## Elk River Chain of Lakes Fish Shelters Project Watershed Protection Plan Implementation Team

Camp Hayo–Went–Ha Workshop January 30, 2013

**Fred Sittel** 

**Steve Young** 

### **Collaborating Organizations**

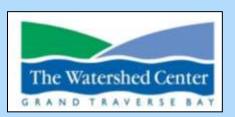


















### Acknowledgment

TOWNSHIP	NUMBER OF SITES
Forest Home Townshin	8

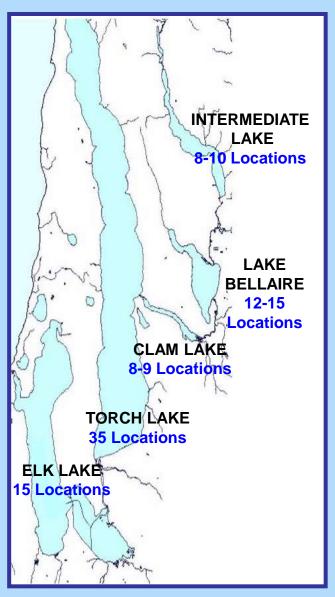
rorest nome rownship	0
Helena Township	3
Milton Township	6
Torch Lake Township	2
Central Lake Township	4
Kearney Township	4
Central Lake Village	1
Whitewater Township	4

Total

32

### Fish Shelters Project Scope and Purpose

- **J** Provide habitat & improve sport fishing
- **J** Compensate for lack of woody debris
- ✓ Over 80 locations across five lakes
- **J** Over 240 individual shelter structures
- **J** Located in 15 to 20 feet of water



### Fish Shelters Project MDEQ Permit Conditions

- **J** Five year permit issued June 2012
- **J** Riparian owner permission
- **J** MDNR Fisheries Division biologist support
- **J** Minimum 10 foot clearance for boat navigation
- **J** Use durable natural materials

### Fish Shelters Project Structure types

#### **J** Hardwood slab tree



Hardwood stump with root ball



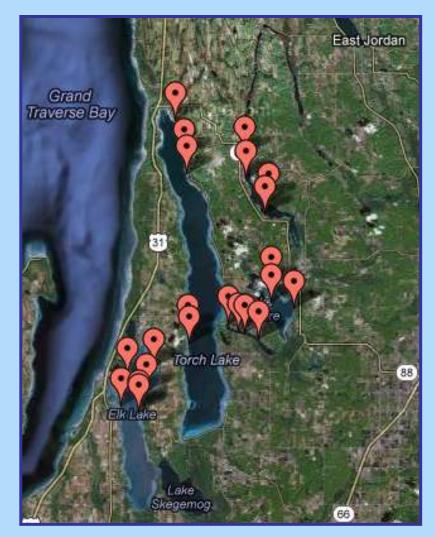
## J Hardwood crate filled with natural brush



# First Year Accomplishments



Construction, placement and follow up



22 locations completed in 2012

#### History

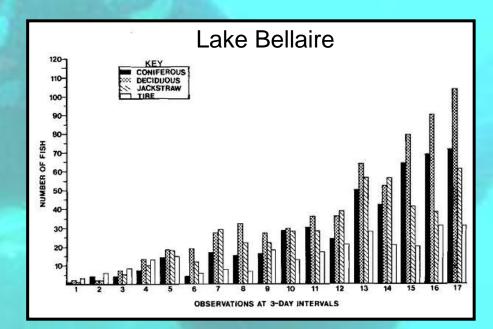
### The Colonization of Artificial Shelters by Fishes in an Oligotrophic and Mesotrophic Lake

1977 Thesis by CMU Student Bruce Pelletier

**J** Torch Lake & Lake Bellaire

**J** Four shelter types

J Diver observation & net capture



#### **Observations**



- **J** Rapid colonization
- **J** Larger fish on hardwood tree
- **J** Small fish on stump & crate
- **J** Smallmouth bass & rock bass





First Year Experiences

**J** Overwhelmingly popular

**J** Provide habitat for may types of fish

**J** Opportunities for recreational fishing

For additional information visit any sponsoring organizations web site