CELRE-ET-RG 26 June 2007

MEMORANDUM FOR Regulatory Office

SUBJECT: Ordinary High Water Mark Determination on the Great Lakes and Connecting Channels

Background

On November 3, 2006, the Federal Court for the Eastern District of Michigan rendered a decision in United States v Marion Kincaid Trust (Kincaid) in which the Judge, in dicta (basically verbiage in the decision that is nonessential to the holding), questioned the validity of our use of administratively established ordinary high water marks (OHWM) on the Great Lakes and connecting channels. Although the court did find our claim that the Kincaids worked in wetlands adjacent to navigable waters without authorization to be "substantially justified", it noted that the use of an administratively set OHWM is not found in the law or regulations. This decision prompted our re-examination of our process and Regulatory Guidance Letters (RGLs) and led to the decision that we can no longer use, by itself, the intersection of an elevation plane on the shoreline as a means of determining to location of the OHWM.

That we cannot solely use our administratively set OHWMs for jurisdiction determinations on the Great Lakes and connecting channels presents us with a substantial change in the way we do business. We have included a relatively comprehensive amount of background information in this document in an effort to validate and provide context for the guidance set forth in the last five paragraphs. Discounting the guidance in this document is not an option, however, this guidance is open to change and we welcome suggestions for improving or refining it, especially since no "field testing" has been preformed to date. The guidance in this document should not just be applied in the field. We will have to document our field decisions in Jurisdiction Determination Information Sheets with the understanding that no facet of our OHWM determinations will be too "small" or "obvious" to merit being left undocumented.

The Kincaid judgment contains the following statement:

> The Court finds, therefore, that reliance by the government on an administrative OHWM was unreasonable. Likewise, the failure to perform any investigation to determine factually the location of the OHWM on the Kincaids land based on the definition of that boundary in the government's own regulations was equally unreasonable. Absent such investigation, there was no basis to claim that the Kincaids' beach-grooming activity took place within the navigational servitude of the United Stated (i.e., the Great Lakes bottomland), and the allegations that they did are not substantially justified.

At face value, the Judge's statements are correct. Our regulations do not discuss the use of administratively set OHWMs and the Corps has never initiated rulemaking (i.e., putting them on Public Notice and publishing them in the Federal Register) to establish OHWMs on the Great Lakes. It is also important to remember that Kincaid is not an outlying decision in suggesting there be a "mark" associated with an OHWM. The Court in United States v. Davis (Davis) also did not look fondly at the use of gage data or administratively set OHWMs without corroborating such

information with physical indications of an OHWM. The Davis decision was rendered in 2004 and is discussed below.

The regulations at 33 CFR § 328.3(e) states: "The term 'ordinary high water mark' means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas." The section of the Jurisdiction Determination Information Sheet (JDIS) titled "Lateral Extent of Jurisdiction" lists 33 CFR § 328.3(e)'s physical indicators.

Lateral Extent of Jurisdiction: (Reference: 33 CFR parts 328 and 329)
[ ] Ordinary High Water Mark indicated by:
- [ ] clear, natural line impressed on the bank
- [ ] the presence of litter and debris
- [ ] changes in the character of soil
- [ ] destruction of terrestrial vegetation
- [ ] shelving
- [ ] other:

Solely using our administratively set OHWMs without other physical characteristics means only checking the "other" category in the above list.

With the expectation that disputes over our use of administratively set OHWMs will be inevitable with the advent of the appeals process, we have been describing our OHWMs in a manner that reflects their reasonable approximation of a physical mark on the shoreline. The language we have been using for (1) the Great Lakes and (2) the connecting channels is presented in the following two examples:

1) In Lake Huron, the OHWM is the line on the shore coinciding with the 581.5 feet (International Great Lakes Datum, 1985) elevation contour that represents the approximate location of the line on the shore established by fluctuations of water and indicated by physical characteristics such as a line impressed on the bank, shoreline destruction of terrestrial vegetation, presence of litter or debris, or changes in the character of soil.

2) In the St. Mary's River, the OHWM is a sloping line on the bank between Lake Superior's OHWM coinciding with the 603.1 feet (International Great Lakes Datum, 1985) contour on the river's upper reaches and Lake Huron's OHWM coinciding with the 581.5 feet (IGLD, 1985) contour on the river's lower reaches. These fixed marks on Lakes Superior and Huron, and the interpolated spot elevations on the St. Mary's River represent the approximate location of the line on the shore established by fluctuations of water and indicated by physical characteristics such as a line impressed on the bank, shelving, destruction of terrestrial vegetation, presence of litter or debris, of changes in the character of soil.

Please adopt the practice of using the above language in jurisdiction determinations to describe our OHWMs because a statement such as , "the OHWM of Lake Huron is 581.5 feet" is meaningless with respect to our regulations if that elevation is not put in the context of the fluctuations that

establish a physical mark on the shoreline. For the record, the Detroit District's mid-1970's study of the establishment of OHWMs on the Great Lakes did fi nd that the accepted OHWM elevations did seem to correlate with physical marks on the shoreline established by fluctuations of water. However, the study was never incorporated into a rulemaking and, as shown in the Kincaid ruling, may be overruled if a Court so chooses.

RGL 05-05, titled "Ordinary High Water Mark Identification:, was drafted in direct response to the above noted Davis case. In Davis, the Court declined to use the Corps and EPA determinations of an OHWM on a lake/reservoir in Utah because the OHWM was derived solely from gage data. Although the Court in Davis acknowledged that conditions on the lake precluded finding a physical indicator (even by the defendant), the Court concluded that, per 33 CFR § 328.3(e), the Corps should not rely upon gage data alone for making an OHWM determination. This case was not appealed and the Corps could not pursue further enforcement action. South Pacific Division recommended the Corps issue guidance on the matter and RGL 05-05 was released several months later (copy of SPD's memorandum is attached as a pdf file). Much of RGL 05-05 is devoted to "other" means of estimating the location of an OHWM. We all need to read this RGL which may be found at: http://www.usace.army.mil/cw/cecwo/reg/rgls/rgl_05_05.pdf

Use of administratively set OHWMs on the Great Lakes

Paragraph 3b in RGL 05-05 provides a non-exclusive list of physical characteristics that "… should be considered when making an OHWM determination, to the extent that they can be identified and are deemed reasonable reliable." Many, if not most, of our OHWM determinations on the Great Lakes and connecting channels will involve an interpretation of the preceding sentence from RGL 05-05. Physical evidence of OHWMs is often not available on many stretches of the Great Lakes; moreover, when such evidence appears to be available, it tends not ot be reliable. Example reasons for the lack of physical OHWM indicators include: shoreline grooming, seasonal installation of drift fences, installation of new or replacement riprap/bulkheads, power washing of bulkheads, bluff/bank failures, and storm events. The best example of a misleading or unreliable physical indicator of an OHWM on the Great Lakes is probably the shelving, wrack lines, or erosion zones left by storm events. These storm created features are often obvious and can be mistaken for features of an OHWM; however, they are often formed at elevations much higher than actual OHWM. Such storm-created features also tend to persist until the next large storm event alters the shoreline.

The most compelling reason for adopting administratively set OHWMs on the Great Lakes and connecting channels is that the Great Lakes, unlike tidal waters or "regular" non-tidal waters (i.e., lakes and rivers), do not behave in and orderly or regular manner. Water levels on the Great Lakes fluctuate widely on a daily (e.g., seiches and storms), seasonal, annual, and multi-year basis. Per the International Joint Commission, differences between recorded all time high- and low-water levels on the Great Lakes range from 3.6 tp 6.5 feet depending on the lake. Periods of high water on the Great Lakes have lasted years and created physical characteristics on the shore that ostensibly look like OHWMs but are higher than an actual OHWM. The current low water conditions have even allowed the establishment and growth of upland vegetation in areas waterward of the OHWMs.

Additionally, the use of administratively set OHWMs on the Great Lakes and the connecting channels provides consistency. Relying solely on physical characteristics for locating OHWMs on

the Great Lakes will inevitably result in the placement of OHWMs at different elevations along relatively short sections of shoreline. Using physical characteristics alone, we could even identify substantially different OHWMs on adjoining properties. The application of a basic scientific principle – that water seeks its own level – suggests it may be unreasonable to make determinations wherein the ordinary high waters of the Great Lakes and/or connecting channels can exist at different elevations on nearby properties.

We also use our administratively set OHWMs in Michigan to determine upstream cut-off points, with respect to the State's assumption of our Section 404 responsibilities, on waters flowing into traditional Section 10 waters. With respect to state assumption, the abandonment of administratively set OHWMs for locating the upstream limits of our jurisdiction on these types of waters will add a measure of uncertainty to the administration of Corps' and the Michigan Department of Environmental Quality's regulatory programs.

Course of Action

A final course of action (e.g., a rulemaking or a RGL or something else) on how we do business on the Great Lakes and connecting channels must be coordinated with multiple Districts and Divisions as well as with Headquarters. Obviously, nothing will be decided quickly. In the interim, with the expectation it could be permanent, we will have to incorporate references to "physical indicators" into our OHWM determinations. This is most critical for initial enforcement actions. We do not intend to visit every "routine" site, and will use the administratively set OHWMs on these actions.

As stated above, our OHWM determinations on the Great Lakes and connecting channels will involve the application of RGL 05-05. We must search for, and provide comment on, physical evidence of an OHWM on every field jurisdiction determination we do on the Great Lakes and connecting channels. If such evidence is lacking, we must state such and back up our statements with photographs and a discussion of the factor or factors contributing to the lack of physical indicators. We must estimate the approximate elevation of any OHWM determination established by the location of one or more physical indications on the shoreline and compare that elevation with our administratively set OHWMs. We must also note the presence of any physical indicators that were the product of storm or seiche events, photograph them, estimate their approximate elevation(s), and comment on the inappropriateness of using such indicators for the determination of an OHWM. When our site investigations determine suitable physical indicators of an OHWM are lacking, we will have to make a reasonable effort to locate a nearby stretch of shoreline that possesses physical indicators, estimate the elevation of the OHWM,, and compare it with our administratively set OHWMs.

In the office, we will need to: (1) find aerial photographs of sites; (2) find the elevation of the waterway on the day/time the photograph(s) was/were taken; (3) determine the elevation of the waterway on the day/time of the inspection; and (4) compare/contrast the location of the water's edge with respect to the known differences in waterway elevations and witrh respect to our administratively set OHWMs.

The above practices will be relatively labor intensive but hopefully will demonstrate the practicality and value – for the Corps and the public – of using administratively set OHWMs on the

Great Lakes and connecting channels. These pracices, in time, may also semonstrate the futility of attempting to only use physical indicators for OHWM determinations on the Great Lakes.

In addition to changing the way we do jurisdiction determinations in the field, we will also need to establish a "reference library' of sites exhibiting what we would consider to be realistic physical indicators of an OHWM. To establish such a site, we would have to photograph the physical indicator(s) of the OHWM from several points of view angles and from close-up and pan-view perspectives; provide a latitude and longitude location of the site; describe how to access the site from the nearest road and/or easement; describe the physical features in question; determine the elevation of the physical features and, thus, the OHWM; and relate this elevation to our administratively set OHWMs for the waterway in question. We may also begin the practice of establishing surveyed witness locations. We will store our reference library in the PIX directory or similar. Such a reference library could improve the efficiency of future field visits and could also be part of any new study we may be obliged to undertake in defending our use of administratively set OHWMs. The process of establishing such a reference library will surely involve additional guidance and refinement in the near future.

Questions and comments should be brought to the attention of Don Reinke.

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Enclosures