More Regulations In The Works
The recently passed state budget bill (SB 44) contained additional regulatory language that applies to farm runoff in a Priority Watershed project area. All the details won’t be available for some time, but the basic requirements of the legislation are as follows:

- After the voluntary sign-up phase of the Watershed Program ends, the DNR will issue “clean-up” orders to the owners of property that have been identified as a “critical” source of runoff pollution who have not participated in the program.

- Those landowners who receive clean-up orders (after the sign-up period) will be restricted to a reduced rate of cost sharing for the installation of any conservation practices that may be required to satisfy the order.

- The regulations will apply to the Milwaukee River Watershed project and other watershed projects that were completed prior to the new law.

The above requirements are similar to bill language the governor had vetoed a year earlier. While politics played a major role in the switch, a recent evaluation of the watershed program by the Legislative Audit Bureau also helped sway opinion of the need for further runoff regulations. After reviewing figures from dozens of past projects, the bureau concluded in their final report:

- “a few bad sites [which] can mask benefits accrued from the farms which have greatly improved their land management”; and

- “the effects of a single large uncontrolled source of [pollution] may overwhelm the effects of controlling smaller sources”.

Of course, another event that factored into the decision making earlier in the year (whether it was relevant or not), was the drinking water crisis in the City of Milwaukee - which happened to occur right in the middle of the debate over the need for more regulations.

The details on how the new regulations are applied will be worked out over the next year as the administrative rules are developed. In the meantime, landowners in the Milwaukee River Watershed are encouraged to take advantage of the program benefits while they are still available.

Last Chance For Watershed Sign-up
November 30, 1993 marks the last day that many area landowners will be able to sign up for cost sharing offered through the Milwaukee River Watershed Program. That is the day that the sign-up period ends for the East/West Branch and the North Branch project areas (Farmington, Kewaskum, West Bend/Newburg Areas).

Many landowners remain undecided about their participation in the program. The Land Conservation Department encourages everyone to take advantage of the level of cost sharing being offered, because it not likely to be around again in the future. Personal letters are being sent to all people who are eligible for program cost sharing to remind them of the fast approaching deadline.

Once signed up, a landowner has up to four years to install the practices on their cost share agreement. The program also allows many practices to be added to an existing cost share agreement after the sign-up period. This provides some flexibility in the decision making for those practices that are not “critical” to program participation. LCD staff can explain which items qualify.

Cedar Creek Update... 

The Cedar Creek portion of the Milwaukee River Priority Watershed Program has hit the half-way mark of the landowner sign-up period. This leaves 1-1/2 years remaining for those of you still thinking about signing on. There are 20 committed program participants to date in the Washington County area.
Low-Tech Water Pumps Work!

There have been many news articles recently about a "cow powered bubbler" that is catching on in many parts of the country. No batteries. No electricity. Gets the cattle out of the stream, but keeps their thirst quenched. By reading the stories one might think that this is the greatest invention since sliced bread.

While the product they are referring to is very good, it is by no means new. It is commonly referred to as a nose pump. The livestock simply press their nose against a lever which syphons water from a well, spring, pond or creek up to 150 feet away. The water travels through a hose and fills a small basin right in front of the pump, which the livestock can then drink from. If they need more water, they just pump it again. (Even the "slow" ones catch on quickly.) The pump is manufactured in Germany and has been used extensively in Europe since the early 1950's.

Of course, keeping livestock out of the stream prevents water pollution from animal wastes and eroding streambanks. And when no power supply is readily available, this may prove to be a relatively inexpensive way to provide drinking water for livestock in pasture. That is why the pump is getting a lot of attention lately across the country.

There are other methods to get water to livestock without electricity, depending on site conditions. Gravity flow systems can often be used if a spring is nearby. Hydraulic ram pumps are also available. These can lift water similar to the nose pump, but are powered by falling water. They have been manufactured since the early 1800's. Solar powered pumps are a more recently developed system that is also available.

All types of livestock watering systems are eligible for 70% cost sharing through the Milwaukee River Program, in exchange for fencing livestock out of the stream. If you would like more information, call the Land Conservation Dept. at 335-4800.

Tree Program Gearing Up For Next Spring

If you are interested in ordering native trees, shrubs or prairie flowers for planting next spring, contact the Land Conservation Department to get on our mailing list for the order forms. The order forms will be available later this fall, but will only be mailed to you upon request. The program is available to anyone.

There will be 26 species of native trees and shrubs available. Most are transplant size (about 1-2 ft. tall), and range in price from $ .30 - 1.00 each. A minimum of 10 per species and 30 total trees or shrubs must be ordered.

The prairie seed is sold by the pound in a special mix of grasses and wildflowers native to the area. The 25 species of wildflowers display a variety of color throughout the growing season while providing habitat for songbirds, butterflies and other wildlife.

Orders will be taken until March 15 or until supplies last. The 1993 program saw 40,000 trees/shrubs and 220 pounds of prairie seed sold to area residents. All orders must be paid for in advance. Pick-up of orders will be in mid-April, 1994, at the County Fair Grounds in Slinger. For order forms or further information on the program, contact the Washington County Land Conservation Department at 335-4800.
Local Field Day Covers Well Water and Nutrient Management

A field day held at the William Thull Farm in September provided participants with a free nitrate screening of their drinking water and information on how to protect it from pollution caused by agricultural practices. Approximately ten farmers brought in drinking water samples to be tested for nitrates. None of the samples had nitrate levels exceeding normal background levels, less than two parts per million. “This is surprising,” said Ron Hennings, Assistant Director, Wisconsin geological and Natural History Survey, “because approximately ten percent of Wisconsin’s private wells exceed the health standard of ten parts per million.” Hennings also explained that drinking water does not come from Canada or Lake Superior, but rather from rainfall that lands close to the farmstead. Said Hennings, “...the quality of the water you drink is influenced by your activities on the land. It’s much easier to protect your drinking water from pollution than it is to clean it up!”

Bryan Jenson, Program Manager of the UW’s Integrated Pest Management program spoke on corn rootworm control and the use of nontraditional corn rootworm control methods. Said Jenson, “University studies have shown that nontraditional methods such as molasses, turpentine, sulfur, and mixtures of diatomaceous earth/molasses/kelp/soybean meal provide no control of corn rootworm larvae. They are no better than an untreated area.” He went on to say that reducing traditional soil applied corn rootworm insecticides by 25% provided acceptable control of corn rootworms, but advised farmers to start in small areas and to be cautious.

Richard Proost, Regional Agronomist with the Nutrient and Pest Management program informed farmers about the movement of crop nutrients on and off farm. Said Proost, “A tremendous amount of phosphorus and potassium leave the farm in the form of milk. If you can determine the amount of nutrients leaving the farm and balance them with nutrients brought on to the farm, you will not affect the fertility status of the farm.” Proost used the Thull farm as an example to show how many crop nutrients were moving off and on the farm.

Mike Ballweg, Sheboygan County Crops and Soils Agent, told farmers how to determine growing degree days and then how to use that information to calculate how long it will take for corn to come to maturity. Said Ballweg, “This corn I’m holding is in the early dent stage. It will take an additional 440 growing degree days to bring it to full maturity. That means we need 35 days of day time temperatures of 75 degrees. You tell me, is this going to happen?”

The field day was sponsored by the Washington County Extension Office, the Milwaukee River Priority Watershed and the University of Wisconsin’s Nutrient and Pest Management Program.

Conservation Easements Serve Many Purposes

Wide strips of permanent vegetation adjacent to streams can greatly reduce the amount of sediment that is washed into the water each year from croplands and eroded pastures. This vegetative “buffer” can also provide a variety of recreational opportunities and improve habitat for fish and other wildlife.

However, if these lands are currently being cropped, restoring them to a natural cover could result in a loss of income. To address this problem, conservation easements are now offered to landowners through the Milwaukee River program as a financial incentive to establish buffer strips along streams.

An easement is a one time purchase of very certain “rights” of ownership for a property. (A common example is an easement that allows a utility company to maintain a service line through your property.) In the case of a conservation easement, the rights to cultivate the land are purchased so that a natural landscape can be maintained along the stream. It is fast becoming a popular practice for landowners in the watershed.

If you are interested in conservation easements, and would like to learn more about them, contact the Land Conservation Department (335-4800) for a free fact sheet entitled “Conservation Easements - Questions and Answers for Landowners.”
Watershed Meeting Draws Large Response

Over 250 area residents attended a spring meeting and dinner, sponsored by the Washington County Land Conservation Committee and the Milwaukee River Program. The purpose of the meeting was to discuss the status of the watershed program in the county and to get some feedback on the program from local landowners.

During the meeting, Perry Lindquist from the County Land Conservation Department, presented a slide show on the history and ultimate goals of the program, along with a review of some of the local activities that have occurred. He also presented a summary of survey data local staff have compiled on the reasons landowners have given for not participating in the program - to help stir some dialogue (see bar chart).

Jim Stoffel, Mike Thuill, Chuck Mayhew and George Muth all served on a panel of local landowners and spoke about their experiences as program participants. While their perspectives varied considerably, they all shared a general support for program efforts. Some of the projects they were involved with include contour strips, barnyard runoff control systems, manure storage facilities, and conservation easements along the Milwaukee River.

The large crowd made it a little difficult to follow the informal format that was originally planned. However, based on the results of written evaluations by the attendees, the meeting was well received. Ninety percent felt there should be a follow-up meeting some time next year, after the sign-up has ended in part of the project area. Thanks to all those that participated in the meeting! We will try to arrange for a follow-up next year.

Reasons Why Landowners Don’t Participate in the Priority Watershed Program

* The above information is based on personal discussions between Land Conservation Department staff and landowners in the Washington County portions of the East-West and North Branches of the Milwaukee River Watershed (293) and the Oconomowoc River Watershed (1950) Project areas. Percentages are based on 80 animal waste related runoff problems and 456 cropland fields targeted for sediment control where the landowners chose not to cooperate with program efforts.

Rental Agreements Can Protect Your Interests and the Environment

A one page sample rental agreement is now available that will encourage soil and water conservation on rented land. The agreement ties the rental of cropland to the management practices outlined in a Conservation Plan that was prepared specifically for the property. About half the cropland in Washington County is rented. A three page fact that accompanies the sample rental agreement explains why rented land tends to be more of a problem for excessive soil erosion and water pollution from runoff. The fact sheet also describes the basics of preparing and following a Conservation Plan, and the many benefits - to the landowner and the renter - of making this a condition of land rental.

Landowners and renters are encouraged to utilize this simple document to protect the environment, as well as their own interests. While the landowner is ultimately responsible for ensuring the proper management of their rented land, it requires a commitment from both parties to make it happen. Call the Land Conservation Department (335-4800) for a free copy of the fact sheet and sample rental agreement.
County Program Helps Increase Use Of No-till

With the help of a discount program offered to county farmers, the practice of no-till planting of winter wheat, soybeans and alfalfa is becoming more popular in the area.

The program requires a purchase agreement between the farmer and the Washington County Land Conservation Committee (LCC) in order to take advantage of a discount (up to 10%) offered by some dealers on the purchase of certain conservation tillage equipment. Last year 2,200 acres of no-till crops were planted in the county using John Deere 750 No-till Grain Drill's purchased through this program. That number should increase this year with a couple more drills added to the list.

As part of the purchase agreement, the farmer must agree to offer custom planting or equipment rental to other area farmers. County farms that are offering these services are listed below. Call if you are interested.

- Mark Gundrum* 629-5336
- Rick Kratz* 644-6632
- Marv Kissinger* 677-3469
- Ned Leplien* 673-5343
- Erv Prohaska* 242-0154
- Richard Roskopf* 255-1785
- Terry Breuer 644-5311/8982 (Farm)

*These farmers currently have tillage agreements with the Washington County LCC.

Conservation Tillage Cost Sharing Available

The Washington County ASCS office will once again offer cost sharing for reduced tillage and no-till planting of crops. You must apply and be approved for cost sharing BEFORE the practice begins (before chisel plowing for example). ASCS requires soil tests to be taken on fields enrolled in the conservation tillage cost share program. The soil tests are necessary to reduce the risk of crop failure due to low fertility or improper pH. The soil samples must be processed by a lab which is certified by ASCS. The certification ensures the lab is following University of Wisconsin recommendations for chemical analysis of soil samples. Stop by the ASCS or SCS/LCD office for a conservation tillage information sheet which explains the cost sharing program in detail.

Terms of Conservation Tillage Purchase Agreement

Anyone who enters into a purchase agreement with the county Land Conservation Committee (LCC) must agree to the following terms for a period of three years:

- Provide custom tillage/planting services or rental of equipment to other area farmers for a minimum of 200 acres each year; and
- Maintain a minimum of 30% residue cover after planting on all cropland serviced by the equipment; and
- Make equipment available for LCC sponsored field demonstrations; and
- Assume all liability for purchase, operation and maintenance of the equipment; and
- Provide a brief annual report of activities to the LCC.

It should be noted that the availability of a discount for equipment purchases is at the discretion of the implement dealer/manufacturer, not the Washington County LCC.

No-till grain drills are becoming very popular in the county for planting winter wheat, alfalfa and soybeans (shown above). They save the farmer a lot of time and money in tillage while maintaining a protective cover on the soil surface at all times.
The Basics of Barnyard Runoff Control

A Dual Purpose Barnyard

The standard barnyard runoff system for a dairy herd utilizes the lot itself as a settling area for manure solids. The concrete walls and floor temporarily trap the water on the lot and slowly release it through a small hole in the outlet box (center of photo). The system shown above was installed on the Leroy Becker farm in 1991 through the Milwaukee River Program. The photo was taken shortly after a heavy rain, and shows how effective it is at trapping manure on the lot, where it can be easily scraped up. You may also notice that all downspouts from the buildings are redirected to areas outside of the barnyard to minimize the "flushing" effect.

The Final Steps

After the standard on-lot manure settling area, the barnyard runoff is directed to a secondary (concrete) settling pad. Here some of the finer solids will settle out while the water is also spread out evenly to accommodate the width of the filter strip. The polluted water then passes through small holes in the curb, (over the top, which is lower on that side) to a gravel spreader. From there the grass filter strip (average of 20'W x 80'L) does the final dirty work. The above system was installed this summer on the Louis Schuenemann farm through the Milwaukee River/Cedar Creek Program.

Busy Busy Busy

The conservation staff have been very busy with the installation of conservation practices this year in Washington County. By the end of this construction season the following projects should be completed:

- 1 Field Terrace System (6150 lin. ft.)
- 4 Wetland Restoration sites
- 11 Barnyard Runoff Control Systems
- 5 Manure Storage Facilities
- 68 acres of Contour Strip Cropping
- 4000 lin. ft. Stream Fencing (limit cattle access)

All of these projects received cost sharing offered through the Priority Watershed and/or the Agricultural Conservation Programs. If you are interested in seeing any of the projects, call the conservation office. Many of them are still in the construction phase due to the numerous rain delays this year. Seeing them in this phase may give you a better understanding of how they are constructed.

This winter these projects will also be added to the self guided tour that the office offers to anyone upon request. Call 335-4800 if you are interested.

For The Beef Lot

Due to the different diets of beef cattle, larger off-lot settling pads are recommended to allow better settling of manure solids before being discharged to a grass filter strip. The upper lot traps the larger manure solids. After flowing through three small holes, the runoff spreads out in the long off-lot area, which allows settling of of finer materials and easy scraping. The runoff then travels through two screens (lower left) and out to a conventional grass filter strip as shown above. This system was installed on the Bill Butzlaff farm in 1991 with 70% cost sharing through the Milwaukee River Program.
Editorial:

Finger Pointing Accomplishes Nothing

After Milwaukee’s crisis with contaminated drinking water this spring, I’m beginning to wonder if we are ever going to get past the finger pointing stage of our water pollution control efforts. Despite eight years of educational programs on the sources and solutions to water pollution throughout the Milwaukee River Watershed area, the knee-jerk reaction by city officials to this crisis was to once again point the finger of blame “upstream”.

“It All Adds Up”. That has been the motto of the Milwaukee River Program. It refers to the countless sources of runoff pollution - each one significant in their own way - that originate throughout the river’s 850 square mile drainage area. The phrase attempts to diffuse the finger pointing and equally distribute the “blame” between the urban and rural communities for a polluted river system that spans through both.

“Upstream” includes a landscape as diverse as they come. Almost 100 miles upstream, the headwaters begin in the Northern Unit of the Kettle Moraine State Forest. After flowing through thousands of acres of forests, farmland, wetlands and numerous small communities along the way, the land cover becomes dominated by concrete, asphalt and rooftops in the highly populated Milwaukee Metropolitan area (lower quarter of the drainage area). If the river could talk, it would tell us stories of its abuse - equally as horrifying along its entire journey to Lake Michigan (at the Milwaukee Harbor).

EPA investigators have come up with predictably inconclusive results with their widespread water sampling to find “the source” of cryptosporidium. This is not surprising because it’s the nature of the beast. That's why the bureaucrats call it “nonpoint” pollution. It is virtually impossible to accurately trace all the sources of water pollution that washes off our landscape. This fact tends to perpetuate the finger pointing and inaction (from both the urban and rural sides), while at the same time making it even more senseless. Searching for a “smoking gun” is more the result of a political frenzy than sound science.

The critical message has been, and will continue to be, that everyone - urban and rural residents alike - must do their part, if we are to get serious about cleaning up the river and making it a proud part of our communities again. While great strides have been made, this recent crisis illustrates the fact that we have a long way to go.

While some pollution sources will continue to elude investigators, others have been painfully obvious for a long time. As the price tag of the crisis continues to climb ($54 million so far), the pressures to treat the known pollution problems will also increase. Where there are practical, proven solutions to those problems, it is hard to justify any further delays. Water pollution is a prime example of the old adage, “an ounce of prevention is worth a pound of cure”.

The price of filtering pollutants out of the water for drinking dwarfs the cost of pollution control efforts such as the Milwaukee River Watershed Program.

The water crisis in Milwaukee has taught us many lessons. I would hope that one of them would be that pointing fingers accomplishes nothing.

Perry M. Lindquist, County Conservationist

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In the City

- Too many urban residents do not understand that the sewers in their street curbs (storm sewers) empty into the nearest lake, stream or wetland, not the sewage treatment plant.

- Thousands of gallons of used motor oil, antifreeze, solvents and other harmful chemicals are purposely dumped into urban storm sewer systems each year by local residents.

- Homeowners use up to 10 times more chemical pesticides and fertilizer per acre than farmers do.

- 70% of storm sewer discharges in the Milwaukee area exceed acute toxicity standards set by the EPA for industries.

- For every acre of land under construction each year, about a dump truck of soil is washed into local lakes, streams or wetlands if proper erosion control measures are not followed.

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On the Farm

- The organic waste generated by an average size dairy herd is comparable to an unsewered community of 1500 people. Statewide, livestock waste accounts for 18 times the quantity of phosphorous produced by all industries and municipalities combined.

- Animal waste is the leading cause of groundwater contamination in the state, beating out landfills and hazardous waste sites.

- 97% of Wisconsin livestock farmers don’t properly credit the nutrients of manure applied to croplands, resulting in the over-application of fertilizer.

- Soil erosion from cropland remains the number one source of sediment in our lakes and streams due to the large number of acres farmed. An estimated 32,000 tons of soil is washed into the Milwaukee River system each year from cropland.

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Acknowledging that we are all part of the problem is the first step towards meaningful water pollution control.
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Quotable Quote...

"We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect."  Aldo Leopold

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ADDRESS CORRECTION REQUESTED