DEQ	WATER RESOURCES DIVISION POLICY AND PROCEDURE		DEPARTMENT OF ENVIRONMENTAL QUALITY	
Original Effective Date: December 15, 1994 Revised Date:	Subject: Part 325 - Great Lakes Nourishment or Backfill of Shore Program Name: Water Resources Program		Category:	
Reformatted Date:	Number: WRD-025	Page: 1 of 2	External/Non-Interpretive X External/Interpretive	

A Department of Environmental Quality (DEQ) Policy and Procedure cannot establish regulatory requirements for parties outside of the DEQ. This document provides direction to DEQ staff regarding the implementation of rules and laws administered by the DEQ. It is merely explanatory; does not affect the rights of, or procedures and practices available to, the public; and does not have the force and effect of law.

Note: This policy and procedure was previously numbered as 325-94-01.

#### ISSUE:

Dredging public trust bottomlands for beach nourishment or backfill depletes an already scarce resource. Property owners generally have alternatives to Great Lakes dredging. They may obtain clean backfill or beach nourishment from an upland source, construct shore protection that does not require backfill or leave the structure unfilled.

Dredging may adversely affect neighboring properties, destroy aquatic habitat and stress fish populations in the immediate area and in the sediment plume created by the dredging.

## DISCUSSION:

Research shows that the offshore and beach sand that provides protection for underlying glacial till and bluffs along the margin of many areas of the Great Lakes is thin to nonexistent. Studies also show that only a thin veneer or sand lies over glacial till or other substrates. Any additional loss of the sand cover is expected to result in abrasion of the lake bottom by coarse material and hydration and fluidization by currents and waves. Erosion of till and clay bottoms result in permanent down cutting of the offshore profile, thereby exposing the backshore area to larger wave energy and erosion.

Dredging of the nearshore bottom area disrupts or destroys fish habitat along many portions of the Great Lakes shoreline. Feeding, spawning, and rearing of young may be affected by the physical loss of benthic materials. In addition, dredging also creates a sediment plume of suspended material that causes stress on fish populations.

#### **AUTHORITY**:

The Great Lakes Submerged Lands Act, 1955 PA 247, as amended (Act 247), and Administrative Rule R 322.1011 require the Department to protect the public trust and private riparian interests and further, "(c) That...dredging...shall be conducted in a manner which will cause the least damage to the littoral drift and longshore processes, enhance the public trust or interests, or mitigate damages." Act 247 provides the alternative of mitigation. However, since the accepted mitigation for loss of sediment in the littoral zone is beach nourishment, mitigation is counter-productive to the reason for the application. A mitigation plan for fish or aquatic habitat loss may be an alternative.

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or Backfill of Shore Protection

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Natural Resources Commission Policy Number 2301, states in part that "Act 326, Public Acts of 1913, as amended, provides that it is unlawful for any person, firm, or corporation to remove marl, stone, sand, gravel, etc., from or under the beds of any of the Great Lakes and bays and harbors connected therewith within the jurisdiction of the State of Michigan, without first obtaining a written lease from the Department. The Department shall execute leases for the removal of said materials only under conditions specified in Act 326 and those that will protect and preserve the public interest in the bottomlands and the shore. No leases will be granted in Lake Michigan waters off the Lower Peninsula."

### **GUIDANCE/ACTION:**

Without clear evidence submitted by the applicant that documents that no identifiable adverse impacts will occur and that the activity is otherwise lawful, application for dredging from the bottomlands and beaches below the ordinary high water mark of Lakes Erie, St. Clair, Huron, Michigan, and Superior for beach nourishment or as a source of fill material should generally be denied.

If the applicant clearly documents extenuating circumstances that prohibit bringing in backfill from an upland source, staff will carefully weigh the request to dredge for backfill against the resource impacts in evaluating the permit application. In all reviews, staff will ensure that the adverse impacts to the nearshore environment will be minimized.

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