



## City Manager's sustainability and energy topic of the month: erosion prevention

Responsible resource management is an important consideration at the city of Mankato for today and generations to come.

**Q.** What is the city of Mankato doing to decrease or prevent erosion?

**A.** One way to be good land stewards is by managing run-off to help prevent erosion through a variety of ways:

### Storm water pond management

Mankato has developed more than 90 storm water ponds, which are regulated by state mandate, throughout the city to protect against floods and filter pollutants before water flows back into the river. Reducing the amount of water and how fast it travels back to the river can help prevent erosion because the less water there is and the slower it travels, the less impact there is on the land. The larger the storm water pond, the less often water needs to be released. Large ponds can decrease the amount of water discharged back to the river by at least 90 percent, so when planning or redoing storm water ponds, smaller pipes are used because their size helps regulate how much and how fast water flows to the river.

As the city of Mankato continues to grow, development plans will include storm water ponds. An item under consideration is developing storm water ponds that are designed to serve a regional area rather than having a pond service an individual new development or industrial area.

City staff is currently developing a storm water policy to align with new state water quality standards. Once completed, information will be shared on the city of Mankato's website, [www.ci.mankato.mn.us](http://www.ci.mankato.mn.us), and through various other opportunities, such as neighborhood association meetings. For more information about this policy, contact Rick Baird, water quality specialist, at 507-387-8543 or [rbaird@city.mankato.mn.us](mailto:rbaird@city.mankato.mn.us).

### City streets

Street run-off can increase erosion. As staff plans for reconstruction or new development of city streets, they strive to decrease the amount of run-off by adjusting a street's width from 36-feet to 32-feet. The smaller the street, the less amount of run-off there is.

### More about storm water ponds

#### What do storm water ponds do?

Storm water ponds are part of the city's infrastructure. City staff works with developers to design storm water ponds, which help:

- ◆ protect the city against floods;
- ◆ filter pollutants before water flows back to the river.

Although they have aesthetic value, storm water ponds are not for fishing or swimming because they contain contaminants. During this time of year, it's important to not ice skate on them since storm ponds are constantly working, water is continuously moving, making ice inconsistent.

## Construction

Staff works closely with construction companies to ensure erosion controls are in place to protect the land since their construction activities can potentially increase run-off. Items companies can use to decrease run-off include a buffer strip, sediment barriers or basins, filters and dikes. In addition, any run-off that does leave the site must be discharged into an approved area or container so the sediment from the run-off doesn't end up in the storm drain system. Companies must also clean-up streets and areas they worked in at the end of the day to prevent items from ending up in the storm drain system.

## How you can help

Citizens play an important role in managing erosion:

- ◆ **Landscaping**—when planning for landscaping, it's important to look for opportunities to decrease or prevent run-off, such as directing water spouts on gutters away from paved surfaces and foundations and onto grass.
  - Be aware of where the property line is before landscaping in an area near a storm water pond. Typically, city storm water ponds have a 50-foot right-of-way from the water's edge. If property line is unknown, it's recommended to have a licensed surveyor determine where it is. For more information, contact staff at 507-387-8543 or [stormwater@city.mankato.mn.us](mailto:stormwater@city.mankato.mn.us).
- ◆ **Vegetation around storm water ponds**—if living near a storm water pond, avoid removing or mowing vegetation and trees around storm ponds because they serve as a buffer so items don't end up in the ponds and helps prevent erosion. Removing vegetation and trees can cause the water to wash up along the shoreline, which can erode the land. Restoring land that has been eroded can have significant costs, sometimes ranging up to \$25,000.
- ◆ **Maintenance**—city staff maintains the area around ponds as needed to ensure vegetation is properly cared for. If needed, mowing is done to remove unwanted weeds and trees and to promote better growth of native vegetation. Storm water ponds are typically scheduled for maintenance in the fall.
- ◆ **Water management**—if living in a ravine area, avoid discharging water into the ravines because doing so can erode them and make the land less stable. It's recommended to manage water that flows to the natural drainage areas near ravines by directing water to the storm water system.

Mankato is committed to decreasing and preventing erosion to benefit the environment. If areas of erosion are seen, please contact staff at 507-387-8543 or [stormwater@city.mankato.mn.us](mailto:stormwater@city.mankato.mn.us).

Please contact me at 507-387-8695 or [phentges@city.mankato.mn.us](mailto:phentges@city.mankato.mn.us) anytime I can be of service.