

#### HURON-ERIE Corridor Initiative

# HECI GLRI

#### **USGS GLSC and Partner Roles**



### **Background and Objectives**

 This project employs a multidisciplinary scientific approach to assess fish habitat in the HEC and to remediate losses of fish habitat.

Activity	Location	Туре	Team
Preconstruction assessment for MI and CAR reefs	Middle Channel and Chanel @ Ronde	Spawning: eggs, adults, habitat classification	USGS SCR USFWS SCR
SCR main channel and fringes larval fish	Entire length of St. Clair River	Bongo nets larval fish, zooplankton	USGS SCR
SCR and DR larval fish nursery areas	Wetlands associated with MC, CAR, and FI reefs	IP net, light traps, zooplankton, seines, vegetation sampling	CMU USGS DR USGS SCR
SCR and DR juvenile fish nursery areas?	Wetlands associated with MC, CAR, and FI reefs?	Fyke net, trap net, seine, electrofish?	MI DNRE, USFWS, USGS, others?
DR main channel larval fish	Main channel areas of Detroit River	Bongo nets, IP net, larval fish, zooplankton	USGS DR CMU
FI Reef spawning	Fighting Island reef	Egg mats, gillnets, set lines	USGS & USFWS DR CMU
Larval lake sturgeon (SSP funded)	Fighting Island Reef	Deep river drift nets	USGS DR USFWS DR
Outreach	Regional/national and beyond	Workshops, talks, pubs, media, etc.	MI Sea Grant, all others

# Logistics

#### USGS SCR crew

- Team of three
- Housed in Algonac
- Boat required full week
- April June
- USGS DR crew
  - Team of three
  - Housed at GLSC
  - Boat required full week
  - April June

#### CMU crew

- Team of three
- Housed in Algonac
- CMU Boat required full week
- April August

### Deliverables

- Databases and Habitat use maps/GIS
  - Habitat type (e.g. substrate, flow, vegetation)
  - Spawning use (adults and egg incubation)
  - Larval fish distributions
  - Juvenile fish distributions
  - Nursery areas (location and function)
- Recommendations on future restoration strategies
  - What/where/how/why?

## Deliverables

- Begin/continue integrating ecological data with physical models
- Development of predictive models
- Continued development of adaptive science framework