

Davis Creek News

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

LEADERS ARE TALKING

What are the key players saying?

Did you ever wonder what community leaders have to say about Davis Creek? What about major industries located in the watershed or the chief engineer of the Davis-Olmsted Drain?

The attitudes, opinions and thoughts of these and others are now available in a unique document prepared by **The Forum for Kalamazoo County**. Twenty-three key stakeholders contributed their creative and visionary thinking for this unique survey.

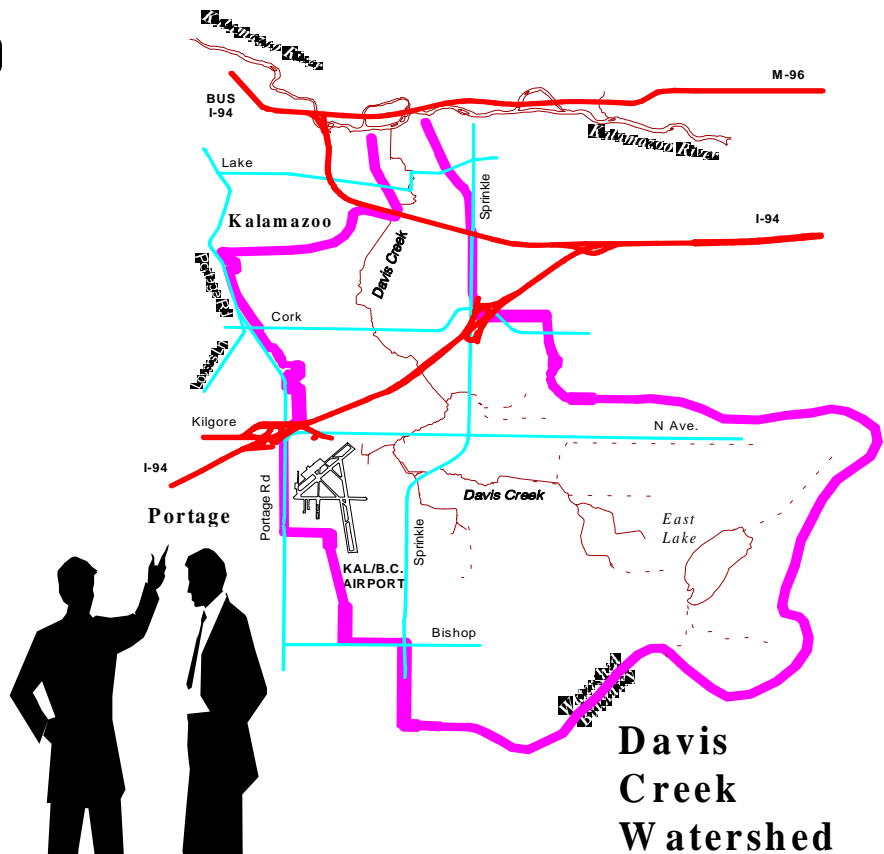
Meeting people face to face has been invaluable. New data and experience was gathered, including special knowledge and perceptions from often disparate views.

Some participants even candidly admit having participated in past, public choices which are now perceived as having been short-sighted.

By compiling a broad and balanced spectrum of opinions from planners, regulators, local officials, sportsmen, environmentalists and private property owners, a new basis for community collaboration has been founded.

Once maligned, forgotten and abandoned, Davis Creek may now gain recognition as the place from which we take lessons learned from this watershed forward—a stepstone towards more enlightened watershed management policies throughout the County.

Copies are available through the **River Partners Program** at (616) 337-7382.



INSIDE

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- ③ Citizen Planners in Action
- ④ 25 Things to do for Clean Water

WATERSHED AWARENESS

Groundwater Festival.

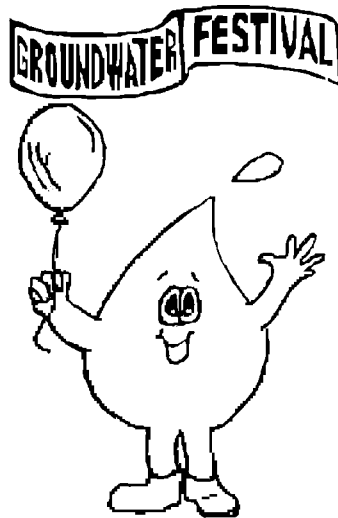
The Forum for Kalamazoo County, through the Davis Creek Watershed Program, was one of 16 co-sponsors of the County's first annual **Groundwater Festival** held February 22nd. Organized through the county's groundwater stewardship program, the Festival introduced youth leaders and educators to local resources, educational materials and dynamic models available for demonstrating the need for groundwater and water quality protection.

The Festival's overall message was that greater public awareness and personal responsibility in our every day lives are the keys to protecting our water resources.

The Festival required attendees to actively participate in the operation of different models, lab activities, computer software, games and demonstration kits—each of which is available for loan (at little or no cost) through the **Kalamazoo County Human Services Department (KCHSD)** and other Festival sponsors.

Festival sponsors have created a "traveling" festival package. They've compiled materials which are specific to the region, showing examples from Kalamazoo County. It's an excellent tool for trainers, educators and youth leaders to demonstrate real-life water quality problems in our community.

Call Connie Cousins-Leatherman at KCHSD (616/373-5336) for assistance in organizing your own festival, or to borrow specific watershed educational models, equipment and/or materials.



WATER QUALITY DATA

Big kids seen playing in Davis Creek!

Keep a watchful eye out, for you may soon see adults playing in Davis Creek. Actually, this is just another effort to better understand Davis Creek water quality and its problems. Employees of **Kieser and Associates**, a local environmental consulting firm, will be in the creek in coming days to gather spring runoff creek samples. The first spring rain following snow melt and the spring thaw is an important time to gather water quality samples.

Testing the water samples will help us further understand the water quality problems facing the creek. This information will be combined with twenty creek samples collected in 1996. Half of last year's samples were selected to represent normal creek flow conditions. The other half were gathered during a rain shower. As expected, the rain storm samples contained significant quantities of urban pollutants from our streets and yards. Particularly notable were high bacterial counts. This may have come from pet

wastes washed from our yards & streets.

Be sure to thank these volunteers if you see them standing in the freezing water. We also wish to acknowledge the contribution of **KAR Laboratories**, the **Kalamazoo Water Reclamation Plant** and the **Michigan Department of Environmental Quality** who are contributing their water quality testing services.

WHAT YOU CAN DO

Build your own wildlife sanctuary.

The **Kalamazoo Conservation District** is ready to help residential landowners establish a backyard sanctuary for wildlife. For the first time ever KCD has prepared seeding packets which are specially designed to provide food and shelter for native Michigan wildlife.

Each spring and fall KCD makes bulk purchases of trees, shrubs and seedlings to promote conservation and wildlife management throughout the County.

This service is especially valuable for land owners along Davis Creek and other water bodies, because we now understand that maintaining natural vegetation is one of the best methods for protecting water quality.

Turf grass at the water's edge is a poor choice. Shrubs and trees are preferred because their complex root systems help stabilize the soil and capture more nutrients—soil and nutrients being the two biggest causes of water quality damage. Trees also provide shade which helps maintain cooler water temperatures.

Call the Kalamazoo Conservation District at (616) 327-1258 for further information.



EARTH DAY WAS CLEAN UP DAY

Creek clean-up celebrates Earth Day!

Earth Day arrived on April 19th in Lexington-Green and Chateau Acres. River Partners Program and a dozen volunteers pitched in for two hours on Saturday morning for the 2nd annual clean-up of Davis Creek.

Since we found considerably less trash than last year, volunteers were able to spend more time removing woody debris and other obstructions which hinder creek flow, promote erosion and encourage sediment buildup. Our thanks to the volunteers, to the City of Portage for providing the dumpster and to Chateau Acres staff who were working the "deep-waters" in their boat. THANKS—SEE YOU NEXT YEAR!

CITIZEN PLANNERS IN ACTION

Help guide the future of Davis Creek!

Citizen led focus groups are being called back into action to stimulate further community movement towards improving the quality of Davis Creek. In late 1995 the Davis Creek Steering Committee asked affected citizens and others to define their concerns and vision for Davis Creek. The Steering Committee is now gathering these same people together again, with the request that they provide meaningful input to the accomplishments of the past year.

Returning focus group participants and others are being asked to evaluate the Committee's *Davis Creek Watershed Management Plan*, and to provide further direction during implementation of the plan's recommendations.

The concerns, needs and recommendations noted in the Davis Creek plan are a direct result of 5 small, community focus groups of landowners, business owners and the general public held during 1995/96.

The 1997 focus group meetings are also asking participants to make personal commitments to carry the citizen stewardship recommendations forward. Plenty of opportunities still exist for additional volunteers. Call 337-7382 to join us.

PUBLIC POLICY & LANDUSE

Are we paving paradise?

Paved surfaces and the private auto are arguably the greatest contributors of nonpoint source pollutants to our watersheds.

Choosing private automobile commutes of greater and greater distances contributes to urban sprawl, road building and loss of green space.

Urban development and its associated increase in imperviousness is directly linked to declines in the physical, chemical, and biological integrity of aquatic ecosystems. **Minimizing paved and impervious surfaces is therefore emerging as a central tenet of storm water and watershed management.**

The change of land from green spaces to urban usage will increase between 63% to 87% in Michigan during the next twenty years. This will accompany a 12% increase in population—an additional 1.1 million people.

This increase in urban land (for 1.1 million more people) is equivalent to Michigan's 1978 total urbanized land which satisfied the state's 1978 population of 9.1 million.

A blue-ribbon panel of Governor Engler released a 1992 report titled

Michigan's Environment and

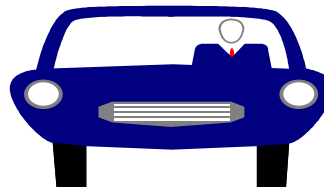
Relative Risk stating that Michigan is losing agricultural land at the rate of 10 acres per hour to urban development. This is about 133 square miles each year; the largest portions being lost to residential use.

Does land conversion matter? The following figures suggest that not only is our environment at risk but also our economic welfare. Our fate may depend upon how our local communities and their planning commissions take notice of this dangerous trend:

- Agriculture is Michigan's second largest industry, contributing more than \$37 billion to the state's economy through the production, manufacture and distribution of food products.
- Tourism, which is Michigan's third largest industry, generates about \$11 billion annually.
- Forestry and minerals contribute about \$8 billion to the state's economy.
- The number of vehicles per household rose 76% between 1980 and 1992, while the population increased only 1%.
- The fastest growing commuter population are those commuting 45 minutes or more to work.
- The abandonment of built urban infrastructure is proceeding at an alarming rate. (Detroit may own as many as 43,000 parcels through tax reversion.)

Abandoned urban lands reduce municipal tax revenues. These "brownfields" also represent a surrender of our public investments in roads, schools and utilities, including street lighting & electrical, water & fire protection, and sanitary & storm sewers, etc.

By controlling sprawl and imperviousness, communities can also attain other goals such as traffic calming, saving open space, providing recreational opportunities, protecting wildlife habitat, and preserving community character.





Human activities on the land cause nonpoint source (NPS) pollution and contaminated runoff. In order to keep NPS pollutants out of our water, we must change our daily activities. Listed below are ideas for "best management practices" which you can adopt in your daily habits. If we all adopt best management practices (BMP's), we will individually be doing our fair share in protecting the water resources of our community.

Lawn/Garden Chemicals

Many lakes and streams are choked with excess algae and water plants. Damaging plant growth is commonly due to excess nutrients delivered to the water through polluted storm water runoff.

- Practice Integrated Pest Management (nature's own beneficial insect eaters) to reduce use of pesticides by 40-60%.
- Do not use lawn chemicals and fertilizers if you do not need them.
- Good watering and cultivating native plants and grasses are the secrets to healthy green spaces.
- Replace turf grass with plant species which support wildlife.
- Always have your soil tested; apply only the minimum amount of chemicals necessary.
- Mulch grass clippings to decrease the use of fertilizer by 25-30 percent.
- Select slow release fertilizers, low in soluble nitrogen and with a minimum amount of phosphorous.
- Don't allow fertilizer to spread onto sidewalks and driveways; sweep back onto the lawn before watering.
- Don't apply fertilizer on frozen ground or when it might be washed away by rain.

- Never use chemicals near water wells and well fields.
- Don't apply fertilizers and pesticides within 50 feet of a lake, creek or wetland.
- Use Arnold Palmer's all natural fertilizer mix: bone meal, feather meal, wheat germ, soya, muriate of potash, enzymes, and mix with soil organisms.
- Compost leaves and other yard wastes, use as fertilizer on lawns and gardens.
- Pull weeds by hand when you can.

Yard/Site Drainage and Storm Water Management

Excessive storm water discharges, bank erosion and polluted storm water runoff are believed to contribute more than half of all known pollutants to our waters.

- Plant trees and shrubs to promote ground water infiltration and absorption.
- Use rain gutters or woody plants to protect soil under the roof line.
- Use splash blocks or diffusers underneath downspouts.
- Grade soil into a gentle slope away from your house and all other structures.

- Divert runoff away from paved areas to encourage ground water infiltration.
- Construct water diversions/turnouts to direct runoff onto vegetation and promote infiltration.
- Use a grass swale (a low area in the lawn) to move water gently from one area to another.
- Install check dams (e.g. low stone and rock piles) in drainage swales to reduce the speed of runoff.
- Install gravel trenches along driveways or patios to collect water and promote infiltration.
- Use porous paving/construction materials: wood decking, brick, rock, or interlocking paving stones.
- Think Globally. Act Watershed!

**Nonpoint Source
Pollution:**
the Nation's largest
water quality problem!



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