Rain Barrels

A rain barrel is part of a system designed to capture and store rainwater coming off a roof. On houses, the barrel is usually attached to a downspout. There is a rain barrel next to this sign.

Until the 1940s, the rain barrel was a common sight at farms and homes throughout rural America. Rainwater often was softer than well-supplied water which was desirable for washing clothes. Rain water was often used to water plants and animals. Sometimes the water was used for drinking when wells ran dry. Old wooden barrels placed under the roof edge of a barn or house could catch hundreds of gallons of water during a brief shower. Records indicate that rain barrels were in use as far back as 2000 years ago. With modern plumbing, water treatment systems, deep wells and reservoirs the use of rain barrels diminished to almost nothing.

Cass County Soil Conservation District

Rain barrel on house.

There is currently a resurgence in the use of rain barrels. Some municipalities are even paying residents to install rain barrels. The reasons for using rain barrels are many. Some of reasons include:

River Keepers

Rain barrel class.

- There is increasing interest in conserving water by reducing the demand for treated water delivered to a house. Some rain barrel users report decreasing their use of treated water by over 1000 gallons a summer. Not using the treated water also reduces the need for the energy which is used to treat and pump the water.

- Some people have a desire to save money by purchasing less treated water.

- Some gardeners want to provide "better" water for their gardens and landscaping. Rainwater is free of the additives (e.g., chlorine and fluoride) in tap water that plants don't need or want. Rainwater is slightly acidic, helping plants access soil nutrients. If there are water restrictions in place, usually during hot dry weather, the use of rain barrel water may be the only way to keep a garden healthy.

- Rain barrels can reduce moisture levels around the foundation of buildings by controlling when rainwater is released into the soil.

- The wide spread use of rain barrels has the potential to reduce the strain on urban storm water drainage systems, especially during large rain events. A community the size of Fargo-Moorhead could potentially catch and temporarily hold several million gallons in rain barrels. This may be enough to reduce localized flooding by reducing the load on existing storm drain infrastructure during certain storm events.

- Rain barrels can reduce the amount of pollutants flowing into rivers during rain events. Rain water picks up pollutants from the air, hard surfaces and the ground and carries them to rivers, such as the Red, through storm drain systems. Storm water is usually not treated before it runs into those rivers. Holding storm water and slowly releasing it into the ground after a storm event allows the earth to filter out pollutants before it enters rivers or lakes.

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Rain barrel on house.

- Rain barrels can be inexpensive and relatively easy to construct.

One typical rain barrel holds about 50 gallons of water. During a one inch rain event an average house in Fargo-Moorhead will have over 500 gallons of water run off its roof. So one rain barrel will not solve all of our storm drain and pollutant problems, but with enough barrels in place there will be an impact.

Rain barrels are not maintenance free. They need to be monitored and water released at appropriate times, occasionally cleaned and drained before winter. They need to be properly and safely installed to insure the intended benefit.

Building a rain barrel using plans such as the one used to build this rain barrel will insure a drowning and mosquito proof barrel. Barrels can also be purchased at some garden centers, through the internet, at some retail stores or from River Keepers.

RIVER KEEPERS