Today's Agenda

9:00 – 10:15	Overview of Corps & EGLE Regulatory Programs, Jurisdiction
10:15 – 10:30	Break
10:30 – 11:00	Wetland Delineations & Data Sheets
11:00 – 12:00	The Complete Permit Application
12:00 – 1:00	**~ LUNCH ~**
1:00 – 2:00	MiWaters
2:00 – 3:00	Permit Coordination & Evaluation
3:00 – 3:15	Break
3:15 – 4:15	Mitigation

Regulatory Overview

Regulatory Project Managers

Corps Detroit District Regulatory Office

EGLE Grand Rapids District Office

August 28, 2019

US Army Corps of Engineers
BUILDING STRONG®

Michigan Department of Environment, Great Lakes, and Energy

Overview

- **Corps - Authorities & Jurisdictional Waters**
- EGLE Water Resources Regulations
- Activity Jurisdiction
- Geographic Jurisdiction
- Example Project

Detroit District

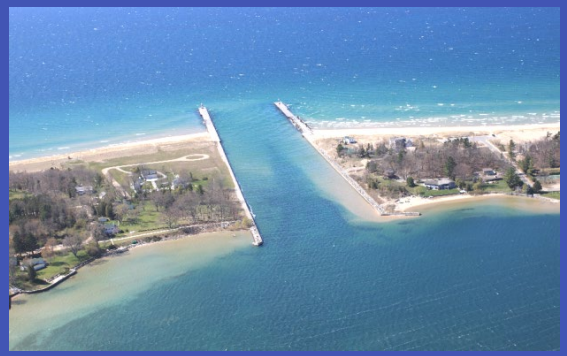
Mission: We serve the Nation by delivering world-class engineering and construction for –

- Economic Vitality (Great Lakes Navigation)
- National Security
- Water Resources Management
- Environmental Sustainability
- Emergency Assistance

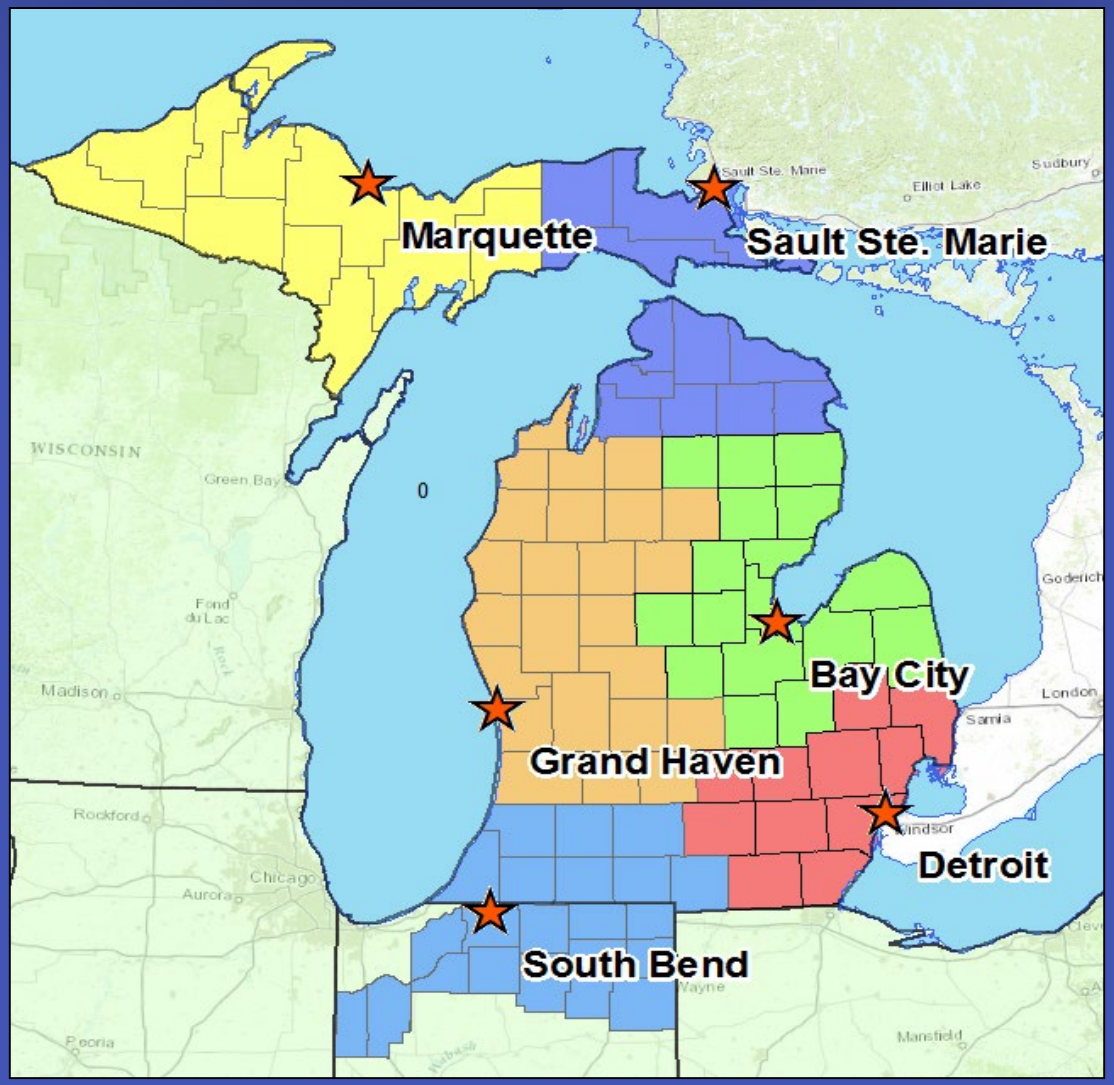
- 95 Navigation projects
- 99 miles of structures
- 611 miles of channels
- 3,200 miles of coastline

Detroit District: Primary Missions

- Navigation/Hydropower
- Environmental Initiatives
- Flood Risk Management
- Emergency Management
- Recreation
- International & Interagency Support
- Military Construction
- Regulatory Program

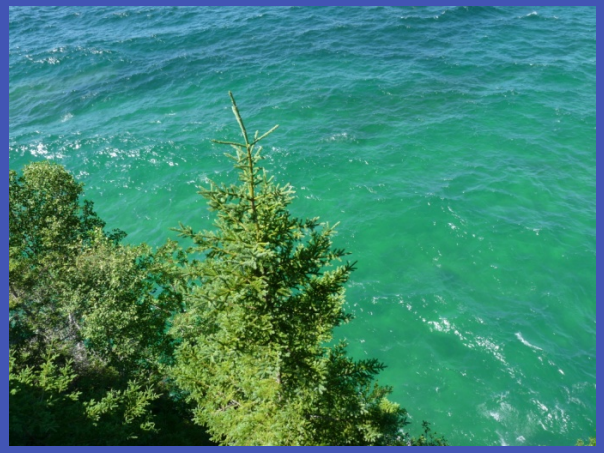


Regulatory Field Offices



Regulatory Program Mission

To provide strong protection of the Nation's aquatic environment. This will be accomplished through: coordination with agencies and the public; fair, reasonable, and timely decisions; accurate and timely jurisdiction determinations; and monitoring, compliance, and enforcement of permit laws, regulations and policies.



Regulatory Authorities

Section 10
Rivers and Harbors Act of 1899

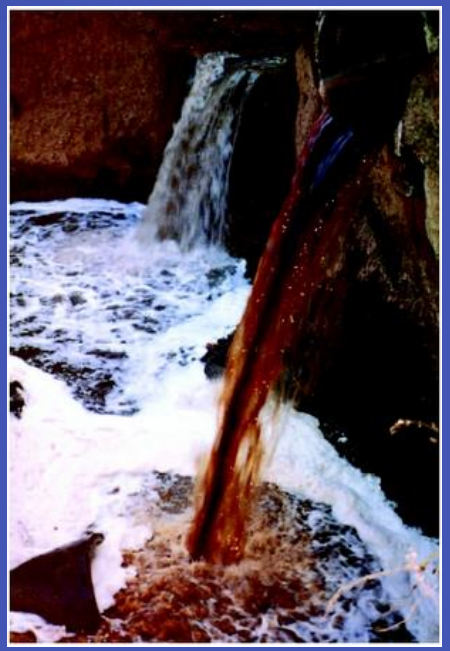
- Navigable waters of the U.S.
- Structures and work

Section 404
Clean Water Act

- Waters of the U.S., including wetlands
- Discharge of dredged or fill material

Section 10 of the Rivers and Harbors Act of 1899

Section 404 of the Clean Water Act



Overview

- Corps Program & Jurisdictional Waters
- **EGLE Water Resources Regulations**
- Activity Jurisdiction
- Geographic Jurisdiction (USACE & EGLE)
- Example Project

Mission Statement

The Michigan Department of Environment. Great Lakes and Energy mission is to protect Michigan's environment and public health by managing air, water, land, and energy resources .

Land and Water Management Programs

Since the mid-1970's, special resources that exist at the interface between land and water have been protected by programs in the Division

These programs are based on several state laws enacted between 1955 and 1989 which are now codified as the following parts of the Natural Resources and Environmental Protection Act (NREPA):

Part 31 – Floodplain Management

Part 301 – Inland Lakes and Streams

Part 303 – Wetlands Protection

Part 323 – Shorelands Protection and Management

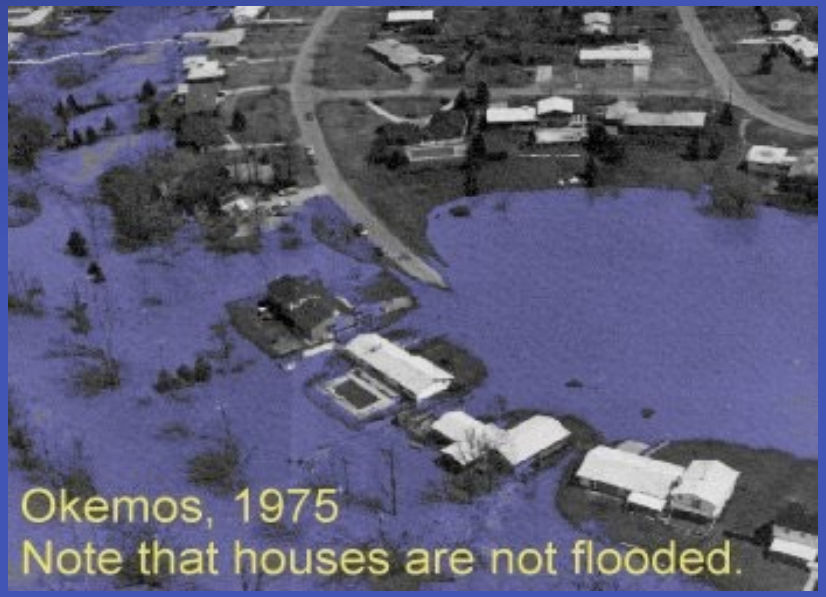
Part 325 – Great Lakes Submerged Lands

In conjunction with these programs, the Division also administers the following parts of NREPA:

- Part 35 – Use of Water in Mining Low-Grade Ore
- Part 307 – Inland Lake Levels
- Part 311 – Local River Management
- Part 313 – Surplus Waters
- Part 315 – Dam Safety
- Part 326 – Great Lakes Submerged Logs Recovery
- Part 339 – Control of Certain State Lands
- Part 341 – Irrigation Districts
- Part 353 – Sand Dune Protection and Management
- Part 761 – Aboriginal Records and Antiquities

Part 31, Water Resources Protection (Floodplain Regulatory Authority)

Reduces property damage caused by flooding through regulation of activities in floodways and floodplains



Regulated activities:

Any occupation, filling, or grade changes within floodplain.

Part 301, Inland Lakes and Streams

Protects inland waters by regulating work in inland lakes and streams

Michigan has over 36,000 miles of streams, and more than 11,000 lakes and ponds, providing fish and wildlife habitat, and recreational opportunities

Part 301 Regulated Activities

- Dredge or fill bottomland
- Construct, enlarge, extend, remove, or place a structure on bottomland
- Construct, reconfigure, or expand a marina
- Create, enlarge, or diminish an inland lake or stream
- Structurally interfere with the natural flow of an inland lake or stream
- Construct an artificial waterway that ultimately connects to or is within 500 feet of the OHWM of an existing inland lake or stream
- Connect any natural or artificial water with an existing inland lake or stream

Part 303, Wetlands Protection

Protects wetland functions and values by requiring permits for activities within **regulated** wetlands.

Part 303 Regulated Activities

- Deposit or place fill material in a wetland
- Dredge or remove soil or minerals from a wetland
- Construct, operate, or maintain any use or development within a wetland
- Drain surface water from a wetland

Part 323, Shorelands Protection and Management

Identifies high-risk erosion areas along the Great Lakes shoreline and regulates construction in these areas

Regulated activities:

Erect, install, move, or enlarge a permanent structure on a parcel of property, any portion of which is designated as a high-risk erosion area

Part 353, Sand Dune Protection and Management

Protects Critical Dune Areas

- In 1989, the Dune law was amended to include residential, commercial and industrial development in designated critical dunes; this law is now Part 353
- 70,000 acres were designated as Critical Dune Areas (CDA)

Part 353, Sand Dune Protection and Management

Protects Critical Dune Areas

Regulated activities:

Any developmental, silvicultural, or recreational activity that significantly alters the physical characteristic of a critical dune area or a contour change

Site #4.

Site #6.

Special exception:

Proposed contour changes to a grade that is steeper than 33%

Part 325,
Great Lakes Submerged Lands

Protects the public trust, riparian rights, and the environment

There is approximately 3,288 miles of Great Lakes shoreline in Michigan

Part 325 Regulated Activities

- Dredging
- Connecting a canal, ditch, lagoon, or similar waterway to the Great Lakes or Lake St. Clair

- Filling or construction on bottomlands
- Construction or expansion of marinas
- Removal of shoreline vegetation

Overview

- Corps Program & Jurisdictional Waters
- EGLE Water Resources Regulations
- **Activity Jurisdiction**
- Geographic Jurisdiction (USACE & EGLE)
- Example Project

Examples of activities that require a Corps and EGLE Permit

Docks, boat houses

Examples of activities that require a Corps and EGLE Permit

Walkways/paths

Examples of activities that require a Corps and EGLE Permit

In wetlands

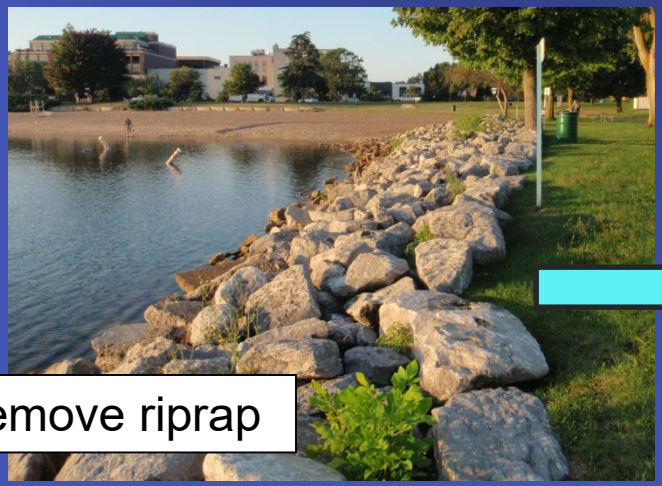
In waterways

Placement of fill

Examples of activities that require a Corps and EGLE Permit

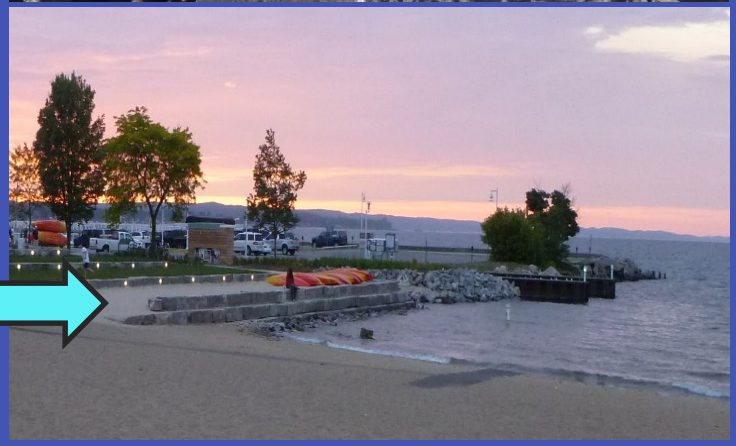
Culverts

Examples of activities that require a Corps and EGLE Permit



Remove riprap

Place stone



Examples of activities that require a Corps and EGLE Permit

Marinas, Breakwaters

Examples of activities that require a Corps and EGLE Permit

Mooring buoys

Examples of activities that require a Corps and EGLE Permit

Dredging

Examples of activities that require a Corps and EGLE Permit

Placement of sand, grooming

Examples of activities that require a Corps and EGLE Permit

Riprap, Stairs

Examples of activities that require a Corps and EGLE Permit

Seawalls and backfill

Examples of activities that require a Corps and EGLE Permit

Temporary construction measures

Examples of activities that require ONLY a Corps Permit

Seasonal structures

- Docks
- Boat hoists

State exemption

- Private
- Non-commercial
- Removed annually
- Does not impede use of water
- Does not impede flow

Examples of activities that require ONLY a EGLE permit

Regulated activities in:

- Inland lakes or streams (that are not Section 10 waters)
- Regulated wetlands not adjacent to Section 10 waters
- High Risk Erosion Areas
- Floodplains

Overview

- Corps Program & Jurisdictional Waters
- EGLE Water Resources Regulations
- Activity Jurisdiction
- **Geographic Jurisdiction (USACE & EGLE)**
- Example Project

Navigable Waters of the U.S.

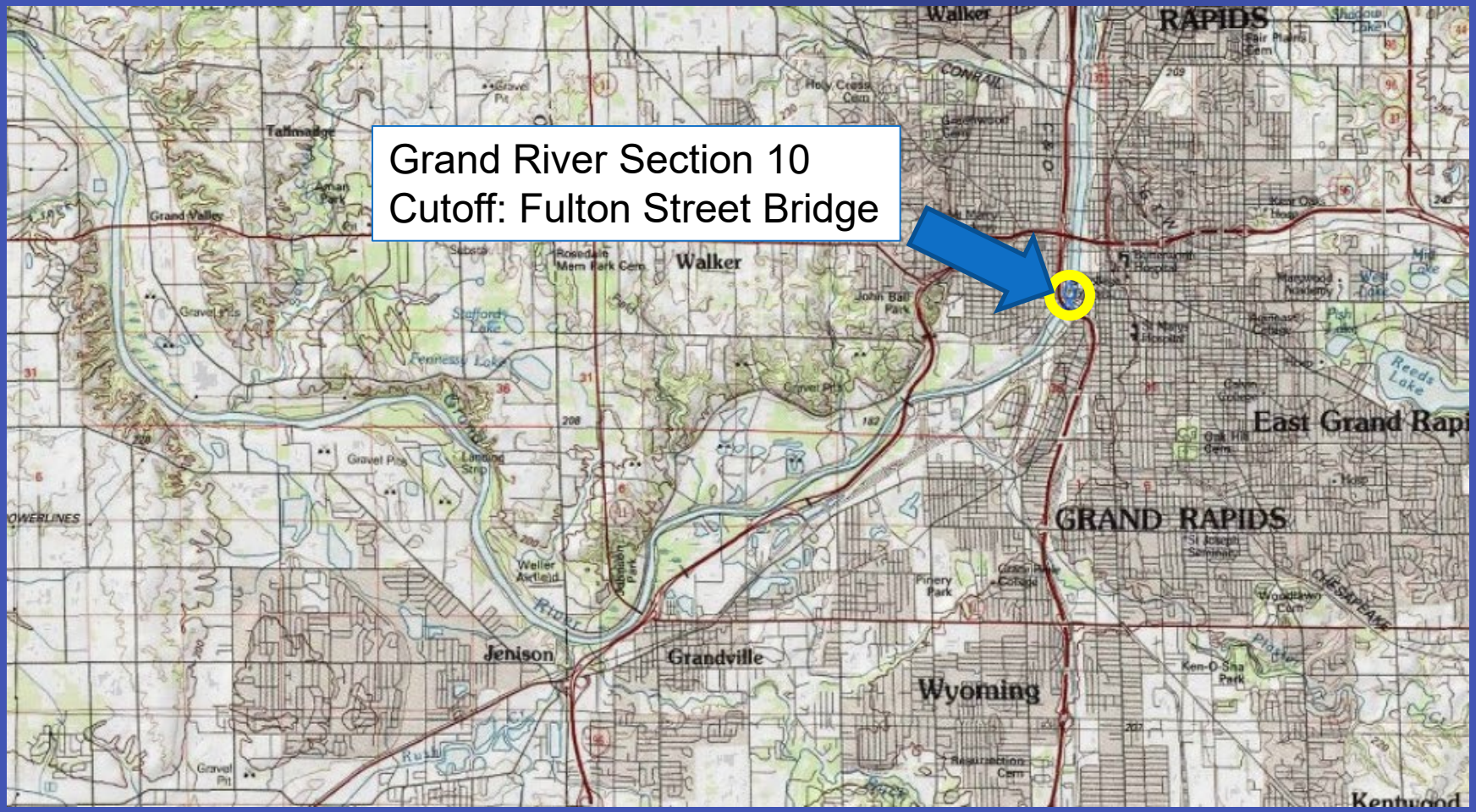
Navigable Waters of the United States are those waters that are subject to the ebb and flow of the tide and/or

<u>are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce</u> (33 CFR Part 329).

Navigable Waters

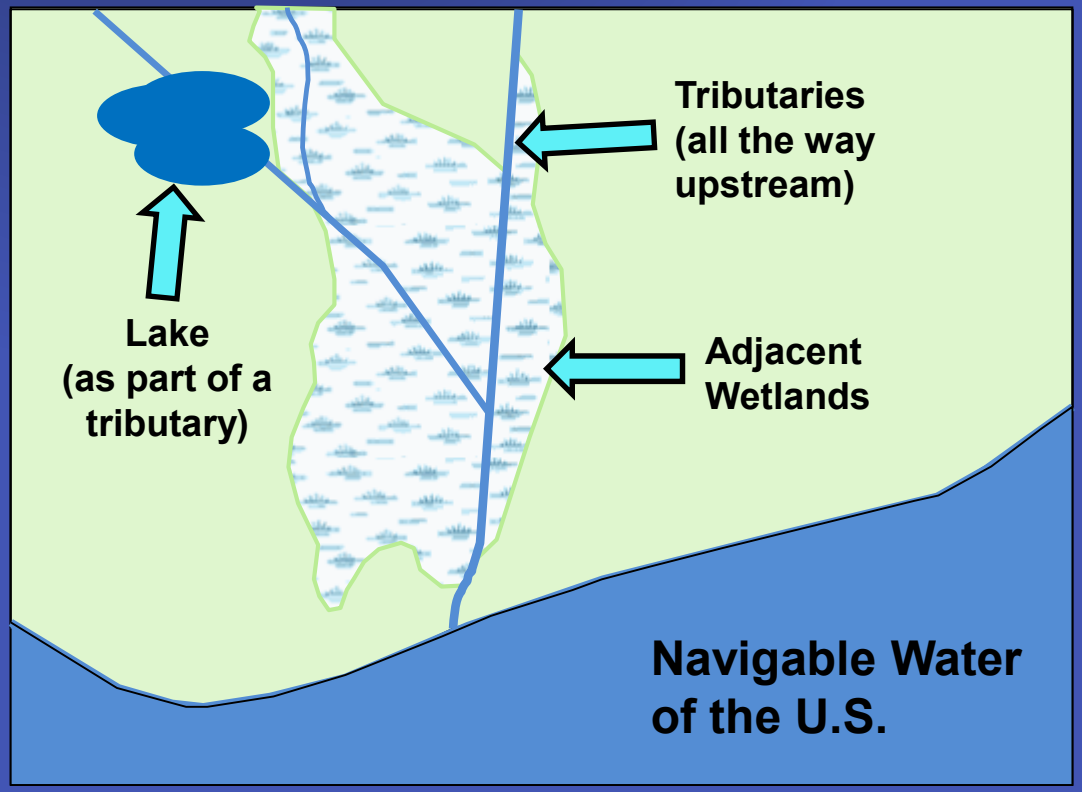
- Navigable waters of the United States are those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. A determination of navigability, once made, applies laterally over the entire surface of the waterbody, and is not extinguished by later actions or events which impede or destroy navigable capacity.

Section 10 Limits of Navigability



Section 404
Corps Waters of the U.S.

- Navigable waters of the U.S.
- Tributaries to Navigable Waters of the U.S.
- Wetlands adjacent to waters listed above
- All interstate waters including interstate wetlands.



Sections 10 and 404 Jurisdiction

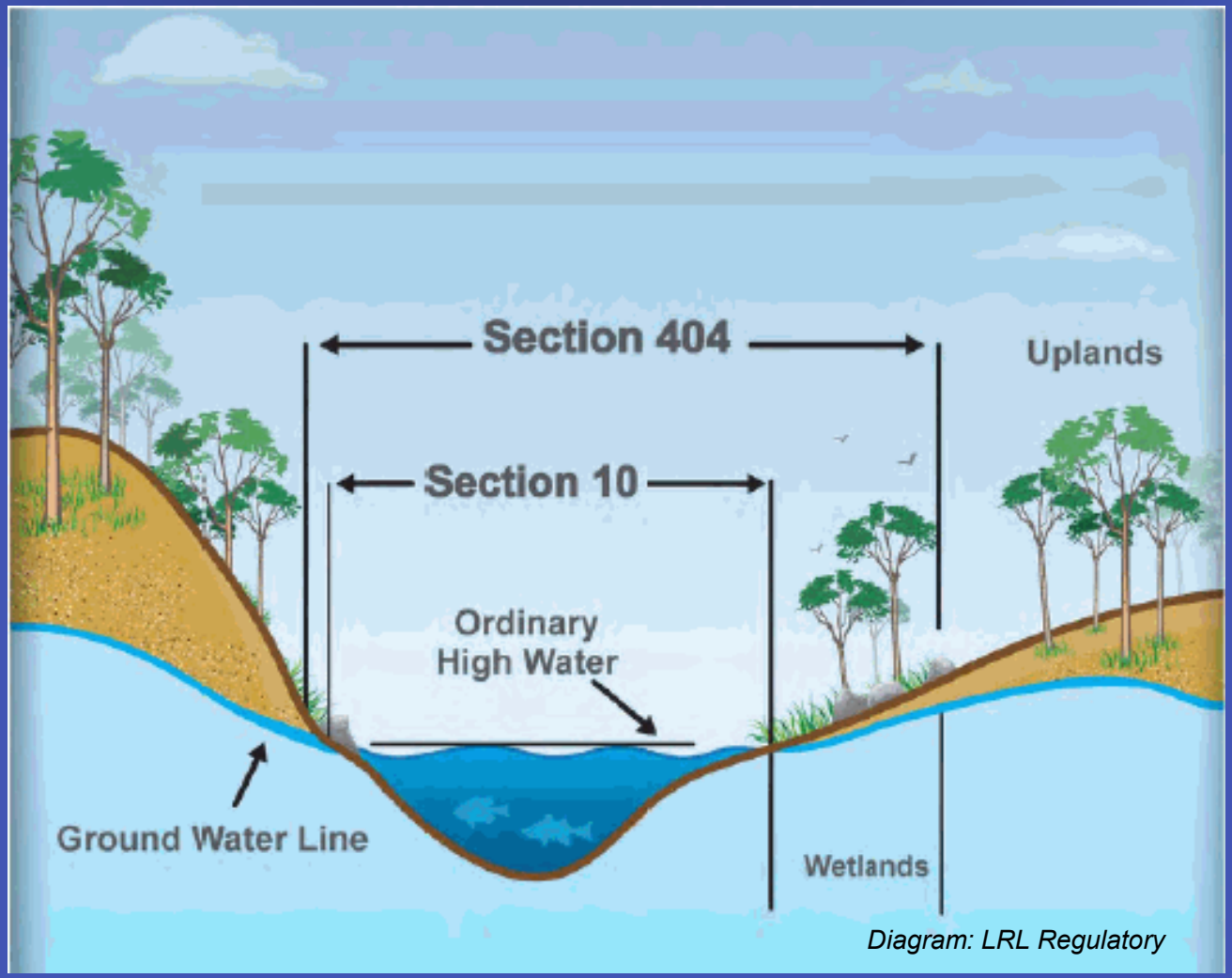


Diagram: LRL Regulatory

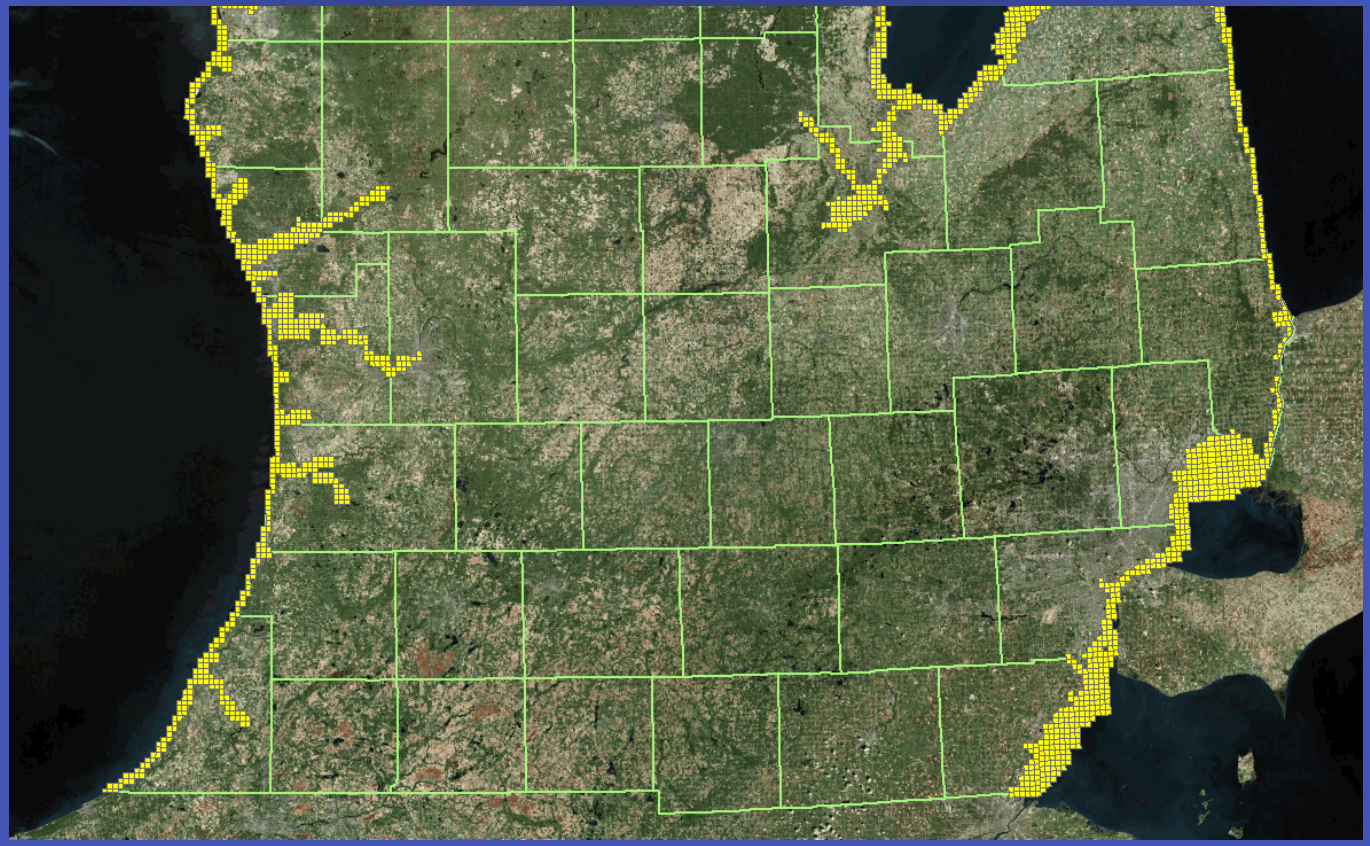
Section 404 Program in Michigan

Operates under a Memorandum of Agreement with the USEPA that defines the federal and state roles in the program

- Administered under Michigan law: Parts 301 and 303 of the NREPA
- Policies and procedures specific to state needs
- Some projects require EPA review

USACE retains jurisdiction over Section 10 waters and adjacent wetlands

Navigable Waters and Adjacent Wetlands



Corps Jurisdiction Determination (JD) Options

- When either activity jurisdiction or geographic jurisdiction is in doubt – give us a call
- Have conversation with your project manager for your site specific situation

No JD Option

- Default practice in State of Michigan is the No JD option
  - No JD does NOT mean the Corps does not have jurisdiction
  - Good option when jurisdictional questions may not arise
  - Requires less documentation

Corps JD Options

Preliminary JD

- Advisory in nature
- May shorten the processing time
- Not appealable

Approved JD

- Official Corps determination
- May take longer
- Must have legal access to the property
- Appealable (33 CFR Part 331)
- Valid for 5 years

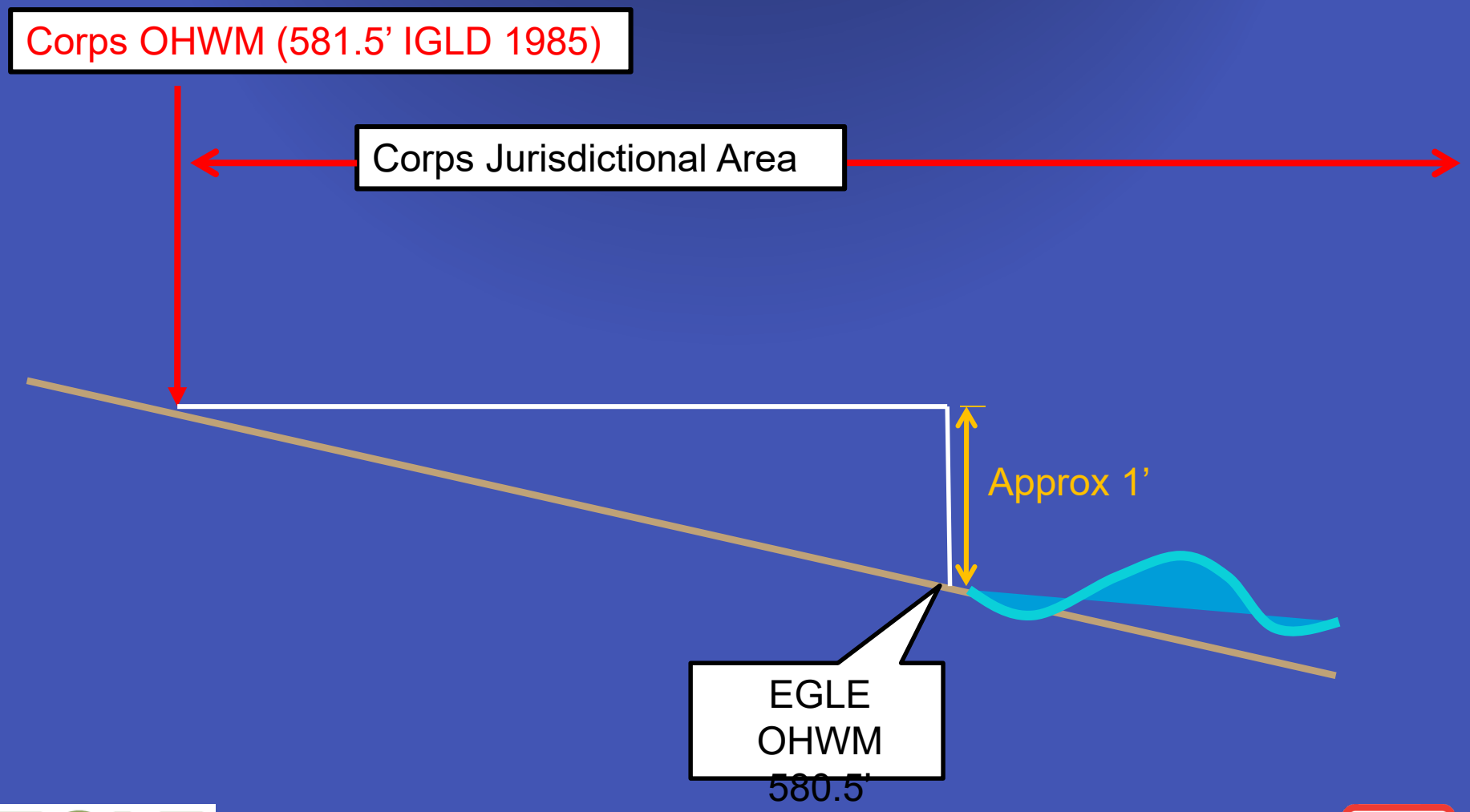
Ordinary High Water Mark
(OHWM)

- Jurisdictional limit for waterways
- Physical characteristics of the shoreline
  - Typically determined by a site visit
- OHWM by elevation on the Great Lakes
  - Used when OHWM can not be clearly determined by physical characteristics

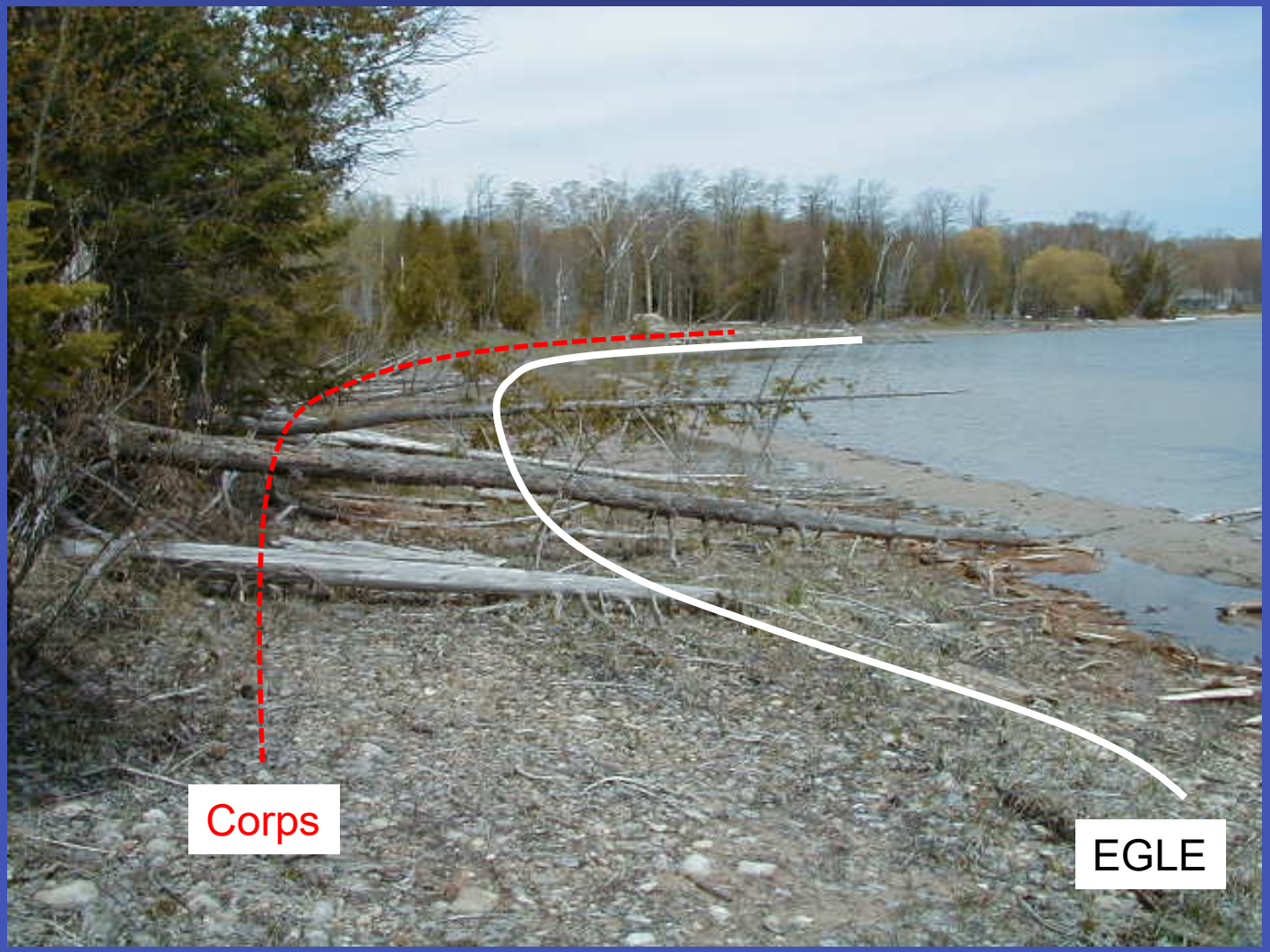
Corps & EGLE OHWMs IGLD 1985

	Corps	EGLE
Lake Superior	603.1’	602.6’
Lake Michigan/Huron	581.5’	580.5’
Lake St. Clair	576.3’	575.3’
Lake Erie	573.4’	572.2’

OHWM

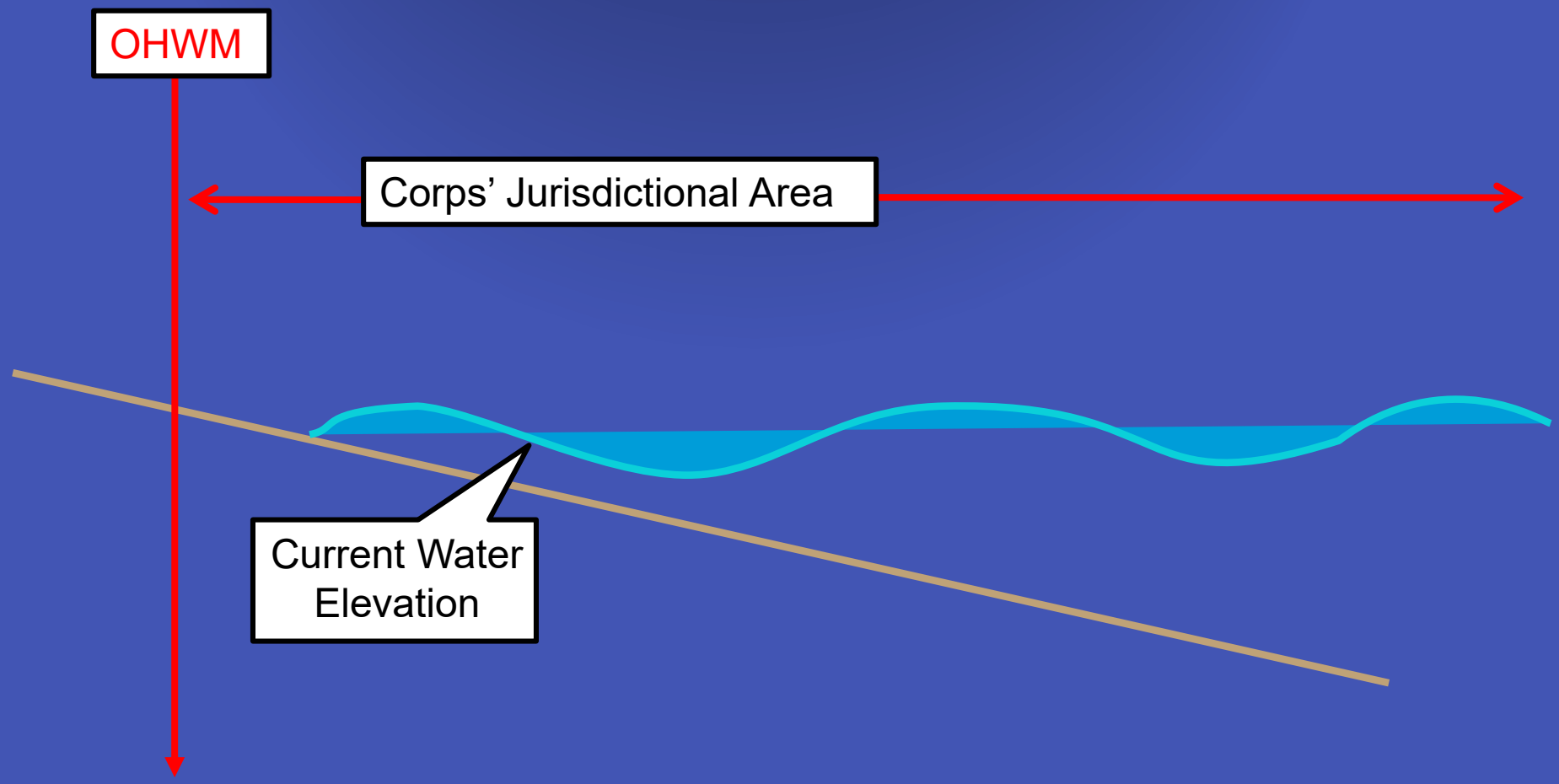

Corps OHWM (581.5' IGLD 1985)
Corps Jurisdictional Area
Approx 1'
EGLE
OHWM
580.5'

Corps & EGLE OHWM



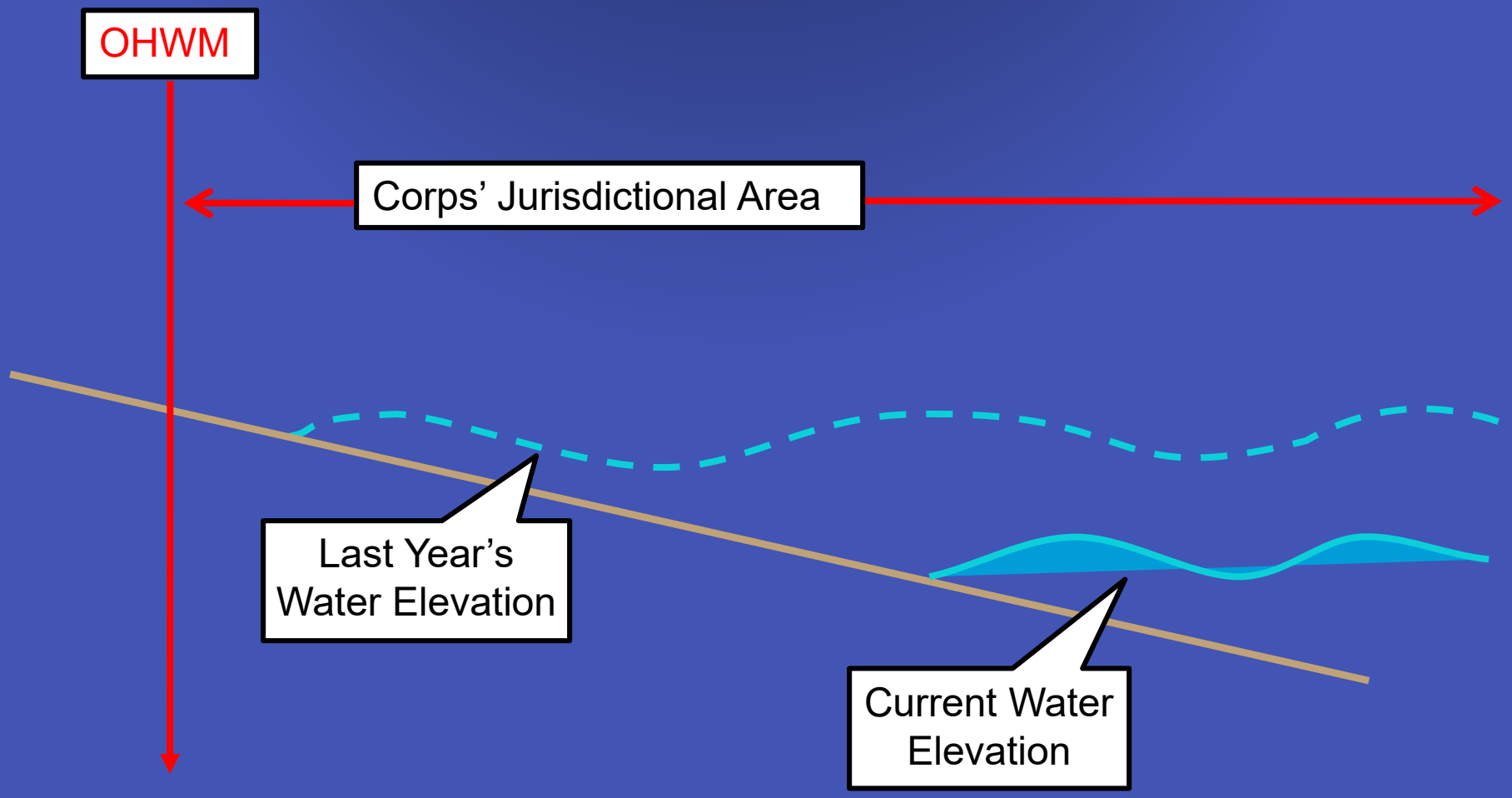
Corps OHWM

Corps Ordinary High Water Mark



Corps Ordinary High Water Mark

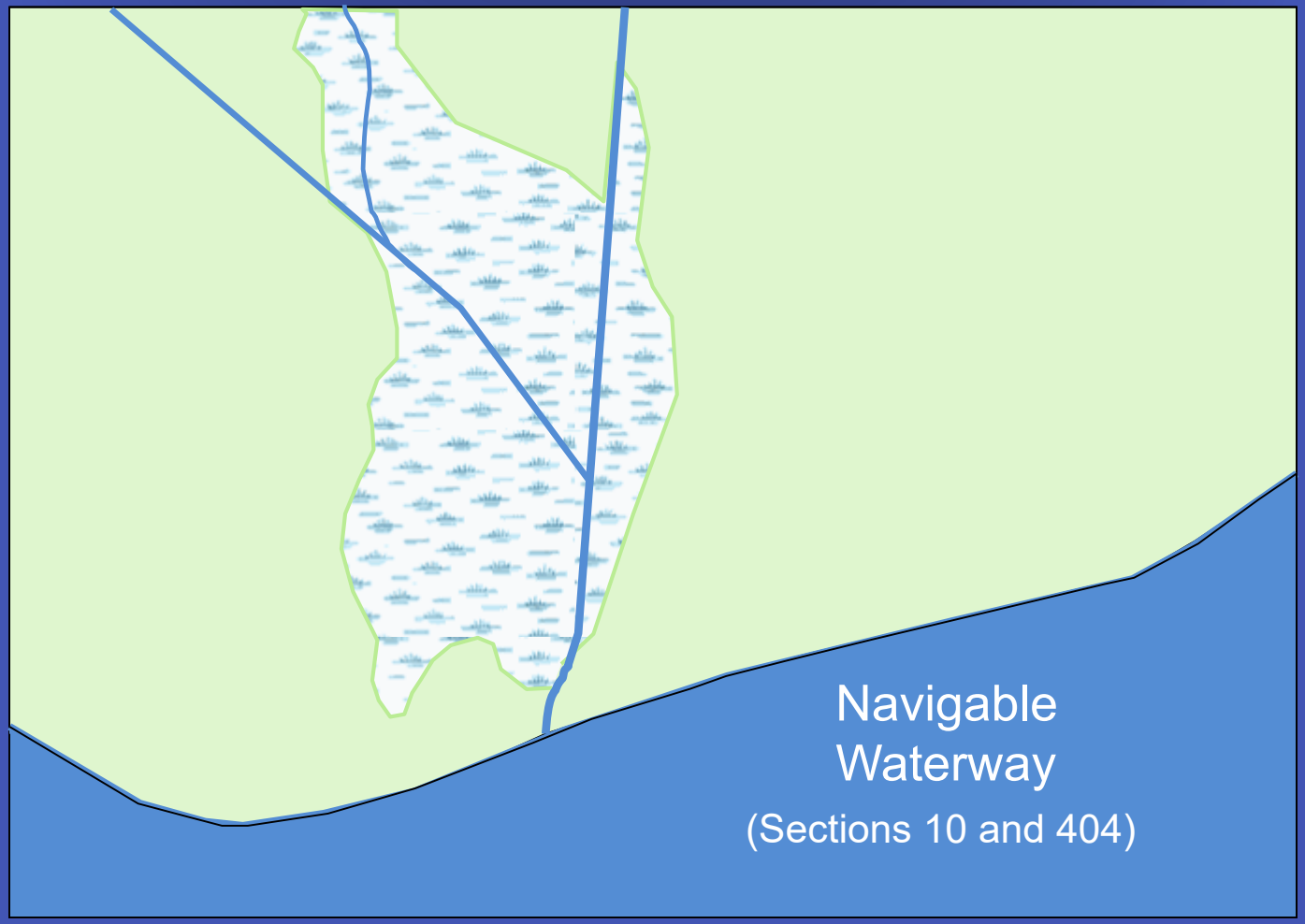
One year later…



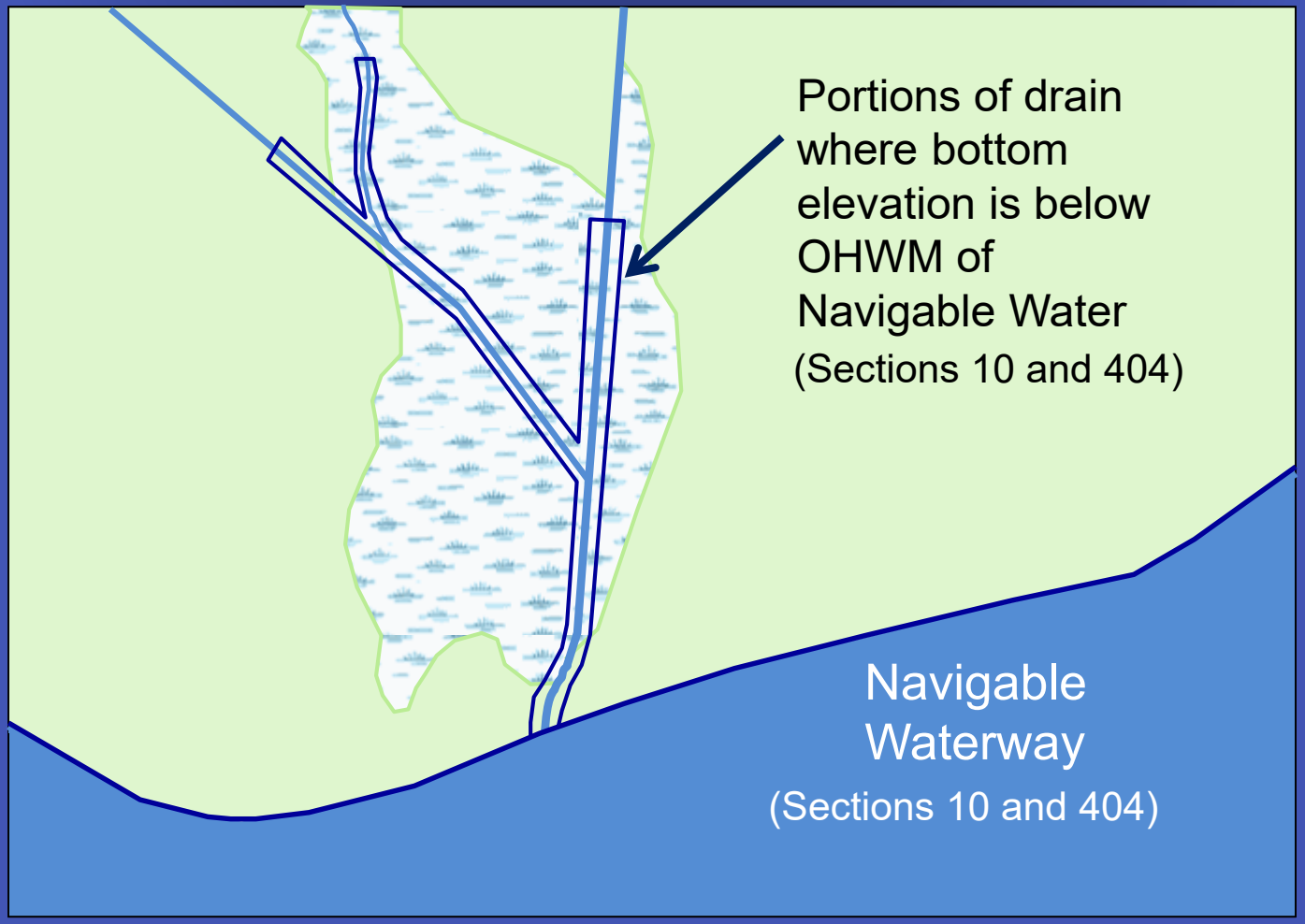
Example
Corps Ordinary High Water Mark

Example
Corps Ordinary High Water Mark

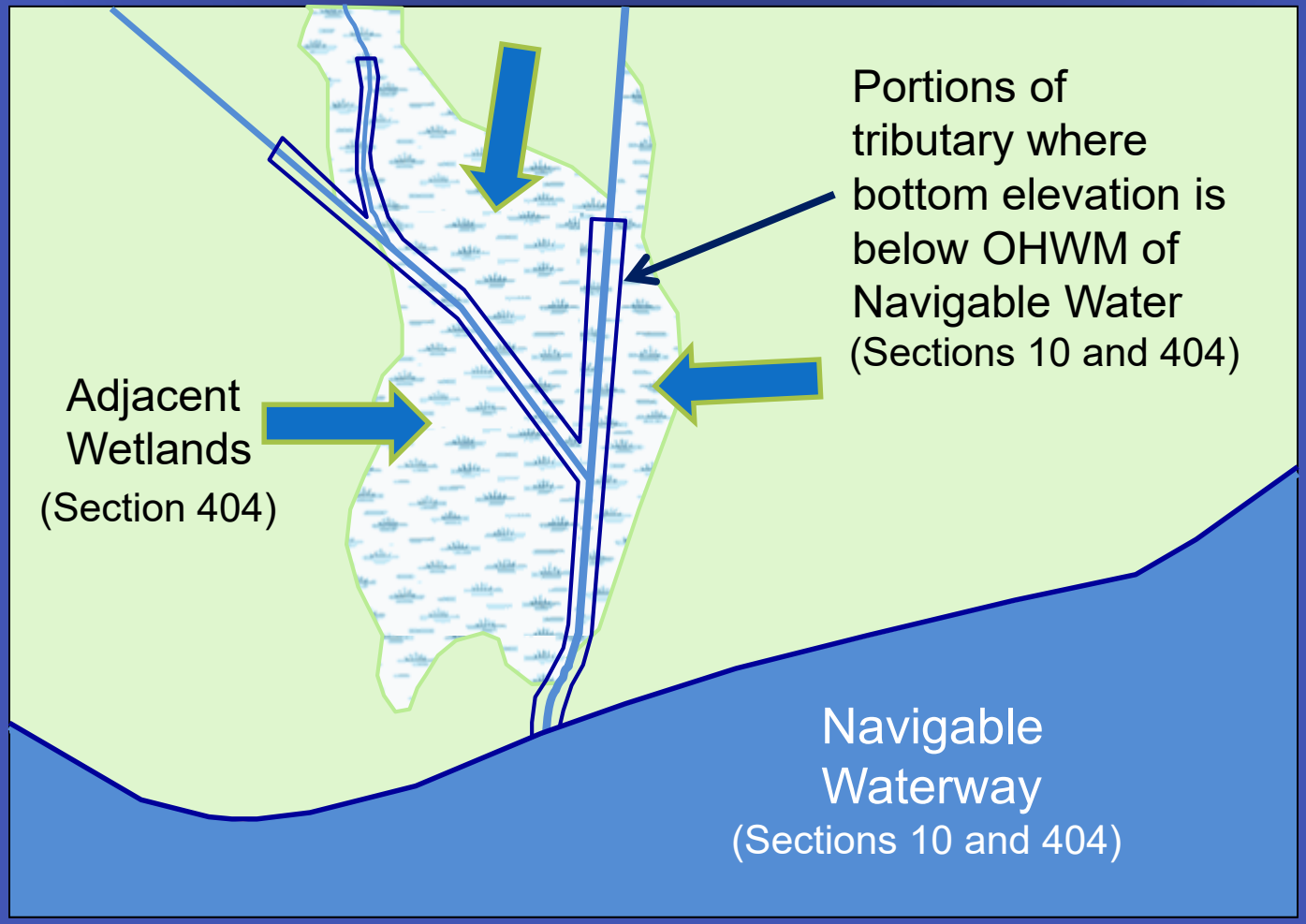
Corps Section 10 Jurisdiction



Corps Jurisdiction in Tributaries

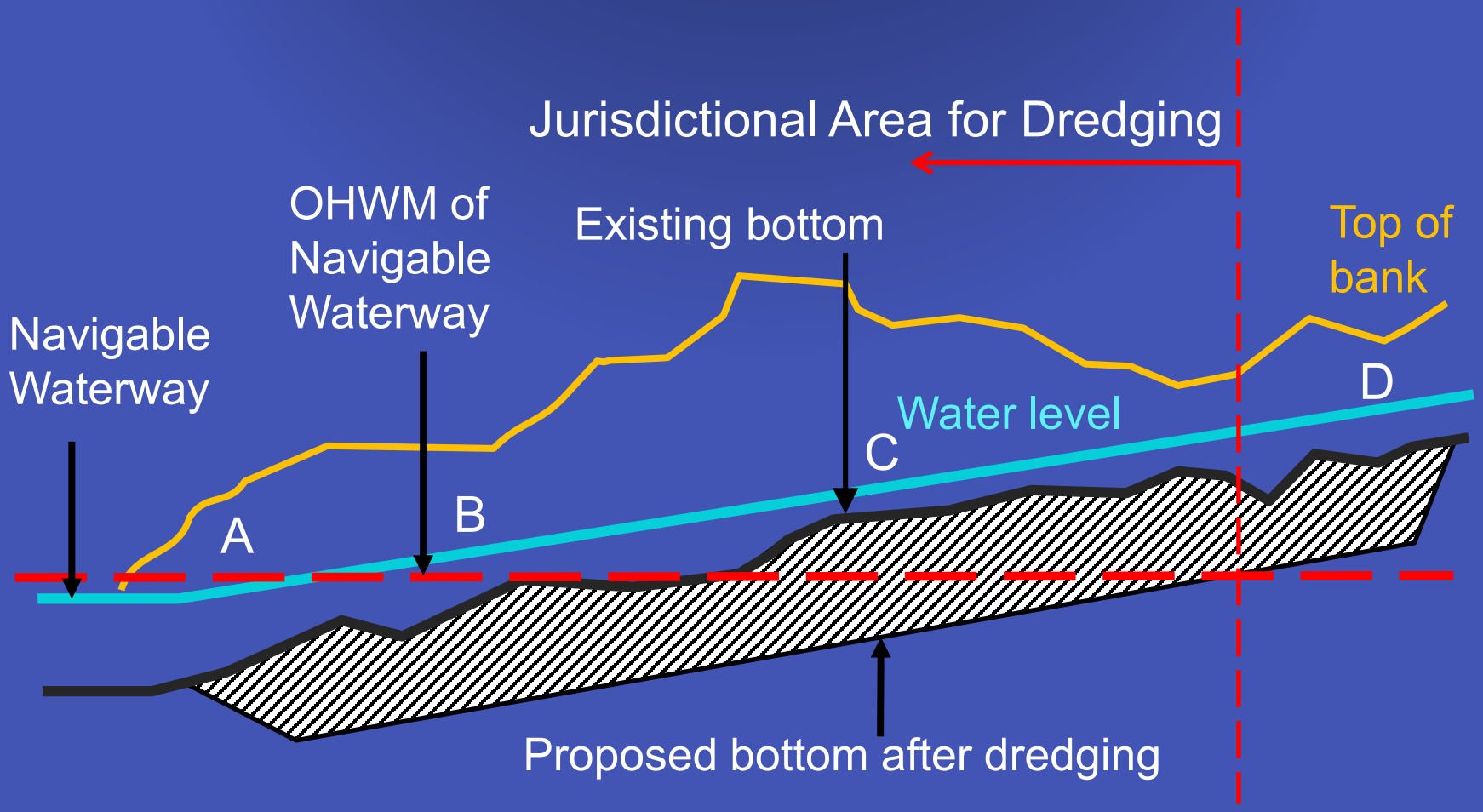


Corps Jurisdiction in Tributaries

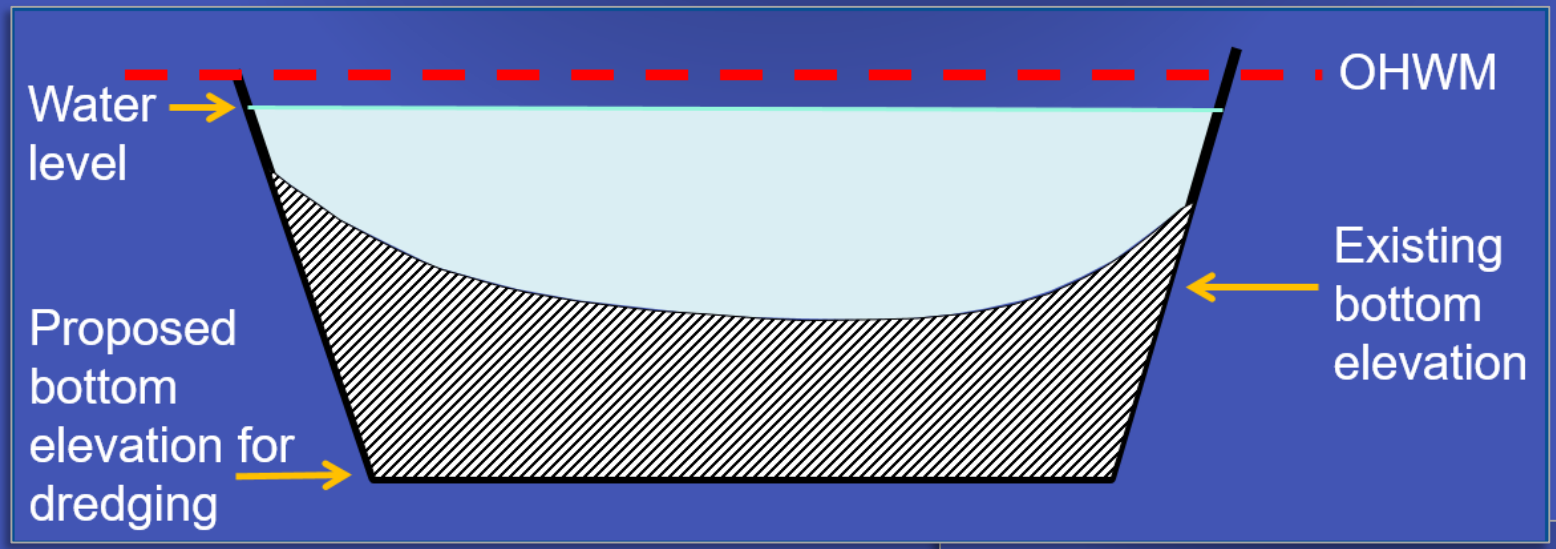


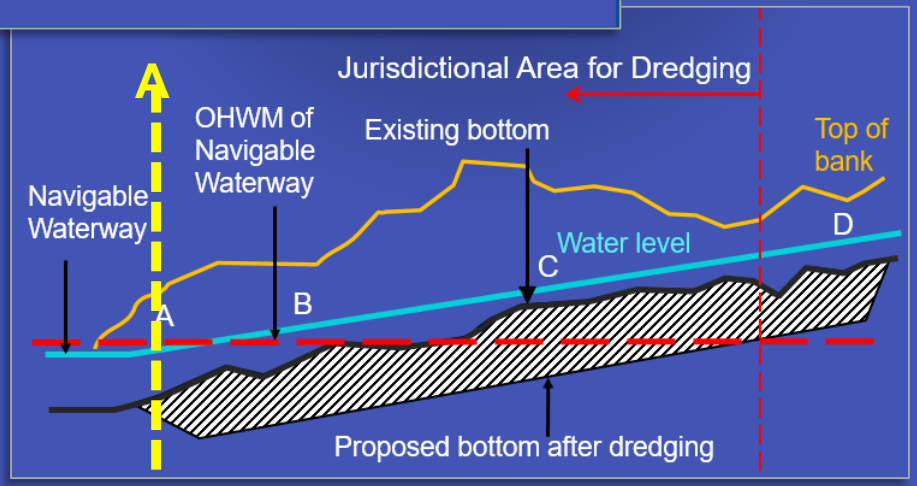
Example
Corps Ordinary High Water Mark

Example
Corps Jurisdiction – Drain Cleanout

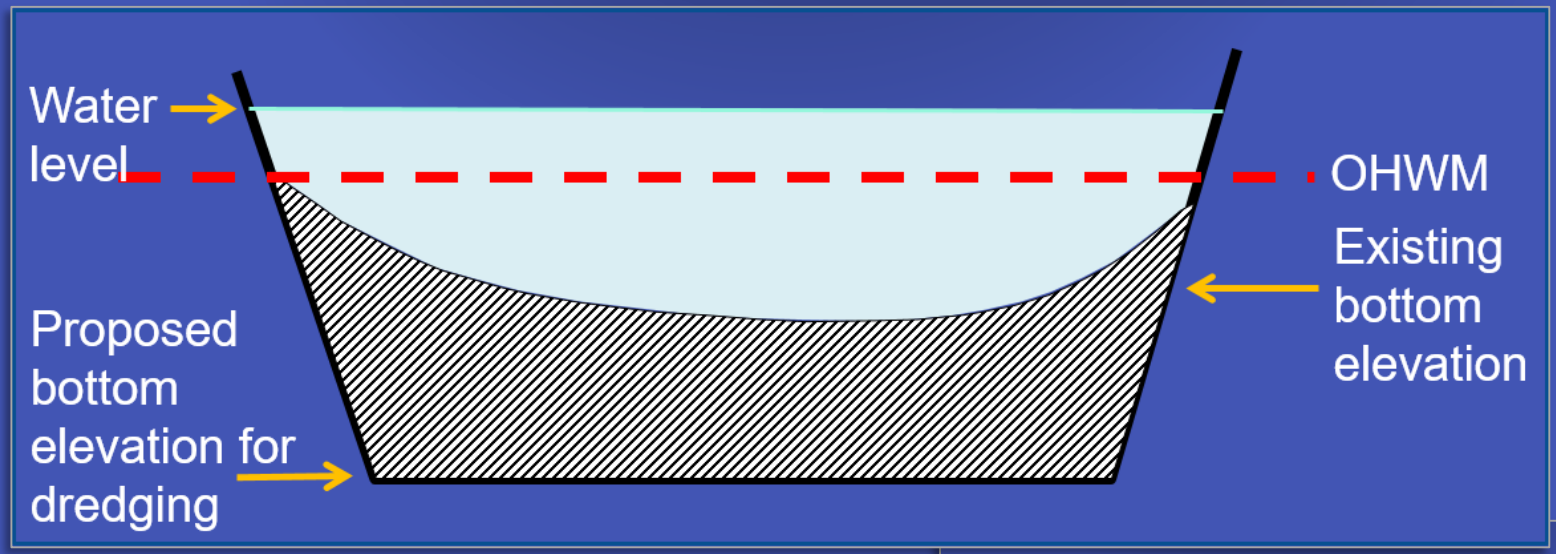


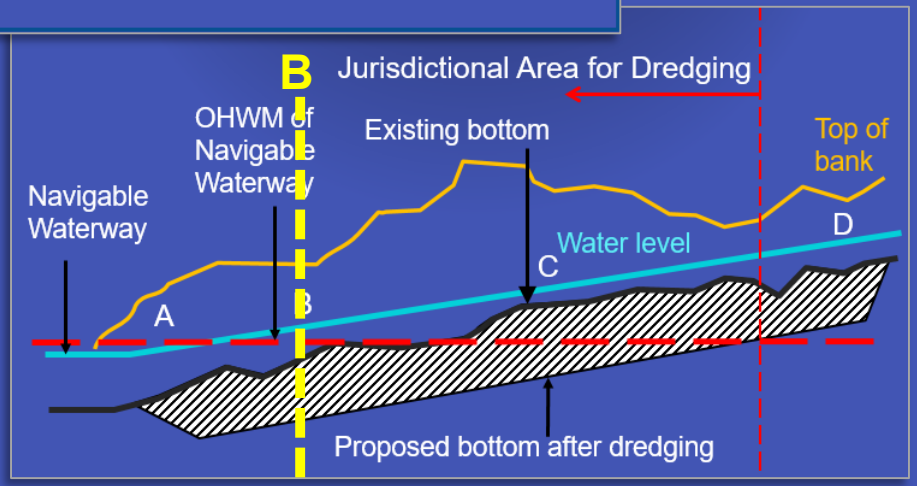
Example Corps Jurisdiction Drain Cleanout Cross-section A



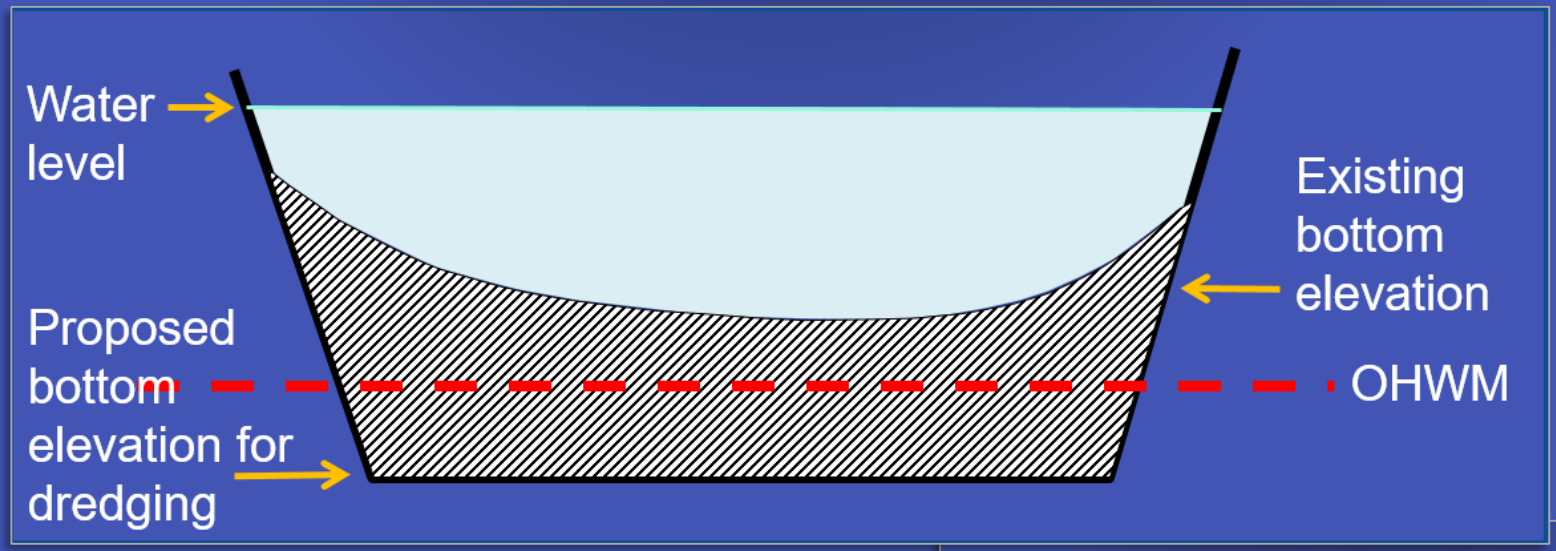


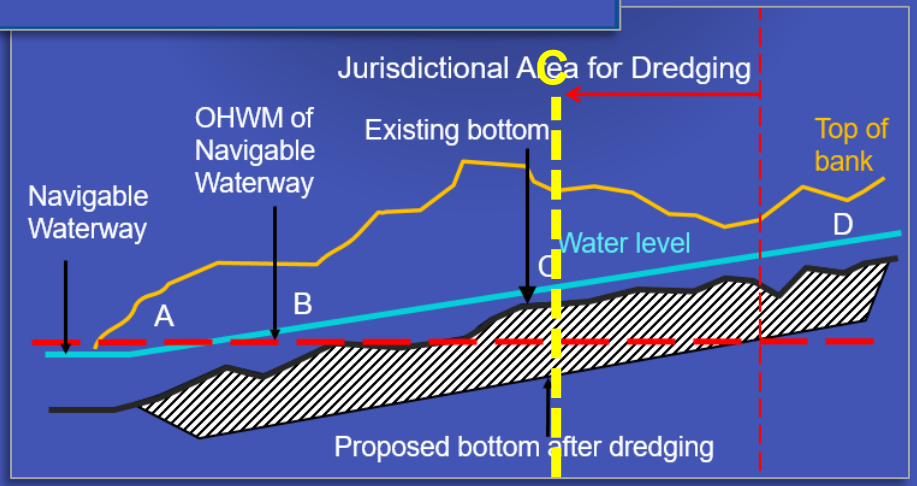
Example Corps Jurisdiction Drain Cleanout Cross-section B



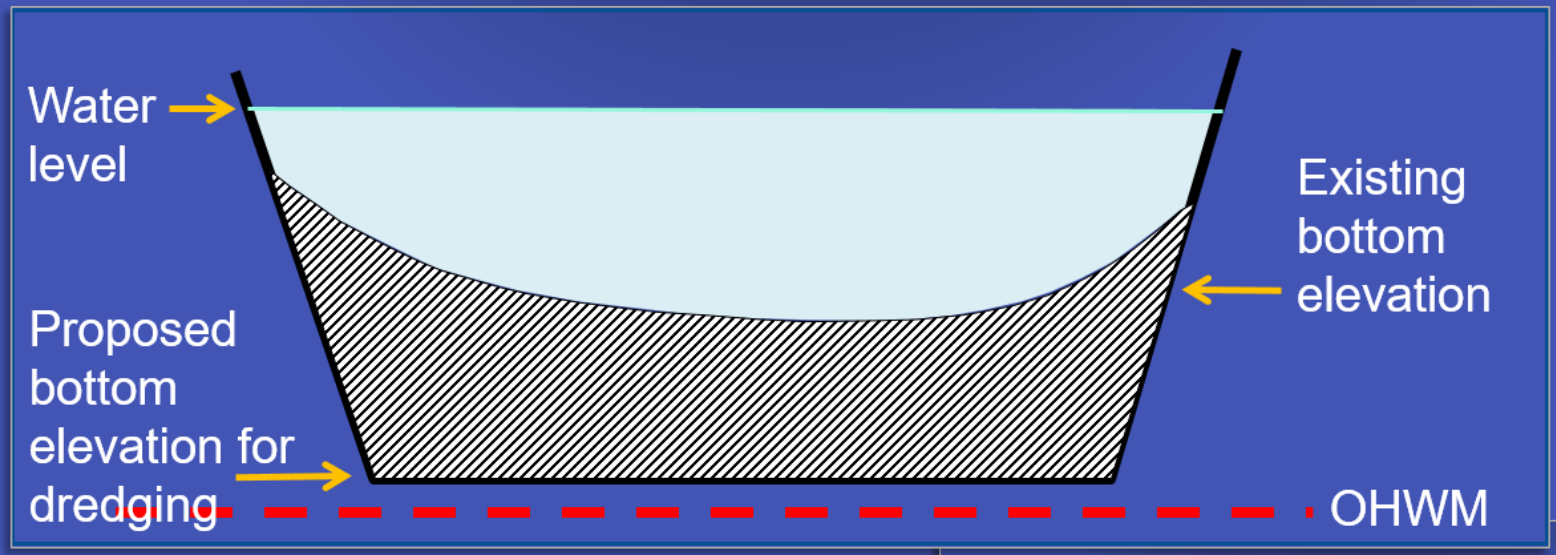


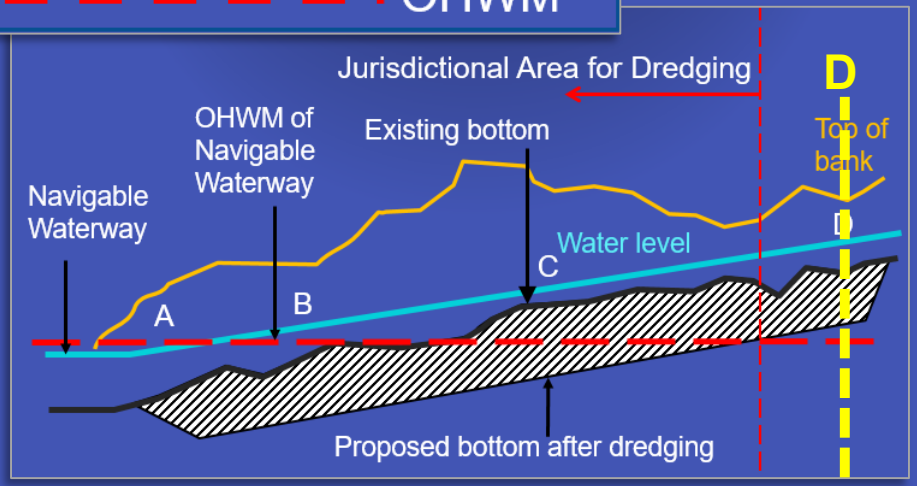
Example Corps Jurisdiction Drain Cleanout Cross-section C



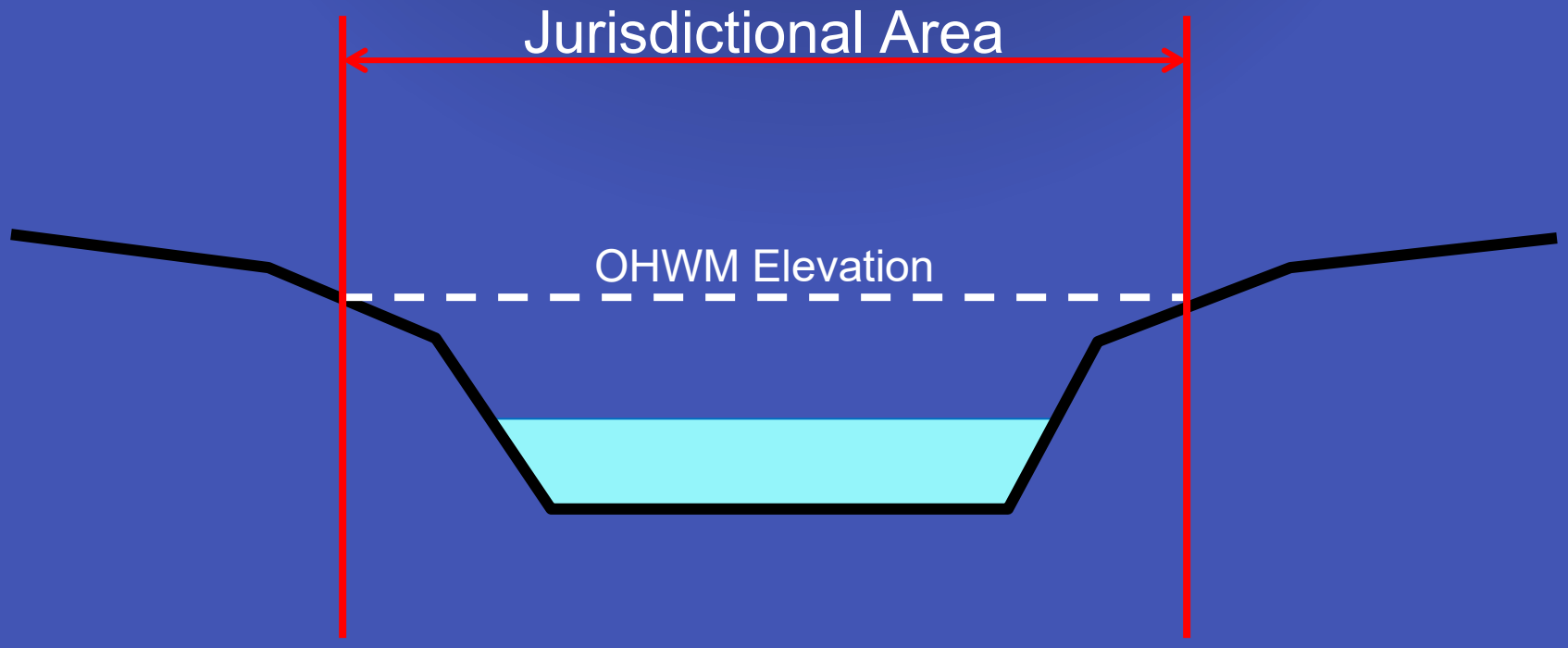


Example Corps Jurisdiction Drain Cleanout Cross-section D

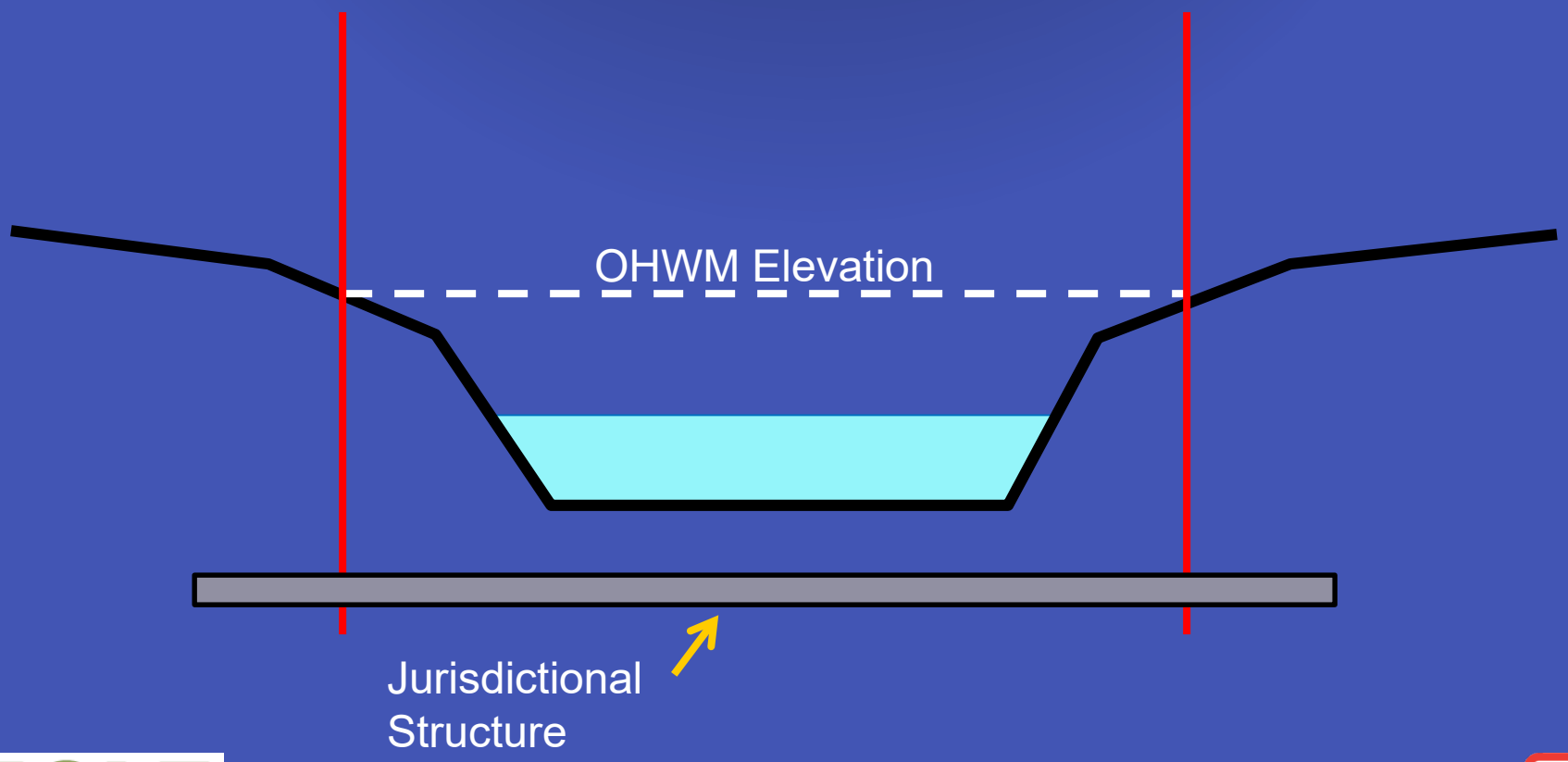




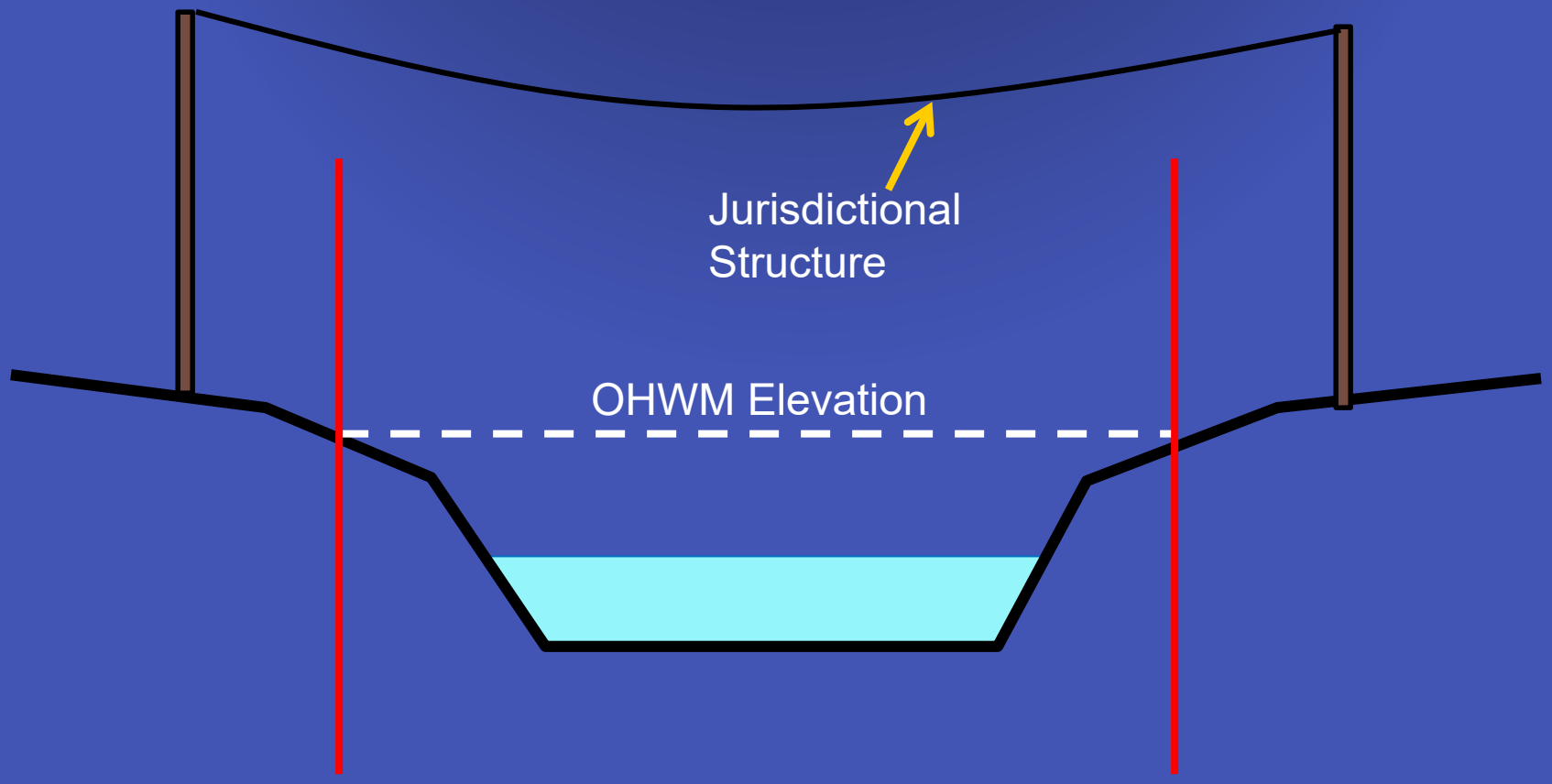
Corps Jurisdiction - Example



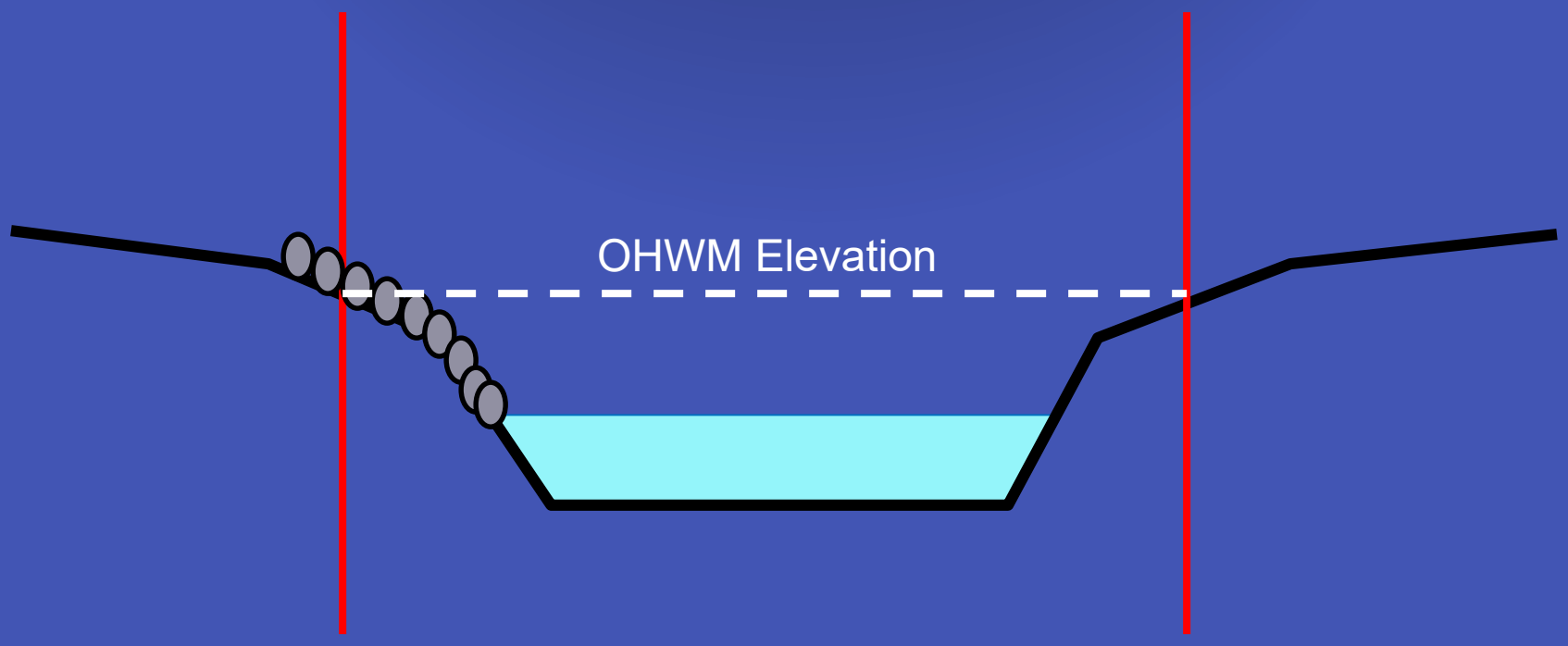
Corps Jurisdiction - Example



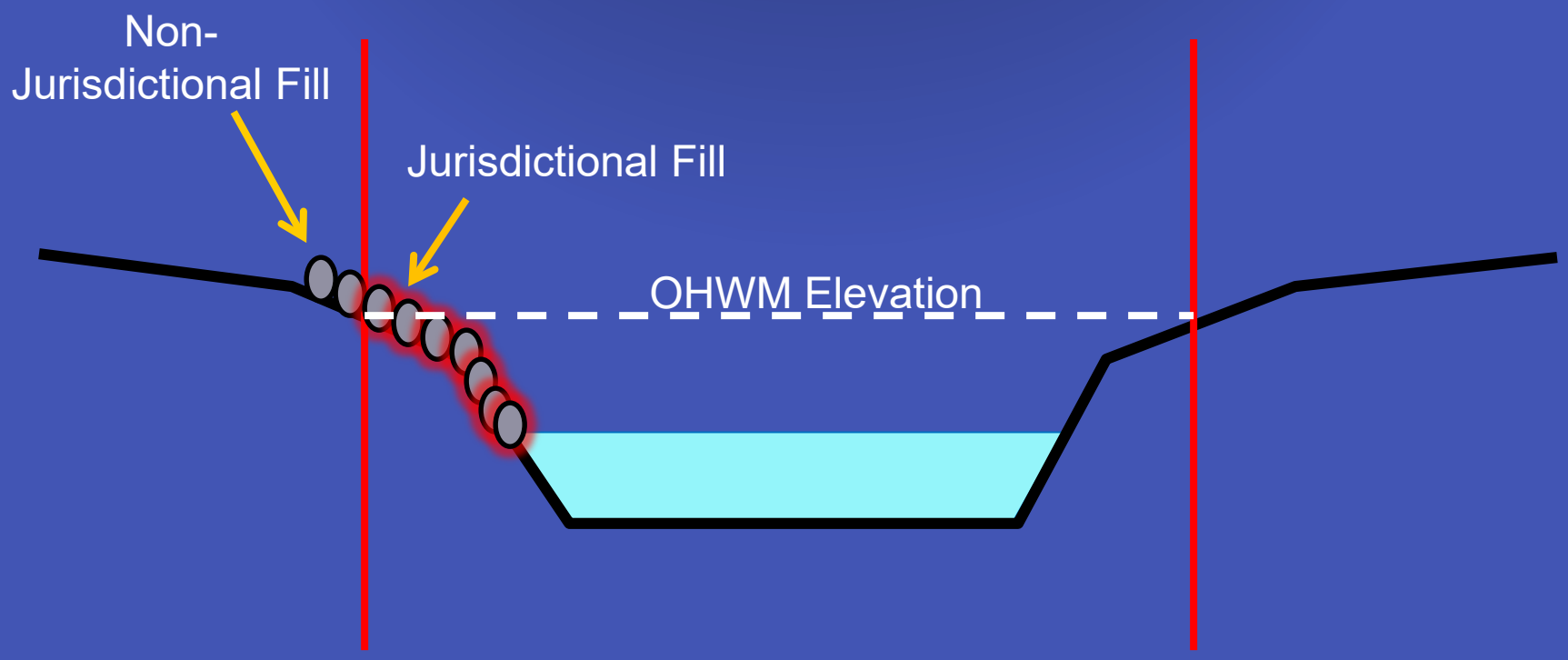
Structures Overhead



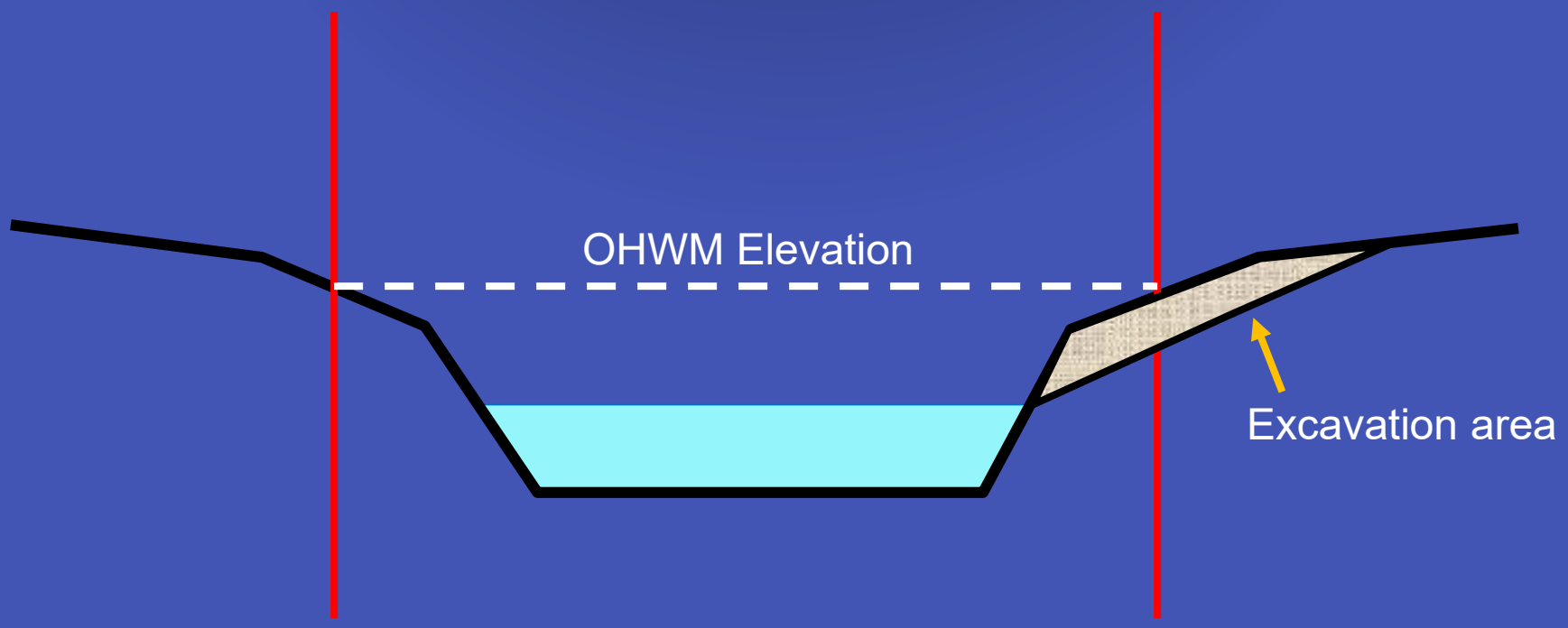
Corps Jurisdiction - Example



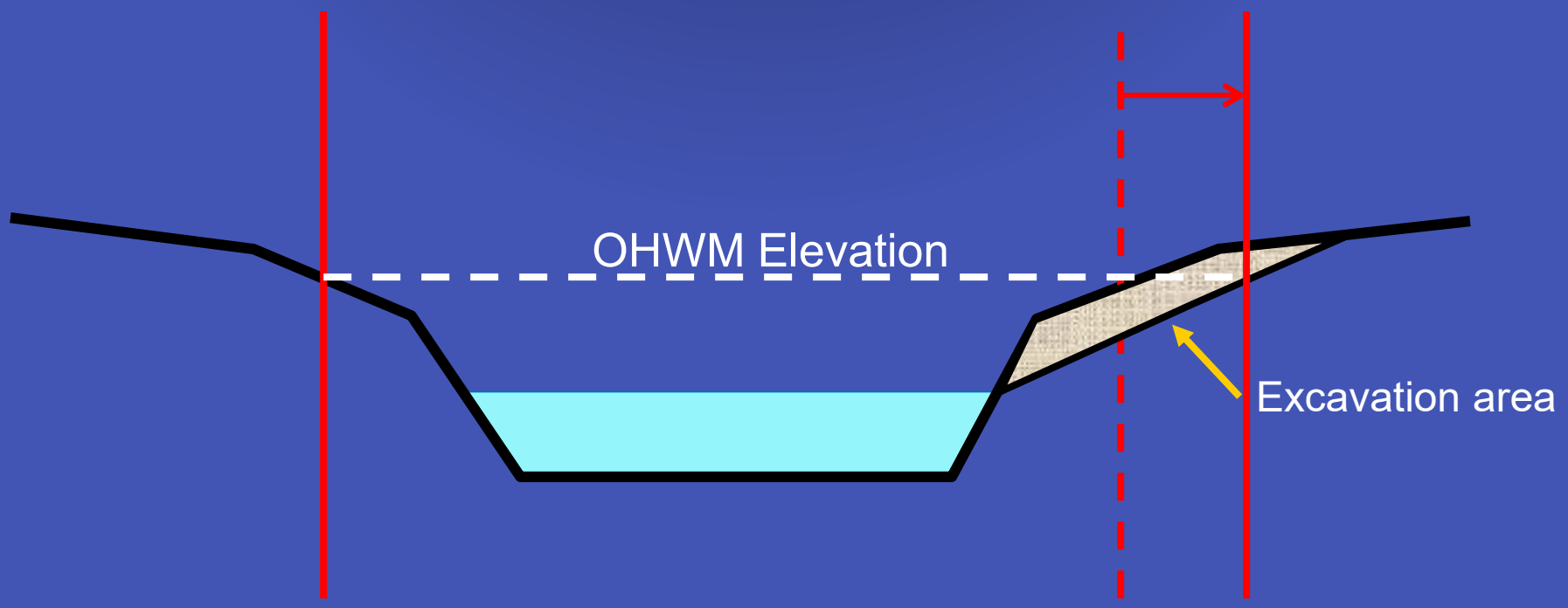
Corps Jurisdiction - Example



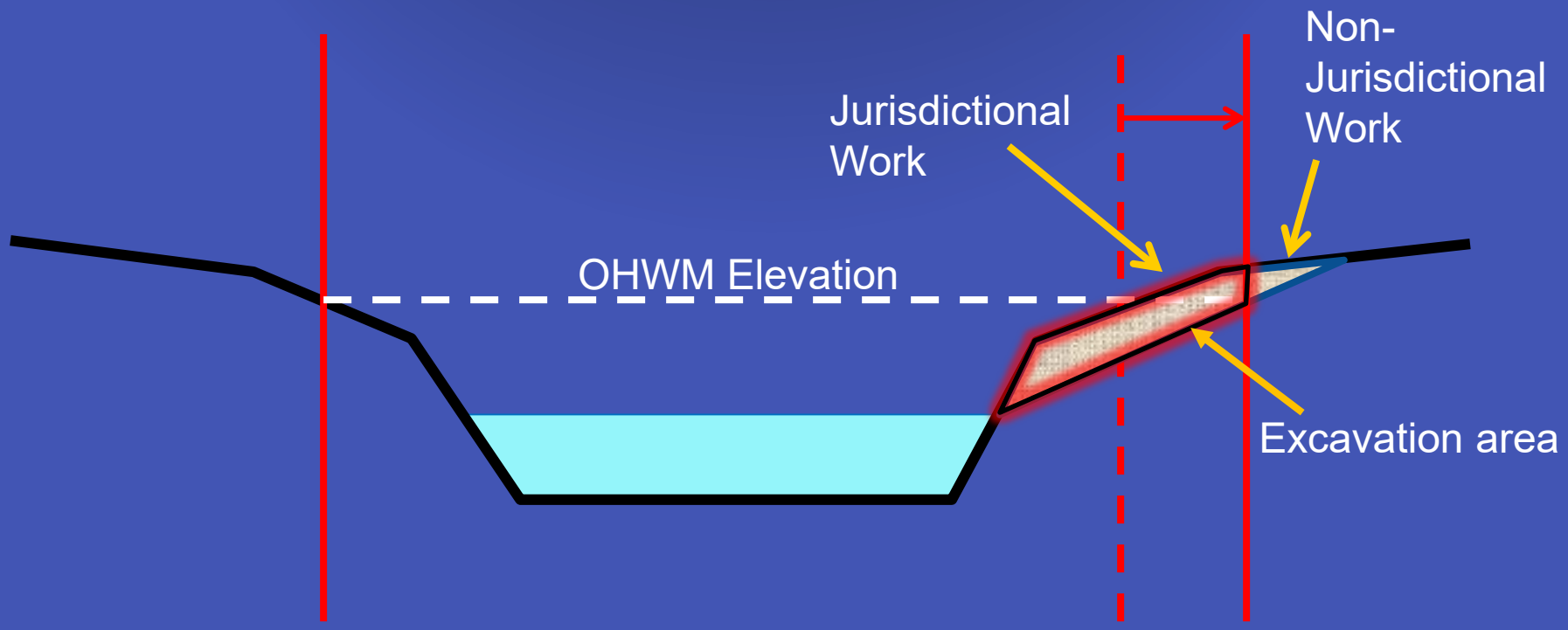
Corps Jurisdiction - Example

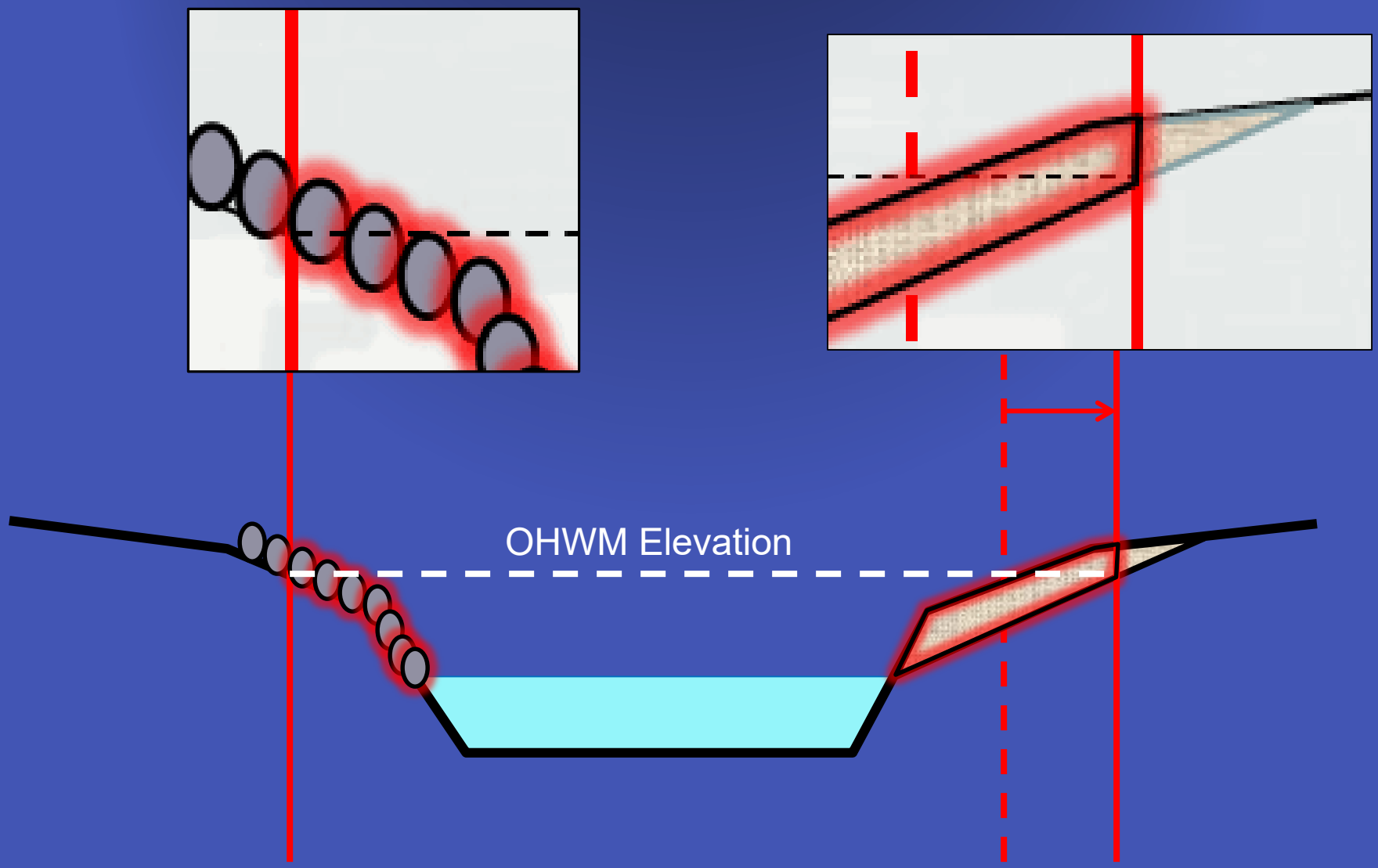


Corps Jurisdiction - Example



Corps Jurisdiction - Example




OHWM Elevation

EGLE Jurisdiction

Part 31: Drainage area greater than 2 sq. miles

Part 301: Ordinary High Water Mark (OHWM)

Part 303:

- 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
- Greater than 5 acres in size
- The EGLE has determined that the wetland is essential to the preservation of the state's natural resources

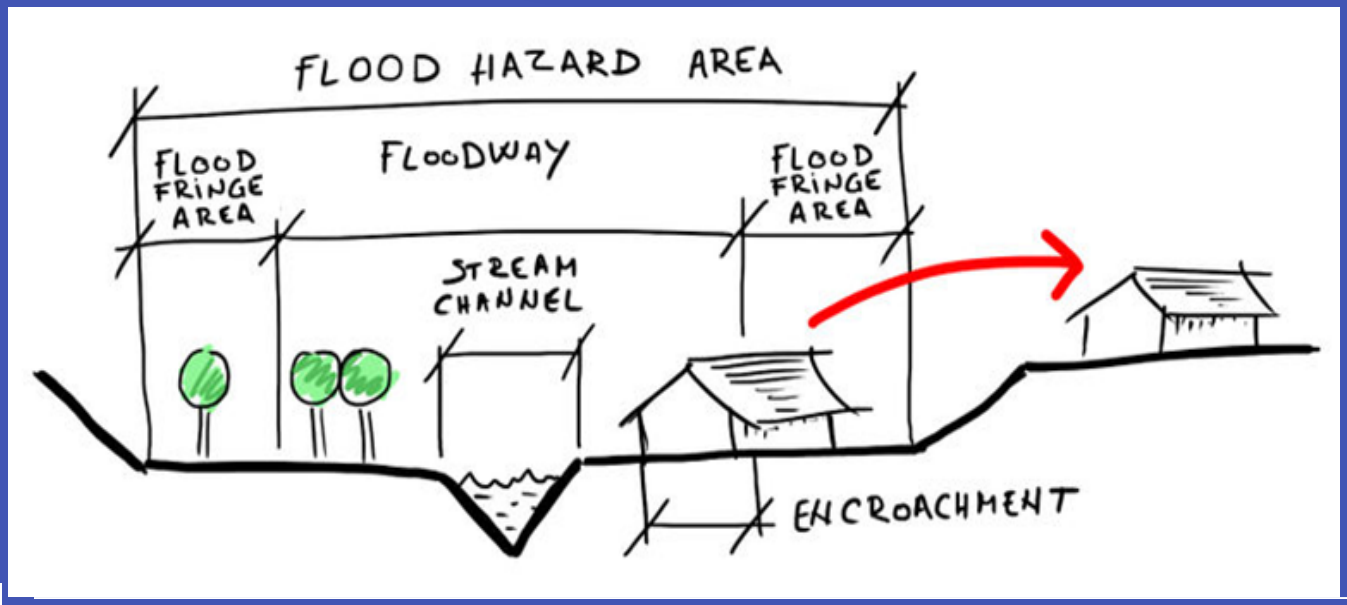
Part 323: Areas designated on map

Part 325: Elevation of 580.5 feet IGLD85 (Lake Huron)
575.3 feet IGLD85 (Lake St. Clair)

Part 31, Floodplains

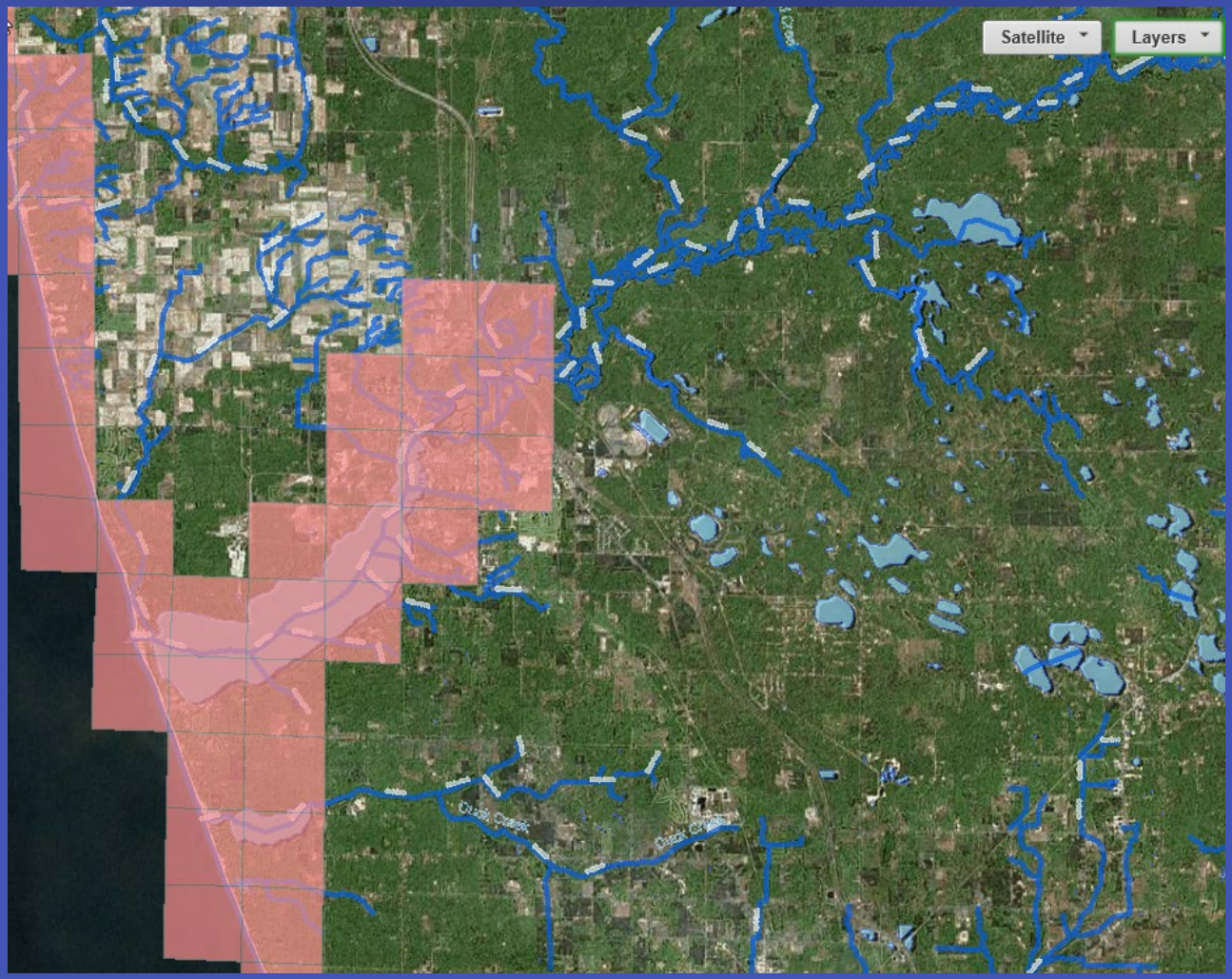
- All streams and drains have a floodplain
- Non-mapped floodplains may be regulated!
- We do not have a publically available map of all regulated floodplain areas.
- Please call your local floodplain engineer to determine if the drainage area for your project is > or < 2 sq. miles.

www.Michigan.gov/floodplainmanagement

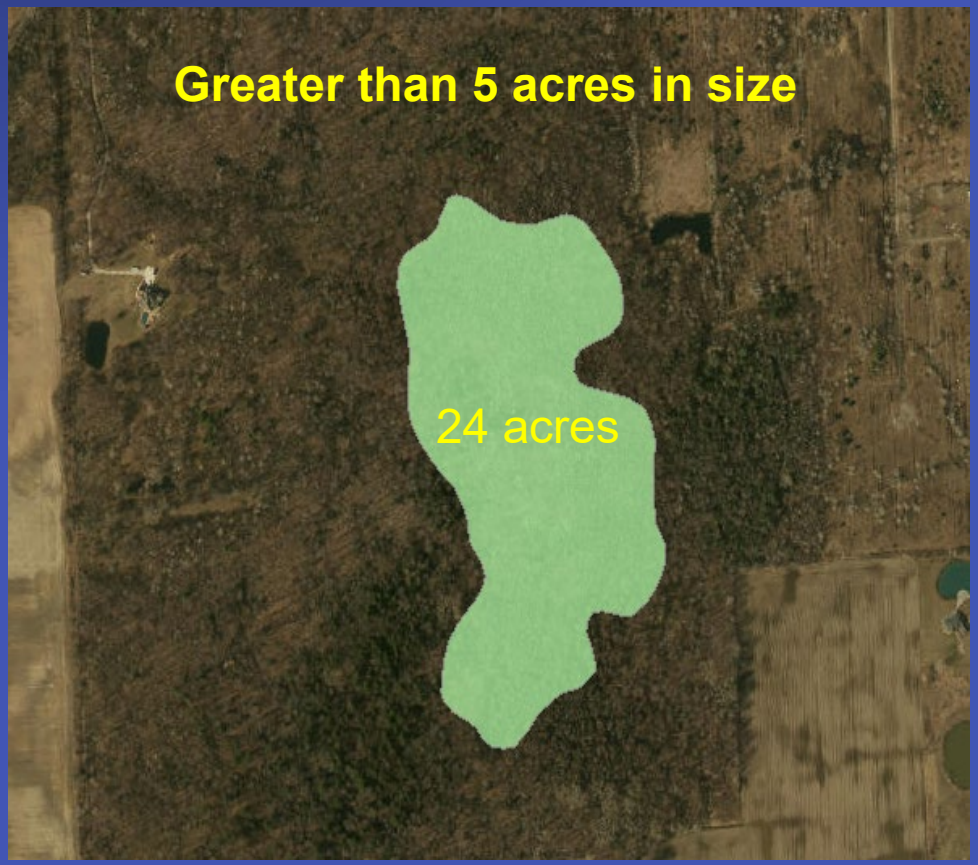


Part 301, Inland Lakes and Streams (OHWM)

Section 10 vs Part 301



Part 303, Wetlands Protection



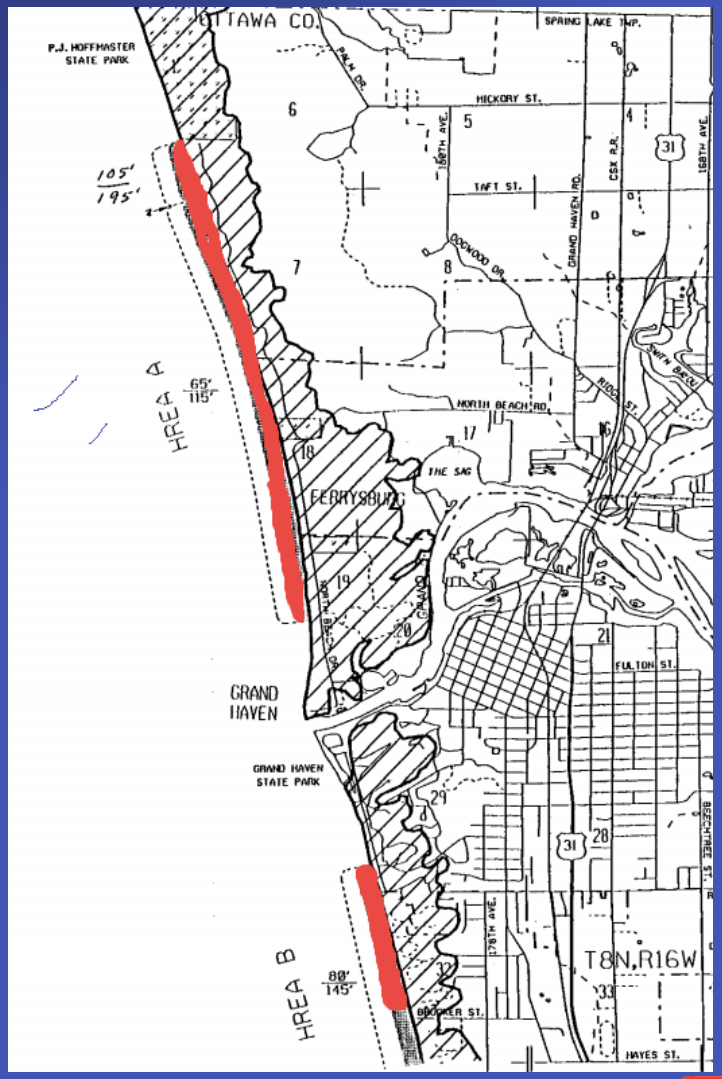
Part 323, Shorelands Protection and Management

High Risk Erosion Area

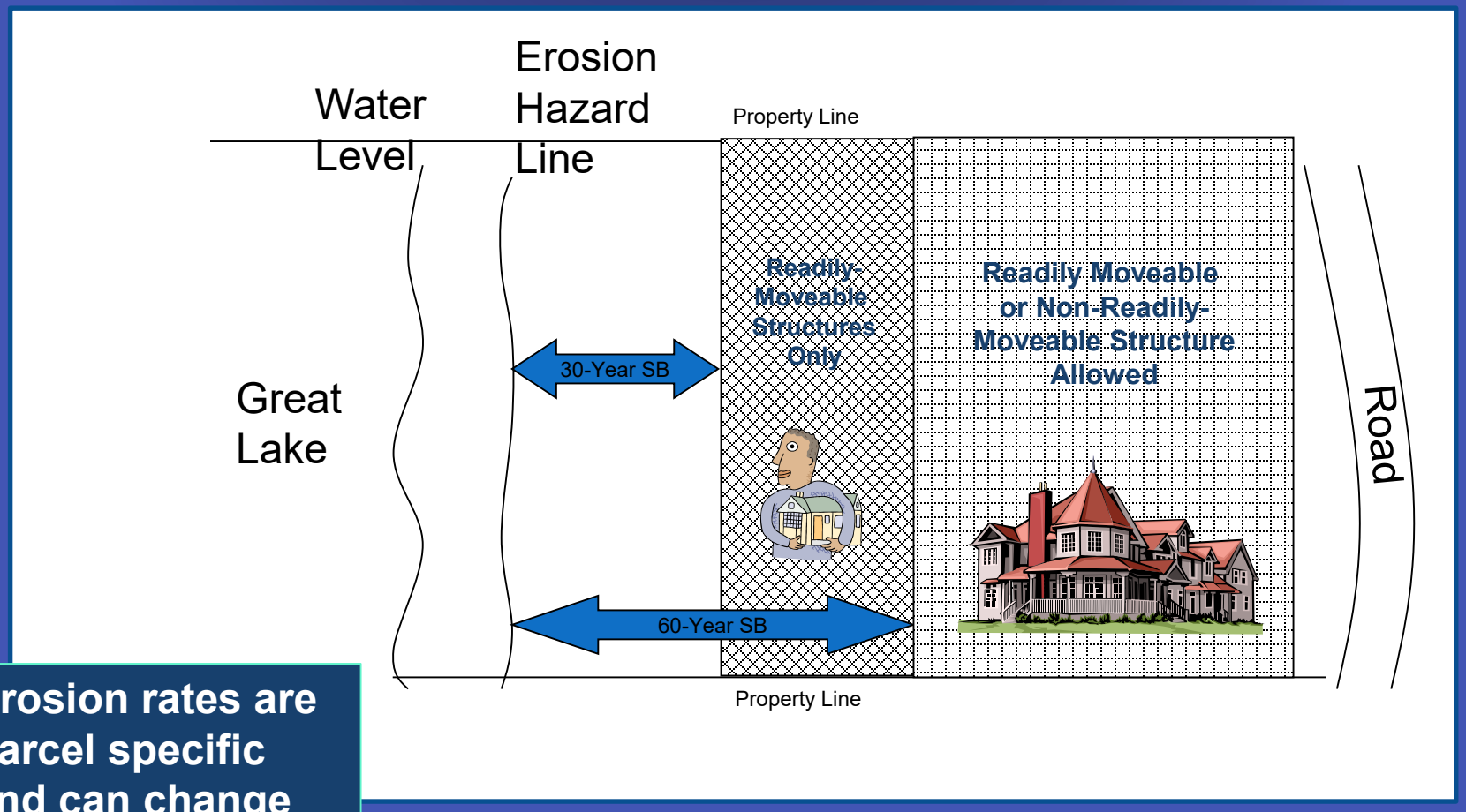
Interactive map at
http://www.mcgi.state.mi.us/wetlands/

or

PDF maps available at
www.michigan.gov/criticaldunes



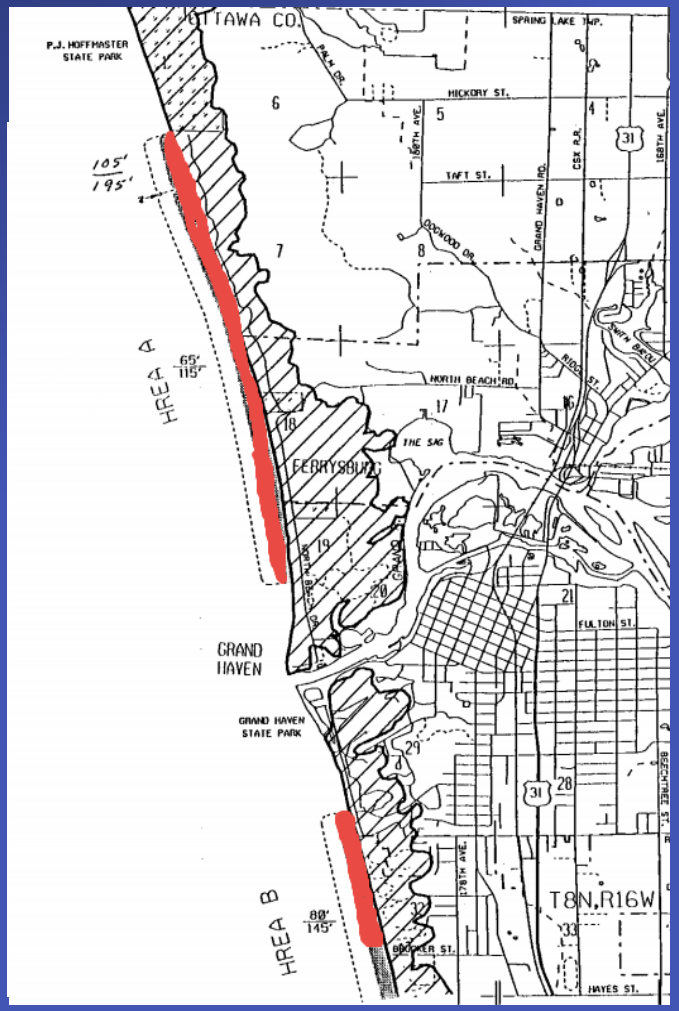
Part 323, Shorelands Protection and Management



Erosion rates are parcel specific and can change over time.

Part 323 and 353

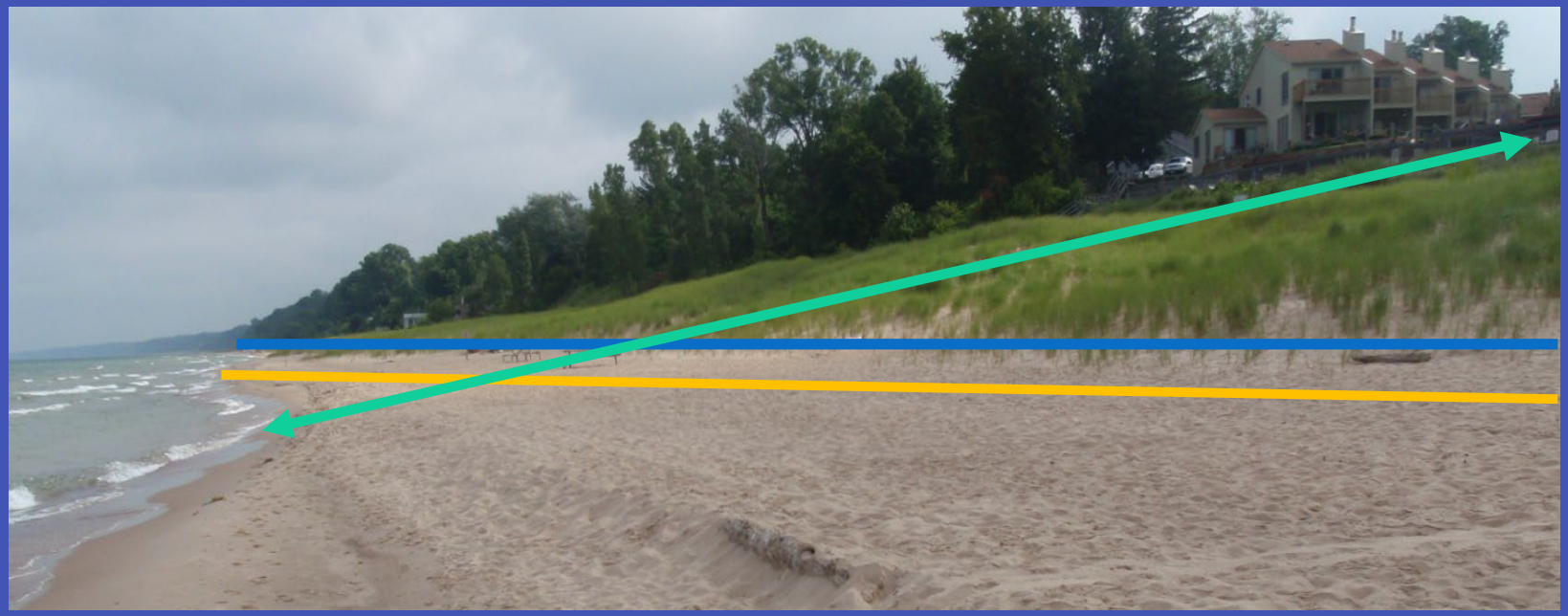
- High Risk Erosion area
- Critical Dune area
- Interactive map at http://www.mcgi.state.mi.us/wetlands/ or
- PDF maps available at www.michigan.gov/criticaldunes



EGLE Part 325:
Example on Lake Michigan

- Corps regulates to 581.5 IGLD85
- EGLE regulates to 580.5 IGLD85
- Critical Dunes

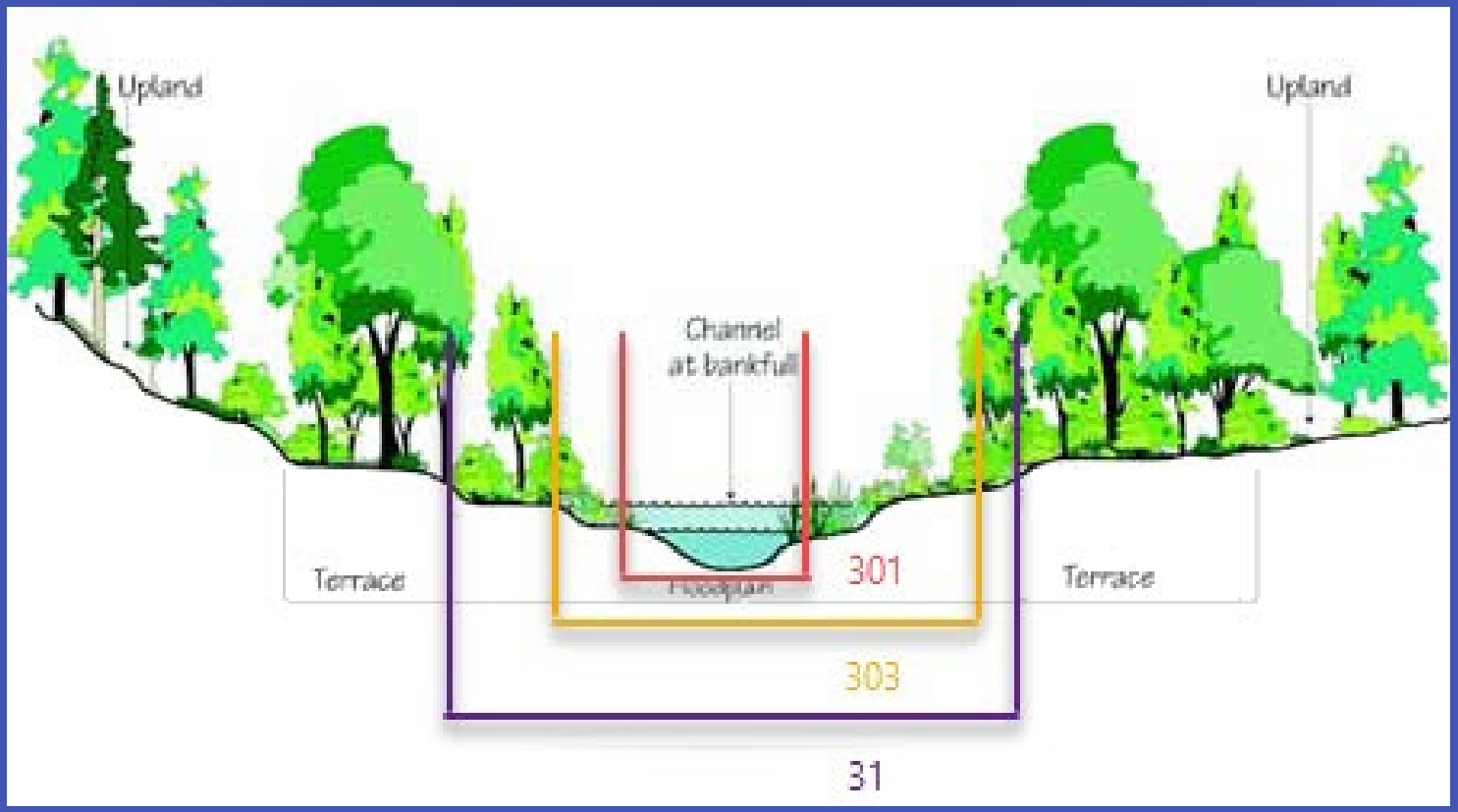
Water's edge to mapped boundary



Part 325, Great Lakes Submerged Lands (OHWM – Lake Huron)

- Corps regulates to 581.5 IGLD85
- EGLE regulates to 580.5 IGLD85

EGLE Jurisdiction Example



Many statues overlap. Depending on where your project area is located, three or more statutes may apply.

Overview

- Corps Program & Jurisdictional Waters
- EGLE Water Resources Regulations
- Activity Jurisdiction
- Geographic Jurisdiction (USACE & EGLE)
- **Example Project**

Applying Jurisdiction

Proposed Project Site

Property Line

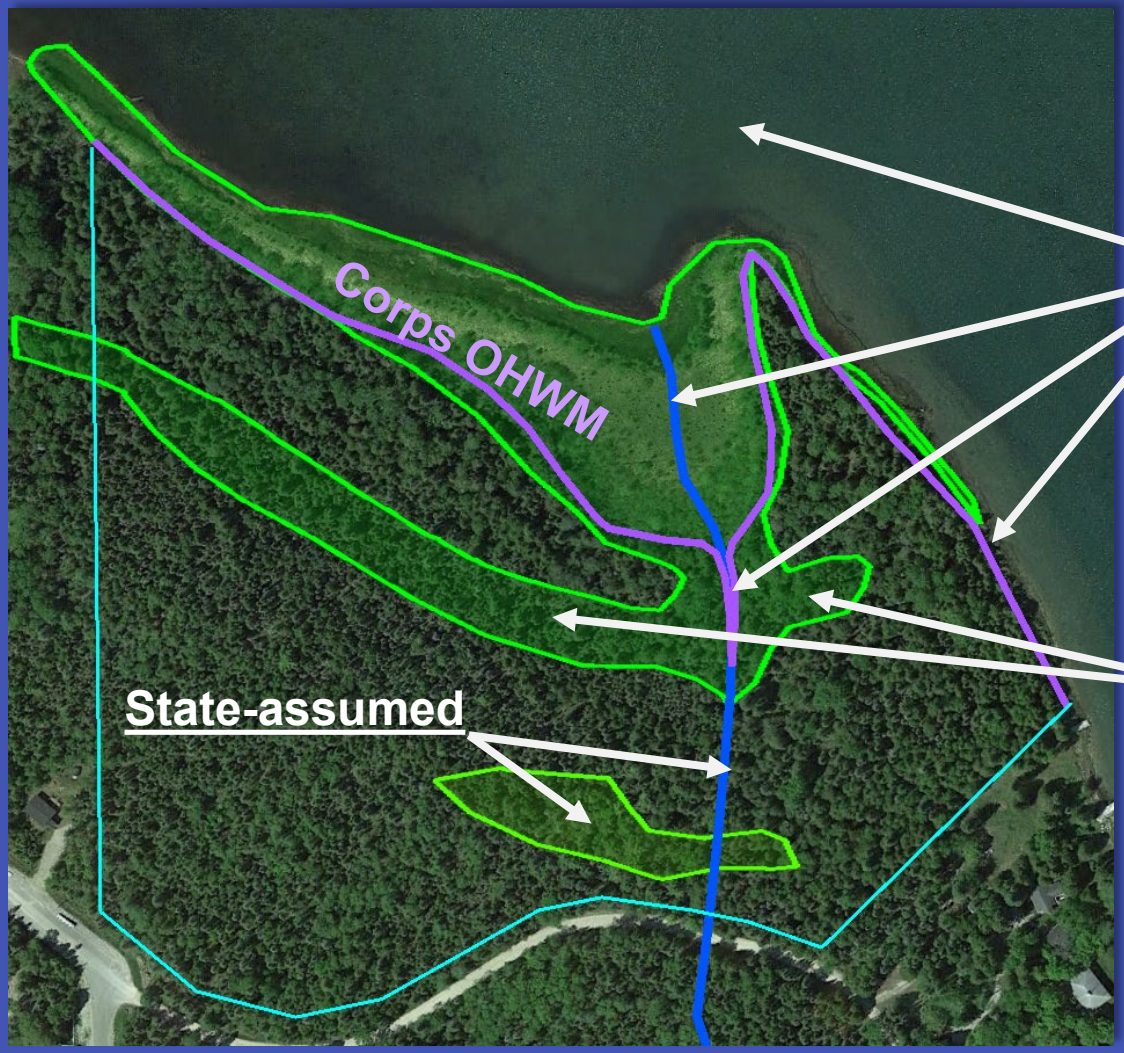
Wetland Boundary

Tributary

Corps OHWM

Example Project

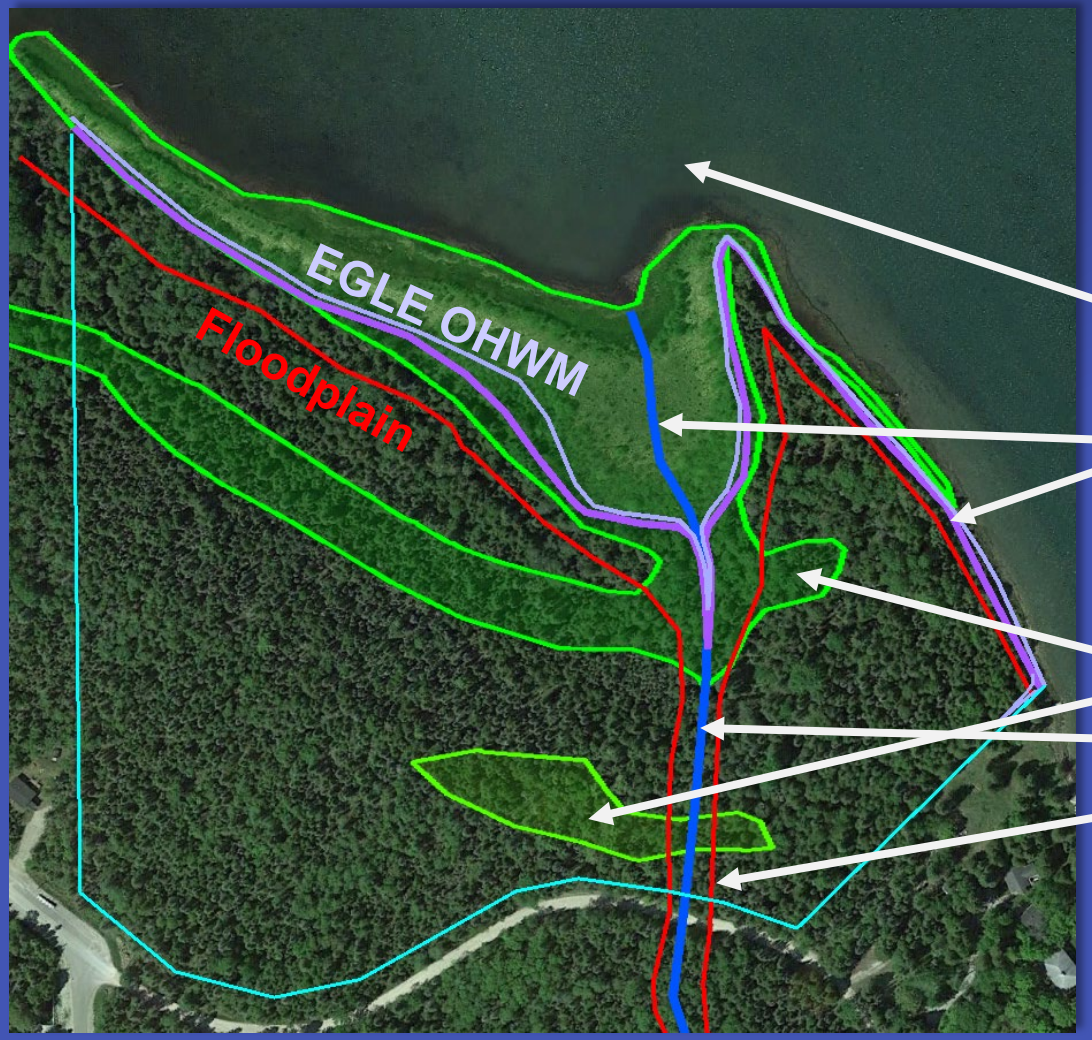
Geographic Jurisdiction - Corps



Section 10 and 404

Section 404

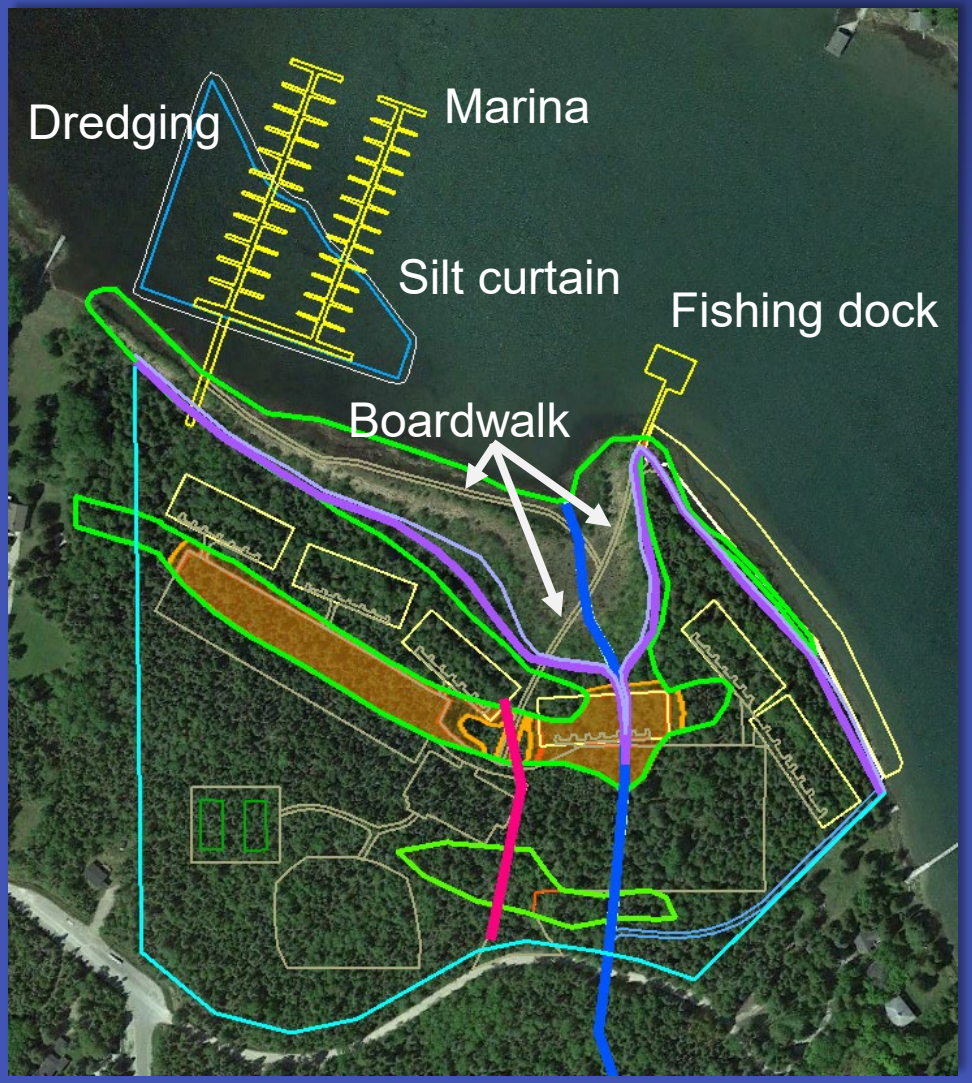
Geographic Jurisdiction - EGLE



Waterward:
Part 325, Great Lake
Part 301, River and Shoreline

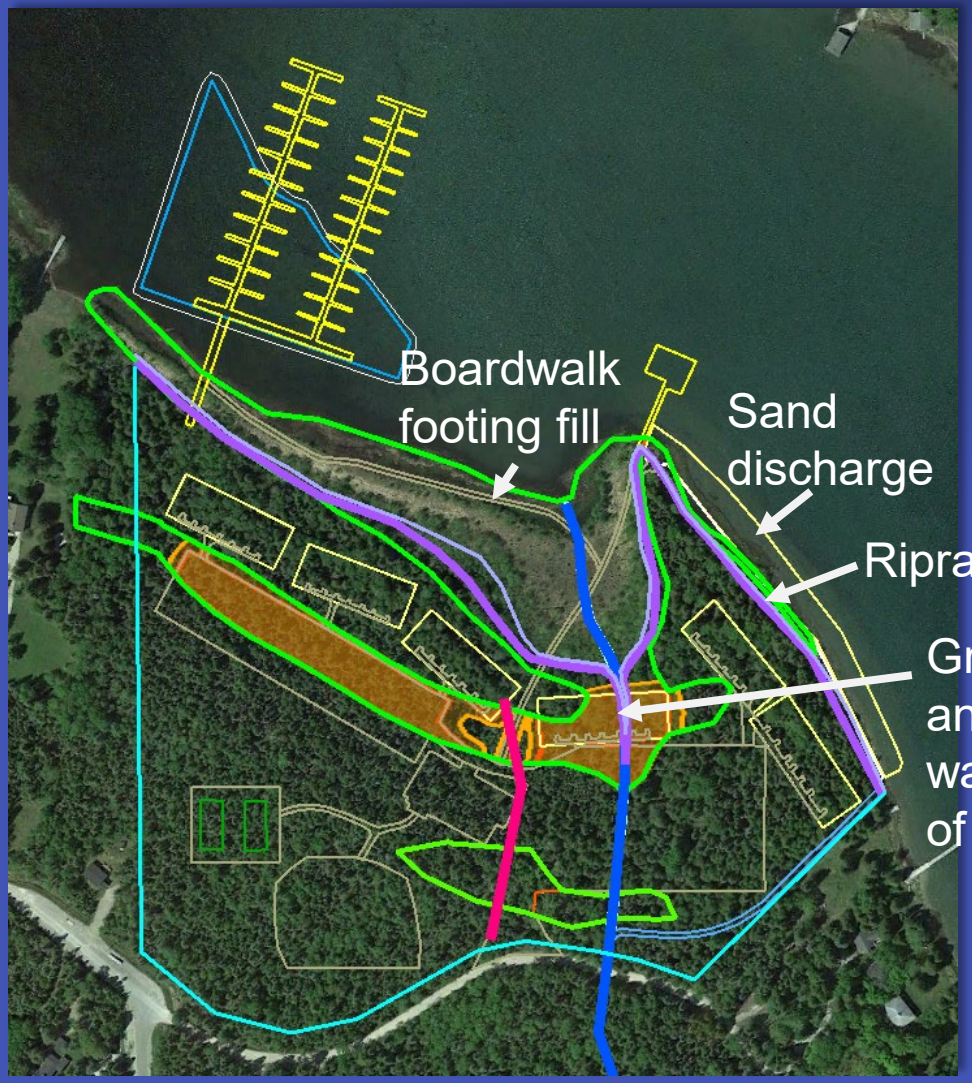
Landward:
Part 303, Wetland
Part 301, Stream
Part 31, Floodplain

Activity Jurisdiction - Corps



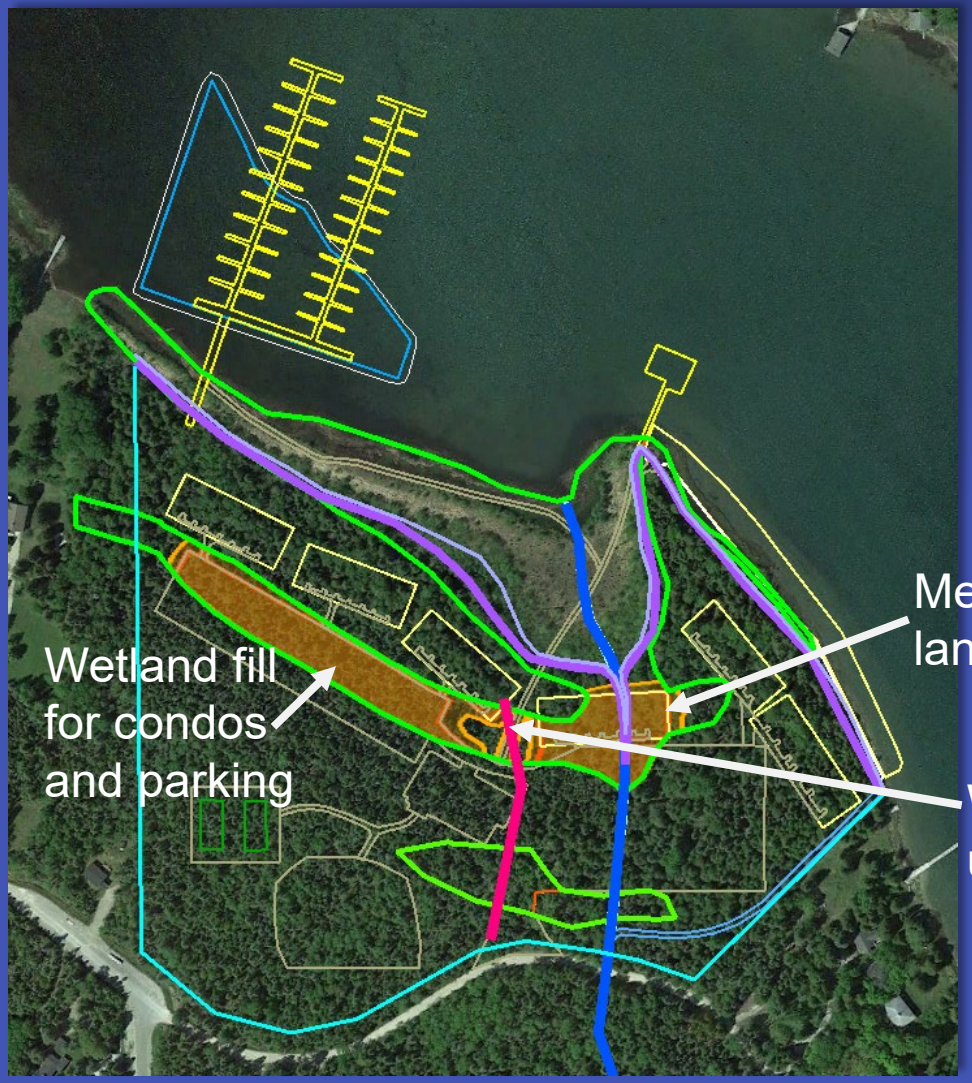
Section 10 only

Activity Jurisdiction - Corps



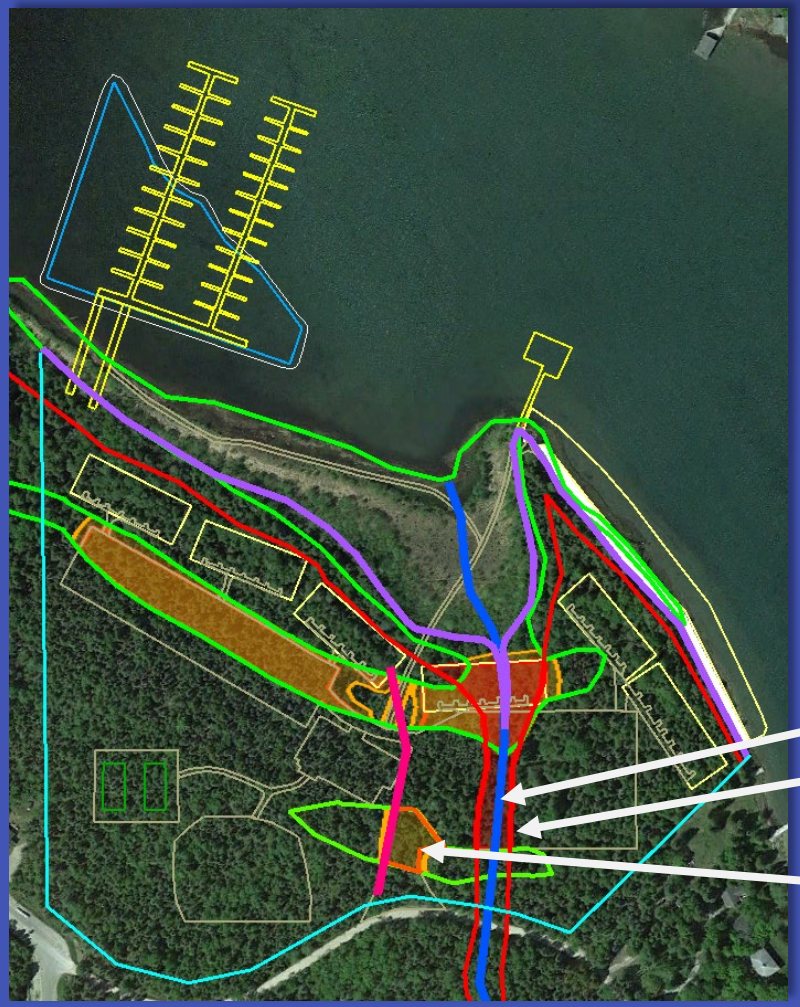
Sections
10 and 404

Activity Jurisdiction - Corps



Section 404 only

Activity Jurisdiction - EGLE



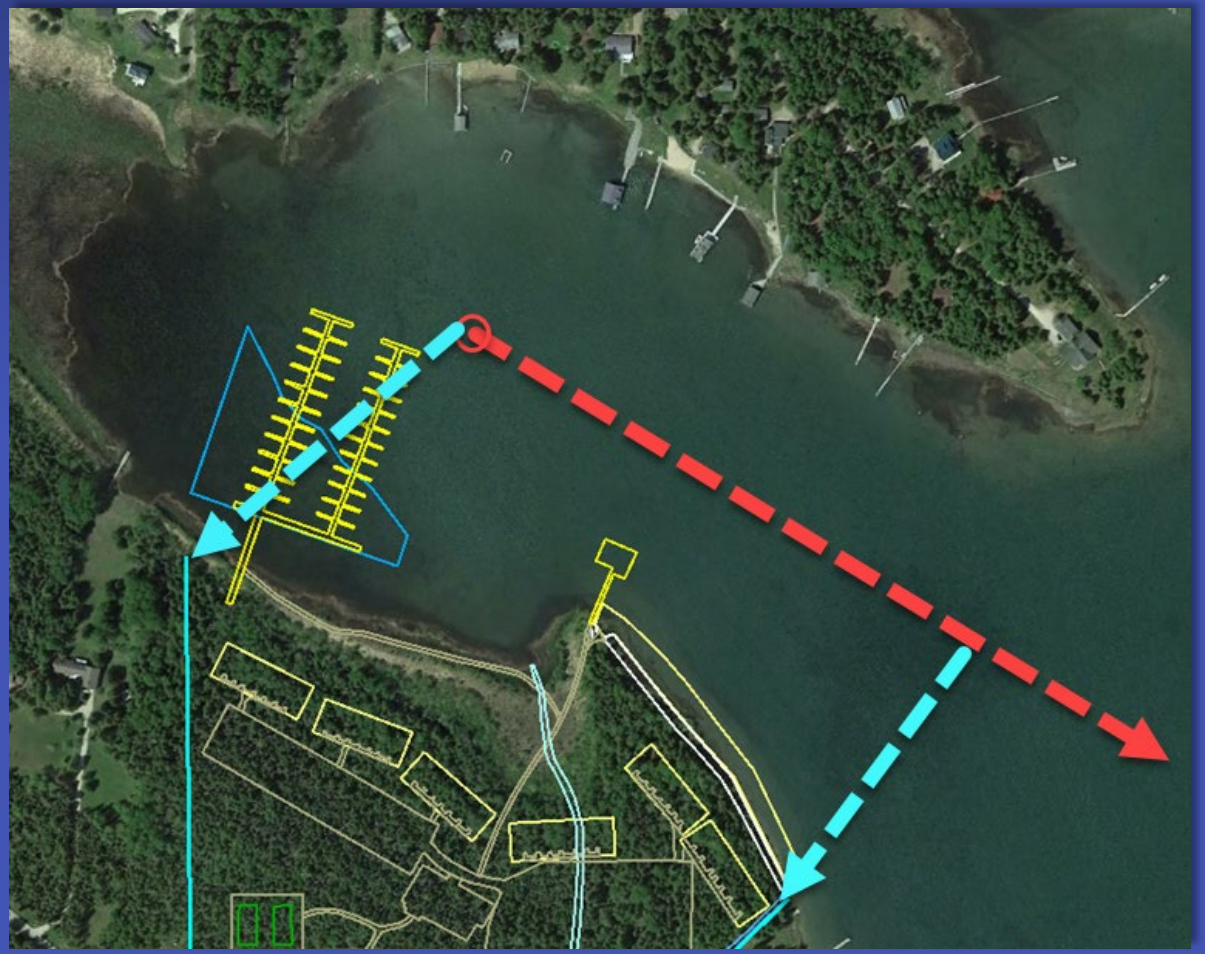
- Corps-regulated activities plus:

Riparian interest

- Applicant would need an easement from adjacent owners

OR

- Modify the project to fit within RIA

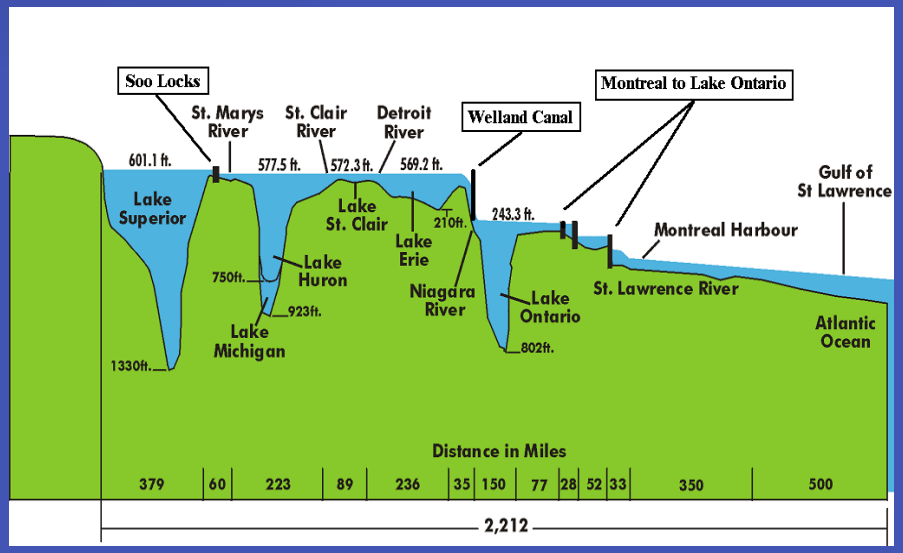


Great Lakes Water Level UPDATE

Great Lakes Basin

The Great Lakes Basin

- 14,000 miles of shoreline
- 95,000 square miles of water
- 200,000 square miles of land
- 8 States & 2 Provinces



Current Situation

Date	Superior* Daily Mean	Michigan Huron* Daily Mean	St. Clair* Daily Mean	Erie* Daily Mean	Ontario* Adj. Daily Mean
01-AUG-2019	603.25	581.90	577.52	574.47	248.34
02-AUG-2019	603.23	581.89	577.50	574.44	248.30
03-AUG-2019	603.25	581.88	577.45	574.40	248.26
04-AUG-2019	603.23	581.87	577.44	574.38	248.21
05-AUG-2019	603.22	581.87	577.42	574.37	248.16
06-AUG-2019	603.28	581.88	577.37	574.36	248.12
07-AUG-2019	603.25	581.87	577.38	574.37	248.13
08-AUG-2019	603.26	581.87	577.30	574.32	248.12
09-AUG-2019	603.29	581.86	577.30	574.32	248.09
10-AUG-2019	603.25	581.85	577.33	574.30	248.06
11-AUG-2019	603.23	581.84	577.30	574.25	248.00
12-AUG-2019	603.24	581.81	577.27	574.18	247.96
13-AUG-2019	603.23	581.80	577.34	574.22	247.92
14-AUG-2019	603.22	581.79	577.35	574.22	247.86
15-AUG-2019	603.18	581.78	577.34	574.21	247.81
16-AUG-2019	603.16	581.78	577.30	574.17	247.77
17-AUG-2019	603.18	581.77	577.24	574.16	247.75
18-AUG-2019	603.17	581.79	577.22	574.16	247.75
19-AUG-2019	603.21	581.78	577.28	574.17	247.71
20-AUG-2019	603.21	581.76	577.29	574.17	247.68
21-AUG-2019	603.23	581.73	577.30	574.20	247.67
22-AUG-2019	603.21	581.71	577.35	574.21	247.64
23-AUG-2019	603.19	581.67	577.35	574.17	247.60
24-AUG-2019	603.15	581.66	577.32	574.18	247.54
25-AUG-2019	603.12	581.63	577.30	574.13	247.50
Mean:	603.22	581.80	577.34	574.26	247.92

August Statistics	*Historic Water Levels*				
	Superior	Michigan Huron	St. Clair	Erie	Ontario
Avg Last Month	603.20	581.93	577.56	574.59	248.69
Avg Last Year	602.54	580.54	576.24	573.22	245.76
Minimum	600.43 (2007)	576.67 (1964)	572.21 (1934)	569.00 (1934)	242.78 (1934)
Maximum	603.22 (1952)	581.99 (1986)	577.10 (1986)	573.95 (1986)	247.97 (1947)
Long Term Avg**	602.17	579.27	574.67	571.75	245.70

* Mean levels are calculated by averaging the best available gage data at report generation and are subject to change.
** Period of Record 1918 - 2018

New Record Highs Reached in 2019

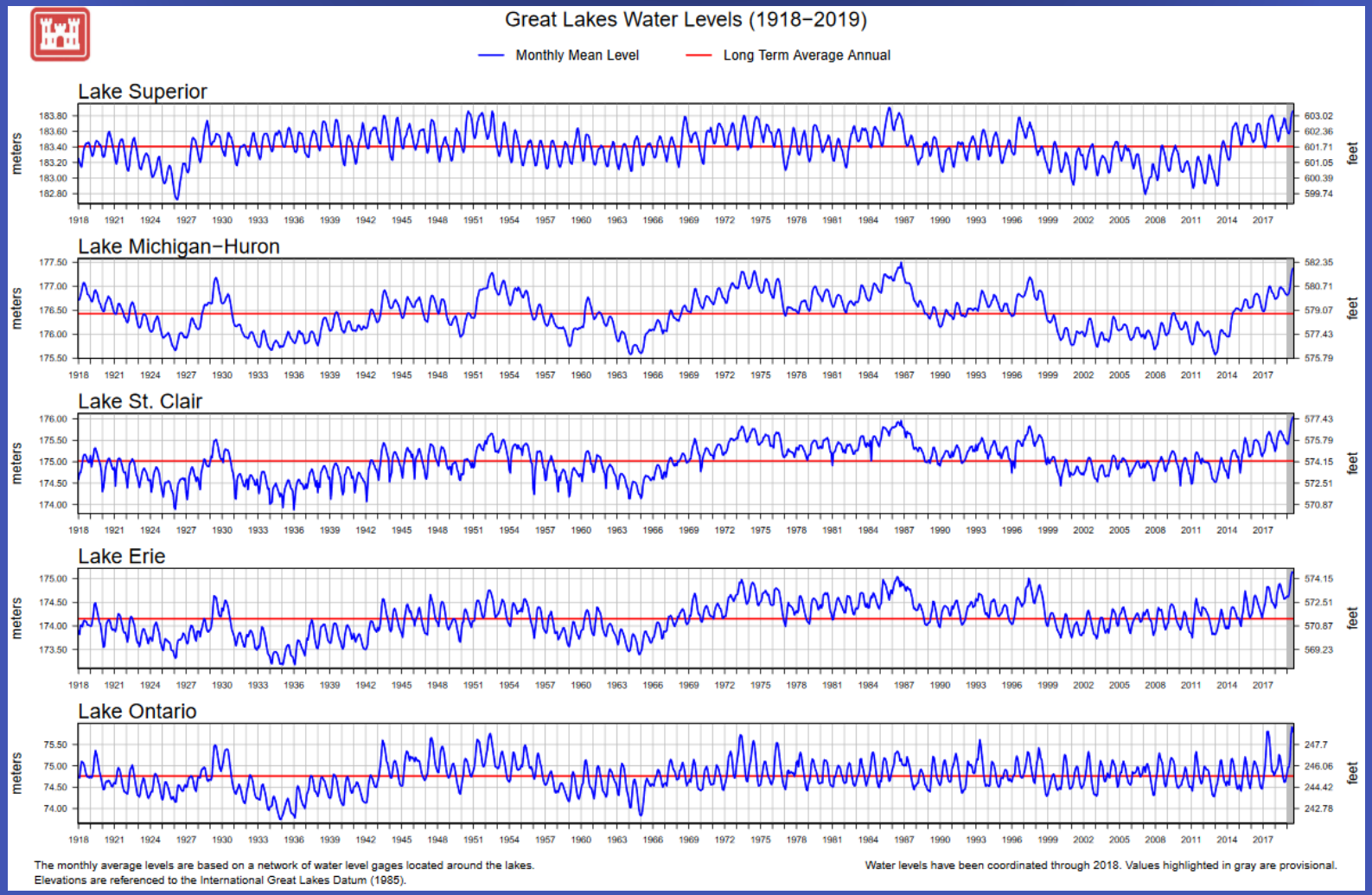
May: Superior, St. Clair, Erie

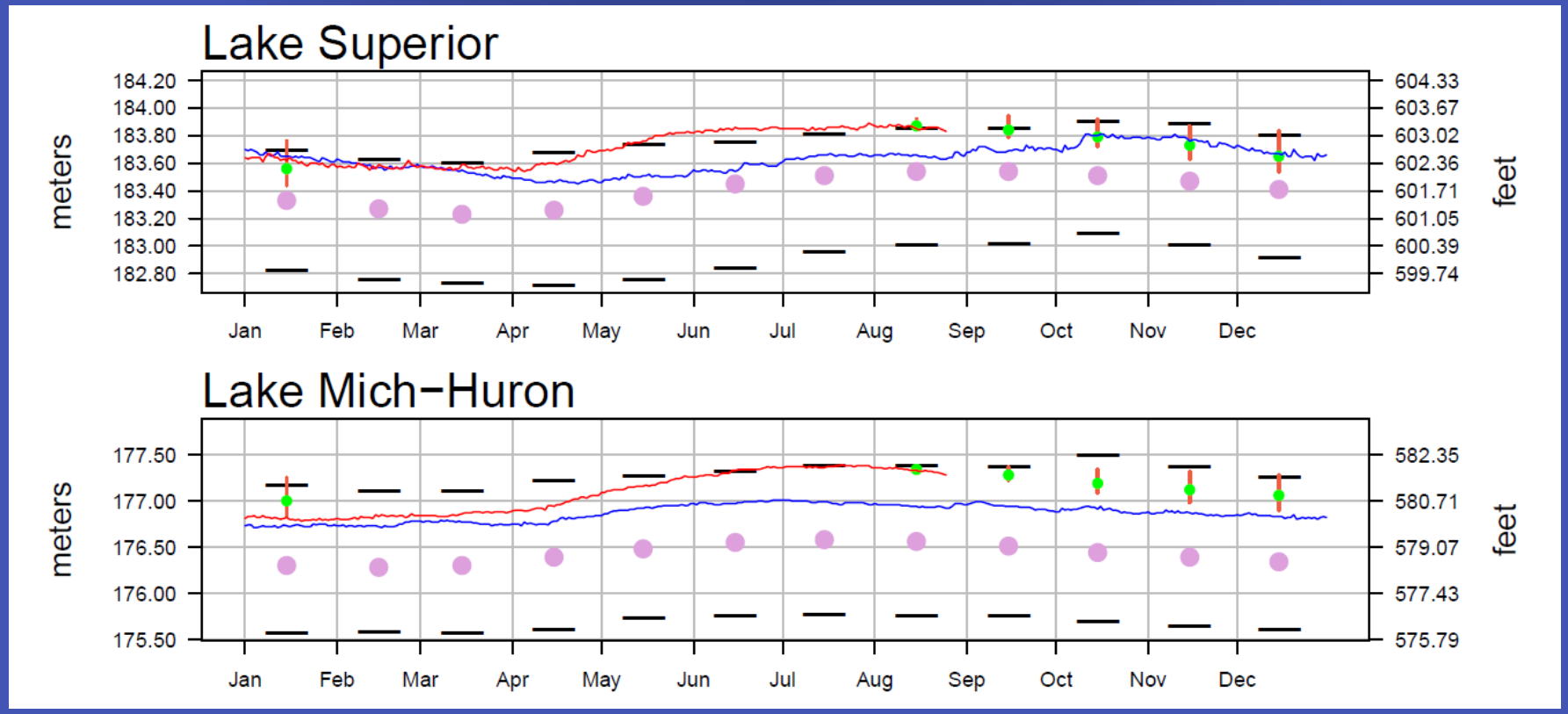
June: Superior, St. Clair, Erie* and Ontario*

July: Superior, St. Clair*, Erie and Ontario

*highest monthly mean on record for all months

Period of Record is 1918-2018


Great Lakes Water Levels (1918–2019)
Monthly Mean Level
Long Term Average Annual
Lake Superior
meters
183.80
183.60
183.40
183.20
183.00
182.80
feet
603.02
602.36
601.71
601.05
600.39
599.74
Lake Michigan–Huron
177.50
177.00
176.50
176.00
175.50
582.35
580.71
579.07
577.43
575.79
Lake St. Clair
176.00
175.50
175.00
174.50
174.00
577.43
575.79
574.15
572.51
570.87
Lake Erie
175.00
174.50
174.00
173.50
574.15
572.51
570.87
569.23
Lake Ontario
75.50
75.00
74.50
74.00
247.7
246.06
244.42
242.78
1918 1921 1924 1927 1930 1933 1936 1939 1942 1945 1948 1951 1954 1957 1960 1963 1966 1969 1972 1975 1978 1981 1984 1987 1990 1993 1996 1999 2002 2005 2008 2011 2014 2017
The monthly average levels are based on a network of water level gages located around the lakes.
Elevations are referenced to the International Great Lakes Datum (1985).
Water levels have been coordinated through 2018. Values highlighted in gray are provisional.


2019
2018
Coordinated Forecast
LTA Monthly Mean
Record High/Low Monthly Mean
Lake Superior
meters
184.20
184.00
183.80
183.60
183.40
183.20
183.00
182.80
604.33
603.67
603.02
602.36
601.71
601.05
600.39
599.74
feet
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Lake Mich−Huron
meters
177.50
177.00
176.50
176.00
175.50
582.35
580.71
579.07
577.43
575.79
feet
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

Questions ?