

Lyndon Torstenson

I have reviewed the Ford Motor Company's feasibility study and remediation plan for the Twin Cities Plant Area C, and have the following comments.

I strongly prefer the Alternative 6, "full removal of all waste and site restoration," as it is the only alternative that conforms with the ethical precept we all were taught by our parents and in kindergarten, clean up your own mess. Such an ethic is particularly important when it relates to our common environment, and even more important when that environment is in such a naturally critical and dynamic place as a major river course. It is guaranteed that the river's course will change over time (e.g., note the recent sudden and catastrophic failure at the Rapidan Dam on the Minnesota River), and the Ford's Area C is directly in the river's course below the Ford Dam.

If the MPCA chooses the weaker remediation plan of Alternative 4, "removal of reasonably accessible waste and site stabilization," I have two key concerns:

- 1) the language of what is "reasonably accessible" allows for subjective weakening of the implementation plan and outcome; and
- 2) riprap is both ugly and terrible for wildlife such as turtles.

Regarding the first point, it will be critical for the MPCA to ensure that what is considered "reasonably accessible" is held to the highest possible standard and not a watered down standard that compromises the outcome.

Regarding the matter of riprap, MPCA and Ford must examine softer ecological alternatives to riprap and kinds of riprap to ensure best aesthetics and compatibility with wildlife needs. Following are some ideas and guidelines as it pertains to riprap.

Vegetated riprap (or joint-planting) is considered much better for turtles and other wildlife, as it combines rocks for erosion control with native vegetation that provides shade, cover, and easier access to water. Using smaller, mixed rock sizes to fill large gaps prevents turtles from getting trapped.

Best Practices for Wildlife-Friendly Riprap:

- * Vegetated Riprap/Joint Planting: Live stakes of shrubs or willow can be driven into the soil between rocks, creating a stable, naturalized, and cooler bank.
- * Smaller Rock/Mixed Sizing: Avoid large, jagged, deep-void riprap that acts as a trap. Filling gaps with smaller stones (10–16 inches) makes it easier for turtles to move across.
- * Gentle Slopes: Use a 3:1 (Horizontal to Vertical) slope, or at minimum 2:1, to ensure turtles can climb out of the water.
- * Rock Toe/Rip-rap Combo: Limit riprap to the water's edge (the "toe") and use natural vegetation or root-wad revetments above that line.
- * Avoid Large Voids: Ensure the rocks are not stacked in a way that creates deep crevices where small turtles can become trapped.

While conventional riprap can act as a barrier to nesting turtles, incorporating vegetation and using smaller materials significantly mitigates these risks.

Comments to MPCA on Ford Twin Cities Plant Area C feasibility study and remediation plan

January, 2026

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Submitted by Lyndon Torstenson

Minneapolis, MN

January 27, 2026