The Complete Permit Application

Regulatory Project Managers

Corps Detroit District Regulatory Office

EGLE Bay City District Office

October 17, 2019

US Army Corps of Engineers
BUILDING STRONG®

Michigan Department of Environment, Great Lakes, and Energy

Outline

- Complete application
- Commonly missing pieces
- Tips on applying
- Permit application resources

Applying for a Permit

Michigan Joint Permit Application

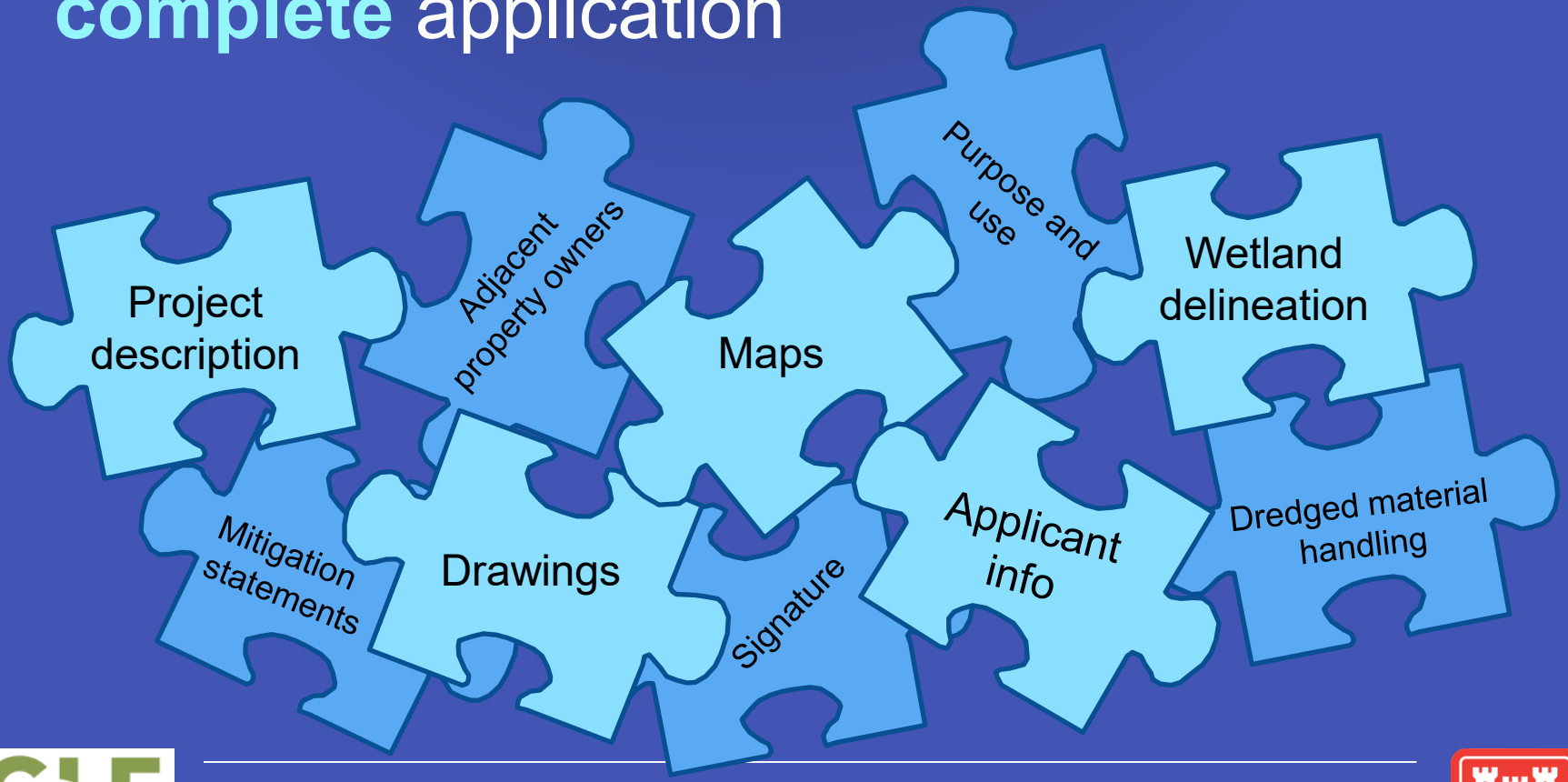
EGLE Permit Process → EGLE Permit Decision

Corps Permit Process → Corps Permit Decision

Information required by EGLE may differ from Corps

Complete application

- Corps review begins when we receive a **complete** application



Project Purpose

- Why does the applicant want to do the work?
- Not a project description
- Informs alternatives analysis
- May include specific objectives, constraints
- “To provide...”

Purpose

- Project:
  - Dock
- Purpose:
  - Provide waterway access and docking for 10 watercraft

Purpose

- Project:
  - Shoreline grooming
- Purpose:
  - Provide a vegetation-free shoreline recreation area free of debris

Purpose

- Project:
  - Driveway
- Purpose:
  - Provide vehicle access to an upland area where a house would be built

Purpose

- Provide a luxury condominium development in the Big Lake area with marina facilities and waterfront recreational opportunities for residents

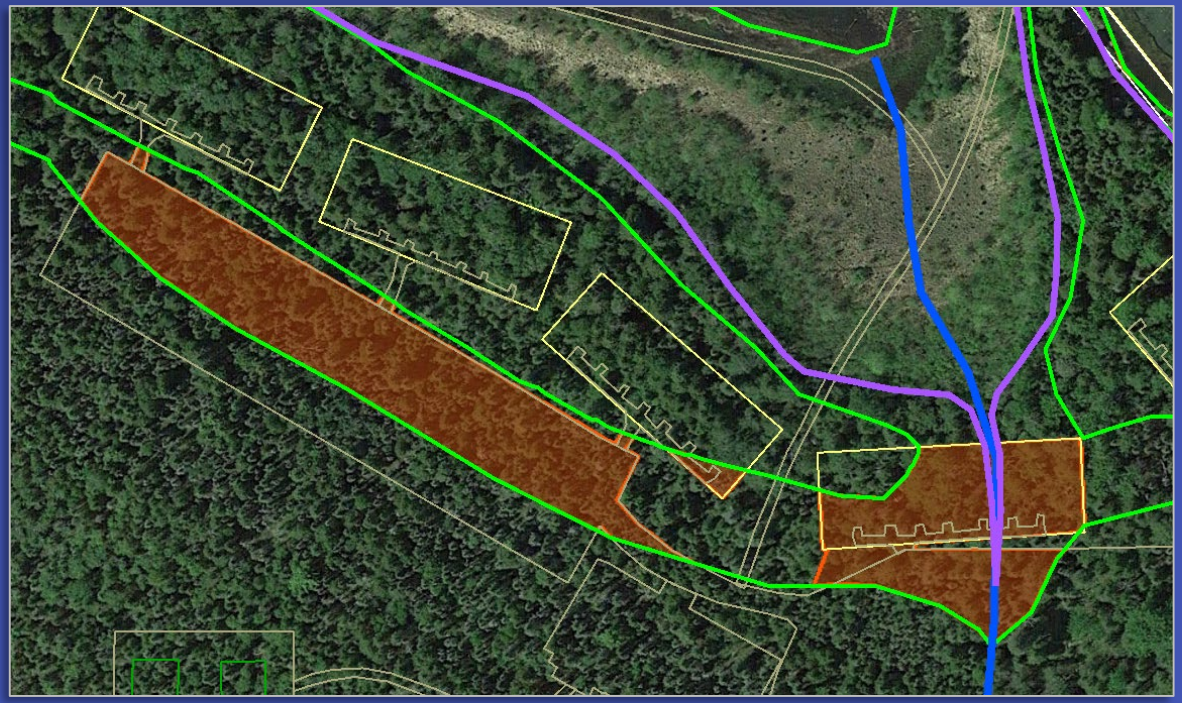
Include all jurisdictional work

- On application
- In drawings

**We suggest: Contact us in advance for a Jurisdictional Determination or with questions.

Include work in all jurisdictional areas

- Impact amounts depend on correct wetland boundaries
- Have Corps/EGLE verify boundaries before you prepare an application
- May affect mitigation requirements

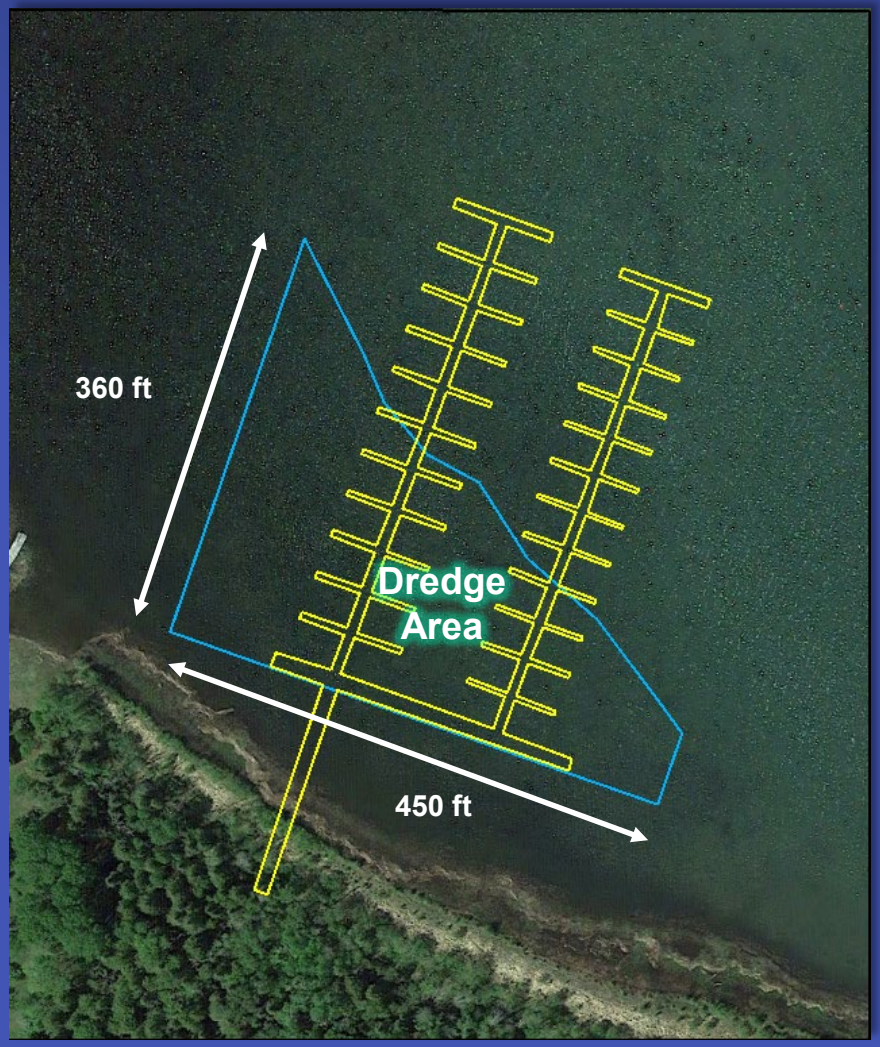


Construction sequence

- Types of equipment, access routes
- Dredge methods, material handling
- Sequence of work
- Temporary construction measures, stockpiling, sidecasting

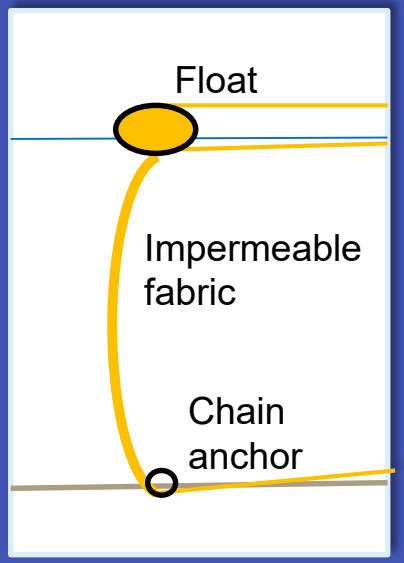
Temporary construction measures

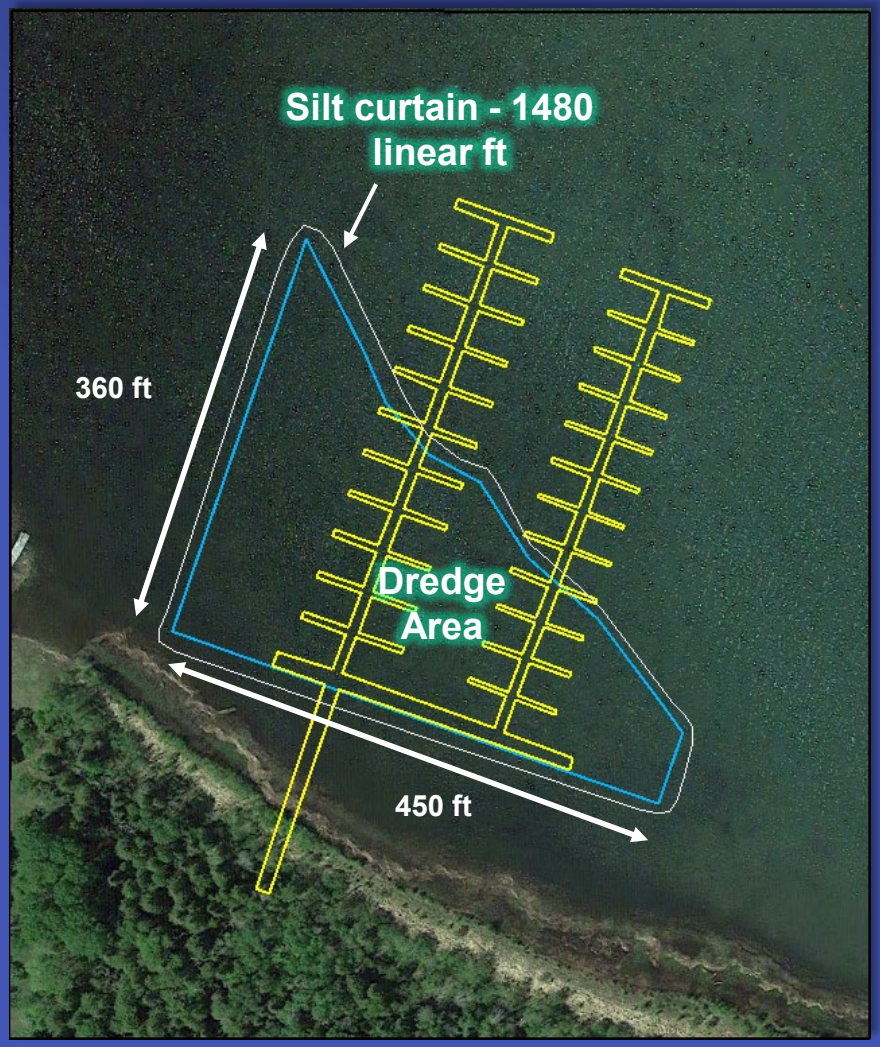
Temporary construction measures?



Silt curtain

Silt curtain cross section

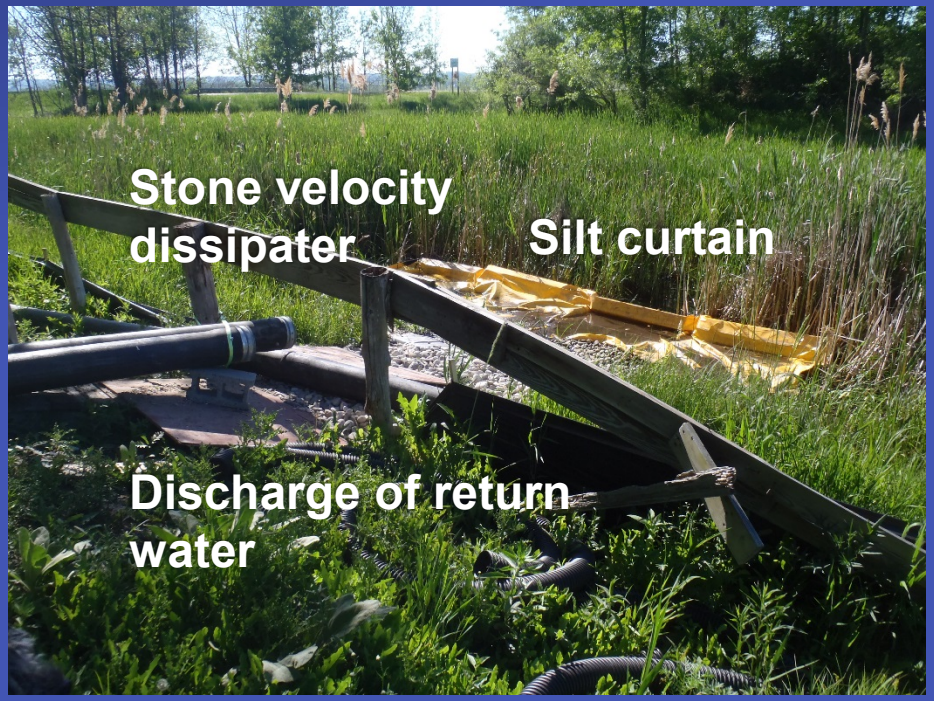




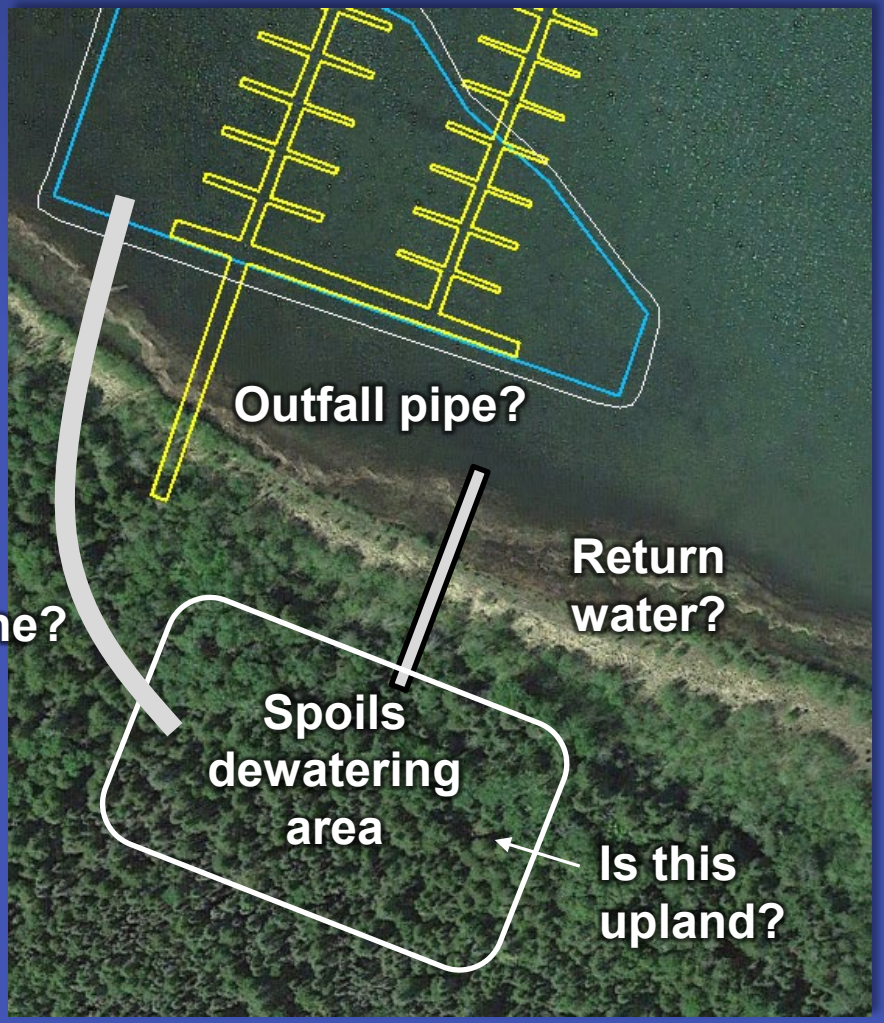
Silt Curtain

- Required by EGLE and/or Corps for many dredging projects
- Need drawings/dimensions for Corps permit
- We recommend:
  - Include it in your application
  - If you don’t plan to use one, tell us why

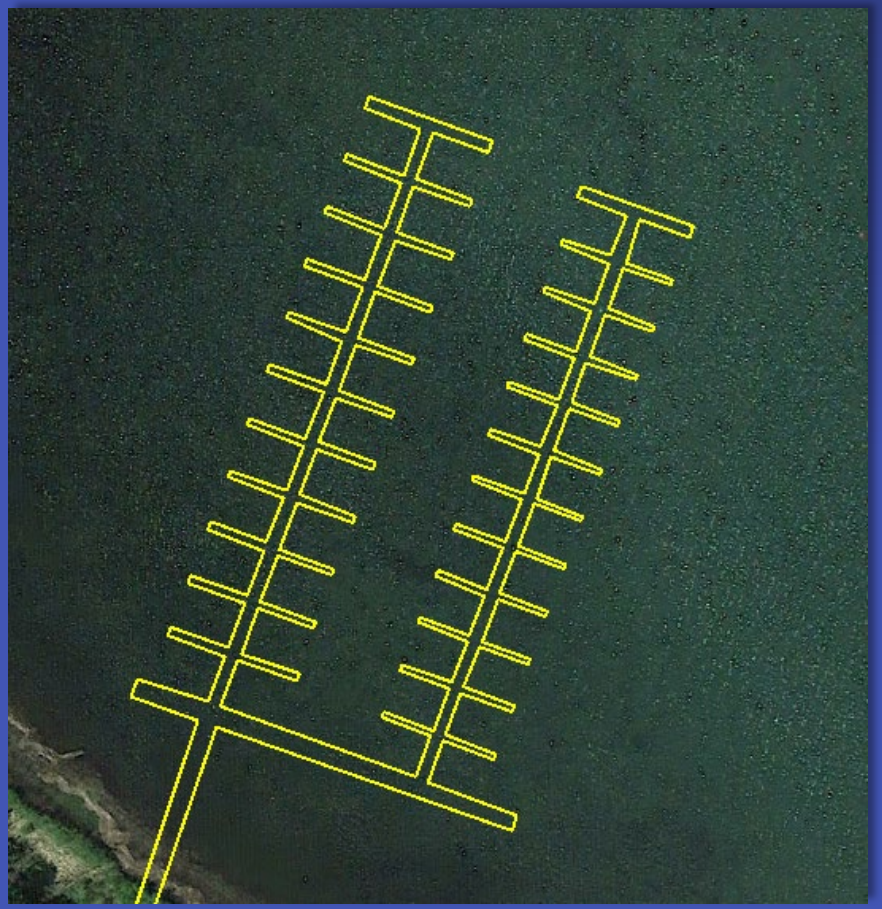
Dredged material handling and return water



Dredged material handling and return water

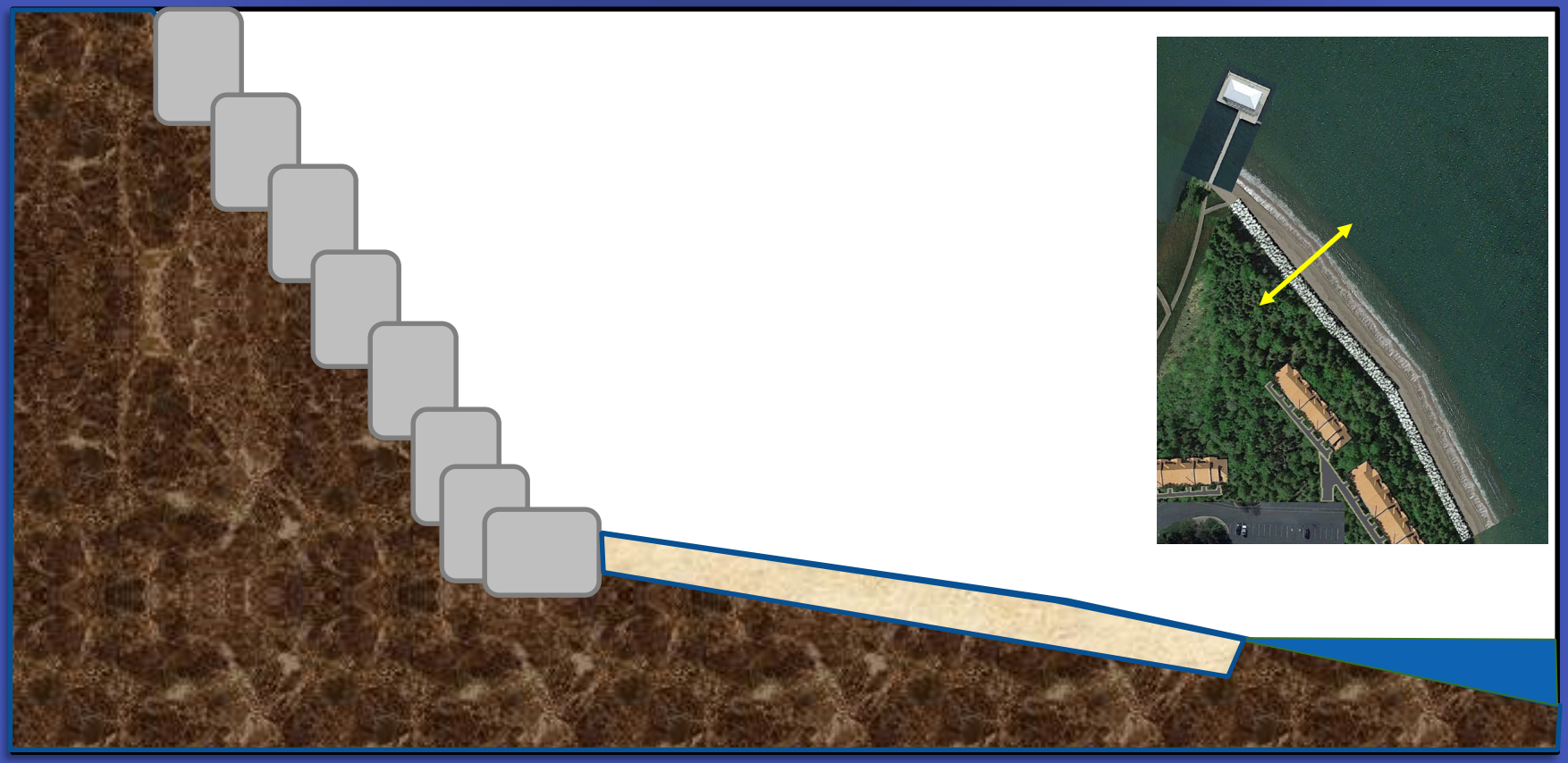


Structures often left out

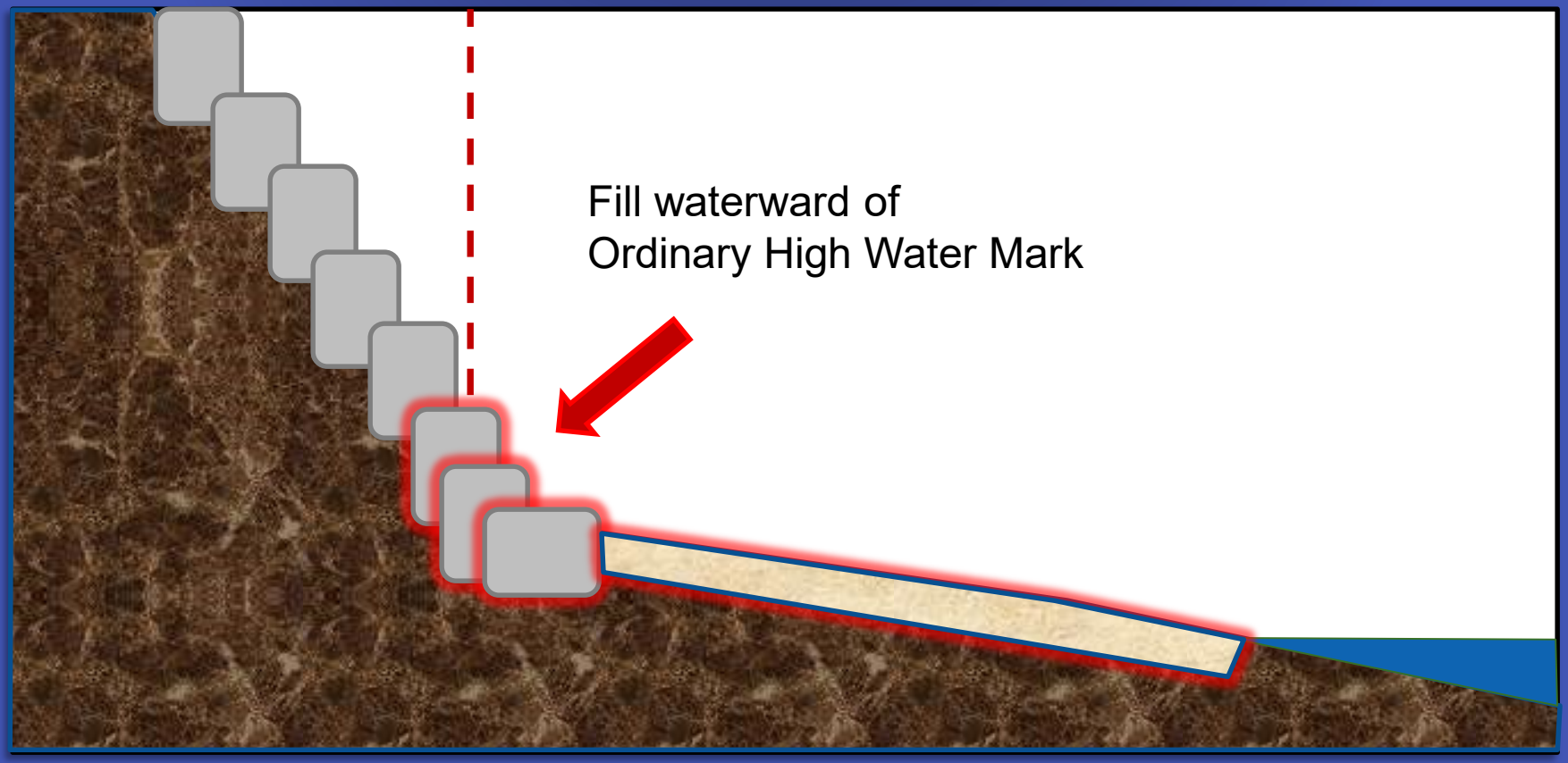


- Spring piles
- Ice piles
- Boat hoists
- Mooring buoys
- Seasonal structures

Proposed riprap/revetment



Proposed revetment



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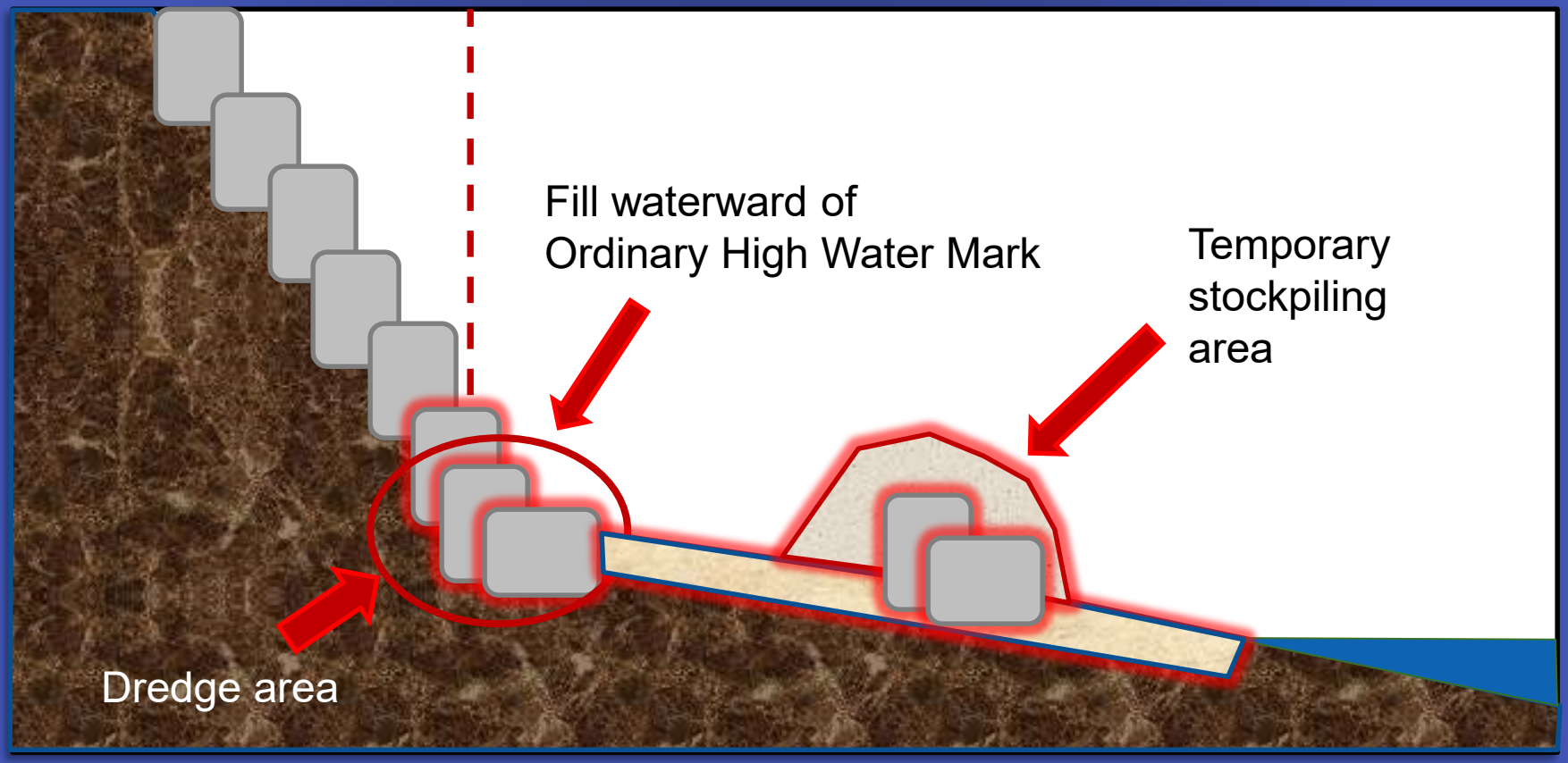
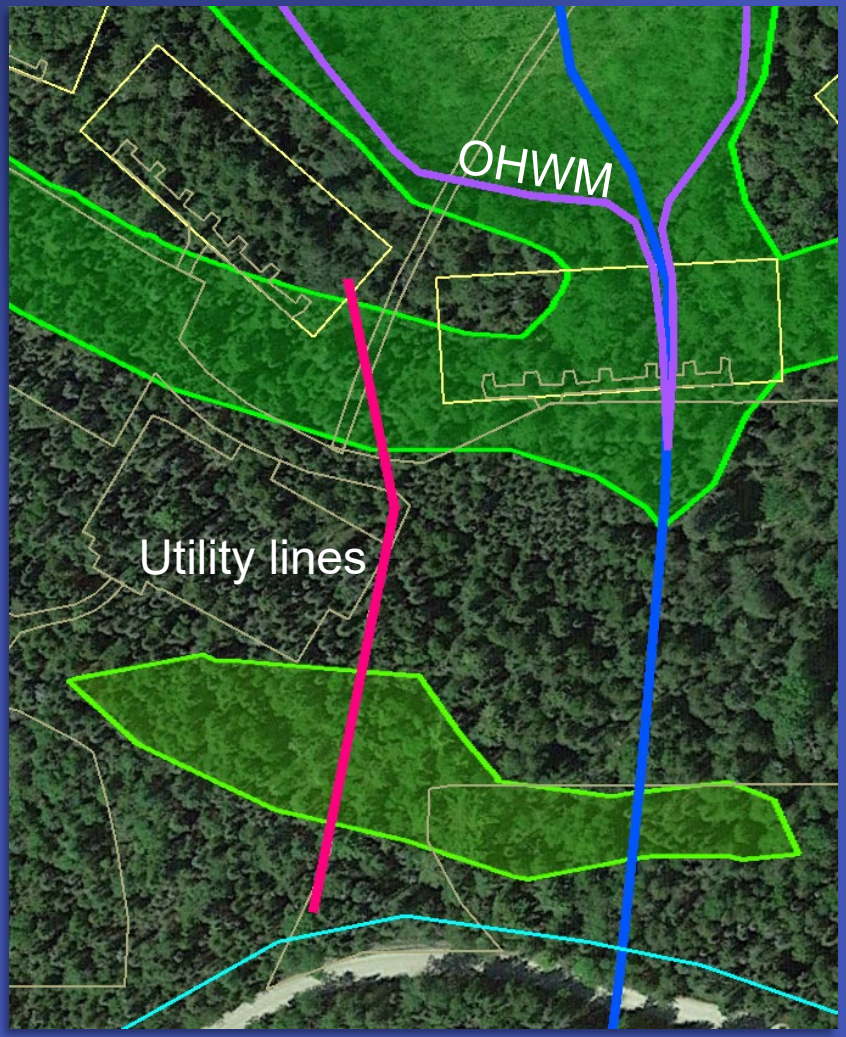


Mechanized landclearing

- Grading, leveling, contouring, clearing of vegetation roots
  - Describe it in permit application
  - Show footprint in drawings

Buried utility lines

- Open trench?
  - May involve discharges of fill in wetlands
- Directional drill?
  - May require a permit if Section 10 waters

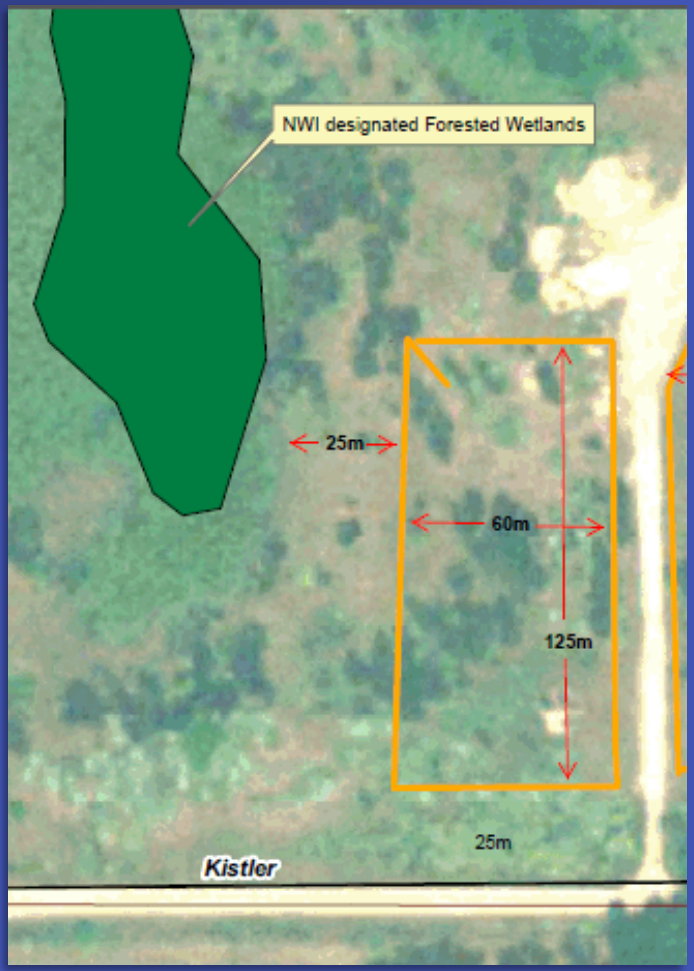


Disposal site for dredged material

- Dewatering and final disposal sites
- We verify that it's upland
- Map it out, especially if multiple sites

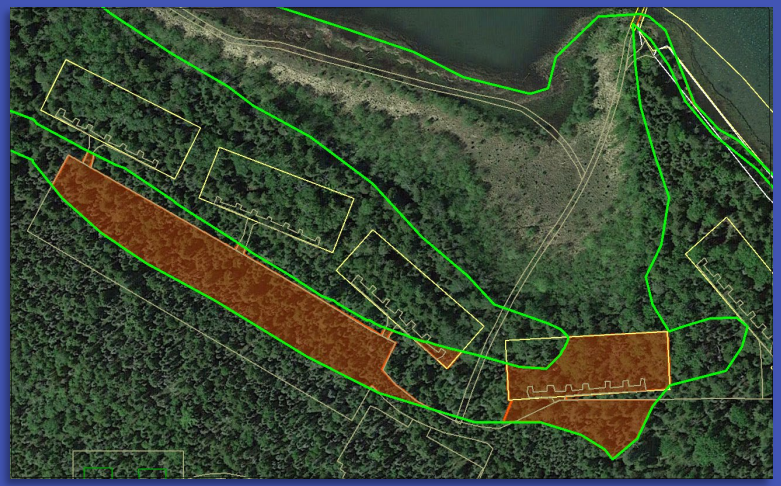
Map the disposal area

- Map it out, especially if multiple sites
- Show full footprint of disposal area
- If wetlands are near, be specific

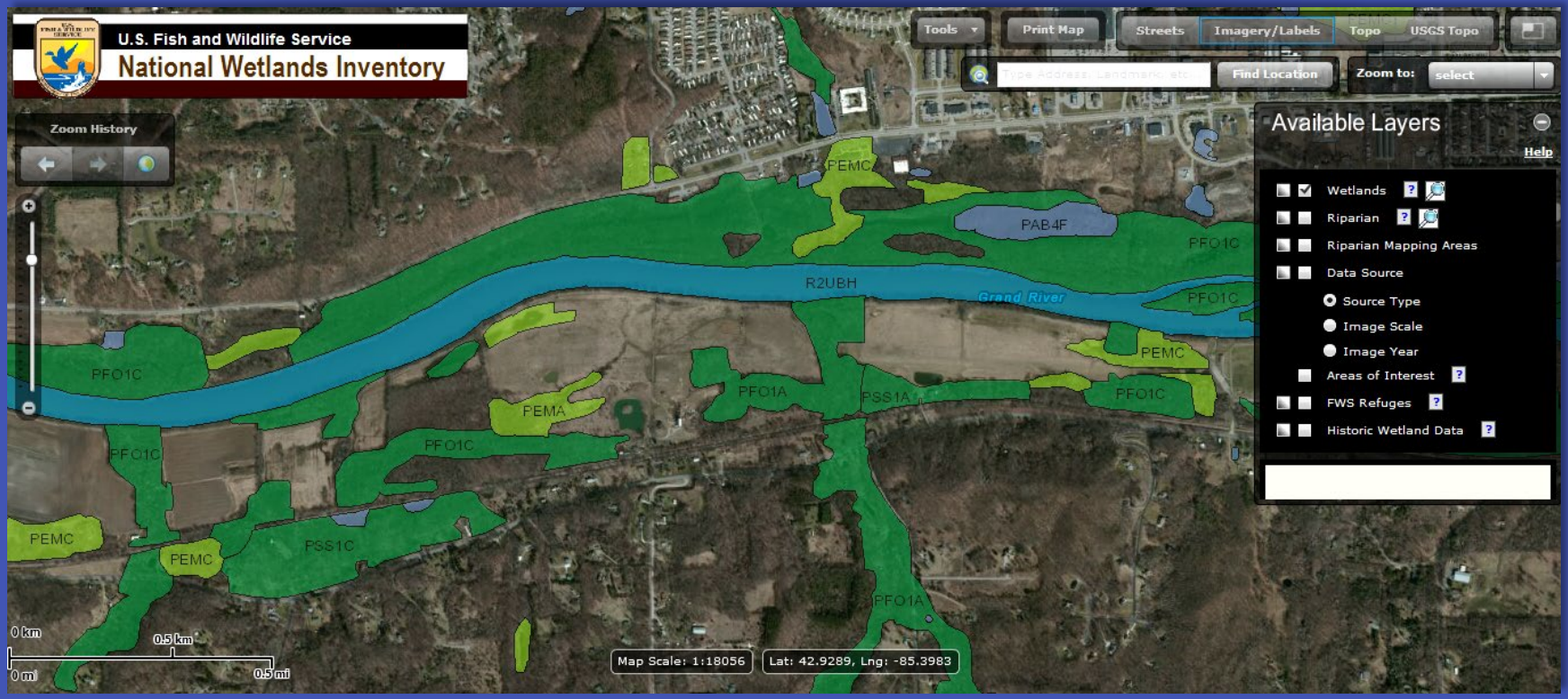


Information on potential wetland impacts

- Wetlands present?
- Delineate **all waters** on project drawings
- Not just those in the proposed work area
- Contact us in advance for a jurisdictional determination

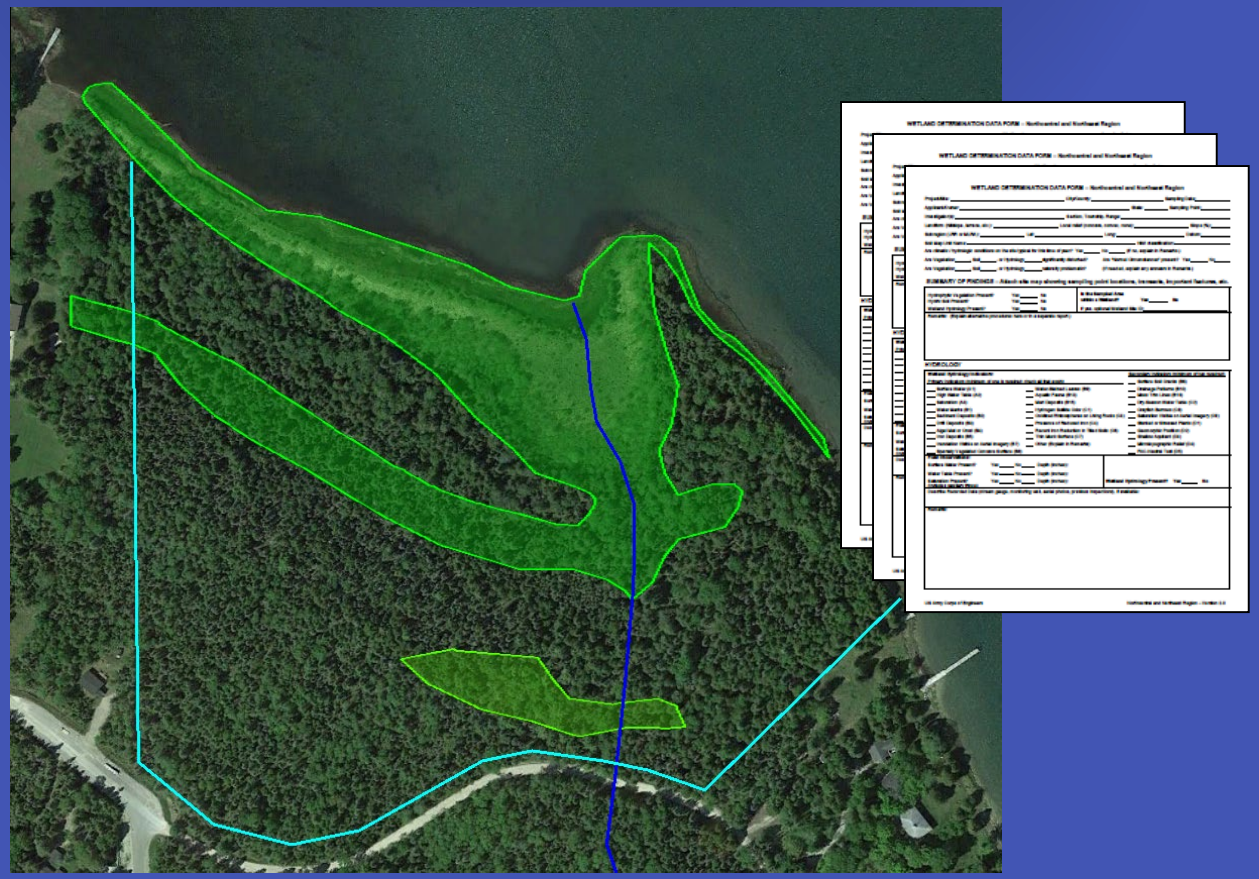


National Wetlands Inventory: potential wetlands



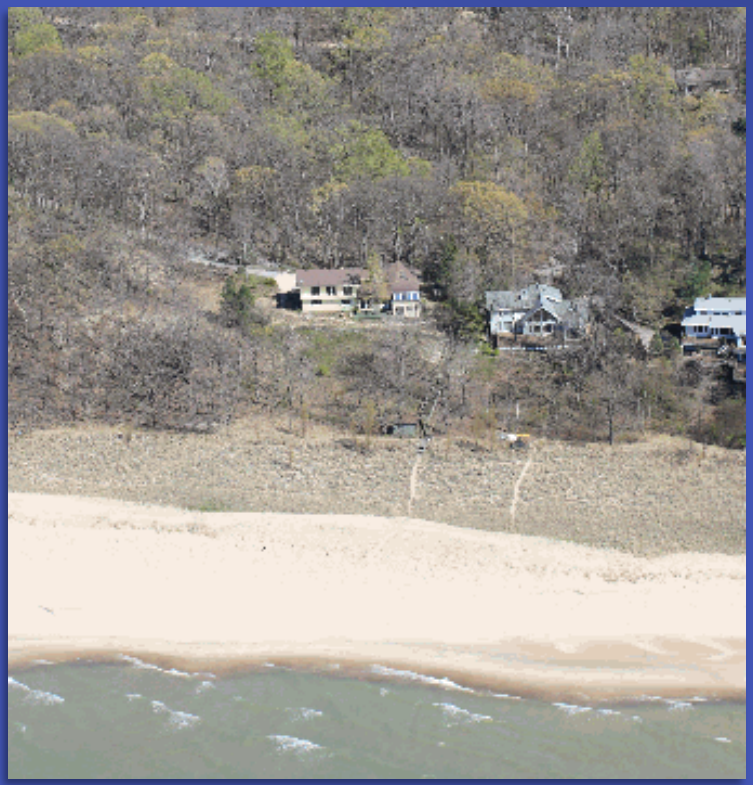
www.fws.gov/wetlands

Provide datasheets with wetland delineation map



Shoreline projects

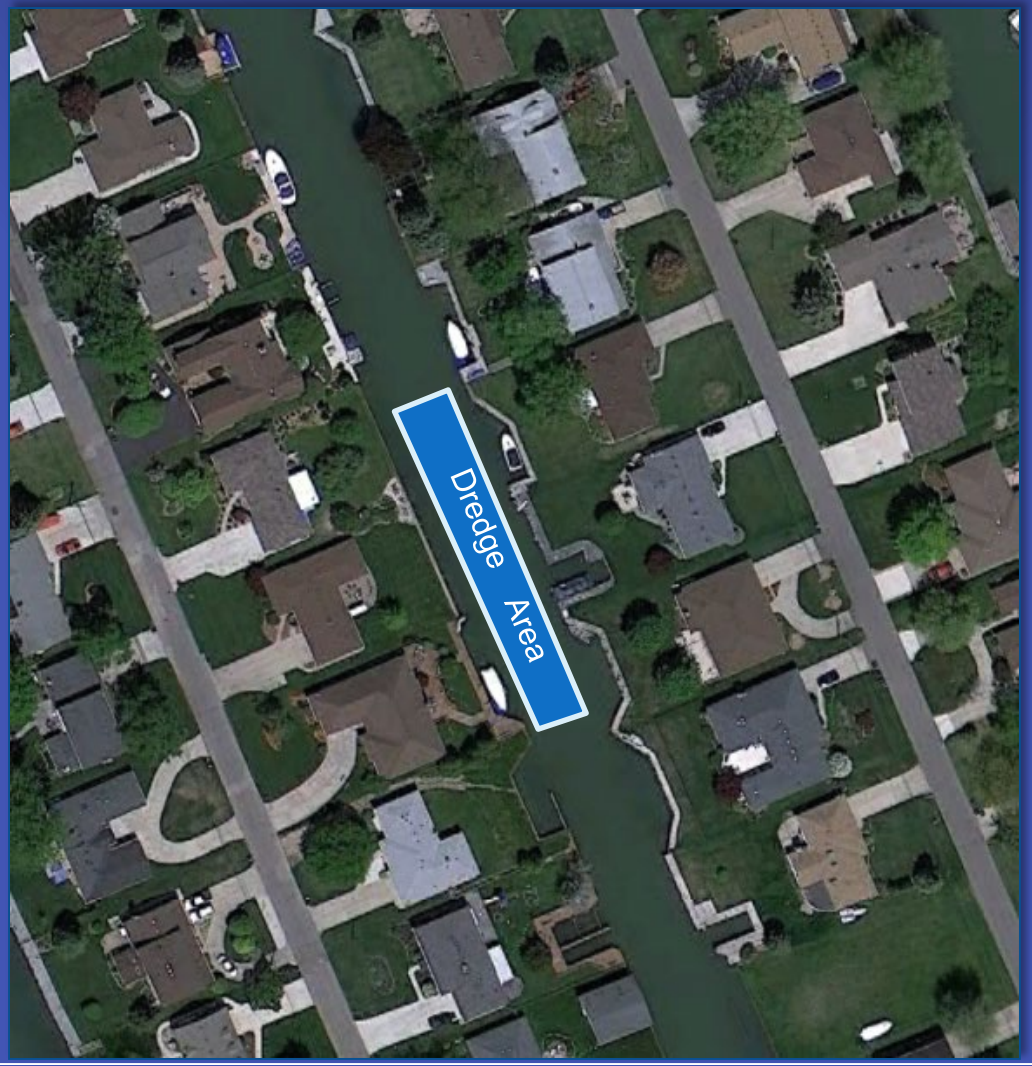
- Are there wetlands along the lakeshore?



Adjacent riparian property owner mailing addresses

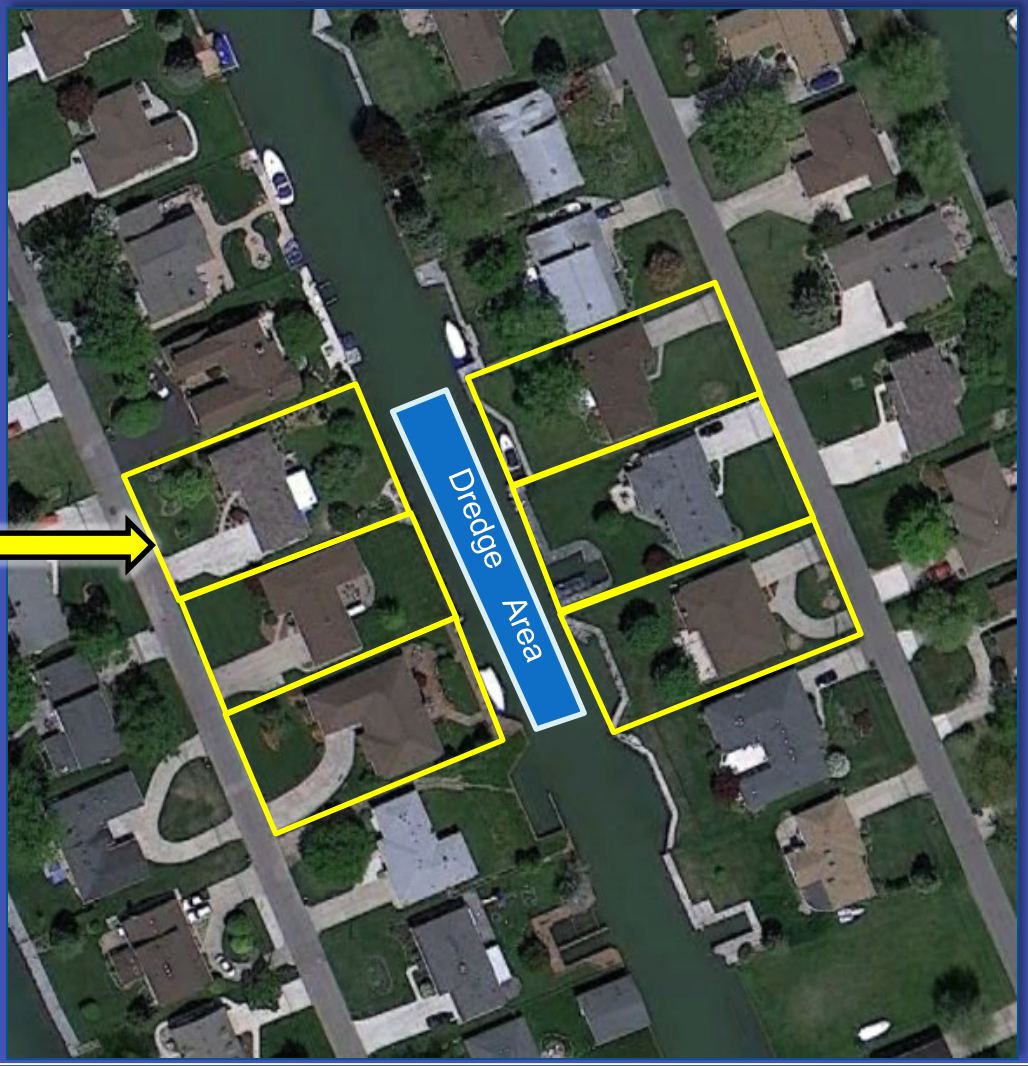
- Accurate **mailing** addresses for riparian neighbors on each side of the project location
  - In some cases you may need to include neighbors across a canal or more than immediately adjacent neighbors

Which adjacent riparian property owners?



Which adjacent riparian property owners?

Properties where the work area is located



Which adjacent riparian property owners?

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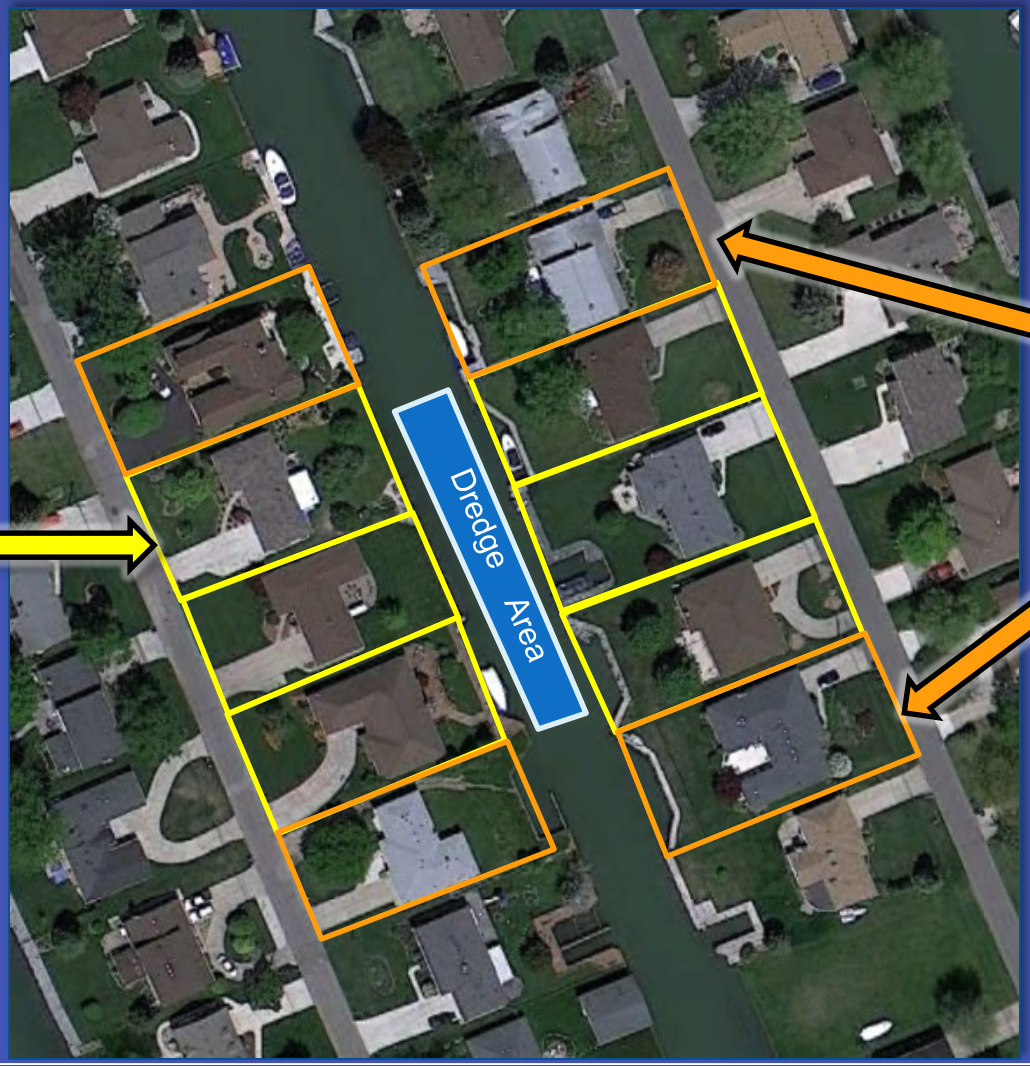
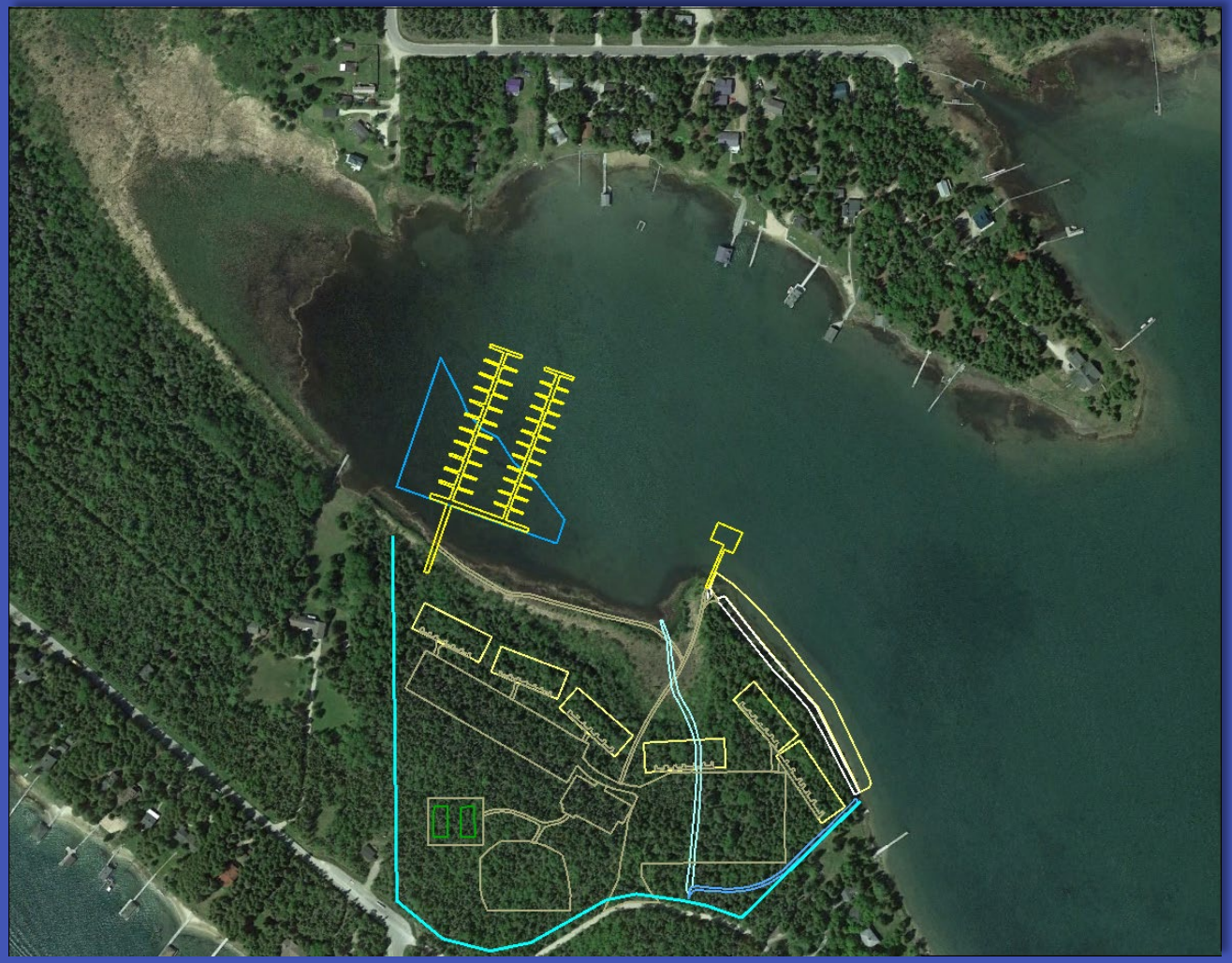


Adjacent properties on each side

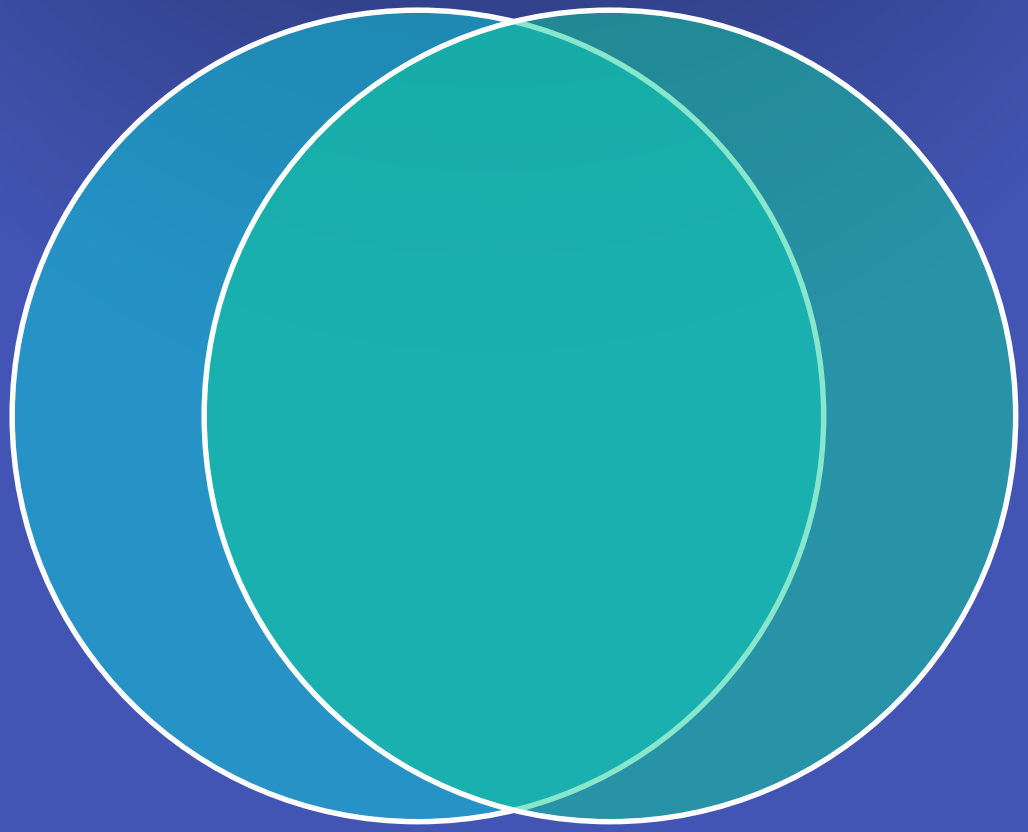
Which adjacent riparian property owners?



Which adjacent riparian property owners?

Agency information requirements

Corps information requirements



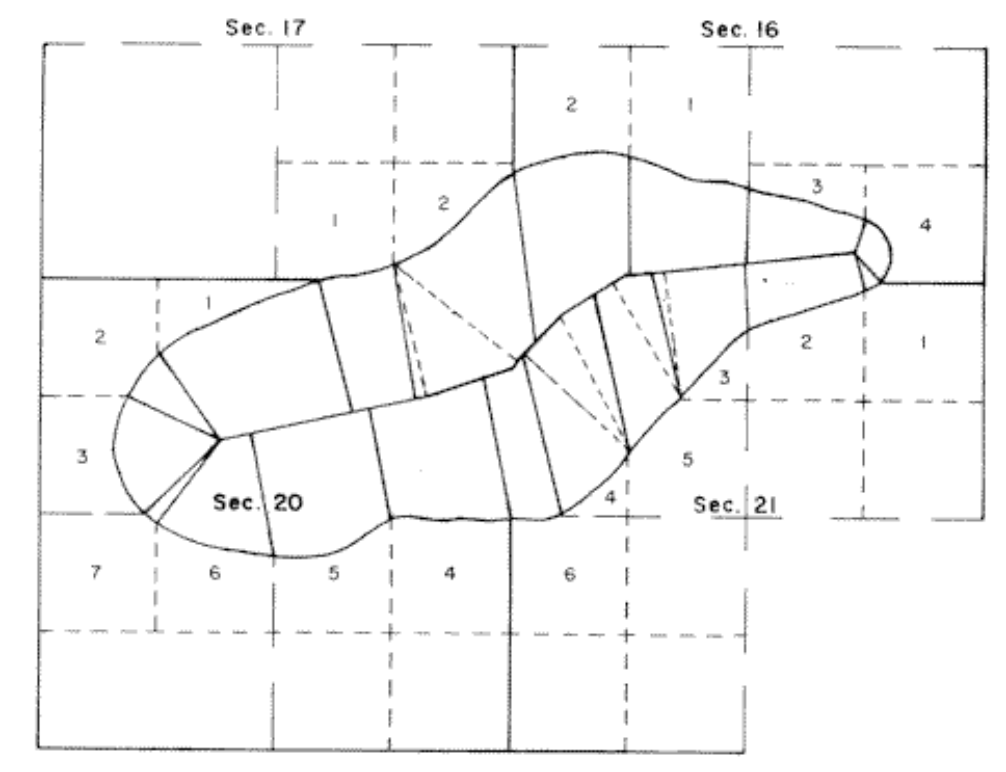
EGLE information requirements

Application requirements

- If your proposed project is on or crosses a neighboring property line, you may be required to provide…
  - A letter of authorization from your neighbor
  - An easement from your neighbor
  - A riparian interest area survey

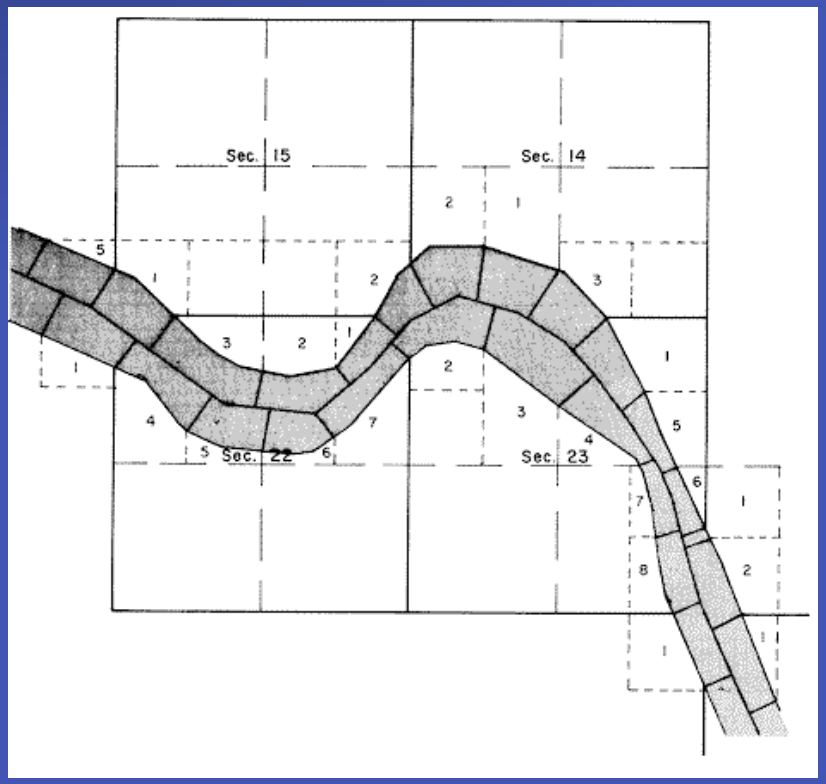
RIA surveys - Lake

- A center point or centerline is determined
- Lines are drawn from center back to land-based property lines



RIA surveys – River/Stream

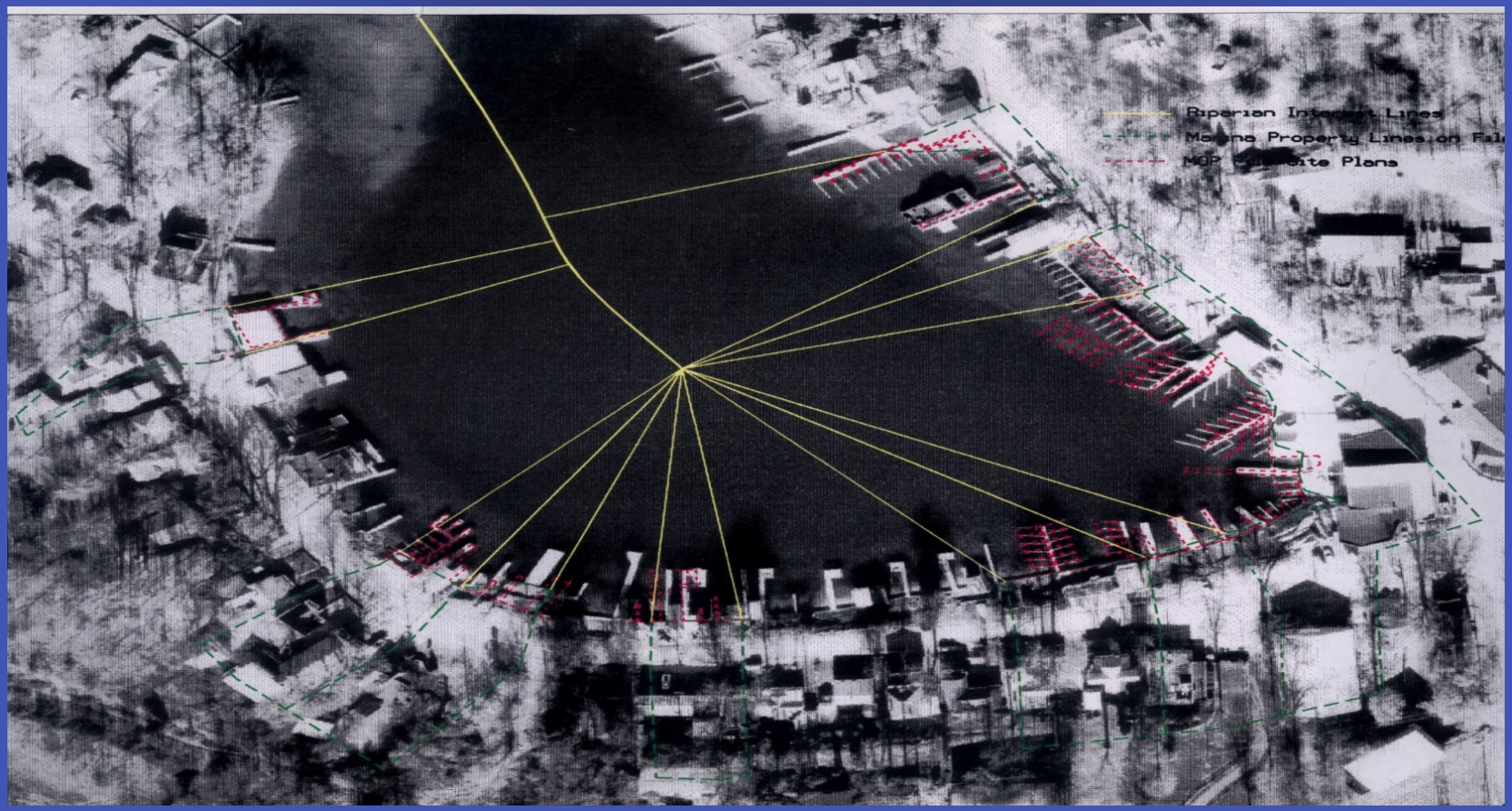
- A centerline is determined
- Lines are drawn from center back to land-based property lines



Example 1

- Structure close to property line or crossing property line

Riparian Interest Areas



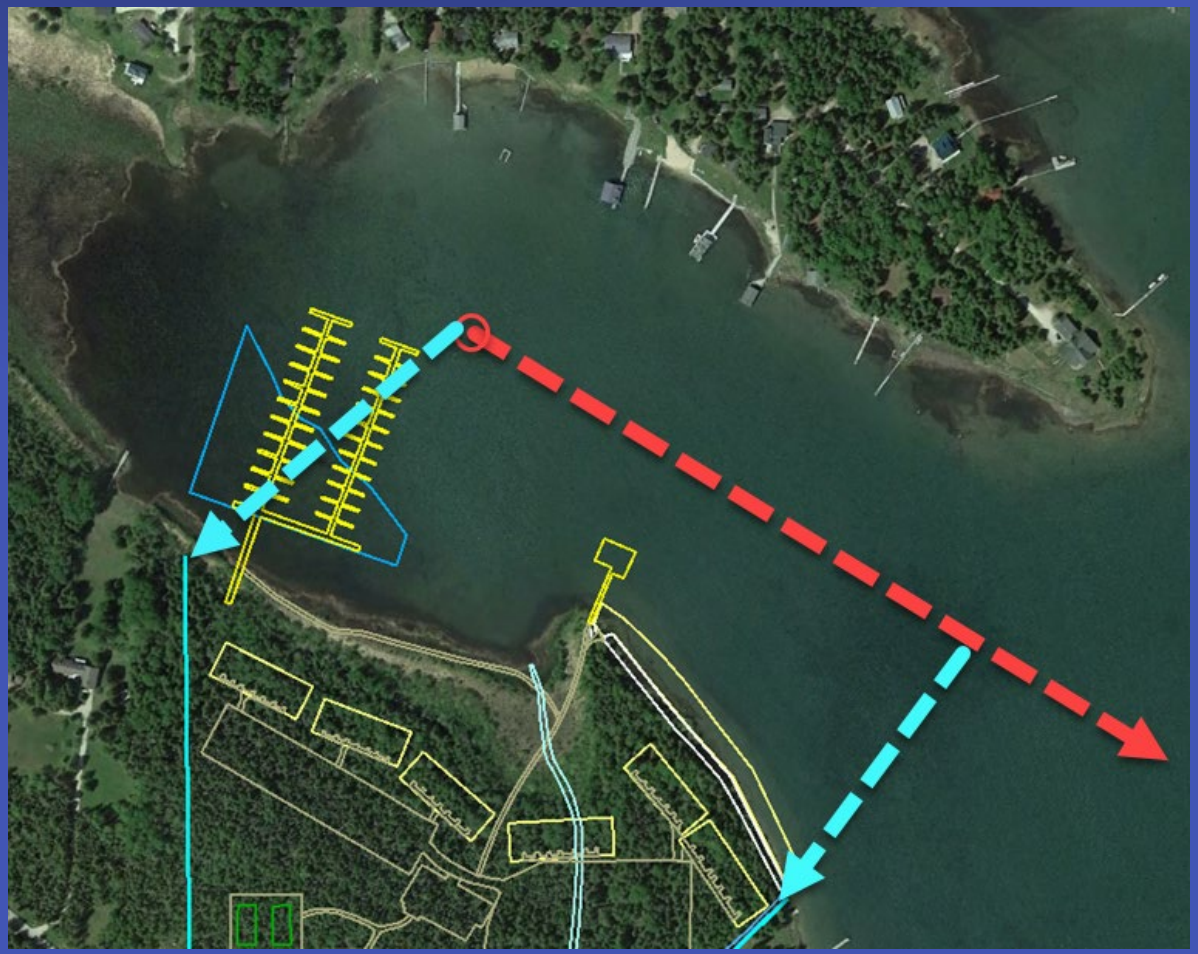
Gull Lake, Kalamazoo County

Example Project

- Applicant would need an easement from adjacent owners

OR

- Modify the project to fit within RIA



New dredge sediment testing procedure

New dredge sediment testing procedure

- This will supersede and replace previous procedure 09-018 dated March 19, 2013
- Effective date is April 13, 2018
- Link to new procedure WRD-048 on DEQ dredging projects website:
- https://www.michigan.gov/documents/deq/wrd-policy-048-sediment-testing_620980_7.pdf

New dredge sediment testing procedure

What changed?

- Change from reviewing dredge sediment test results against Part 115 Solid Waste to Part 31 Water Resources Protection
- Addition of 2 metal parameters (Chromium and Nickel)
- Addition of BOD testing requirement (potential in high organic spoils to mobilize metals to GW). This is a pore water sample test. (Check with your local lab for handling and hold times)
- WRD will no longer waive testing requirements based on final spoil placement locations, including landfill placement or restrictive covenant use

New dredge sediment testing procedure

PART 31 Screening Guidelines

Table 1. Required PAH Testing

Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(b)fluoranthene
Benzo(k)fluoranthene
Benzo(g,h,i)perylene
Benzo(a)pyrene
Chrysene
Dibenzo(a,h)anthracene
Fluoranthene
Fluorene
Indeno(1,2,3-cd)pyrene
2-Methylnaphthalene
Naphthalene
Phenanthrene
Pyrene

Table 2. Aquatic Life and Wildlife Screening Guidelines

CHEMICAL	CONCENTRATION
Metals (mg/kg)	
Arsenic*	33.00
Cadmium*	4.98
Chromium	111.00
Copper*	149.00
Lead*	128.00
Mercury*	1.06
Nickel*	48.60
Selenium**	1.90
Zinc*	459.00
PAH (ug/kg)	
Anthracene*	845
Benz(a)anthracene*	1,050
Benzo(a)pyrene*	1,450
Chrysene*	1,290
Fluorene*	536
Fluranthene*	2,230
Naphthalene*	561
Phenanthrene*	1,170
Pyrene*	1,520
Total PAH*	22,800
Total PCB (mg/kg)	0.676
Dioxin/furans as 2,3,7,8 TCDD TEQ (ug/kg)***	0.00012

What didn't change?

- Sampling requirements are largely identical:
- Testing for projects over 2,000 CY or smaller projects in areas of known/suspected contamination
- Full depth (composite) core samples
- 6 samples for 1st 10,000 CY of dredge material
- 1 sample for each additional 10,000 CY of dredge material
- Sand sieve testing remains identical to previous process

Avoidance/ minimization/ compensatory mitigation statements

- Required for any project involving **discharge** of dredged or fill material that requires **public notice**
- Not just wetland projects
- In MiWaters:
  - Project Alternatives
  - Project Compensation

Avoidance/ minimization/ mitigation statements

- Describe how impacts to Waters of the U.S. will be **avoided and minimized**.
- Describe how impacts to Waters of the U.S. will be **compensated**.
  - OR explain why compensatory mitigation should not be required for the proposed impacts.

Avoidance, Minimization, and Mitigation Statements

- Example – Driveway crossing a wetland:
  - Impacts will be minimized by **locating the driveway crossing at the narrowest part** of the wetland. A **culvert** will be placed under the fill to maintain connectivity and water flow within the wetland, and **silt fencing** will be used to prevent fill material from entering other parts of the wetland. Compensatory mitigation is not proposed because only **0.02 acre** of wetland will be impacted, and we expect minimal impact to the wetland.

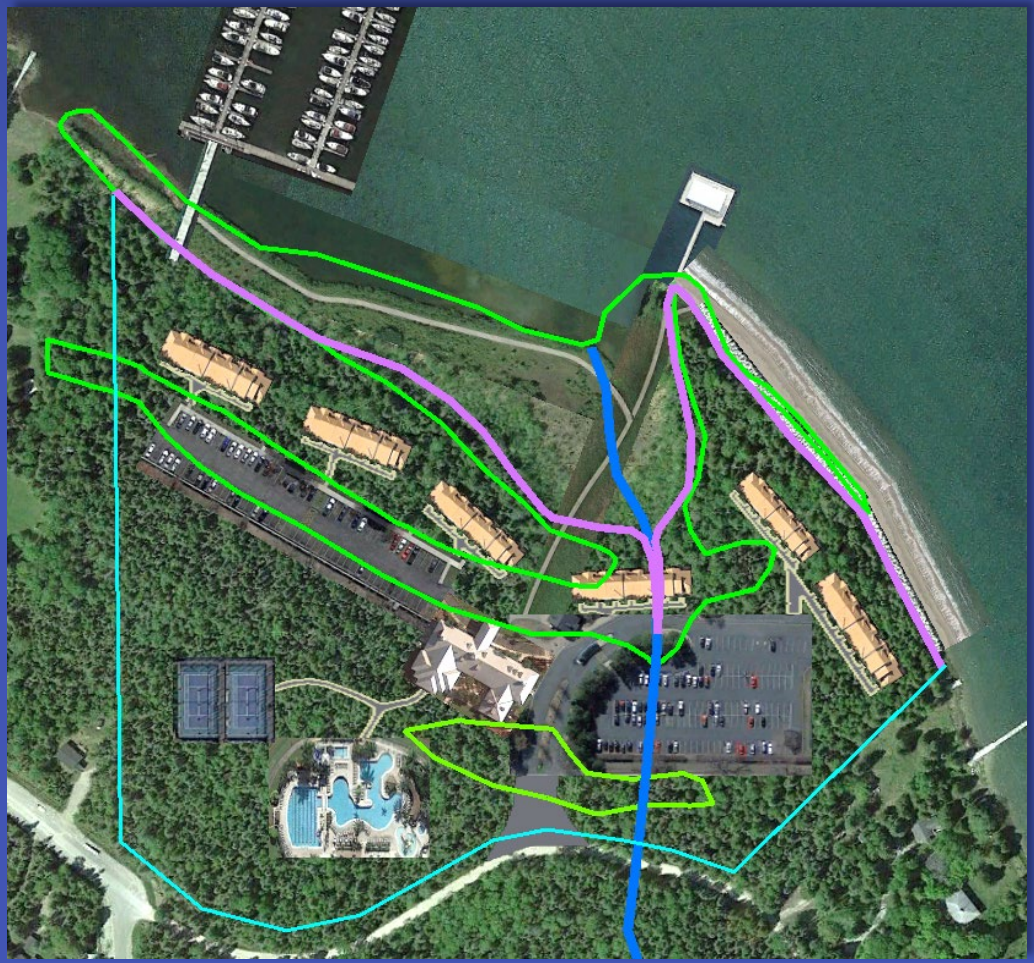
Avoidance, Minimization, and Mitigation Statements

- Example – Discharge of sand on exposed lakebed for a swim area:
  - Impacts will be minimized by limiting the discharge to **12 cubic yards placed on 0.02 acre** of lakebed, by **avoiding wetland areas**, and by using **pea stone** in the waterward part of the discharge area to minimize loss of fish spawning habitat. Compensatory mitigation is not proposed because the **impact area is limited** and **does not include wetlands**.

Avoidance, Minimization, and Mitigation Statements

- Example – Discharge of fill in wetlands for a residential development
  - Impacts will be minimized by **maximizing use of upland areas**. Other offsite locations were considered for the development, but the selected property contains the **least wetland area**. The work will affect 0.6 acres of wetland, and we propose compensatory mitigation by **restoring 2.4 acres** of former, previously filled wetland as detailed in the **attached mitigation plan**.

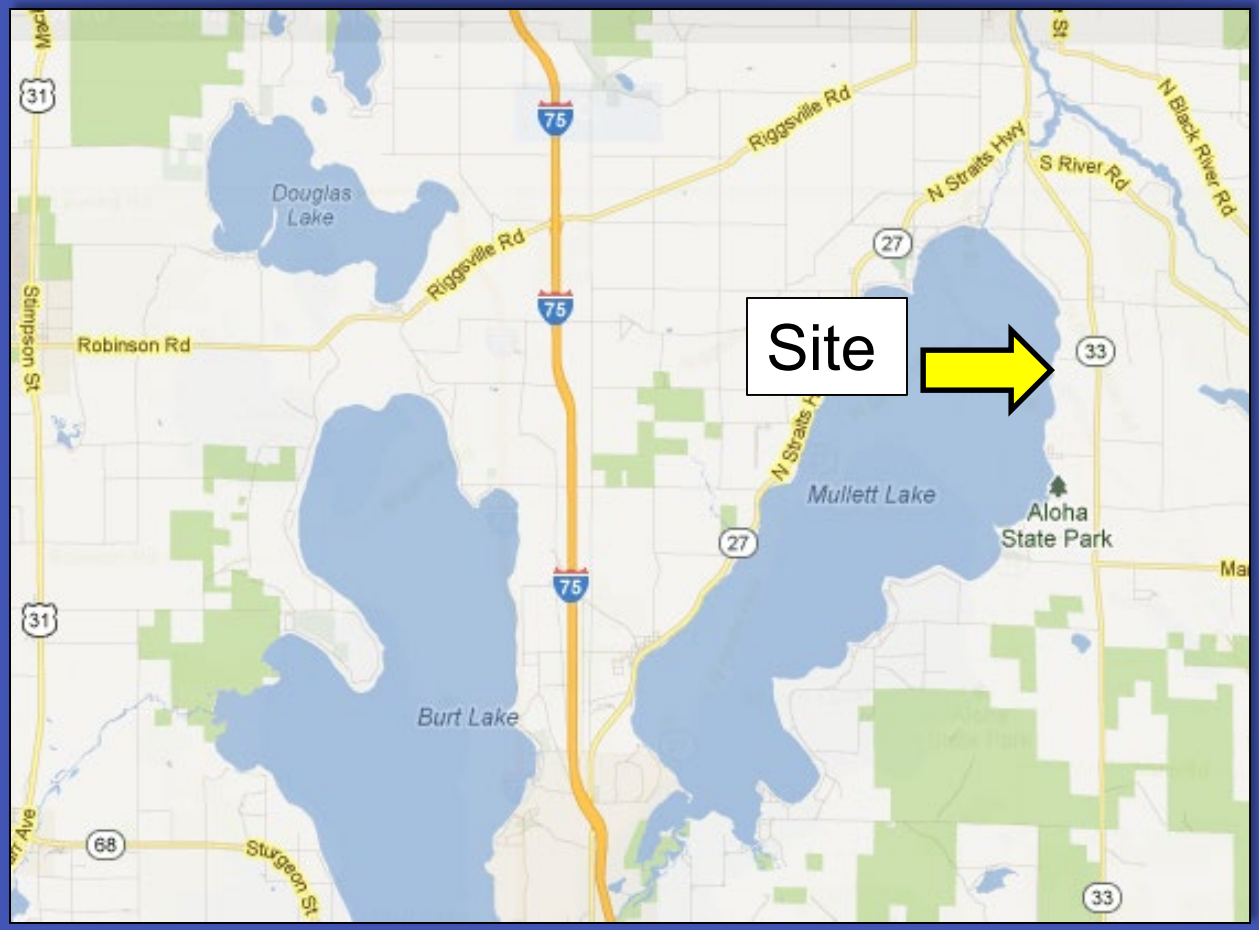
Avoidance, Minimization, and Mitigation Statements?



Project location

- Locate property on detailed map or aerial photo
- Map it accurately in MiWaters
- Locate work area within the property
- Be specific

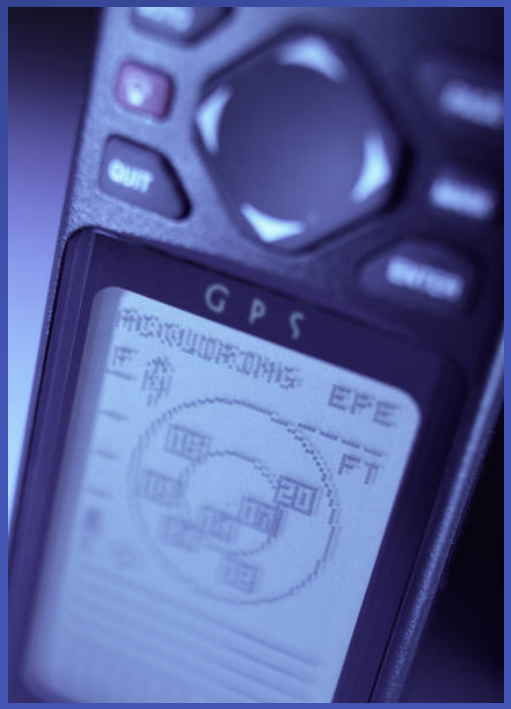
Project Location



Project Location

Project Location

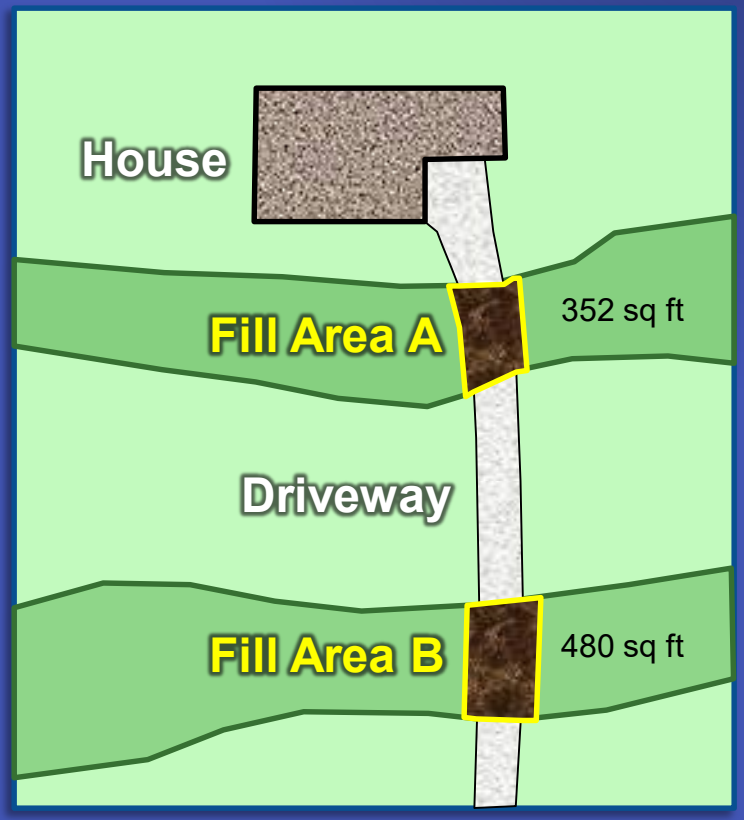
- Useful information:
  - **Coordinates**
    - **Handheld GPS point**
    - **Smartphone app**
  - Color of roof
  - “Fifth house on the left, east of Bay Street”
  - Property survey



Quantities/Dimensions

- Drawings must be **consistent** with application
- Include each dredge/fill area separately
  - Separate by type of material
- Include table or project narrative on additional sheets

Quantities and Dimensions

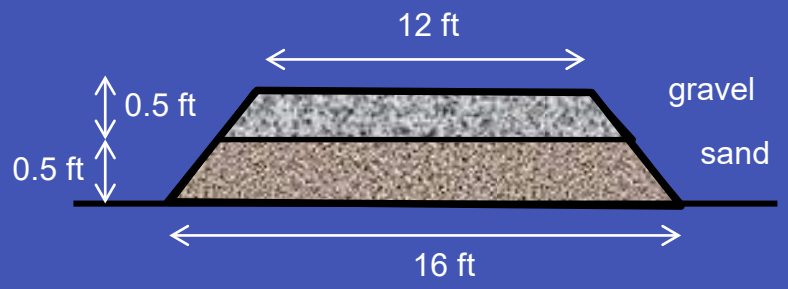


Fill Area A

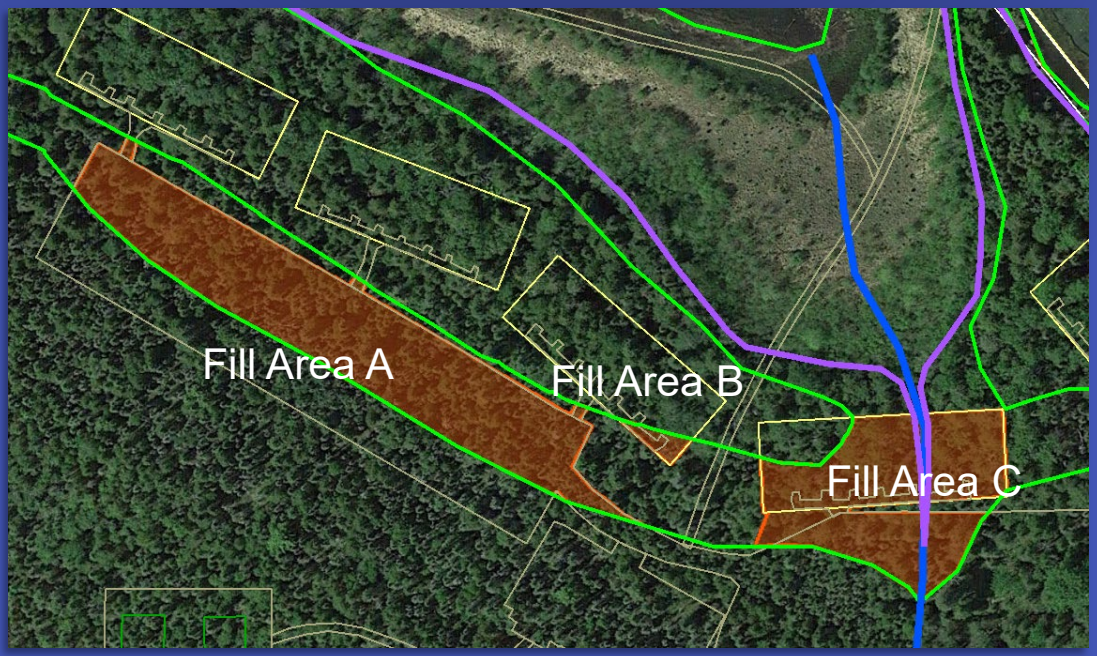
Material	Length	Width	Depth	Volume
Sand	22 ft	16 ft max 15 ft average	0.5 ft	6.1 cu yd
Gravel	22 ft	14 ft max 13 ft average	0.5 ft	5.3 cu yd

Fill Area B

Material	Length	Width	Depth	Volume
Sand	30 ft	16 ft max 15 ft average	0.5 ft	8.3 cu yd
Gravel	30 ft	14 ft max 13 ft average	0.5 ft	7.2 cu yd



Quantities and Dimensions



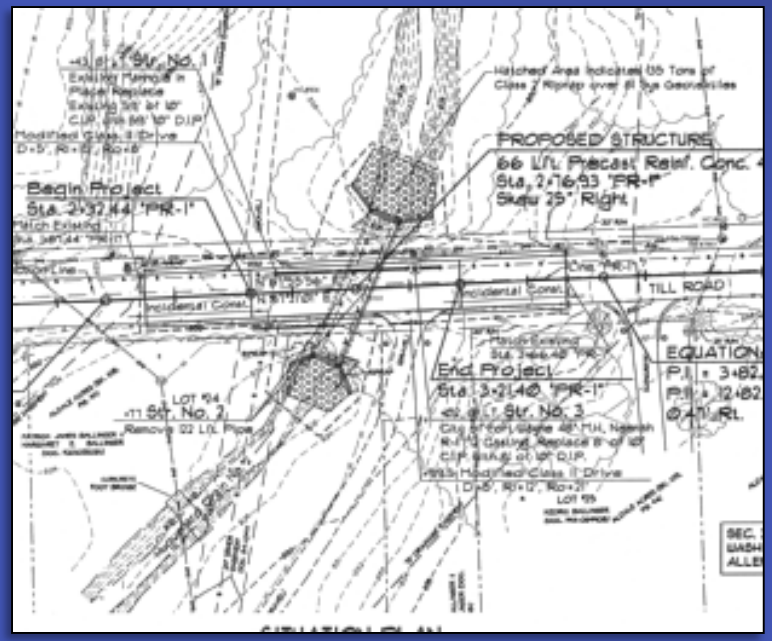
Cubic yards, not weight

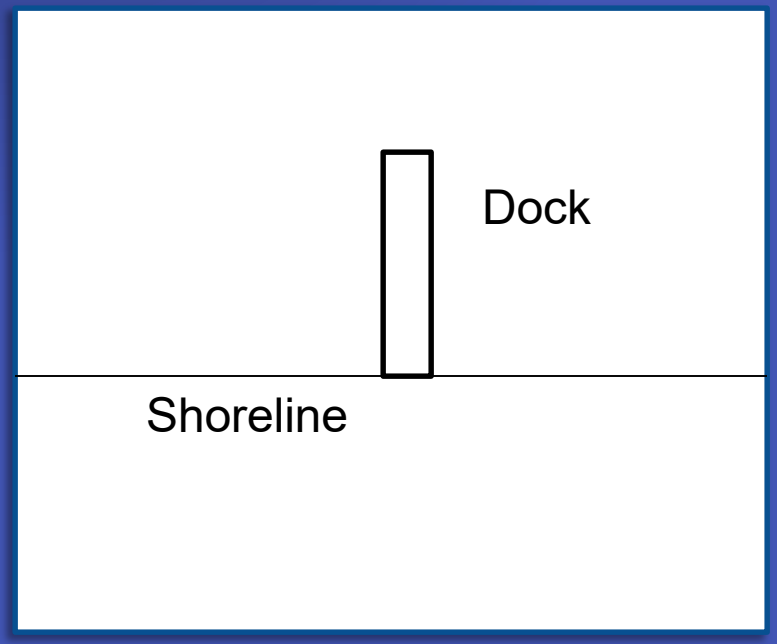
Fill area	Max length	Max width	Max depth	Square footage	Acreage	Volume of fill
A	210 ft	160 ft	3 ft	21,957 sq ft	0.50 ac	1780 cu yd
B	67 ft	25 ft	2 ft	905 sq ft	0.02 ac	44 cu yd
C	572 ft	80 ft	2 ft	35106 sq ft	0.81 ac	2210 cu yd

Project drawings

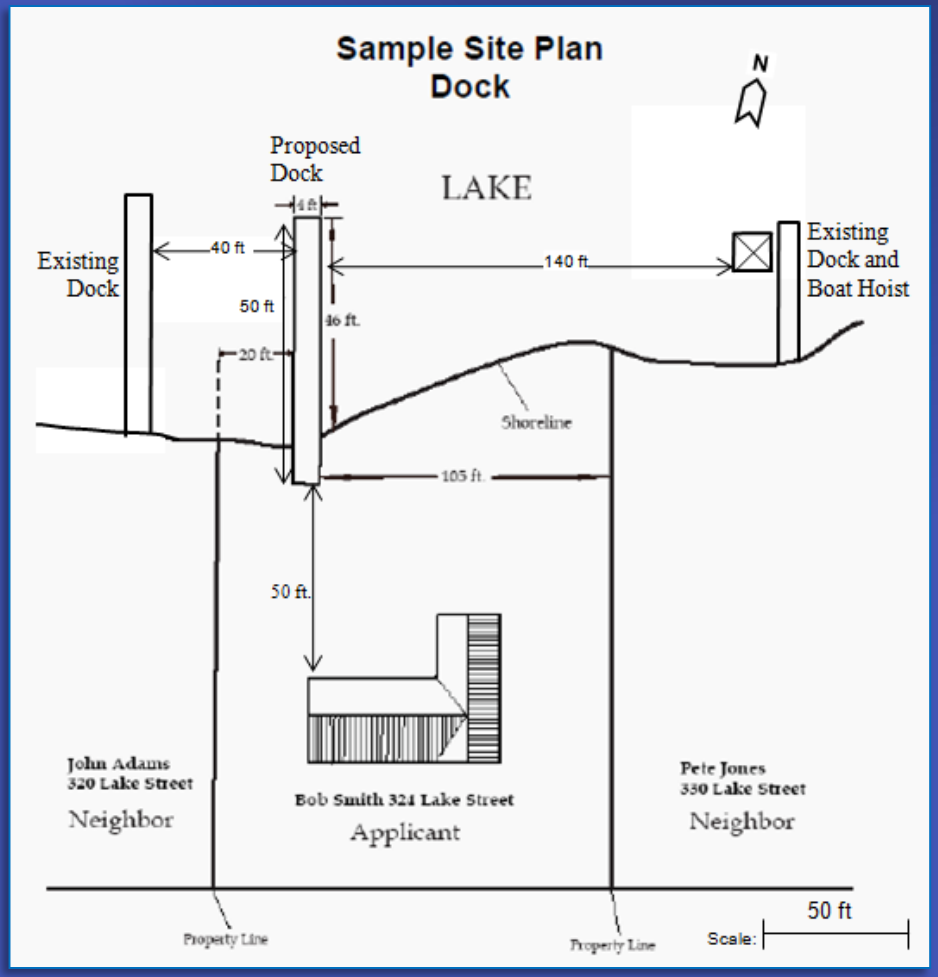
- Plan-view and cross-section
- Relevant information clear and legible
  - Even after photocopying!
- Scale drawings are best
- Show all dimensions on project drawings
  - Don’t just list them in the application form

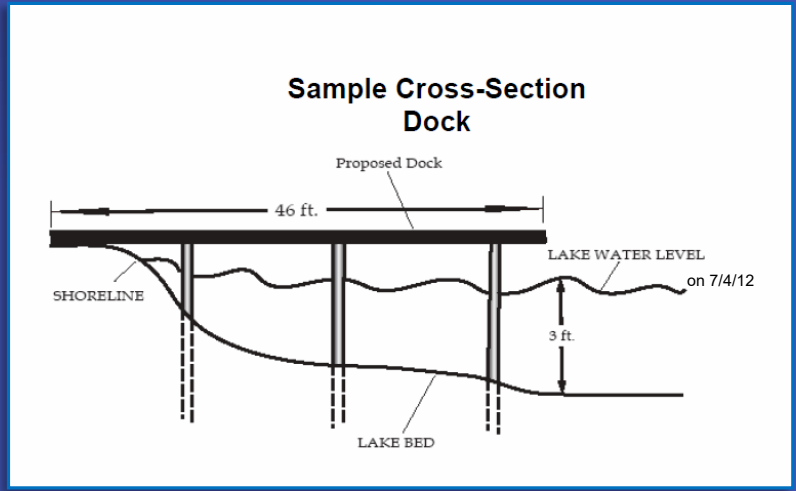
How much detail?





Example Drawings

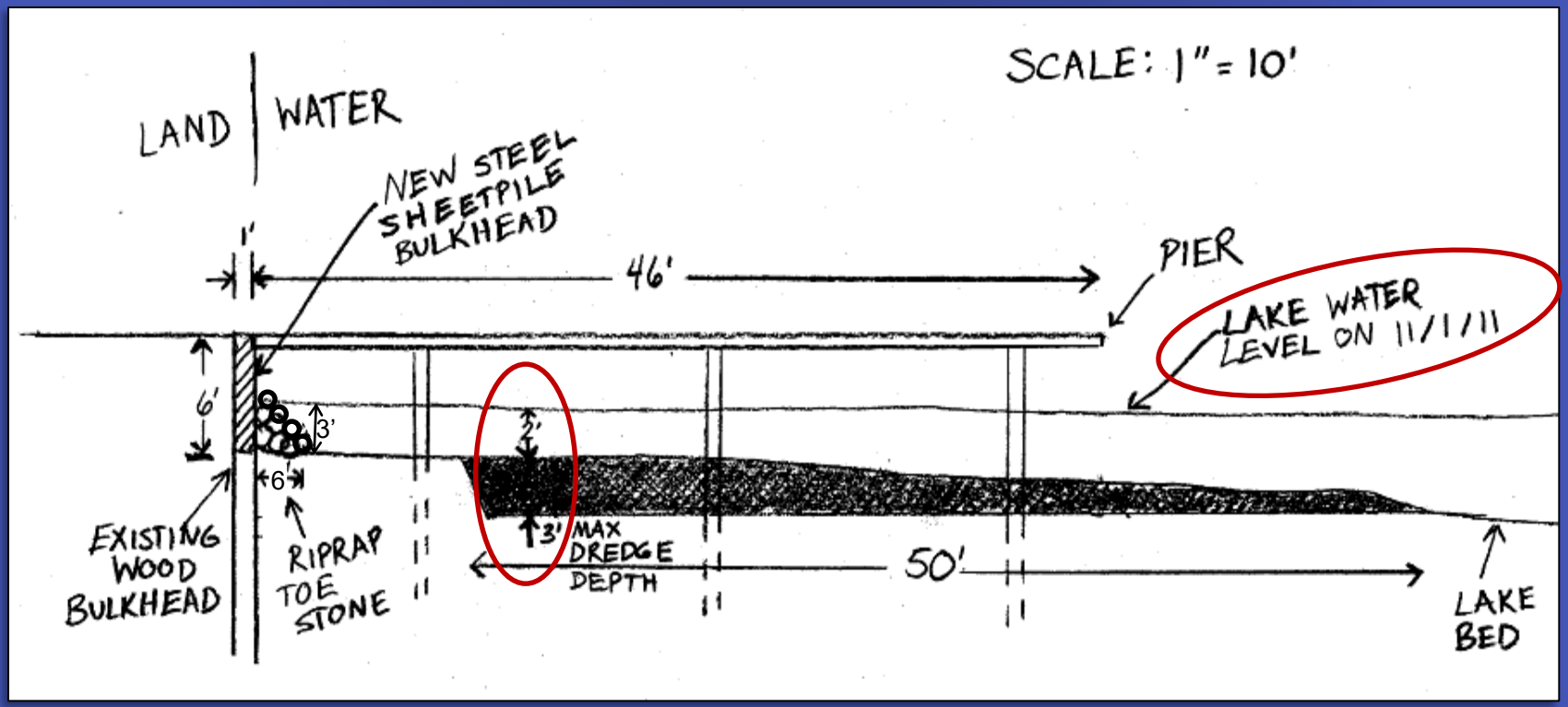




Cross-section

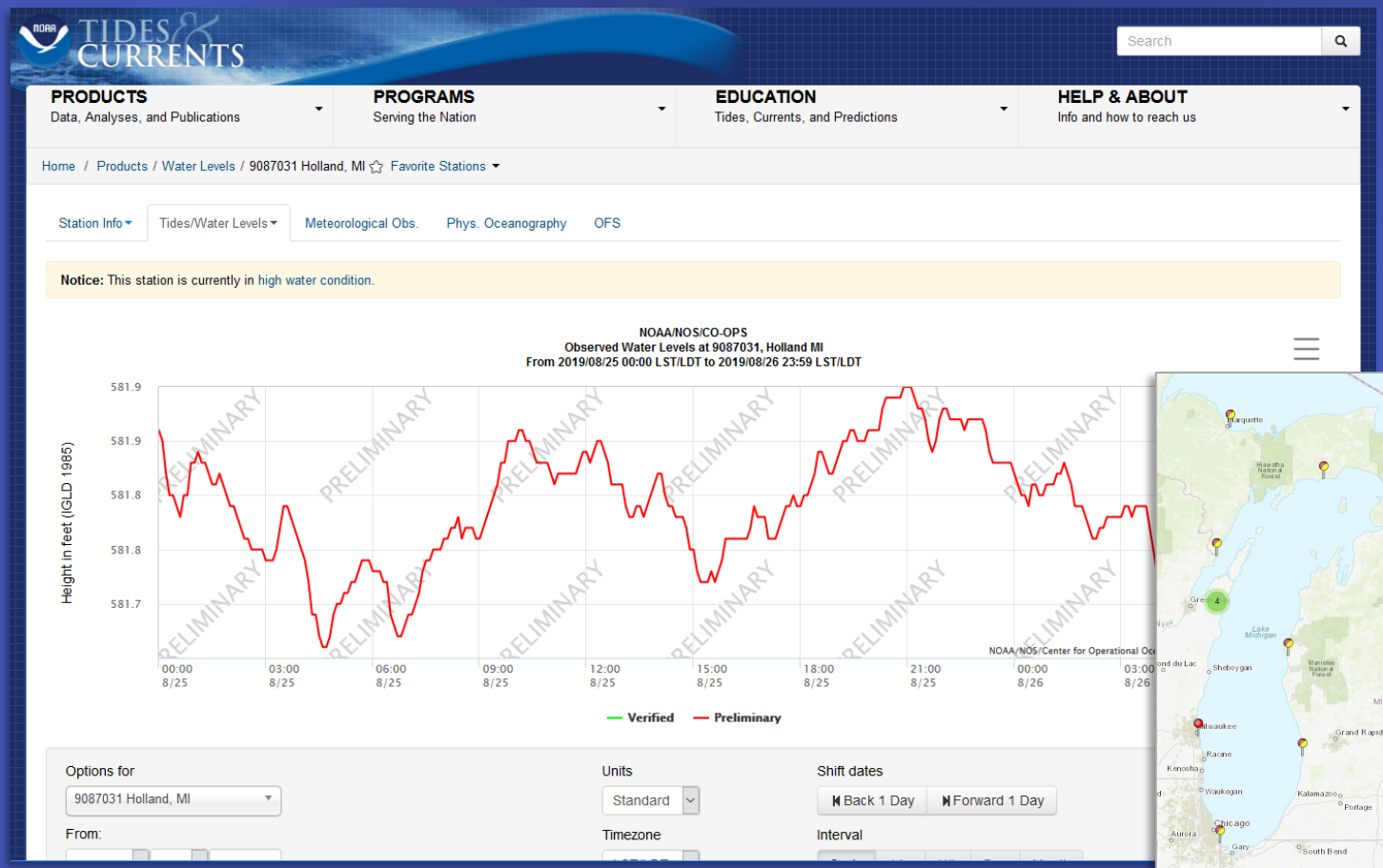
- Side view
- If possible, show EGLE and Corps Ordinary High Water Mark elevations
- Bottom elevation for dredging
- Show elevation information in relation to:
  - A **specific datum** (IGLD 1985) OR
  - The **water level** on (**date** you specify)

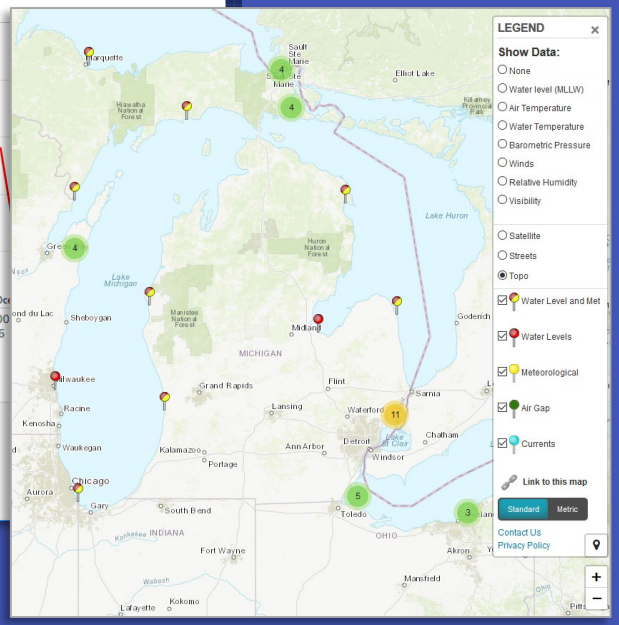
Cross-section



Proposed dredging, seawall replacement, riprap toe stone, pier

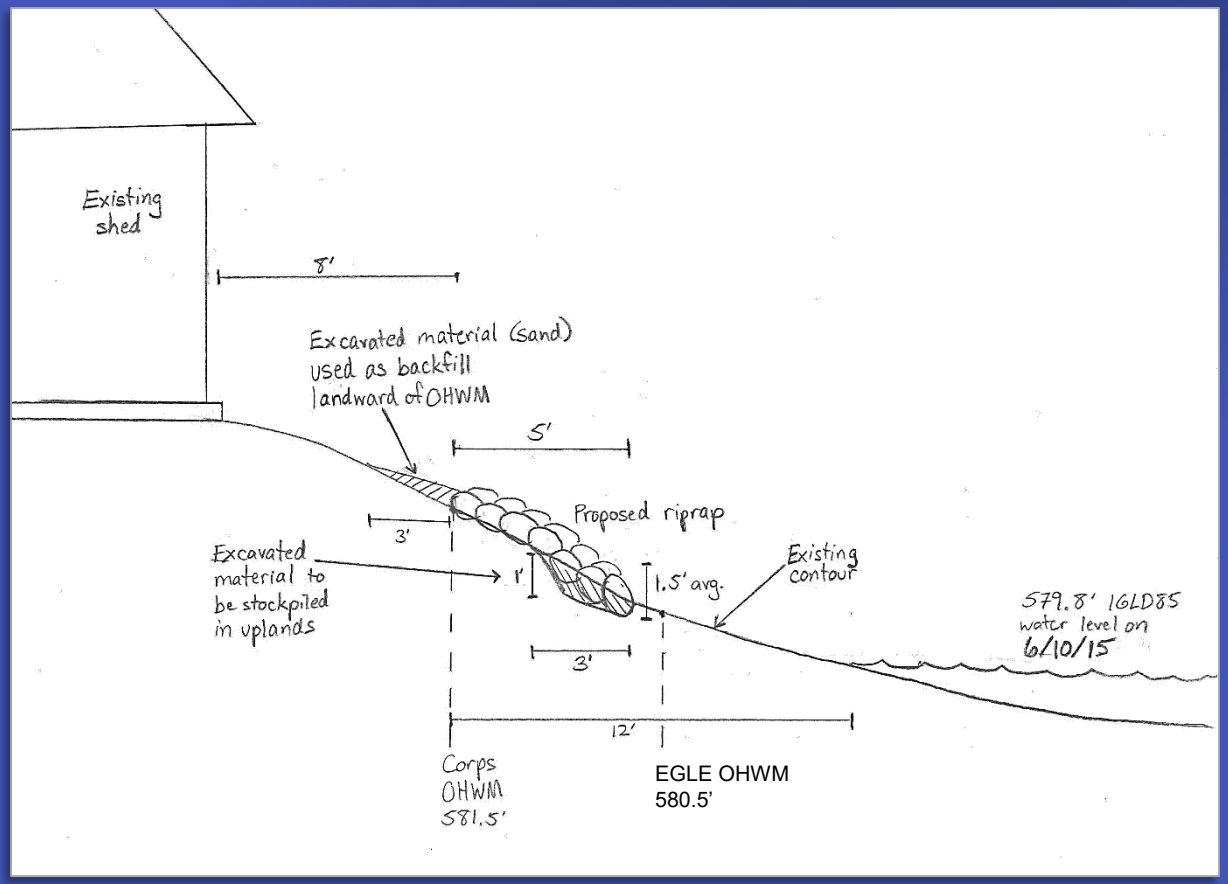
What is the current water level?





Webpage clips from:
https://tidesandcurrents.noaa.gov/stations.html

Show existing conditions



Proposed riprap shore protection

Elevation

- Surveyed elevations? Specify the datum.
- In Muskegon,

  581.5’ IGLD 85 = 581.9’ NAVD 88 = 582.4’ NGVD 29
- Using a local datum? We may request a tie-in to a known elevation.

Uncertainty in plans

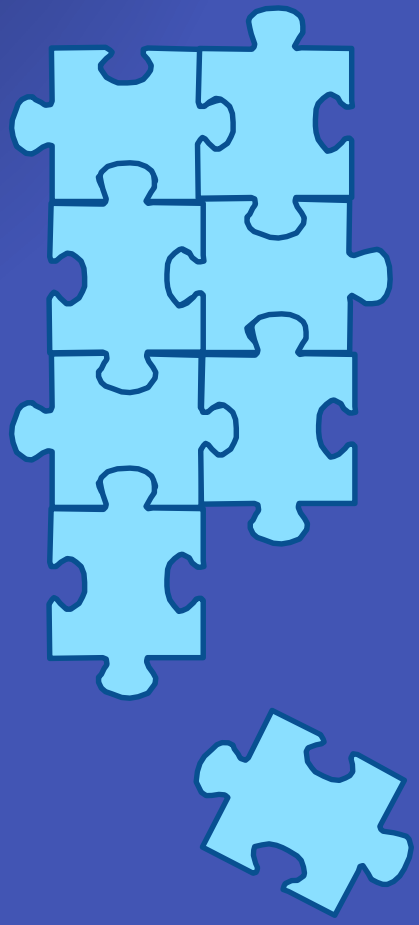
- Show maximum foreseeable impact areas
- Show alternative configurations/methods
- If plans change after permit issuance, may need to seek new permit or modification
  - Contact us

Tips on Applying

- Apply early – not last minute
- If either agency requests information, provide that information to both agencies

Permit Application Resources

- Toolbox handout
- Corps Regulatory website
  - Wetland determination resources
  - Navigable waters list
- **Your local Corps or EGLE office**
  - Jurisdictional determinations
  - Pre-application meetings



Questions?