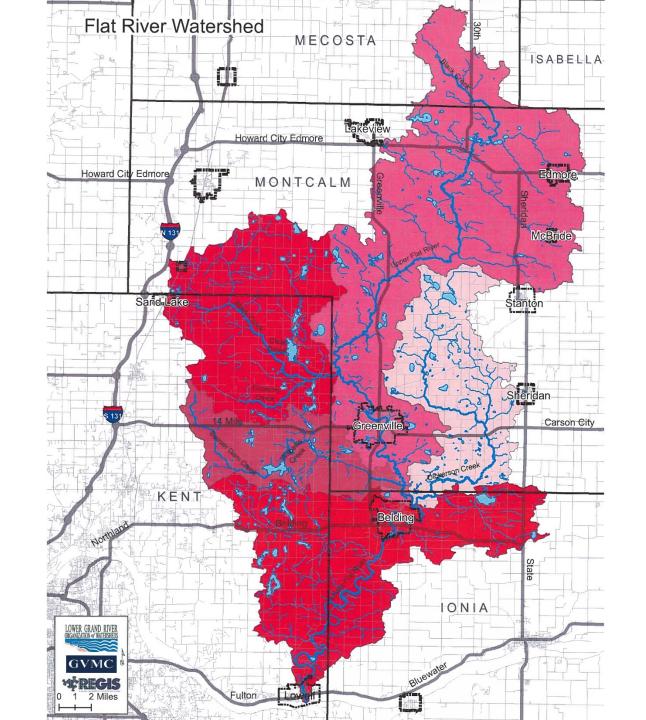
# Flat River Watershed Council



#### **Our Purpose:**

To protect, enhance, and maintain land and water quality, and other natural resources.

989-831-4212 x 105 Find us on Facebook



# **Montcalm Conservation District**

#### **Mission Statement:**

Enhancing Montcalm County's natural resources through conservation education, outreach, and partnerships.



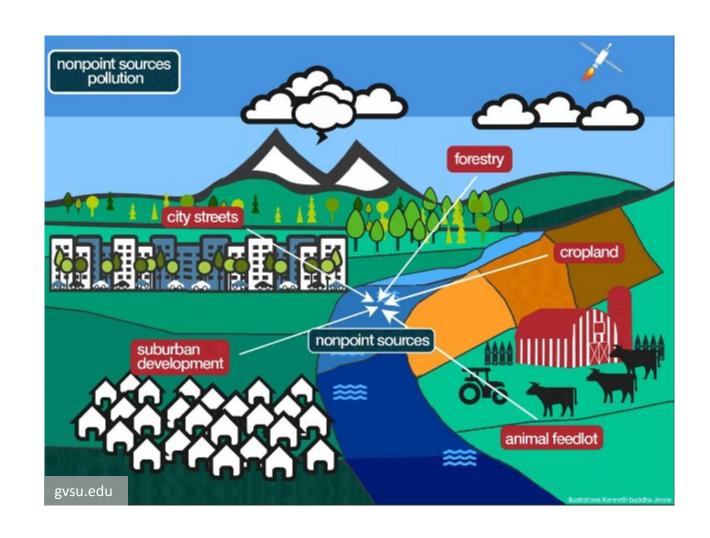
989-831-4212 x 105
77 S. State St. Stanton, MI 48888
<a href="https://www.montcalmcd.org">www.montcalmcd.org</a>
Find us on Facebook



## EGLE 319 Non-Point Source Pollution Grant

Non-Point Source (NPS) pollution occurs when precipitation or wind carries pollutants from the land into the water bodies.

Grant funds are used to protect / improve water quality.





- 1) Conservation Easement in High Biorarity Area
- 2) Natural River Act Ordinance Adoption
- 3) Septic Education Mailers & Workshops
- 4) Farmer-Led Workgroups
- 5) Agricultural BMPs
- 6) Natural Shoreline Installation



### 1) Conservation Easement in High Biorarity Area



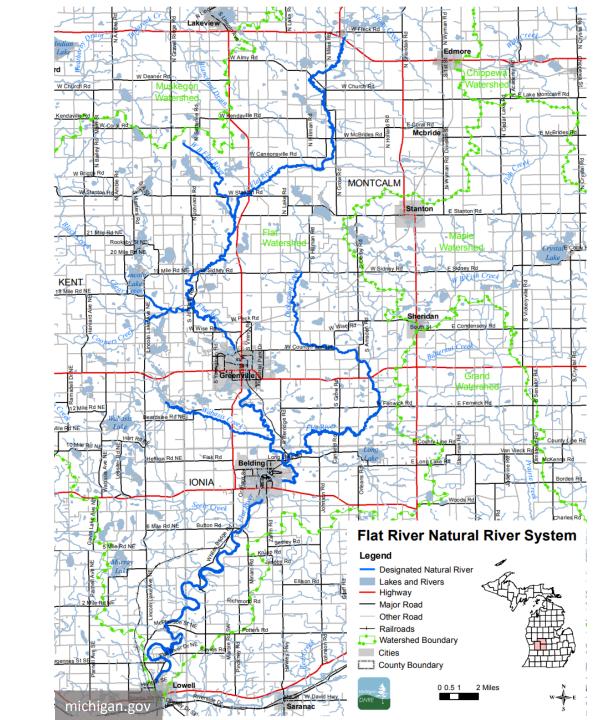
#### **Conservation Easement:**

A legal agreement between the land owner and government agency that restricts the quantity and type of development that can take place.



# 2) Natural River Act Ordinance Adoption

Natural River – a river designated by DNR for its wild, scenic, and recreational value.

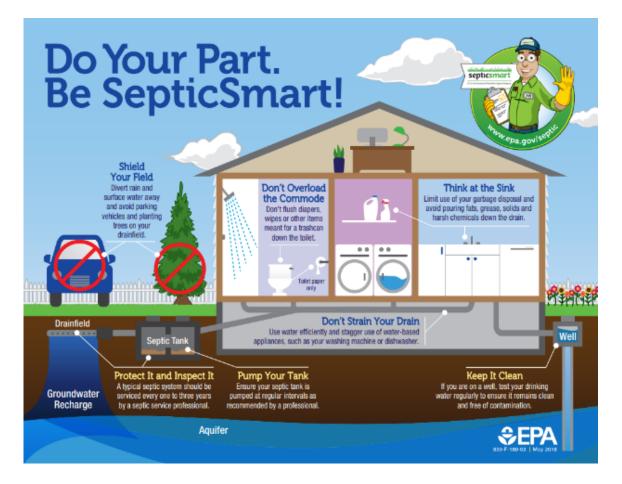




This project has been funded wholly or in part through Michigan Department of Environment, Great Lakes, and Energy's Nonpoint Source Program by the United States Environmental Protection Agency.

#### 3) Septic Education Mailers & Workshops

Improperly managed septic systems are polluting the Flat River and its tributaries with E. coli from human waste.





#### 4) Farmer-Led Workgroups





## 5) Agricultural Best Management Practices (BMPs)



#### **Benefits**

- Reduce Erosion
- Reduce & Filter Runoff
- Recycle Nutrients



#### 6) Natural Shoreline Installation



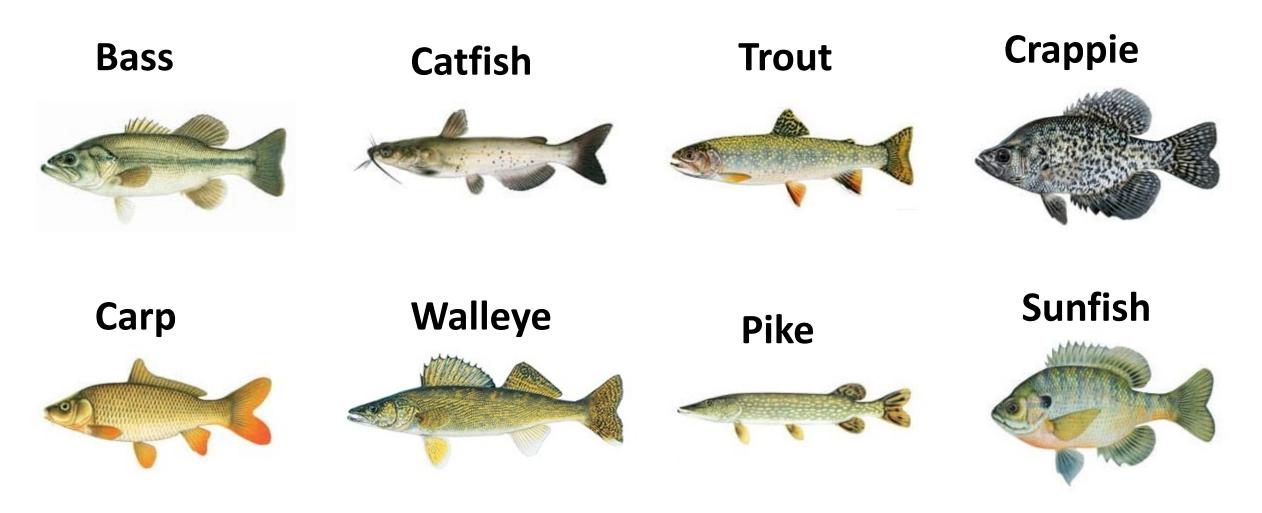




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# Common Fish in the Flat River





# Listed Fish & Plants in the Flat River

#### Pugnose Shiner (Endangered)



River Redhorse (Threatened)



**Bald-Rush** (Threatened)



**Black-Fruited** Spike-Rush (Special Concern)



**Cut-Leaved Water Parsnip** (Threatened)



**Dwarf Bulrush** (Special Concern)





# Listed Plants in the Flat River

Prairie
False Indigo
(Special Concern)



Hairy-Fruited Sedge (Special Concern)



Prairie Buttercup (Threatened)



Virginia Bluebells (Endangered)



Stiff Gentian (Threatened)



Fringed Orchid (Threatened)



Kitten-tails (Endangered)



Goldenseal (Threatened)





# Blanding's Turtle (Special Concern)



Listed Reptiles & Amphibians in the Flat River

#### Eastern Massasauga Rattlesnake (Special Concern)



Blanchard's Cricket Frog (Threatened)



Wood Turtle (Special Concern)



Eastern Box Turtle (Special Concern)





# Listed Mussels in the Flat River

**Cylindrical Papershell** (Special Concern)



Elktoe (Special Concern)



**Ellipse** (Special Concern)





**Purple Wartyback** 

**Black Sandshell** (Endangered)



(Threatened)



Slippershell (Threatened)



Lilliput (Endangered)



**Round Pigtoe** (Special Concern)



Rainbow (Special Concern)



Snuffbox (Endangered)





# Invasive Plants & Algae in the Flat River

#### Narrow-Leaved **Cattail**

#### **Flowering Rush**



**Eurasian Water Milfoil** 



**European Frogbit** 



**Purple Loosestrife** 



Holly-Leaf Waternymph



Yellow **Floating-Heart** 





**Starry Stonewort** 





# Invasive Plants & Algae in the Flat River

#### **Yellow Iris**

#### **Curly-Leaf Pond Weed**



**Creeping Yellow Cress** 



**Reed Canary Grass** 





**Carolina Fanwort** 





# Invasive Fish in the Flat River System

#### **Round Goby**



**Rainbow Trout** 



White Perch



**Common Carp** 



**Gizzard Shad** 



**Flathead Catfish** 





# Invasive Species in the Flat River

#### **Zebra Mussel**



**Sea Lamprey** 



**Asian Clam** 



Asian Clans



**Mute Swan** 

Banded Mystery Snail



**Freshwater Jellyfish** 



**Rusty Crayfish** 



