Rewilding Northport Creek

Discussion Brief for NCB Meeting April 15, 2026

Note: This discussion brief is an AI summary of a packet of documents (engineering reports, letters, etc.) that was submitted by David Brigham. The AI summary is offered as a convenience for members only. Any factual representations, advocacy, or planning on this issue outside the scope of our NCB discussion should be based on the original documents, not on this AI summary. Links to the documents consulted in preparing this summary are given at the end of this brief. *. Link to the full packet.*

Northport Creek is a small but significant stream that flows through the Village of Northport into Grand Traverse Bay. It is designated as a coldwater trout stream and, despite its modest size, supports naturally reproducing fish populations and a range of aquatic life. At the same time, it is a working landscape—shaped over more than a century by logging, farming, village development, and infrastructure.

The current discussion about "rewilding" the creek—specifically, removing the Mill Pond dam—arises from the intersection of these natural and human histories. The question is not simply whether to remove a dam, but how to think about the future of a stream that is already partly altered, partly functioning, and subject to multiple pressures.

A stream shaped by history

The dam at the center of the discussion has its origins in the mid-19th century, when it was built to create a log pond for a sawmill. Over time, the structure was rebuilt (most recently in 1935) and became part of the village landscape. Today, the impoundment it creates—commonly called the Mill Pond—is about an acre in size and has been dredged periodically to remove accumulated sediment.

In that sense, the dam is not an isolated feature but part of a long history of modifying the creek for practical purposes. The surrounding watershed has undergone similar changes. Forests once dominated the area, but logging in the late 1800s was followed by agriculture and later residential and recreational development. Today, the watershed is a mix of forest, farmland, and developed land, with relatively limited wetland area.

These changes matter because they influence how water, sediment, and nutrients move through the system. The dam is one visible element of that larger pattern.

Current condition: a "moderately impaired" system

The most comprehensive recent assessment (2015–2016) characterizes Northport Creek overall as “fair” or “moderately impaired.”

This is not a description of a severely degraded stream, nor of a pristine one. Rather, it is a system that still functions as a trout stream but shows signs of stress.

Water quality measurements illustrate this mixed condition. Some indicators, such as dissolved oxygen and pH, fall within healthy ranges for coldwater fisheries. Others, including turbidity and especially conductivity, show elevated levels at times, suggesting inputs from runoff or other sources.

Biological and habitat conditions follow a similar pattern. The creek continues to support fish and aquatic organisms, but its habitat is influenced by factors such as sedimentation, altered flow, and barriers to movement.

In short, the creek is working—but not at its full potential.

Multiple stressors, not a single cause

One of the most important contributions of the 2016 report is to identify the **range of stressors affecting the creek**. These include:

- Loss or degradation of streambank habitat
- Runoff from roads, residential areas, and agriculture
- Culverts that restrict fish passage
- Historical and ongoing sedimentation
- The impoundment created by the dam
- Potential influences from nearby land uses, including a golf course and wastewater treatment system

The dam is clearly one of these stressors, but it is not the only one. This broader context is important, because it suggests that removing the dam would address some—but not all—of the factors affecting stream health.

The dam and its effects

Within that broader system, the dam plays a distinctive role.

By design, it slows and impounds water, creating a small pond. Over time, this has led to the accumulation of sediment and organic material. The impoundment also changes water temperature, flow patterns, and habitat structure compared to a free-flowing stream.

Equally important, the dam acts as a **barrier to movement**. Fish and other aquatic organisms moving upstream from Lake Michigan encounter both the dam and associated culverts. This limits access to upstream habitat and can affect reproduction and population dynamics.

At the same time, the pond itself has become part of the local landscape. It provides a visible water feature, supports some recreational uses, and reflects a long-standing historical pattern of use.

The emerging decision

The immediate reason for revisiting the dam's future is not only ecological but practical. A recent engineering inspection found the structure to be in poor condition, with deterioration that will require action. The Village therefore faces a choice: invest in repair and continued maintenance, or pursue removal and restoration.

These options differ not only in cost and engineering complexity, but in how they relate to the broader system described above.

Repair: maintaining the current system

Repairing or replacing the dam would preserve the existing pond and the general character of the site. It would also continue the pattern of managing the creek in its current, altered form.

However, this approach would require ongoing maintenance, including periodic sediment removal, and would leave in place the existing constraints on fish passage and stream processes. It also appears to offer fewer opportunities for outside funding, meaning that costs would fall more directly on local resources.

In effect, repair is a choice to stabilize and continue the current system, with its mix of benefits and limitations.

Removal: restoring a different system

Removing the dam would shift the creek toward a more natural, free-flowing condition. This would involve re-establishing a defined channel through the former pond area, reconnecting upstream and downstream segments, and allowing sediment and water to move more naturally.

From an ecological perspective, this approach is expected to improve habitat continuity, restore natural flow patterns, and support fish movement. Over time, it could lead to a more self-sustaining system, less dependent on ongoing intervention.

At the same time, removal would change the visible landscape. The pond would disappear, replaced by a narrower stream channel and adjacent floodplain. The process would involve short-term disruption, and the long-term outcome—while generally predictable in similar projects—would still unfold over time.

Importantly, removal may also align more closely with available grant funding, particularly where projects improve fish passage across an entire system, including culverts.

A question of tradeoffs, not a single answer

Seen in this broader context, the decision about the Northport Creek dam is less about choosing between “good” and “bad” options than about weighing different priorities.

One perspective emphasizes continuity: maintaining a familiar landscape, minimizing immediate disruption, and managing the system as it exists.

Another emphasizes change: restoring natural processes, reducing long-term maintenance, and aligning the creek more closely with its ecological potential.

Both perspectives operate within the same underlying reality: a stream that is already shaped by human activity and influenced by multiple factors beyond the dam itself.

List of documents consulted in preparing this discussion brief

Northport Creek Report (2016)

Leelanau Forum Ad: Rewild Northport Creek

Northport Creek Information Packet (misc. correspondence and reports)

Report on e coli testing (9 10 News)