



Aquatic Characteristic: Clear Water

Description

Clear water is water that has little particulate matter suspended in the water column and allows large quantities of light to aquatic plants and animals.

General Condition of Feature

This habitat is considered 70% in good to excellent condition, 20% in fair condition, and 10% in degraded to very degraded condition.

Associated Species of Greatest Conservation Need

INSECTS

- rapids clubtail (*Gomphus quadricolor*)
- a net-winged midge (*Blepharicera tenuipes*)

FISH

- redside dace (*Clinostomus elongatus*)
- bigmouth shiner (*Notropis dorsalis*)
- cisco or lake herring (*Coregonus artedii*)
- kiyi (*Coregonus kiyi*)
- shortjaw cisco (*Coregonus zenithicus*)
- pygmy whitefish (*Prosopium coulterii*)

FISH cont.

- least darter (*Etheostoma microperca*)

AMPHIBIANS

- pickerel frog (*Rana palustris*)

REPTILES

- wood turtle (*Glyptemys insculpta*)

MAMMALS

- water shrew (*Sorex palustris*)

Associated Threats

POLLUTION

HABITAT CONVERSION

- Riparian modifications: Agriculture in our clay-based watersheds

Conservation Actions Needed (Threats addressed)

LAND & WATER PROTECTION

- Continue to support landowner incentive programs to foster conservation on private land (riparian modifications)

LAND, WATER & SPECIES MANAGEMENT

- Allow seasonal flooding (riparian modifications)
- Maintain or establish riparian buffers of at least 50 ft., but 500 ft. or wider maximizes conservation benefits (riparian modifications)
- Protect and rehabilitate wetland and floodplain functions (altered nutrient inflows)

LAW & POLICY

- Encourage clustered development and greenspace planning (riparian modifications)
- Encourage townships to separate combined sewer systems (altered nutrient inflows)
- Strengthen existing water quality laws (pollution)
- Upgrade septic systems (altered nutrient inflows)
- Use best management practices (pollution, riparian modifications)
- Work with local governments to develop and refine planning and zoning regulations and ordinances that consider natural processes (pollution, riparian modifications)
- Work with local officials on setback and buffer ordinances (riparian modifications)

EDUCATION & AWARENESS

- Continue to create awareness of environmental issues (variety of threats)
- Educate the public on the use of and reasons for maintaining septic systems (altered nutrient inflows)

Research and Survey Needs

- Develop alternatives to pesticides and herbicides
- Determine effective prevention, control, and survey techniques for aquatic invasive species
- Determine unknown life history requirements for SGCN associated with clear water
- Determine the location and condition of septic systems in each watershed
- Inventory erosion sites within watersheds and conduct remediation activities at those sites
- Survey loadings of sediments within watershed and develop strategies to reduce identified problems
- Survey loadings of nutrients within watershed and develop strategies to reduce identified problems
- Map, in GIS, this landscape feature

Monitoring

- Aquatic invasive species
- Beach grooming

- Effluent flows: municipal waste water treatment plants, septic systems
- Erosion sites
- Forestry practices
- Land use changes
- Mining practices
- Nutrient loading
- Pesticide and herbicide use
- Riparian modifications
- Road crossings
- Sediment loading
- Wetland modification