

Davis Creek News

A newsletter for residents of the Davis Creek Watershed; Sponsored by Kalamazoo Conservation District, River Partners Program of The Forum of Greater Kalamazoo and MI Department of Envir. Quality

KNOW YOUR WATERSHED

Davis Creek Q & A

Q What is a watershed?

A An area of land that receives runoff from storm water and drains it to a nearby water body.

Q What is the Davis Creek Watershed Plan?

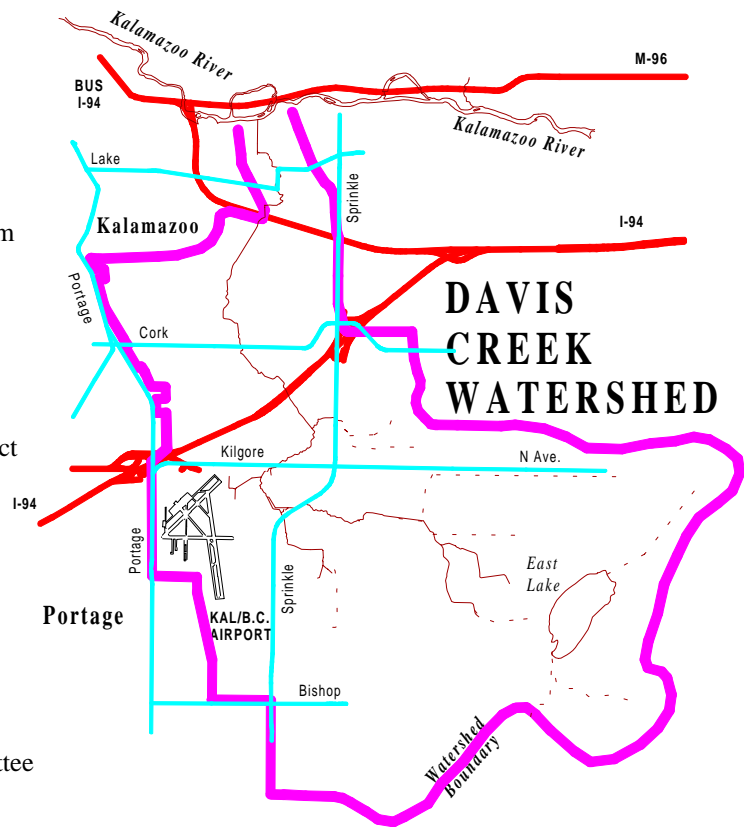
A The Davis Creek Watershed restoration project was undertaken by a group of citizens and community organizations in 1995/96 to improve the quality of Davis Creek and its watershed.

Q Who are the members of the Davis Creek Watershed Steering Committee?

A The Davis Creek Watershed Steering Committee is composed of concerned citizens, elected officials, governmental agencies, local business firms and watershed residents. In other words, it's composed of people like **you & your neighbors!** Please join us at our next meeting on October 18, at 2:30 p.m. in the County Center Building, Kalamazoo County Fairgrounds, 2900 Lake Street.

Q How can I find out more about the Davis Creek Watershed Project?

A To find out more about the Davis Creek project, or to learn more about watershed protection, call the Kalamazoo River Partners Program at 337-7382.



INSIDE

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MONITORING WATER QUALITY

Will A Changing Landscape Worsen Davis Creek Water Quality? WMU will help us find out!

Human activities on the land, such as farming and land development, change the natural landscape into something different. Sometimes these changes can be dramatic, as forests are changed into pastures or farmlands changed into track homes. These changes cause greater volumes of rainfall to run off the land and into the creek. This increased run off often carries increased loads of pollutants to our creeks and lakes.

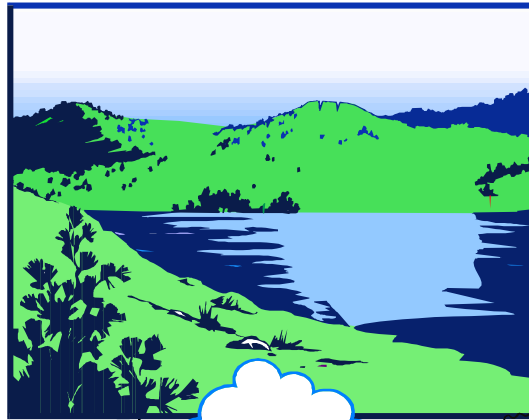
Rainfall can move soil and chemicals into the creek when human activities are exposed to wind and water. Often these sources of pollution are widespread and cannot be easily determined. Storm water runoff picks up toxic chemicals, fecal coliform bacteria, lawn chemicals, and oil from yards, urban areas, roads and parking lots.

The natural landscape of the Davis Creek Watershed has changed significantly, and this change is expected to continue. The Davis Creek Steering Committee wants to know, "what effect will these changes have on the creek?" Through a grant from the Kalamazoo Foundation to Dr. Chansheng He, the Steering Committee will seek an answer to this question.

Dr. Chansheng He, Department of Geography of Western Michigan University, has received a grant from the Sustainable Community Watershed Fund to carry out just such a study of the Davis Creek Watershed.

The aims of Dr. He's study are to analyze the effects changes in the use of land have on the contribution of soil, storm water runoff, and nonpoint source pollution (NPS) into the creek. His study will evaluate the water quality impacts of current management practices within the existing landscape. He will then predict the future water quality impacts which may result from a future landscape as defined by current practices and the master plans of the five, local jurisdictions.

Various electronic monitoring devices have already been installed in different points of the watershed to measure stream flow, temperature, dissolved oxygen and pH. Detailed chemical analysis of the Creek's water quality analysis is being done by collecting water samples from both up and down stream sites. This analysis will include measurements of sediments, and nitrogen & phosphorus in both suspended and dissolved forms.



GOVERNMENTAL PARTNERSHIPS

Kalamazoo Area Storm Water Working Group

For over a year representatives of Kalamazoo County, the cities of Kalamazoo, Parchment and Portage, a number of townships, and other organizations and individuals interested in water quality have been discussing ways to manage storm water in order to protect groundwater and surface water. The impetus for these discussions has been proposed federal storm water regulations which are scheduled to require several of these local units to obtain storm water discharge permits in 2002. As discussions have proceeded, most members of this group have become interested in watershed-based decision making as a way to maximize water quality protection while minimizing cost. The storm water group has benefited greatly from meetings and events coordinated by Kalamazoo County.

With a grant from the U.S. Environmental Protection Agency to the Delta Institute, the storm water group has developed and begun implementing a strategy to help their communities meet the goals of the federal regulations and other related local needs. The group also collaborated with local partners several months ago on several grant proposals to the Michigan Department of Environmental Quality

for federal Clean Water Action Plan funding. MDEQ is reviewing these proposals, and CWAP funding of several local project proposals is anticipated. These projects include site-specific planning and implementation of storm water best management practices, evaluation of storm water systems and discharges, public education on storm water runoff concerns, and a variety of

other projects designed to address nonpoint source pollution.

The Storm Water Working Group has sponsored and continues to plan workshops to educate themselves and local decision-makers on related technical and regulatory issues. Currently the group is inventorying local programs, policies and resources in light of the proposed federal requirements.

YOUR CLUB'S NEXT PROJECT?

Storm Sewer Stenciling!

Storm Sewer Stenciling is a fun project which you, your neighbors or your community group can do to protect our water!

The Forum of Greater Kalamazoo is able to assist community group leaders and individuals in carrying out neighborhood storm sewer stencil projects. The Forum will provide materials, training and coordination assistance, including collaboration with city officials to assure your project's success. Interested parties should call (616) 337-7382.



Storm drains are often located at the curb of a road or in the middle of a lot. These drains carry water from streets, sidewalks and driveways, and discharge them into a nearby body of water. The trash or harmful materials dropped by people onto the streets are washed into the drains and, together with the water, get dumped into lakes or streams. The drainage structures of the Davis Creek and Woods Lake Watershed are at a disadvantage because they dump their untreated contents into streams and lakes, polluting them immensely.

To inform people of how drains work, a stenciling project was developed by the Forum. Community volunteers from the local Boy Scout Troop 286 and Woods Lake Association have worked with the Davis Creek Watershed Steering Committee to stencil watershed awareness information at roadway storm sewer inlets leading to the creek. The stencils comprised the picture of a fish and the message Dump No Waste-Drains to Stream. These stencils were placed on the most visible areas containing storm sewers. Approval was gained from the Kalamazoo City Council for the areas to be stenciled. In addition, door hangers with information about the project and its goals were left at houses in the neighborhood of the stenciled areas.

Some things which people can do to prevent or minimize the pollution from entering into our waterbodies are: washing of cars over grass which will capture dirty water and reduce run-off; composting leaves and lawn clippings well away from sewer inlets and stream banks; reporting illegal dumping and documenting it with photographs or videos; and the containment and proper disposal of pet wastes. People

interested in participating in the project should contact Marc Elliott at The Forum of Greater Kalamazoo at (616) 337-7382.

Dump No Waste

Drains to Stream

LOCAL STEWARDSHIP

Kalamazoo Conservation District to host the 1999 Watershed Steward Awards!

The 2nd annual Watershed Steward Awards (1999) will be hosted by the Kalamazoo Conservation District. The KCD is an organization which has been actively involved in watershed management and other resource conservation efforts.

The awards will be presented at the District's Annual Meeting and election of board members. According to Kathy Buckham, District Administrator, nominations for the Annual Watershed Stewardship Awards will be solicited this fall.

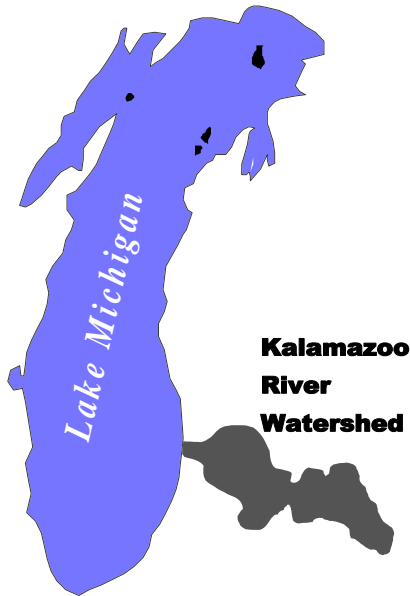


The first Annual Watershed Steward Awards were hosted in 1998 by The Forum of Greater Kalamazoo. This cooperative award program was created by Kalamazoo River Partners as a way to give recognition to outstanding individuals or groups actively involved in watershed protection, education and partnership in the Kalamazoo area.

Last year, a judging committee consisting of representatives of the Forum, the Kalamazoo Council of Governments, Kalamazoo Conservation District, the Kalamazoo County Chamber of Commerce, the Kalamazoo County Drain Commissioner and the Kalamazoo Environmental Council.

Last year's awards were announced at the Annual meeting of the Forum of Greater Kalamazoo. A brief public awards ceremony was officiated by Richard Kleiman, Kalamazoo County Drain Commissioner at the 1998 Trail way Trek of the Forum FunFest/River Fest.

Kalamazoo River/Lake Allegan - Phosphorus Total Maximum Daily Load (TMDL) Project



As a requirement of the federal Clean Water Act, a Total Maximum Daily Load project has been initiated for the Kalamazoo River/Lake Allegan to reduce phosphorus concentrations in Lake Allegan to meet water quality standards. Currently, because of the high nutrient inputs, the lake experiences nuisance algal blooms and oxygen depletion. In addition, the community of aquatic plants and animals is dominated by species that are largely tolerant of polluted waters. All of these conditions contribute to a decline in aesthetic and recreational values of Lake Allegan, which is located at the lower end of the watershed, before the river discharges into Lake Michigan.

The Michigan Department of Environmental Quality (MDEQ) is completing sampling and modeling efforts this summer to determine the "capacity" of Lake Allegan to assimilate phosphorus input (i.e. how much phosphorus can the Lake receive and still meet water quality standards). These studies will also indicate the tributaries that are most likely to carry the most significant loadings of phosphorus to the Kalamazoo River and Lake Allegan. Data suggest that Davis Creek is one of the "Top Ten".

Implementing phosphorus reductions may involve farmers, industry, commercial and residential areas, municipal wastewater treatment facilities and storm water discharges from roads, parking lots and other areas. With the expectation that everyone in the watershed may play a role in reducing phosphorus inputs to the river, a local committee has been convened to follow the MDEQ's "capacity" determination process and provide input as needed, and to design the reduction strategy.

As the sampling and modeling efforts wind down, the focus is shifting to the reduction planning. The local committee is charged with making determinations on how various sources of phosphorus inputs can be reduced in order to meet the new phosphorus limit. Based on ecological, economical and human factors, the committee will make recommendations on how these reductions may be achieved, and suggest a reasonable timeline for meeting the goals. The committee is also considering how PCB remediation efforts might influence or be influenced by phosphorus reduction strategies.

A plan that includes the Lake "capacity," an "allocation" of that phosphorus capacity amongst sources, and reasonable proposals for reductions is due to the U.S. Environmental Protection Agency by December 31, 1999. A detailed reduction plan will not be produced within this timeframe. TMDL planning and implementation will be ongoing for quite a while.

A draft phosphorus assessment report for the Kalamazoo River/Lake Allegan Watershed is currently available. A draft reduction plan will be available for public comment by early autumn. If you would like to participate in crafting the reduction plan, your input is welcome. Please call Jenny Molloy (616-692-6966) if you have questions or would like to participate.

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