

**ADMINISTRATIVE APPEAL DECISION
INDIVIDUAL PERMIT DENIALS
FOR MECHANICAL SHORELINE GROOMING
FOR SIX PERMIT APPLICANTS
BAY CITY, MICHIGAN
DETROIT DISTRICT
DECEMBER 29, 2005**

Review Officer: Douglas R. Pomeroy, U.S. Army Corps of Engineers, South Pacific Division, San Francisco, California, on behalf of the Great Lakes and Ohio River Division

Appellants:

Frank Whalen: Detroit District file #00-016-170-2, Donahue Beach Drive
James Patchett: Detroit District file #00-016-155-2, Donahue Beach Drive
William Gough: Detroit District file #00-016-241-3, Donahue Beach Drive
Bernard Shotwell: Detroit District file #00-016-224-3, Bay Road
Charles Groya: Detroit District file #00-016-225-2, Bay Road
Bette Wasney-Ryan: Detroit District file #00-016-220-2, Bay Road

All properties are located on the shoreline of Saginaw Bay in Bay City, Michigan

Appellant Representative: David Powers, attorney for Appellants

Permit Authority: Section 404 of the Clean Water Act (33 U.S.C. 1344) and Section 10 of the Rivers and Harbors Act (33 U.S.C. 403).

Appeal Conference and Site Visit: May 25, 2005

Background Information: The six Appellants each applied for a permit to conduct shoreline grooming activities and the Detroit District (District) received their applications on the following dates: Whalen, July 29, 2003; Groya March 8, 2004; Wasney-Ryan March 8, 2004; Patchett, March 11, 2004; Gough, March 15, 2004; and Shotwell, April 16, 2004. Between February and May 2004, the District issued Public Notices to evaluate the six permit applications. The project sites are located within an approximately one mile area of shoreline starting approximately 800 feet south of the mouth of the Kawkawlin River and extending south for nearly one mile, with the southernmost project located about 3,000 feet north of the mouth of the Saginaw River. Three properties are located on Donahue Beach Drive in an area known as Donahue Beach. The other three properties are located on Bay Road, and their shoreline area is known as Aplin Beach.

In recent years low water levels on Lake Huron and the other Great Lakes have exposed wide expanses of bottomland between the current water level and the designated ordinary

Program Support Division
Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

high water mark (OHWM) in areas with extensive shallow water such as Saginaw Bay on Lake Huron. Vegetation has grown in these bottomland areas. The Appellants propose to conduct mechanized shoreline grooming to remove the vegetation, remove debris that becomes trapped in the vegetation, and smooth the bottomland substrate. The Appellants do not dispute that the areas to be mechanically groomed below the OHWM of Saginaw Bay are within the geographic jurisdiction of the Clean Water Act (CWA) and Rivers and Harbors Act (RHA).

The exact extent of the Appellants' proposed shoreline grooming varied between properties, but in general each Appellant requested to groom laterally along his shoreline for the entire width of his property and groom from the designated OHWM to the current waterline of Saginaw Bay. Appellants Whalen and Patchett requested to mechanically groom their shorelines to a depth of two inches while the other four Appellants requested to mechanically groom their shorelines to a depth of four inches. The District summarized the six projects as:

- Whalen – move a maximum of 40 cubic yards of material
- Patchett – move a maximum of 125 cubic yards of material
- Gough – move a maximum of 75 cubic yards of material
- Shotwell – move a maximum of 150 cubic yards of material
- Groya – move a maximum of 440 cubic yards of material
- Wasney-Ryan – move a maximum of 140 cubic yards of material

Mechanized grooming was described in the administrative record as pulling a rake or disc behind a tractor to remove vegetation and smooth the surface of the shoreline bottomland substrate.

The District concluded that these six projects should be evaluated in one Permit Evaluation Document (PED) because of their close proximity to each other and similar environmental effects. The District denied these six permit requests on December 6, 2004 because it concluded that the requests did not comply with the Clean Water Act (CWA) Section 404 (b)(1) Guidelines and that the projects were contrary to the public interest.

The Appellants believe these conclusions are incorrect and appealed. The Appellants' representative submitted six identical requests for appeal (RFA), each containing 32 reasons for appeal, on the following dates: Whalen, February 1, 2005; Groya, Shotwell, and Wasney, February 2, 2005; and Gough and Patchett, February 3, 2005. As there was some overlap between the Appellants' 32 reasons for appeal, this appeal decision consolidated the 32 reasons into a smaller number for evaluation. This appeal decision identifies where each of the Appellants' 32 reasons for appeal were evaluated.

Summary of Decision: The Appellants submitted 32 reasons for appeal and some of these reasons for appeal were found to have merit. The District must reconsider these six permit denial decisions. The District must resolve the internal inconsistencies in its PED,

Program Support Division
Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

and reconsider and further document and, if appropriate, modify some of the conclusions in the PED as described in more detail in this administrative appeal decision.

Appeal Decision Evaluation, Findings and Instructions to the Detroit District Engineer (DE):

Appellants' Reason for Appeal:

Reason 1: The District's characterization of portions of the Appellants' properties as wetlands, coastal marshes, and special aquatic sites was inappropriate, incorrect, and unfair, and was not required or appropriate information to include in the public notices for the Appellants' permit requests. (Appellants' request for appeal reasons 3, 6C, 16, 18, 21, 22, 32).

Finding: This reason for appeal did not have merit.

Action: None required.

Discussion: The District is required to base its determination of what is a wetland on the definition of a wetland in the Corps regulations (33 Code of Federal Regulations (CFR) 328.3 (b)) and corresponding Environmental Protection Agency (EPA) regulations (40 CFR 230.41) that both define wetlands as:

“The term wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.”

The Corps definition of wetlands further clarifies that:

“Wetlands generally include swamps, marshes, bogs, and similar areas.”

The Corps identifies wetlands using a technical manual called the Wetland Delineation Manual. This manual directs that the Corps evaluate a site to determine the presence or absence of three parameters – hydric soils, hydrophytic vegetation, and wetland hydrology – under normal circumstances to establish whether or not a wetland area is present. The administrative record supports the District's conclusions that all three wetland parameters - hydrophytic vegetation, hydric soils, and wetland hydrology - were present at all six of the Appellants' properties.

The District also concluded that normal circumstances were present. The Corps Wetland Delineation Manual provides guidance regarding what should be considered normal circumstances stating that:

Program Support Division
Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

“ ‘Normal circumstances’ has been further defined as ‘the soil and hydrologic conditions that are normally present, without regard to whether the vegetation has been removed.’ The determination of whether normal circumstances exist in a disturbed area ‘involves an evaluation of the extent and relative permanence of the physical alteration of wetlands hydrology and hydrophytic vegetation’ and consideration of the ‘purpose and cause of the physical alterations to hydrology and vegetation.’ “

and also states that:

“It is necessary to determine whether alterations to an area have resulted in changes that are now the “normal circumstances.” The relative permanence of the change and whether the area is now functioning as a wetland must be considered.”

The Appellants assert that wetlands are not present on their property now, and have never been present in the past (i.e. normal circumstances to produce wetlands on their properties have never been present) so none of their shoreline areas should be considered wetlands.

In regard to whether the current circumstances represented normal circumstances the Appellants concluded that normal circumstances were not present because humans had influenced (a) water diversions from the Great Lakes, (b) increased nutrient supplies and pollution entering Saginaw Bay from the Saginaw River and other sources, (c) the introduction of zebra mussels to Saginaw Bay, and (d) other man-made influences to reduce water levels such as mining, dredging, and water diversions. The Appellant concluded these conditions now support the growth of hydrophytic wetland vegetation on the Appellants’ properties where none grew in the past. Although the extent of influence of these factors is in dispute, they all represent relatively permanent changes to the watershed. The District reasonably concluded that the changes in environmental conditions identified by the Appellants, although likely caused in part by humans, were now part of the normal circumstances for properties under consideration. The Appellants also asserted that mechanized shoreline grooming to remove shoreline vegetation was an established practice in the area, and that unvegetated, groomed shorelines should be considered the normal circumstances for the area.

The Wetland Delineation Manual identifies that there are instances when the vegetation in a wetland has been inadvertently or purposely removed or altered and that in such instances the determination of normal circumstances be made based on the presence of hydric soils and wetland hydrology, without regard to the presence of hydrophytic wetland vegetation. Therefore, whether or not shoreline grooming to remove wetland vegetation occurred in the past is not relevant to the consideration of whether normal circumstances are currently present. The administrative record supports the District’s conclusions that normal circumstances as defined by the Wetland Delineation Manual are present and that wetlands are present on portions of the shoreline of all these properties.

Program Support Division

Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

The Appellant and the District disagree regarding whether and how much wetland vegetation occurred on the Appellants' properties during previous low water periods. The Corps has addressed the use of historical conditions on several occasions. Regulatory Guidance Letter 86-09 dated August 27, and the Preamble to 1977 Corps regulations Federal Register Volume 42, No. 138, page 37128, dated July 19, 1977 both state that the Corps' intent under CWA Section 404 is to:

“regulate the discharges of dredged or fill material into the aquatic system as it exists and not as it may have existed over a record period of time”

So the Corps must consider the bottomland areas that meet the definitions of wetlands in the Corps regulations to be wetlands, regardless of the extent of wetlands present in the past. However, the administrative record provided sufficient documentation that Lake Huron water levels periodically fluctuate over time. The administrative record also supports the District's conclusions with regard to the Appellants' properties that Lake Huron's changing water levels represent normal circumstances for their properties and that these normal circumstances currently support wetland vegetation along the shoreline and have periodically supported such vegetation in the past.

The Appellant asserted that the District had improperly characterized the Appellants' properties as special aquatic sites solely because the District characterized the areas as coastal marshes. The term “coastal marsh” is not specifically defined in the Corps regulations, but the Corps definitions of wetlands identifies that it includes areas such as marshes, and the term coastal is commonly understood to be the land along a shoreline. All the areas the District identified as coastal marshes are also identified in the administrative record as wetlands.

The EPA CWA Section 404 (b) (1) *Guidelines for Specification of Disposal Sites for Dredged or Fill Material* at 40 CFR 230 (CWA 404 (b) (1) Guidelines, Subpart E – *Potential Impacts on Special Aquatic Sites*) specifically defines all wetlands as special aquatic sites. As the District had documented that each of the Appellants' properties contained wetlands, the District was required to characterize these areas as special aquatic sites to be consistent with CWA 404 (b) (1) Guidelines.

The Appellant's representative asserted that the characterization of the Appellants' properties as coastal marsh and wetlands in the Public Notice for the permit requests was not required or appropriate for the Public Notice. The District used several different terms to describe the different Appellants' projects in the six Public Notices including mechanical grooming in wetlands, mechanical grooming in coastal marsh, lakebed grading/grooming, and lake bottom grooming. The Corps standards for public notices are described at 33 CFR 325.3 and state that:

33 CFR 325.3 (a): The public notice is the primary method of advising all interested parties of the proposed activity for which a permit is sought and of soliciting comments and information necessary to evaluate the probable impact on the public interest. The notice must, therefore, include sufficient information to

Program Support Division
Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

give a clear understanding of the nature and magnitude of the activity to generate meaningful comment.

Further, the public notices should include any other available information which may assist interested parties in evaluating the likely impact of the proposed activity, if any, on factors affecting the public interest (33 CFR 325.3(a)(13)).

The public notices for these proposed activities were written at several different times, and initially were assigned to several different Corps project managers. While the exact words used to describe the project areas varied slightly the descriptions all represented reasonable, commonly understood descriptions of the projects, their locations, and the environmental conditions present. The District's choices of information to include in the public notices were reasonable and consistent with the Corps regulations.

Reason 2: The Appellant asserted that the Detroit District has given the Appellant disparate (markedly different) treatment relative to public properties. (Appellants' request for appeal reasons 10, 23, 27)

Finding: This reason for appeal did not have merit.

Action: None required.

Discussion: The Appellants' representative did not elaborate regarding this reason for appeal but submitted information regarding shoreline grooming activities on public properties that had received Corps permit authorizations. Those authorizations are discussed below. The Appellant's implied inference is that if projects similar to those proposed by the Appellant were proposed for public properties, the Corps would issue permits for those activities.

The environmental effects of a similar project on a publicly accessible shoreline area and similar private non-accessible shoreline area would be similar. However, a project on a publicly accessible shoreline area would typically provide some different benefits than a project on a private shoreline area, and this would result in some differences in the weighing and balancing of public interest factors in the Corps public interest review. This difference in weighing and balancing of a permit for a public project as compared to a private project does not preclude a private project from being permitted. Just as with a public project, a private project would receive a permit unless that project was determined to be contrary to the public interest or did not comply with the EPA CWA Section 404 (b) (1) Guidelines.

The Corps regulations at 33 CFR 320.4 (a) describes the requirements of the Corps public interest review process. Generally, the regulations state that a permit will be granted unless the District Engineer determines that it would be contrary to the public interest. This determination whether to issue a permit is based on an evaluation of the probable impacts of the proposed activity and its intended use on the public interest. Evaluation of the probable impact which the proposed activity may have on the public interest requires

Program Support Division
Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

careful weighing of all those factors which become relevant in each particular case. The benefits that are reasonably expected to accrue are balanced against the reasonably foreseeable detriments. There would generally be differences in the public interest review factors between a project that was designed to serve the general public and a project that was private property and developed primarily for the use of the property owners.

The District's October 20, 2004 Memorandum For Record *Review of Consideration of Impacts Specific to an Applicant as Public Interest Review Factors in the Public Interest Review of Department of Army Permits* describes in more detail how the District evaluates public interest review factors for public and private projects. The District's policy memo was reviewed as part of the evaluation of these appeals and found to be consistent with the Corps regulations regarding the public interest review process.

The Appellant submitted clarifying information on specific permit actions that he asserted represented evidence that he had received a disparate (i.e. markedly different) permit decision from public applicants for shoreline grooming permits. As described above, permit decisions for shoreline grooming for publicly accessible and privately accessible shorelines are not directly comparable because of the differences in the public interest review factors between the two. Nevertheless, the District permit actions submitted by the Appellants' representative as evidence of disparate treatment were evaluated to determine whether they constituted evidence of disparate treatment.

The Appellant provided six examples of what he considered to be disparate treatment between public and private properties. Of those six examples, one was located in Saginaw Bay approximately 50 miles northeast of the project sites and the other five were located on Grand Traverse Bay, approximately 100 miles northwest of the project sites. My conclusions regarding those actions are as follows:

East Tawas City Park, Michigan, Detroit District file number 01-016-051-0. The East Tawas City Park is approximately 50 miles northeast of Bay City, Michigan. The District evaluated the proposed project identified in this application and concluded that the beach cleaning machine proposed for use on a public beach did not result in a discharge of dredged or fill material that required a permit authorization under the Corps regulations. The Appellants' permit requests were not comparable to the East Tawas permit as they did not propose to use the same equipment.

Grand Beach Resort Hotel Detroit District file number 00-056-092-0A, an individual permit that expired on December 31, 2003. The Grand Beach Resort Hotel is a commercial property located on Grand Traverse Bay, Michigan, over 100 miles to the northwest of the properties under consideration in this administrative appeal. This permit expired before these six permit decisions were made. The Grand Beach Resort Hotel permit was not sufficiently similar situation to the activities under appeal to provide any evidence of disparate treatment between these six permit applicants and other shoreline grooming permit applicants.

Program Support Division
Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

Northport, Michigan Detroit District file number 86-056-385-4, was authorized by the District under Regional General permit 80-200-001-6, which allows shoreline grooming for designated municipal public swimming areas. This property is a public swimming area and is located over 100 miles to the northwest of the permit actions under consideration in this administrative appeal. The environmental conditions and scope of the proposed projects under appeal area not sufficiently similar to the Northport project to provide any evidence of disparate treatment.

Northport, Michigan Detroit District file numbers 03-056-013-0 and 03-056-014-0 were permit actions for public shoreline properties located over 100 miles to the northwest on Grand Traverse Bay, Michigan and authorized under Corps Nationwide Permit number 18, which is restricted to discharges of 25 cubic yards or less. The Appellants' projects are more extensive than the Northport projects and so are not comparable to them.

Northport, Michigan Detroit District file number 03-056-015-0 was for a public shoreline property located over 100 miles to the northwest on Grand Traverse Bay, Michigan and was authorized under Corps Regional General permit 80-200-001-6, which allows shoreline grooming for designated municipal public swimming areas, and Corps Nationwide Permit number 18, which is restricted to discharges of 25 cubic yards or less. The Appellants' projects are more extensive than the Northport project and so are not comparable to them.

The Appellants asserted the District's determination of its cumulative impact area (CIA) for these projects was inappropriate and therefore resulted in disparate treatment of these permit applicants. That issue is discussed in the cumulative impact analysis section of this administrative appeal decision.

The Appellants' representative provided no evidence that the six permit applications for mechanized grooming of shorelines on private residential lots received a disparate evaluation relative to public shoreline grooming permits for similar areas. The Appellants' properties were different from the areas the Appellants used as examples of disparate treatment. The Appellants' examples of disparate permit decisions included public properties that were located 50 or 100 miles from the Appellants' projects, in some cases used different equipment, had different environmental conditions, and sometimes involved lesser acreages of proposed fill.

Since the Appellants' examples of disparate treatment do not involve comparable circumstances to the Appellants' projects, they only provide evidence that under different circumstances, the District reached different conclusions as to whether a permit could be issued. This is not evidence of disparate treatment because the permit decisions did not involve comparable properties and public interest review factors. The examples provided by the Appellant represent evidence that the District was making decisions on a project-by-project basis considering public interest factors and environmental conditions specific

Program Support Division
Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

to each project. It does not provide evidence that the District reached different conclusions on two projects with the same conditions or that the District had markedly different evaluations of comparable permit requests. This reason for appeal did not have merit.

Reason 3: The Detroit District misinterpreted the Corps regulation 33 CFR 320.4 (j) (2) as specifically shown in the District's January 24, 2001 policy memorandum for the record (MFR) titled *Issues of overriding national importance vis a vis state or local authorizations*, resulting in a flawed decision on these six permit applications. The Detroit District did not appropriately consider the needs and welfare of the people of Michigan because the District did not follow the standards of Michigan state shoreline grooming laws (Appellants' request for appeal reasons 1, 2, 25, 30).

Finding: This reason for appeal has merit.

Action: The District must reconsider the possible availability of alternative projects or mitigation measures as identified in more detail in Reason 4. The District must subsequently reconsider whether significant issues of overriding importance remain after those reconsiderations.

Discussion: The Corps regulations at 33 CFR 320.4 (j) (2) state that:

“The primary responsibility for determining zoning and land use matters rests with state, local and tribal governments. The district engineer will normally accept decisions by such governments on those matters unless there are significant issues of overriding national importance. Such issues would include but are not necessarily limited to national security, navigation, national economic development, water quality, preservation of special aquatic areas, including wetlands, with significant interstate importance, and national energy needs. Whether a factor has overriding importance will depend on the degree of impact in an individual case.”

The Appellant stated his interpretation of 33 CFR 320.4 (j) (2) in his RFA as:

“ ‘Corps jurisdiction over ... property is a matter of zoning and land use. 33 CFR 320.4 (j) (2) mandates that the District Engineer “normally accept decisions” of state, local, and tribal governments on such matters, “unless there are significant issues of overriding national importance.’ Rather than accept its clear meaning—that the Corps will generally defer to state government decisions on whether to grant or deny a permit- - the Detroit District has opined that it will defer only to state decisions when considering a single factor in its ‘public interest review.’ This interpretation ignores that that the District Engineer must also defer to state zoning issues, even though ‘zoning’ is not listed as a public interest factor....”

The Appellant's interpretation of 33 CFR 320.4 (j) (2) is inconsistent with Corps national guidance on this topic. The Preamble to the Corps *Final Regulations for Controlling*

Program Support Division

Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

Certain Activities in Waters of the United States, Federal Register V. 49 pages 39478 – 9, explains the Corps interpretation of 33 CFR 320.4 (j) (2), stating that:

“...this paragraph clarifies that the district engineer will normally consider the decisions of state, local, and tribal governments *on land use matters* to be conclusive as to *this factor* in the public interest review. *Many commenters interpreted this change to mean that the Corps would automatically base its permit decisions on existing or planned zoning or land use designations, or on the permit decisions of a state, local or tribal government rather than its current objective public interest review. This interpretation is not correct.* Land use is one of several factors considered by the Corps in the public interest review. ... The intent of this paragraph is to recognize that the primary responsibility for addressing this factor (i.e. local zoning and/or land use matters) rests with state, local, and tribal governments. When a state, local or tribal government gives its zoning or other land use approval for a particular project, this will be considered conclusive for this factor. However, the Corps will continue to perform a thorough, objective evaluation of each application in full compliance with applicable regulations and laws.” (italics added).

The Appellant’s interpretation of 33 CFR 320.4 (j) (2) considers Corps permit decisions on CWA and RHA permit applications to be comparable to local land use and zoning decisions, and that the Corps will generally defer to state government decisions on whether to grant or deny a permit. The Corps permit decisions are not land use or zoning decisions. The Corps decisions on these permit requests does not change the existing local land use from residential to some other land use classification. The Corps regulations do not require the District to come to the same decision as the State of Michigan regarding these permit requests. However, the District is required to identify what significant issues of overriding national importance were present that necessitated a permit denial. Using its January 24, 2001 policy memorandum for the record, the District further interpreted 33 CFR 320.4(j)(2) consistently with the Corps’ regulations in general.

But, even though the District’s Statement of Findings document for each permit denial decision identified such significant issues of overriding national importance, this reason for appeal has merit because of the inconsistencies in the District’s documentation. The District’s documentation is inconsistent as to whether less damaging practicable alternatives or additional avoidance, minimization, and compensatory mitigation measures to reduce adverse project impacts were available. Since those issues must be reevaluated, the District’s determination that significant issues or overriding national importance are present must also be reconsidered based on the results of other reconsiderations identified in this administrative appeal decision. The District’s evaluations of specific factors made during its public interest review and permit evaluation process are discussed in more detail under other specific reasons for appeal.

Reason 4: The Appellant identified a variety of reasons in his RFA as to why the environmental evaluation in the District’s PED, and the District’s decision that resulted from that evaluation, were flawed. These are addressed by topic under this

reason for appeal. (Appellants' request for appeal reasons 7, 8, 9, 11, 12, 13, 14, 15, 17, 19, 20, 21, 22, 23, 24, 26, 27, 29, 31).

Finding: This reason for appeal had merit.

Action: The District must reconsider its permit denial decisions for these six Appellants. The District must reconsider the following specific items and document its decision in one or more revised PED and Statement of Findings (SOF) documents:

- 1. The District must reconsider its determination of the basic and overall project purpose(s) for these six Appellants, including further discussions with the Appellants as to their basic and overall project purpose(s).**
- 2. The District must reconcile the internal inconsistencies in the PED including**
 - a. Whether or not less damaging practicable alternatives to the proposed activities were available**
 - b. Whether or not measures to avoid, minimize and implement compensatory mitigation for adverse environmental effects of the proposed activities were unavailable to the Appellants, or available but not used.**
- 3. The District's administrative record did not sufficiently establish that if the roots and rhizomes of bottomland wetland vegetation were removed during this low water period, that wetland vegetation could not reestablish itself during the next low water cycle. The District must reconsider and further document or modify that conclusion.**
- 4. The District's administrative record did not sufficiently establish the effects of the proposed activities on mosquito breeding habitat and associated potential for transmission of mosquito-borne diseases. The District must reconsider and further document or modify its conclusions regarding those issues.**
- 5. The District's evaluation of the effects of the proposed shoreline grooming activities on changes in *E. coli* concentrations on the Appellants' shorelines did not consider whether such changes represented a change in risks to human health. The District must reconsider and further document or modify its conclusion regarding that issue.**
- 6. The District must characterize whether or not its conclusion that contaminants would be liberated from the bottomland substrate as the result of the proposed shoreline grooming activities represented an adverse environmental or health risk effect that was a substantial change**

from existing conditions and consider that determination in its reconsideration of these permit decisions.

- 7. The District's PED identified that the six proposed shoreline grooming projects would provide major benefits to property ownership. The District did not explain how the benefits to the six property owners and the cumulative benefit of this factor to other property owners was outweighed by other public interest factors in the District's decision to deny these six permit applications. The District must provide further documentation of that conclusion or revise that conclusion.**
- 8. The District did not explain why the adverse effects on the environment that were the result of the removal of shoreline vegetation would persist longer than the benefits to the Appellants that were also attributed to the removal of shoreline vegetation. The District must reconsider and further document or modify its conclusion regarding how long these adverse and beneficial effects would continue.**
- 9. The District must reconsider its conclusion regarding whether these six shoreline grooming projects and their associated cumulative effects would result in reasonably foreseeable major, long term cumulative negative effects. Since the District's PED was inconsistent regarding whether measures to avoid, minimize, and provide compensatory mitigation for these projects were available, the District's cumulative impacts analysis for additional similar projects must also be reconsidered.**

Discussion: The District's combined PED and Statements of Finding reached the same conclusions for each of the six permit applicants. These conclusions are discussed in more detail below.

Clean Water Act Section 404 (b) (1) analysis (Appellant request for appeal reason 13).

The Corps must evaluate the compliance of CWA individual permit applications in accordance with the CWA 404 (b) (1) Guidelines 40 CFR 230. An important component of the CWA 404 (b) (1) Guidelines analysis is the determination of project purpose. The Corps Regulatory Program Standard Operating Procedures (SOP) issued April 8, 1999 describes how the determination of basic project purpose and overall project purpose are used during the CWA 404 Section (b) (1) Guidelines analysis. The basic project purpose is identified to determine whether a project is "water dependent" and the overall project purpose is used to evaluate practicable alternatives under the CWA Section 404 (b) (1) Guidelines.

Normally, individual permit applicants will identify their project purposes in an individual permit application. However, for these permit requests, five of six applicants submitted only the District's brief *Application for Minor Residential Shore Activities* application. That application, which was designed for projects that met the requirements

Program Support Division

Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

of the District's regional general permit for shoreline activities (not applicable to these projects), does not request that applicants identify a project purpose. One of the applicants (Groya) identified in his cover letter that he wanted to have a clean beach while selling one of his properties. The sixth applicant (Shotwell) submitted the Corps standard national application form, but listed no project purpose on his application.

Although the applications did not list project purposes, the District's representative stated that the District proceeded with permit processing and did not request more specific descriptions of project purpose from the Appellants. The District subsequently issued public notices that identified the Appellants' project purposes as follows:

Whalen:	Extend existing sand beach towards the water's edge
Patchett:	Remove vegetation
Gough:	Groom shoreline for recreational activities
Shotwell:	Aesthetic improvement
Wasney-Ryan:	Remove vegetation and debris to facilitate recreational activities
Groya:	No project purpose provided in public notice

Appellant Whalen's representative submitted additional information regarding his client's project purposes (March 19, 2004 and July 6, 2004 letters in the administrative record). These letters included discussion of several project purposes including improved views of Saginaw Bay, improved recreational access, removal of organic debris and litter, control of mosquitoes and risk of mosquito-borne disease infections, control of shoreline contamination such as by blue-green algae and *E. coli*, elimination of habitat for undesirable animals, control of undesirable odors, and control of *Phragmites* vegetation.

The District's PED document (page 39) explained the District's conclusion that the basic project purpose for all six Appellants was not water dependent stating that:

"The fundamental, essential, or irreducible activity or use to which the special aquatic site will be put after discharging dredging or fill material ("basic purpose") has not been identified by the applicants. The closest basic purpose we can discern is aesthetics and/or recreation without further clarification. Neither (non-wetland) aesthetics or recreation, per se, requires access or proximity to or siting within wetlands to take place."

The Corps Standard Operating Procedures discusses basic project purpose and identifies examples of water dependent projects as:

"Examples of water dependent projects include, but are not limited to, dams, marinas, mooring facilities, and docks. The basic project purpose of these projects is to provide access to the water."

The District's administrative record did not clearly document and explain why the basic project purposes the District identified for these six projects, Aesthetics and Recreation, did not require access to the water and were not water dependent activities in the

Program Support Division

Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

circumstances specific to these appeals. In regard to Aesthetics, each Appellant's intent was to modify the current shoreline conditions of a single family residential property to replace wetland vegetation below the OHWM with unvegetated shoreline conditions that the District concluded the Appellants considered more aesthetically desirable. The District did not sufficiently explain why a generalized basic project purpose of "Aesthetics" was appropriate to use in this situation when the Appellants' specific desired purpose was not aesthetic modification in general but aesthetic conditions of a shoreline area.

In regard to Recreation, each Appellant's intent was to modify the current conditions of the shoreline on their property below the OHWM to conditions they considered more desirable for shoreline recreation activities, including access to the water. The District did not sufficiently explain why a generalized basic project purpose of "Recreation" was appropriate to use in this situation when the Appellant's desired purpose is modification of shoreline conditions to improve shoreline recreation. The District did not explain how the Appellants could meet this project purpose without access to the shoreline.

In addition, the March 19, 2004 and July 6, 2004 letters submitted on behalf of Appellant Whalen described additional benefits that the Appellants believed would be provided if the proposed shoreline grooming activity proceeded. The Appellants' RFA Reason 13 reiterated these concerns stating that:

"The Detroit District failed to consider other reasons why a so-called marsh environment in close proximity to congested human habitans is undesirable, such as the existence of rodents, snakes, undesirable odors, muskrats, mink, and perhaps other "fur bearing" land animals, and other factors within the knowledge of the Detroit District."

In the reason for appeal given above the Appellant was stating that the District should have considered its permit decision in relation to several additional project purposes that the Appellant did not clearly identify during the permitting process. The Appellants did not specifically identify the removal of wildlife such as rodents, muskrats, mink, and other furbearing animals as a project purpose. Some Appellants stated that these animals have the potential to transmit diseases to humans or directly injure (bite) humans. The District reasonably concluded not to specifically consider general comments by the Appellant that the existence of rodents, snakes, muskrats, mink, and other "furbearing" land animals were "undesirable," when the Appellants provided no further detail on those issues.

However, some of the additional project benefits that the Appellants identified, such as reducing exposure to diseases warranted specific consideration as possible additional basic project purposes. The Appellants did not specifically identify eliminating undesirable odors as a project purpose, but that purpose would fit within the general purpose of changed Aesthetic conditions. The District should have addressed whether the Appellants' projects would reduce undesirable odors from stagnant ponded water. Since all six projects were considered to be sufficiently similar to evaluate in one PED,

Program Support Division
Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

these possible additional project purposes should have been considered for each of the six permit applications.

The District's administrative record does not sufficiently document that the basic project purposes identified in its PED included all the basic project purposes that are discernable from the Appellants' submittals. The District must reconsider its determination of basic project purpose(s) for these six actions. As part of this reconsideration the District should review the Appellants' submittals of project purpose information, and contact each of the six Appellants or their representatives to attempt to obtain more details regarding their project purpose(s) of these permit requests, and reconsider whether one or more basic project purposes of each Appellant are water-dependent. If one or more Appellants' projects are identified as water-dependent, the District should modify its CWA Section 404 (b) (1) Guidelines analysis to reflect that change and reconsider whether other changes to the CWA Section 404 (b) (1) Guidelines analysis are necessary as a result of that change.

In order to comply with the CWA Section 404 (b) (1) Guidelines for the applicants must show that there are no practicable alternatives to the proposed project which would have less adverse effect on the aquatic environment no practicable alternatives to siting their projects in a special aquatic site (CWA Section 404 (b) (1) guidelines at 40 CFR 230.10 (a) and 40 CFR 230.10 (a)(3). The CWA 404 (b) (1) Guidelines at 40 CFR 230.10 (a) (3) defines a practicable alternative as:

“An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.”

The District's PED document (page 38) discussed its determination of overall project purposes for these permit applications stating that:

“The applicants have stated their purpose as transforming the vegetated lake bottom into a sandy one. The applicants have stated their reasons for the proposed grooming as aesthetics and recreation, without further clarification. We must presume that the applicants' purpose of the proposed grooming is one of the desired aesthetics based upon statements that the finished result should appear like their conception of an historical sandy beach, i.e., the upland groomed sand slope located landward of the OHWM.”

The District used its generalized definition of overall project purposes to reach several conclusions in the CWA Section 404 (b) (1) analysis (PED page 38 – 39). These included (1) that all six Appellants had demonstrated that there were no practicable alternatives that were less damaging to the aquatic environment that had no other significant, adverse environmental effects (40 CFR 230.10 (a) and 40 CFR 230.12 (a) (3) (i)), and (2) that the proposed discharge included all appropriate and practicable measures to minimize potential harm to the aquatic ecosystem (40 CFR 230.10 (d) and 40 CFR 230.12 (a) (3) (iii)).

Program Support Division
Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

However, on PED page 35 the District identified mowing of vegetation, chemical herbiciding of vegetation, construction of access paths through the vegetation, use of Corps nationwide permits to remove debris from unvegetated sand areas and sand ridges at the water's edge, and manual shoreline grooming as alternatives to mechanical grooming of the shoreline. The District also identified that there may be specific methodologies to control invasive vegetative species such as *Phragmites* and purple loosestrife, zebra mussels, *E. coli*, and mosquitoes, without removing or destroying all coastal vegetation. The District's PED page 35 states that there may be more alternatives, although none of these directly satisfies the applicants' stated objective of removing coastal vegetation.

The District's conclusions on PED pages 38 – 39 that no practicable alternatives and no measures to avoid or minimize adverse environmental effects were available are inconsistent with the District's discussion on PED page 35 that avoidance and minimization measures were available. The District did not explain why those conclusions were different. The District also states on PED page 39 while discussing compensatory mitigation that:

“As described in the sections above we have not identified any justifiable unavoidable loss of aquatic resources. Therefore, steps to achieve functional replacement are not appropriate.”

The CWA Section 404 (b) (1) Guidelines analysis as explained by the Army Corps of Engineers/Environmental Protection Agency 1990 Memorandum of Agreement regarding *Determination of Mitigation under the Clean Water Act Section 404 (b) (1) Guidelines* is designed to generally be a sequential analysis where avoidance, minimization, and compensatory mitigation measures are sequentially considered to address adverse environmental effects of projects. So the only reason for not considering whether compensatory mitigation was appropriate would be that avoidance and minimization measures to reduce the environmental effects of the projects were available, but not used.

The District's CWA Section 404 (b) (1) Guidelines analysis in the PED is internally inconsistent, and inconsistent with portions of the District's public interest review in the PED. If the District's conclusion is that no less environmentally damaging practicable alternatives were available, and no minimization measures were available, then the District should have evaluated whether compensatory mitigation measures were available to offset the effects of these projects on aquatic resources. If the District's conclusion is that practicable avoidance and minimization measures were available, but not utilized, then the District's CWA Section 404 (b) (1) Guidelines analysis in the current PED is inconsistent with that conclusion. The District erred in not evaluating whether an alternative that incorporated avoidance and minimization measures the District identified on PED page 35 could be considered to be a practicable alternative in accordance with the CWA Section 404 (b) (1) Guidelines.

Program Support Division
Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

The District's CWA Section 404 (b) (1) Guidelines analysis of avoidance and minimization measures does not discuss the measures identified on PED page 35 in relation to the District's identified overall project purposes – Aesthetics and Recreation. Instead, it appears the District eliminated these avoidance and minimization measures from consideration because they were inconsistent with the Appellants' proposed method of meeting their project purposes – mechanized shoreline grooming to remove all vegetation. The Appellants in these six permit actions all provided the method by which they wanted remove vegetation from their shoreline areas, but only later in the permit evaluation process did some of the Appellants provide their project purpose(s) for wanting to remove the shoreline vegetation. In some cases the Appellants never clearly provided an overall project purpose (i.e. the purpose to be achieved by removal of the shoreline vegetation).

The District must reconsider whether all practicable avoidance and minimization measures to reduce adverse environmental effects of the proposed permit actions have been considered. In undertaking this reconsideration, the District must reconsider its determination of the overall project purposes for each of these six Appellants. As the overall project purposes might differ among the Appellants, the District must attempt to communicate with each Appellant or his representative to obtain further clarification of their basic and overall project purpose(s). The District must consider the various project purposes that have been identified by the Appellants during the permitting process such as, but not limited to, the project purposes identified in the March 19, 2004 and July 6, 2004 letters from Appellant Whalen's representative. If the Appellants' project purposes are sufficiently distinct, it may be necessary to evaluate them in separate PED and SOF documents. If the District concludes that all practicable avoidance and minimization measures have been undertaken, then the District must consider whether compensatory mitigation measures are available to offset some or all of the adverse environmental effects of the proposed activities.

As the District reevaluates its CWA Section 404 (b) (1) Guidelines analysis regarding whether there were less damaging practicable alternatives, the District must also reconsider whether the addition of avoidance, minimization, or compensatory mitigation measures would change the District's prior analysis that the six projects were not compatible with the Guidelines. The District must specifically reconsider its prior determinations that these projects did not comply with the following sections of the Guidelines: (a) 40 CFR 230.10 (c) prohibiting projects from causing or contributing to significant degradation of waters of the United States, (b) 40 CFR 230.10 (c) (2) prohibiting significantly adverse effects of the discharge of pollutants on life stages of aquatic life and other wildlife dependent on the aquatic ecosystems, and (c) 40 CFR 230.10 (c) (3) prohibiting significantly adverse effects of the discharge on aquatic ecosystem diversity, productivity, or stability.

This appeal decision discusses the District's current PED conclusions in greater detail in the following sections.

Permit Evaluation Document Public Interest Review Analysis, Environmental Impact Analysis, and Cumulative Environmental Impacts Analysis

The District combined its discussion of environmental effects and public interest review factors in its PED. The Appellant objected to the District's evaluations and conclusions regarding many of the environmental effects and public interest review factors. The District's public interest review, NEPA environmental analysis and cumulative impacts analysis are discussed together below.

Effect of Proposed Projects on Water Quality, Wetlands, and Aquatic Organisms
(Appellant RFA Reason 15, 17, 21, 22, 26, 31)

The District's evaluation of the water quality effects of issuing an increasing number of shoreline grooming permit applications (PED page 20) stated that:

“In the case of one landowner performing grooming, the surrounding marsh vegetation continues to provide protection and filtering functions. Adjacent vegetative beds can provide filtering of the contaminants and fines released where the grooming takes place. The impacts of grooming one location may therefore be minor, short to long term and negative. If many properties along the cumulative impact area (CIA) are groomed, the protection afforded by the adjacent non-groomed reach is drastically reduced. If most or all properties along the CIA are groomed, the protection afforded by the adjacent non-groomed marshes no longer exists.”

The District further stated PED (page 20) that:

“Grooming would remove the ability of the native wetland vegetation to regrow when water levels rise sufficiently to prevent continued mowing. Without the vegetation to perform its filtering actions, there will be no remaining buffering/cleansing ability. The root systems would not be there to respond to future low lake level cycles. Thus, a secondary impact of grooming would be the elimination of future filtering of some of the suspended load from the adjacent river plumes when water levels again rise and the plumes infiltrate the work areas and shoreline propelled by wave action. These would not be trapped or transformed, resulting in long term negative impact on water quality.”

The District stated that the wetlands along the shoreline would also provide excellent spawning and nursery habitat for fish when water levels increased and covered the shoreline wetland vegetation

The Appellants' position is that the District's conclusion that mechanized shoreline grooming would result in a negative impact on water quality is not supportable because the District did not explain how grooming the bottomland substrate to a depth of only two inches, as proposed by Groya and Whalen, or four inches, as proposed by the other Appellants, would eliminate the deep roots of wetland vegetation. The Appellants'

Program Support Division

Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

position is also that such roots and rhizomes have not been historically present but are a recent occurrence, and so the removal of this vegetation does not represent an adverse environmental effect. The Appellants also noted that at high water levels wetland vegetation would eventually die back.

The administrative record supports most of the District's conclusions regarding water quality. Those conclusions are (1) that mechanized shoreline grooming will remove roots and rhizomes from the bottomland substrate, (2) that removal of those roots and rhizomes will eliminate the ability of the groomed area to filter the sediment loads from the Saginaw and Kawkawlin Rivers during the next occurrence of high water levels, (3) that removal of roots and rhizomes will have an adverse effect on fish spawning and nursery habitat and (4) that the extent of these effects will increase as the number of property owners who groom their shorelines increases.

However, the District's conclusion that wetland vegetation would be unable to reestablish itself during the next low water cycle is not sufficiently supported by the District's administrative record. This is because the District did not consider that the wetland vegetation could reestablish itself by means other than roots and rhizomes. As discussed further under the *Duration of Environmental Effects* section below, the District did not fully document its conclusions regarding the duration of the losses of wetland vegetation that would occur as a result of mechanized shoreline grooming. The District must reconsider or further document whether and how long it would take wetland shoreline vegetation to reestablish itself by means other than roots and rhizomes during the next low water period. The District must also consider whether the absence of roots and rhizomes from prior low water periods would effect the species composition of the wetland species that would recolonize the areas.

Although the Appellant claimed such roots and rhizomes were not present in the past, the District's PED pages 8 and 9 identified photographs and descriptions from the administrative record that reasonably supported the District's conclusion that wetland vegetation appeared on the shoreline bottomland areas during past low water periods and, if not disturbed, will continue to do so. The District's administrative record discussed that such roots and rhizomes could exist in the bottomland substrate even if inundated for extended periods of time. The District's conclusion that the shoreline would experience greater wave action and undercutting and increased erosion if the wetland vegetation roots and rhizomes were removed was reasonable. The District's conclusions that mechanized grooming of the bottomland vegetation would adversely affect water quality by elimination of the filtering function of the wetland vegetation, and erosion control function of the roots and rhizomes, were also reasonable.

The District concluded on PED page 23 that:

“In summary, the grooming of the coastal marsh at each project site would remove habitat and create the above conditions harmful to aquatic organisms at that site, but the surrounding vegetated marshes would be expected to continue to perform their normal filtering and nutrient fixing functions....the impact on

aquatic organisms of grooming a single property would presumably be minor, but still present immediate and long-term negative impacts if and until it could recover. The cumulative impacts of numerous such projects ... will be major immediate and long-term negative impacts...Cumulative grooming would both destroy the habitat as well as any reasonable chance of its recovery during the next several low water periods. We conclude that these proposed projects have the potential for significant degradation to the waters of the United States within the context of the Clean Water Act 404 (b) (1) Guidelines, 40 CFR 230.10 (c).”

The District must reconsider this conclusion because as stated under the CWA Section 404 (b) (1) Guidelines analysis above, the District’s PED document is inconsistent regarding whether avoidance and minimization measures are available, and the PED did not consider whether compensatory mitigation to reduce the environmental effects of the proposed activities were available.

Phragmites (Common Reed) Control (Appellant RFA Reason 7)

The Appellants’ requests for appeal stated that the Appellants’ projects would produce a major positive environmental effect by controlling *Phragmites* vegetation and that the District’s PED and permit decisions were flawed because they did not take into account this major benefit. The administrative record shows that *Phragmites* can be an invasive plant and sometimes invades pristine wetland areas. This administrative appeal concerns six different Appellants who own property at six different, but nearby, locations. The administrative record does not describe whether there are differences in how often these six Appellants mow their shorelines (an unregulated activity), or how often they would propose to mechanically groom their shorelines. The Appellants have stated their desire to regularly remove all vegetation and debris from their shoreline areas. The Appellants described a generalized approach to remove all shoreline vegetation, and assumed that this would also control *Phragmites*.

The administrative record document *Element Stewardship Abstract for Phragmites australis Common Reed*, discussed the effectiveness of controlling *Phragmites* using cutting, mowing, and mechanical disking. The administrative record includes information showing that these mechanical control methods vary in effectiveness based on the timing, duration, and frequency of the control activities. None of the Appellants described a program or timing of mechanical grooming to specifically control or eliminate *Phragmites*.

The District was required to undertake an evaluation of environmental effects of the proposed project (mechanized shoreline grooming) relative to existing conditions (continued unregulated mowing by Appellants of their shoreline vegetation).

The District concluded in its PED page 26 that:

“Although the applicants may believe that disking and raking may control phragmites, our review indicates that it could easily result in increasing the invasion program because phragmites regenerates and spreads by vegetative root

Program Support Division
Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

stock, and disking and raking cuts the rhizome up into pieces that can start new plants, and spreads these pieces through the sand.”

The District concluded that the proposed mechanized shoreline grooming activities would break down the native bulrush beds and afford an opportunity for spread and establishment of invasive and exotic species such as purple loosestrife or *Phragmites*. The administrative record is not conclusive regarding whether the Appellants’ proposed shoreline grooming activities will or will not provide a major benefit in controlling or eliminating *Phragmites* over time. Based on the lack of specific information in the administrative record regarding how the shoreline grooming would be designed to prevent regrowth of *Phragmites*, and recolonization of invasive *Phragmites* in place of other species, the District’s conclusion that the Appellants’ project would not provide a major benefit in controlling *Phragmites* was reasonable.

Safety (Human Health) considerations

The Appellants’ Requests for Appeal and the March 19, 2004 letter submitted on behalf of Appellant Whalen describe the effect of the proposed projects on several “safety” (i.e. human health) factors identified during the District’s permitting process. The Appellants concluded that the District had either disregarded or not appropriately analyzed these factors. These factors are discussed individually below.

The District and the Appellant differed in their view of what should be considered a safety factor that affected the general public, as opposed to the six Appellants. The District described its safety evaluation on PED page 33 as follows:

“We (the district) view the public interest factor of safety as truly a public resource, from the perspective of protection and well being afforded to the public and to neighbors along the alignment of their respective riparian interest areas. As we understand it, in Michigan, shoreline property owners have exclusive use of the exposed bed of the Great Lakes, and the public and neighbors are not entitled to walk along or across the riparian interest area. We will address each applicant’s personal safety preferences bound up in the project purpose in the sections below on the “consideration of property ownership factor” and in the analysis of alternatives for Section 404 (b) (1) Guidelines review below. The proposed grooming activity on each respective lot does have some possible safety implications for neighbors who do not perform it yet access their respective riparian area by foot, and also for adjacent areas such as Bay City State Recreation Area a few miles to the north.”

The District’s evaluation of Safety factors as they affected the general public is described below.

Blue-Green Algae Toxicity (Appellant RFA Reason 8)

Program Support Division

Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

The Appellant asserted that the District had not appropriately considered the safety concern related to blue-green algae (*Microcystis*). Information from the National Oceanic and Atmospheric Administration (NOAA) September 2002 document submitted with the March 19, 2004 letter on behalf of Appellant Whalen stated that *Microcystis* and other blue-green algae blooms had occurred in the 1990's and more recently. The NOAA document attributed *Microcystis* blooms in the 1970's and early 1980's to excessive availability of phosphorus, but with increased control of phosphorus input to the Great Lakes, NOAA had begun to consider the invasions of zebra mussels and quagga mussels as possible reasons contributing to more recent blue-green algae blooms. The NOAA document states that there have to be high concentrations of *Microcystis*, such as that found in a thick surface scum, to be dangerous to wildlife or pets drinking the water.

The District discussed the effect of the proposed projects on algae on PED page 23. The District concluded that:

“Under current water levels, the rooted aquatic vegetation normally filters nutrients and utilizes them in the creation of vegetated biomass. After the project results in removal of the marsh vegetation, the resulting increase in nutrients in the water column will favor algae growth over rooted aquatic vegetation, causing a shift in the rest of the aquatic community.”

The District did consider the potential effects of the six proposed projects on blue-green algae, and concluded that the conditions that would result from the projects would likely produce more algae rather than less. The District's administrative record reasonably supports this conclusion.

Effect of the project on mosquito breeding habitat and transmission of mosquito-borne diseases (Appellant RFA Reason 9)

The District considered the effect of the six projects on mosquitoes. The District's PED (page 8) stated that the water that pools along the existing shoreline is subject to wind and wave action and would be expected to discourage mosquitoes from breeding in that habitat. The District concluded (PED page 33-34) that the elimination of vegetated swales during the grooming process would eliminate mosquito breeding habitat, but would also destroy the habitat of macro-invertebrates and other organisms that prey on mosquitoes. The District concluded that proposed projects would not alter mosquito breeding habitat in areas outside the project areas, and that even within the project areas, the exposed ponded areas could continue to breed mosquitoes if not regraded within two to three weeks of the original grading.

The District concluded that eliminating the shoreline wetland vegetation would have little effect on the Appellants' perception of an existing mosquito problem because numerous mosquito breeding areas would exist whether or not the shoreline was mechanically groomed. The District identified that there are many other sources of mosquito breeding habitat outside of the proposed project areas, and that the primary carrier of West Nile Virus, *Culis sp.* mosquitoes, often breed in the urban environment rather than coastal

Program Support Division

Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

marsh wetlands. The Appellant stated that the District's conclusions overstated the effect of wind and waves on areas of ponded water that were several feet from the water line, and that the District did not provide sufficient documentation to support its conclusions. The Appellant did not address the District's conclusion that there are many other sources of mosquito breeding habitat outside of the proposed project areas. The District did not address the potential cumulative effects of changes in mosquito breeding habitat and mosquito-borne disease transmission risk associated with the cumulative impacts of many mechanized shoreline grooming projects.

I conclude the District's administrative record did not sufficiently establish the effects of the proposed activities on mosquito breeding habitat and associated potential for transmission of mosquito-borne diseases. The District must reconsider and further document its conclusions and, if appropriate, modify its conclusions regarding those issues. The District must also further consider and document the potential cumulative environmental effects of additional shoreline grooming activities on local mosquito populations and associated potential for transmission of mosquito-borne diseases.

Effects of the proposed projects on the safety risks posed by E. coli in shoreline sand or water (Appellant RFA Reason 11)

The District stated that *E. coli* bacteria naturally occurs on virtually all the shorelines of the Great Lakes and that gull and goose fecal material is the primary source of natural *E. coli* in the project area. The District cited several sources in its PED (page 33) that shoreline grooming activities might provide favorable conditions to increase *E. coli* populations by mixing surface *E. coli* colonies into subsurface sand layers providing moist soil conditions, protection from the dessication by sun and wind, and protection from sand sterilization by the sun's ultraviolet rays.. The Appellant stated that he believed the District had disregarded his concern regarding *E. coli* contamination of stagnant ponds of water along the shoreline, and that the Appellant had not heard of shoreline closings based on *E. coli* contamination of dry sand.

The District reasonably concluded that mechanized shoreline grooming could maintain or increase naturally occurring *E. coli* concentrations on the Appellants' properties. However, neither the District nor the Appellant differentiated between natural and man-caused sources of *E. coli*, nor possible differences in health risks posed by the different sources of *E. coli*. The administrative record describes that there are periodic overflows of undertreated sewage from sources in the Saginaw River that can come into contact with the six project locations under consideration in this administrative appeal. The District's evaluation of the effects of the proposed shoreline grooming activities on changes in *E. coli* concentrations on the Appellants' shorelines did not consider whether such changes represented a change in risks to human health. The District must reconsider and further evaluate this environmental issue and either provide more documentation of its current conclusion, or modify that conclusion if appropriate.

Effects of the proposed projects on contaminants in the bottomland substrate (Appellant RFA reason 12)

Program Support Division
Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

The District stated that “high” dioxin concentrations had been found in exposed bottomlands of Bay City State Recreation Area with levels of 220 parts per trillion (ppt) at 2 inches below the surface and 340 ppt at 15 inches below the surface. The District concluded that the likely source of this dioxin, as well as other contaminants that may be in the shoreline bottomland substrate, is the Saginaw River. The District did not identify in the administrative record whether it considered these concentrations to represent a potential environmental or human health risk. However the District did state that since the project sites were closer to the Saginaw River than was the Bay City State Recreation Area, that potentially higher levels of dioxin or other contaminants could be present on the Appellants’ properties.

The Appellant objected to the District’s statements regarding dioxins because the District did not have site-specific information regarding the presence of dioxins on any of the Appellants’ properties, and did not discuss whether the dioxin levels that were identified at Bay City State Recreation Area represented a potential environmental or health risk. The District’s discussion of dioxin and other potential contaminants on PED page 33 states that:

“Any dioxin or other contaminants present but buried will be exposed and liberated to the surface and water column where neighbors and other users can be exposed.”

The description above suggests that the District considered exposure of possible contaminants in the substrate to be a potential safety or health risk. However the District’s conclusion on the District’s 404 (b) (1) analysis on PED page 38 that states:

“The material to be discharged in this project consists of fine sands. Subpart H of the Guidelines requires test of the extraction site of the discharge material for contaminants except under certain circumstances. In this case, testing is not required because the discharge site is adjacent to the extraction site and subject to the same source of contaminants, and materials at the two sites are substantially similar.”

The District must reconsider and clarify its conclusions regarding whether the completion of these six projects, and the cumulative effects associated with completing many similar projects, would represent a substantial change, either positive or adverse, regarding any potential environmental, safety, or health exposure risk associated with contaminants that might be disturbed during shoreline grooming.

Consideration of Private Property Ownership and Private Benefits vs. Public Benefits of the Proposed Activities (Appellant RFA Reasons 10 and 14)

The Appellants claimed the District’s public interest review methodology was flawed because it did not provide for the possibility that a private project could serve a public need, while also stating that the District had inappropriately assumed that the Appellants’

Program Support Division
Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

private properties were subject to public use. The Appellant also stated that the District's permit decision did not appropriately consider the benefits to the general public of private property ownership.

The District's October 20, 2004 Memorandum For Record *Review of Consideration of Impacts Specific to an Applicant as Public Interest Review Factors in the Public Interest Review of Department of Army Permits* describes the District's approach to considering public interest factors from the perspective of the general public, and those factors that are of private benefit to the Appellants. The memorandum also identifies conditions under which a private project may have public benefits. The District's PED (page 28) identifies the Appellants' properties as private properties and identifies that the property owners do not have to provide access to any other party. The District did not assume that the Appellants' properties were subject to public access and use, but did evaluate that the Appellants' proposed projects could have various environmental effects including physical, biological, and aesthetic changes that would affect areas beyond the boundaries of the Appellants' properties. The District's October 20, 2004 memorandum was consistent with the Corps regulations, but there were deficiencies in the District's specific analysis in this instance as described further below.

While the District identified that there would be major benefits to property ownership from granting the requested mechanized shoreline grooming permits, and cumulatively, granting other similar permits, the District did not clearly and fully explain those benefits, or how those benefits to the property owners were outweighed by other public interest review factors, or other factors considered during the District's permit evaluation, that ultimately resulted in a permit denial decision.

The District's PED page 35 states that:

“Based on previous unauthorized activities in the CIA and what we perceive to be very strong feelings of the property owners in this reach of shoreline, we can reasonably presume that most, if not all riparians (property owners) in the CIA would desire and accrue this benefit (mechanized shoreline grooming). In summary, there would be major cumulative benefits to property ownership.”

The District's PED page 35 also states that:

“There are alternatives to the complete removal of surface and subsurface vegetation that will still afford reasonable private use of the coastal marsh property, although alternatives to the applicants' purpose of removing the coastal vegetation by mechanical means would be limited to chemical herbicides.”

The statement above provides further evidence that the District did not clearly distinguish between project purposes identified in the PED – Aesthetics and Recreation – and the Appellants' proposed means to achieve them – mechanized shoreline grooming. The remainder of the PED's *Consideration of Property Ownership* section then identifies alternatives to meet the possible Appellant project purposes of shoreline aesthetic

Program Support Division
Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

improvement, shoreline access improvement, debris removal, and control of undesirable plants and animals.

The District's PED *Consideration of Property Ownership* section, which discusses project alternatives, is inconsistent with the District's PED *CWA 404 (b) (1) Guidelines* analysis that concluded that no less environmentally damaging practicable alternatives were available. Both the PED's *Consideration of Property Ownership* and *CWA 404 (b) (1) Guidelines* analyses are unclear in part because of the District's limited efforts to clarify the basic and overall project purposes of the proposed activities with the Appellants. The District's conclusions regarding shoreline aesthetic changes, shoreline recreational access, debris removal, safety hazards, and control of undesirable plants, animals must be reconsidered after attempting to clarify the basic and overall project purpose(s) with the Appellants.

Evaluation of Economic Effects and Consideration of Property Ownership (Appellant RFA Reason 15)

The Appellants' representative claimed that the sporadic appearance of bottomland vegetation during extreme low water years (until destroyed by rising waters) would cause a long term negative impact by negatively impacting the value of the Appellants' properties, and that the District had not appropriately considered this adverse impact on the Appellants' properties.

The District evaluated the effects of the proposed shoreline grooming activities on the local economy and took into consideration the Appellants' ability to use their private properties. The District identified a number of activities that the Appellants could undertake to use their private property and partially meet their project purposes even though the District had denied their permit requests. These included mowing or herbiciding vegetation to retain views, utilizing existing District regional general and Corps Nationwide Permit authorities to place a path through the vegetation to the shoreline, and mechanically groom unvegetated, non-wetland shoreline areas, and utilize various control methods for mosquitoes and other animals. The Appellants can also continue to use the existing structures on the properties as housing.

The value of a particular piece of property is subject to many economic and market factors that are beyond the evaluation requirements of the Corps Regulatory program, and the true market value of an individual property is not established until the property is actually sold on the open market. The District's consideration of property ownership as part of the public interest review provided an appropriate evaluation of property ownership concerns during the permit evaluation process.

As part of this appeal decision the District is being instructed to reconsider its prior decisions on these six permit requests. The District will provide the results of those reconsiderations to the Appellants. The Corps regulations require that the District consider property ownership and reasonable use of private property as part of its public interest review.

Duration of environmental effects (Appellant RFA Reason 15, 26)

The Appellant asserted the District's PED incorrectly concluded that public uses would be permanently damaged by the Appellants' proposed activities, while the Appellants' benefits would be only short-term. The District identified that the Appellants' proposed activities would have major, long term, negative impacts on water quality (PED page 20), aquatic vegetation (PED page 22), aquatic organisms and fish (PED page 23 and 32), wildlife (PED page 25 and 32), wetlands (page 27), conservation and overall ecology (PED page 28). On PED page 37 the District concluded that:

“The public uses as a fish spawning and nursery area, feeding and resting area for wildlife, and sediment retention area would be permanently damaged as a result of the proposed work and its cumulative effects. Actual private use of the exposed lakebed is not suited for beach lounging or recreation except when saturation levels are very low. If the aesthetic appearance of an area is a “use”, then this and other conceivable uses by the applicants would be relatively short term during the low water period, and until the lakes rise back to normal or above normal levels and the area is once again submerged.”

The District's specific conclusion regarding whether shoreline grooming will result in long term and/or permanent changes in vegetation is stated on PED page 22 as follows:

“The proposed grooming of the coastal marsh areas would prevent the growth of the aquatic vegetation beds that would otherwise exist as portions of the flats become flooded or inundated under existing conditions. As water levels return to normal, the grooming now would eliminate the erect marsh vegetation stands that would persist through several seasons as water levels return to normal and eliminate the submerged plants that would otherwise sprout from roots and seeds within the area after it is inundated and associated invertebrates. These sites and the rest of the CIA will suffer long term damage as the root systems which developed over hundreds of years will not exist to sprout when the next cycle of low water arrives.”

If the bottomland wetland vegetation did suffer long-term root damage as a result of shoreline grooming, and therefore did not produce wetland vegetation during the next low water cycle, then the benefits to the Appellants of having an unvegetated shoreline would also be expected to extend into the next low water cycle. The District did not clearly explain why the adverse effects of removing bottomland vegetation identified on PED page 37 would be of longer duration than the beneficial effects to the Appellants of removing bottomland vegetation, which would also apparently extend to the next low water period. Instead, the District considered the adverse environmental effects of shoreline grooming to be long term detriments, but only considered the Appellants' benefits received from shoreline grooming to be short-term benefits. The administrative record does not fully support the District's conclusions that the proposed shoreline

Program Support Division
Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

grooming activities produced long-term and permanent adverse effects on the environment but only short-term benefits to the Appellants.

The District must reconsider and further document its conclusions and, if appropriate, modify its conclusions as to why the benefits that the Appellants' received as a consequence of the absence of vegetation after shoreline grooming would not persist as long as the detrimental effects that were also a consequence of the absence vegetation after shoreline grooming.

Cumulative Effects Analysis (*Appellant RFA Reasons 23, 25*)

The Corps regulations at 33 CFR 325 Appendix B, the National Environmental Policy Act (NEPA), as well as the CWA Section 404 (b) (1) guidelines require consideration of cumulative environmental effects in reaching a permit decision regarding a proposed activity. NEPA regulations define cumulative environmental impacts at 40 CFR 1508.7 as:

“Cumulative impact” is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.”

The District's PED (page 16) described the area for evaluation of cumulative environmental impacts as:

“For the purpose of this application review, the geographic area for which we are reviewing cumulative effects is the shoreline of Saginaw Bay from the mouth of the Saginaw River to the mouth of the Kawkawlin River (Aplin and Donahue Beaches). Although other shoreline reaches display the same or similar areas containing coastal marshes waterward of a recreational upland sandy area, we are restricting the cumulative impact area (CIA) in this manner because the discharges from the two rivers surrounding Donahue and Aplin Beaches dictate much of the environmental characteristics which are not shared by other reaches of coastal wetlands along Saginaw Bay. ...the demographics of settlement patterns along this CIA are fairly uniform, as are the size, age, and conditions of the waterfront homes. ...the coastal length of this cumulative impact area is about one and a half miles. ...Based on a work area of 100 feet to 300 feet in depth from the OHWM to the shoreline along this reach, an approximation of the total acreage implicated by this type of project within the shorelines defined by the CIA is between 40 and 100 acres.”

The District's PED (page 11) identified that coastal fringe marshes are relatively uncommon along Great Lakes shorelines in general but relatively common within Saginaw Bay. The District identified that cumulative adverse environmental effects were

Program Support Division

Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

reasonably foreseeable if the District issued permits for these six actions, because many additional permit applicants in the CIA appeared to be interested in obtaining similar permits.

The District stated that one of the goals of the Corps regulatory program is to provide fair and reasonable decisions. The District's conclusion regarding the cumulative environmental effects of the six proposed mechanized shoreline grooming projects, when combined with other grooming projects stated on PED page 28 as:

“The impacts on conservation and the overall ecology of the accomplishment of a single grooming project in this coastal reach would be injury to the coastal marsh, but adjacent vegetated cover would be capable of providing protection and a source of the native marsh vegetation for recruitment and recovery, that is, if invasive species did not overtake the disturbed areas and establish a foothold. The impacts of a single project might therefore be minor, long term and negative. The cumulative impacts of all of the above grooming projects, plus additional similar requests in the CIA on conservation and overall ecology would be major, long term and negative. In fact, the cumulative impacts of many grooming efforts along this 1.5-mile coastal reach would result in the removal of the coastal marsh. In summary, the projects will have major, short term and long term, negative impacts on conservation and the overall ecology. Denial of the permit would avoid these major negative impacts.”

Implied, but not overtly stated in the above conclusion, is that the District concluded it would be inconsistent with fair and reasonable decisionmaking to issue permits to some applicants in the CIA to groom their entire shoreline, but later deny permits for similar actions by neighboring property owners in the CIA because of increasing cumulative, adverse environmental effects.

The area within the District's CIA boundaries represents a reasonable boundary of similar areas with similar development pressures and environmental effects because of the proximity of the area to the Saginaw and Kawkawlin Rivers. The District acknowledged that many other shoreline areas of Saginaw Bay include wetland vegetation, but that the areas between the Saginaw River and the Kawkawlin River are particularly important for filtering sediments entering the Saginaw Bay from those rivers.

The Appellants RFA reason 25 stated in relation to the District's cumulative effects analysis that:

“The Detroit District's cumulative impact analysis is inapplicable to Applicant's permit. Pursuant to 33 CFR §320.4 (j) (2), the District Engineer must defer to the state decision unless there are overriding issues of national significance. Such cases are to be determined in an individual case, and as a result a cumulative impact analysis does not apply.”

The Corps regulations at 33 CFR 320.4 (j) (2) regarding individual cases states that:

Program Support Division
Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

“Whether a factor has overriding importance will depend on the degree of impact in an individual case.”

I have reviewed the wording of 33 CFR 320.4 (j) (2) and concluded that the intent of this wording is to establish that a particular public interest factor is not always overriding in importance, but must be evaluated relative to a specific situation. This does not preclude consideration of cumulative impacts to the environment as part of public interest review factors when a Corps decision is contrary to that of a state or local entity, but only requires that such cumulative impacts be considered in relation to each specific permit application. However, the District’s determinations that the reasonably foreseeable cumulative environmental impacts of issuing additional similar permits for mechanized shoreline grooming would produce major, long term, negative effects, must be reconsidered because the District’s PED is inconsistent regarding whether all practicable measures have been undertaken to avoid, minimize, and implement compensatory mitigation for the adverse environmental impacts of the requested permits.

Reason 5: The Appellant asserted that the Detroit District acted as an opponent to the Appellants’ permit applications and that the District staff’s substantial training in biological and wetland sciences resulted in a bias for wetland protection instead of an impartial public interest review of these permit applications. (Appellant RFA reasons 4, 5, 6A, 6B, 6D, 28)

Finding: This reason for appeal did not have merit.

Action: None required.

Discussion: The Appellants asserted that several actions of the District demonstrated that the District was biased against the Appellants. The Appellants stated that the District was biased because it accepted comments on the permit application greater than 60 days after the receipt of a complete application, and that this action was inconsistent with 33 CFR 325.2 (d) (3) which states:

“District engineers will decide on all applications not later than 60 days after receipt of a complete application, unless...

However, immediately after that statement 33 CFR 325.2 (d) (3) (vi) states that:

“unless...Information needed by the district engineer for a decision on the application cannot reasonably be obtained within the 60 day period.”

The District issued public notices for these six shoreline grooming permit applications, and received comments on all six applications. The District PED identifies that the District provided comments on the public notice to all six permit applicants. Some permit applicants then provided a rebuttal to some of the comments on the public notice, and also identified that the U. S. Fish and Wildlife Service comment letter did not

Program Support Division
Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

provide site-specific information regarding the proposed activities. The District then sought site-specific information from the U.S. Fish and Wildlife Service. The District coordinated with the U.S. Fish and Wildlife Service on visits to the properties in Spring 2004 and the U.S. Fish and Wildlife Service then provided more specific comment letters on May 27 and 28, 2004.

The Appellants' representative asserted that the District was biased against the Appellants because the six appellants did not accompany the District and the U.S. Fish and Wildlife Service on all six site visits. However, District then gave each permit applicant an opportunity to rebut the U.S. Fish and Wildlife Service letter the District received after the site visit. Some permit applicants responded and some did not. Also, at least one permit applicant (Groya) was contacted during the site visit.

The District has a specific responsibility to obtain the views of the U.S. Fish and Wildlife Service on permit applications under the Fish and Wildlife Coordination Act and the Corps regulations. The District's actions as described above are consistent with a reasonable approach to fulfill its responsibility under the Fish and Wildlife Coordination Act and obtain more site-specific information upon which to make a decision. Such an approach was reasonable and does not establish that the District was biased against these Appellants.

The Appellant's representative claimed the District was biased and had undertaken a campaign to oppose mechanized shoreline grooming. The Appellant submitted a June 7, 2003 newspaper opinion column and a January/February 2005 newsletter article by the Corps' Detroit District Engineer from July 2002 – July 2004 as evidence of bias of the District against mechanized shoreline grooming. These articles both discuss the need for balance between protection of environmental resources and use of the resources, including in permitting decisions, and the efforts to involve various stakeholders when making those decisions. I concluded they did not represent evidence of bias by the District. However, the Detroit District Engineer who served from July 2002 – July 2004 had moved to a new assignment by the time these permit denial decisions were made, and a different District Engineer made these permit denial decisions.

The Appellants' representative asserted that the District staff's substantial training in biological and wetland sciences resulted in a bias by District staff for supporting wetlands protection. However, the District must adhere to the CWA Section 404 (b) (1) Guidelines, and those Guidelines favor the protection of special aquatic sites (including wetlands) over a discharge of fill material into those sites. Specifically, the District must presume that there are project alternatives that do not involve the use of special aquatic sites areas unless clearly demonstrated otherwise. The District must also adhere to the evaluation process established by the Guidelines. The administrative record did not show, and the Appellant's representative did not establish, that the District was biased against these Appellants. This reason for appeal did not have merit.

Information Received and its Disposition During the Appeal Review: The Division evaluated this appeal based on the Appellants' reasons for appeal, the District's

Program Support Division
Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

administrative record, clarifications to the administrative record at the appeal conference including the Review Officer's appeal conference summary and addendums to the appeal conference summary submitted by the Appellants' representative and the District, and the following submittals:

The following items were considered clarifying information and considered during this administrative appeal:

East Tawas, East Tawas City Park, Michigan file number 01-016-051-0 Detroit District determination of non-regulated activity letter of April 30, 2001, and photographs

Traverse City State Park shoreline photographs dated Spring 2002, Summer 2004, and June 17, 2004.

Traverse City county boat ramp photographs dated 2003.

Grand Beach Resort Hotel file number 00-056-092-0A Detroit District permit which expired on December 31, 2003, and photographs.

Northport, Michigan file number 86-056-385-4 Detroit District authorization letter dated April 9, 2003.

Northport, Michigan file number 03-056-014-0 Detroit District authorization letter of March 18, 2003.

Northport, Michigan file number 03-056-013-0 Detroit District authorization letter of March 18, 2003

Northport, Michigan file number 03-056-015-0 Detroit District authorization letter of April 9, 2003.

Photographs of the Whalen property and vicinity from various years.

Photographs of Bay City State Park (Bay City State Recreation Area), Michigan from 2005

Photographs of "environmental area" just west of mouth of Saginaw River at entrance to Saginaw Bay, Michigan.

Detroit District Regulatory Branch Mission Statement as stated on the District web site as of August 29, 2004.

The following items were determined to be new information and were considered in this administrative appeal in accordance with 33 CFR 331.7 (e) (6):

Program Support Division
Six Permit Denials for Mechanical Shoreline Grooming in Bay City, Michigan

Northport, Michigan demographic information. This information was not provided elsewhere in the District's administrative record, and was determined to be new information that could not be considered.

Regime Change (Man Made Intervention) and Ongoing erosion in the St. Clair River and Impacts on Lake Michigan-Huron Lake Levels by W.F. Baird and Associates dated January 2005 and press release describing the findings of the report. This report was identified as new information and not considered in this appeal decision because it had not been issued at the time the District made its permit decision. However, the Appellant stated in his transmittal of this information his main reason for introducing this report was for the information on Great Lakes Water Levels. That information was presented in other parts of the District's administrative record, and was considered in reaching this administrative appeal decision.

In accordance with 33 CFR 331.7 (g) appeal decisions are applicable only to the instant appeal, have no other presidential value, and may not be cited or used as precedent for the evaluation of any other permit action. Therefore, the following item was also not considered.

Great Lakes and Ohio River Division Pittman administrative appeal decision dated August 20, 2004.

Conclusion: I remand these six permit denial decisions to the Detroit District for reconsideration of the items I have specifically identified as described in detail in this administrative appeal decision.



BRUCE A. BERWICK
Brigadier General, U.S. Army
Commanding