

Thank you for your interest in the Otter Creek Lake and Park Restoration Project. The overall goals of this project include improving and protecting water quality, aquatic habitat, and recreation in and around Otter Creek Lake for future generations. This summary describes the project and answers some frequently-asked questions. Please submit your questions or comments by emailing cikenberry@fyraengineering.com or leaving feedback forms at the Nature Center office.

Project Summary. The Otter Creek Lake and Park Restoration Project is a cooperative effort between Tama County Conservation and the Iowa Department of Natural Resources. The project includes development of engineering design plans for watershed, park, and in-lake improvements to Otter Creek Lake and its surrounding amenities. Watershed improvement alternatives include rehabilitation of existing ponds and wetlands and construction of new sediment ponds to reduce sediment and nutrients entering the lake. In-lake improvements include removal of sediment deposited in the lake over time, improvement of shoreline habitat and angler access, and improvements to the fishery. Park amenities such as the beach and playground are also be improved to compliment the watershed and lake improvements.

How to Learn More about the Project

A **video presentation** further describing this project will be held via Zoom at 6:00pm on April 13, 2021.

<https://zoom.us/j/96685338376>

The presentation will also be available for later viewing on the DNR's YouTube channel:

<https://www.youtube.com/user/iowadnr>

How will this project impact me? Project components are entirely within the boundary of Otter Creek Lake Park, so if you are a landowner, there will be no impact to your property. If you enjoy the lake and surrounding park, this project will improve water quality, increase desirable fish habitat, enhance shoreline fishing success, and improve habitat, aesthetic value, and other recreational opportunities in and around the lake. Removing sediment and improving shorelines will require the water to be drained from the lake during construction. During this period, the lake will not be available for public use.



Who is funding this project? Funding for this effort is provided by the Iowa Department of Natural Resources-Lake Restoration Program and Tama County Conservation. DNR Fisheries is also providing technical and funding assistance.



What is wrong with Otter Creek Lake? Otter Creek Lake provides habitat benefits and recreation opportunities for Tama County residents and visitors. Like all lakes, sediment and nutrients from the watershed have been carried in rainwater to the lake over the years. This has resulted in loss of water depth, increased growth of floating aquatic plants called algae, and challenges in maintaining an optimal fishery. At times, increased levels of algae give the lake a green appearance and negatively affect the lake's food web, fishery, and appearance. Wind and wave action has eroded several reaches of shoreline and the demand for public access to lakes is increasing. This project will address these issues and needs and make the lake a better place for both people and fish (and other wildlife).



What is the project schedule? The project is being constructed in two phases. The first phase of construction will begin in June 2021 and conclude this winter. The second phase will start this winter and will conclude in May 2023. The lake will be drained in late summer to early fall of 2021 and will begin to fill again in May 2023.



What will the project look like when finished? See the Watershed and In-Lake Improvement maps that are provided along with this summary.

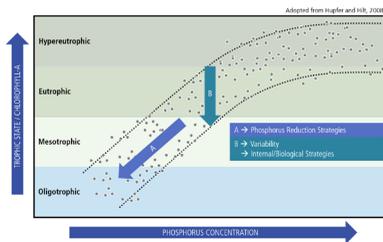
Project Background

What is a Watershed? A watershed is the area of land that drains water from rain events to the lake. Otter Creek Lake's watershed includes surrounding farm ground, homesteads, roadways, pasture, and parkland surrounding the lake.

What are erosion and sedimentation? Erosion is disturbance and loss of topsoil due to intense rainfall, overland runoff, and wind. Sedimentation is the transport and deposition of eroded soil materials in waterbodies, such as Otter Creek Lake. Over time, these processes result in reduced lake depth, poor water clarity, and lower quality fisheries.

How do nutrients affect Otter Creek Lake?

Nutrients such as nitrogen and phosphorus cause aquatic plants to grow in streams and lakes (much like your yard or corn field). Too many nutrients can lead to algal blooms, which impair water quality. Phosphorus is the nutrient primarily responsible for excessive algal growth in Otter Creek Lake.



What is a Watershed Best Management Practice (BMP)?

A watershed BMP is a management practice designed to prevent sediment and/or nutrient transport to a lake or stream. Examples of BMPs being utilized for restoration of Otter Creek Lake include sediment retention ponds, wetlands, stream stabilization, and planting of native prairie that prevent, trap and/or filter sediment and nutrients from water before draining to the lake.

