This "Joint Permit Application" package was developed to facilitate the state and federal permit application process administered by the MDEQ and the USACE, respectively, for regulated activities where the land meets the water, including wetlands, often referred to as the land/water interface. The status of your application being processed by the state can be viewed on the LWMD website under "CiWIPS".

Permit applications should be sent to the Permit Consolidation Unit (PCU), LWMD, MDEQ for initial review. Once the PCU has received the information necessary for review of the project, including drawings that have adequate detail for review and the full application fee, the file will be sent to the appropriate MDEQ District/Field Office for site inspection and final processing. You will receive a card or a public notice that will tell you your file number and the telephone number of the office where your application is being processed. The PCU review time for complete applications ranges from 15 to 45 days. District/Field Office processing times usually range from 60 to 90 days, processing times will be longer if a public hearing is held. A LWMD staff person from your local District/Field Office may visit your project site and may contact you for additional information prior to issuance of a permit, if approved. If a federal permit will also be required, a copy of the permit application will be sent to the Detroit District Office, USACE, for processing at the federal level. Additional copies of this application form can be downloaded from the LWMD website under "Permit Application" or can be photocopied from the original. If you have any questions about the permitting process or if you need to modify your application, you can contact the PCU by phone or fax at the numbers above, by mail at the address below, or by email at DEQ-LWM-PCU@state.mi.us.

The LWMD, MDEQ, regulates activities under the following Parts of the Natural Resources and Environmental Protection Act, 1984 PA 451, as amended. The regulated activities are summarized in Appendix D. The complete statutes and rules can be downloaded from our website under "LWMD Statutes and Rules".

- Part 301, Inland Lakes and Streams
- Part 303, Wetlands Protection
- Part 325, Great Lakes Submerged Lands
- Floodplain Regulatory Authority found in Part 31, Water Resources Protection

The USACE has the authority to regulate activities within the waters of the United States under the following statutes:
- Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403)
- Section 404 of the Clean Water Act (33 U.S.C. 1344)

Complete all items in Sections 1 through 9, on pages 1 and 2 of the application (italicized words are defined in Appendix E):
- Please print all information and use black or blue ink.
- Make sure you:
  - Provide the Township, Range, Section, and Property Tax Identification Numbers required in Section 1.
  - Provide the requested information for all adjacent and impacted property owners in Section 8.
  - Print your name and sign and date your application in Section 9. If applicant is a corporation, include title of authorized representative.

Prepare maps and drawings with black or blue ink and provide adequate detail for review:
- Read and follow the "General Instructions for all Drawings" on page 1 of Appendix B.
- Review the sample site location maps in Sample Drawing 1 and prepare a site location map for your project location.
- Prepare an Overall Site Plan following the instructions on page 1 of Appendix B.
- Review the Plan View and Cross-Section (elevation) Sample Drawings 2 through 23 in Appendix B for the type of information required for your project.
- Prepare site-specific Plan View and Cross-Section Drawings for your proposed project showing existing and proposed details.

Complete project specific information:
- Complete items in Sections 10 through 21 on pages 3 through 7 that apply to your project following the instructions at the beginning of each section. The instructions for each sample drawing in Appendix B indicate the application sections you will most likely need to complete.
- If your project is located on a Great Lake, elevations must be provided in IGLD 85. If the elevation is surveyed, please describe the reference point or benchmark used, and its elevation. If the elevation is from a still water elevation, please note this and provide observed water elevation and date of observation. For observed Great Lake water elevations in IGLD 85 visit the USACE website under "water levels". On inland waters, generally use NGVD 29 or a local datum, NGVD 29 or IGLD 85 must be used for Section 10 Waters. The state building code requires an Elevation Certificate for any building construction or addition in the floodplain. This form can be found at www.fema.gov/braview/ect.pdf.

To prevent processing delays, make sure only the following items are mailed to the PCU at the address below, label each attachment with applicant’s name and date:
- Pages 1 and 2 of the application.
- Pages 3 through 7 of the application that you have provided information on.
- The Site Location Map, Overall Site Plan, Plan View and Cross-Section Drawings, and additional information sheets on 8.5 x 11 standard weight paper suitable for photocopying for public notice purposes. If larger drawings or blueprints are required to show adequate detail for review, submit 5 full size copies.
- An authorization letter from the property owner if someone other than the property owner is signing the application.
- A check made payable to the State of Michigan (refer to Appendix C for the correct permit application filing fee).

MDEQ
LWMD PCU
P.O. BOX 30204
LANSING, MI 48909-7704

To reduce the processing time:
- Please flag the area for site inspection including the property corners, proposed road or driveway centerlines, and areas of proposed impacts.
- Descriptive photographs of the proposed work site are optional, but may assist staff in processing your application more quickly — e.g., showing vegetation if wetlands are involved or the shoreline for shore protection projects. All photographs must be labeled with your name and date of photograph, indicate what they show, and be referenced to the site plan. Proposed activities or structure(s) may be indicated directly on the photographs using indelible markers or ink pens.
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*Note: The document appears to be a table of contents for a permit application or regulatory guide.*
1 PROJECT LOCATION INFORMATION
- Refer to your property's legal description for the Township, Range, and Section information, and your property tax bill for your Property Tax Identification Number(s).

<table>
<thead>
<tr>
<th>Address</th>
<th>Township Name(s)</th>
<th>Township(s)</th>
<th>Range(s)</th>
<th>Section(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>City/Village</td>
<td>County(ies)</td>
<td>Property Tax Identification Number(s)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Name of Waterbody | Project Name or Job Number | Subdivision/Plat | Lot Number | Private Claim |

Project types (check all that apply) | private | public/government | public/government |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>building addition</td>
<td>new building or structure</td>
<td>industrial</td>
<td>building renovation or restoration</td>
</tr>
<tr>
<td>other (explain)</td>
<td>commercial</td>
<td>river restoration</td>
<td>single-family</td>
</tr>
</tbody>
</table>

The proposed project is on, within, or involves (check all that apply) | a stream | a pond (less than 5 acres) | a Great Lake or Section 10 Waters | a natural river |
| a river | a channel/canal | a designated high risk erosion area | a dam |
| a ditch or drain | an inland lake (more than 5 acres) | a designated critical dune area | a wetland |
| a floodway area | a 100-year floodplain | a designated environmental area | a utility crossing |
| 500 feet of an existing waterbody |

2 DESCRIBE PROPOSED PROJECT AND ASSOCIATED ACTIVITIES, AND THE CONSTRUCTION SEQUENCE AND METHODS
- Attach separate sheets, as needed, including necessary drawings, sketches, or plans.

3 APPLICANT, AGENT/CONTRACTOR, AND PROPERTY OWNER INFORMATION
- The applicant can be either the property owner or the person or company that proposes to undertake the activity.
- If the applicant is a corporation, both the corporation and its owner must provide a written document authorizing the agent/contractor to act on their behalf.

Applicant (individual or corporate name) | Agent/Contractor (firm name and contact person) |
|Mailing Address | Address |
|City | State | Zip Code | City | State | Zip Code |

Daytime Telephone Number with Area Code | Daytime Telephone Number with Area Code |
|Fax | E-mail | Fax | E-mail |

Is the applicant the sole owner of all property on which this project is to be constructed and all property involved or impacted by this project? Yes [ ] No [ ]

If No, provide a letter signed by the property owner authorizing the agent/contractor to act on his or her behalf or a copy of easements or right-of-ways. If multiple owners, please attach all property owners' names, mailing addresses, and telephone numbers.

Property Owner's Name (If different from applicant) | Mailing Address
|Daytime Telephone Number with Area Code | City | State | Zip Code |

4 PROPOSED PROJECT PURPOSE, INTENDED USE, AND ALTERNATIVES CONSIDERED (Attach additional sheets if necessary)
- The purpose must include any new development or expansion of an existing land use.
- Include a description of alternatives considered to avoid or minimize resource impacts. Include factors such as, but not limited to, alternative construction technologies; alternative project layout and design; alternative locations; local land use regulations and infrastructure; and pertinent environmental and resource issues.
- For utility crossings, include both alternative routes and alternative construction methods.
LOCATING YOUR PROJECT SITE

- Provide the requested information listed below that will help staff in locating your project site.
- Attach a copy of a map, such as a plat, county, or USGS topographic map, clearly showing the site location and include an arrow indicating the north direction.

Is there an access road to the project? Yes   (If Yes, type of road, check all that apply)   No  Yes

Name of roads at closest main intersection

Directions from main intersection

Style of house or other building on site  ranch  2-story  cape cod  bi-level  cottage/cabin  pole barn  none  other (describe)

Color of adjacent property house and/or buildings

House number  Address is visible on  house  garage  mailbox  sign  other

Street name  Fire lane number  Lot number

How can your site be identified if there is no visible address?

Provide directions to the project site, with distances from the best and nearest visible landmark and waterbody

Does project cross boundaries of two or more political jurisdictions? (City/Township, Township/Township, County/County, etc.)

List other federal, interstate, state, or local agencies authorizations required for the proposed activity, including all approvals or denials received.

Agency  Type approval  Number  Date applied  Date approved / denied  If denied, reason for denial

If a permit is issued, date activity will commence (M/D/Y)

Has any construction activity commenced or been completed in a regulated area?  No  Yes

If Yes, identify the portion(s) underway or completed on drawings or attach project specifications and give completion date(s) (M/D/Y)

Are there any present unresolved violations of environmental law or litigation involving the property? No  Yes (If Yes, please explain)

PUBLIC NOTIFICATION (Attach additional sheets if necessary)

- Complete information for all adjacent and impacted property owners and the lake association or established lake board including the contact person's name.
- If you own the adjacent lot, provide the requested information for the first adjacent parcel beyond your property line.

Property Owner's Name  Mailing Address  City  State  Zip Code

Name of  Established Lake Board  or Lake Association

and the Contact Person's name, phone number, and mailing address

APPLICANT'S CERTIFICATION

READ CAREFULLY BEFORE SIGNING

I am applying for a permit(s) to authorize the activities described herein. I certify that I am familiar with the information contained in this application, that it is true and accurate, and, to the best of my knowledge, is in compliance with the State Coastal Zone Management Program and the National Flood Insurance Program. I understand that there are penalties for submitting false information and that any permit issued pursuant to this application may be revoked if information on this application is untrue. I certify that I have the authority to undertake the activities proposed in this application. By signing this application, I agree to allow representatives of the MDEQ and the USACE to enter upon said property in order to inspect the proposed activity site and the completed project. I understand that I must obtain all other necessary local, county, state, or federal permits and that the granting of other permits by local, county, state, or federal agencies does not release me from the requirements of obtaining the permit requested herein before commencing the activity. I understand that the payment of the application fee does not guarantee the issuance of a permit.

All applicants must complete all the items in Sections 1 through 9 on pages 1 and 2 of this application.

Complete these items in Sections 10 through 21 that apply to your project. It is necessary to submit only those pages where you have provided information.

Please list here the application page numbers being submitted and a brief description of other attachments included with your application.

Property Owner  Agent/Contractor  Corporation - Title

Printed Name  Signature  Date

February 2001
Projects impacting wetlands or floodplains or located on an inland lake or stream or a great lake

- Check boxes A through N that may be applicable to your project and provide the requested information.
- If your project may affect wetlands, also complete Section 12. If your project may impact regulated floodplains, also complete Section 13.
- Provide an overall site plan showing existing lakes, streams, wetlands, and other water features; existing structures; and the location of all proposed structures, land change activities and soil erosion and sedimentation control measures. Please review sample drawings for guidance in completing site-specific drawings for your project.
- On a Great Lake use IGLD 89 on-site, if on-site, show location on site plan. On inland waters, use NGVD 29. Local datum. If other, observe water elevation (ft.), date of observation (MDY).

A. Projects requiring fill (see all sample drawings)

- To calculate volume in cubic yards (cu yd), multiply the average length in feet (ft) times the average width (ft) times the average depth (ft) and divide by 27.
- Attach both plans and cross-section views to scale showing maximum and average fill dimensions.

(Choose all that apply) Yes: Floodplain fill, wetland fill, riprap, seawall, bulkhead, or revetment, bridge or culvert, boat launch, off-shore swim area, beach fishing, boat well, crib dock, other.

Fill dimensions (ft): length, width, maximum depth.

Fill volume (cu yd), maximum water depth in fill area (ft).

Type of clean fill: pea stone, sand, gravel, wood chips, other. Will filter fabric be used under proposed fill?

Source of clean fill: on-site, if on-site, show location on site plan. Commercial or other. If other, attach description of location.

Fill will extend _______ feet into the water from the shoreline and _______ feet out of the water.

B. Projects requiring dredging or excavation (see all sample drawings)

- To calculate volume in cubic yards (cu yd), multiply the average length in feet (ft) times the average width (ft) times the average depth (ft) and divide by 27.
- Attach both plans and cross-section views to scale showing maximum and average dredge or excavation dimensions.

The applicant will be notified if sediment sampling will be required.

(Choose all that apply) Yes: Floodplain excavation, wetland dredge or draining, seawall, bulkhead, or revetment, navigation, boat well, boat launch, other.

Dredge volume (cu yd), method and equipment for dredging.

Has proposed dredge material been tested for contaminants? No. Yes (If Yes, attach testing results).

Has this same area been previously dredged? No. Yes (If Yes, provide date and permit number, if available).

If Yes, are you proposing to enlarge the previously dredged area? No. Yes.

Is long-term maintenance dredging planned? No. Yes (If Yes, when and how much)?

C. Projects requiring riprap (see sample drawings 2, 3, 8, 12, 14, 17, 22, and 23. Others may apply)

Riprap waterward of the shoreline or ordinary high water mark

Dimensions (ft): length, width, depth.

Volume (cu yd).

Riprap landward of the shoreline or ordinary high water mark

Dimensions (ft): length, width, depth.

Volume (cu yd).

Type of riprap: field stone, angular rock, other.

Will filter fabric be used under proposed riprap? No. Yes (If Yes, type).

D. Shore protection projects (see sample drawings 2, 3, and 17)

(Choose all that apply) Yes: Riprap, seawall/bulkhead, revetment.

E. Dock, pier, mooring pilings (see sample drawing 10)

Type: open pile, piled, crib, seasonal.

Proposed structure dimensions (ft): length, width.

Dimensions of nearest adjacent structures (ft): length, width.

F. Boat well (no sample drawing available)

Type of bank stabilization: wood, steel, concrete, vinyl, riprap, other.

Boat well dimensions (ft): length, width, depth.

Number of boats.

Volume of backfill behind sidewalk stabilization (cu yd).

Distances of boat well from adjacent property lines (ft).

G. Boat launch (no sample drawing available)

(Choose all that apply) Yes: New, existing, public, private, commercial.

Overall boat launch dimensions (ft): length, width, depth.

Boat launch dimensions (ft) below ordinary high water mark:

Length, width, depth.

Distances of launch from both property lines (ft).

Number of skids.

Skid pier dimensions (ft): width, length.

H. Boat hoist (no sample drawing available)

(Choose all that apply) Yes: Seasonal, permanent, cradle, side lifter, other.

Located on: seawall, dock, bottomlands.

I. Boardwalks and decks in wetlands or floodplains (see sample drawings 5 and 6)

(Choose all that apply) Yes: Boardwalk, deck, wetlands, floodplain.

Boardwalk or deck is on: fill, piling.
### J. INTAKE PIPES (See Sample Drawing 15) □ OUTLET PIPES (See Sample Drawing 22)

**Type** □ headwall □ end section □ pipe □ other  
**If outlet pipe, discharge is to** □ wetland □ inland lake □ stream, drain, or river □ Great Lake □ other

**Dimensions of headwall**
- **OR end section (ft)** length _width_ depth  
- Number of pipes  
- Pipe diameters and invert elevations

### K. MOORING AND NAVIGATION BUOYS (No Sample Drawing available)
- Provide an overall site plan showing the distances between each buoy, distances from the shore to each buoy, and depth of water at each buoy in feet.
- Provide cross-section drawing(s) showing anchoring system(s) and dimensions.

**Number of buoys** □ anchor system _height_  
**Purpose of buoy** □ mooring □ navigation  
(If No, you must provide an authorization letter from the property owner(s))

### L. GROINS (No Sample Drawing available)
- Provide an overall site plan showing the distances (ft) of the outermost groins from the property lines, distances between groins, length and width of each groin, and the distance from the existing toe of the bluff to the lakeward end of the groins.
- If existing groins are located on adjacent properties, provide distances (ft) from closest neighboring groin to your property lines on the site plan.
- Provide cross-section views showing the length and height of each groin and the height of groin ends above the observed water level (date and time). If step down type, show the height of each section above the observed water level.

**Number of groins** □ Type of groin □ steel □ wood □ other  
**Will groin be placed on a foundation?** □ No □ Yes (If Yes, dimensions of foundation (ft)) length _width_ height

### M. FENCES IN WETLANDS, STREAMS, OR FLOODPLAINS (No Sample Drawing available)
- Provide an overall site plan showing the proposed fencing through wetlands, streams, or floodplains.
- Provide drawing of fence profile showing the design, dimension, post spacing, board spacing, and distance from ground to bottom of fence (if in a floodplain).

(check all that apply)  
- □ wetlands □ streams □ floodplains _Total length (ft) of fence through wetlands_ _streams_ _floodplains_  
- □ Fence height (ft)  
- □ Fence type and material

### N. OTHER - e.g., structure removal, maritime railway, low sand trap wall, breakwater, and structural foundations in wetlands or floodplains

### 11 CONSTRUCTION OF A NEW LAKE OR POND (See Sample Drawings 4 and 15)

Which best describes your proposed waterbody use (check all that apply)  
□ wildlife □ stormwater detention basin □ stormwater detention basin □ recreation □ wastewater basin □ other

**Water source for lake/pond**  
□ groundwater □ natural springs □ Inland Lake or Stream □ stormwater runoff □ pump □ sewage □ other

Will project involve construction of a dam, dike, outlet control structure, or spillway? □ No □ Yes (If Yes, complete Section 17)

### 12 ACTIVITIES THAT MAY IMPACT WETLANDS
- For information on the MDEQ’s Wetland Assessment Program, please visit the LWMD website or call 517-241-8485.

(check all that apply) □ fill (Section 10A) □ dredge or excavation (Section 10B) □ boardwalk or deck (Section 10I)  
□ fences (Section 10M) □ bridges and culverts (Section 14) □ drainage surface water □ other

Has a professional wetland delineation been conducted for this parcel? □ No □ Yes (If Yes, please provide a copy; if federal method was used, supply data sheets)  
Applicant purchased property before OR after October 1, 1980.

Has the MDEQ conducted a wetland assessment for this parcel? □ No □ Yes (If Yes, please provide a copy)

Describe the wetland impacts, proposed use or development, and efforts to avoid/minimize impacts.

Is any grading or mechanized land clearing proposed? □ No □ Yes  
(If Yes, please show locations on site plan)

Has any of the proposed grading or mechanized land clearing been completed? □ No □ Yes (If Yes, please label and show locations on site plan)

- Complete the wetland dredge and wetland fill dimension information for each impacted wetland area. Attach additional sheets if necessary and label the impacted wetland areas on a site plan drawn to scale. Please attach at least one typical cross-section for each wetland dredge and/or fill area. (See Sample Drawings 6 & 9)
- Also complete Section 10A for fill and Section 10B for dredge or excavation activities.
- If dredge material will be disposed of on site, please show the location on site plan in an upland area and include soil erosion and sedimentation control measures.

**Wetland dredge dimensions**
- **maximum** length (ft)  
- **maximum** width (ft)  
- **acres**  
- **sq ft**  
- **average** depth (ft)  
- **dredge volume** (cu yd)

**Wetland fill dimensions**
- **maximum** length (ft)  
- **maximum** width (ft)  
- **acres**  
- **sq ft**  
- **fill area**  
- **average** depth (ft)  
- **fill volume** (cu yd)

**Total wetland dredge area**  
□ acres □ sq ft

**Total wetland fill area**  
□ acres □ sq ft

The proposed project will be serviced by □ public sewer □ private septic system (If septic system, show existing and new or expanded system on plans)

If septic system, has application been made to the County Health Department for a permit? □ No □ Yes  
If Yes, has permit been issued? □ No □ Yes (If Yes, provide copy)
13 FLOODPLAIN ACTIVITIES (See Sample Drawing 5. Others may apply)
- Please attach additional sheets with the requested information when multiple floodplain activities are included in this application.

(check all that apply) [ ] fill  [ ] dredge  [ ] wetland impacts  [ ] other

Site is ___ feet above [ ] ordinary high water mark (OHWM) OR [ ] observed water level __________ Date of observation ______ (M/D/Y)

Fill volume below the 100-year floodplain elevation (cu yd) __________________________
Compensating cut volume below the 100-year floodplain elevation (cu yd) __________________________

14 BRIDGES AND CULVERTS (Including Foot and Cart Bridges)
- Provide detailed site-specific drawings of existing and proposed Plan View (Sample Drawing 14A), Elevation View (Sample Drawing 14B), Stream and Floodplain Cross-Section (Sample Drawing 14C), Stream Profile (Sample Drawing 14D) and Floodplain Fill (Sample Drawing 5) at a scale adequate for detailed review.
- Provide the requested information that applies to your project. If there is not an existing structure, leave the "Existing" column blank.
- If you choose to have a Licensed Professional Engineer "certify" that your project will not cause a "harmful interference" for a range of flood discharges up to and including the 100-year flood discharge then you must use the "Required Certification Language". A copy is available on our website under "Permit Application" or you may request a copy by phone, email, or mail. A hydraulic report supporting this certification may also be required.
- Please attach additional sheets with the requested information when multiple crossings are included in this application.

<table>
<thead>
<tr>
<th>Existing</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridge type (box, circular, arch) and material (corrugated metal, timber, concrete, etc.)</td>
<td>Bridge span (length perpendicular to stream) OR culvert width</td>
</tr>
<tr>
<td>Bridge type (concrete box beam, timber, concrete I-beam, etc.)</td>
<td>Bridge width (parallel to stream) OR culvert length (ft)</td>
</tr>
<tr>
<td>Entrance design (projecting, mitered, wingwalls, etc.)</td>
<td>Bridge rise (from bottom of beam to streambed) OR Culvert rise (from top of culvert to streambed) (ft)</td>
</tr>
<tr>
<td>Total structure waterway opening above streambed (sq ft)</td>
<td></td>
</tr>
<tr>
<td>[ ] elevation of culvert crown Upstream</td>
<td>Higher elevation of [ ] culvert invert Upstream</td>
</tr>
<tr>
<td>[ ] bottom of bridge beam (ft) Downstream</td>
<td>OR [ ] streambed within culvert (ft) Downstream</td>
</tr>
<tr>
<td>Elevation of road grade at structure (ft)</td>
<td>Distance from low point of road to mid-point of bridge crossing (ft)</td>
</tr>
<tr>
<td>Elevation of low point in road (ft)</td>
<td></td>
</tr>
<tr>
<td>Cross-sectional area of primary channel (sq ft)</td>
<td>Average stream width at OHWM outside the influence of the structure (ft) upstream downstream</td>
</tr>
</tbody>
</table>

Reference datum used (show on plans with description) [ ] NGVD 29 [ ] IGLD 85 (Great Lakes coastal areas) [ ] local

High water elevation – describe reference point and highest known water level above or below reference point and date of observation.

15 STREAM, RIVER, OR DRAIN CONSTRUCTION ACTIVITIES (No sample drawing available)
- Complete Section 10A for fill, Section 10B for dredge or excavation, and Section 10C for riprap activities.
- If side casting or other proposed activities will impact wetlands or floodplains, complete Sections 12 and 13, respectively.
- Provide an overall site plan showing existing lakes, streams, wetlands, and other water features; existing structures; and the location of all proposed structures and land change activities. Provide cross-section (elevation) drawings necessary to clearly show existing and proposed conditions. Be sure to indicate drawing scales.
- For activities on legally established county drains, provide original design and proposed dimensions and elevations.

(check all that apply) [ ] maintenance [ ] improvement [ ] relocation [ ] enclosure [ ] new drain [ ] wetlands [ ] other

Dimensions (ft) of existing stream/drain channel to be worked on. length width depth
Dimensions (ft) of new, relocated, or enclosed stream/drain channel. length width depth
Existing channel average water depth in a normal year (ft) Proposed side slopes (vertical / horizontal)

How will slopes and bottom be stabilized?

Will old/enclosed stream channel be backfilled to top of bank grade? [ ] No [ ] Yes

If an enclosed structure is proposed, check type? [ ] concrete [ ] corrugated metal [ ] plastic [ ] other

Will spoils be disposed of on site? [ ] No [ ] Yes (If Yes, show location of spoils on site plan in an upland area.)

Reference datum used (show on plans with description) [ ] NGVD 29 [ ] IGLD 85 (Great Lakes coastal areas) [ ] local

February 2001
16 DRAWDOWN OF AN IMPOUNDMENT
- If wetlands will be impacted, also complete Section 12.

Type of drawdown ☐ over winter ☐ temporary ☐ one-time event ☐ annual event ☐ permanent (dam removal) ☐ other

Reason for drawdown

Has there been a previous drawdown? ☐ No ☐ Yes (If Yes, provide date (M/Y))

Previous permit number, if known

Does waterbody have established legal lake level? ☐ No ☐ Yes ☐ Not Sure

Extent of vertical impoundment
derawdown (ft)
drawdown head (ft)

Date drawdown would start
(MD/Y)

Date drawdown would stop (MD/Y)

Date refilling would start
(MD/Y)

Date refilling would end (MD/Y)

Type of outlet discharge structure to be used
☐ surface ☐ bottom ☐ mid-depth

Impoundment area at normal water level (acres)

Sediment depth behind impoundment discharge structure (ft)

17 DAM, EMBANKMENT, DIKE, SPILLWAY, OR CONTROL STRUCTURE ACTIVITIES (See Sample Drawing 15)
- If wetlands will be impacted, also complete Section 12.
- Please attach site-specific conceptual plans for construction of a new dam, reconstruction of a failed dam, or enlargement of an existing dam for resource impact review. Detailed engineering plans are required once the activity has been determined to be permissible from an environmental standpoint.
- Please attach detailed engineering plans for a dam repair, dam alteration, dam abandonment, or dam removal.

Which one best describes your project? ☐ new dam construction ☐ reconstruction of a failed dam ☐ enlargement of an existing dam ☐ dam repair ☐ dam alteration ☐ dam abandonment ☐ dam removal ☐ other

DAM ID Number
If known

Type of outlet discharge structure
☐ surface ☐ bottom ☐ mid-depth

Will proposed activities require a drawdown of the waterbody to complete the work? ☐ No ☐ Yes (If Yes, also complete Section 16)

Riprap
Volume (cu yd)

Volume (cu yd)

Fill volume (cu yd)

Does structure allow complete drainage of waterbody? ☐ No ☐ Yes

Benchmark Datum used
☐ Local ☐ NGVD 29 ☐ other

Describe benchmark and show on plans

Have you engaged the services of a Licensed Professional Engineer? ☐ No ☐ Yes (If Yes, name, registration number, and mailing address)

Will a water diversion during construction be required? ☐ No ☐ Yes (If Yes, describe how the stream flow will be controlled through the dam construction area during the proposed project activities)

- The following additional information is required for a new dam, reconstruction of a failed dam, or enlargement of an existing dam.

Describe the type of dam and how you will design the dam and embankment to control seepage through and underneath the dam.

18 UTILITY CROSSINGS (See Sample Drawings 12 and 13)
- If side casting is required, complete Subsections 10A and 10B. If spoils will be placed in wetlands or wetlands may be impacted, complete Section 12.
- Please attach additional sheets with the requested information as needed for multiple crossings.

What method will be used to construct the crossings?
☐ flush ☐ plow ☐ open trench ☐ jack and bore ☐ directional drilling ☐ international waters ☐ wetlands (also complete Section 12)

Type ☐ sanitary sewer ☐ storm sewer ☐ watermain ☐ cable ☐ oil/gas pipeline

Number of wetland crossings ☐ Number of inland lake or stream crossings ☐ Pipe diameter (inches) ☐ Pipe length per crossing (feet) ☐ Distance below streambed or wetland (inches)
19 MARINA CONSTRUCTION AND OPERATING PERMIT INFORMATION (See Sample Drawing 21)
- Marina located on one of the Great Lakes, including Lake St. Clair, may be required to secure leases or conveyances from the state of Michigan to place structures on the bottoms.
- If you have a current pump-out agreement with another marina facility, please enclose a copy.
- Please attach a copy of the property legal description or a property boundary survey report to your application.

<table>
<thead>
<tr>
<th>Marina owner</th>
<th>Marina name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mailing address</td>
<td>Location address</td>
</tr>
<tr>
<td>City</td>
<td>State</td>
</tr>
</tbody>
</table>

Check the reasons for submitting this application
- [ ] Owner's name change
- [ ] Construction of a new marina
- [ ] Issuance of a new marina Operating Permit
- [ ] Expansion/modification of an existing marina
- [ ] Reissuance of a marina Operating Permit

<table>
<thead>
<tr>
<th>Marina's daytime telephone number with area code</th>
<th>Current Marina Operating Permit Number</th>
<th>Expiration Date (M/D/Y)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Existing</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of boat slips/wells</td>
<td>Are sanitary pump-out facilities available?</td>
</tr>
<tr>
<td>Number of launch ramps/lanes</td>
<td>Number of hoist/take-out wells</td>
</tr>
<tr>
<td>Number of mooring buoys</td>
<td>Number of gas pumps</td>
</tr>
<tr>
<td>Lineal feet of boardside dockage</td>
<td>Name of marina insurance company</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Existing</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of parking spaces</td>
<td></td>
</tr>
</tbody>
</table>

20 HIGH RISK EROSION AND CRITICAL DUNE AREAS (See Sample Drawings 19 and 20, also Sample Drawing 9 if wetlands are impacted)
- Construction in critical dune areas on slopes greater than a 1-foot vertical rise in a 3-foot horizontal plane (33 percent) are prohibited without a special exception.
- Construction in critical dune areas on slopes that measure from a 1-foot vertical rise in a 4-foot horizontal plane (25 percent) to less than a 1-foot vertical rise in a 3-foot horizontal plane (33 percent) requires plans prepared by a registered architect or licensed professional engineer.
- All property boundaries and proposed structure corners, septic system, water well, and driveway locations must be staked before the MDEQ site inspection.
- Additional information, including the building construction plans, may be required to complete the application review.
- The use of federal funds includes any federally insured mortgages such as the Veterans Administration (VA) or Federal Housing Administration (FHA).

<table>
<thead>
<tr>
<th>Parcel dimensions (ft)</th>
<th>Property is a</th>
<th>If platted lot, year platted</th>
<th>Length of shore frontage (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>width x depth</td>
<td>platted lot</td>
<td>year platted</td>
<td></td>
</tr>
</tbody>
</table>

Type of construction activities
- [ ] home
- [ ] garage
- [ ] driveway
- [ ] septic
- [ ] addition
- [ ] renovation
- [ ] other

The proposed project will be serviced by
- [ ] public sewer
- [ ] private septic system (If septic system, show existing and new or expanded system on plans)

If septic system, has application been made to the County Health Department for a permit?  [ ] No  [ ] Yes

If Yes, has permit been issued?  [ ] No  [ ] Yes (If Yes, provide copy)

Number of individual living-units in proposed building

<table>
<thead>
<tr>
<th>Existing construction is on</th>
<th>Proposed new construction will be on</th>
</tr>
</thead>
<tbody>
<tr>
<td>pilings</td>
<td>pilings</td>
</tr>
<tr>
<td>basement</td>
<td>basement</td>
</tr>
<tr>
<td>concrete slab</td>
<td>concrete slab</td>
</tr>
<tr>
<td>crawl space</td>
<td>crawl space</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Existing construction material above foundation wall</th>
<th>Proposed new construction material above foundation wall</th>
</tr>
</thead>
<tbody>
<tr>
<td>stud frame</td>
<td>stud frame</td>
</tr>
<tr>
<td>log</td>
<td>log</td>
</tr>
<tr>
<td>block</td>
<td>block</td>
</tr>
<tr>
<td>other</td>
<td>other</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Existing siding material</th>
<th>Proposed new siding material</th>
</tr>
</thead>
<tbody>
<tr>
<td>wood</td>
<td>wood</td>
</tr>
<tr>
<td>vinyl</td>
<td>vinyl</td>
</tr>
<tr>
<td>block</td>
<td>block</td>
</tr>
<tr>
<td>other</td>
<td>other</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area of the existing foundation, excluding attached garage (sq ft)</th>
<th>Area of the proposed foundation, excluding attached garage (sq ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If renovating or restoring existing structure, renovation or restoration cost

<table>
<thead>
<tr>
<th>Current structure replacement value</th>
<th>Tax assessed value of existing structure (excluding land value)</th>
<th>Assessment year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Are federal funds being used to finance any portion of the proposed project?</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] No  [ ] Yes (If Yes, please identify source)</td>
</tr>
</tbody>
</table>

Date by which project location will be staked (MD/Y)

21 ACTIVITIES IN DESIGNATED ENVIRONMENTAL AREAS (No Sample Drawings Available)
- Many designated environmental areas are completely or partially wetlands. Be sure to complete Section 12 if your proposed activities will also occur in wetlands.
- If you are proposing any alteration in a designated environmental area, please attach a detailed site plan.

(Check all that apply)
- [ ] placement of structures
- [ ] grading or other soil alteration
- [ ] alteration of natural drainage
- [ ] boardwalk or deck
- [ ] driveway or road
- [ ] other

Has the MDEQ staff or anyone else conducted a wetland assessment for this parcel?  [ ] No  [ ] Yes (If Yes, please provide copy of response)

Describe the proposed activity.

Joint Permit Application Page 7 of 7 February 2001
APPENDIX A

Acronyms and Abbreviations

ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>FHA</td>
<td>Federal Housing Administration</td>
</tr>
<tr>
<td>IGLD 85</td>
<td>International Great Lakes Datum of 1985</td>
</tr>
<tr>
<td>LWMD</td>
<td>Land and Water Management Division</td>
</tr>
<tr>
<td>M/D/Y</td>
<td>Month / Day / Year</td>
</tr>
<tr>
<td>MDEQ</td>
<td>Michigan Department of Environmental Quality</td>
</tr>
<tr>
<td>NGVD 29</td>
<td>National Geodetic Vertical Datum of 1929</td>
</tr>
<tr>
<td>NREPA</td>
<td>Natural Resources and Environmental Protection Act</td>
</tr>
<tr>
<td>OHWM</td>
<td>Ordinary High Water Mark</td>
</tr>
<tr>
<td>PCU</td>
<td>Permit Consolidation Unit</td>
</tr>
<tr>
<td>USACE</td>
<td>United States Army Corps of Engineers</td>
</tr>
<tr>
<td>VA</td>
<td>Veterans Administration</td>
</tr>
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</table>

ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ac</td>
<td>acre</td>
</tr>
<tr>
<td>cu yd</td>
<td>cubic yards</td>
</tr>
<tr>
<td>ft</td>
<td>feet</td>
</tr>
<tr>
<td>sq ft</td>
<td>square feet</td>
</tr>
</tbody>
</table>
General Instructions For All Drawings

Required drawings:
- Site location map that clearly identifies your project location. Draw a map, copy a plat map or a county map, or create a map using the Internet (see Sample Drawing 1).
- Overall site plan showing areas of proposed impacts, existing lakes, streams, wetlands, floodplains, and other water features. Include name of waterbodies, property boundaries and corners, easement boundaries, neighboring property owner information, and soil erosion and sedimentation control measures.
- Plan view and cross-section (elevation) drawings that are site-specific and adequate for detailed review. Show both existing and proposed conditions (see Sample Drawings 2 through 23).

All drawings should:
- Be legible and clearly labeled on standard weight paper of 8-1/2 x 11-inch size. If drawings are engineering plans larger than 8-1/2 x 11, submit a minimum of five copies.
- Title block on each drawing which includes: proposed activity; applicant's name; waterbody; city, village or township; county; drawing number and number in set (i.e., Drawing 1 of 4), and date prepared.
- Reference a datum (NGVD 29 or USGS 83) if the proposed project is on Section 10 Waters.
- Be drawn to scale with the scale identified on each drawing. Show vertical scale if different than horizontal scale on each drawing.
- All plan view drawings should include a north arrow.
- Label all existing and proposed relevant features and dimensions relative to those features, especially those that correspond to questions on the application form.
- Include soil erosion and sedimentation control measures.

NOTE: To calculate volume in cubic yards (cu yd), multiply the average length in feet (ft) times the average width (ft) times the average depth (ft) and divide by 27.

Sample Drawing 1

Site location map using a hand-drawn map that is clearly labeled

Site location map using a copy of a county plat book
Complete Section 10D and Sections 10A, 10B, 10C, 12, and 13 if applicable to your project.

Provide plan view and cross-section site-specific drawings adequate for detailed review, include:

- Name of waterbody, neighboring property owner information, and property boundaries and corners.
- Existing and proposed conditions along the shoreline at your project location.
- Existing conditions and/or structures along the shoreline for each adjacent parcel.
- Dimensions from fixed objects to property boundaries and the proposed shore protection.
- Length (ft), volume (cu yd) and type (i.e., field stone, angular rock, etc.) of riprap.
- Locations of filter fabric and soil erosion and sedimentation control measures.
- Observed water level and date of observation and datum (NGVD 29 or IGLD 85 on Section 10 Waters).
- Minimum and maximum distances landward and waterward of proposed shore protection to the existing shoreline or ordinary high water mark.

Inland Lake Shore Protection

APPLICANT: WATERWAY: CITY: TOWNSHIP: COUNTY: NUMBER OF SHEETS: OF DATE:

8 CUBIC FEET OF STONE PER FOOT OF SHORELINE FRONTAGE

APPROXIMATELY 30 CU. YDS. TOTAL

Complete Section 10D and Sections 10A, 10B, 10C, 12, and 13 if applicable to your project.

Provide plan view and cross-section site-specific drawings adequate for detailed review, include:

- Name of waterbody, neighboring property owner information, and property boundaries and corners.
- Existing and proposed conditions along the shoreline at your project location.
- Existing conditions and/or structures along the shoreline for each adjacent parcel.
- Dimensions from fixed objects to property boundaries and the proposed shore protection.
- Length of seawall/bulkhead and return wall (ft). If structure will be tied into adjacent walls, show how.
- Locations of filter fabric and soil erosion and sedimentation control measures.
- Type of construction material (i.e., wood, steel concrete, vinyl, etc.).
- Observed water level and date of observation and datum (NGVD 29 or IGLD 85 on Section 10 Waters).
- Minimum and maximum distances landward and waterward of proposed shore protection to the existing shoreline or ordinary high water mark.

BULKHEAD/Bulkhead

APPLICANT: WATERWAY: CITY: TOWNSHIP: COUNTY: NUMBER OF SHEETS: OF DATE:
Complete Section 11 and Sections 10A, 10B, 10C, 12, and 13 if applicable to your project. Provide plan view and cross-section site-specific drawings adequate for detailed review, include:
- Overall site plan showing existing lakes, streams, wetlands, and other water features.
- Waterbody names, property boundaries and corners, and neighboring property owner information.
- Please include property owner information for upstream and downstream adjacent parcels.
- Existing and proposed conditions in the area of proposed pond.
- Maximum depth, maximum and typical side slopes at edge of pond (vertical/horizontal), pond surface area, and dimensions and distances of proposed pond and spoil disposal area from fixed objects and property boundaries. Spills should be placed above the 100-year floodplain elevation and upland of regulated wetlands. If off-site disposal is planned, please provide a detailed description of the location.
- Soil erosion and sedimentation control measures.
- Water levels and dates of observation in nearby surface water and at proposed pond location.
- Datum (NGVD 29 or IGLD 85 or local) and dredge volume (cu yd).
- If pond will have a surface water outlet show on plan and cross-section drawings.

Complete Section 13 and Sections 10A, 10B, 10C, and 12 if applicable to your project. Provide plan view and cross-section site-specific drawings adequate for detailed review, include:
- Overall site plan showing existing lakes, streams, wetlands, and other water features.
- Waterbody names, property boundaries and corners, neighboring property owner information, and soil erosion and sedimentation control measures.
- Datum used (NGVD 29 or IGLD 85).
- 100-year floodplain elevation (if known). Proposed basement floor and finished first-floor elevations (ft). Description of reference point and highest known water elevation (ft) above or below reference point and date of observation (MD/Y).
- Existing and proposed building dimensions and minimum and maximum distances of proposed cut and fill from waterbodies, wetlands, and floodplain boundaries (ft). Proposed and existing contours on a site development plan that show compensating cut for proposed fill in the floodplain.
- Dredge and or fill volumes (cu yd).
Complete Sections 101 and 12 and Sections 10A, 10B, 13, and 21 if applicable to your project.

Provide plan view and cross-section site-specific drawings adequate for detailed review, include:
- Overall site plan showing existing lakes, streams, wetlands, floodplains, and other water features.
- Name of waterbodies, property boundaries, and neighboring property owner information.
- The boardwalk or dock dimensions in feet (height, width, and length).
- In cross-sectional view show the maximum and minimum height of boardwalk above existing ground and the supporting system (i.e. fill or pilings).
- Distance from end of boardwalk to shoreline or ordinary high water mark.
- The existing and proposed building dimensions and minimum and maximum distances of proposed cut and fill from waterbodies, wetlands, and floodplain boundaries (ft).
- The observed water elevation and date of observation (MD/AV).
- Datum (NGVD 29 or IGLD 85 on Section 10 Waters).
- Soil erosion and sedimentation control measures.

Complete Sections 10B and Sections 10A, 12, 13, and 21 if applicable to your project.

Provide plan view and cross-section site-specific drawings adequate for detailed review, include:
- Overall site plan showing existing lakes, streams, wetlands, floodplains, and other water features.
- Name of waterbodies, property boundaries, and neighboring property owner information.
- The dredge spoils disposal area location in an upland area above the 100-year floodplain. If spoils will be disposed of off-site, attach a detailed location. Sediment sampling may be required.
- The location and dimensions of existing or proposed docks or piers.
- The maximum and average dredge dimensions (ft) in both plan and cross-section views. Calculate dredge volume (cu yd) by multiplying average (depth) x (width) x (length) in feet and dividing by 27.
- The observed water elevation and date of observation (MD/AV).
- Datum (NGVD 29 or IGLD 85 on Section 10 Waters).
- Soil erosion and sedimentation control measures.
Complete Sections 10A, 10B, 10C, 12, 13, and 14 if applicable to your project. Provide plan view and cross-section site-specific drawings adequate for detailed review, include:
- An overall site plan showing existing lakes, streams, wetlands, floodplains, and other water features.
- Name of waterbodies, property boundaries, and neighboring property owner information.
- Choose the crossing location to provide for minimum impact to the wetland.
- The length, diameter, and type of culvert that is proposed.
- The volume of fill in cubic yards by multiplying average (depth) x (width) x (length) and dividing by 27.
- Method of bank stabilization at the culvert ends.
- The dimensions for maximum depth and maximum extent of fill. Include dimensions from fixed objects and property boundaries to wetland fill area.
- Soil erosion and sedimentation control measures, if within 500 feet of a lake or stream.

Complete Sections 10A, 10B, 10C, 12, 13, and 14 if applicable to your project. Provide plan view and cross-section site-specific drawings adequate for detailed review, include:
- An overall site plan showing existing lakes, streams, wetlands, floodplains and other water features.
- Name of waterbodies, property boundaries, and neighboring property owner information.
- Site location plan that provides for minimum impact to the wetland.
- The dimensions for maximum depth and maximum extent of fill. Include dimensions from fixed objects and property boundaries to wetland fill area.
- The fill volume (cu yd) calculated by multiplying average (depth) x (width) x (length) in feet and dividing by 27.
- Soil erosion and sedimentation control measures.
- Observed water elevation, date of observation(M/D/Y).
- Datum (IGLD 85 or NGVD 29 on Section 10 Waters).
Complete Sections 10A, 10B, 12, 13, and 21 if applicable to your project. Provide plan view and cross-section site-specific drawings adequate for detailed review, include:

- Name of waterbody, neighboring property owner information, property boundaries, and distances to adjacent property lines from proposed dock.
- Observed water elevation and date of observation (M/D/Y).
- Datum used (GLD 85 or NGVD 29 on Section 10 Waters).
- Dimensions from fixed objects to property boundaries and the proposed pier, dock, or piles.
- Existing conditions along the shoreline for each adjacent parcel.
- Dimension of existing structures for each adjacent parcel.
- Material used for construction of pier, dock, and or piles.

Complete Sections 10A, 10B, 10C, and 12 if applicable to your project. Provide plan view and cross-section site-specific drawings adequate for detailed review, include:

- Overall site plan showing existing lakes, streams, wetlands, floodplains, and other water features.
- Name of waterbodies, property boundaries, and neighboring property owner information.
- Dimensions of an existing or proposed house, dock, or other structures from the proposed sanding area and property boundaries.
- The maximum and average fill dimensions (ft) in both plan and cross-section views. Calculate fill volume (cu yd) by multiplying average (depth) x (width) x (length) in feet and dividing by 27.
- The observed water level, date of observation (M/D/Y) and datum, if used (NGVD 29 or local).
- The extent of filter fabric, if used, and how the filter fabric will be grounded.
- Soil erosion and sedimentation control measures.
- Source of clean sand or pre-washed gravel.

February 2001
Proposed Bridges and Culverts:
Complete Section 14 and Sections 10A, 10B, 10C, 12, 13, and 15 if applicable to your project.

- Provide an overall site plan showing existing lakes, streams, wetlands, and other water features. Include name of waterbodies, property boundaries, and neighboring property owner information.
- Provide detailed site-specific drawings of existing and proposed Plan View (Sample Drawing 14A), Elevation View (Sample Drawing 14B), Stream and Floodplain Cross-Sections (Sample Drawing 14C), and Stream Profile (Sample Drawing 14D) adequate for detailed review.
- If your project includes floodplain fill complete Section 13 and include a site-specific drawing (See Sample Drawing 5).

Sample Drawing 14A

Bridge or Culvert Plan View
- Existing and proposed structures and approaches.
- Property boundaries and or right-of-ways (ROW).
- Description of reference point and datum used (NGVD 29, IGLD 85 or local).
- Location of cross-section or elevation views.
- Soil erosion and sedimentation control measures.

Bridge Plan View
Howe Road
Existing and Proposed Structures

PROPOSED: BRIDGE OR CULVERT
APPLICANT: 
WATERWAY: 
CITY/TOWNSHIP: 
COUNTY: 
NUMBER OF SHEETS: ___ OF ___ 
DATE: 

Scale: 0 30'
Bridge or Culvert Elevation View

- Observed and highest known water elevations (ft) and dates of observations (M/D/Y).
- 100-year floodplain elevation (ft known).
- Basement floor and finished first-floor elevations (ft) of nearby homes and buildings.
- Elevation of ordinary high water mark (ODHM).

Existing and proposed:
- Structure elevations.
- Road grade and elevation of low points in road.
- Distance from low point of road to mid-point of structures.
- Upstream and downstream elevations (ft) of culvert crown or bottom of bridge beam.
- If culvert, higher elevation of pipe invert or streambed within pipe.

Bridge Elevation View
Existing and Proposed Structures

PROPOSED: BRIDGE OR CULVERT

APPLICANT:
WATERWAY:
CITY/TOWNSHIP:
COUNTY:
NUMBER OF SHEETS: ___ OF ___
DATE:

Elevations in Feet

Scale

0 10'

Sample Drawing 145
Cross-section downstream of proposed replacement structure typical to the watercourse involved and taken perpendicular to flood flows.

Stream and Floodplain Cross-Section View
- All proposed projects need to provide the channel dimensions.
- Description of reference point and datum used (NGVD 29, IGLD 85, or local).
- Highest known and observed water elevations (ft) and dates of observations (M/D/Y).
- 100-year floodplain elevation (if known).
- Descriptions of overbank vegetative cover within the floodplain.
- Elevation of ordinary high water mark (OHWM).
- If upstream channel and overbank dimensions and/or vegetative cover differ significantly from the downstream conditions also provide an upstream cross-section.

Sample Drawing 14C
STREAM PROFILE VIEW
Existing and Proposed Structure,
Invert Elevations and End Treatment

PROPOSED: BRIDGE OR CULVERT

APPLICANT: 
WATERWAY: 
CITY/TOWNSHIP: 
COUNTY: 
NUMBER OF SHEETS: ___ OF ___
DATE: 

Stream Profile View
☐ Datum used (NGVD 29, IGLD 85, or local).
☐ Location of cross-sections.

Show existing and proposed:
☐ Road width and culvert length or bridge width (ft).
☐ Upstream and downstream invert elevations (ft)
☐ 100-year floodplain profile (if known).
Complete Section 1D and Sections 10A, 10B, 10C, 12, 20, and 21 if applicable to your project. Provide plan view and cross-section site-specific drawings adequate for detailed review, include:

☑ Existing and proposed conditions along the shoreline at your project location.
☑ Existing conditions and/or structures along the shoreline for each adjacent parcel.
☑ Length of proposed shore protection. If shore protection is a seawall or bulkhead, please provide the return wall length (ft).
☑ Details of how structure will be tied into existing walls or tied back to bank.
☑ Location of filter fabric on cross-section.
☑ Horizontal and vertical dimensions from fixed objects to property boundaries and the proposed shore protection.
☑ Name of waterbody, neighboring property owner information, and property boundaries.
☑ Soil erosion and sedimentation control measures.
☑ Observed water elevation, date of observation, and datum (IGLD 85 or NGVD 29 on Section 10 Waters).

Complete Sections 10B and Sections 10A, 12, and 21 if applicable to your project. Provide plan view and cross-section site-specific drawings adequate for detailed review, include:

☑ Overall site plan showing existing lakes, streams, wetlands, floodplains, and other water features.
☑ Name of waterbodies, property boundaries, and neighboring property owner information.
☑ The dredge spoils disposal area location in an upland area above the 100-year floodplain. If spoils will be disposed of off-site, attach a detailed location. Sediment testing may be required.
☑ The location and dimensions of existing or proposed docks or piers.
☑ Show maximum and average dredge dimensions (ft) in both plan and cross-section views. Calculate dredge volume in cubic yards by multiplying average (depth) x (width) x (length) in feet and dividing by 27.
☑ Observed water elevation, date of observation, and datum (IGLD 85 or NGVD 29 on Section 10 Waters).
☑ Soil erosion and sedimentation control measures.
Complete Section 20 and Sections 10A, 10B, 10C, and 10D if applicable to your project. Provide plan view and cross-section site-specific drawings adequate for detailed review, include:

- Overall site plan showing existing lakes, streams, wetlands, floodplains, and other water features.
- Name of waterbodies, location of water well, and property boundaries.
- Dimensions for all existing and proposed buildings, septic systems, and driveways.
- Applicable required setback dimensions (minimum distance (ft) from erosion hazard line to existing or proposed buildings or construction activities).
- Location and dimensions of proposed grading.
- Reference Sample Drawing 9 for required information if your proposed activities will impact a wetland.
- Soil erosion and sedimentation control measures.

Photographs are optional, but may assist staff in processing your application more quickly.
MARINA SITE PLAN #1

Main Pier Length=100'
Finger Width=3'
Number all slips, proposed & existing
Water's Edge
Land

Fairway of 1.5 times slip length between slip and property line.

Name and mailing address of adjacent riparian owner.

MARINA SITE PLAN #2

Slip Length=30'
Water's Edge
Land

Name and mailing address of adjacent riparian owner.

Parking Lot

0 50 100
FEET

PROPOSED MARINA SITE PLAN

APPLICANT:
WATERWAY:
city:
TOWNSHIP:
COUNTY:
NUMBER OF SHEETS: OF
DATE:

Please include actual dimensions for all distances as shown in examples.

Do not include slip or dock length as lineal feet of broadside dockage.

Complete Section 19 and Sections 10, 12, and 21 if applicable to your project.
Provide plan view and cross-section site-specific drawings adequate for detailed review, include:
- Overall site plan showing existing lakes, streams, wetlands, floodplains, and other water features.
- Name of waterbodies, property boundaries, and neighboring property owner information.
- Soil erosion and sedimentation control measures.
- Site specific proposed dimensions for all distances shown in Sample Drawings 10 and 21 if applicable to your project.
- Site specific information and dimensions shown on Sample Drawing 7 if dredging activity is proposed.
- Highest known and observed water elevations (ft) and dates of observations.
- Datum used (GLD 85, NGVD 29, or local) and a description of the reference point or benchmark.
APPENDIX C

State Fees, Federal Fees, Minor Project Categories, and General Permit Categories for Minor Projects

STATE FEES

All permit applications for projects located on an inland lake or stream, Great Lake, or within a wetland or floodplain regulated by Part 301, Inland Lakes and Streams, Part 303, Wetlands Protection; Part 325, Great Lakes Submerged Lands; Floodplain Regulatory Authority found in Part 31, Water Resources Protection; Part 353, Sand Dunes Protection and Management; or Part 315, Dam Safety, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, (NREPA), shall be accompanied by a fee in accordance with the following fee schedule. Fees are not cumulative, with the exception of dam and critical dune projects. The highest of all other fees will be charged. Final fee determination will be based upon the final administrative review of the plans and specifications provided with the permit application. The applicant will be notified if the final fee determination is different from that submitted with the application.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>FEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>All projects not covered below</td>
<td>$500</td>
</tr>
<tr>
<td>Minor Project Categories listed in R281.616 for Part 301, or R322.1013 for Part 325*</td>
<td>$50</td>
</tr>
<tr>
<td>General Permit Categories for minor activities in wetlands authorized under Section 30312 of Part 303*</td>
<td>$100</td>
</tr>
<tr>
<td>Minor Project Categories authorized under Section 2a(G) of Part 31*</td>
<td>$100</td>
</tr>
<tr>
<td>Marine Operating Permit Renewal or Transfer under Part 301</td>
<td>$50</td>
</tr>
<tr>
<td>Marine Construction or Expansion Projects under Parts 301 or 325:</td>
<td></td>
</tr>
<tr>
<td>• expansion of 1-10 slips</td>
<td>$50</td>
</tr>
<tr>
<td>• new marine of 1-10 slips</td>
<td>$100</td>
</tr>
<tr>
<td>• expansion of 11-50 slips</td>
<td>$250</td>
</tr>
<tr>
<td>• new marine of 11-50 slips</td>
<td>$500</td>
</tr>
<tr>
<td>• new or expansion marine over 50 slips</td>
<td>$1000</td>
</tr>
<tr>
<td>• existing marine - maintenance dredging of 10,000 cubic yards or more</td>
<td>$1500</td>
</tr>
<tr>
<td>• existing marine - maintenance dredging of 10,000 cubic yards or more</td>
<td>$2,000</td>
</tr>
<tr>
<td>Major Projects: Categories as listed below under Parts 301, 303, or 325:</td>
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</tr>
<tr>
<td>• dredging of 10,000 cubic yards or more (wetlands excepted)</td>
<td>$1000</td>
</tr>
<tr>
<td>• new dredging or upland boat basin excavation in suspected contamination areas</td>
<td>$2000</td>
</tr>
<tr>
<td>• seawalls, bulkheads, or revetments of 500 feet or more</td>
<td>$3000</td>
</tr>
<tr>
<td>• new commercial docks or wharves of 500 feet or more in length</td>
<td>$5000</td>
</tr>
<tr>
<td>• stream relocation of 500 feet or more in length</td>
<td>$7500</td>
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<tr>
<td>• filling of 10,000 cubic yards or more (wetlands included)</td>
<td>$10000</td>
</tr>
<tr>
<td>• filling of 10,000 cubic yards or more (wetlands included)</td>
<td>$15000</td>
</tr>
<tr>
<td>• heavy equipment or dredging in existing structures, garages, utilities for single-family homes, sand removal in critical dune areas, parking areas in critical dune areas, retaining walls in critical dune areas, decks in critical dune areas</td>
<td>$10000</td>
</tr>
<tr>
<td>• single-family homes, road or driveway in critical dune areas, moving a building</td>
<td>$15000</td>
</tr>
<tr>
<td>• special use projects, including: industrial, commercial, multi-family</td>
<td>$20000</td>
</tr>
<tr>
<td>• an additional $100 shall be charged if the applicant requests a &quot;special exception&quot; in a critical dune area</td>
<td>$25000</td>
</tr>
<tr>
<td>Floodplain Projects: where engineering computations are required to assess the impact of a proposed floodplain alteration on flood stage or discharge characteristics</td>
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<tr>
<td>Dam Projects under Part 315: Fees for Part 315 are in addition to the fees listed above:</td>
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</tr>
<tr>
<td>• dam height 6 feet or more, but less than 10 feet</td>
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<tr>
<td>• dam height 10 feet or more, but less than 20 feet</td>
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<tr>
<td>• dam height 20 feet or more</td>
<td>$3000</td>
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<tr>
<td>• dam repair, alteration, removal, or abandonment</td>
<td>$2000</td>
</tr>
<tr>
<td>• minor projects pursuant to Section 27(1)*</td>
<td>$100</td>
</tr>
</tbody>
</table>

*Minor Project Categories for Part 31, Part 301, Part 315, and Part 325, as well as General Permit Categories for Minor Activities under Part 303, are attached for your reference. If you would like a copy of a particular statute or administrative rules, you may submit a request to the Permit Consolidation Unit (PCU) at MDEQ, LWMD, P.O. Box 30204, Lansing, MI 48909-7704, call 517-373-5244, or download a copy from our website at www.deq.state.mi.us/wlwp and click on "LWMD STATUTES AND RULES".

FEDERAL FEES

All activities within the waters of the United States regulated by the USACE under the authority of Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) and Section 404 of the Clean Water Act (33 U.S.C. 1344) may also require a permit from the USACE. The USACE will notify you of the appropriate federal filing fee when their permit application review has been completed and a preliminary determination has been made that a permit will be required. Fees are assessed as follows:

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>FEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>commercial or industrial users</td>
<td>$100</td>
</tr>
<tr>
<td>noncommercial users</td>
<td>$10</td>
</tr>
</tbody>
</table>

DO NOT SUBMIT ANY FEE TO THE USACE UNTIL YOU ARE NOTIFIED OF THE REQUIRED AMOUNT.

NOTE: The federal filing fee is in addition to any fee required by the state of Michigan.
Minor Project Categories for Part 31, Water Resources Protection, of the NREPA

(a) Construction, filling, or grading that is landward of the floodway limit identified in floodplain delineation studies listed in R 323.1314(1).

(b) Construction, filling, or grading that is landward of the bed and banks of the St. Marys, St. Clair, and Detroit rivers.

(c) Construction, filling, or grading that is landward of the floodway limits as determined by the department on stream reaches or in areas where floodways have not been defined by R 323.1314(1).

(d) Any construction or filling which is located within the following critical floodwater storage areas and which is done on an individually owned subdivision lot where the construction and fill is confined to less than 5,000 square feet:

(i) Clinton river forks, as follows: Land areas within the 100-year floodplain of the Clinton river and branches within Clinton township and Macomb township, Macomb county.

(ii) Saginaw river storage area, as follows: Land areas within the 100-year floodplain of the Saginaw river and tributaries, including Cheboygan and Dutch creeks, between the cities of Saginaw and Bay City, Saginaw and Bay counties.

(iii) Shiawassee flats, as follows: Land areas within the 100-year floodplain of the lower reaches of the Shiawassee, Cass, Flint, Tittabawassee, and Bad rivers within Saginaw county.

(iv) Snake creek, as follows: Land areas within the 100-year floodplain of Snake creek in the city of Midland, Midland county.

(v) Rush creek, as follows: Land areas within the 100-year floodplain of Rush creek in Georgetown township and the city of Hudsonville, Ottawa county, and/or

(vi) Frank and Pecil drain, as follows: Land areas within the 100-year floodplain of the Frank and Pecil drain in the city of Trenton, Wayne county.

(e) A clear span bridge that has the lowest bottom of beam elevation at or above the natural ground elevations on either bank and the approach fill sloping to natural ground elevations within 10 feet on either end of the bridge.

(f) A culvert which has an effective waterway opening that equals or exceeds the cross-sectional area of the channel, which has the fill over the culvert that is not more than 1.5 feet, and which has approach fill that slopes to natural ground elevations within 10 feet on either side of the culvert.

(g) A boardwalk which is of open pile construction and which is landward of the existing shoreline.

(h) A pond where excavated materials are placed landward of the floodway, as defined in R 323.1311(g).

(i) A parking lot constructed at grade or resurfacing that is not more than 4 inches above the existing surface.

(j) A deck placed on a residential structure which is of open pile design, which is anchored to prevent flotation, and which does not extend over the bed and bank of a river or stream.

(k) A stormwater outfall which conformed to the side slope of the river, stream, or waterway and which does not project beyond the shoreline.

Minor Project Categories for Part 301, Inland Lakes and Streams, of the NREPA

(a) Noncommercial piers, docks, and boat hoists that meet all of the following design criteria:

(i) The length or size of the proposed structure is not greater than the length or size of similar structures in the vicinity and on the watercourse and will not unreasonably interfere with the navigability or boateability of the water involved.

(ii) Free littoral flow of water and drift material is provided for.

(iii) Clean, nonpolluting materials will be used for the construction.

(iv) The structure is a single pier or dock appurtenant to the applicant's upland or is an added boat hoist, minor pier, or extension to the existing boat hoist, pier, or dock.

(b) Spring piles and pile clusters that meet all of the following design and purpose criteria:

(i) The location, number, and purpose for placement is usual for such projects in the vicinity and watercourse involved.

(ii) All piles and other materials used in their placement are clean, nonpolluting materials.

(iii) The location and placement will not create an obstruction to navigation.

(c) Seawalls, bulkheads, and other permanent revetment structures that meet all of the following purpose and design criteria:

(i) The proposed structure fulfills an identifiable need for erosion protection, bank stabilization, or the protection of, or improvements on, uplands.

(ii) The structure will be constructed of suitable materials free from pollutants, waste metal products, debris, or organic materials.

(iii) The structure is not more than 300 feet in length and is located in an area on the body of water where other similar structures already exist. However, the department shall provide written notification to the adjoining riparian property owners for structures more than 200 feet in length. The department shall not complete action upon applications for such structures that are more than 200 feet in length for a period of 7 days from the mailing of the notification to allow adjoining riparian owners the opportunity to comment.

(iv) The placement of backfill or other fill associated with the construction does not exceed an average of 2 cubic yards per running foot along the shoreline and a maximum of 300 cubic yards.

(v) The structure or any associated fill will not be placed in a wetland area or placed in any manner that impairs surface water flow into or out of any wetland area.

(d) Filling for the creation and improvement of swimming areas and beaches, the restoration of existing permitted fills, fills placed incidental to construction of other structures, and fills that do not exceed 300 cubic yards as a single and complete project that meet both of the following design criteria:

(i) The fill is of suitable material free from pollutants, waste metal products, debris, or organic materials.

(ii) Fill for the improvement of swimming areas or beaches, utilizing clean sand or gravel, will not exceed a blanket depth of 6 inches and will not be placed in a water depth exceeding 4 feet.

(e) Dredging for the maintenance of previously dredged areas or dredging of not more than 300 cubic yards as a single and complete project when both of the following criteria are met:

(i) No reasonable expectation exists that the materials to be dredged are polluted.

(ii) All dredging spoils will be removed to an upland site outside of wetland areas.

(f) Construction of bridges and culverts, whether new, replacement, or temporary, and the removal of bridges or culverts with the restoration of the crossing site that meet all of the following criteria:

(i) The bridge or culvert structure proposed is of a type and design, including modifications, described by one of the following:

(A) A clear span bridge that has the lowest bottom of beam elevation at or above the natural ground elevations on either bank and the approach fill sloping to natural ground elevations is within 10 feet on either end of the bridge.
A culvert which has an effective waterway opening that equals or exceeds the cross-sectional area of the channel, which has fill over the culvert that is not more than 1.5 feet, and which has approach fill that slopes to natural ground elevations within 10 feet of either side of the culvert.

The proposed structure is a replacement stream crossing which fully spans the bottomlands and the owner or the owner's engineering consultant certifies that the proposed structure is of equal or greater hydraulic capacity, that deletion of auxiliary waterway openings is not planned, and that available information does not indicate the presence of a harmful interference.

The proposed structure is a new stream crossing structure that fully spans the bottomlands. The design of the structure is certified by a registered professional engineer to pass the 100-year flood, as determined by the department, without causing harmful interference. The certification includes hydraulic waterway design calculations.

The proposed structure is a new or replacement structure to be placed on an upland channel or similar artificially constructed waterway where consideration for the passage of flow is not a significant design factor.

The proposed structure is an extension of an existing bridge or culvert where the total extended length does not exceed 24 feet. The structure will provide sufficient underclearance to facilitate passage of watercraft that could be expected to navigate the waters involved. The total volume of fill to be placed below the ordinary high water mark for placement of the structure does not exceed 200 cubic yards. The removal of existing structures will be conducted without dropping demolition materials in the watercourse, and haul roads, work pads, or other structures to facilitate the removal will not be placed below the ordinary high water mark.

Watercourse crossings by utilities, pipelines, cables, and sewer lines that meet all of the following design criteria:

A minimum of 30 inches of cover will be maintained between the top of the cable or pipe and the bed of the stream or other watercourse on buried crossings. The method of construction proposed is the least disturbing to the environment employable at the given site.

Any necessary backfilling will be of washed gravel. The diameter of pipe, cable, or encasement does not exceed 20 inches.

Dredging and construction or enlargement of ponds, lagoons, ditches, stormwater management basins, and similar artificial waterways if the proposed activity meets both of the following criteria:

The artificial watercourse will have a surface area of less than 5 acres and have no direct connection to an existing inland lake or stream.

The resulting spoils will be placed on an appropriate upland site in a manner that will not impair flood flows or be eroded into public waters.

Structural repair of man-made structures that meets all of the following design and purpose criteria:

The repair will not alter the original use of a currently serviceable structure.

The repair will not adversely affect public trust values or interests, including navigation, fish migration, and water quality.

Any materials used for repair will be of nonpolluting materials.

Fish or wildlife habitat structures that meet all of the following criteria:

The structures are placed so as not to impede navigation or create a navigational hazard.

The structures are anchored to the bottomlands.

The structures are constructed of nonpolluting materials.

The structure placement has the written authorization of the riparian owner and the appropriate department district fisheries or wildlife biologist, or both.

Scientific structures, such as staff gauges, water monitoring devices, water quality testing devices, survey devices, and core sampling devices that meet all of the following design and purpose criteria:

The structures do not impede navigation or create a navigational hazard.

The devices are constructed of nonpolluting materials.

The placement of any scientific structure has the written authorization of the riparian owner.

Navigational aids that meet either of the following criteria:

The aids are approved by the United States coast guard.

The aids are approved under Part 301 of the act.

Extension of a project under a current permit that will not result in any damage to natural resources.

Physical removal of man-made structures or natural obstructions that meet all of the following criteria:

The debris and spoils shall be removed to an upland site in a manner that will not impair flood flows or be eroded into public waters.

The stream bank or shoreline and bottom contours shall be restored to an acceptable condition.

Upon completion of structure removal, the site does not constitute a safety or navigational hazard.

Department staff shall consider fisheries and wildlife resource values when evaluating applications for natural obstruction removal.

Lake or impoundment drawdowns or the associated reflooding, or both, that meet the following design and purpose criteria:

The purpose of the drawdown is described by one of the following criteria:

(A) The drawdown is temporary in nature for the purpose of inspection to determine the integrity of the impounding structure.

(B) The drawdown is associated with the routine operations of fish or wildlife flooding; ponds, or impoundments where the purpose of the drawdown is the enhancement or production of fish, wildlife, or associated habitat.

(C) A drawdown authorized by court order under the provisions of Part 307 of the act if the court has incorporated the department requirements into the court order or concurred in department recommendations to address environmental concerns under Part 301 of the act.

The potential adverse environmental effects of the drawdown have been determined to be minimal under R 281:814.

Seismic cables across lakes and streams which are temporary in nature and which will be clearly identifiable by recreationalists normally expected to use the body of water.

Aquatic weed bottomland barriers that do not exceed 1600 square feet singly or in combination and that are installed with an anchoring system to assure permanent placement.

Dry fire hydrant installations where the intake line will not interfere with navigability of the water involved.

Storm water outlet structures where the activities do not exceed criteria of the designated minor project criteria for filling or dredging.

Off-line stormwater basins constructed for storm water management that provide retention/detention and sediment settling or filtration before discharge.

Boat ramps designed for single-family, private usage where the installation will not involve more than 10 cubic yards of dredging, with upland disposal, or filling.

Aquatic plant removal with mechanical equipment designed to operate by air or water pressure or by raking or rolling actions if the treatment areas are 1600 square feet or less, if the water depth is 4 feet or less, and if the uprooted floating debris is removed and disposed of within upland areas.
Recreational mineral (gold) prospecting by mechanical methods, such as portable (backpack) suction dredges or sluice boxes, if the activity is for recreational reasons only and if all of the following conditions are met:
(i) Individual prospecting areas are 300 square feet or less per location.
(ii) The intake nozzle for suction dredges is 2 inches in diameter or less.
(iii) Prospecting will not be done before July 1 or after August 31.
(iv) Stream bank excavation will not occur.
(v) The stream bottom is predominately gravel.
(x) Ditch plugs with or without water flow controls if the purpose is to reestablish the hydrology to previously drained areas, if all impacted parties acknowledge and provide their written authorizations, and if the proposed activities do not exceed other minor project criteria.

Minor Project Categories for Part 315, Dam Safety, of the NREPA

1. The department shall grant or deny an application for a minor project after all of the following steps have been completed:
   (a) Submission of a complete application.
   (b) An on-site inspection by a department representative.
   (c) A review of all appropriate information by the department.
2. A review of a minor project does not require any of the following:
   (a) Submission of the application materials by the department to any of the individuals or agencies listed in Section 23(1) of the act.
   (b) A 20-day comment period as provided for in Section 23 of the act.
   (c) A public hearing.
3. Required plans and specifications for a minor project do not need to be prepared by a licensed professional engineer.
4. The following alterations and repairs shall be considered minor projects pursuant to Section 27 of the act if the activity involves a temporary drawdown of 2 feet or less or involves a temporary drawdown where the dam owner is the sole riparian to the lands surrounding the impoundment:
   (a) Dredging or filling of more than 25 cubic yards, but less than 300 cubic yards, as a single and complete project. For dredging projects, the project will not be considered minor unless evidence is provided with the application that the materials to be dredged are not contaminated pursuant to the provisions of Act No. 64 of the Public Acts of 1979, as amended, being §209.501 et seq. of the Michigan Compiled Laws.
   (b) Erosion protection measures that fulfill an identifiable need for erosion protection, bank stabilization, or the protection or improvement of the dam and its inlet and outlet channels. The fill material that is associated with erosion protection measures shall be in compliance with any of the following provisions:
      (i) It shall have a volume of more than 25 cubic yards, but shall not have a volume of more than 300 cubic yards.
      (ii) It shall not have a surface area of more than 10,000 square feet.
      (iii) There shall not be more than 2 cubic yards per linear foot.
   (c) Other repairs and alterations that have a minimal effect on the structural integrity of the dam.
5. Dredging or filling in volumes of less than 25 cubic yards shall be considered maintenance and does not require a permit pursuant to the provisions of the act.

Minor Project Categories for Part 325, Great Lakes Submerged Lands, of the NREPA

1. The department may process applications in accordance with R 322.1014 for those projects of a minor nature which have minimal adverse environmental impact, which will be constructed of clean, nonpolluting materials, which do not impair the use of the adjacent bottomlands by the public, and which do not adversely affect riparian interests of adjacent owners.
2. The following projects are eligible for a minor project permit:
   (a) Noncommercial single piers, docks, and boat hoists which meet the following design criteria:
      (i) Are of a length or size not greater than the length or size of similar structures in the vicinity and on the watercourse involved.
      (ii) Provide for the free littoral flow of water and drift material.
   (b) Springs piles and pile clusters when their design and purposes are usual for such projects in the vicinity and watercourse involved.
   (c) Seawalls, bulkheads, and other permanent revetment structures which meet all of the following purpose and design criteria:
      (i) The proposed structure fulfills an identifiable need for erosion protection, bank stabilization, protection of uplands, or improvements on uplands.
      (ii) The structure will be constructed of suitable materials free from pollutants, waste metal products, debris, or organic materials.
      (iii) The thickness is not more than 50 feet in length and is located in an area on the body of water where other similar structures already exist.
      (iv) The placement of backfill or other fill associated with the construction does not exceed an average of 3 cubic yards per running foot of shoreline and a maximum of 300 cubic yards.
      (v) The structure or any associated fill will not be placed in a wetland area or placed in any manner that impairs surface water flow into or out of any wetland area.
   (d) Groins 50 feet or less in length, as measured from the toe of bluff, which meet all of the following criteria:
      (i) The groin is low profile, with the lakeward end not more than 1 foot above the existing water level.
      (ii) The groin is placed at least 1/2 of the groin length from the adjacent property line or closer with written approval of the adjacent riparian.
   (e) Filling for restoration of existing permitted fills, fills placed incidental to construction of other structures, and fills that do not exceed 300 cubic yards as a single and complete project, where the fill is of suitable material free from pollutants, waste metal products, debris, or organic materials.
   (f) Dredging for the maintenance of previously dredged areas or dredging of not more than 300 cubic yards as a single and complete project when both of the following criteria are met:
      (i) No reasonable expectation exists that the materials to be dredged are polluted.
      (ii) All dredging materials will be removed to an upland site exclusive of wetland areas.
   (g) Structural repair of man-made structures, except as exempted by R 322.1008(3), when their design and purpose meet both of the following criteria:
      (i) The repair does not alter the original use of a recently serviceable structure.
      (ii) The repair will not adversely affect public trust values or interests, including navigation and water quality.
Fish or wildlife habitat structures which meet both of the following criteria:

(i) Are placed so the structures do not impede or create a navigational hazard.
(ii) Are anchored to the bottomlands.

(iii) Scientific structures, such as staff gauges, water monitoring devices, water quality testing devices, survey devices, and core sampling devices, if the structures do not impede or create a navigational hazard.

(iv) Navigational aids which meet both of the following criteria:

(i) Are approved by the United States coast guard.
(ii) Are approved under Part 841. Marine Safety, of the NREPA; being 3324.80101: et seq. of the Michigan Compiled Laws.

(v) Extension of a project where works being performed under a current permit and which will result in no damage to natural resources.

(vi) A sand trap wall which meets all of the following criteria:

(i) The wall is 300 feet or less in length along the shoreline.
(ii) The wall does not extend more than 30 feet seaward from the toe of the bluff.
(iii) The wall is low profile, that is, it is not more than 1 foot above the existing water level.
(iv) The wall is constructed of wood or steel or other nonpolluting material.

(vii) Physical removal of man-made structures or natural obstructions which meet all of the following criteria:

(i) The debris and spoil shall be removed to an upland site, not in a wetland, in a manner which will not allow erosion into public waters.
(ii) The shoreline and bottom contours shall be restored to an acceptable condition.
(iii) Upon completion of structure removal, the site does not constitute a safety or navigational hazard.
(iv) Department staff shall consider fisheries and wildlife resource values when evaluating applications for natural obstruction removal.

General Permit Categories for Minor Activities under Part 303, Wetlands Protection, of the NREPA

The following activities are incorporated into this list of General Permit categories. In order to be processed in accordance with expedited General Permit procedures, all criteria specified by each category must be met.

(A) Small Ponds: Construction or maintenance of waterbodies less than 1 acre in size providing that dredge spoils including organic and inorganic soils, vegetation and debris shall be placed at an upland site; leveled, and stabilized with sod or seeded and mulched in such a manner as not to erode into any waterbody or wetland, or be located in a floodway or harmfully interfere with flood flows. Direct connection to an existing inland lake or stream will not qualify for consideration under General Permit categories.

(B) Boardwalks or Elevated Platforms:

(C) Walkways: Filling or paving or footpaths no to exceed 6 feet in base width and 200 feet in length, where boardwalks or elevated walkways are not feasible or practical. Culverts will be required where necessary to provide for the free flow of surface water. If in a floodplain, the grade elevation change shall not exceed 6 inches.

(D) Driveways: Construction of driveways providing that:

1. Any upland on the property or other alternatives, such as shared driveways, are utilized to the greatest degree possible.
2. The location of the driveway is at the least damaging place on the property (e.g., as close to any upland edge as possible).
3. The portion of the driveway that passes through wetland is restricted to 16 feet in base width and 200 lineal feet in length. Culverts will be required where necessary to provide for the free flow of surface water or to avoid restricting low flows and the movement of aquatic organisms. Fill shall be placed on filter fabric or equivalent material at least 3 feet below the wetland edge. If in a floodplain, the grade elevation change shall not exceed 6 inches.

(E) Utility Lines:

1. The following activities may qualify for General Permit processing:
   a. Sewer and water line construction;
   b. Electric transmission and telephone lines;
   c. Underground utility lines;
   d. Oil/gas pipelines larger than six inches in diameter.

2. To qualify for General Permit processing, the proposed activity shall meet the following conditions:

a. Construction shall be completed during dryer periods, or construction methods, equipment and materials use will minimize the impact on the wetland;

b. If excavated material is contaminated based on sediment leachate data, it may not be used as backfill and it shall be removed from the wetland and placed in a licensed landfill;

c. Project design features shall assure that backfill used in an excavated trench will not result in drainage of the wetland;

d. The top 6 inches to 12 inches of the trench shall be backfilled with topsoil from the trench. If material is contaminated, it shall be handled as indicated under (a) above and uncontaminated clean topsoil shall be brought in to fill the trench;

e. Excavated material stored in or stockpiled in the wetland shall not reman for over three months and must be utilized as backfill or removed before completion of the project;

f. Excess excavated material must be removed from the wetland and disposed of at an upland site and stabilized to prevent erosion; and,

g. The wetland must be restored post-construction contours and conditions.

(F) Oil, Gas, and Mineral Well Access Roads: Access roads for oil/gas drilling or mineral well drilling activities where angle drilling from upland is not feasible and where the activity is of minor impact, on both an individual and cumulative basis, to the wetland. Access roads shall not exceed 20 feet in base width on filter fabric or equivalent material. Culverts will be required, where necessary, to provide for the free flow of surface water or to avoid restricting low flows and the movement of aquatic organisms. Immediately upon plugging the well, all fill material shall be removed, the original wetland contours restored, and the site stabilized with a wetland seed source and mulch as necessary.

(G) Stormwater Outfalls: Stormwater outfalls above the ordinary high water mark of an inland lake or stream, provided that the outlet is strapped or otherwise stabilized to prevent soil erosion and that the stormwater will be treated or otherwise meet state water quality standards and applicable discharge permit requirements.
(H) Culverts. Culverts, if installed for water level equalization.

(I) Emergency Drain Maintenance. Projects not otherwise exempt under Section 30305 (2) (h) involving maintenance, repair, or operation of an existing drain where necessary to alleviate flooding on an emergency basis, providing that:
1. The activity does not otherwise require a permit under Part 301, Inland Lakes and Streams, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended;
2. The area and extent of current wetlands will not be diminished; and,
3. The activity is limited to restoring the drain to depths and widths that do not exceed historic dimensions.

(J) Septic Tank Replacement. A replacement on-site septic tank and drain field system providing that it is required by and meets design standards of the local health department. Where the option is available, pump-back systems to uphill will be required in place of mound systems to qualify for construction under this General Permit. A copy of local health department permit or permission must be submitted to the MDEQ prior to final action under this General Permit.

(K) Repairs to Serviceable Structures. Repairs to a serviceable structure which is not otherwise exempt from permits under Part 303 providing that the structure or fill is not to be put to uses different from those uses specified or contemplated in the original design. This category applies to structures in existence on October 1, 1980, or constructed pursuant to Part 303. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, or current construction codes, or safety standards which are necessary to make repair may still be considered under this category provided that the environmental impacts resulting from the entire repair area is minimal. Serviceable means useable as is or with some repair, but not so degraded as to essentially require reconstruction. Serviceable structures damaged by storms, floods, fire, or other discrete events are included under this category provided that the repairs are commenced or under contract to commence within one year of the date of the damage.

(L) Completed Enforcement Actions. Contact the Land and Water Management Division for specific criteria.

(M) Spill Cleanup. Contact the Land and Water Management Division for specific criteria.

(N) Cleanup of Hazardous Substances and Hazardous and Toxic Waste. Contact the Land and Water Management Division for specific criteria.

(O) Maintenance Dredging of Artificial Treatment Ponds and Lagoons. Excavation and removal of accumulated sediment for maintenance of existing and legally constructed stormwater retention or detention basins, sediment basins, treatment lagoons, or other man-made water treatment or retention areas created for those sole purposes, provided that the dredged material is placed in an upland site and stabilized with sod, or seeded, mulched or riprapped as necessary to prevent soil erosion into any waterbody or wetland, or that dredged material is placed in a licensed landfill based on sediment leachate analysis of the material. The applicant shall submit the analytical results and sampling locations with the application. The upland disposal sites or licensed landfill must be identified in the plans.

(P) Road Maintenance Projects. Public roadway maintenance and safety projects in existing right-of-way where all practical means have been used to minimize the wetland impact, and provided that all components of the project will impact no more than two acres of wetland. Contact the Land and Water Management Division for further restrictions to this category.

(Q) Minor Fills. Minor fills for the construction or expansion of single-family residences with the total fill area in wetlands not exceeding one-half acre for all phases of the residential construction including driveways, garages, small storage sheds (not to exceed 100 square feet), and all waste treatment facilities providing that:
1. No fill shall be placed in any part of a wetland that is inundated by waters from an adjacent waterbody, provides fish habitat functions, or that consists of emergent waterfowl habitat.
2. All upland on the property shall be utilized to the greatest degree possible.
3. The proposed fill within wetlands shall be at the least damaging location on the property.
4. All necessary actions shall be taken to minimize on-site and off-site impacts including sewage treatment systems that pump back to uplands where feasible,
5. The filled area surrounding building foundations shall not be greater than 15 feet from edge of foundation to top of slope. Fill slopes shall not be steeper than 1 vertical to 4 horizontal. Additional fill for purposes such as landscaping or recreational facilities will not qualify under this category.
6. The ownership of the parcel of land shall have been maintained within the immediate family since October 1, 1980. Note: This minor fill General Permit can be used only once on a parcel of land that existed prior to October 1, 1980. It cannot be used on parcels established on or after October 1, 1980. Only one permit under this minor fill provision of the General Permit may be granted to a person.

(R) Restoration of Altered Wetland Areas. This category applies only to projects that serve to restore wetland hydrology, vegetation, and functions of altered wetlands. Altered wetlands include areas which have been partially or fully drained, or where other land use conversions have resulted in significant alteration of the original character of the site. Projects under this category involve the restoration of altered wetlands on public and private lands by state, federal, and non-profit conservation and wildlife agencies and organizations. Contact the Land and Water Management Division for further restrictions to this category.

Issuance of a permit pursuant to General Permit procedures does not remove the need for other applicable local, state, or federal permits.

This modifies and replaces the October 3, 1994 "General Permit Categories for Minor Activities in Wetlands In the State of Michigan" and shall expire on June 18, 2002, unless revoked or modified before that date.
APPENDIX D

State Authority, Federal Authority, Privacy Act Statement, State and Federal Penalties

STATE AUTHORITY

This application can be used for the following Parts of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA).

1. Part 301, Inland Lakes and Streams, of the NREPA
   A permit is required to:
   - Dredge or fill bottomlands.
   - Construct, enlarge, extend, remove, or place a structure on bottomland.
   - Erect, maintain, or operate a marina.
   - Create, enlarge, or diminish an inland lake or stream.
   - Structurally interfere with the natural flow of an inland lake or stream.
   - Construct, dredge, commence, extend, or enlarge an artificial canal, channel, ditch, lagoon, pond, lake, or similar waterway where the purpose is ultimate connection with an existing inland lake or stream, or where any part of the artificial waterway is located within 500 feet of the ordinary high water mark of an existing inland lake or stream.
   - Connect any natural or artificially constructed waterway, canal, channel, ditch, lagoon, pond, lake, or wetland with an existing inland lake or stream for navigation or any other purpose.

2. Part 303, Wetlands Protection, of the NREPA
   The following activities are prohibited in wetlands unless a permit has been obtained from the MDEQ:
   - Deposit or permit the placement of fill material in a wetland.
   - Dredge, remove, or permit the removal of soil or minerals from a wetland.
   - Construct, operate, or maintain any use or development in a wetland.
   - Drain surface water from a wetland.

   Regulated wetlands are defined in Part 303 and the associated administrative rules.

3. Part 325, Great Lakes Submerged Lands, of the NREPA
   A permit is required for all filling, dredging, and placement of permanent structures (i.e., groins, docks, piers, pilings, etc.) below the "ordinary high water mark" and on all upland channels extending landward of the "ordinary high water mark" of the Great Lakes.

4. Floodplain Regulatory Authority found in Part 31, Water Resources Protection, of the NREPA
   A permit is required for any occupancy, construction, filling, or grade change within the 100-year floodplain of a river, stream, drain, or inland lake. Bridges and culverts are considered an occupancy of the floodplain, as are activities that involve storage of materials in the floodplain.

5. Part 353, Sand Dune Protection and Management, of the NREPA
   A permit is required for all proposed new uses in designated critical dune areas mapped in the "Atlas of Critical Dune Areas" prepared by the MDEQ. The following counties have designated critical dune areas:

<table>
<thead>
<tr>
<th>Alger</th>
<th>Berrien</th>
<th>Emmet</th>
<th>Lake</th>
<th>Mackinac</th>
<th>Muskegon</th>
<th>Ottawa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allegan</td>
<td>Charlevoix</td>
<td>Keweenaw</td>
<td>Mackinac</td>
<td>Muskegon</td>
<td>Oceana</td>
<td>Schoolcraft</td>
</tr>
<tr>
<td>Antrim</td>
<td>Chippewa</td>
<td>Leelanau</td>
<td>Manistee</td>
<td>Muskegon</td>
<td>Oceana</td>
<td>Van Buren</td>
</tr>
</tbody>
</table>

   Islands that have designated critical dune areas include Beaver Island, North Fox Island, South Fox Island, High Island, North Manitou Island, and South Manitou Island.

6. Part 323, Shorelands Protection and Management, of the NREPA
   Designated Environmental Areas - A permit is required for any of the following activities in a designated environmental area:
   - Dredging, filling, grading, or other alterations of the soil.
   - Alteration of natural drainage, but not including the reasonable care and maintenance of established drainage.
   - Alteration of vegetation utilized for the preservation and maintenance of fish or wildlife, including identified colonial bird nesting areas.
   - Placement of permanent structures.
   - Farming of land is allowed without a permit if the person is engaged in the business of farming and the land is used for the production and harvesting of agricultural products using normal farming implements and generally accepted agricultural practices and if artificial draining, diking, dredging, or filling are not used and the natural contour of the land is not altered.

   The following counties have designated environmental areas:

<table>
<thead>
<tr>
<th>Alcona</th>
<th>Arenac</th>
<th>Charlevoix</th>
<th>Delta</th>
<th>Huron</th>
<th>Jackson</th>
<th>Monroe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alger</td>
<td>Baraga</td>
<td>Cheboygan</td>
<td>Emmet</td>
<td>Mackinac</td>
<td>Marquette</td>
<td>Tuscola</td>
</tr>
<tr>
<td>Alpena</td>
<td>Bay</td>
<td>Chippewa</td>
<td>Houghton</td>
<td>Manistee</td>
<td>Muskegon</td>
<td>Wayne</td>
</tr>
</tbody>
</table>

   Designated High Risk Erosion Areas - A permit is required for the erection, installation, or moving of a permanent structure on a parcel of land where any portion is a designated high risk erosion area. Examples include homes, porches, septic systems, additions, substantial improvements of existing structures, and out buildings. The current counties with high risk erosion areas include:

   | Alger | Allegan | Alpena | Antrim | Arenac | Baraga | Bay | Benzie | Berrien | Cheboygan | Chippewa | Delta | Emmet | Gogebic | Grand Traverse | Houghton | Huron | Iosco | Keweenaw | Leelanau | Luce | Mackinac | Manistee | Marquette | Mason | Menominee | Muskegon | Oceana | Ontonagon | Ottawa | Presque Isle | St. Clair | Sanilac | Schoolcraft | Van Buren |

NOTE: These brief summaries are only intended to provide assistance in determining whether this application is appropriate for your proposed project. They should not be construed as a complete description of the statutes or as a limitation of the state or federal government's regulatory authority.

Joint Permit Application

Appendix D - Page 1 of 2

February 2001
STATE AUTHORITY (con’t)

7. Part 315, Dam Safety, of the NREPA
Permits are required for dams with a dam “height” of six feet or more and that have a surface area of five acres or more at the design flood elevation. A permit is required for new dam construction, enlargement of an existing dam or impoundment, dam repair, dam alteration, dam removal, dam abandonment, or reconstruct a failed dam. A licensed professional engineer must prepare, sign, and seal the construction plans, except for minor projects as defined in Part 315, or for projects by non-profit organizations under certain circumstances, as specified in Part 315. A Part 315 permit is not required for dam "maintenance", however other permits may be required.

8. Part 91, Soil Erosion and Sedimentation Control, of the NREPA
A permit is required for all earth change activities which disturb one or more acres of land, or if the earth change is within 500 feet of a lake or stream. Generally, permits are issued locally unless multiple counties are involved. State permits seldom apply.

FEDERAL AUTHORITY

The U.S. Army Corps of Engineers (USACE) has been regulating activities in the nation’s waters since 1890. Until the 1960’s, the primary purpose of the regulatory program was to protect navigation. Since then, as a result of laws and court decisions, the program has been broadened so that it now considers the full public interest for both the protection and utilization of water resources.

The regulatory authorities and responsibilities of the USACE are based on the following federal laws:

- Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) prohibits the obstruction or alteration of navigable waters of the United States without a permit from the USACE.

- Section 404 of the Clean Water Act (33 U.S.C. 1344) prohibits the discharge of dredged or fill material into all waters of the United States, including wetlands, both adjacent and isolated, without a permit. The state of Michigan has assumed from the U.S. Environmental Protection Agency (USEPA), the authority to regulate the placement of fill material in waterways and wetlands under provisions of Section 404 (1) of the Clean Water Act of 1977 (33 U.S.C. 1251 et seq.). However, since Section 10 of the Rivers and Harbors Act does not provide for similar transfer to states, the USACE retains Section 404 jurisdiction within those waters that are navigable waters of the U.S. and their adjacent wetlands. The discharge of any fill materials must comply with state water quality standards consistent with Sections 301, 307, and 401 of the Clean Water Act.

PRIVACY ACT STATEMENT

Title of Form: "Joint Permit Application" (EQP 2731) from the Land and Water Management Division (LWMD), Michigan Department of Environmental Quality (MDEQ), and the USACE.


2. PRINCIPAL PURPOSE(S): These laws require permits authorizing activities in or affecting navigable waters of the United States and the discharge of dredged or fill materials into waters of the United States.

3. ROUTINE USES: Information provided on this form will be used in evaluating the permit application.

4. DISCLOSURE: Disclosure of requested information is voluntary. If information is not provided, however, the permit application cannot be processed nor can a permit be issued.

If a completed application is made to the Detroit District Office of the USACE, a copy will be furnished to the MDEQ’s LWMD. Conversely, if a completed application, that is within the USACE’s jurisdiction is submitted to the MDEQ’s LWMD, a copy will be furnished to the Detroit District Office of the USACE, and subsequently the content is made a matter of public record through issuance of a public notice.

STATE AND FEDERAL PENALTIES

Section 3011.2 (5) of Part 301, Inland Lakes and Streams, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, provides: "A person who knowingly makes a false statement, representation, or certification in an application for a permit or in a notice or report required by a permit, or a person who knowingly renders inaccurate any monitoring device or method required to be maintained by a permit, is guilty of a misdemeanor, punishable by a fine of not more than $10,000 per day for each day of violation."

18 U.S.C. Section 1001 provides that: "Whoever, in any manner within the jurisdiction of any department or agency of the United States, knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious, or fraudulent statements or representations, or makes or uses any false writing or document knowing same to contain any false, fictitious, or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both."

NOTE: These brief summaries are only intended to provide assistance in determining whether this application is appropriate for your proposed project. They should not be construed as a complete description of the statutes or as a limitation of the state or federal government's regulatory authority.
**APPENDIX E**

**Glossary**

For additional definitions, please refer to the associated statutes and rules. The generalized definitions below are only provided to assist in the completion of the Joint Permit Application. They are not intended as a full legal definition of these terms. Many of these terms are defined by statute or rule and these sources and any applicable case law should be consulted for a complete definition.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjacent and Impacted Property Owners</td>
<td>Those properties which physically touch the applicant's property, also including all properties which may be impacted by the proposed activity. May include all property owners on a lake, may also include upstream and downstream property owners on a stream depending on whether the proposed activity is likely to impact their properties.</td>
</tr>
<tr>
<td>Boat Hoist</td>
<td>Mechanism or apparatus used to raise a boat out of the water.</td>
</tr>
<tr>
<td>Boat Well</td>
<td>An artificial embayment for boat moorage created by excavation/dredging into the bank of the waterway, usually including bank stabilization within the embayment.</td>
</tr>
<tr>
<td>Breakwater</td>
<td>A structure that protects a shore area, harbor, or basin from the full impact of waves.</td>
</tr>
<tr>
<td>Bulkhead</td>
<td>A vertical or near-vertical wall primarily designed to prevent erosion and other damage due to wave or ice action.</td>
</tr>
<tr>
<td>Coastal Zone Management Program</td>
<td>&quot;Consistent with Michigan's federally approved Coastal Management Program&quot; means that the project complies with the standards set forth in the Parts of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), that regulate activities in coastal areas. Federally permitted or funded projects that have the potential to adversely affect coastal resources are required to be consistent with Michigan's environmental protection statutes.</td>
</tr>
<tr>
<td>Critical Dune Area</td>
<td>A geographic area designated in the &quot;Atlas of Critical Dune Areas,&quot; dated February 1989, which was prepared by the department.</td>
</tr>
<tr>
<td>Cross-section</td>
<td>Side view (elevation view) of project-site.</td>
</tr>
<tr>
<td>Dam</td>
<td>An artificial barrier, including dikes, embankments, control structures, spillways, and appurtenant works; that impounds, diverts, or is designed to impound or divert water, or a combination of water and any other liquid or material in the water. The definition of a dam does not include a storage or processing tank or standpipe constructed of steel or concrete, a roadway embankment not designed to impound water, or a dug pond where there is no impoundment of water or waste materials containing water at levels above adjacent natural grade levels.</td>
</tr>
<tr>
<td>Dam Abandonment</td>
<td>An affirmative act on the part of an owner to discontinue maintenance or operation of a dam.</td>
</tr>
<tr>
<td>Dam Alteration</td>
<td>Changes in the design of an existing dam that directly affect, or may directly affect, the structural integrity or operation of a dam.</td>
</tr>
<tr>
<td>Dam &quot;Height&quot;</td>
<td>Difference in elevation measured vertically between the natural bed of a stream at the downstream toe of the dam, or, if it is not across a stream channel, from the lowest elevation of the downstream toe of the dam to the design flood elevation or to the lowest point of the top of the dam, whichever is less.</td>
</tr>
<tr>
<td>Dam Maintenance</td>
<td>The upkeep of a dam and its appurtenant works but does not include alterations or repairs.</td>
</tr>
<tr>
<td>Dam Repair</td>
<td>To substantially restore a dam to its original condition and includes only such restoration as may directly affect the structural integrity of the dam.</td>
</tr>
<tr>
<td>Department</td>
<td>Michigan Department of Environmental Quality (MDEQ).</td>
</tr>
<tr>
<td>Dock</td>
<td>A small structure constructed over water on piling to gain access to a boat or for recreational purposes such as fishing.</td>
</tr>
<tr>
<td>Earth Change</td>
<td>A human-made change in the natural cover or topography of land, including cut and fill activities, which may result in or contribute to soil erosion or sedimentation of the waters of the state. Earth change does not include the practice of plowing and tilling soil for the purpose of crop production.</td>
</tr>
<tr>
<td>Encroachment</td>
<td>Any structure, filling, grading, or deposition of materials in, upon, across, or projecting into a wetland, floodplain, channel, floodway, lake, or stream.</td>
</tr>
<tr>
<td>Environmental Area</td>
<td>An area of the shoreline determined by the department on the basis of studies and surveys to be necessary for the preservation and maintenance of fish and wildlife, as defined in Part 323 of the NREPA.</td>
</tr>
<tr>
<td>Erosion Hazard Line</td>
<td>The line along the shoreline that is the landward edge of the zone of active erosion. This line is where the 583.0 foot contour on Lake Michigan, the 582.2 foot contour on Lake Huron, or the 603.3 foot contour on Lake Superior meets the shoreline, whichever is farthest landward (International Great Lakes Datum [IGLD], 1955).</td>
</tr>
<tr>
<td>Failed Dam</td>
<td>A dam not capable of impounding water at its intended level due to a structural deficiency.</td>
</tr>
<tr>
<td>Filter Fabric</td>
<td>Commercial geo-textile fabric used for soil stabilization.</td>
</tr>
<tr>
<td>Floodplain</td>
<td>That area of land adjoining a river, stream, drain, or inland lake, which will be inundated by a 100-year flood.</td>
</tr>
<tr>
<td>Floodway</td>
<td>The channel of a river or stream and the portions of the floodplain adjoining the channel that are reasonably required to carry and discharge the 100-year flood and which must be kept free of encroachment so that the 100-year flood can be carried without a harmful increase in flood heights.</td>
</tr>
<tr>
<td>Flume Method</td>
<td>A method of placing utilities across a stream or lake which blocks off a portion of the waterbody such that the work can be done &quot;in the dry.&quot;</td>
</tr>
<tr>
<td>Grein / Jetty</td>
<td>A structure placed perpendicular to the shore and extending out into the water. Used either singularly or in a series to trap and accumulate sand on the updrift side of the groin.</td>
</tr>
<tr>
<td>Harmful Interference</td>
<td>Causing an increased stage or change in direction of flow of a river or stream, or is likely to cause, damage to property, a threat to life, a threat to personal injury or pollution, impairment, or destruction of water or other natural resources.</td>
</tr>
<tr>
<td>High Risk Erosion Area</td>
<td>A shoreline area determined by the department to be subject to erosion and which has an average annual recession rate of one foot per year or more.</td>
</tr>
<tr>
<td>Impoundment</td>
<td>Part 301 - The water held back by a dam, dike, floodgate, or other barrier.</td>
</tr>
<tr>
<td>Inland Lake or Stream</td>
<td>Part 301 - A natural or artificial lake, pond, or impoundment; a river, stream, or creek which may or may not be serving as a drain as defined by the drain code of 1986, Act No. 40 of the Public Acts of 1986, being sections 280.1 to 280.630 of the Michigan Compiled Laws; or any other body of water that has definite banks, a bed, and visible evidence of a continued flow or continued occurrence of water, including the St. Marys, St. Clair, and Detroit rivers. Inland lake or stream does not include the Great Lakes, Lake St. Clair, or a lake or pond that has a surface area of less than 5 acres.</td>
</tr>
<tr>
<td>Low Sand Trap Wall</td>
<td>A structure parallel to the shoreline with a height approximating the water elevation, with the purpose of trapping sand between the wall and a bulkhead, which are within 30 feet of each other.</td>
</tr>
<tr>
<td>Marina</td>
<td>A public or private facility which extends into or over an inland lake, Great Lake, or stream that offers docking, loading, or other servicing of recreational vessels to the public or members of the marina.</td>
</tr>
</tbody>
</table>
### Marine Railway
A structure for launching boats consisting of two or more parallel rails extending from shore to deeper water, the hardware upon which the rails are mounted, and a boat carrying a cradle device that glides over the rails.

### Natural River
A river which has been designated by the Natural Resources Commission for inclusion in the wild, scenic, and recreational rivers system, under Part 305 of the NRPEA.

### National Flood Insurance Program
“Consistent with the National Flood Insurance Program” means that the project complies with the standards set forth in 44 CFR 60.3 that regulates activities in Special Flood Hazard Areas as delineated on Flood Insurance Rate Maps and Flood Hazard Boundary Maps published by the Federal Emergency Management Agency (FEMA).

### NGVD29
National Geodetic Vertical Datum of 1929.

### Navigable Waters of the United States
As defined by the USACE - Those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. A determination of navigability, once made, applies laterally over the entire surface of the water body to the Ordinary High Water Mark. A list of such waters in Michigan is available from the Corps of Engineers' offices in Detroit. They generally include all Great Lakes and connecting channels, waterways constructed or improved for navigational use by the Corps, major rivers to heads of navigation, and segments of waterbodies whose surface elevations are subject to backwater influence (below the Ordinary High Water mark) of adjoining listed navigable waters of the United States. In Michigan navigability is defined by the court system.

### 100-Year Floodplain
The floodplain that is inundated by a flood with a magnitude that has a 1 percent chance of being equaled or exceeded in any given year.

### Ordinary High Water Mark (OHWM)
As defined by the USACE - The 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 USACE's definition of OHWM differs from the state's on Great Lakes shorelines. For the state definition, please refer to the applicable state statutes and rules. It is recommended you consult both agencies if the location of the OHWM is an important factor in your permit application.

### Pier
A structure extending outward from a shore, over water that is used to secure, protect, and provide access to ships or boats.

### Piling
Beams or posts of timber, concrete, or steel driven into the bottomland or wetland as a means of securing a boat or supporting a pier, boardwalk, dock, or other structure.

### Plan View
Top or bird's-eye view of a project site.

### Plow Method
A method of placing underground utilities which involves the digging of a trench, placement of the utility, and immediate burying in one continuous operation.

### Revetment
An orderly facing of stone or broken concrete along a slope to prevent erosion.

### Riprap
A layer, facing, or protective mound of stone of varying sized pieces randomly placed to prevent erosion, scour, or sloughing of an embankment or structure.

### Rise
For bridges: distance from the stream bottom to the underside of the bridge deck.

For culverts: distance from culvert crown to the stream bottom or lowest point of culvert (whichever is higher).

### Seasonal Structure
A structure, such as a dock, boat hoist, ramp, raft, or other recreational structure, that is placed on or across bottomland and is not permanent because it is placed in the spring and removed in the fall.

### Seawall
A bulkhead or other permanent revetment structure that fulfills an identifiable need for erosion protection or bank stabilization for the protection of or improvements on uplands.

### Section 10 Waters
The Great Lakes and their connecting channels and other navigable waters regulated not only by the department but also by the U.S. Army Corps of Engineers under Section 10 of the Rivers and Harbors Act of 1899.

### Setback
In designated high risk erosion areas, the minimum distance a permanent structure can be constructed from the erosion hazard line without a special exception.

### Shoreline
Existing edge of water at the time of application, which may change over time.

### Slope
A ratio of the change in the horizontal direction compared to that in the vertical direction of an inclined surface (horizontal/vertical).

### Soil Erosion and Sedimentation Control Measures
Temporary and permanent devices that are installed or constructed and/or establishment of vegetation to minimize the movement of sediment off-site during and after construction.

### Spillway
An overflow device, in or about a dam or other hydraulic structure, designed for the discharge of water from an impoundment.

### Stormwater Detention Basin
A basin, either dry or wet, that temporarily captures and stores stormwater runoff before discharging to a surface water body.

### Stormwater Retention Basin
A basin which captures stormwater runoff with no direct discharge to a surface waterbody. The runoff either infiltrates or evaporates.

### Structure
The term structure shall include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir booms, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other obstacle or obstruction. The department includes other examples e.g., a marina, dam, stream deflectors, groin, sewer, pipeline, cable, culvert, bridge, home, porch, garage, additions, out buildings, septic systems, and commercial buildings.

### Underspill
A device used to release water from the lower part of an impoundment rather than from the upper part.

### Upland
The land area which lies above the ordinary high water mark and is not wetland or floodplain.

### Waterway Opening
That area available for carrying water through a bridge or culvert structure.

### Wetland Assessment
Refers to the evaluation of a site by the department, at the request of a property owner or his/her agent, for purposes of providing information regarding the presence of wetlands on the site.