MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

Wetlands, Lakes and Stream Permitting: A Focus on Utilities Projects

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MECC

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EGLE

Michigan’s Resource Program

- Since the mid-1970’s, special resources that exist at the interface between land and water have been protected by Michigan's Resource Program.
- Protects public trust resources and the surface waters of the state.
- Administered by EGLE's Water Resources Division (WRD)

EGLE

State Assumption under CWA Section 404

- One of 3 states (Michigan, New Jersey, and recently Florida) to assume Section 404 of the Clean Water Act.
- Michigan: 1984
- New Jersey: 1994
- Florida: 2020

Michigan’s Section 404 Program

- Has served as a national model of natural resource protection and streamlining of state, federal, and local regulations for nearly 40 years.
- Michigan’s Wetland Protection Act was written specifically to support state assumption of the federal Section 404 Program.

State and Federal Coordination

"Any approved State Program shall, at all times, be conducted in accordance with the requirements of the [Clean Water] Act and of this Part.

While States may impose more stringent requirements, they may not impose any less stringent requirements for any purpose." *40 CFR §233.1*

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Benefits of Michigan's 404 Program

- ✓ Provides clear definitions for regulation
- ✓ Provides faster permit decisions
- ✓ Reduces regulatory burden through a consolidated state permit process and a joint permit application with the USACE
- ✓ Maintains state control while remaining consistent with federal regulations
- ✓ Local field staff provide direct interaction with applicants
- ✓ Provides a court-style formalized appeal process
- ✓ Provides a stable and predictable regulatory framework
- ✓ Effective resource protection

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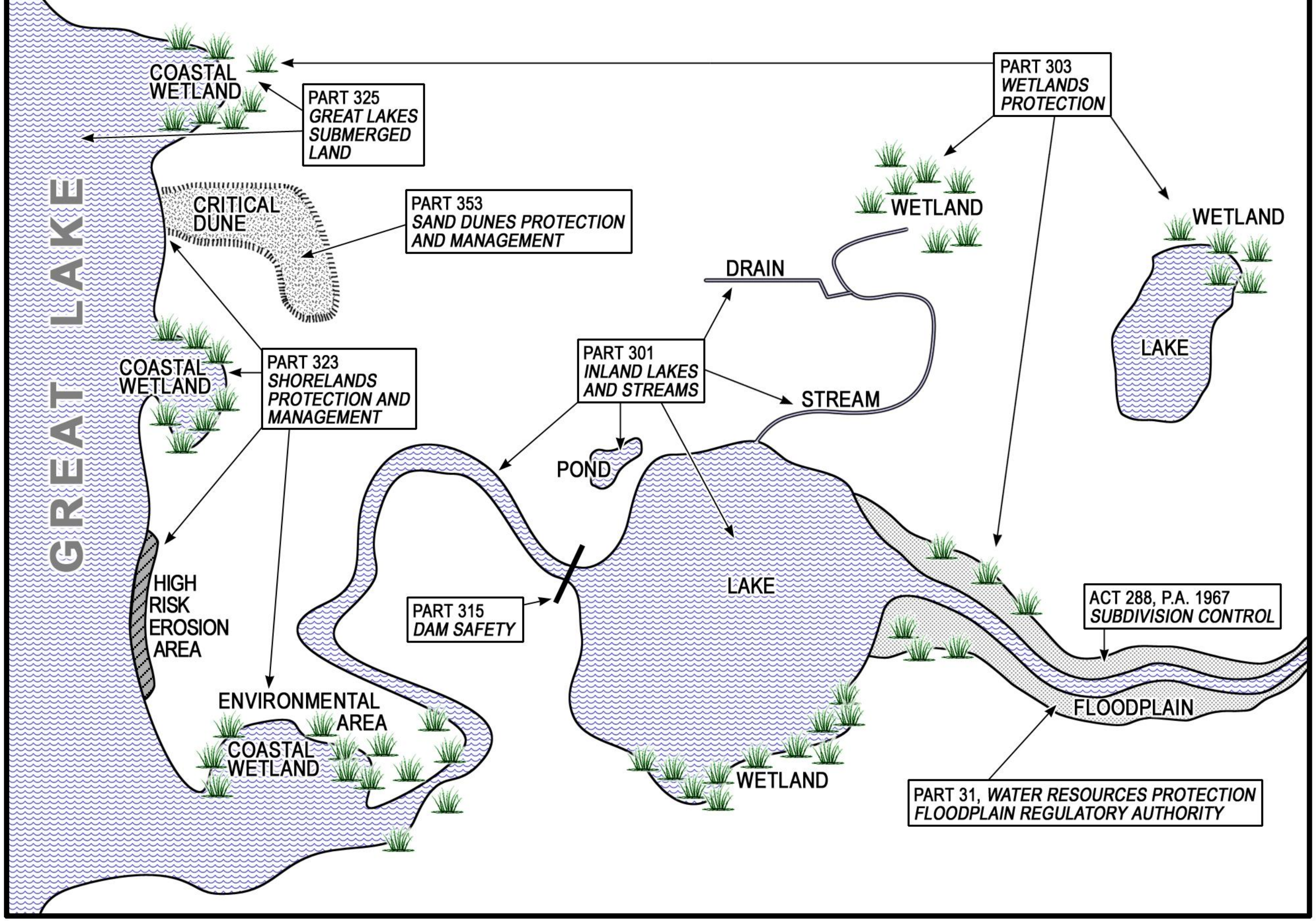
MICHIGAN LAWS ADMINISTERED BY EGLE WRD

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT
ACT 451 OF THE PUBLIC ACTS OF 1994 & RELATED STATUTES



Part 303
Wetlands Protection

Permit required for dredging, filling, draining, maintaining a use or development, or construction in regulated wetlands

The Michigan Legislature clearly recognized the benefits of wetlands (functions and values) in legislative findings incorporated into Part 303.

A loss of a wetland may deprive the people of the state of some or all of the following benefits to be derived from the wetland:

- Flood and storm control
- Wildlife habitat
- Protection of subsurface water resources and recharging ground water supplies
- Pollution treatment
- Erosion control
- Nursery grounds and sanctuaries for fish

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Regulated Activities - 30304

A Part 303 permit is required to:

- Place fill material in a wetland
- Remove soil or minerals from a wetland
- Drain surface water from a wetland
- Construct, operate or maintain a use/development in a wetland

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Part 303, Wetlands Protection

Protects wetland functions and values by requiring permits for activities that may have impacts to wetlands

What is a wetland?

Wetland means land or water feature, commonly referred to as a bog, swamp, or marsh, inundated or saturated by water at a frequency and duration sufficient to support, and that under normal circumstances does support, hydric soils and a predominance of wetland vegetation or aquatic life.

Wetlands are regulated if:

- Is a WOTUS
- Connected to or located within 1,000 feet of one of the Great Lakes or Lake St. Clair.
- Connected to or located within 500 feet of an inland lake, pond, river, or stream.
- More than 5 acres in size
- Documented presence of an endangered or threatened species
- Is a Rare and Imperiled Wetland

Part 301
Inland Lakes and Streams

Permit required for filling, dredging, placement of a structure on bottomlands (below the ordinary high water mark), enlarging or diminishing of a waterbody

"Inland Lake or Stream"

- 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 1956, 1956 PA 40, MCL 280.1 to 280.630; or <u>any other body of water that has definite banks, a bed, and visible evidence of a continued flow or continued occurrence of water….</u>
- Inland lake or stream does not include the Great Lakes, Lake St. Clair, or a lake or pond smaller than 5 acres.

What is a Stream?

- A body of water with definite banks, a bed, and visible evidence of a continued flow or continued occurrence

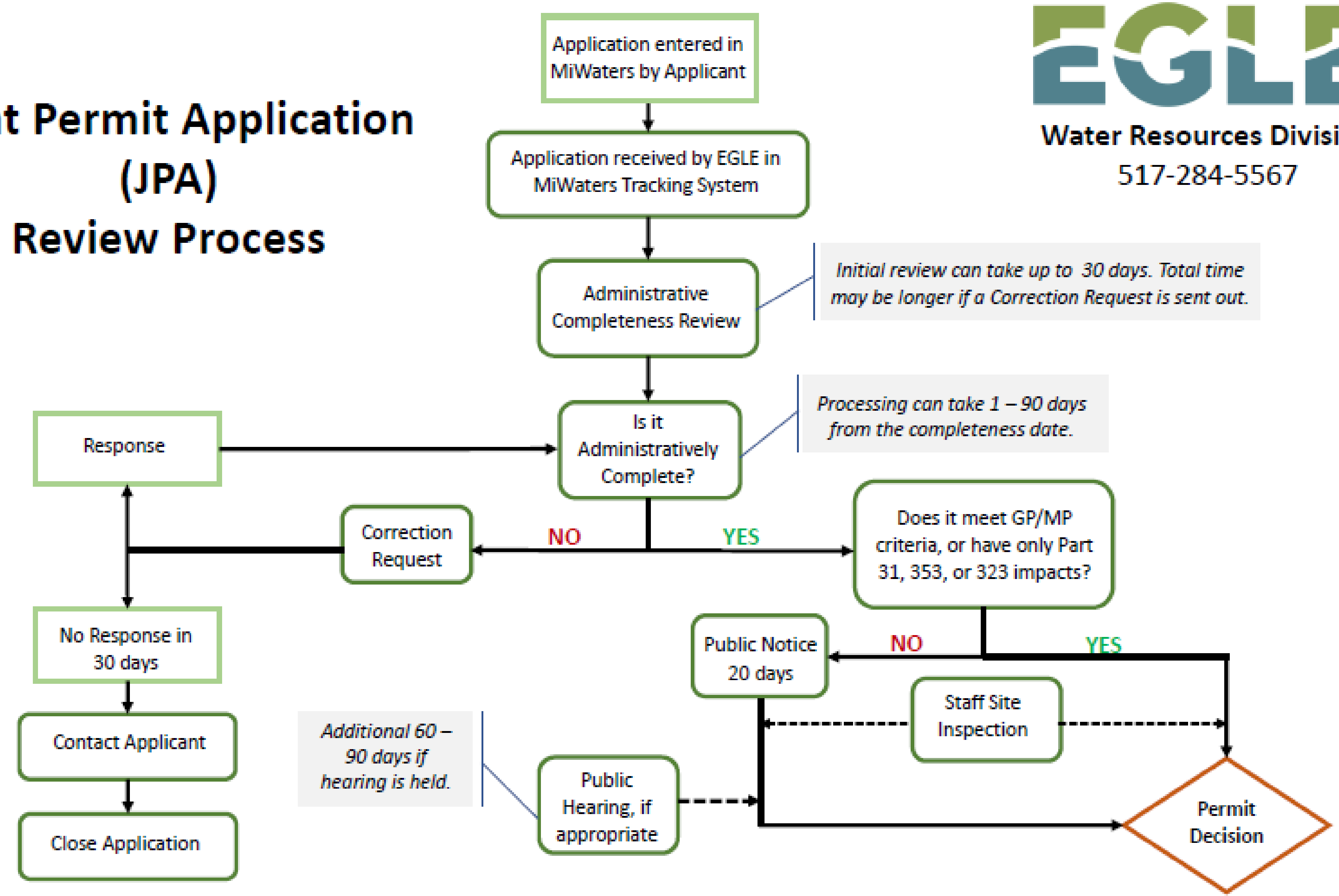
- A stream can be seasonal or intermittent

UTILITY PERMITTING

Wetlands, Lakes and Streams

Joint Permit Application (JPA) Review Process

Water Resources Division
517-284-5567



Efforts depend on...

- Type of utility project
  - Generation
    - Solar, wind, natural gas, etc.
  - Transmission
  - Distribution
- Maintenace vs. New utilities
  - Avoidance will look different depending on the project

3-Tiered Permitting System

Public Notice Projects

Minor Projects

General Permits

Exempt Activities

MP/GP documents are posted on **Permit Categories for Wetlands, Inland Lakes and Streams, Great Lakes, and Floodplains**

Objectives

- Reduce Time and cost
- Create flexibility
- Minimize individual and cumulative impacts
- Incorporate BMPs

Objective 1:
Reducing Time and Cost

↓ TIME

\+

↓ COST

=

↑ INCENTIVE

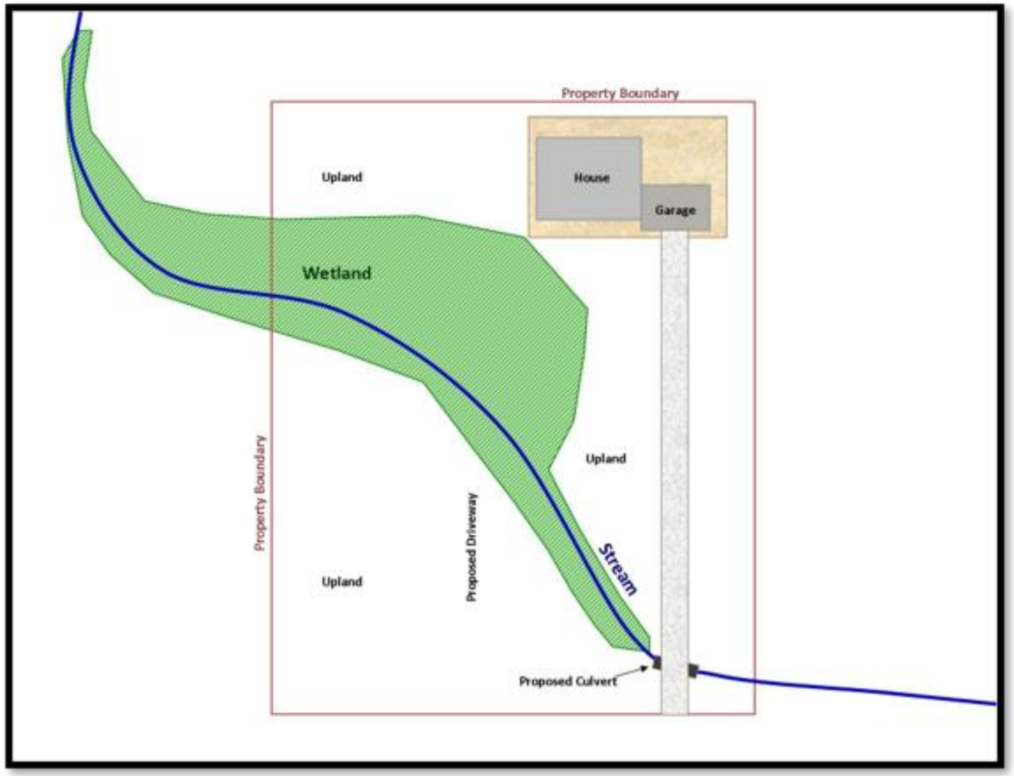
Objective 2:
Flexibility

1. Diversity of water in the state

2. Stakeholder input

3. Allow for updates/changes

Objective 3:
Minimize Impacts



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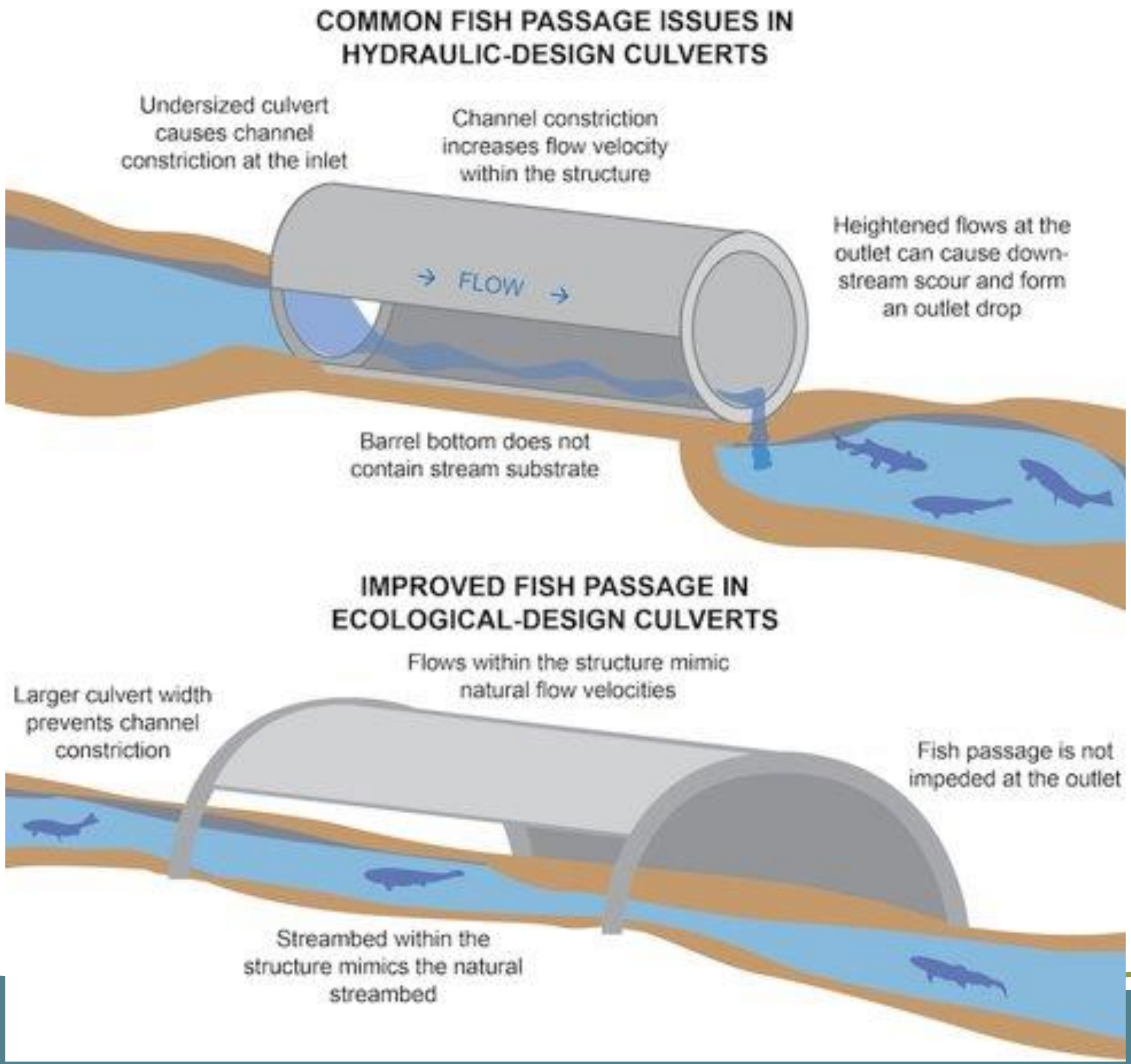
Objective 4:
Incorporate BMPs



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Applicable Categories

GP Categories

- GP G. Culverts and Bridges – Small
- GP H. Culverts – Wetland Equalizer
- GP R. Pipeline Safety Program Designated Time Sensitive Inspections and Repairs
- GP U. Removal of Structures
- GP BB. Utility Line Activities

MP Categories

- MP 11. Culverts and Bridges – Large
- MP 17. Driveway
- MP 18. Fences
- MP 51. Temporary Construction, Access, and Dewatering
- MP 53. Utility Line Activities

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Activities Not Requiring Permit

- **303 Exempt Activities**
  - Directional drilling/boring/knifing-in
    - 6 in or less diameter pipe
    - 4 ft or more below ground surface
    - No accidental release
  - Installation of poles <1 cyd support structure
  - In Place/In Kind maintenance or repair
    - Done in a manner to minimize adverse impact
    - No conversion of wetland

- **301 Exempt Activities**
  - Directional drilling/boring
    - 10 or more feet from top of line to bottom of lake/stream
    - No bank disturbance
    - No accidental release

- **Timbermatting BMPs**
  - Placed for short duration at appropriate time of year
  - Does not significantly disturb the soil
  - Avoids standing water areas

TEMPORARY IMPACTS

Temporary Activities Requiring Permit

- Installation with minimal disturbance restored in place
- Access Roads/Clear span bridges
- Timbermatting resulting in earth disturbance
  - Does not meet BMPs

PERMANENT IMPACTS

Permanent Activities Requiring Permit

Wetland --> Upland

- Non-exempt Structure Installation
  - Pump houses, substations, poles, etc.
- Pads
  - Towers
- Access Roads

PERMANENT IMPACTS

Wetland Use Activities Requiring Permit

Conversion of Wetland Types

- Long-term maintenance activities
  - Tree/shrub cutting/mowing
  - Changing wetland type
- Converting wetland to open water
  - Increasing hydrology inputs

Is Mitigation Required?

It Depends!

Mitigation is to replace lost functions and values, so ask yourself the following:

- Will the area still be wetland afterwards?
  - If yes, will it be the same type of wetland?
- What does the vegetation maintenance entail?
  - Timing, frequency, height of vegetation allowed, etc.
- What quality is the existing wetland and how will it be impacted?
- How long will the area take to be restored?
- What is the likelihood of success?

Is Restoration Required?

Are there temporary wetland impacts?

- If so, then **YES**

Range of restoration requirements will be based on:

- Wetland type (PEM/PSS/PFO)
- Quality of the wetland
- Amount of impact

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Is Monitoring Required?

It Depends!

- Range of monitoring requirements will be based on:
  - Wetland type (PEM/PSS/PFO)
  - Quality of the wetland
  - Amount of impact
- Monitoring is typically required for conversion impacts.

Scenario 1

Overhead utility line corridor. Temporary Impact (< 1 construction season) to emergent wetland dominated by invasives.

Activities included:
- Non-exempt new line installation meeting the MP
- Soil disturbance from matting

- MITIGATION
  - No mitigation required
- RESTORATION
  - Minimum restoration condition
  - Must be restored to existing grade and wetland type
- MONITORING
  - Minimum monitoring to ensure not converted to upland
  - Typically 1-2 growing seasons

Scenario 2

Solar Farm installation
Temporary Impact (< 1 construction season) to scrub shrub wetland.

Activities included:

- Panels outside of wetland
- Open Cut trench through PSS
- Proposed replanting of scrub shrub wetland impacts

- MITIGATION
  - Likely no mitigation required
- RESTORATION
  - Standard restoration conditions
  - Must be restored to existing grade and wetland type
- MONITORING
  - Monitoring to ensure returns to scrub shrub conditions
  - Standard monitoring conditions
  - Typically 3-5 growing seasons

Remember!

These scenarios are basic examples.

All utility projects will be on **case-by-case** basis.

Common Issues

- Easements
  - Applicants not listed as the property owner typically need to provide letter of authorization or proof of property ownership, however utilities typically have easements over the property.
  - New corridors are more complicated
    - If the applicant is still working through obtaining some easements, please notify the permit processor.
    - Best to have all easements secured prior to submitting the JPA.

Common Issues

- Administrative Completeness
- Off season delineations
- Massive linear projects with large resource impacts
- Timbermatting
  - Crossing T&E species area?
    - EGLE is still required to coordinate with state and federal agencies. Additional review may be required.
  - Unable to meet BMPs?
- Route Feasibility/Site Selection Studies

What can be provided in an Alternatives Analysis?

Alternative construction technologies

Alternative project layout and design

Pertinent environmental and resource issues

Local land use regulations and infrastructure

This list of factors is not exhaustive and no particular factor will necessarily be dispositive in any given case.

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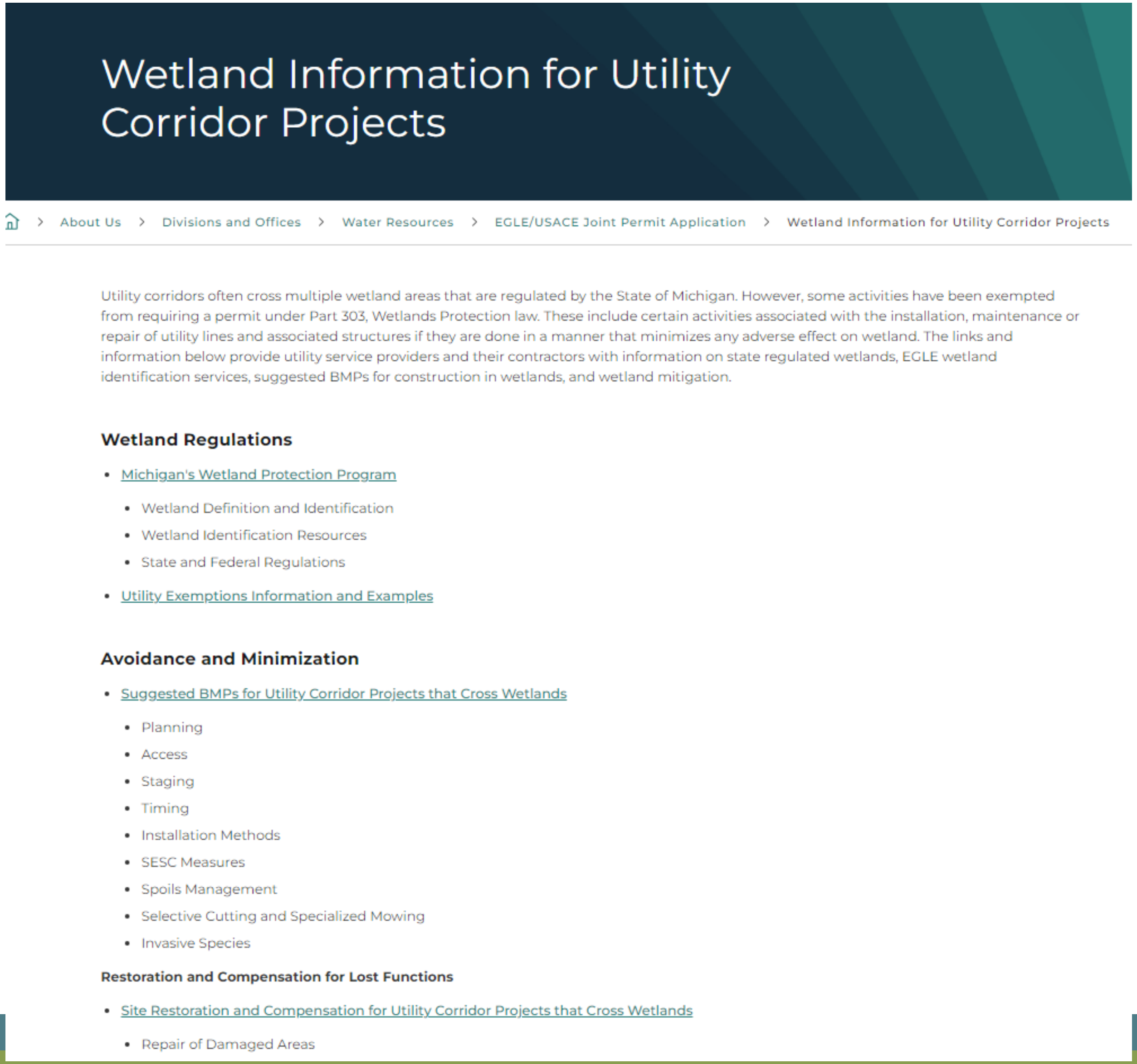
Feasible and Prudent Alternatives

- Linear projects
  - Early, more detailed investigation of wetland boundaries prior to determining route.
    - Do not recommend relying solely on NWI imagery.
    - Can use LIDAR, soil maps, historical aerials to provide more accurate preliminary desktop delineations.
- Fill pads
  - Purposes that require a permanent pad vs. temporary matting
  - Modify size, shape, type of impacts
- Solar panels
  - Many alternative locations are available to place solar panels.
  - Can be configured with the landscape, placed on existing infrastructure, ROWs, etc.

Feasible and Prudent Alternatives

- Document these well in the JPA
  - What was considered in the site selection?
    - Alternative routes/parcels, local ordinance/zoning, higher quality habitat, cost, etc.
  - What BMPs are being utilized?
    - Temporary timbermatting, exclusionary fencing, invasive species decontamination, culvert sizing, etc.
- Utilize Pre-application Meetings!
  - Discuss concerns with project, timelines, JPA items, and alternatives.

Online Resources – Utility Corridor Projects



UTILITY CORRIDORS IN WETLANDS – EDUCATION SERIES

DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY♦ WATER RESOURC
Michigan.gov/Wetlands

Utilities Exemptions under Part 303, Wetlands Protection,
of the Natural Resources and Environmental Protection Act 1994 PA 451, as a

Utility corridors often cross multiple wetland areas that are regulated by the State of
some activities have been exempted from requiring a permit under Part 303, Wetlan
NREPA. These include certain activities associated with the installation, maintenan
lines and associated structures if they are done in a manner that minimizes any ad
wetland.

For the purposes of the exemptions, "utility line" means any pipe or pipeline used
any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any ca
transmission for any purpose of electrical energy, telephone or telegraph messa
communication.

The following are the exemptions in Part 303 related to utility activities:

(l) Maintenance or repair of utility lines and associated support structures tha
requirements:
(i) Is done in a manner that minimizes any adverse effect on the wetl
(ii) Does not include any modification to the character, scope, or size
design.
(iii) Does not convert a wetland area to a use to which it was not pr

(m) Installation of utility lines having a diameter of six inches or less using
knifing-in, and the placement of poles with minimal (less than one cub
utility lines and poles are installed in a manner that minimizes any ad
Directional drilling or boring under this subdivision shall meet all of th
(i) The top of the utility line is at least four feet below the soil sur
the presence of rock prevents the placement of the utility line at hig
this subparagraph, the bottom of the utility line is not placed hig
(ii) The entry and exit holes are located a sufficient distance fro
disturbance of the wetland does not occur.
(iii) The operation does not result in the eruption or release of
ground and into the wetland and there is an adequate plan to
mud or other fill material.

Both exemptions require that the work be conducted in a manner th
the wetland. Information on suggested ways to meet this criterion c
Suggested Best Management Practices for Utility Corridor Projects

The following are examples of activities that **would not** require a
manner that avoids and minimizes wetland impacts:

- The use of temporary construction mats that are placed
construction) and does not significantly disturb the soil
does not include grubbing of vegetation or other earth
- Open trenching to access utility lines for maintenance
replaced, they must be replaced with the same size a
necessary to conform to modern construction practic
standards if they remain of the same scope and do r

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DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY♦ WATER RESOURCES DIV
Michigan.gov/Wetlands

Suggested Best Management Practices for Utility Corridor Projects
in Accordance with Part 303, Wetlands Protection, of the Natural Resources and En
Protection Act, 1994 PA 451, as amended (NREPA)

During the planning process of a utility corridor project it is important to be aware of wetla
map all activity locations with the goal of avoiding impacts to wetlands. Once avoidance
planned to the greatest extent possible, Part 303, Wetlands Protection, of the NREPA,
management practices be used during construction to minimize impacts to wetlands. T
exempt and non-exempt utility projects.

Avoidance and minimization requires up-front planning and knowledge. The followin
management practices (BMP) for avoiding and minimizing impacts to wetlands:

Planning
Having a plan in place that addresses and avoids impacts to the known natural r
corridor can provide for less long-term costs associated with clean-up efforts an
avoidance and minimization process should start with utilizing in-office resourc
Inventory Maps, Soils Maps, and aerial photographs to determine what resour
corridor. Areas shown as wetlands, wetland soils, or open water on these res
wetlands, and deserve further site investigation to verify if wetlands are actu
evaluation performed in accordance with Part 303 can identify if wetland is
required for a project. Proper permits should be sought early in the plannin
are obtained, they should be supplied to the contractors performing the w
Meeting will ensure that all contractors and workers know the plan for ea
avoided or any special measures that are required to minimize impacts.
meetings are the what, where, when, and how of each specific constru
identification of the areas to be avoided should be marked in the field.
oversight is necessary to ensure that the work is carried out properly.

Access
Access routes should be planned for locations that are not in wetla
invasive species to the greatest extent possible. Accessing the uti
equipment) is the best way to ensure impacts to wetlands are av
maintenance activities. If equipment is necessary and these are
should be located to cross at the narrowest point of the wetland
straight line and not at an angle.

Once an access route is established, it should be traveled wi
be discouraged. The access route should be memorialized
activity. This can be done through establishing GPS points
Marking the route in the field is recommended, but may no
permissions, locations, etc. Width of, and clearing for, the
allow passage of the required equipment.

Matting can be used in access areas that cannot avoid wetlands
multiple matting types and methods that may be appropriate to use in wetla

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DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY♦ WATER RESOURCES DIVISION
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Restoration and Follow-Up of Utility Corridor Projects
in Accordance with Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA)

After any project construction it is important to restore the site and complete follow-up activities to ensure it is properly closed out, including removal of all waste products and debris. Proper decontamination and cleaning of equipment and materials should occur prior to leaving the site at the designated staging area (See Suggested BMPs for Utility Corridor Projects that Cross Wetlands). However, some utility activities may require more than just clean up. Sometimes unintentional or unavoidable damage may have occurred during the construction or maintenance activities. Knowing when and how to repair damaged areas is important in doing it properly since sometimes trying to repair damage could result in more damage. Table 1 details various damage issues that may occur with construction activities and how to restore it.

Table 1. When and how to restore areas disturbed by maintenance activities.

Issue	Re-grade (by hand if possible)	Apply Mulch	Apply Native Seed	Inspect	Maintain
Ruts <8"	yes	no	no	no	no
Ruts >8"	yes	yes	no	no	no
Exposed Soil in Wetland	yes	yes	yes	yes	yes
Exposed Soil in Upland	yes	yes	no	yes	no
Fill or Dredge	yes	yes	yes	yes	yes

During directional drilling operations if a leak of drilling mud material into surface waters occurs, the project shall be immediately stopped, evaluated, and appropriate measures should be taken to alleviate the release and contain the leaking material. In general, the leaked material should be immediately isolated, contained, and restored to previous conditions.

When restoring any disturbed area, the following should be taken into account:

- Avoid using machinery and restore by hand if possible.
- Small areas will likely vegetate on their own and may not need additional seed if there is not a large invasive species presence.
- Always use a temporary seed such as annual rye to immediately stabilize the area
- Larger areas may require seeding with native seed appropriate for the resource (consultation with knowledgeable staff should occur).
- Do not use fertilizer or lime, and only use certified weed-free mulch.

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Questions?