

---

# FIFTH WATER INFORMATION SUMMIT: REGIONAL PERSPECTIVES ON WATER INFORMATION MANAGEMENT SYSTEMS

OCTOBER 23-25 WATERWEB CONSORTIUM, FORT LAUDERDALE, FLORIDA USA  
2002

---

## CLERMONT COUNTY (OHIO) PROJECT XLC (EXCELLENCE AND LEADERSHIP FOR COMMUNITIES): AN INNOVATIVE APPROACH TO WATER QUALITY MANAGEMENT ON A LOCAL LEVEL

Christopher Murphy<sup>1</sup>

**ABSTRACT:** Ohio's Clermont County, one of U.S. EPA's collaborative partners on the Web, has developed an effective approach to watershed management through participation in U.S. EPA's Project XLC (eXcellence and Leadership for Communities), vigorous pursuit of a strong stakeholder involvement, and an effective use of the Web to maintain public awareness of water quality needs in the East Fork of the Little Miami watershed. As the Project XLC moves toward full implementation, the County is developing viable options, such as assistance through the State Revolving Fund, for funding the work that needs to be done particularly in the area of nonpoint source pollution. The County is leveraging its partnerships to ensure that the most efficient solutions are achieved at the most reasonable cost, and U.S. EPA and Ohio EPA are providing creative alternatives for funding sources.

**KEY TERMS:** Project XLC; stakeholder involvement; watershed action plan; site assessment tool; water infrastructure finance; State Revolving Fund; Clermont County; Ohio.

### PLACING THE CLERMONT PARTNERSHIP IN A WEB CONTEXT

EPA collaborates with Web partners on many levels, both internally and externally. The evolution of the U.S. EPA Web presence and coordination of efforts with its many partners has recently received high marks from the researchers at Brown University, who in their third annual e-government survey ranked the EPA Web site third among federal sites (after FCC and Department of Labor). The report, which is available at the Brown University Web site at [http://www.brown.edu/Administration/News\\_Bureau/2002-03/02-016.html](http://www.brown.edu/Administration/News_Bureau/2002-03/02-016.html), also offers several useful suggestions for improving e-government Web sites, which are quoted from the report summary that appears on the Web site as follows:

- Employ consistent design and navigational principles so that users of e-government services may move among different agencies and offices without confronting radically different user interfaces, search techniques and other impediments.
- Integrate state agency Web sites into a state portal or gateway Web site. This enables citizens to locate desired services by surfing either the portal page or the agency Web site.

---

<sup>1</sup> Program Analyst, U.S. Environmental Protection Agency, Region 5, 77 W. Jackson Blvd., Chicago, IL 60604, Tel: +1 (312) 886-0172; Fax: +1 (312) 886-0168; E-mail: [Murphy.Christopher@epa.gov](mailto:Murphy.Christopher@epa.gov)

- Minimize use of areas that require premium fees. Placing additional charges on governmental services deters free and open access to electronic governance.
- Increase access to interactive technologies. The public sector has yet to implement successfully two-way communications devices, Web site personalization and credit card payments on the majority of its pages.
- Enable foreign language translation through translated pages or software translators.
- Provide a clear and consistent privacy/security policy. The state of Connecticut, for example, has linked every agency in its borders to a common portal outlining the state's policy in these areas.

EPA has consciously been striving to pursue these options as it has moved to an integrated topics-driven approach to environmental information on the Internet and has encouraged its partners to move in the same direction.

EPA Region 5 Water Division, located in Chicago and covering an area of responsibility ranging from the Upper Mississippi River and the Great Lakes down to the Ohio River, has been leading a concerted effort by the ten EPA Regions and Office of Water to improve the context of EPA water information on the Internet. During this current calendar year, Region 5 Water Division has produced several important partnership products including the new "EPA Region 5 State of the Waters Report - 2002" (which is available in hard copy, on CD-ROM, and also online at <http://www.epa.gov/region5/water/sotw2002.htm> ) and the "Upper Mississippi Water Quality Assessment" (which is currently out of stock in hard copy and on CD-ROM but still available online at [http://www.epa.gov/region5/water/umr\\_wq\\_assess.htm](http://www.epa.gov/region5/water/umr_wq_assess.htm)) Region 5 Water Division also maintains a water partnership page at <http://www.epa.gov/region5/water/partnerships.htm>, which includes in its international listing references to the Water Web Consortium and the Water Information Summit. While the Web has presented new challenges in communication, EPA and its partners have found new ways of using its technology to reinforce solid grassroots support for water quality activities. One partner in particular has set an example in this area. Clermont County in Ohio has been a local leader in cultivating grassroots support for watershed action and using the potential of the Internet to make decision-making information available.

## **CLERMONT COUNTY PROJECT XLC BACKGROUND**

The story of Clermont County and its EPA-sponsored Project "eXcellence and Leadership for Communities" (XLC) is the story of "the little county that could." Clermont County is situated just east of the Cincinnati Metropolitan area and is evolving with the growth of that urban area and its need for bedroom communities. In fact, with a growth rate of about 18%, Clermont County is one of the fastest growing counties in the State of Ohio. In 1990, the County's population was estimated at 150,000 and is expected to increase to 255,000 by the year 2020. Other areas adjacent to Cincinnati, such as Mill Creek, have already experienced the adverse impacts that such development can bring. The Clermont County Commissioners created an Office of Environmental

Quality (online at <http://www.oeq.net/> ) to maintain and enhance the County environment by applying smart growth concepts to future development. This desire brought Clermont County into partnership with U.S. EPA and Ohio EPA in Project XLC, which is designed to test environmental management actions that deliver better or more cost-effective environmental and public health protection. This goal is accomplished through alternative pollution reduction strategies tailored to the conditions and needs of specific geographic areas.

Under Project XLC guidelines, EPA provides the opportunity to test regulatory flexibility and advance innovative strategies for protection and enhancement of the environment. The Clermont County Project XLC focuses on the East Fork of the Little Miami River (EFLMR) watershed. This watershed is approximately 320,000 acres and incorporates portions of five counties. The EFLMR is a major tributary to the Little Miami River, which is a designated State and National Scenic River and is the State of Ohio's largest Exceptional Warmwater Habitat (EWH) stream. All but the headwater areas of the EFLMR have the EWH designation. Lake Harsha, a 2,200 acre reservoir that is a source of drinking water as well as recreation, is centrally located in the EFLMR watershed, draining 66% of the overall watershed. The EFLMR's drainage basin straddles two eco-regions: the interior plateau in the lower portion of the basin and the eastern corn belt plain in which the upstream areas are located. The Clermont portion of the EFLMR is approximately 155,000 acres or almost half of the watershed with urbanizing in the southwestern portions and agricultural use in the north and east. More than 20% of the watershed is forested with significant forest cover in the vicinity of Lake Harsha.

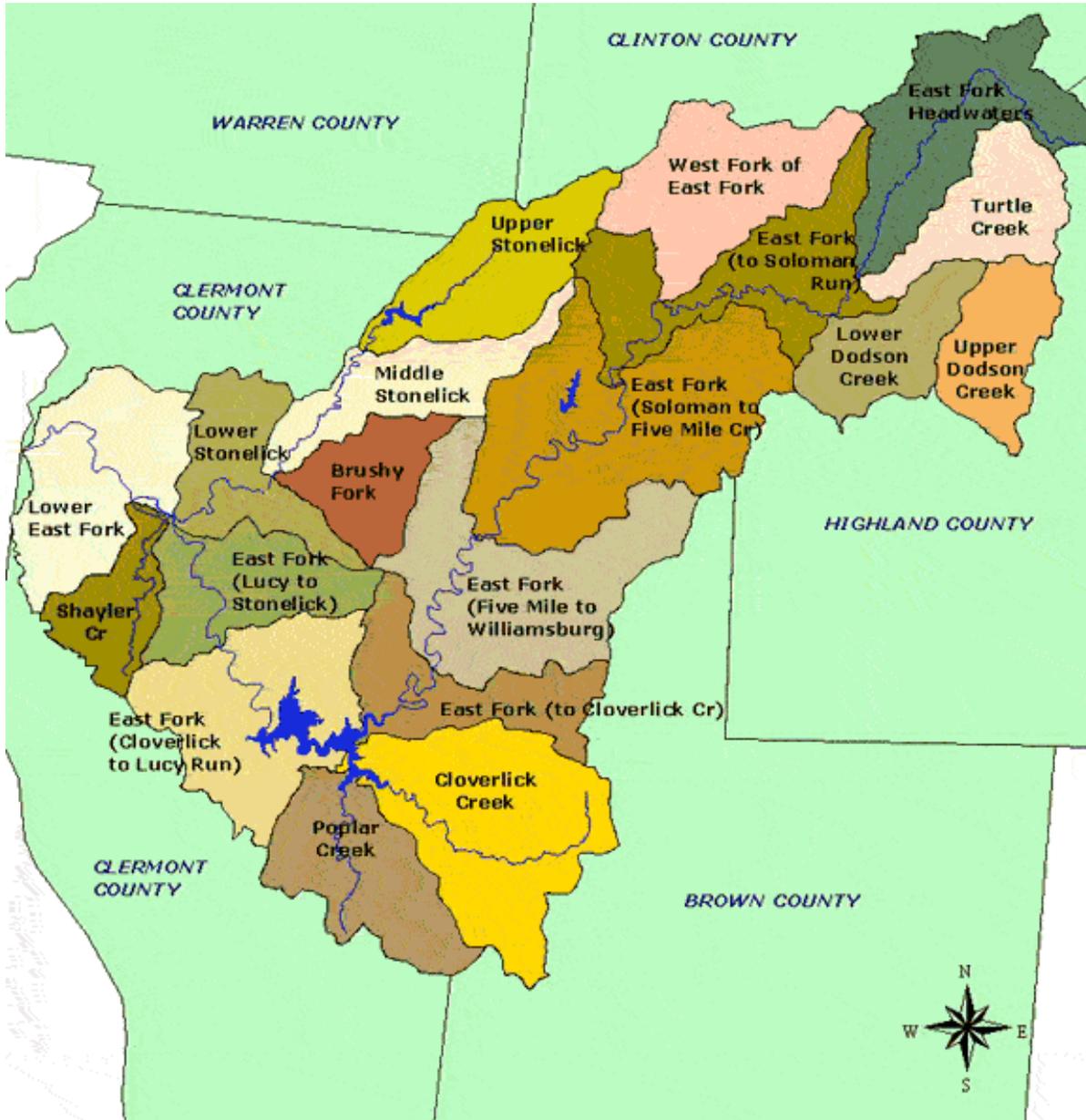
The desired benefits from the Clermont County Project XLC include:

- Full attainment of the State's EWH designation;
- Enhanced ecological benefits due to stream corridor management;
- Better growth management through Smart Growth;
- Improved habitat protection;
- Improvement of water quality and biological conditions in sensitive waterways;
- Enhanced wildlife protection;
- Wetlands protection and restoration;
- Conservation easements;
- Flow augmentation;
- Riparian habitat improvements;
- Protection of drinking water supply; and
- Transferability to other communities and governmental organizations

The overall strategy for the Clermont County Project XLC is to address all the water quality issues of the East Fork of the Little Miami watershed in a comprehensive way, holistically integrating protection and enhancement of water quality into the land planning process, taking full advantage of smart growth concepts. The Phase I Planning Agreement is available online at <http://www.epa.gov/projectxl/clermont/finalfpa.pdf> The successful completion of Phase I produced

a comprehensive Watershed Quality Management Plan (QMP), which has been used as a model for other projects.

*EFLMR Watershed Map (Source: <http://www.oeq.net/default.php?section=map>)*



## CURRENT PROJECT DEVELOPMENTS

The Phase II Implementation Agreement will be a cumulative Watershed Action Plan, drawing together component plans for the EFLMR subwatersheds that are being developed with strong stakeholder involvement. Three of these plans are already available on the Clermont County Web site at <http://www.oeq.net/default.php?section=wataction>. The cumulative watershed plan will lay the foundation for the development of a Total Maximum Daily Load (TMDL) for the EFLMR watershed by Clermont County at the request of the State of Ohio. It will also offer a unique opportunity for the East Fork watershed to become a candidate for piloting U.S. EPA's new Watershed Permit Program, which is currently under development.

Clermont County's proactive approach to stakeholder involvement, particularly through the use of the Internet, will add a strong new dimension to the development process for the East Fork TMDL and also understanding and acceptance of the watershed permit concept, which builds on many of the regulatory flexibility premises previously explored under point/nonpoint source trading. A comprehensive Watershed Action Plan, a TMDL, and a watershed permit—three closely integrated pieces, produced as a result of the collaborative efforts of Clermont County's Office of Environmental Quality, the State of Ohio, and U.S. EPA, are the goals of the Phase II Implementation for the Clermont County Project XLC.

A key element in the Clermont County Project XLC has always been partnership. Partnership support for the County is taking on a new dimension as expertise in identifying the full range of possible funding strategies is added to expertise in the technical aspects of protecting and enhancing water quality. U.S. EPA has already provided Clermont County with Regional Geographic Initiative Funding for development of an user-friendly Internet interface for the County's customized Site Assessment Tool (SAT), which enables those with access to the County's Web site to apply the modeling tool capabilities to land planning decisions to gain a better understanding of the impacts of such decisions on water quality in the East Fork watershed, and an "alpha" version of the SAT and User Guide are now available online at the Clermont County Office of Environmental Quality Web site ( <http://www.oeq.net/> ). The Ohio Department of Natural Resources has also already provided funding to the County for a watershed coordinator.

Several other possibilities for funding of the implementation phase are under consideration. Assistance under Section 104(b)(3) of the Clean Water Act might be requested to support the County's innovative watershed approach. However, the source of funding that potentially holds the greatest significance for Clermont County is the Clean Water State Revolving Fund (SRF).

### **SRF APPROACHES TO WATER INFRASTRUCTURE FINANCE**

The SRF is a national program that was created by Title VI of the 1987 Amendments to the Clean Water Act. It is a partnership of federal and state governments that finances state-run programs that provide water infrastructure financing mainly through loans, which by law are made at or below the market rate to borrowers with dedicated sources of revenue for making loan repayments. The state

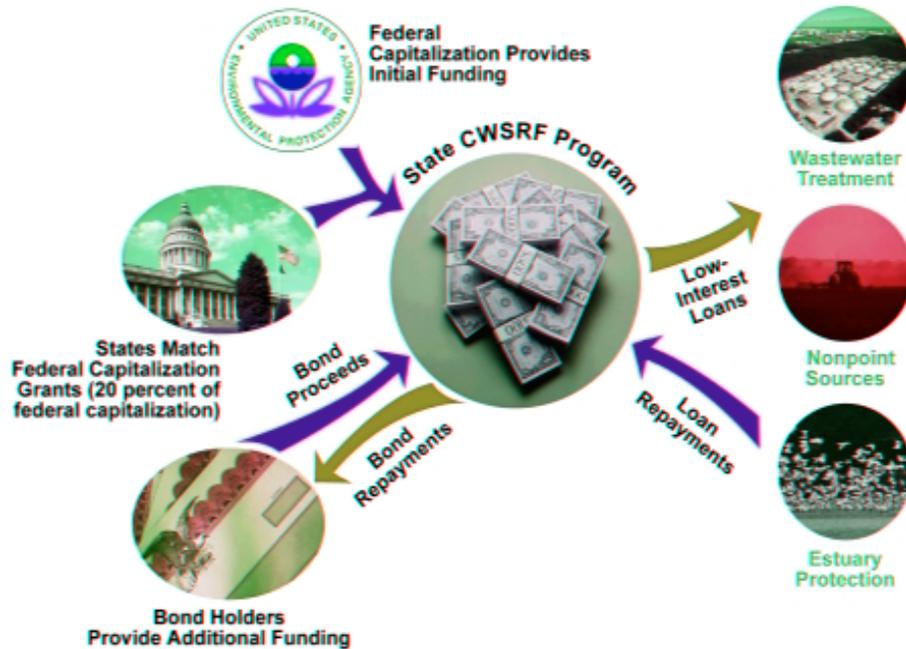
programs are capitalized with federal grants and state matching funds, which may also be used to leverage larger pools of available funds through the issuance of general obligation bonds or revenue bonds. The program has been so successful that a parallel program has subsequently been created for drinking water infrastructure support through amendments to the Safe Drinking Water Act.

**Diagram of SRF Cashflow**

(Source: [http://www.epa.gov/owm/cwfinance/cwsrf/cwsrf\\_diagram.htm](http://www.epa.gov/owm/cwfinance/cwsrf/cwsrf_diagram.htm) )

Both SRF programs have been highly popular with the states—and also with Congress, which has consistently funded them at or above levels requested by successive presidential administrations. More information on the Clean Water SRF Program can be found online at

<http://www.epa.gov/owm/cwfinance/cwsrf/index.htm>. Since the beginning of the Clean Water SRF



Program, funds made available for assistance have amounted to \$42.3 billion dollars, making the SRF Program the single largest program funded through U.S. EPA, even larger than Superfund. Of that amount of available assistance, \$38.7 billion has been provided through over 12,500 SRF loans. In the SRF reporting year ending on June 30, 2002, \$4.4 billion was made available in over 1,500 loans. This is the latest SRF financial information available, which, though usually not released until November, has been made available for the Water Information Summit by Kit Farber of the SRF Branch in the Office of Wastewater Management at EPA Headquarters.

Unlike its predecessor program for construction grants, the SRF has demonstrated broad versatility in addressing a variety of sources of pollution. Since the start of the program, \$1.647 billion has been made available to address nonpoint source and estuary needs. In the SRF reporting year ending on

June 30, 2002, \$242 million dollars was directed to addressing nonpoint source needs.

## **OHIOS SRF INNOVATIONS FOR NONPOINT SOURCE PROJECT FINANCING**

The State of Ohio's SRF, known as the Water Pollution Control Loan Fund, which has a website accessible online at <http://www.epa.state.oh.us/defa/defamain.html>, has been a national leader in innovative approaches to nonpoint source funding. The program is managed jointly by the Ohio EPA and the Ohio Water Development Authority. Two innovative Ohio SRF nonpoint source funding strategies, which Clermont County is considering as it develops its subwatershed action plans, are the Linked Deposit Program and the Water Resource Restoration Sponsor Program. These two strategies offer viable methods of funding nonpoint source projects that might otherwise have difficulty obtaining assistance due to the lack of a dedicated source of revenue for repaying loans. The Linked Deposit Program deposits SRF funds into certificates of deposit (CDs) at participating banks. The CDs are posted at a reduced rate of return with the mark down in the interest rate being used to offset the interest rates on loans to farmers with qualified nonpoint source projects. This enables farmer who might not be able to get funding at a reasonable rate to undertake nonpoint source cleanup.

The Water Resource Restoration Sponsor Program uses a different approach. Traditional point source SRF projects are encouraged to sponsor qualified nonpoint source water restoration projects under the umbrella of their loan amount. In return there is a reduction in the SRF interest rate for the point source loan, which more than offsets the increase in loan principal that is required to fund the nonpoint source project. This renders the funding of the nonpoint source project, in effect, as a grant. More information about this highly innovative use of the SRF can be found online at [http://www.epa.gov/owm/cwfinance/cwsrf/ohio\\_wrrsp.pdf](http://www.epa.gov/owm/cwfinance/cwsrf/ohio_wrrsp.pdf).

## **CONCLUSION**

Tapping into such creative financing options for real progress with the help of its partners, Clermont County is not only developing a plan of action for the EFLMR watershed but also ensuring that the plan contains feasible steps that will lead to greater protection for the water quality in the area. Because the County has approached its constituency through a rigorous stakeholder outreach and then effectively maintained its information and progress on its Web site to ensure continued public awareness and support, the County has set an example for others to follow. With its proactive approach to environmental protection, Clermont County has become "the little county that could".

## **ACKNOWLEDGMENTS**

Special thanks to Kit Farber, SRF Branch, Office of Wastewater Management, U.S. EPA for release of the latest aggregate SRF funding data for inclusion in this paper.

## **REFERENCES**

All references for this paper are available, as noted, on the Web.

***Brown University Third Annual e-Government Survey Cited:***

[http://www.brown.edu/Administration/News\\_Bureau/2002-03/02-016.html](http://www.brown.edu/Administration/News_Bureau/2002-03/02-016.html)

***Clermont County Sources Cited:***

**OFFICE OF ENVIRONMENTAL QUALITY**

<http://www.oeq.net/>

**MAP OF THE EAST FORK OF THE LITTLE MIAMI WATERSHED**

<http://www.oeq.net/default.php?section=map>

**WATERSHED ACTION PLANS**

<http://www.oeq.net/default.php?section=wataction>

***State of Ohio Water Pollution Control Fund Sources Cited:***

**OHIO EPA DIVISION OF ENVIRONMENTAL AND FINANCIAL ASSISTANCE**

<http://www.epa.state.oh.us/defa/defamain.html>

***U.S. EPA Clean Water State Revolving Fund (SRF) Sources Cited:***

**CLEAN WATER SRF WEB SITE**

<http://www.epa.gov/owm/cwfinance/cwsrf/index.htm>

**DIAGRAM OF SRF CASHFLOW**

[http://www.epa.gov/owm/cwfinance/cwsrf/cwsrf\\_diagram.htm](http://www.epa.gov/owm/cwfinance/cwsrf/cwsrf_diagram.htm)

**FACTSHEET ON OHIO'S WATER RESOURCE RESTORATION SPONSOR PROGRAM**

[http://www.epa.gov/owm/cwfinance/cwsrf/ohio\\_wrrsp.pdf](http://www.epa.gov/owm/cwfinance/cwsrf/ohio_wrrsp.pdf)

***U.S. EPA Project XLC Sources Cited:***

**CLERMONT COUNTY PHASE I PLANNING AGREEMENT**

<http://www.epa.gov/projectxl/clermont/finalfpa.pdf>

***U.S. EPA Region 5 Water Sources Cited:***

**EPA REGION 5 STATE OF THE WATERS REPORT 2002**

<http://www.epa.gov/region5/water/sotw2002.htm>

**UPPER MISSISSIPPI WATER QUALITY ASSESSMENT**

[http://www.epa.gov/region5/water/umr\\_wq\\_assess.htm](http://www.epa.gov/region5/water/umr_wq_assess.htm)

**U.S. EPA REGION 5 WATER PARTNERSHIPS**

<http://www.epa.gov/region5/water/partnerships.htm>