



IOWA ENVIRONMENTAL COUNCIL

"Together for the Earth we share"

WATER QUALITY MONITORING

Iowa must fund water quality monitoring efforts adequately. \$1 million is requested for 1999-2000 and \$2 million annually starting in 2000-2001 for comprehensive surface water and groundwater monitoring.

Iowa's existing water quality monitoring program fails to provide much of the most basic information about our most precious resource. With comprehensive water monitoring of both surface water and groundwater, we can better protect our citizens and environment, save money, and reduce public health concerns as we discover and address water quality problems early.

Clear Lake is a good example of what happens when we don't monitor. Last summer, the lake's three public beaches were closed several times due to high levels of E. coli and fecal coliform bacteria. No routine monitoring had been conducted on the lake to identify problems before they became health concerns and a public relations nightmare.

Because we monitor so little:

- **We pay far more than we should to treat our drinking water.**
- **We put at risk agricultural and manufacturing operations that rely on good quality water.**
- **We hurt our tourism industry and make Iowa a less desirable place to live.**
- **We damage our health and the health of our ecological communities.**

Iowa spends only \$243,000 for water quality monitoring, three-fourths paid for by the federal government. In contrast, Illinois spends \$2.6 million per year of state funds to monitor its water. In Iowa, no state funds are spent on DNR's surface water monitoring network. Only 27 sites per year are monitored, all paid for with federal funds.

Groundwater monitoring is not much better. Ninety wells are used to monitor water in the six aquifers that underlie Iowa's 36.2 million acres. This is of particular concern, because groundwater is a source of drinking water for more than 70 percent of Iowans.

Action requested

The state should immediately assemble a diverse team of water quality experts to guide its efforts. Their task:

1) Determine monitoring needs that must begin immediately.

For example:

- biological and herbicide monitoring at existing monitoring sites (\$55,000 and \$20,000, respectfully);
- monthly bacterial monitoring at public beaches (\$10,000);
- maintenance of the current groundwater monitoring network, which is in jeopardy because of decreases in federal funds (\$30,000).

2) Develop a comprehensive statewide monitoring program.

Elements of the planning process:

- develop a centralized statewide water quality database to aid in analysis of new and existing water quality information (\$150,000 to cover both equipment and additional staff);
- better coordinate monitoring and analyze existing monitoring data (\$110,000);
- develop, within one year, a plan for a comprehensive integrated water monitoring program in Iowa (\$200,000).

3) Recommend allocation for capital investments to be made in 1999-2000 to implement the completed monitoring plan without delay.

For example:

Analytical equipment, gauging stations, monitoring wells, and other capital improvements (\$425,000).

A comprehensive water quality monitoring network is fiscally responsible. It will help us deal with concerns before they cause harm to our communities and businesses.

— David Hurd, Emeritus Chairman, Principal Financial Group, and at-large director, Iowa Environmental Council

Immediate needs for water monitoring: Answers to common questions

Why \$1 million is needed in FY1999-2000

Q: Why do we need a comprehensive water quality monitoring program?

A: As one top DNR official put it, Iowa's existing monitoring efforts are "minimal at best." Under Iowa's current program, there are major data gaps both in the number of sites monitored and the types of data collected. In addition, there is not enough integration and analysis of the data collected.

Only a comprehensive surface water and groundwater monitoring network, carefully planned and conducted by highly qualified professionals, will regularly and consistently tell us what is in our water (\$200,000 for planning).*

Q: Why should we begin immediately improving our monitoring efforts while a comprehensive plan is developed?

A: Because the public is demanding that Iowa act now to protect our water quality. In many areas, we cannot afford to wait. We need to start collecting baseline information. All of the following monitoring needs for 1999 would certainly be included in any comprehensive plan that is developed:

1.) The addition of biological monitoring at the 16 fixed station surface water sites. Biological monitoring, which evaluates biological diversity as an indicator of water quality, often can identify problems that cannot be identified through chemical monitoring alone (\$55,000).

2.) The addition of monthly (June-August) bacterial monitoring at public beaches, including the larger lakes and smaller state- and county-owned beaches (\$10,000).

3.) Maintenance of the current groundwater monitoring network, a cooperative program between the state and the U.S. Geological Survey (USGS), by allocating necessary state funds to assure data continuity and meet new USGS matching fund requirements. This network is in jeopardy because of decreases of federal funds (\$30,000).

4.) Analysis of common herbicides at the state's 27 surface water monitoring sites. Currently, we analyze for 10 common herbicides used in Iowa at only seven surface water monitoring sites (\$20,000).

Q: How can we assure that the existing and new water quality information will be used?

A: Make it accessible. The state must carefully evaluate existing data and develop a centralized statewide database. This will be a comprehensive and easy to use source of new and existing water quality information (including all of the valuable existing sources of information from other agencies, businesses, universities, and water utilities). The database should be designed and put into use this year. Information from this database will be helpful in planning and implementing the comprehensive monitoring program (\$150,000).

Q: How many FTEs are needed?

A: An estimated seven FTEs (full-time equivalent employees) are needed in FY1999-2000 to assure that the state's

monitoring initiatives are adequately carried out. These may be new positions or staff reassigned from other areas. Two FTEs are needed to develop a statewide water quality database (one for database design and one for data entry). Two more FTEs are needed to evaluate existing monitoring data. Three additional FTEs are needed to develop the comprehensive monitoring plan (one coordinator and two FTE equivalents for planning assistance).

Polls show Iowans want our state government to commit to water quality:

- 87 percent expressed concern about pollution of their drinking water.
- 84 percent think surface water pollution is a "serious" problem.
- 77 percent think groundwater pollution is a "serious" problem.

Source: 1996 poll commissioned by the Iowa Environmental Council and conducted by Professors Paul Lasley and Steve Padgett of Iowa State University

Q: What capital investments are needed?

A: In order to begin a comprehensive monitoring program in the year 2000, money must be allocated this session for capital improvements, so that equipment may be purchased, installed, and tested before the comprehensive monitoring program begins. For example, capital investments are needed for equipment to identify all pesticides registered in Iowa and their transformation products, which are formed as pesticides transform in the environment (\$300,000). In addition, equipment such as gauging stations and additional monitoring wells will be essential to support an expanded monitoring network (\$125,000).

* Dollar estimates are based on analysis by the Iowa Environmental Council and other water quality experts.