

Proposed and On-going MITCHELL CREEK WATERSHED RESTORATION WORK

February 2026



Spanning 16 square miles, Mitchell Creek is the third-largest subwatershed emptying into Grand Traverse Bay. It covers parts of Garfield, East Bay and Blair townships, and Traverse City, where growing human activities pose significant threats to water quality. To tackle these challenges, a partnership was formed between the Conservation Resource Alliance, Grand Traverse Band of Ottawa and Chippewa Indians, Grand Traverse Conservation District, Grand Traverse Regional Land Conservancy and The Watershed Center Grand Traverse Bay. Through the actions outlined below, this group will leverage its collective expertise and work with other stakeholders to coordinate water quality protection and restoration efforts.

PRIORITY RESOURCE ISSUES, CONCERNS AND ACTIONS

Protecting Forests and Reducing Impervious Surfaces

Forested and natural lands protect water quality by absorbing stormwater runoff and recharging groundwater. Replacing them with impervious surfaces reduces these natural functions and increases runoff.

ACTIONS:

- Protect priority land parcels to preserve natural surfaces
- Increase vegetative cover through tree planting events

Wetland Protection

Wetlands play an important role in mitigating storm impacts, providing critical habitat and removing pollutants. The loss of natural wetlands exacerbates impacts to water quality and watershed health.

ACTIONS:

- Review EGLE permit applications that involve altering wetlands and provide recommendations to minimize impacts

Water Quality Monitoring

Tracking water quality metrics throughout the watershed over time helps assess its health, identify pollution sources and demonstrate the impacts of restoration.

ACTIONS:

- Collect physical, chemical and biological data at monitoring sites
- Conduct volunteer-powered Adopt-A-Stream macroinvertebrate sampling

Mitchell Creek Meadows Demonstration Site

Mitchell Creek Meadows: The Don and Jerry Oleson Nature Preserve provides a publicly accessible site for demonstrating best practices in land and water management.

ACTIONS:

- Conduct habitat restoration on the property
- Host volunteer and engagement opportunities to raise awareness of ongoing work, decision-making processes and outcomes

East Branch Flow Restoration

Sedimentation has diverted flow from Mitchell Creek's natural path through the Reffitt Nature Preserve into a straight-line ditch, reducing wetland benefits such as mitigating floodwaters, capturing and removing pollutants, and providing valuable habitat.

ACTIONS:

- Monitor flow to establish baseline data for future redirection to stream's historic channel
- Conduct hydrologic and geomorphic assessments to guide recommendations
- Host community meetings to disseminate information and gather input
- Redirect flow to Mitchell Creek's natural channel

Road-stream Crossing Improvements

Aging and undersized road-stream crossings restrict movement for aquatic organisms, contribute to erosion during heavy rainfall, and can alter the stream channel's morphology.

ACTIONS:

- Improve prioritized road-stream crossings to restore connectivity, reduce erosion and create sustainable access across our waterways

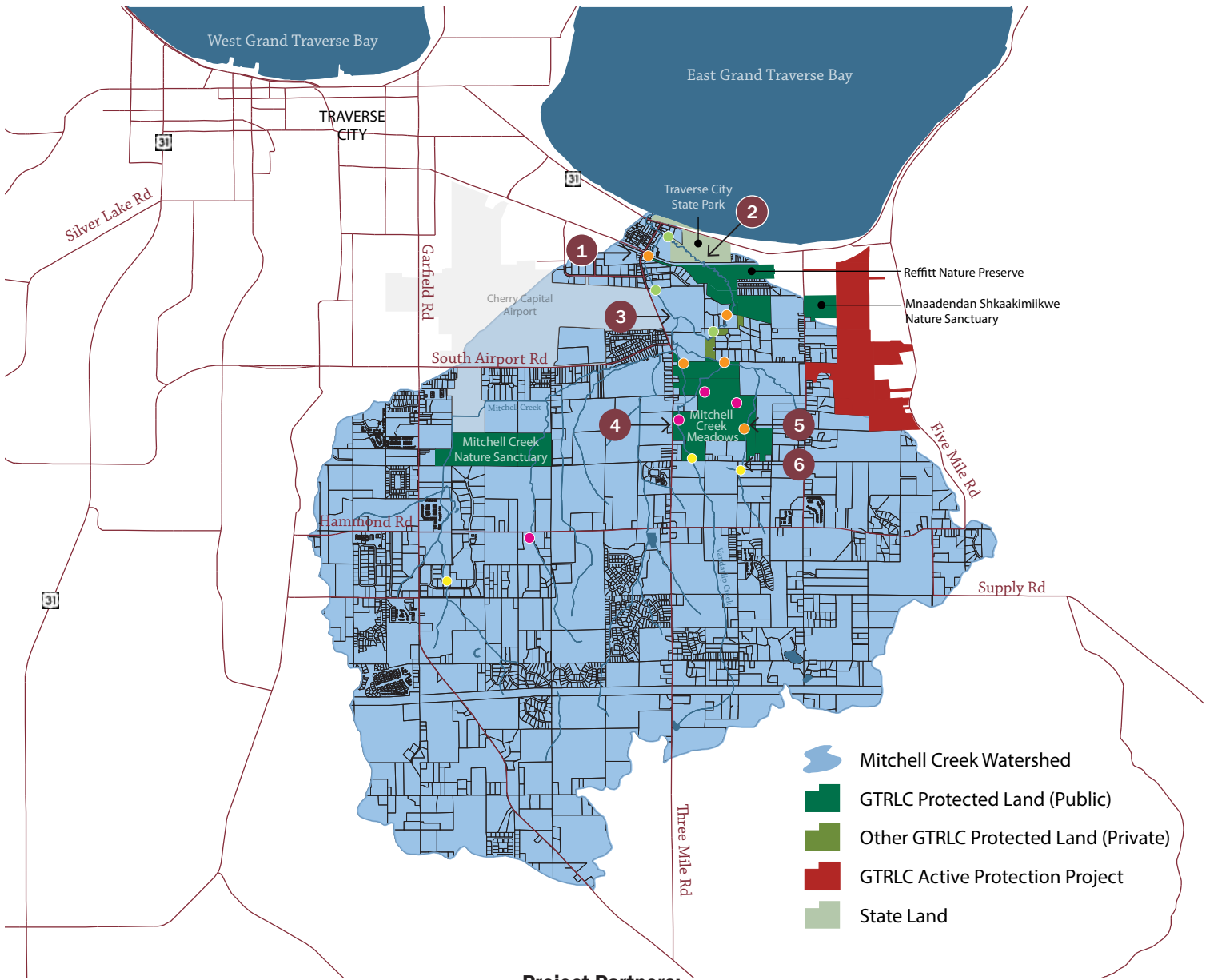
Local Policy Protections and Eco-development

Gaps in local zoning and government policies leave sensitive wetlands, streambanks and riparian areas vulnerable to development.

ACTIONS:

- Work with local governments on zoning and master plans to limit impervious surfaces, protect wetlands and retain greenspace
- Ensure the enforcement of ordinances with water resource protections
- Advocate for sustainable development and ecological design practices

MITCHELL CREEK WATERSHED PRIORITY PROJECTS



Project Partners:

Conservation Resource Alliance (CRA), Grand Traverse Band of Ottawa and Chippewa Indians (GTB), Grand Traverse Conservation District (GTCD), Grand Traverse Regional Land Conservancy (GTRLC) and The Watershed Center Grand Traverse Bay (TWC)

- 1** Future West Branch Mitchell Creek Stream Crossing Replacement
- 2** Future East Branch Mitchell Creek Stream Crossing Replacement
- 3** Future East Branch Mitchell Creek Stream Flow Restoration

- 4** Future Vanderlip Creek Buffer, Instream Habitat & Stream Crossing Removals
- 5** Future West Branch Four Mile Creek Buffer, Instream Habitat, & Stream Crossing Removals
- 6** Future West Branch Four Mile Creek Stream Crossing Replacement

- Adopt-A-Stream Macroinvertebrate Monitoring Sites
- Adopt-A-Stream Macroinvertebrate and Temperature Monitoring Sites
- Temperature Monitoring Sites
- Temperature, Depth, and Conductivity Monitoring sites

Not shown are approximately 550 acres GTRLC has prioritized for protection should they become available.

FOR MORE INFORMATION

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