

WATER RESOURCES BEST PRACTICES

INTRODUCTION

Water is essential for life and plays a vital role in the proper functioning of the Earth's ecosystems. Our water supply is threatened by pollution, invasive species and overuse, which may have a serious impact on all living creatures and can have a negative effect on the use of water for drinking, household needs and recreation. The following Best Practices are recommended to protect and maintain our water resources. More information can be found on the Vadnais Lake Area Water Management Organization (VLAWMO) web site at vlawmo.org.

GOAL

Avoid nutrient pollution caused by excess nitrogen and phosphorous in the air and water.

Recommendation - Encourage proper maintenance of on-site septic systems. A poorly functioning septic system can allow pathogens, nutrients and other chemicals to enter groundwater or lakes.

Action - Continue requiring septic systems to be inspected and/or pumped every two years.

Recommendation - Encourage disposal of yard waste away from lakes and wetlands.

Action - Continue to promote Ramsey County's Compost site and to leave grass clippings on your grass rather than in the garbage can.

Recommendation - Dispose of unwanted medicines using an approved collection site.

Action - Continue to promote the disposal sites provided by the Ramsey County Sheriff's Department.

Recommendation - Use road & driveway salt efficiently.

Action - Promote the reduced use of salt on driveways and roads through education.

Action - Consider the use of salt alternatives.

GOAL

Because wetlands are a vital link between our land and water resources, avoid degradation of wetlands from

pollution, urban encroachment, groundwater withdrawals, partial drainage and other actions.

Recommendation - Reduce runoff.

Action - Grow a healthy water friendly lawn and garden. Minimize water use, keep leaves and grass clippings out of streets and storm drains and swales, and avoid pesticides.

Action - Vadnais Lake Area Water Management Organization (VLAWMO) currently promotes rain gardens and provides educational brochures on how to construct them.

Action - Don't litter. Pick up trash when you see it. Debris gets washed into storm drains and flows directly into local bodies of water. That includes animal pet waste, which can contribute harmful ammonia.

GOAL

Limit and stop the spread of aquatic invasive species such as zebra mussels and milfoil.

Recommendation - Encourage awareness of how invasive species are spread.

Action - Continue educational efforts reminding people to make sure all boats and other objects that have been in the water are cleaned before and after their use.

GOAL

Reduce the amount of water overuse.

Action - Promote web sites such as wateruseitwisely.com which list dozens of ways to reduce water use.

Action - Check water bills for any instances of high water use, as this may be an indication of a leak.

Action - When doing laundry or using a dishwasher, always wash full loads.

Action - Use garbage disposal sparingly and compost vegetable food waste.

Action - Collect the water you use to rinse fruit and vegetables and use it to water plants.

Action - While running water to heat it up, collect the water and use it to water plants.

Action - When it is time to replace appliances that use water, choose high efficiency models.

Action - Find and fix any leaking faucets.

Action - Test your toilet for leaks once a year by putting food coloring in the tank. If it seeps into the bowl there is a leak.

Action - Replace showerheads that have a flow rate greater than 2.5 gallons per minute (the current national energy policy act standard).

Action - Take shorter showers. Reducing shower length by a minute or two can save 150 gallons a month.

Action - If an irrigation system is used, make sure that it has a weather based SMART irrigation controller with a rain sensor that is properly set up and maintained.

Action - Water grass in the morning to prevent water loss through evaporation.

Action - Sweep outdoor surfaces with a broom instead of using a hose.

Action - Wash vehicles at a carwash that recycles its water.

Wetlands 101: What to Know Before You Work

Minnesota's landscape includes roughly 10.6 million acres of wetlands. While many people think of wetlands as swampy, marshy areas with standing water and cattails, the reality is wetlands take on many forms. In addition to swampy, marshy areas, wetlands can vary from grassy meadows, to forested wetlands covered in trees and shrubs, to wet areas of cultivated farm fields. Many wetlands are actually dry for most of the year, with no standing water.

Why Wetlands Matter

Before European settlement, studies estimate Minnesota had over 20 million acres of wetland. Today that number has been cut in half. Wetlands are important ecosystems. They hold water, providing for natural water quality improvements by filtering nutrients and sediment that might otherwise pollute and clog waterways. They provide flood protection and shoreline erosion control. Wetlands are also home to many species of fish and wildlife.

Wetlands Regulation

Most wetlands in Minnesota are protected by State and/or Federal law and in some cases by local ordinances. Minnesota's primary wetland protection law is the Wetland Conservation Act. The law is implemented by local governments, the Minnesota Board of Water and Soil Resources provides assistance and oversight, and the Department of Natural Resources provides enforcement.

- The State law applies to all wetlands, including those on private property, to achieve "no net loss" of wetlands.
- In general, wetland protection laws regulate activities in or near wetlands that can negatively affect the wetland through draining, filling, or excavating.
- There are some exemptions contained within State law for certain activities.

What You Should Know

It can be very difficult to identify wetlands and wetland regulations can be quite complex. Some examples of projects that could potentially affect wetlands include:

- Filling a low area of a residential lot for a building or lawn.
- Digging a pond in a low area.
- Cleaning out an old ditch or improving an existing ditch.
- Adding fill for a crossing of a stream or wet swale.

Requirements

If there is the potential for your project to impact a wetland, before you start it is important to contact your local WCA regulatory authority to:

- Find out if the land you intend to alter is a wetland. Remember, an area can be a wetland even if it does not appear wet on the surface.
- Determine if the proposed activity has impacts to a wetland area.
- Assure that any impact to wetlands can be avoided if possible, and properly replaced if not.

If you don't know where to start, your local Soil and Water Conservation District can help you determine which agency is your local contact. Cooperation is a key component of successful conservation. Local, state, and federal wetland regulatory agencies work in partnership with landowners to help them achieve the best possible results on their private land.

For more information about wetlands in Minnesota, see the Board of Water and Soil Resources website at <http://www.bwsr.state.mn.us/wetlands/index.html>, or the Department of Natural Resources website at: <http://www.dnr.state.mn.us/wetlands/index.html>