

SHORELAND ALTERATION REGULATIONS

POLK COUNTY ORDINANCE

I. VEGETATION ALTERATIONS

- Vegetation alterations necessary for the construction of structures, septic systems, roads etc. are exempt from vegetation alteration rules.
- Intensive vegetation clearing is not allowed in shore impact zones.
- Limited clearing/pruning of trees and shrubs is allowed to provide a view to the water and for stairways/landings etc. (as long as screening of structures from water is not substantially reduced).

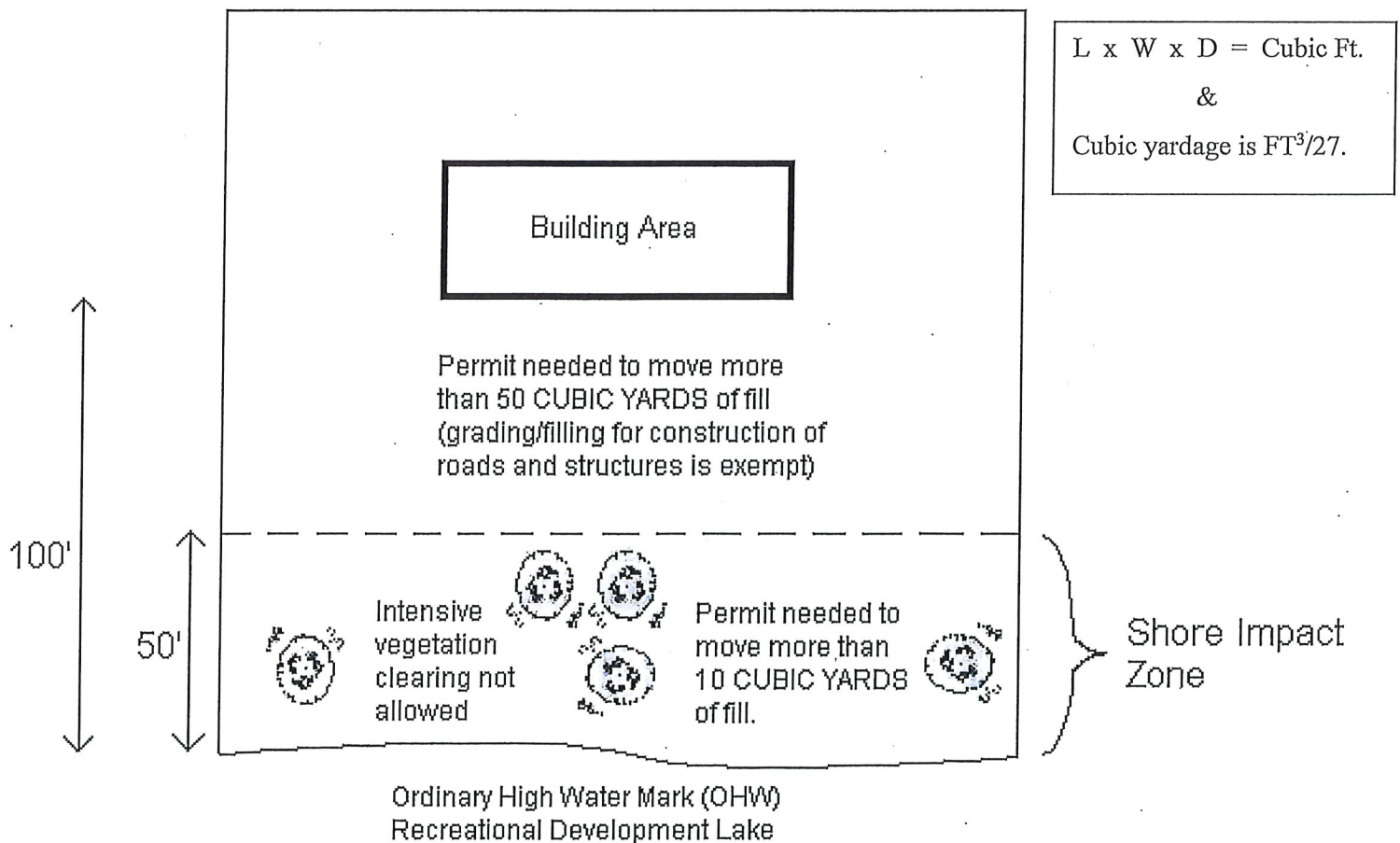


II. GRADING/FILLING

- Grading/filling necessary for construction of structures, septic systems, roads etc. are exempt from grading/filling rules.
- Although some activities listed above may require additional permitting/requirements.
- Any alterations below the ordinary high water mark (OHW) are subject to regulation of the DNR, including; rock rip-rap, beach sand blankets, removal of debris, etc. More info is available at the Planning and Zoning Office or call the DNR at 218-681-0947.
- PERMITS ARE REQUIRED FOR:
 - movement of more than **10 cubic yards** of material in shore impact zone*
 - movement of more than **50 cubic yards** of material outside of shore impact zone (anywhere else in shoreland district).



**Movement involves displacing, excavating or bringing materials into a property.*



III. ADDITIONAL REQUIREMENTS

- Alterations must be done in a manner that ensures only the smallest amount of bare ground is exposed for the shortest time possible to reduce erosion and sedimentation loss.
- Vegetation must be established as soon as possible.
- A temporary soil cover or straw or mulch can be used.
- Fill or excavated material must NOT be placed in a manner that creates an unstable slope.
- Fill or excavated material must NOT be placed on steep slopes or in bluff impact zones.
- Fill or excavated material must NOT be placed in wetlands or fringe wetlands.
- A **SEPTICE COMPLIANCE INSPECTION** is required before **ANY** permit can be issued.
- All projects needing a permit are subject to an administration fee and neighbor approval.
- Contact the East Polk Soil and Water Conservation District to inquire about additional regulations or for information on cost-share for restoration projects at 218-563-2777.

Restoring Shorelines and Raingarden Information

When restoring shorelines and installing raingardens native plants are used. This is because they have a deeper root system which has many benefits such as:

- Allows more water to seep into the ground reducing runoff.
- Filters out impurities before the water rejoins the groundwater improving water quality
- Holds the soil in place protecting shoreline from erosion.
- Creates more favorable habitat and food sources for wildlife.
- Enhances a properties aesthetic value.

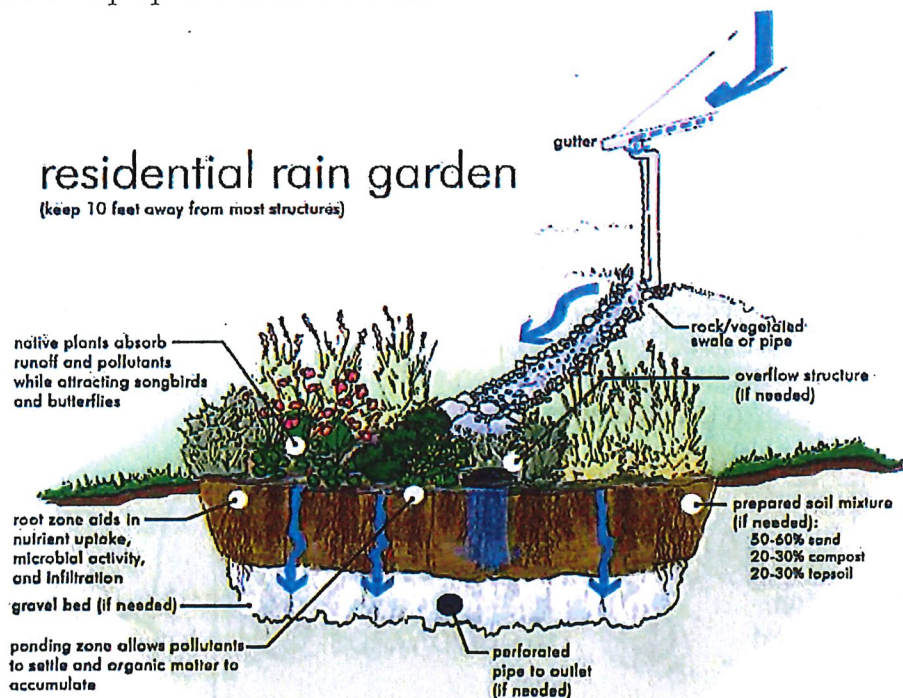


photo courtesy of <http://ottan.me>

Contact the East Polk Soil and Water Conservation District at the above number to learn about cost-share options for restorations and raingardens.

LAND ALTERATIONS IN SHORE-IMPACT ZONE

Shore-Impact Zone:

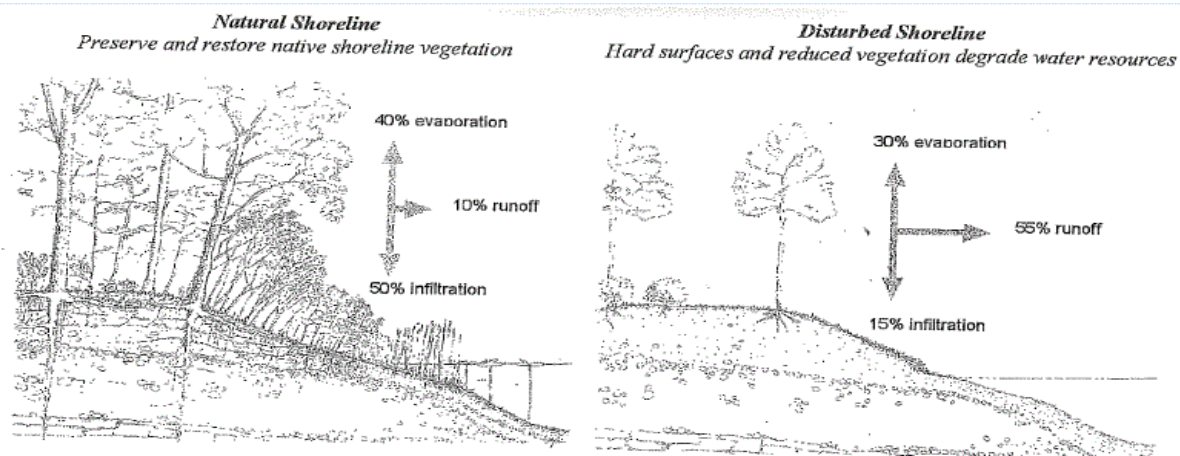
Land located between the Ordinary High Water Level of a public water and a line parallel to it at a setback of 50 percent of the structure setback. (Example; Maple lake is a recreation development lake with a structural setback of 100 feet of the OHWL, thus the shore impact zone is from the OHWL extending 50 feet on the land).

In the shore-land district which extends 1000 feet from a protected lake, no extensive vegetative clearing is allowed. Vegetative alterations shall in no case exceed 50 percent of the brush and 25 percent of the trees within the shore and bluff impact zones or steep slopes. For the purpose of this section trees less than four (4) inches in diameter as measured at a height of four (4) feet from the ground shall be considered brush. Anything larger than the said standard above shall be considered trees.

Vegetation Alteration:

Limited clearing/pruning of trees and brush is allowed to provide a view to the water and for stairways/landings etc. (as long as screening of structures from the water is not substantially reduced). Vegetation alterations necessary for the construction of structures, septic systems, roads etc. are exempt from vegetation alteration rules. **Intensive vegetation clearing is not allowed in shore impact zones.** Intensive vegetation clearing is defined as the complete removal of trees or brush in a contiguous patch, strip, row, or block.

Alterations must be done in a manner that ensures only the smallest amount of bare ground is exposed for the shortest time possible. Vegetation must be established as soon as possible in disturbed areas. Also the landowners should contact the Soil and Water Conservation District at 218-563-2475 to inquire about additional regulations and restrictions. Check with DNR if alterations are below the Ordinary High Water Level (DNR office @ 218-681-0947).



Water Quality Benefits

1. **Reduced water runoff** – slows and redirects precipitation. Mostly natural landscape has only 10% runoff.
2. **Filtered water runoff** – prevents pollutants and nutrients from entering water, reduces sediments and excessive plant growth.
3. **Increased groundwater infiltration** – filters water, recharges aquifers. Natural landscapes filter 50% of rainfall.

Natural Resource Benefits

Diverse and healthy habitats – improves health and diversity of aquatic environment, provides good habitat, improves health and diversity of shoreland and upland birds and wildlife.

Visual Qualities

Visually attractive natural shoreline – looks good from water and opposite shore, screens man-made structures, provides color, texture and variety.

Degraded Water Quality

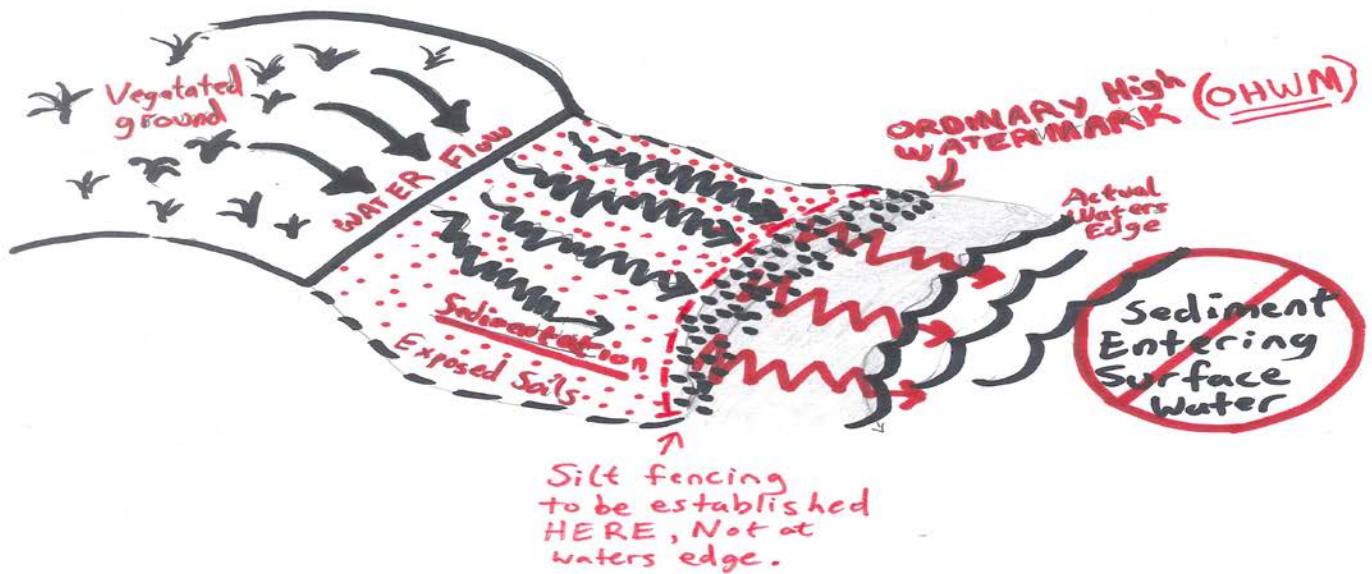
1. **Dramatically increased runoff water** – more precipitation runs off, mostly hard surfaces have about 55% runoff.
2. **Unfiltered runoff water** – more pollutants enter water, increased plant growth, unhealthy aquatic plants and marine life, reduced sunlight degrades environment.
3. **Minimal groundwater infiltration** – poorly filtered water enters groundwater, degrades groundwater quality. Hard surfaces decrease infiltration 15-50%.

Degraded Natural Habitats

Degraded aquatic and shoreland habitat – reduces quality and quantity of shoreland and upland birds and wildlife, degrades aquatic plant and animal communities, increases risk of species disease and devastation.

Degraded Visual Qualities

Shoreline looks disturbed and unnatural – appears to be sterile, obvious man-made structures, looks artificial and over-developed.



Sedimentation is the process of water flowing over the landscape as runoff that carries sediments with the water. In the picture above this shows the process of sedimentation that ultimately results in water pollution if there is no silt fence in place. Simple practices can avoid water pollution such as establishing vegetation on newly exposed areas in the form of native grasses, or sod. Other options are redirecting the water around an exposed site which is often the case when building beach sand blankets where vegetation is undesired. By placing stones at the interface of sand and soils, water is directed around by placing drain tile where water can flow perpendicular to the sand blanket thus avoiding sand washout during heavy precipitation. Whenever soils are exposed, where water and land interface placing silt fences at this interface will inhibit water pollution. Silt fences catch sediment within the fence and allow water to pass through the fabric of the fence. They are inexpensive and must be used whenever soils are exposed for long periods of time in these sensitive areas. Leave fencing in place until vegetation can be established. (See examples below)



Shoreline Alterations: Beach Blanket



Will a sand beach work on my shoreline?

One goal of DNR Ecological and Waters Resources is to limit unnecessary and potentially damaging alterations to shorelines. Specifically, use of beach sand and other types of fill is limited in order to prevent damage to fish spawning areas, aquatic habitat, and water quality of Minnesota's lakes.

Although natural sand beaches can be found on many Minnesota lake-shores, landowners often attempt to create them on shores where they do not naturally occur (i.e., a muddy-bottom lake). If you are considering adding a beach blanket, you should know a few important things before investing your money.

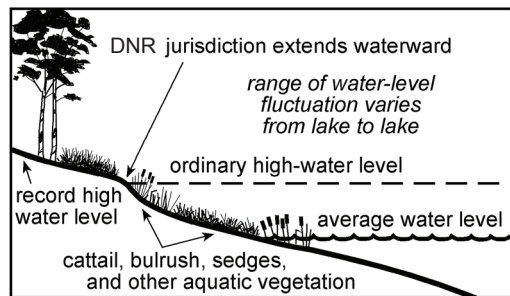
- Beach material that erodes into the lake may coat aquatic plant beds and fish spawning grounds, degrading fish and wildlife habitat and damaging the water quality of your lake.
- Beach material must be clean and washed free of fine particles and must be of the appropriate grain size (coarse sand or larger) to stay in place under wave action. Placed material that migrates from your site may constitute a violation of water quality standards. To further minimize the risk of your beach migrating away from the site, maintain aquatic vegetation on both sides of your beach, like in the diagram on page two.
- The lakebed must be capable of holding beach material in place. If the lake bottom is soft, the sand or gravel will only sink into the muck and disappear.
- You are only allowed to install sand or gravel twice in the same location without a permit.
- Vegetation will constantly emerge through the beach material, and additional plant control will be needed on the beach. If you plan to weed by hand or apply herbicide, an aquatic plant management permit may be required from the DNR Division of Fisheries.
- Beach blankets may not be placed over emergent vegetation such as bulrush or cattails unless you obtain a permit from the Division of Fisheries.

IS AN INDIVIDUAL PERMIT REQUIRED?

For most projects constructed *below* the ordinary high-water level* (OHWL) of public waters as determined by the Minnesota Department of Natural Resources (DNR), an individual permit is required from the DNR.

Beach blanket exception: An individual permit from the DNR is not required for beach sand or gravel placement if the conditions outlined in this information sheet are followed.

If you have questions concerning the contents of this information sheet, contact your local DNR Area Hydrologist. See contact information on reverse side.



Shoreline cross section

ARE OTHER PERMITS REQUIRED?

Other governmental units (federal, state, city, county, township, and watershed authority) may require a permit for that portion of the project within their jurisdiction, which usually involves work above the OHWL. It is advisable to contact them.

*For lakes and wetlands, the OHWL is the highest elevation that has been maintained as to leave evidence on the landscape. It is commonly that point where the natural vegetation changes from predominantly aquatic to predominantly terrestrial. For watercourses, the OHWL is the top of the bank of the channel. For reservoirs and flowages, the OHWL is the operating elevation of the normal summer pool.

Keep in mind that you are *not* allowed to install any plant barrier or liner (e.g., filter fabric or plastic) underneath your constructed beach. If owning lakeshore property with a sandy beach is a high priority for you, look for lakeshore property where sandy beaches occur naturally before you make that important purchase.



Beach blanket at shoreline.

Shoreline Alterations: Beach Blanket

If you have considered all of the conditions above and you think adding beach sand or gravel will work for your shoreline, you may install a beach blanket without an individual permit if the installation meets all of the following conditions:

- The sand or gravel layer may be up to 6 inches thick; up to 50 feet wide along the shoreline or one-half the width of the lot, whichever is less; and up to 10 feet waterward of the ordinary high-water level (OHWL; see sidebar on page 1).
- The beach blanket does not cover emergent aquatic vegetation, unless authorized by an aquatic plant management permit (contact your local DNR Fisheries office).
- The sand or gravel is clean and washed so that it is free of fine particles.
- Local watershed district and local zoning officials are given at least 7 days' notice by the landowner.
- No plant barrier or liner (i.e., filter fabric or plastic) is installed underneath your beach sand.

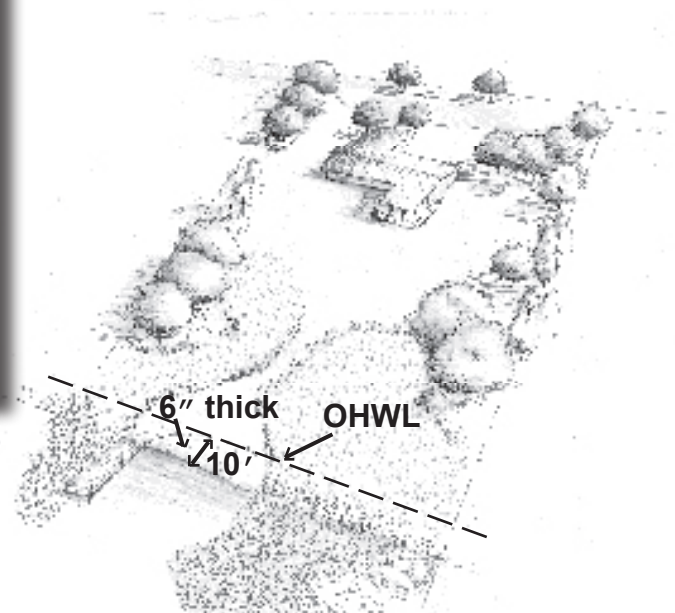
Installation of sand and gravel may be repeated *once* at the same location but may not exceed the amount of sand and dimensions of the original sand blanket.

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Another example of a beach blanket is pictured above.

The plan view of a diagram (right) shows dimensions of a beach blanket surrounded by vegetation with a path to the sand area.



Based on an illustration by Roxanna Esparza.

DNR Contact Information



DNR Ecological and Water Resources
website and a listing of Area Hydrologists:
<http://mndnr.gov/contact/ewr.html>

DNR Ecological and Water Resources
500 Lafayette Road, Box 32
St. Paul, MN 55155
(651) 259-5100

For information about aquatic plant management permits:
<http://mndnr.gov/shorelandmgmt/apg/regulations.html>

DNR Information Center

Twin Cities: (651) 296-6157
Minnesota toll free: 1-888-646-6367
Telecommunication device for the deaf (TDD): (651) 296-5484
TDD toll free: 1-800-657-3929

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This information is available in an alternative format on request.

FAQ's about Raingardens

Is a rain garden a pond?

- Rain gardens are designed to hold water for no more than 24-48 hours. Unlike ponds, you don't need costly pumps, electricity, or filters. In fact, a rain garden is a filter for the water that runs off of your property's impervious surfaces.

How much maintenance is required?

- Less than a regular garden, if you use native plants. They adapt well to their natural surroundings, and don't need fertilizers or pesticides. While your natives are establishing their roots, water them every other day or so for two to three weeks, or until you see that they're thriving. After that, you'll never need to water them except during a prolonged dry spell.

Won't it attract mosquitoes?

- Properly installed, your rain garden shouldn't hold water long enough for mosquito larvae to complete their 7-to-12-day life cycle. Rain gardens also attract dragonflies, who find mosquitoes quite tasty.

Do I have to use native plants?

- Natives have adapted to our climate and are much better at handling the periodic inundation (getting their feet wet) that goes along with a rain garden. They'll also save you the time and money of replanting every year, and offer much greater wildlife value.

What about winter?

- Even though your plants will be dormant, in the winter gardens can still help slow down water movement and enable it to be absorbed into the ground. Water may remain longer, particularly when the ground is frozen, but that's not a problem in winter.

Can it be too large or too small?

- With the help of a landscaper or other professional, you can size your garden to handle all the rain that normally falls here. You don't have to plan gardens to capture all of the rain water from your house. For example, capturing water from a single downspout will help.

<http://raingardenalliance.org/what/faqs>



East Polk SWCD

240 Cleveland Ave

McIntosh, MN 56556

218-563-2777

eastpolkswcd.org



Rain Gardens



Rain gardens are a wonderful way to improve water quality in your area while enjoying the beauty and other benefits of native plants. A rain garden is different from a regular garden in a few ways; its set in a shallow depression (6-12in) often with a sand/compost mix at the bottom, water is directed toward it and it features native plants.

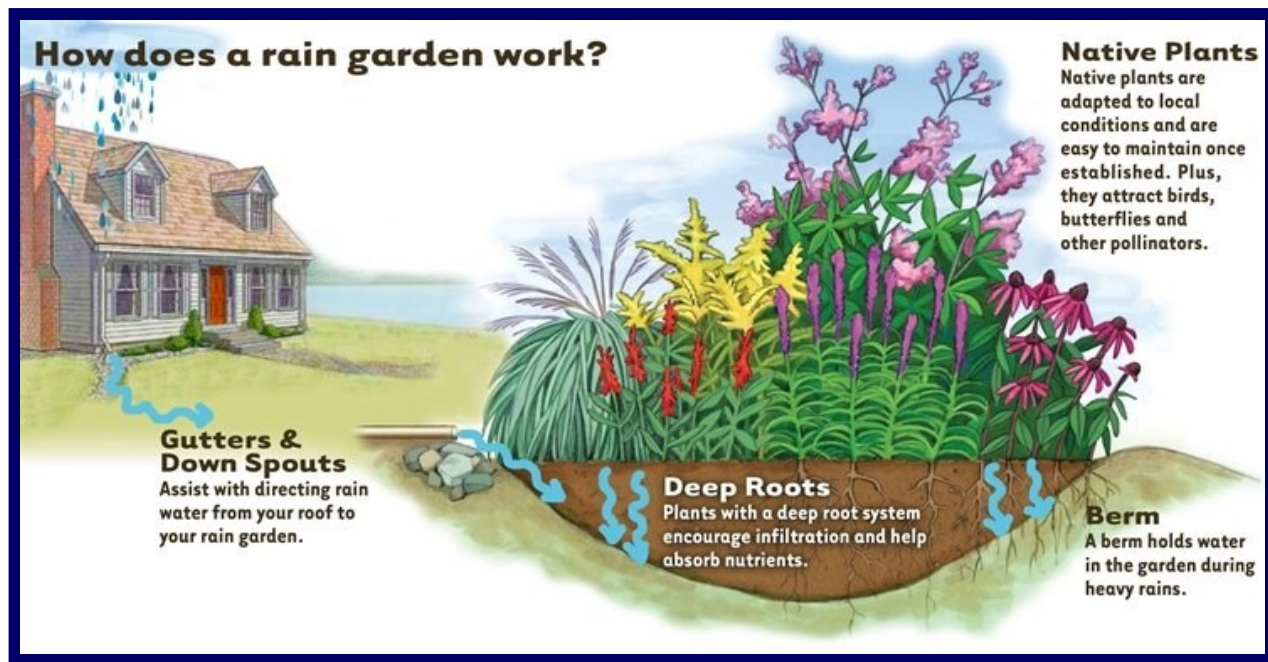
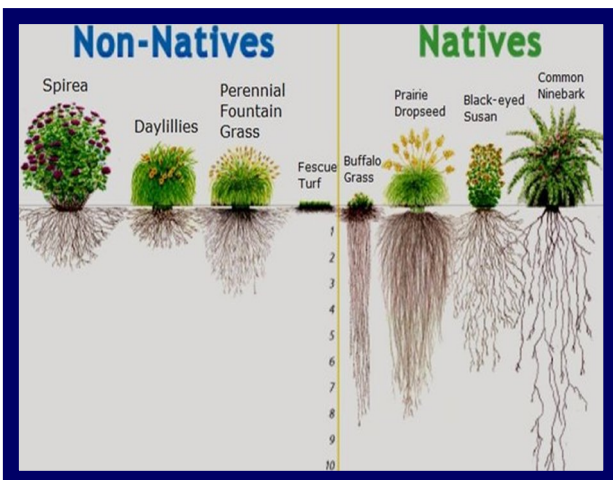
The benefits include adding beauty to your yard, absorbing runoff which can reduce erosion and filter pollutants out of the water, provide habitat and food for pollinators and has potential reduce wet spots in your yard and therefore mosquito populations

Why are native plants important?

In nature, plants commonly grow in association with a particular group of other compatible plants. These communities are found where specific environmental conditions exist (e.g. soils, topography, climate, water).

Vegetation removal and soil disturbance (and soil compaction) reduces the amount of runoff absorbed, increasing sediment-laden runoff into lakes, streams & wetlands.

When native plants are replaced by turf grass, that has very short roots, the water can no longer filter into the ground and becomes run-off. Run-off picks up pollutants and excess nutrients, carrying them more directly into near by water bodies. Native plants have deeper root systems that allow water to filter into the ground and absorb nutrients.



What Can East Polk SWCD Do to Help?

East Polk SWCD partners with Prairie Restorations to ensure that projects are well designed with 40 years of experience in native planting. However, after design you can choose to hire them to do the work or if you like DIY (do-it-yourself) projects a rain garden is not that difficult to put in. You dig out the basin, mix in a sand and compost mixture after tilling up the bottom of the basin, over lay the mulch and then plant the plants. It can be a fun project for your family!

Ask us about Cost-Share Opportunities!

