

ADMINISTRATIVE APPEAL DECISION

MR. GREG SCHMIDT, FILE NO. 90-035-046-3

DETROIT DISTRICT

OCTOBER 24, 2007

Review Officer: Mike Montone, U.S. Army Corps of Engineers, Great Lakes and Ohio River Division

Appellant: Mr. Greg Schmidt

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

Receipt of Request for Appeal: November 14, 2006

Appeal Conference and Site Visit Date: May 4, 2007

Background Information: Mr. Greg Schmidt (the appellant) has requested Department of the Army authorization to discharge fill materials in waters of the U.S., including wetlands, in order to construct a residence and attendant features along the shoreline of the St. Marys River near DeTour Village, in Chippewa County, Michigan.

The project site is located at the terminus of Radisson Road, which ends at the tip of Sweets Point, an irregularly shaped peninsula projecting into the St. Marys River. The St. Marys River is approximately 65 miles long and connects Lake Superior to Lake Huron. Sweets Point is located approximately five miles north of the river mouth at Lake Huron. The project site is bordered by the St. Marys River shoreline to the north and west. Radisson Road and a residence also border the property to the north. The eastern border roughly follows Radisson road and undeveloped land borders the site to the south.

With the exception of a few small upland areas, the District has determined that the project site is mostly situated below the ordinary high water mark (OHWM) for Lake Huron and the St. Marys River. The District has determined that all portions of the site below OHWM are federal wetlands. Wetlands on site are predominantly characterized as scrub shrub with interspersed pockets of open water. According to the District, the site conditions will vary from smaller ponded areas during periods of low water levels to almost all open water during periods of high water levels.

There have been multiple previous applications for residential development on the project site. In June 1991, the previous owner applied for a state permit to fill 0.29 acre and was denied by the state of Michigan ("the state"). In June 1993, the previous owner was issued a permit by the

state for fill to construct a trailer pad and access drive. In June 1994, the Detroit District (“District”) issued the previous owner an after-the-fact permit authorizing the access drive.

In September 1998, the appellant submitted a permit application to the state and the District to fill 0.46 acre to construct a residential home. The state denied the appellant a permit in December 1998 and adhering to Corps regulations at 33 CFR 320.4(j)(1), the District immediately denied the appellant’s request “without prejudice”. The appellant then appealed the state’s decision and in June 1999, the state’s denial was upheld. In October 2000, the appellant applied for a permit to fill 0.3 acre to construct a residential home. This request was once again denied by the state, denied without prejudice by the District, and appealed (to the state) by the appellant. In January 2004, the state issued a modified permit to the appellant to fill 0.19 acre (state) wetlands to construct a residential home and attendant features (e.g. deck, garage, septic system, driveway).

The appellant’s proposed project, as modified by the state, was submitted to the District for their review and permit evaluation. In this case, the District modified the jurisdictional boundaries that were reflected in the appellant’s submittal based on a site visit. Due to differences in the administration of state and federal regulatory programs, regulatory boundaries may differ. In this case, the District notified the appellant that it was reviewing a proposal to impact 0.52 acres of waters of the U.S. including federal wetlands. In September 2006, the District denied the appellant’s request for authorization with prejudice. The appellant appealed the District’s denial in November 2006. Due to severe winter weather, the appeals conference commencing the detailed review of this request for appeal (RFA) was postponed until May 2007.

Information Received and its Disposition During the Appeal Review: The Division evaluated this appeal based on the appellants’ reasons for appeal, the District’s administrative record, clarifications to the administrative record at the appeal conference including the Division’s appeal conference summary and addendum to the appeal conference summary submitted by the appellant at the request of the Division.

Summary of Decision: The appellant’s request for appeal has merit and the permit denial is remanded to the District to include sufficient documentation to support its decision and to reconsider its decision as appropriate.

Appeal Evaluation and Findings:

Reason 1: The District’s decision is based upon an erroneous drawing.

Finding: This reason for appeal does not have merit.

Action: No action required.

Discussion:

In his request for appeal (RFA) the appellant asserts that the District’s evaluation of the impacts of his proposed project was based on a site plan that overstates the footprint (area and location)

of the proposed discharge of fill materials. The appellant further asserts that the District's reliance on an incorrect drawing led to the erroneous conclusion that a greater degree of waters of the U.S., including wetlands, will be filled than that which was actually proposed by the appellant. The appellant's arguments are based on the apparent differences between the drawings used by the District and the state permitting agency, the Michigan Department of Environmental Quality (MDEQ) to reach their respective permit decisions. The appellant points out that the discrepancy between the estimated impacts of the proposed project as determined by MDEQ (approximately 0.19 acre of wetlands) and the District (approximately 0.52 acres of wetlands) was noted in the District's decision document.

The following points are important to the evaluation of the merits of this reason for appeal and will be discussed below: the manner in which the District determined which portion(s) of the project site is subject to their jurisdiction; how the District determined/estimated the footprint (area and location) of fill materials; and how the District communicated their determination(s) with the appellant.

Jurisdictional Determination

During the appeals conference, the appellant further clarified his position by stating that the District erroneously concluded that all areas below the OHWM are wetlands. The appellant stated his concern that MDEQ and two private consultants (Voice and Charles Wolverton) identified less wetlands than the District. The appellant stated his assumption that all parties are using the same standard, the 1987 Corps of Engineers Delineation Manual (1987 Manual). The appellant acknowledged that only data sheets associated with the Voice delineation were submitted to the District. The appellant also stated his concern that the District did not avail itself of the opportunity to visit the site with MDEQ.

The Appellant and the District clarified that MDEQ is not required to use a specific manual, although MDEQ does possess and may sometimes use their DRAFT state delineation manual.

The District's administrative record contains a site inspection report dated February 3, 2005 that adequately documents that the District's regulatory staff delineated the wetland boundary according to the 1987 Manual. The report also notes that the District regulatory staff set flagging denoting the wetland boundary on November 3, 2004 and documents that the District's survey staff collected data to delineate the administrative OHWM on December 15, 2004. During the appeals conference, the District clarified that the administrative OHWM is 581.5 feet¹. The report also documents that even though the delineation of wetlands and OHWM turned out to coincide with each other, the actions of the Regulatory and survey staffs were conducted independently of each other.

Impacts to Waters of the U.S.

During the appeals conference, the District clarified that it estimated fill areas based on a map prepared by the appellant's consultant, Voice. This impact map was initially part of and attached

¹ Unless otherwise noted, all water levels are reported in feet, IGLD 1985.

to the District's Public Notice (PN) dated October 1, 2004. The MDEQ permit was issued on Jan 30, 2004, or about eight months prior to the release of the District's PN.

During the appeals conference, the appellant came to realize and acknowledge that he had added hatching to the Voice drawing denoting "fill areas" (specifically to the area abutting the house). The appellant clarified that the hatched areas were added to demonstrate areas he might desire to fill at a later time, under his overall assumption that these areas were uplands based on the MDEQ drawings. However, the diagrams submitted by the appellant clearly denoted the hatched areas as fill areas and this was the first time the appellant disclosed this clarifying information to the District. Therefore, the District reasonably determined that the appellant, at the time of their evaluation, intended to place fill within the hatched areas. The appellant also clarified that at the date of the PN the appellant did not disagree with the drawings used or raise an objection because the PN drawings showed these areas as upland fill areas.

The District clarified that they do not consider these areas uplands as they are below the Corps OHWM. However, at the time of the PN (October 2004), the District had not confirmed the wetland boundary. As stated in the above section, the District performed its wetland delineation on November 3, 2004. The results of this wetland delineation were finalized in an approved jurisdictional determinations submitted to the appellant on March 1, 2005. The District's approved JD letter notified the appellant that the District has "...revised the OHWM and wetland boundary" and attached a map indicating the federal limits of jurisdiction and the appellant's proposed fill area.

While the project drawing attached to the approved JD letter may appear identical to the PN drawing, as stated in the letter, the approved JD drawing actually illustrates an important difference. The difference is that the District modified the jurisdictional boundaries and the hatched areas around the house, previously represented as uplands, were determined to fall within waters of the U.S. The approved JD letter notifies the appellant of his right to appeal the approved JD. The appellant did not appeal the approved JD at that time.

During the appeals conference, the District clarified that it estimated fill areas based on the survey drawings. Fill areas did not change, but the designation (from upland to wetland) of the fill areas did. Prior to the District's revision of the OHWM and wetland boundary, a smaller portion of the fill (roughly 8,000 sq ft or 0.18 acre) was identified as being within waters of the U.S. in the PN drawing. After the revision, a larger portion of the fill (roughly 22,766 sq ft or about 0.52 acres) was identified as being within waters of the U.S. in the approved JD drawing.

Communications Issues

The District clearly notified the appellant of the revised OHWM and wetland boundaries in its March 1, 2005 approved JD letter. The District also attached a drawing to the approved JD letter that showed the proposed fill areas overlaid upon the delineated waters of the U.S. The approved JD letter states the District's revision was based on its site inspection and documentation that the areas identified as wetlands meet the criteria of the 1987 Manual. As previously stated above, the site inspection included in the District's administrative record substantially justifies and documents the District's jurisdiction.

The District adequately documented, justified, and notified the appellant of the location of waters of the U.S. within the project site. The District also appropriately used drawings submitted by the appellant to adequately document the location and estimate the area of proposed fill within the project site. Lastly, the District took reasonable steps to inform the appellant of its findings. Therefore, this reason for appeal does not have merit.

Reason 2: The District does not properly describe the location of the drain field.

Finding: This reason for appeal does not have merit.

Action: No action required.

Discussion: In his RFA, the appellant asserts that the District erroneously and tenuously concluded that the proposed drain field is a potential source of contamination. During the appeals conference, the appellant clarified that this reason for appeal focuses on the manner in which the District considered the location and attributes of the septic treatment system (STS) as a water quality issue.

The appellant raised the point during the appeal conference that several other properties in the surrounding area had their septic systems far below the elevation that the appellant is proposing for his system. The District clarified that the septic systems within the surrounding area (as referred to by the appellant) were not permitted by the District.

The appellant argues that the undisputed fact that the STS will be a foot higher in elevation than virtually every other STS in the vicinity was a key point omitted by the District. Accordingly, the appellant argues that for the appellant's STS to fail, every other STS placed lower in elevation would also have failed first, thus eliminating the concern that the appellant's STS would contribute cumulatively (with like STS) to contamination. The appellant also argued in his RFA that the District ignores the result of the appellant's proposal to place fill within his property (including waters of the U.S.) such that the STS will be elevated above historic flood levels and effectively isolated from any open water by 75 feet. The appellant asserts that the 75-foot setback, as required by local health code, is an adequate assurance that the STS will be protected from "open water issues." Therefore and to the contrary, the appellant states that he has taken every reasonable precaution to demonstrate that his STS is unique in that in the event of a flood, his STS would not fail.

In its decision document, the District reviewed historic and bench mark water levels for the project area. The District documented that the base flood elevation (100 year flood event) is 584.079 feet, OWHM is 581.5, and the highest water level on record is 582.35 feet, which was recorded in 1986. According to the District, the proposed location of the STS has been inundated on 11 occasions since 1918 with the most recent occurrence in 1997.

In its decision document the District documented that it considered such comments from the appellant. The District reviewed multiple opinions submitted by professional engineers and

scientists on the attributes of the STS under the section that addresses post construction and use impacts to water quality (pages 10-13). Accordingly, the District made the following determinations: the proposed aerobic STS will perform better than an anaerobic STS, but that neither system will perform to maximum efficiency in saturated soil conditions; both aerobic and anaerobic systems have the potential to contaminate ground and surface waters; the 75-foot, open water setback provides inadequate protection given the entire site was inundated 11 times since 1918; the proposed STS appears to violate the Chippewa County health code and similar criteria used by the state. Based on these determinations, the District concludes that the installation of a STS below OHWM could have adverse impacts to surface water quality during periods of high water levels. The District attributes the potential adverse impacts to possible leaching of phosphorous and nitrates, or the release of contaminants due to damage sustained by the STS as the result of erosion. This conclusion is central to the District's overall conclusion that the proposed project will have minor, long term, negative impacts on water quality.

During the appeals conference, both the appellant and District acknowledged that the drain field will be elevated and placed atop fill and the District estimated that the bottom of the STS would be at 584 feet (the base flood elevation). The District further clarified that the actual elevation of the STS is less concerning than the lack of protection sheltering the area. The District explained that locating the STS at this location would allow for exposure to storm surge, ice, and erosion forces because the area is not proposed to be protected by rip/rap. This is consistent with the District's determination in its decision document under the section that addresses effects on flood hazards and flood plain values (page 14) that all fill areas will likely be subjected to erosion during periods of high water.

The District's conclusion regarding the placement of the STS below OHWM appears based on the fact that the fill material is an integral part of the STS. As discussed in appeal reason 1, the District properly identified waters of the U.S. including the delineation of the OHWM and the location of fill as proposed by the appellant. Accordingly, fill for the STS will indeed be placed below OHWM.

The appellant submitted a letter from an engineer at Michigan State University (MSU) in which the engineer provided his opinion on the risk of contaminants from STSs based on his literature review. For normal situation, the engineer deduces that the risk of leaking nitrogen or phosphorous is minimal when the ground beneath the STS is unsaturated for three feet. The engineer elaborates that in instances where the ground is saturated, phosphorous may be discharged into the ground water. As previously discussed, it is undisputed that the STS will rest on fill, elevated to 584 feet. To maintain 3 feet of unsaturated ground, water levels would presumably need to be maintained below 581 feet since water will rise in soil due to capillary action. According to monthly data presented on the District website and included in the administrative record, water levels for Lake Huron have risen above 581 feet approximately 56 times and above 580 feet approximately 240 times between 1918 and 2005. The data represented by the District on their website at the time of the District's decision covered a period of approximately 1044 months. Therefore, between 1918 and 2005, water levels have risen over 580 feet approximately 23% of the time and over 581 feet approximately 5% of the time. Based on these estimates, it is reasonable to assume that the STS will not always have 3 feet of unsaturated soils beneath it, especially in times of high water. Therefore, the District's

conclusion that the STS may discharge contaminants into the surrounding area during times of high water appears reasonable and is supported by the administrative record.

Therefore, the District's conclusions regarding the post-construction and use impacts to water quality based in part on the location and attributes of the STS are reasonable and this reason for appeal has no merit.

Reason 3. The alternative proposed by the District would be contrary to the MDEQ permit and non-compliant with the requirements of other governmental agencies.

Finding: This reason for appeal has merit.

Action: The District is instructed to carefully reconsider its alternatives analysis and substantially document its conclusion regarding the availability of a least environmentally damaging practicable alternative.

Discussion: The appellant argues that it is impossible to consider the District's proposed alternative as reasonable given that the District had knowledge that a design nearly identical to the District's proposed alternative had already been rejected by the MDEQ. In addition, the appellant states that the District was aware that the appellant's proposed project was permitted by MDEQ after substantial modifications were made to accommodate the concerns expressed by the state. Therefore the appellant asserts that the District's determination that their denial of the appellant's proposed project is supported by the existence of a reasonable alternative is entirely unfounded since the District's proposed alternative has already been met with disapproval by the MDEQ and local health department.

During its evaluation of the appellant's proposal, the District identified a modified project design (the District's proposed alternative as referenced by the appellant) that would reduce impacts to the aquatic environment by reducing the footprint of the project. The modified project design includes relocating the residence along an upland portion of the site, attaching the garage to the residence, placing the STS as close to residence as possible, utilizing a previously permitted access drive, and installing rip rap to protect the property from erosion. During the appeals conference, the District clarified that it relied on best professional judgment and experience to identify the modified project design. According to the District, a common method to minimizing impacts is compressing the footprint of a project. During the appeals conference, the District clarified that the modified project design identified in its decision document was established solely by the District and was not discussed with appellant.

The administrative record demonstrates that the District took steps to solicit input from the appellant regarding practicable alternatives to avoid and minimize impacts to wetlands prior to making their permit decision. In a letter dated December 3, 2004, the District forwarded correspondences to the appellant that it received in response to the PN announcing and soliciting public comments on the appellant's proposed project. The District informed the appellant that the responses to the PN raised substantive issues which will weigh heavily in the District's review and stated that the appellant's input on these issues was essential prior to their final

decision. The District also clarified for the appellant that the Corps alone is responsible for reaching its conclusion on the merits of the appellant's application. Among the substantive issues identified were practicable alternatives.

The District took efforts in their December 3, 2004 letter to carefully explain federal regulations at 40 CFR 230 that govern the process of evaluating alternatives. These regulations are commonly referred to as the 404(b)(1) Guidelines or "Guidelines." The District informed the appellant that it determined that the overall project purposes is to provide a residential home on the St. Marys River and that this project purpose is not water dependent. That is, the project purpose does not require a wetland to be situated in. As such, the District informed the appellant that according to the Guidelines it must presume that the project as proposed can be accomplished by avoiding and/or minimizing wetland impacts to the maximum extent practicable. The District also informed the appellant that it was his burden to disprove these presumptions. Lastly, the District informed the appellant of the definition of practicable alternatives and offered the appellant points to consider in his alternatives analysis and provided examples of relevant information to submit to the District. Specifically, the District directed the appellant to consider ways to reasonably obtain and/or utilize, expand, or manage offsite areas to fulfill the overall project purpose and to consider alternative designs which minimize wetland impacts within a practicable site.

The appellant submitted his response to the District in a letter dated September 16, 2005. In his letter, the appellant states that he has taken great efforts to comply with all requirements set fourth by the MDEQ and District by utilizing the service of professional engineers and scientists to arrive at the only feasible alternative. The appellant further states that his options are limited based on an extensive review by local and state agencies. In short, the appellant clarified during the appeals conference that he felt "boxed in a corner."

In its decision document, the District concluded that neither the project as proposed by the appellant nor the alternative (that compresses the footprint) identified by the District complies with the Guidelines. The District clarified this during the appeals conference by stating that the District's decision to deny the permit was not based on the availability of the proposed alternative identified in its decision document and referenced by the appellant in this reason for appeal. The District reiterated that it would not have been able to authorize this alternative. Therefore, the appellant's assertions in this reason for appeal appear misdirected. However, further review of the District's alternatives analysis is warranted.

In its decision document, the District also disagreed with the appellant's statement in his September 16, 2005 letter in which the appellant states that the project as proposed is the only feasible alternative. Instead, the District presumes that the appellant had two feasible and less damaging alternatives available to fulfill the appellant's overall project purpose: 1) purchase non-wetland property for development prior to applying for a Corps permit and 2) utilize or expand (off-site) shoreline property owned by the appellant. The District also states that these options do not pose other significant adverse environmental consequences. To support both options as being practicable, the District stated that in absence of information and/or justification to the contrary, it presumed these options were available. To further support option 2, the District documented that the appellant had applied for and received a permit to perform work at

his off-site shoreline property located at East Paradise Point (EPP) Road² in 1995. Lastly, the District documented that the appellant still had ownership of the EPP Road property shortly before the District reach its conclusion to deny the permit in September 2006.

The District December 3, 2004 letter to the appellant documents that the District correctly informed the appellant of substantial issues that required his attention prior to the District making its permit decision. The letter also documents that the District provided the appellant with ample opportunity and guidance to consider and address these concerns per Corps regulations at 33 CFR 325.2(a)(3). The letter also demonstrates that the District informed the appellant of Corps regulations regarding its alternatives analysis and correctly stated that the appellant bore the burden to overcome the presumption that less environmentally damaging practicable alternatives exist (40 CFR 230.10). However, as clearly documented in the administrative record and the District's decision document, the appellant provided minimal information to describe why his project complied with the Guidelines. Therefore, the District's conclusion that in the absence of evidence to the contrary a least environmentally damaging practicable alternative exists is a reasonable and consistent with Corps regulations. However, while justified by Corps regulations, the District's conclusion regarding its alternatives analysis lacks substantial documentation in which to base a denial.

As previously discussed, the District presumes that the appellant had two feasible and less damaging alternatives available to fulfill the appellant's overall project purpose: 1) purchase non-wetland property for development prior to applying for a Corps permit and 2) utilize or expand off-site shoreline property owned by the appellant.

Federal regulations at 40 CFR 230.10(a)(1) state that an area not presently owned by the applicant may represent a practicable alternative if it can reasonably be obtained and developed to fulfill the purpose of the project. The District did not substantiate how it determined that upland shoreline property was reasonably available to the appellant at the time he began applying for authorization to construct his current proposed project. Such presumptions may be substantiated by demonstrating that similarly situated real estate was available (e.g. local real estate listings) and could reasonably have been developed taking into consideration costs, logistics, and potential impacts to environmental resources. Likewise, the District did not substantiate how it determined that the appellant could reasonably develop his existing shoreline property on EPP Road. Documentation within the administrative record (aerial photography, tax information, District's statements) indicate that a "home" or residence exists on the EPP Road property. The District did not discuss how the EPP road property in its current form or with reasonable development will satisfy the overall project purpose of the Radisson Road proposal. For example, it is not clear if the appellant's property at EPP Road meets the overall project purpose of a residence on the St. Marys River in its current state and on its own merit, in conjunction with limited development (e.g. seasonal recreational use) of the Radisson Road site, or if reasonable development is required at the EPP Road site to meet this purpose. The

² EPP Road is located across the bay protected by Sweets Point, approximately ½ mile south of the appellant's proposed project on Radisson Road. The administrative record documents that the appellant received a permit from the District to reconstruct a pier and dredge an existing boat channel at the EPP Road property. District documentation within the administrative record characterizes the EPP Road property as three contiguous lots, an existing residence on the middle lot, and a total of 225 feet of shoreline.

District's decision document also lacks a discussion to justify how it determined that reasonable development at the EPP Road site will not adversely impact aquatic or other environmental resources.

For these reasons, I find that the District's conclusion regarding its alternatives analysis lacks substantial documentation in which to base a denial. Therefore, I am directing the District to carefully reconsider its alternatives analysis and substantially document its conclusion regarding the availability of a least environmentally damaging practicable alternative.

Reason 4. The project will not increase erosion.

Finding: This reason for appeal has merit.

Action: The District is instructed to reconsider and provide adequate documentation to support its overall evaluation and conclusions regarding cumulative effects. The District shall then reconsider and provide adequate documentation to support its evaluation and conclusions regarding the cumulative effects of relevant decision factors (e.g. shore erosion and accretion effects).

Discussion: In his RFA, the appellant asserts that the District has relied upon conjecture and misstatement of fact to arrive at a strained conclusion that the project will result in erosion. The appellant contrasts statements made by the District in its decision document where the District determined that "[t]he project would not be expected to accelerate erosion on the property or along adjacent properties..." with the District's discussion about the potential for erosion to take place during periods of high water levels. The appellant argues that erosion during periods of high water levels would happen regardless of site development and all along the St. Mary's River.

The appellant also argues that the District's conclusions regarding erosion are not supported by the facts of the matter. Again, the appellant cites the District's reliance on inaccurate project drawings, specifically the District's statements within its decision document that "[w]e note that the proposed house would be located at the existing shoreline on its westerly side, and separated from the river by 25 feet of proposed fill projecting out into the river." The appellant states that it is not possible for the proposed project to result in "...changes in current patterns and accretion."

The appellant argued during the appeals conference that the District's conclusion that erosion and accretion will occur is speculative. The appellant asserts that the District's conclusion is not supported by basis or facts. The appellant asserts that even if events would unfold as proposed by the District, there is insubstantial evidence in the record to conclude that it would result in either positive or negative impacts.

As previously discussed in appeal reason 1, the appellant's reasons for appeal based on the assertion that the District relied on inaccurate drawings do not have merit.

During the appeals conference, the District clarified its conclusion regarding shore erosion and accretion effects. The District clarified that “erosion” refers to the actual fill materials being eroded and “accretion” is the direct addition of the eroded fill materials into the remaining wetlands. As previously discussed in Appeal Reason 2, the District has adequately documented the site’s relative elevation compared to OHWM and reasonably concluded that the site will flood during high water levels and be exposed to the wave and ice action. It is also reasonable to conclude that without any shoreline protection, the fill materials discharged to develop the site will be periodically exposed to these erosive forces and any eroded materials may settle in the remaining wetlands. Finally, that these project specific impacts may result in minor, negative impacts is also reasonable and adequately documented by the District’s description of the physical, chemical and biological characteristics of the site. However, while the District appropriately considered the project specific impacts to erosion and accretion, its evaluation of cumulative impacts is flawed for reasons discussed below. Specifically, the District incorrectly evaluated cumulative impacts throughout its decision document including its determination regarding the effects of shore erosion and accretion.

CUMULATIVE IMPACT REVIEW

Cumulative impact is defined in CEQ's NEPA regulations at 40 CFR 1508.7 as the "impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions ..." Corps regulations direct the District to assess cumulative impacts (33 CFR 320.4(a)(1)) in its evaluation of permit applications. Corps policy articulated in Regulatory Guidance Letter (RGL) 84-09 offers guidance for establishing a cumulative impact area (CIA) and assessing cumulative impacts. It directs the District to develop a sense of the rate of development by providing a description of the historical permitting activity and the anticipated future activities within the CIA.

Cumulative impacts should then be evaluated by assessing the effect that the proposed project will have on a cumulative impact area (CIA) in addition to the *current* impacts of past projects and any foreseeable impacts that can reasonably be expected to occur (e.g. permit requests recently issued or currently under review and likely to be authorized). The size, location, function, and value of the existing (or remaining) aquatic resources must be estimated in the CIA. These estimates must then be compared with the proposed impact of the project being reviewed in addition to the current or imminent impacts of past permitted projects. A CEQ guidance memo to federal agencies dated June 24, 2005 directs the evaluation of cumulative impacts be focused on the aggregate effects of past, present and reasonably foreseeable future actions that are truly meaningful.

Past Actions

The District reviewed nine different permitting actions that occurred on four sites within the CIA, including past actions on the appellant’s currently proposed project site. On three of the four sites, the District adhered to Corps regulations at 33 CFR 320.4(j)(1) and denied the permit requests without prejudice, since MDEQ had denied the project first. On the fourth site (owned by the appellant) the District issued an after-the-fact nationwide permit to a previous owner for a driveway in 1994 and ultimately denied with prejudice the appellant’s current proposal in

September 2006. Accordingly, there are no documented impacts to the aquatic resources within the CIA other than the small section of driveway on the appellant's property. A Michigan Department of Natural Resources (MDNR) interoffice memo dated March 19, 1999 and found within the District's administrative record states "[s]horeline wetland around the St. Marys River and Drummond Island³ is rapidly disappearing." While the MDNR memo discusses increasing evidence of ecological damage due to wetland loss across the state, it lacks specific evidence to substantially document a rapid disappearance of wetlands within the CIA. Unless the "rapid loss" of shoreline wetlands is due to natural forces, it is logical to expect that these impacts and the impacts of "numerous such project" would impact waters of the U.S. and require authorization from the District. Yet, without further evidence, the appellant's proposed impacts appear to be among the initial impacts to waters of the U.S. within the CIA.

Reasonably Foreseeable Future Actions

In this case, the District considered the *potential* impact of "numerous such projects" in its cumulative impacts assessment. It is a reasonable expectation that projects similar to the appellants would require a District permit. However, the administrative record lacks evidence that numerous such applications have been, or will soon be, submitted to the District requesting authorization to impact wetlands in the CIA and the likelihood or rationale for why these projects will be authorized. Instead, the District states that interested land developers have inquired into developing similarly situated lots and discusses the growing development pressure for such projects as undeveloped, quality upland waterfront sites become rarer and the value of water front property increases. While this basic discussion of development pressures is reasonable, it is not substantiated with specific evidence relative to the CIA. For example, the District did not document what percentage of the shoreline property within CIA are uplands versus wetlands, or developed versus undeveloped. Therefore, the District failed to adequately demonstrate the imminent threat of reasonably foreseeable future actions and improperly considered the potential impact of numerous such projects as the cumulative impact of the appellant's project.

Cumulative Impact Conclusion

On page 27 of its decision document, the District makes three statements regarding its conclusion for the cumulative effects of the proposed project that addresses multiple decision factors. As discussed above, this analysis is flawed. Therefore, the District shall reconsider and provide adequate documentation to support its overall evaluation and conclusion regarding cumulative effects. The District's shall include adequate documentation to quantify to the extent practicable, both existing and reasonably foreseeable future meaningful impacts in its cumulative impact assessment. The District shall then reconsider and provide adequate documentation to support its evaluation and conclusions regarding the cumulative effects of relevant decision factors (e.g. shore erosion and accretion effects).

³ Drummond Island is a large island, approximately five miles from the appellant's site and separated from the Village of DeTour by the Detour Passage, a waterway connecting the St. Marys River to Lake Huron. Drummond Island is the eastern limits of the upper peninsula of Michigan.

Reason 5. The available evidence does not support the District's determination that the project will adversely affect flood hazards and floodplain values.

Finding: This reason for appeal has merit.

Action: Action required as stated in appeal reason 4.

Discussion: During the appeals conference, the appellant and the district clarified that the discussion in the appellant's RFA and the District's decision document regarding flood plain values both refer to the displacement of water and fill materials.

During the appeals conference, the appellant clarified that the Lake Huron watershed and flood plains are so enormous that any effects of this specific project would be negligible. The appellant also points to the District's decision document where the District states "...this project and cumulative similar projects located this close to Lake Huron will not induce any measurable change in the system's water level behavior." The appellant compares this statement with the District's conclusion that impacts are minor, long term and negative and asserts that the District's conclusion is a contradiction and unsupported by its own analysis. The appellant also argues that the District ignores the fact that the structures are elevated to avoid the intrusion of water and questioned the District's determination by citing that all structures are above FEMA flood levels.

During the appeals conference, the District clarified that its determination that impacts are minor and negative is focused on the *hazard of flooding* the proposed residence and attendant features. The District acknowledged their determination that there is no measurable impact to *flood plain values*. The District considered the relative flood hazards based on ice, ice movement, and the general dynamics of placing a house along the shoreline of Lake Huron. In its discussion of flood hazards and flood plain values, the District adequately considered the fact that all structures are to be elevated at or above base flood levels. As previously discussed in appeal reason 4, the District adequately documented the project specific impacts of erosion to the fill material. Therefore, no contradiction exists between the District's statements and conclusions regarding the project's specific effects on flood hazards and floodplain values. The District's conclusion regarding the project specific effect was adequately documented. **However, as previously discussed above in appeal reason 4, this decision is remanded to the District to reconsider its cumulative impact assessment, including the cumulative impacts of flood hazards and flood plain values.**

Reason 6. The permitted project will have minimal effect on aquatic organisms and any such impacts are avoided to the extent practical.

Finding: This reason for appeal has merit.

Action: The District will carefully reconsider its evaluation and substantially documents its conclusions regarding the effects of the proposed project on aquatic organisms.

Discussion: Once again, the appellant raises the point that the District's conclusions are based on an inaccurate determination that the proposed project will require fill materials to be discharged into the river. As previously discussed in appeal reason 1, the appellant assertions that the District has relied on inaccurate drawings to base its conclusions has no merit. The appellant also asserts that the District unreasonably concludes negative impacts to fisheries and its conclusions that the project will have major, long term, negative impacts on aquatic organisms is not supported by the available evidence. The appellant further states that he has taken all steps to minimize project impacts.

As a result of discussions during the appeals conference, the Review Officer requested that the appellant submit additional information to clarify his position regarding fish spawning habitat. The appellant complied and further clarified that the ponding of water on the project site is temporary, irregular, unpredictable and occurs above the OHWM of the St. Marys River. Therefore, the appellant argues that since the vast majority of fish species⁴ found in the vicinity of the project site possess a homing instinct (i.e. return to the same areas where they were spawned), they will not use the project site for spawning because there has been no regular opportunity to do so in the past. The appellant asserts that logically these temporary pools do not provide spawning habitat and the District's determination is flawed.

During the appeals conference, the appellant and the District agreed that high water events are relatively short in duration.

In its decision document, the District states that the cumulative impact of numerous such projects would be negative and concludes that the project will have major, long term, negative impacts on aquatic organisms. The District summarizes that the effects on aquatic organisms will be an overall decrease in productivity and diversity due to the exchange of wetlands for upland habitat. The District also states that wetland habitats are increasingly rare in the area whereas upland habitat is abundant. During the appeals conference, the District clarified that it determined habitat such as the wetlands proposed to be filled are increasingly rare based on the overall concept that wetlands are not being made and are being lost. The above considerations by the District are related to its cumulative impacts assessment. **As previously discussed in appeal reason 4, this decision is remanded to the District to reconsider its cumulative impact assessment, including the cumulative impacts of the effects on aquatic organisms and how it determined that wetland habitats are increasingly rare whereas upland habitats are abundant in the CIA.**

⁴ The appellant indicated that he is referring to salmon, pike and bluegill.

To support its statement that effects on aquatic organisms will be major, long term, and negative, the District also states the proposed project would eliminate and alter emergent aquatic vegetation beds. The District states this would destroy spawning, nursery, and feeding habitat for fish, including recreational fish species. The District continues by listing a number of potential negative effects the project may have on fish and fisheries habitat. In addition to fisheries impacts, the District states that the proposed project will contribute to the degradation of the aquatic food web in the near shore area.

A brief review of readily available literature on local fisheries, demonstrates that the fishery issues discussed by the District in its decision document and raised by the appellant are not completely understood by scientists. For instance, the appellant argues that pike exhibit a homing behavior during spawning. Yet, a habitat suitability index (HSI) model (Inskip, 1982) prepared by the U.S. Fish and Wildlife Service (USFWS) stated that it is unclear to what degree northern pike will return to particular spawning grounds. The same USFWS report cites multiple studies to support the assertion that the loss of wetland habitat and the blocking of access to spawning grounds is associated with reductions in the abundance of pike. However, a report by the Great Lakes Fishery Commission (Gebhardt et al., 2002) assessing the St. Marys River fisheries stated that the lack of substantial information regarding local fisheries contributed to the limited understanding of how fish populations are impacted by loss of habitat and water quality issues. And while the appellant refers to northern pike, salmon and blue gill in its arguments, it appears based on numerous HSI Models prepared by the USFWS (Inskip, 1982; McMahan, 1983; Raleigh et al., 1986; and Stuber et al., 1982) that only northern pike are well suited to the wetland areas proposed to be filled by the appellant.

Again, multiple reports suggest systemic factors such as navigation (Jude et al., 1998), proliferation of predators (Fielder, 2004), and competition (Fielder et al., 2007) may have substantial impacts on fisheries throughout the St. Marys River region versus project specific factors such as losing 0.5 acres of potential spawning habitat.

Together, the District statements appear to assign an extreme value to the habitat that is proposed to be destroyed by the project as being critical to the overall success of aquatic organisms, especially fisheries, in this area. In this instance, the proposed project would impact approximately 0.5 acre of near shore, wetland habitat. While it is reasonable to conclude that the area functions as aquatic organism habitat, including areas that are potential fisheries habitat, the administrative record lacks the supporting documentation that the project area contains habitat which when lost constitutes a major, long term, negative impact.

Statements that a project will have a major effect on aquatic organisms due to the loss of habitat must be supported with specific information in the administrative record. The District adequately documented what species can reasonably be expected to utilize the habitat in and nearby the project area but failed to document the relevance of the habitat to populations of the identified aquatic organisms. The concept of incremental habitat loss is important and may weigh heavily in a District's decision. However, the likelihood of such impacts was not adequately documented (i.e. cumulative impacts). Likewise, the District failed to substantiate how impacts to the identified species will impact the recreational value that is documented to occur in this area (see discussion in appeal reason 10). Without this documentation, the

District's conclusion regarding impacts to aquatic organisms is unsupported and this reason for appeal has merit. Upon remand, the District will carefully reconsider its evaluation and substantially documents its conclusions regarding the effects of the proposed project on aquatic organisms.

Reason 7. The project will not pose "major, long-term, negative impacts on wildlife."

Finding: This reason for appeal has merit.

Action: The District will carefully reconsider its evaluation and substantially documents its conclusions regarding the project specific and cumulative effects of the proposed project on wildlife. In addition, the District will carefully reconsider and document as necessary, its conclusion regarding significant national issues of overriding importance.

Discussion: The appellant states that the District's conclusion regarding "major, long-term, negative impacts on wildlife" is contrary to ample amounts of evidence that any impact to wildlife values as the result of this project is minimal. The appellant also states that MDEQ's determination that the project as proposed can be permitted supports the appellant's claims regarding minimal impacts to wildlife.

In its decision document, the District states that the cumulative impact of numerous such projects would be major, long term and negative and concludes that the project will have major, long term, negative impacts on wildlife. The District also summarizes that the effects on wildlife will be an overall decrease in wildlife diversity and productivity due to the exchange of wetlands for upland habitat. The District states that wetland habitats are increasingly rare in the area whereas upland habitat is abundant. **As previously discussed in appeal reason 4, this decision is remanded to the District to reconsider its cumulative impact assessment, including the cumulative impacts of the effects on wildlife and how it determined that wetland habitats are increasingly rare whereas upland habitats are abundant in the CIA.**

To support its statement that project specific effects on wildlife will be major, long term, and negative, the District states the proposed project "would eliminate/alter reproductive, foraging, and nesting habitats and interrupt a travel corridor for waterfowl, wading birds, shorebirds, songbirds, small and large mammals, reptiles, amphibians, and invertebrates which are associated with the aquatic ecosystem and the aquatic food chain." The District continues by listing a number of negative effects it expects related to destroying or altering wildlife habitat for a "variety of organisms."

The District statements appears to assign an extreme value to the habitat that is proposed to be destroyed by the project as being critical to the overall success of wildlife in this area. In this instance, the proposed project would impact approximately 0.5 acre of near shore, wetland habitat. While it is reasonable to conclude that the area functions as wildlife habitat, the administrative record lacks supporting documentation that the project area contains habitat, which when lost, constitutes a major, long term, negative impact.

Statements that a project will have a major, long term and negative effect on wildlife due to the loss of habitat must be supported with specific information in the administrative record. The District adequately documented what species can reasonably be expected to utilize the project area but failed to discuss the relative importance of the habitat to the documented species. The concept of incremental habitat loss for the documented species is important and may weigh heavily in a District's decision. However, the likelihood of such impacts was not adequately documented (i.e. cumulative impacts). Other factors to consider are how the significance of habitat loss relates to other population dynamics such as predator prey relationships and competition, and how habitat loss impacts recreational values for game and non-game species (also see discussion in appeal reason 10). Without this documentation, the District's conclusion regarding impacts to wildlife is unsupported and this reason for appeal has merit. Upon remand, the District will carefully reconsider its evaluation and substantially documents its conclusions regarding the project specific and cumulative effects of the proposed project on wildlife.

SIGNIFICANT NATIONAL ISSUES OF OVERRIDING IMPORTANCE

During the appeal's conference, the appellant clarified that impacts to fisheries and wildlife are a major focus of state permitting (MDEQ) and if there was a major, negative issue the state would have addressed it. The District responded that the state is narrowly focused and the lack of addressing an issue by the state is not indicative of the importance or impact of the issue.

While the District is obligated to solicit comments from federal and state resource agencies, the District maintains the sole responsible for making decision on the merits of any permit application (33 CFR 325.2(a)(3) and RGL 92-01). However, Corps regulations at 33 CFR 325.2(a)(6) state:

If a district engineer makes a decision on a permit application which is contrary to state or local decisions [regarding land use issues or a favorable decisions made by the state], the district engineer will include in the decision document the significant national issues and explain how they are overriding in importance.

And Corps regulations at 33 CFR 320.4(j)(2) further elaborate that:

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.

In this instance, the District documented in its decision document that the state (MDEQ) issued a permit to the appellant to discharge fill into 0.19 acres of wetland area (see discussion in appeal reason 1 regarding the difference in state and federal wetlands). The District also documented in their decision document that they presumed that the state waived both Section 401 water quality certification (WQC) and Coastal Zone Management certification (CZM) based on the MDEQ permit. Documents within the administrative record demonstrate that MDEQ issued a permit for

the appellant's current proposed project which was subsequently denied with prejudice by the District.

Corps regulations at 33 CFR 325.2(b) allow the District to presume that state certifications (WQC and CZM) are waived if the state fails to act within a timely manner on the District's request for certification. In light of the state's response (MDEQ permit), the District was justified in presuming that the required certifications (WQC and CZM) were waived.

To address national issues of overriding importance, the District stated in its decision document that:

Although the MDEQ issued their respective permit, any local land use benefits are outweighed by the total detriments to other regional/national public interest factors identified above. By virtue of their respective weight, these detriments become issues that are overriding in importance.

The District's statements are generic in nature and fail to specifically document the significant national issues which contribute to its decision. The District also failed to adequately explain how the issues are overriding in importance. Therefore, upon remand, the District shall reconsider these statements and provide adequate documentation to support its final permit decision.

Reason 8. The [proposed] project maximizes the use of existing uplands on the subject site.

Finding: This reason for appeal has merit.

Action: The District will carefully reconsider its evaluation and substantially documents its conclusions regarding the effects of the proposed project on wetlands. The District will then carefully reconsider and document how it weighed the detriments of wetland loss against the project's benefits (33 CFR 320.4(b)(4)).

Discussion: Once again, the appellant raises the point that the District has relied on inaccurate drawings to base its conclusions. The difference in the perspective of the appellant and District regarding uplands wetlands was previously discussed in appeal reason 1 and the appellant's assertions that the District has relied on inaccurate drawings to base its conclusions has no merit.

The appellant also asserts that the District's determination that the proposed project will have major, long term, negative impacts to wetlands is incorrect and unsupported.

To support its conclusion regarding effects on wetlands, the District lists the wetland functions and values for the appellant's property that it previously identified in earlier parts of its decision document. The District concluded that the cumulative impacts of such actions may result in major impairment of wetland resources and that the project will have major, long term, negative impacts on wetlands. **As previously discussed in appeal reason 4, this decision is remanded**

to the District to reconsider its cumulative impact assessment, including the cumulative impacts of the effects on wetlands.

The District's determination of the site-specific wetland functions and values is reasonable based on adequate documentation within the administrative record. However, the conclusion that the project will have major, long term, negative impacts on wetlands is not substantiated. The District statements appear to assign an extreme value to the habitat that is proposed to be destroyed by the project as being critical to the overall maintenance of wetland functions in the area. In this instance, the proposed project would impact approximately 0.5 acre of near shore, wetland habitat. The administrative record lacks supporting documentation that the project area contains wetlands, which when lost, constitutes a major, long term, negative impact that can not otherwise be overcome.

Statements that a project will have a major, long term and negative effect on wetlands must be supported with site specific information in the administrative record. The District adequately documented the biological characteristics of the wetland habitat and reasonably determined the identified functions and values are important consistent with Corps regulations at 33 CFR 320.4(b)(2). The District also logically determined that the identified functions and values would be eliminated by the filling of wetlands. However, the relative importance of these functions and values to the surrounding area (e.g. the CIA) was not discussed. Examples of supporting documentation would be a well reasoned discussion on the significance of the loss of the specific wetland functions and values on site as it interrelates with the surrounding area (33 CFR 320.4(b)(3)). For instance, are the specific functions and values at this site irreplaceable? Can the loss of the specific functions and values on site be compensated by an increase in the functions and values of nearby wetlands? Without this documentation, the District's conclusion regarding the project specific and cumulative impacts to wetlands is unsupported and this reason for appeal has merit. Upon remand, the District will carefully reconsider its evaluation and substantially documents its conclusions regarding the effects of the proposed project on wetlands. The District will then carefully reconsider and document how it weighed the detriments of wetland loss against the project's benefits (33 CFR 320.4(b)(4)).

Reason 9. The [proposed] project does not negatively impact conservation and overall ecology.

Finding: This reason for appeal has merit.

Action: the District will carefully reconsider its evaluation and substantially documents its conclusions regarding the effects of the proposed project on overall ecology and conservation.

Discussion: The appellant asserts that the District's determination that the proposed project will have major, long term, negative impacts to conservation and overall ecology is incorrect and unsupported. During the appeals conference, the appellant clarified that the fact that no federally threatened and endangered species concerns exist should not be ignored.

During the appeals conference, the District clarified that its determination regarding major, negative, long term impacts is based on cumulative impacts and is not tied to its evaluation of threatened and endangered species. **As previously discussed in appeal reason 4, this decision is remanded to the District to reconsider its cumulative impact assessment, including the cumulative impacts of the effects on conservation and overall ecology.** The District adequately documented its consideration of federal threatened and endangered species by demonstrating that none are known to exist in the area. This is consistent with comments submitted by the USFWS which document the absence of federal concerns for threatened or endangered species and designated critical habitat within the immediate project area.

The District concluded that the cumulative impacts of numerous such projects would be major, long term, and negative and that the project will also have major, long term, and negative impacts on conservation and overall ecology. In reaching its conclusion, the District determined that the direct impacts to 0.5 acre of wetlands and indirect impacts to 0.75 acre of wetlands would disrupt the ecological balance and integrity of the valuable resources previously documented within the project site. Based on the documentation in the record, it is reasonable for the District to conclude that the project will impact, to some degree, the overall ecological balance on the site. However, the decision document lacks substantial evidence to explain why these impacts are major and negative within the project area or CIA. The decision document also lacks an adequate explanation for how the District estimated indirect (changes to water temperature, circulation patterns, and chemistry) impacts to 0.75 acre of wetlands.

Statements that a project will have major, long term and negative effects must be supported with specific information in the administrative record. Examples of supporting documentation would be a well reasoned discussion on the significance of the loss of the valuable resources to the overall ecology and conservation of resources in the surrounding area (CIA). For instance, how are the resources at this site interconnected with the area? Are these resources irreplaceable? Can the incremental loss of the resources on site be compensated by an increase in the functions and values of nearby resources? Without this documentation, the District's conclusion regarding the project's impacts to overall ecology and conservation is unsupported and this reason for appeal has merit. Upon remand, the District will carefully reconsider its evaluation and substantially documents its conclusions regarding the effects of the proposed project on overall ecology and conservation.

Reason 10. The [proposed] project's purported affect on recreational value is overstated by the District.

Finding: This reason for appeal has merit.

Action: The District shall reconsider and adequately document its conclusion regarding the project's specific and cumulative effects on recreation.

Discussion: The appellant asserts that the District's determination that the proposed project will have minor, long term, negative impacts to recreation is incorrect and unsupported. The appellant asserts that the District reported to rely on the findings of MDNR fisheries staff to

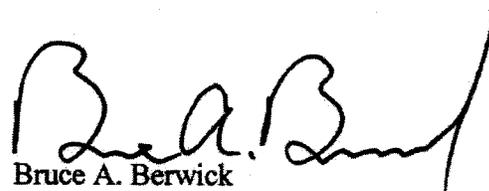
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support their conclusion regarding recreational values. The appellant asserts that this project is entirely within private property and the appellant is under no obligation to allow others to recreate (e.g. hunt, fish, boat or bird watch) on his land. The appellant also restated his concerns that the District's determination of negative impacts to fisheries is unreasonable and he has taken all steps to minimize project impacts.

The District determined that the proposed project would destroy habitat important to the maintenance of fish and game populations and valuable for passive recreation (e.g. bird watching). The District concluded that these impacts would be minor, long term, and negative.

As previously stated in appeal reason 6 and 7, the District adequately documented what fish and wildlife species can reasonably be expected to utilize the habitat in and nearby the project area but failed to document the relevance of habitat loss to fish and wildlife populations. For instance, while it is reasonable to determine that northern pike and yellow perch may use the habitat for spawning, it is not discussed how the incremental loss at this site will impact the fish population for the area (CIA). Likewise, it is reasonable to determine that game and non-game wildlife species utilize the project area, but the District failed to discuss how the incremental loss at the site will impact the overall population of game and non-game species important to recreation within the CIA. The District failed to adequately support its determination of the project's specific and cumulative effect on recreation. Without further evidence, it is reasonable to conclude that the effects to recreation will be negligible and this reason for appeal has merit. The District shall reconsider and adequately document its conclusion regarding the project's specific effects on recreation. In addition, as previously discussed in appeal reason 4, the District is directed to reconsider its cumulative impact assessment, including effects to recreation.

Overall Conclusion: I find that the District's administrative record does not support its decision. Therefore, for the reasons stated above, I conclude that this request for appeal has merit. The permit denial is remanded to the Detroit District to include sufficient documentation in the administrative record consistent with this decision and to reconsider its permit decision as appropriate.



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