

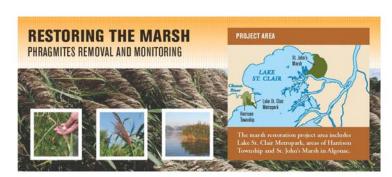
- ◆ SCDRS (aka HEC) Education & Outreach
 - Societal
- Fish Spawning Reefs
 - Fish/Biological
 - Environmental/Water Quality/Habitat
 - Societal
 - AOCs



Education & Outreach Project

2013 - 2015

- Outreach Tools (e.g., maps, fact sheets, exhibits, websites)
- Fisheries Workshops
- Presentations (IAGLR, etc.)
- Technical Publication
- Scientist Webinar
- Media Outreach



Great Lakes marshes are valuable wetland habitats, full of nutrients that help support diverse plant and animal life. They also provide ecological services such as water filtration and flood protection along the coast. However, many marsh habitats are threatened by pollution, development and non-native aquatic invasive species, like Phragmites.

RESTORING THE MARSHES

Phragmites matralis, an invasive plant, quickly spreads through marsh and wetland areas, robbing the fish, plants and wildlife of nutrients and space; blocking access to the water; and spoiling shoreline views. Once it has become established, removal by hand is nearly impossible.

As Phragmites overtook the Lake St. Clair manshes, for example, removing the invader and restoring the natural balance of the marshes required strong measures. Natural resource managers devised a plan to eradicate and manage invasive Phragmites that included herbicide applications and controlled burns. The marsh restoration project area includes Lake St. Clair Metropark, areas of Harrison Township and St. John's Marsh in Algonac.

WHAT WAS DONE

- The Michigan Department of Natural Resources approved a control plan and the Michigan Department of Environmental Quality approved the required permits.
- Trained professionals followed the plan.
- First, an herbicide was applied by helicopter and on the ground.
- Then, controlled burns were used to remove dead Phragmites. Burning the stalks allowed sunlight to penetrate the ground and native plant seeds to germinate.

Managers will continue to monitor the project area and will encourage the re-establishment of native species in the marshes.

TECHNOLOGY

Natural resource managers used Geographical Information System (GIS) technology to determine how and where to reduce and remove Phragmites to allow native plants to regenerate.



YEAR 1 FALL

Herbiscide, a chemical used to kill plants, was applied by helicoptors and on the ground with aprayers. Trained professionals used Glyphosate, an EPA-approved argustic herbiscide to spray the plants. People were not allowed into the treatment area.



Controlled burns

on controlled burns (in combination with the herbicide) were used to remove dead Pruagmetes, allowing sunlight to penetrate the ground



FALL

lerbicide application on the ground continued. The ody herbicides that see effective in controlling "harginess are broad spectrum, meaning they affect other plant species, lowerer, pather plants occover, within a few years after mittal herbicide.



will continue to Applying project area while or other

- the recovering wetlands.
 There are many tools they use, including:

 Flooding, changing water
- levels, diking:

 Removing plants by mowing, dredging or
- Applying herbicides or other chemicals to help prevent the growt and spread of invasive species; and
- Adding nest structure plants and other habit improvements to make it hospitable for native species to return.



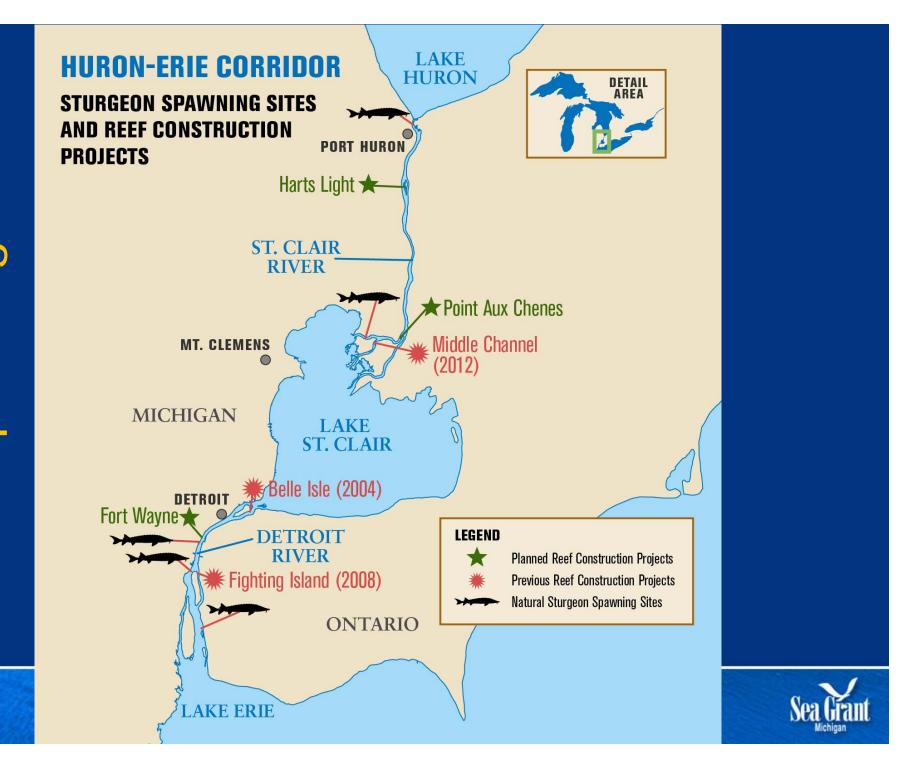
Education & Outreach Needs

- Help develop content for public outreach -review technical publications and other materials
- Speak and/or participate in webinar(s)
- Serve or AOC technical committees
- Help plan and participate in public event(s)
- Photos of scientists and students in the field and lab









Fish Spawning Reef Needs

- Identify project sites
- Document activities through photos and written summaries
- Pre and post construction monitoring & assessment
- Communicate research timeline/activities/findings to MSG







Contacts & Questions

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