



Safety First at Hardy Dam

Planned upgrades will meet Federal Energy Regulatory Commission (FERC) standards for public safety and property protection

Protecting the communities we serve and the planet we call home is among our top priorities. Whether it's by keeping customers informed or keeping our power plants up-to-date, we're on the job to keep you safe.

Here's what to expect:

We're working on upgrades at the Hardy Dam that will help ensure public safety and protect properties for years to come. As part of the project, the Michigan Department of Environment, Great Lakes and Energy (EGLE) requires us to identify streams that may be impacted by the work and submit a mitigation plan for approval.

Working in partnership with the Muskegon River Watershed Assembly and other third-party consultants, this summer we surveyed the property and identified two locations requiring additional improvements – an unnamed upstream waterway and Wheeler Creek. Both are channelized county drains that have been significantly altered from their natural shape.

We plan to make improvements to the channel configuration that will improve stream hydrology and benefit the watershed.

- Widening the stream corridor and increasing segment lengths to better manage peak flows.
- Installing benches/structures for floodplain connectivity and channel stability.
- Improving meanders to promote healthy stream functionality.
- Establishing healthy streams that provide countless educational opportunities for all ages and interests.

Protecting the Landscape

To improve the hydraulic function of these channelized streams, we will need to move and stockpile soil as well as cut and stage trees for reuse. We will work closely with landowners and implement best practices, including:

- Using open meadows where feasible for construction access and material staging areas
- Minimizing areas of disturbance
- Maintaining a buffer for heavy equipment where possible
- Properly sloping the streambanks
- Managing trees & vegetation to maintain a healthy buffer strip
 - Disturbed and newly formed stream banks will be re-planted with a mixture of native plant seeds, trees and shrubs

EGLE will require a conservation easement over the stream mitigation area to maintain the natural features and native flora. Activities within the easement premises are limited, though some uses may be allowed with approval from EGLE, such as:

- Walking paths
- Interpretive signage
- Observation platforms

If these features are desired, they must be shown on design plans and referenced in the easement documents. The conservation easement will not apply to areas outside the designated buffer strip. EGLE will also require monitoring to ensure the mitigation objectives are met.



Existing Road Crossings

We understand it would be beneficial to make improvements to the existing road crossings into the plan. While additional road crossing improvements may provide some benefits, the current EGLE policies related to functional lift, or direct benefits to the stream, do not provide enough guidance to justify the extra project costs - some of which would be passed on to all Consumers Energy customers.

If the final design does not generate enough functional lift, we will negotiate with EGLE for more improvement credits at the culvert locations. These may include in-stream grade stabilization and fish passage, but would not likely include the full replacement of any existing culverts.

The proposed stream mitigation will improve the base stream functions to further benefit the stream system when the road crossing culvert is replaced by the county.

