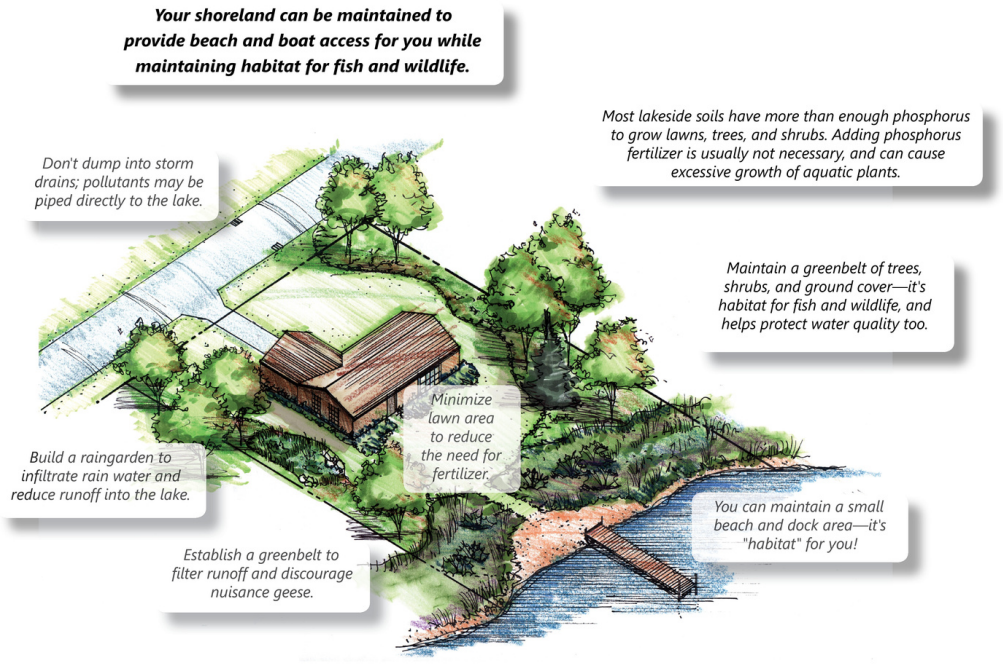
Shoreland Management
A Guide for Dixie Lake

Created by Progressive Companies // Water Resources Group

Natural shoreland areas around lakes help to reduce pollution runoff and provide valuable fish and wildlife habitat. As such, natural shorelands are essential to a healthy lake. In addition to providing important environmental benefits, natural shorelands can be beautiful. Recognizing the value of natural shorelands, several states including Minnesota, Wisconsin, Vermont, Maine, and New Hampshire have adopted state-wide shoreland protection regulations. Many lake communities have realized that restoring natural shorelands is a win-win-win scenario: a healthier lake with better water quality; improved fisheries; and better lake living.

Maintaining and preserving natural features of a shoreland will help to improve the quality of Dixie Lake. Instead of installing seawalls or hard surfaces along the lake's edge, consider using native plantings and maintaining a buffer zone to reduce pollution run off from your lawn. A big contributor to excessive plant and algae growth on Dixie Lake is the presence of phosphorus. Lawn fertilizers can be a primary source of phosphorus. Michigan law prohibits the application of lawn fertilizers containing phosphorus unless a soil test documents a phosphorus deficiency or a new lawn is bein established. Another pollutant that can impact Dixie Lake's water quality is chloride. Increased levels of chloride can become toxic to fish, macro invertebrates, and amphibians. Chloride can come from road salting as well as water softener discharge and use. Following shoreline management best practices can help to reduce the input of chloride and phosphorus in Dixie Lake.



PROGRESSIVE COMPANIES

Ways riparians can help protect Dixie Lake

Nutrient Reduction

- Don't use lawn fertilizer that contains phosphorus. If you use a professional lawn care service, insist upon a fertilizer that does not contain phosphorus.
- Reduce fertilizer use when possible. Use the minimum amount of fertilizer as recommended on the label (if not, less than that).
- Water your lawn sparingly to avoid washing nutrients and sediments into the lake.
- Do not feed ducks and geese near the lake. Waterfowl droppings are high in nutrients.
- Do not burn leaves and grass clippings near the shoreline. Nutrients concentrate in the ash and can easily wash into the lake.
- Do not mow the water's edge. Instead, allow a strip of natural vegetation to become established along your waterfront. This natural buffer will trap pollutants and discourage nuisance geese from frequenting your property. Visit: www.shoreline.msu.edu
- Promote infiltration of stormwater into the ground. Building a rain garden helps to capture runoff from driveways and downspouts. Visit: www.raingardennetwork.com

Chloride Pollution

(Visit: https://dnr.mo.gov/water/hows-water/pollutants-sources/chloride)

- Determine the hardness of your water. Avoid softening water if it is at an acceptable level for drinking.
- Soften only the water that needs it, do not soften water for outdoor spickets or cold drinking water taps.
- Monitor softener settings. If it uses more than one bag of salt per month, consider ways to optimize efficiency.
- Upgrade your softener. Look for demand-initiated versions that are more salt efficient, operate based on how much water you use and can help reduce salt use.
- If you have a timer-based system, see if you can extend the time between cycles.
- Determine where your softener discharge/ backwash is going. Try considering using a dry well or hook up to the sewer system. Avoid discharging onto turf lawns or directly to lake.