would provide the most comprehensive information on this subject. Indeed only such a study may yield an answer as to why SAV does not colonize the dredged areas (if it does not). On the other hand, the Baltimore County studies are designed to document SAV colonization of the dredged areas. The District

-3-

is simply attempting to obtain information for decision-making within resource constraints.

Although we have not agreed to elevate this proposed permit for further review by the Corps Headquarters or this office, we believe there has been value added to the process through your raising this case to our attention. I am truly encouraged to hear that all participants in the aforementioned January 11 meeting agree with the goal of restoring the Chesapeake Bay. Please be assured that the Army Corps of Engineers shares both the concerns and desires of EPA regarding the reestablishment of SAV. However, we do not believe that this can or should occur at the expense of reasonable navigation maintenance. The Corps vision is to provide marked channels in an effort to avoid continuous prop dredging while pursuing related efforts to restore SAV; hence the condition requiring the retrofitting of existing storm drains. EPA's recommended study, like the rest of the Chesapeake Bay restoration effort, is necessarily broader than the Corps Regulatory Program and requires the combined efforts of all involved agencies. Therefore I recommend that all involved federal, state, and local agencies provide resources to address these information needs in lieu of asking for comprehensive studies from the Corps via a Section 404(q) elevation request. Should you have any questions or comments concerning our decision in this case, please contact Mr. Chip Smith, Assistant for Environmental, Tribal and Regulatory Affairs at (703) 693-3655.

Sincerely,

*Marie Howell Domiguez
for*

Joseph W. Westphal
Assistant Secretary of the Army
(Civil Works)

CECW-OR

January 16, 2001

HQUSACE ANALYSIS AND OPTIONS PAPER

SUBJECT: Environmental Protection Agency, Assistant Administrator for Water, Elevation Request, Army Corps of Engineers Baltimore District decision to issue four Department of the Army permits to Baltimore County and Anne Arundel County, Maryland

1. **Purpose:** The purpose of this memorandum is to provide the Army Corps of Engineers analysis of policy and technical issues in response to the Assistant Administrator's December 22, 2000, request for elevation of the U.S. Army Corps of Engineers Baltimore District decision to issue four Department of the Army permits to Baltimore County (three permits) and Anne Arundel County (one permit), Maryland. These permits would authorize dredging of channels in Chestnut Cove, Frog Mortor Creek, and Greyhound Creek in Baltimore County and channels in Grays Creek in Anne Arundel County. Pursuant to the Section 404(q) Memorandum of Agreement (MOA) between Army and the Environmental Protection Agency, EPA has requested that all four of these proposed permits be elevated for further review because they all involve policy and technical issues associated with authorizing dredging in/through approximately 3.5 acres of submerged aquatic vegetation (SAV; District decision documents indicate that 2.4 acres of SAV are actually at issue).

2. **Background:** The Environmental Protection Agency (EPA) request contends that issuance of the proposed permits will cause substantial and unacceptable adverse effects to an aquatic resource of national importance (ARNI). Their contention is based on the consideration of impacts resulting from the four aforementioned permits and 42 additional dredging permits. The Baltimore District is also expects the need to evaluate applications for dredging in response to 42 additional projects to provide navigable access from the proposed county-dredged channels to private and commercial interests. The footprint or scope of this Section 404(q) referral request, therefore, includes all of the aforementioned dredging. Dredging is proposed to be performed hydraulically or mechanically (clamshell dredge) with the dredged material to be discharged into the Hart-Miller-Island Dredged Material Placement (DMP) site (Baltimore County) and the Rock Creek DMP site (Anne Arundel County).

3. **Aquatic Resources of National Importance:** We have reviewed the EPA request and the District's decision documents for all of the aforementioned permit applications. We concur that the SAV in and surrounding the proposed dredging sites, constitute an ARNI. Both the EPA request and the District's decision documents indicate that the species of SAV present (Eurasian watermilfoil, common water weed, wild celery, coontail, horned pondweed, wigeon grass, water stargrass, redhead grass, and curly pondweed) provide important ecological functions. These include, providing food and habitat for waterfowl, fish and shellfish and contributing to the maintenance of water quality through filtering and trapping sediment, producing oxygen, and absorbing excess nutrients. In addition,

CECW-OR

SUBJECT: Environmental Protection Agency, Assistant Administrator for Water, Elevation Request, Army Corps of Engineers Baltimore District decision to issue four Department of the Army permits to Baltimore County and Anne Arundel County, Maryland

Chesapeake Bay currently contains approximately 68,000 acres or 10% of its historical SAV. In general, the Corps views submerged aquatic vegetation beds (unless composed of invasive or noxious aquatic species) to be one of the highest value aquatic ecosystems. The SAV beds in coastal areas, estuaries, along rivers and on larger lakes would typically be considered ARNIs and would warrant careful review and evaluation by the Corps of any proposed discharge of dredged or fill material.

4. EPA's 404(q) Concerns: EPA's primary concern is the significant direct, secondary, and cumulative impacts the agency predicts will occur to SAV. In addition to the direct loss of SAV through dredging, EPA is concerned that removal of rhizome/tuber/root mass will reduce the potential for SAV to reestablish or expand to adjacent areas. Further, EPA is concerned that, from a cumulative impact perspective, removal of SAV results in more turbidity which stresses remaining SAV. Also, EPA is concerned that authorizing the dredging will set an undesirable precedent. The remainder of EPA's concerns are: that the District's decisions are counter to agreements and goals established in conjunction with the restoration of the Chesapeake Bay; that the District has not sufficiently reviewed alternatives to avoid SAV impacts, that the District's proposed study entitled, "Assessment of Potential Impacts on Submerged Aquatic Vegetation", required as a condition of the proposed permits, is not sufficiently rigorous, and would occur after the SAV is dredged; that the proposed dredging will adversely impact fish species; and finally, that the permits are not in the public interest because the direct loss of SAV is not justified by the comparatively small navigational benefits.

5. SAV Impacts: Having agreed that these SAV beds are ARNIs does not mean that no permits can be issued, just that extra care in the evaluation by the Corps must occur. We do not agree the dredging 2.4 acres of SAV to be an unacceptable adverse effect in this situation for three reasons. First, SAVs are currently being adversely impacted by prop dredging as recreational and commercial craft attempt to traverse these areas, without a clearly defined deeper channel. This randomly destroys the vegetation and generates turbidity, with associated and chronic secondary impacts to surrounding SAV. Second, since the proposed channel depths are consistent with those where SAV are currently found, we believe SAV will colonize the channels (although there will be temporal impacts and, colonized SAV may be comprised of a different mix of species). Third, the District is proposing to condition the three permits to Baltimore County to provide for retrofitting storm drains in the vicinity of the proposed dredging which will improve water quality and reduce turbidity (there are no point sources in Grays Creek to require

SUBJECT: Environmental Protection Agency, Assistant Administrator for Water, Elevation Request, Army Corps of Engineers Baltimore District decision to issue four Department of the Army permits to Baltimore County and Anne Arundel County, Maryland

this retrofitting condition in the Anne Arundel County permit). This will improve the conditions for SAV expansion in these water bodies. In addition, we do not agree that an undesirable precedent will be set by these permit decisions. The District has conditioned the four permits to require reasonable follow-on surveys of SAV distribution. The District intends to incorporate the results of these surveys, as well as other developing information, into future permit decisions on projects of this nature. We believe that with these reasonable permit conditions, water turbidity will be reduced (because of the stormwater retrofitting as well as the reduced prop dredging) and direct impacts from prop dredging will be reduced. We believe that these positive influences, along with increased flushing of the upper most portions of the creeks, are likely to have an overall positive influence on SAV growth in the immediate area of the projects. It would normally not be appropriate for the Corps to require an applicant to perform general studies on SAV distribution or ecology. However, it is entirely appropriate for the Corps to require that the applicant survey the distribution of SAV beds in the area of the project during and after the project, as the District has done in this case. Such information on distribution of SAV in the project area, before, during and after dredging will be useful when combined with general studies that local, state and Federal agencies may choose to conduct on SAV growth and distribution in the Bay.

6. Chesapeake Bay Restoration: EPA alleges that issuance of the proposed permits is inconsistent with the following policies and agreements pertaining to the restoration of the Chesapeake Bay: the Chesapeake Bay 2000 Agreement which establishes an interim Bay-wide goal of protecting and restoring 114,000 acres of SAV; the Estuaries and Clean Water Act of 2000 which provides \$275 Million for restoration of estuarine habitat, including SAV; the 1995 Guidance for Protecting Submerged Aquatic Vegetation in Chesapeake Bay from Physical Disruption and its policy of avoiding dredging in existing SAV beds and areas that are suitable for SAV colonization; and the Chesapeake Bay Program 1989 Submerged Aquatic Vegetation Policy which states that the parties to the policy are committed to, "...Only in rare circumstances will losses of submerged aquatic vegetation be considered justifiable".

Our review of these agreements revealed that the District's proposed permits are not inconsistent with the aforementioned agreements. When one considers that the projects will result in temporary and minor impacts to SAV, that the resultant study results will provide information as to whether SAVs colonize dredged channels, and that the required retrofitting of storm drains in the involved watersheds will reduce turbidity, we believe the proposed permits support the intentions of the aforementioned agreements and policies. In particular, we have reviewed the aforementioned 1995 Guidance for

CECW-OR

SUBJECT: Environmental Protection Agency, Assistant Administrator for Water, Elevation Request, Army Corps of Engineers Baltimore District decision to issue four Department of the Army permits to Baltimore County and Anne Arundel County, Maryland

Protecting Submerged Aquatic Vegetation in Chesapeake Bay from Physical Disruption. (April 1995 and August 1995 versions). The Submerged Aquatic Vegetation Workgroup of the Living Resources Subcommittee, Chesapeake Bay Program, prepared this document. This guidance document implements a tiered approach to categorizing SAV. Tier I includes existing and previously existing SAV from 1971 to the present, Tier II includes potential SAV habitat to one-meter depth, and Tier III includes potential SAV habitat to a two-meter depth. The Guidance clearly states the following recommended policy and guidance:

- Avoid dredging in Tier I and Tier II areas, except in limited manner for public access, maintenance dredging, and, in some cases, erosion protection.
- Avoid dredging within Tier III areas. If disruption of these areas is unavoidable, it should be minimized.

In addition, Appendix A to the April 1995 document also clearly states the Baltimore District's dredging policy for SAV as follows:

No dredging is permitted in SAV beds, unless the dredging is:

- Within an existing entrance channel;
- Within historic channels;
- Within an existing slip or marina; or,
- In a sparsely vegetated area where no more than 1 foot of dredged material is to be removed.

The District's policy balances the need for maintaining navigation with preservation of SAV, which is critical to the Chesapeake Bay ecosystem. We believe the District's proposed permits to be in accordance with its stated policy and with the Chesapeake Bay Program's SAV policy.

7. Alternatives Analysis: EPA's 404(q) referral request states that that the District has not sufficiently reviewed alternatives to avoid SAV impacts. EPA's letter goes on to state that such alternatives include further changes in the width and configuration of the proposed channels, pier lengthening, and the use of shared moorings. Our review of the District's decision documents revealed that, in fact, all of EPA's recommended approaches were pursued on a channel-by-channel basis to reduce impacts to SAV. The District's decision documents state that further revisions would not meet the project purpose of providing safe navigable access to these various properties and

CECW-OR

SUBJECT: Environmental Protection Agency, Assistant Administrator for Water, Elevation Request, Army Corps of Engineers Baltimore District decision to issue four Department of the Army permits to Baltimore County and Anne Arundel County, Maryland

facilities. We, therefore, do not believe that additional analysis of alternatives would necessarily result in additional reduction of impacts to SAV. In addition, EPA's recommendation that dredging be denied where avoidance cannot be achieved does not recognize either the need to maintain public access to existing facilities, nor that prop dredging, with the associated direct and secondary impacts to SAV, will continue to occur in these areas. The District working with the applicant did in fact modify the configuration of the proposed dredging and reduced the extent of dredging to a reasonable degree.

8. District Surveys: EPA's referral request states that the District's proposed SAV surveys, required as conditions of the proposed permits, are not sufficiently rigorous, and would occur after the SAV is dredged. EPA recommended using control sites, measuring multiple parameters (nutrient loading, sediment characteristics, etc.) and collecting continuous data from a selected number of sites for an appropriate length of time. EPA also recommended that no dredging of SAV should be permitted until such a study is completed and any associated policy developed.

The District advises that it convened a group comprised of representatives of local, state, and federal agencies, the Chesapeake Bay program, and environmental groups, academicians, and scientists to design the study recommended by EPA's referral request. In fact, Baltimore County was requested to join the group as it was originally envisioned that their currently proposed dredging projects could serve as study sites. Unfortunately, such a study is expensive and the involved agencies could not provide funds.

The District consulted with WES to design a less ambitious study to provide information of dredging impacts to SAV. The first, which is the subject of EPA's referral letter, is defined as a special condition of the Baltimore County permit. The study requires the County to conduct one pre and two post dredging surveys of SAV in the project area. Another permit condition will require Baltimore County to conduct a retrospective study of five creeks that have been dredged and five that have not been dredged for the last ten years. We agree with the District that EPA's study approach would provide the most comprehensive information on this subject. Indeed only such a study may yield an answer as to why SAV does not colonize the dredged areas (if it does not). On the other hand, the Baltimore County study is designed to document SAV colonization of the dredged areas. The District is simply attempting to obtain information for decision-making within resource constraints. In addition, we believe EPA's recommended study would serve a broad range of federal, state, and local agency interests (including EPA's Chesapeake Bay Program, the agency objecting to the study proposed by the District).

CECW-OR

SUBJECT: Environmental Protection Agency, Assistant Administrator for Water, Elevation Request, Army Corps of Engineers Baltimore District decision to issue four Department of the Army permits to Baltimore County and Anne Arundel County, Maryland

Therefore, we believe that the District should receive resource commitments from other interested agencies before pursuing such a study. Furthermore, requiring only one or two applicants to complete such a study would be inappropriate. Denying all permits until such a study is complete is also inappropriate. Particularly when it is entirely possible that the permits, with the District conditions may result in stable or even increasing SAV distribution (which is the District's intention).

9. Impacts to Fisheries: Review of the District's decision documents indicates that it agrees with EPA as to the value of SAV to the listed species of fish that are known to use the areas that are proposed to be dredged. The District has conditioned the permits to restrict dredging from February 15 to October 15. This prohibits dredging during spawning and nursery season thereby minimizing impacts to anadromous species. We agree with the District that the impacts to SAV, as well as the corresponding values to fish, have been minimized by the aforementioned permit condition, as well as District-negotiated reductions in the proposed dredging projects. The District's decision document also concludes that the projects will not adversely affect essential fish habitat of either winter flounder or bluefish.

10. Public Interest: We do not agree with EPA's statement that the permits are not in the public interest because the direct loss of SAV is not justified by the comparatively small navigational benefits. We believe EPA has not adequately considered ongoing prop dredging activities and the associated direct and secondary impacts, overstating the severity of the dredging impacts, and underestimating the value of the required studies and storm drain retrofitting. Moreover, the test in the Corps regulations is whether a particular proposed project is "in the public interest". The test of the public interest review is in fact whether a project "is contrary to the public interest". We believe that the permits with the District imposed conditions clearly establish a project that will not be contrary to the public interest.

11. Conclusions and Recommendations: The Section 404(q) MOA states that the Assistant Secretary of the Army (Civil Works) will take one of the following actions after his review:

- Inform the District Engineer to proceed with the final permit decision; or
- Inform the District Engineer to proceed with final action in accordance with case specific policy guidance; or

CECW-OR

SUBJECT: Environmental Protection Agency, Assistant Administrator for Water, Elevation Request, Army Corps of Engineers Baltimore District decision to issue four Department of the Army permits to Baltimore County and Anne Arundel County, Maryland

- Make the final permit decision in accordance with 33 CFR 325.8. This means elevating the permit decision to either a higher level in the Corps, or to the office of the ASA(CW) for decision.

We agree that the SAVs in and around the project sites constitute an ARNI. However, we do not agree that the project will result in unacceptable adverse effects to SAV as predicted by EPA. In addition, we believe that the Baltimore District has followed Corps regulations and policies in arriving at its permit decisions and that its decisions are consistent with the policies and agreements in support of the restoration of the Chesapeake Bay. For these reasons we recommend that the District Engineer be informed to proceed with the final permit decision.