

## CHAPTER 9

# WATERSHED MANAGEMENT

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### **9:1 WHAT IS A WATERSHED?**

Drain Commissioners have historically dealt with watershed management on a daily basis. Watersheds can be as small as a backyard or as large as the Saginaw River Watershed. A watershed is an area of land that drains to a common point.

### **9:2 WHAT IS WATERSHED MANAGEMENT?**

Over the years, Drain Commissioners have worked directly with local landowners to take care of any drainage problems or concerns they might have. In dealing with many of these problems, Drain Commissioners have had to look beyond the individuals property lines to determine the source of these drainage problems. Even though we did not call them this, the solutions to these problems were actually mini-watershed management plans.

More recently, Drain Commissioners have become more involved with looking at the much bigger picture. We are not only looking at quantity concerns when it comes to drainage problems, but we are also looking at quality concerns. Watershed management plans today could include the entire drainage area of a stream, river or lake. In essence we are looking beyond boundaries. Whether this boundary is across a property line, township line or county line, we are looking beyond it to see the big picture.

Many watershed management plans address more than the water quantity and quality within a given drain or stream segment. As we all know, to make a thorough analysis of what the sources are of pollution within a water body we need to know what is taking place on the land within the watershed. Almost every activity on the land has the potential to affect the quality and quantity of water in a watershed.

### **9:3 WATERSHED MANAGEMENT PLANS**

Watershed Management Plans include a number of items or steps, some of them are listed below:

1. Formation of a local Steering Committee
2. Watershed delineation (map)
3. Designation of Lead Agency
4. Watershed description, including such items as topography, soil types, land use and hydrology.

5. Identification of potential sources of pollution.
6. Identification of water quantity problems.
7. Identification of long-term desired uses in the watershed.
8. Implementation strategies to remedy problems within the watershed or to prevent future problems.

This list does not contain all of the elements that are needed for all watershed management plans, but are merely examples of some of the items that are included. An excellent source to use when developing a watershed management plan is a guide that has been put out by Michigan Department of Environment Quality entitled “Developing a Watershed Management Plan for Water Quality: An Introductory Guide.”

#### **9:4 DRAIN COMMISSIONER’S ROLE**

Drain Commissioners can play a variety of roles in the development of Watershed Management Plans. In some cases the Drain Commissioner may be the lead agency in a community. The Drain Commissioner might take the lead applying for and receiving grant funds to complete the studies needed to put together a comprehensive Watershed Management Plan. In other cases the Drain Commissioner may be a partner in the process that another local lead agency might start. Other agencies that might be involved in developing a Watershed Management Plan are local soil conservation districts, local land conservancies, local township governments, local county or township planning commissions or local non-profit water related associations.

No matter who the lead agency is the Drain Commissioner’s office would play an integral part in the development of the plan as it relates to quantity and quality of stormwater runoff that is looked at in the watershed.

The main thing to remember with watershed management is that no two plans are alike. Each watershed is unique and has its own set of problems or concerns. This chapter has been developed to peak your interest in this process.

#### **9:5 SOURCES OF INFORMATION**

Below there are a number of very good sources of information that you should look at if you are interested in this topic and would like to begin the process or be involved in the process in your own community. The web sites listed will also connect you to other related web sites. There are also

a number of Drain Commissioners across the state that have developed Watershed Management Plans in their own community that would be more than willing to share this information with you. These contacts can be made through the Michigan Association of County Drain Commissioners (MACDC).

<a href="http://www.deq.state.mi.us/swq">www.deq.state.mi.us/swq</a>	Michigan Department of Environmental Quality
<a href="http://www.iwr.msu.edu">www.iwr.msu.edu</a>	Institute of Water Research Michigan State University
<a href="http://www.cwp.org">www.cwp.org</a>	Center for Watershed Protection
<a href="http://www.stormwatercenter.net">www.stormwatercenter.net</a>	Stormwater Manager's Resource Center
<a href="http://www.ctic.purdue.edu">www.ctic.purdue.edu</a>	Know Your Watershed
<a href="http://www.epa.gov/ow/">www.epa.gov/ow/</a>	EPA Office of Water
<a href="http://www.epa.gov/suf/">www.epa.gov/suf/</a>	EPA Surf Your Watershed
<a href="http://www.naco.org">www.naco.org</a>	National Association of Counties

Below are some **excellent** documents that you will want to get for your library:

*The Practice of Watershed Protection*

Techniques for protecting our nation's streams, lakes, rivers and estuaries

By: Thomas R. Schueler and Heather K. Holland

Contact: Center for Watershed Protection

*Guidebook of Best Management Practices for Michigan Watersheds*

Contact: Michigan Department of Environmental Quality

Surface Water Quality Division

*Developing a Watershed Management Plan for Water Quality an Introductory Guide*

Contact: Michigan Department of Environmental Quality

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