

# Geographic Response Strategies

# Purpose

- Historically known as Geographic Response Plans
- Response strategies for the first 48-72 hours
- Tactical options for incorporation into an IAP
- Logistical, Environmental & Social Economic concerns
  - Boat Ramps
  - Marinas
  - Staging Areas
  - Endangered Species
  - Water intakes
  - Historical and Tribal concerns
  - Etc.....

# Development

- Living Document
- Stakeholder Involvement
- AOR Grids to match ESI Grids
- Two Parts
  - Tabulated Information
  - Data in Environmental Response Management Application (ERMA)
- Data Collection -> SSC -> ERMA Team
- Posted on Homeport
- Validation

# Environmental Response Management Application

Used by USCG for Common Operating Picture

- Priority Sites
- Shoreline Sensitivity
- Potable and Non-Potable Water Intakes
- Marinas
- Managed Natural Resource Areas
- Staging Areas
- many more layers available



# Grids

- Grids consistent with Environmental Sensitivity Index Maps
- 6 Branches
  - Harrisville to Saginaw
  - Thumb - Quanicassee to Lakeport
  - St Clair River- Port Huron to Grosse Pointe
  - Detroit River - Belle Isle to Pointe Mouille
  - Western Lake Erie - Monroe, MI to Oregon, OH
  - SW Lake Erie - Reno Beach to Vermilion



# GRS Page 1

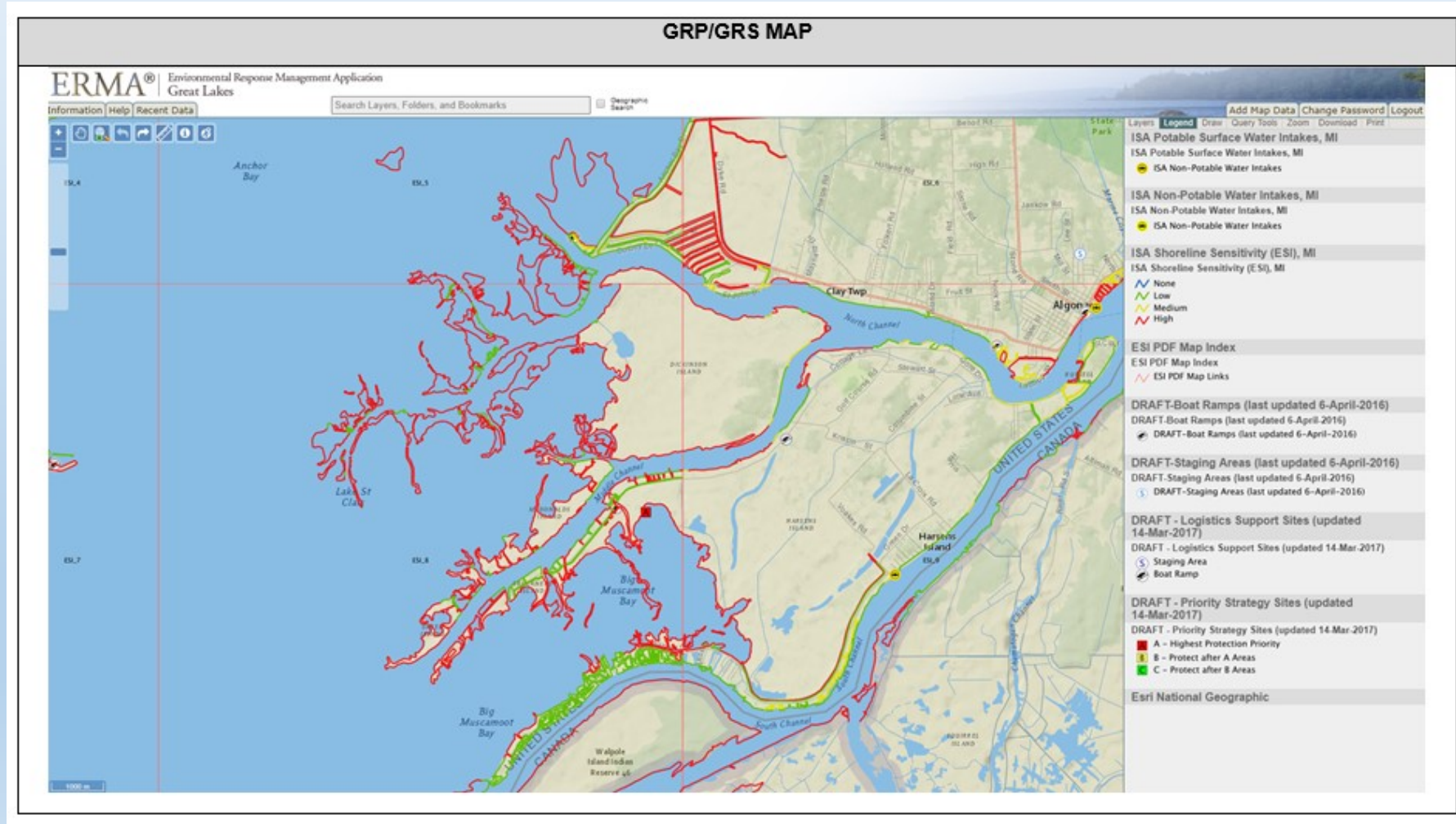
<b>GRS:</b>	<b>Saint Clair Flats State Wildlife Area</b>	<b>ESI #</b>	<b>08</b>
<b>Protection Priority Sites / Ranking:</b>		Sites within GRP/GRS and their priority (A) Saint Clair Flats Wild Life	
<b>LOCATION INFORMATION</b>			
<b>State:</b> MI		<b>County:</b> Saint Clair	
<b>CONTACT INFORMATION</b>			
Key contacts for this GRP area beyond those as part of NRC notification. EPA (312 353 2318) , US Fish and Wild Life Service (517 351 8324) ,DEQ ( 1-800-292-4706)			
<b>RESOURCES AT RISK CHARACTERISTICS</b>			
<b>Managed Areas:</b>	<ol style="list-style-type: none"> <li>1. Saint Clair River Flats (810) 748-9504</li> <li>2. State Wildlife Area (517) 351 8324</li> </ol>		
<b>Shoreline Type:</b>	Coastal Wetlands and low lying areas		
<b>Sensitive Habitat:</b>	Saint Clair Flats Wildlife Area Refuge		
<b>Wildlife:</b>	Lake Trout, Bass, Walleye, Migratory Birds, Marine Birds, Mammals,		
<b>Federally Threatened / Endangered Species:</b>	USFWS IPAC site with confirmation from USFWS: Indiana Bat, Northern Long-eared Bat, Red Knot, Whooping Crane, Eastern Massasauga rattlesnake, Rayed bean clam, Snuffbox Mussel, Eastern Prairie Fringed Orchid.		
<b>Socio-Economic Resources:</b>	Water intakes, parks, high use areas, commercial ports, recreational marinas, docks, recreational fishing areas, etc... <ol style="list-style-type: none"> <li>1. High Recreational fishing and boating area</li> <li>2. Commercial Traffic in the South Channel</li> <li>3. South End of Harsens Island</li> </ol>		
<b>SPILL RESPONSE</b>			
<b>Predicted Behavior:</b>	The normal elevation of the lake surface varies irregularly from year to year. During the course of each year, the surface is subject to a consistent seasonal rise and fall, the lowest stages prevailing during the winter and the highest during the summer. In addition to the normal seasonal fluctuations, oscillations of irregular amount and duration are also produced by storms. Sudden changes in wind or barometric pressure can cause fluctuations of 1 foot or more that may last several hours		
<b>Response Considerations:</b>	Ice forms early on this body of water, usually starting in the shallows of Anchor Bay and in the east at Mitchells Bay. Because of prevailing winds and currents, the west side of the lake is the last to become covered and the first to clear. Navigation is usually extremely limited by early December. This area is a shallow area for response boats. Is a high traffic area during the summer months and has canals leading to residential docks and housing area.		

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Recommended Spill Response Strategy Table										
Site ID	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)	Response Strategy	Implementation	Min Boom Length	Staging Area	Boat Acce ss	Land Acces s		
Saint Clair Flats State Wildlife Area	42.585004	-82.633809	Deflection Boom and Diversion Boom away from the marsh areas	Deflection Boom and Diversion Boom	4,000ft	Algonac Ferry Terminal	Yes	Yes		
<b>LOGISTICS</b>										
Logistics Support Table										
name	type	Lat	Long	address	county	Owner POC	Access limit	description	state	sector
Algonac Municipal Ramp	Boat Ramp	42.62002100 00	-82.5288890000	2635 Pointe Tremble Rd, Algonac, MI 48001	St. Clair County	City of Algonac	None	Boat Ramp	MI	SDET
name	type	Lat	Long	address	county	Owner POC	Access limit	description	state	sector
Algonac Ferry Terminal (Staging Area 10)	Staging Area	42.630247000 0	-82.5302470000	1201 St. Clair River Drive, Algonac MI	St. Clair County		Contact CBP	Contact Customs and Border Patrol at Blue Water Bridge for access permission	MI	SDET
<b>COMMENTS</b>										
Priority Sites										
(A) Saint Clair Flats Wildlife refuge – Area Headquarters is the St Clair Flats DNR Wildlife Field Office 1803 Krispin Road, Harsens Island, MI 48028 phone (810) 748 9504										



# GRS Page 3





# Validation

- 5 Tier Validation Process
  - Tier I – Desktop
  - Tier II – Visual Confirmation
  - Tier III – Equipment Deployment
  - Tier IV – Full Scale Exercise
  - Tier V- Incident

\*It should be noted that large quantity of GRS data and booming strategies may prohibit comprehensive field validation. Therefore, it is important for Area Committees to employ a risk based decision-making methodology.

# GRS Workshop – 29 Aug 2019

- Desk top GRS validation with area Stakeholders (St. Clair River)

- St. Clair County Emergency Management
- St. Clair County Env Health
- St. Clair County Sheriff
- St. Clair County Hazmat
- City of Marysville
- Marysville Water Plant
- MI EGLE
- MI DNR
- MI State Police
- Canadian Coast Guard
- National Energy Board
- Canada Boarder Services Agency
- US Coast Guard Sector Detroit
- US Coast Guard District 9
- US EPA
- US Fish and Wildlife
- US Customs and Boarder Protection
- US Army Corp of Engineers
- NOAA – SSC
- Aamjiwnaang First Nation
- Marine Pollution Control
- Clean Harbors
- T & T
- ECRC
- Enbridge

# GRS Workshop

- Discussed St. Clair River System
  - Port Huron to St. Clair River Delta
- Truth data with area Stakeholders
  - Are Managed Area Identified
  - Shoreline Types
  - Sensitive Areas
  - Predicted behavior of waterway
  - Response considerations
  - Special Logistics
  - Booming Considerations

# GRS Workshop

- Lessoned Learned
  - Extensive notes taken to add to each GRS
- Recommend St. Clair River Delta Workgroup
  - US Coast Guard
  - US EPA
  - US Fish and Wildlife
  - US DNR
  - Canadian Coast Guard
  - Response Contractors
  - Walpole Island First Nation
  - Aamjiwnaang First Nation

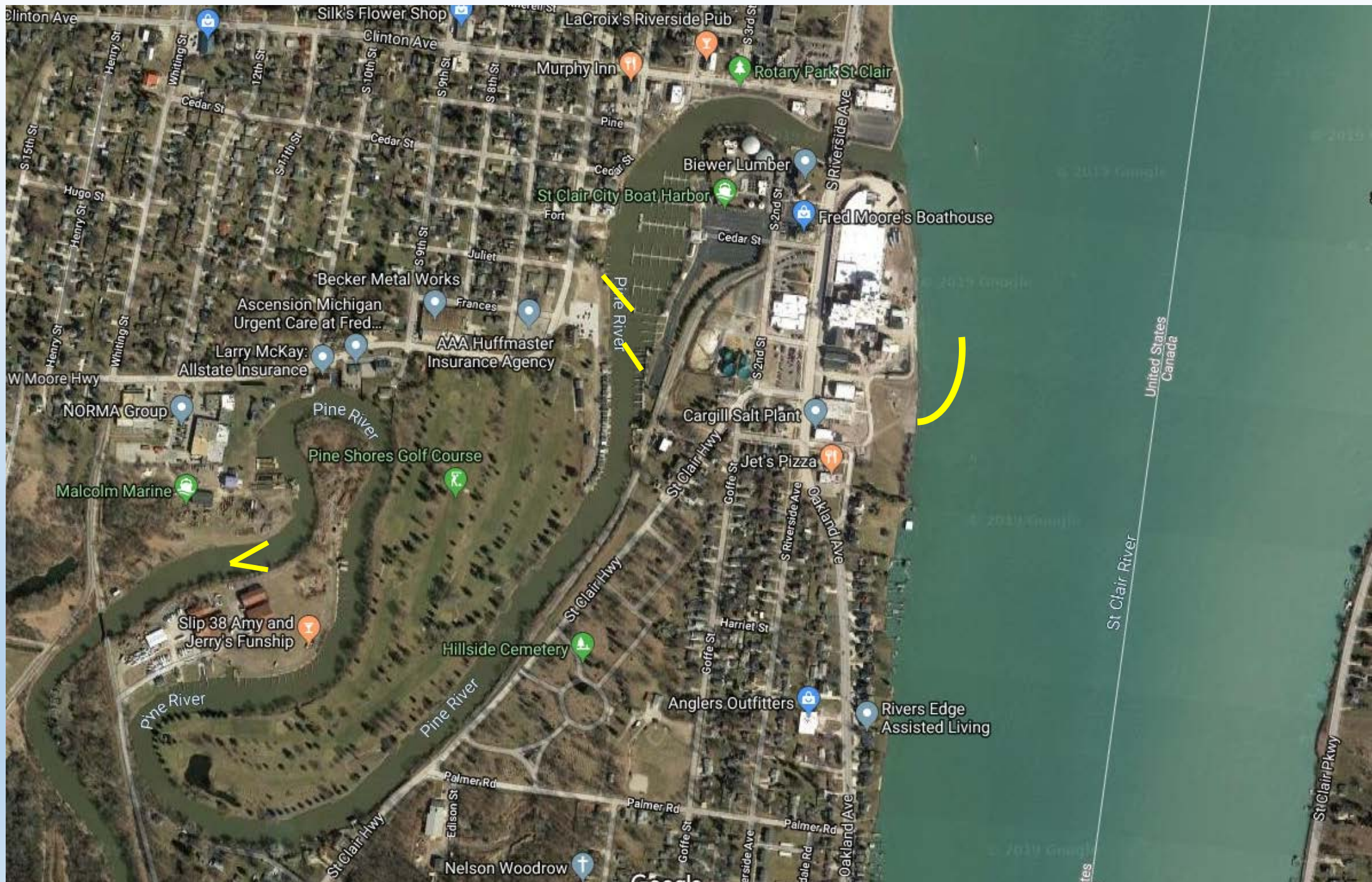
# CANUSLAK Boom Deployment

- 24-26 September 2019 – St. Clair, MI
  - In conjunction with Shell Coruna FSE
  - Test GRS #3 City of St. Clair, MI
  - Players
    - St. Clair County Office of Emergency Management
    - USCG Sector Detroit, ANT Detroit, ANT Buffalo, District 9, Atlantic Strike Team, USCGC Hollyhock
    - T&T Marine Salvage
    - St. Clair City Boat Harbor & Cargill Salt Plant





















# Lessons Learned

- Cargill Salt Plant
  - May be a good staging area
  - Boom collection strategies not recommended due to normal high current
    - 2-4 knots
  - Boom diversion strategies may be appropriate if deemed necessary
- St. Clair City Boat Harbor
  - Excellent sheltered water marina, 2 Boat ramps suitable for launching 30'+
  - Large parking lot
  - Off season use – no problem
  - Summer season use – will require greater coordination and consideration with Harbor Master

Questions?