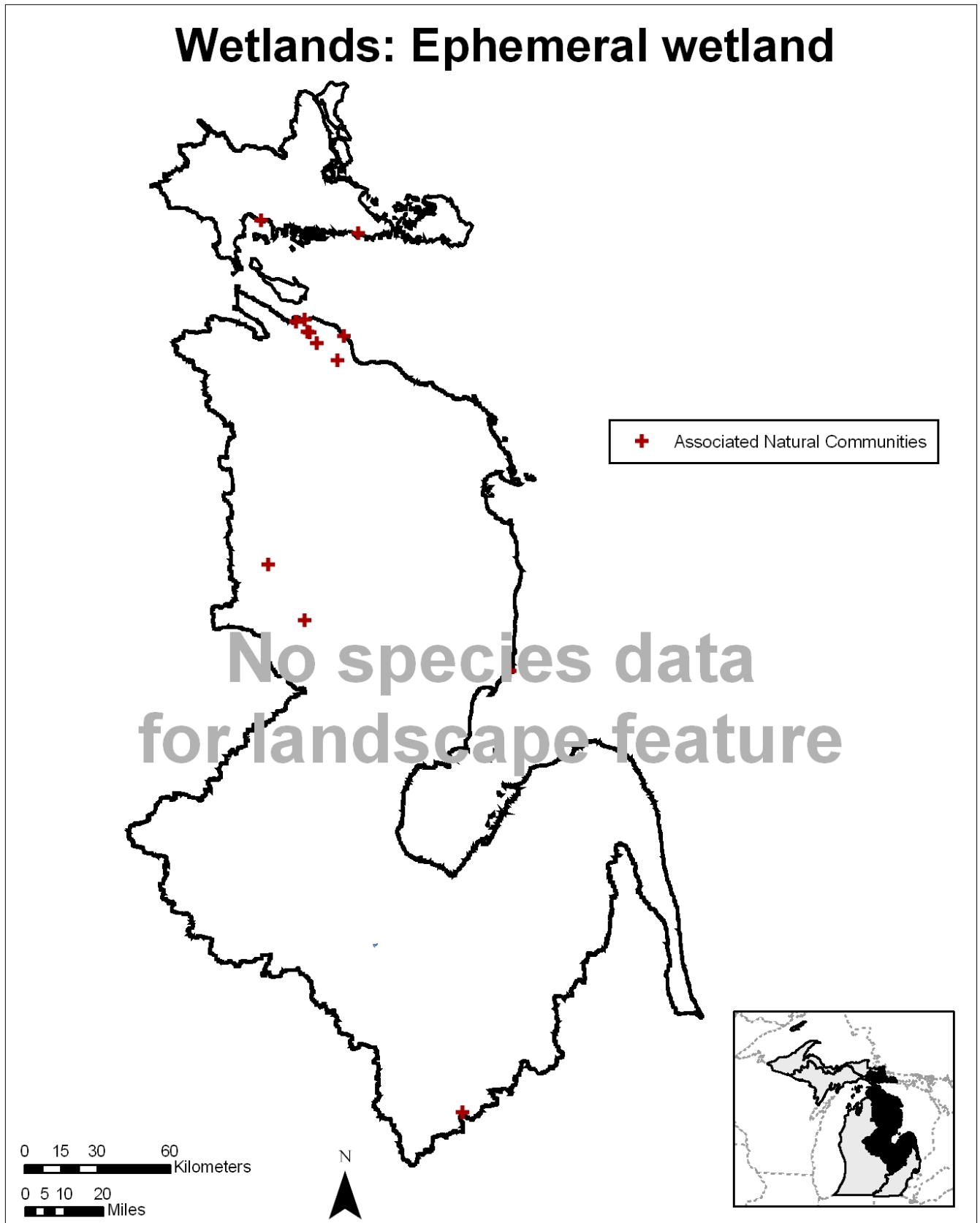


Wetlands: Ephemeral wetland



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Description

Ephemeral wetlands are semi-permanent, seasonally flooded areas. These areas may be small and only a couple of feet in diameter (e.g., vernal pools) or very large. Ephemeral wetlands can have standing water for a few weeks in the spring or short periods after heavy rains during the rest of the year. When not flooded, soils in ephemeral wetlands may feel dry but typically show evidence of hydric conditions. In addition to seasonal fluctuations, water level can vary dramatically from year to year in ephemeral wetlands such as coastal plain marsh, interdunal wetland, and intermittent wetland.

General Condition of Feature

This habitat is considered 45% in good to excellent condition, 20% in fair condition, and 35% in degraded to very degraded condition.

Associated Natural Communities

Interdunal Wetland
Intermittent Wetland

Associated Species of Greatest Conservation Need

CRAYFISH

digger crayfish (*Fallicambarus fodiens*)

INSECTS

Hine's emerald dragonfly (*Somatochlora hineana*)
ringed boghaunter (*Williamsonia lintneri*)

FISH

tadpole madtom (*Noturus gyrinus*)

AMPHIBIANS

blue-spotted salamander (*Ambystoma laterale*)
spotted salamander (*Ambystoma maculatum*)

AMPHIBIANS cont.

four-toed salamander (*Hemidactylium scutatum*)
western chorus frog (*Pseudacris triseriata triseriata*)

REPTILES

eastern fox snake (*Elaphe gloydi*)
queen snake (*Regina septemvittata*)
spotted turtle (*Clemmys guttata*)
eastern box turtle (*Terrapene carolina carolina*)

MAMMALS

water shrew (*Sorex palustris*)

Associated Threats

MODIFICATION OF NATURAL PROCESSES

- Altered hydrologic regimes: Hydrologic alterations; Land use changes; Logging; Impervious surfaces
- Climate change: (low threat)

HABITAT CONVERSION

- Dredging and channelization: Dredging; Filling
- Riparian modification: Development (low threat)
- Wetland modification: Wetland loss; Filling; Dredging

CONSUMPTIVE BIOLOGICAL RESOURCE USE

- Forestry practices: Land use changes; Logging (low threat)

EDUCATION

- Social attitudes: public knowledge on this feature is very limited

Conservation Actions Needed (Threats addressed)

LAND, WATER & SPECIES MANAGEMENT

- Allow seasonal flooding and natural water fluctuations (altered hydrologic regimes)
- Close roads during breeding seasons or install tunnels along migration pathways to allow amphibians and reptiles access to breeding areas (species threats)
- Control and prevent invasive vegetation from establishing (wetland modification)
- Maintain or rehabilitate natural corridors between ephemeral wetlands and other wetlands and upland areas important for amphibian and reptile breeding migrations (riparian modification)
- Protect remaining natural wetlands and rehabilitate degraded wetlands (altered hydrologic regimes, wetland modification)
- Provide incentives for the use and production of native flora (wetland modification)

LAW & POLICY

- Continue developing and refining planning and zoning regulations and ordinance (altered hydrologic regimes, riparian modification, wetland modification)
- Protect and rehabilitate groundwater recharge by requiring that all development-related runoff be captured by infiltration basins (altered hydrologic regimes)
- Work with regulatory agencies to restrict dredging and channelization (dredging and channelization)

EDUCATION & AWARENESS

- Continue working with and educating Drain Commissioners (altered hydrologic regimes, dredging and channelization, riparian modification, social attitudes, wetland modification)
- Educate legislators, policy makers, and the public about the importance and delicate nature of ephemeral wetlands (social attitudes)

Research and Survey Needs

- Conduct statewide wetland inventories
- Determine critical pathways between habitats for amphibians and reptiles to prevent vehicular fatalities and fragmentation of habitats
- Determine life history requirements for SGCN associated with this landscape feature
- Develop alternatives to current drainage practices
- Develop restoration techniques
- Develop techniques to inventory ephemeral wetlands. Poorly timed inventories may result in some ephemeral wetlands not being identified.
- Establish effective methods of communicating with the public and their stewardship role
- Locate high quality or productive ephemeral wetlands
- Model hydrologic flows

Monitoring

- Draining and channelization
- Fragmentation
- Indicator species
- Land use changes
- Riparian modification
- Water withdrawals