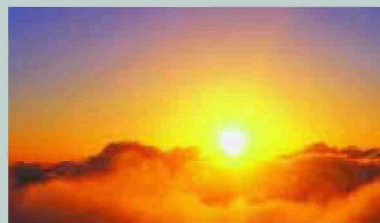
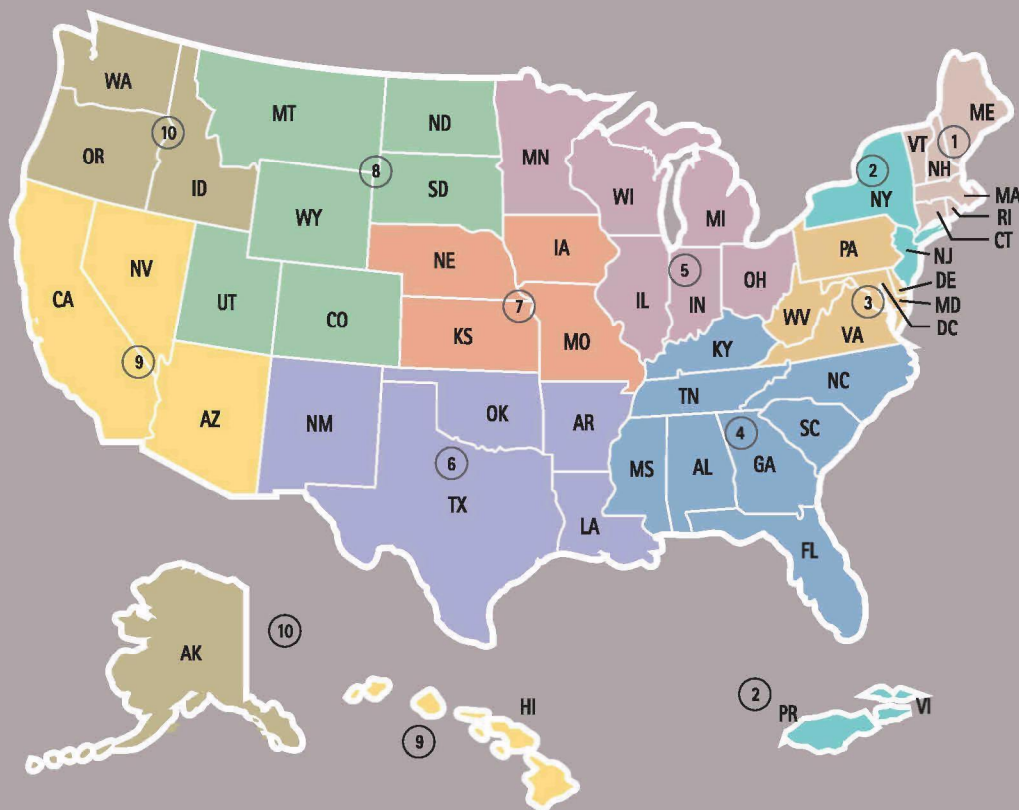




U.S. ENVIRONMENTAL PROTECTION AGENCY ENVIRONMENTAL FINANCE PROGRAM 2005-2006 Report





U.S. ENVIRONMENTAL PROTECTION AGENCY
ENVIRONMENTAL FINANCE PROGRAM

2005-2006 Report



Helping to answer the
EFAB
"How to Pay" question.



Prepared by:

U.S. Environmental Protection Agency
Office of the Chief Financial Officer
Office of Enterprise Technology and Innovation
Environmental Finance Program



October 2006

ACKNOWLEDGMENTS

We would like to express our appreciation to the members and leadership of the Environmental Financial Advisory Board (EFAB), particularly Stan Meiburg, EFAB's Designated Federal Official (DFO), who is also the Deputy Regional Administrator for EPA Region 4. We are extremely fortunate that such a highly respected individual has brought his considerable knowledge and skill to this Federal Advisory Board. In his role as DFO, Mr. Meiburg has been instrumental in aligning the board's projects with Agency priorities and elevating the interactive role of the regional environmental finance center directors as expert witnesses to EFAB. This has provided the board with a unique perspective on a wide variety of environmental and financing issues.

We also want to acknowledge the contributions of those EFAB members who rotated off the board after long-term service. We especially want to recognize George Brewster, Michael Deane, Michael Finnegan, Evan Henry, Anne Pendergrass Hill, Mary Kelly, John McCarthy, George Raftelis, Arthur Ray, and Mary Ellen Whitworth. In addition, we would like to recognize former Syracuse Environmental Finance Center (EFC) Director Kim Farrell, who served as an expert witness to the board before leaving the EFC. The Agency has benefited greatly from former members' expertise and wisdom in helping state and local governments find resources to meet their environmental needs.

We appreciate the valuable assistance supporting the work of the board by senior headquarters and

regional management and staff in the program offices, such as Ben Grumbles, Cynthia Dougherty, Diane Regas, and Jim Hanlon in the Office of Water; and Susan Bodine, Tom Dunne, and Barry Breen in the Office of Solid Waste and Emergency Response. We also want to include Beth Craig, Office of Air and Radiation; Charles Kent, Office of Policy, Economics and Innovations; Laura Yoshii, Deputy Regional Administrator, EPA Region 9; and Kathleen Callahan, Deputy Regional Administrator, EPA Region 2, all of whom helped advance the work of the board.

We are proud of the commitment demonstrated by the directors of the nine university-based EFCs, who strive diligently to reach underserved communities with environmental tools and training tailored to their specific needs. A great many dedicated people have helped the EFCs along the way. We particularly want to thank the EPA regional management and staff who have generously provided their skills and time in managing the cooperative agreements with each of these centers. The EFC Network would not exist without the regions' superb cooperation, guidance, and support.

Finally, we want to recognize Joe Dillon, Director of the Office of Enterprise Technology and Innovation, and his staff of the Environmental Finance Program, Vanessa Bowie, Vera Hannigan, Timothy McProuty, Alecia Crichlow, Susan Emerson, and Sandra Keys. Their efforts and dedication prove that resources can be leveraged into far-reaching results.

FOREWORD

It is my great pleasure to present the *2005—2006 Environmental Finance Program Progress Report*, showcasing the latest accomplishments of the U.S. Environmental Protection Agency's (EPA) Environmental Financial Advisory Board (EFAB) and the Environmental Finance Center (EFC) Network, which provide some of the most unique services to a federal agency in the nation.

EFAB, a federally chartered Advisory Committee, provides EPA with a cross-media, intergovernmental perspective on environmental finance that integrates environmental and economic goals and emphasizes public-private partnerships. The 28 all-volunteer financial experts on EFAB advise EPA on environmental financing challenges, providing advice and recommendations to the EPA Administrator and program offices on environmental finance issues, options, proposals, and trends. Essentially, EFAB seeks to increase the total investment in environmental protection by leveraging public and private environmental resources. Finally, EFAB produces policy and technical reports on a wide range of environmental finance matters, particularly with regard to issues impacting small communities.

The EFC Network, made up of nine regional centers, provides outreach services to state and local governments and small businesses. These regional centers, funded by EPA along with other public and private monies, provide training, tools, workshops, and other services to give communities the know-how to help them manage the cost of environmental protection. The EFC Network's services are based on the premise that communities want to comply with environmental regulations but often do not know how to pay for them. Many communities, particularly small ones, lack in-house financial expertise. The finance centers help fill this knowledge gap—they know that finance is a critical component of sustainable environmental protection.



This report provides a snapshot of the successful Environmental Finance Program, built over a decade through the interactions of financial experts, communities, universities, and EPA. It documents some of the thousands of individuals, agencies, and communities that have benefited from the program's advice, training, workshops, tools, and personal assistance. In short, it shows the environmental results that a small, dedicated group with a specific mission can achieve.

In closing, I'd like to take this opportunity to thank the many committed people who have helped the Environmental Finance Program along the way. On behalf of a grateful Agency, I would like to acknowledge the remarkable contributions of the members of EFAB and the EFC Network who have willingly and generously given of their time and expertise to provide financing advice and assistance in pursuit of environmental protection.

For more information about the Environmental Finance Program, please visit <www.epa.gov/efinpage>.

A handwritten signature in black ink, appearing to read "Lyons Gray". The signature is fluid and cursive, with the first name "Lyons" being more prominent than the last name "Gray".

Lyons Gray, Chief Financial Officer
U.S. Environmental Protection Agency

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EXECUTIVE SUMMARY

Introduction

This *2005 – 2006 Environmental Finance Program Progress Report*, compiled by the U.S. Environmental Protection Agency (EPA) Office of the Chief Financial Officer reports on the activities and initiatives of the Environmental Financial Advisory Board (EFAB) and the Environmental Finance Center (EFC) Network.

Both EFAB and the EFC Network provide unique services to the nation in terms of helping communities find ways to pay for environmental programs and creating incentives that promote environmental stewardship. Together, within the Environmental Finance Program, these entities seek to lower costs, increase investment, and build capacity by creating partnerships with state and local governments and the private sector to fund environmental needs.

EFAB is an independent advisory committee established to advise EPA on environmental financing challenges facing the nation. Chartered in 1989 and operating under the authority of the Federal Advisory Committee Act (FACA), it provides advice and recommendations to the EPA Administrator and program offices on environmental finance issues, options, proposals, and trends.

The board is comprised of 28 members appointed by the Agency's Deputy Administrator, which represent federal, state, and local government; the banking, finance, and legal communities; business and industry; academia; and non-profit environmental organizations. It produces policy and technical reports on a wide range of environmental finance matters of interest to EPA, focusing on environmental finance issues at all levels of government—particularly with regard to their impact on local governments and small communities. The board seeks to increase the total investment in environmental protection by facilitating greater leverage of public and private environmental resources.

The EFC Network, composed of nine centers throughout the nation, is the only university-based organization in the country that provides innovative solutions to communities to help manage the cost of environmental protection. The network works with both the public and private sectors to promote a sustainable environment by addressing the difficult issue of how to pay. The network is supported by EPA's Environmental Finance Program in the Agency's Office of the Chief Financial Officer, as well as by additional funding from other federal, public, and private entities. The centers, each affiliated with an EPA region, are located at the following universities:



- Region 1 EFC at the University of Southern Maine
- Region 2 EFC at the Maxwell School at Syracuse University
- Region 3 EFC at the University of Maryland
- Region 4 EFC at the University of North Carolina at Chapel Hill
- Region 4 EFC at the University of Louisville
- Region 5 EFC at Cleveland State University
- Region 6 EFC at the New Mexico Institute of Mining and Technology

About This Report...

This report contains the complete EFAB progress report for 2005-2006, as well as individual reports for each EFC. A summary of activities conducted by each EFC is presented as the first page in each EFC report, followed by details of completed, ongoing, and future activities of each EFC.

EXECUTIVE SUMMARY

- Region 9 EFC at California State University, East Bay
- Region 10 EFC at Boise State University

The input of EFAB and the EFC Network provides state-of-the-art expertise in an area outside EPA's core competency of developing and implementing environmental programs. In addition, while the EFCs provide services and advice directly to communities on how to finance environmental protection, they also advise EFAB about what works and what does not work from in-the-field experience. EFAB then combines the real-life scenarios of the EFCs with its members' professional experience and provides valuable guidance and advice to the Agency for moving forward into the future.



Highlights—Environmental Financial Advisory Board (EFAB)

The Environmental Financial Advisory Board (EFAB) made a number of compelling recommendations to the Agency, many of which were adopted. For example, EFAB prepared various reports for the Office of Water; Office of Solid Waste and Emergency Response; Office of Policy, Economics and Innovation; and the Office of Radiation to address subjects of concern. Specifically, the board evaluated or began assessing the following issues:

- **Useful Life Financing of Water Facilities** – How environmental goals and objectives might be more affordable by using debt management practices to reduce the budgetary impact of funding capital expenditures.
- **Watershed/Non-Point Source Financing** – Options for financing non-point source pollution cleanup projects using financing entities within the watersheds of concern.
- **Application of Innovative Finance Techniques in the Transportation Infrastructure & Financial Innovation Act of 1998 to Environmental Finance Issues** – Applying a financing technique known as backloading to brown-fields cleanup/redevelopment and water/wastewater facilities.
- **Combined Operations of the State Revolving Fund Programs** – Whether to allow states to operate their Clean Water and Drinking Water Revolving Loan Funds as one.
- **Innovations in Watershed Financing: The Bay Restoration Fund Act** – Identification of the Bay Restoration Fund Act as an innovative tool.
- **Financial Assurance in RCRA Programs** – The strengths and weaknesses of the current financial test used by corporations to demonstrate they have the capacity to meet financial assurance obligations vis a vis contamination cleanup upon facility closure.
- **Affordability of U.S. Water and Sewer Rates** – Suggestions for helping governments, the private sector, and the general public pay for water and sewer services.
- **Establishing a New SRF Loan Guaranty Program** – Whether loan guarantees could be used by the Agency to help meet the funding demands for water infrastructure.
- **Application of Useful Life Financing to State Revolving Funds** – Making extended term financing of environmental facilities available through State Revolving Funds.

EFAB Projects Coordinator

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Highlights—Environmental Finance Center (EFC) Network

The university-based Environmental Finance Centers (EFCs) deal with source water, drinking water, and/or wastewater issues, including smart growth, brownfield redevelopment, green buildings, small business, and sustainability. In addition, while each of the regional EFCs has a slightly different focus and conducts slightly different initiatives to meet goals, they all participate in the same type of activities, described in the following sections.

EFC Network Coordinator

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TRAINING AND EDUCATION

Many of the EFCs are in the business of providing outreach services by developing tools, training courses, delivering lecture series, or otherwise educating communities and relevant stakeholders about financial issues. The **Northeast EFC (Region 1)**, for example, developed an online course about conservation finance. In addition, it presented a Next Communities Initiative workshop to community leaders and planners, addressing the effective use and implementation of smart growth tools such as model ordinances and financial instruments training. At the same time, the **Syracuse EFC (Region 2)** sponsors quarterly Technical Assistance Partnership Forums for the purpose of exchanging information and maximizing technical assistance resources available to other communities. The Syracuse EFC also held four separate multiple-day training events around New York State about public finance, capital planning and budgeting, municipal bond issuance, computer finance models, rate-setting and analysis, asset management, environmental conflict management and resolution, project financing procedures and regulations, and strategic management.

Meanwhile, the **Maryland EFC (Region 3)** developed the Sustainable Financing Initiative to provide communities with the tools they need to effectively finance and implement watershed protection plans. The Maryland EFC held three workshops, and planned one more, which focused on helping communities overcome barriers to implementing their watershed plans. It also conducted six other training programs on topics such as “Local Officials’ Responsibilities,” “Budgeting from Scratch,” and “Rates and Cost Recovery for Small Systems.” The **Louisville EFC (Region 4)** commenced a series of interactive workshops, with 40 to 50 participants each, that provide technical assistance to improve community participation in brownfields redevelopment. In addition, the **University of North Carolina EFC (UNC EFC, Region 4)** provided six financial planning trainings to small water utilities. The **Great Lakes EFC (GLEFC, Region 5)**, in collaboration with several other organizations, conducted an interactive training session for local development professionals on financing the redevelopment of environmentally contaminated properties.

DIRECT ASSISTANCE

In addition, many of the EFCs work directly with and in communities to assist with specialized needs. For example, the **Syracuse EFC (Region 2)** has received calls from municipal leaders who worked to develop much needed projects but feared they might be rejected by voters due to a lack public understanding. The EFC worked with several specific communities to involve the public and relay an understanding of the reasoning behind local governments’ decisions to consider or proceed with a particular project. In addition, the Syracuse EFC worked with communities attempting to create equitable user rates as they pursued water and wastewater system improvements.



EXECUTIVE SUMMARY

The **Louisville EFC (Region 4)** provided technical assistance to brownfield projects in three communities attempting to use environmental insurance. In addition, the EFC developed a practice guide on best approaches for municipal uses of this risk transfer tool. The **UNC EFC (Region 4)** provided direct technical assistance to several communities, helping them, for example, improve a failing water system, expand a sewer system, develop a draft proposal for an innovative finance program for failing septic systems, and develop a rate study and business plan. The **New Mexico EFC (NM EFC, Region 6)** worked with Region 6 states and the New Mexico Environment Department on capacity development assistance, sharing information regarding capacity activities in other states, discussing potential capacity development training programs, and conducting and training staff to conduct capacity assessments. The NM EFC also continued its efforts to assist tribal water systems in improving public health protection. The NM EFC has been working in a partnership with a multi-program engineering and science laboratory and a consortium of universities to assist water systems that might be impacted by the new Arsenic Standard, which limits arsenic concentrations to 10 parts per billion. At the same time, it worked with a tribal water system to evaluate a new method of arsenic removal.

EFC9 (Region 9) continued promoting, developing, and institutionalizing multimedia pollution prevention and resource conservation to businesses in Region 9, while ensuring consistent growth and continuity for regional green business programs. EFC9 provided basic information and presentations on green businesses throughout the region. The EFC also helped new and existing green business programs identify, establish, and expand partnerships with key agencies and public, private, and nonprofit organizations. Using the software tools it developed, the **Boise EFC (Region 10)** extended special technical assistance attention to five communities facing significant financial challenges in implementing improvements to their water or wastewater systems.

TOOL DEVELOPMENT

Most of the EFCs have created reports, Web sites, or other tools and outreach products to disseminate financing information to communities and relevant stakeholders. For example, the **Northeast EFC (Region 1)** developed more than six outreach and educational tools, such as a video, case studies, and model amendments to states' land use control legislation. The **Syracuse EFC (Region 2)**, developed "PMFPTalk," a listserv of nearly 350 active members, providing local government leaders and technical assistance providers a way to submit questions or distribute information. The **Louisville EFC (Region 4)** published a series of practice guides such as: *Brownfields: Historic Preservation As a Redevelopment Option*; *Contaminated Properties: History, Regulations, and Resources for Community Members*; and *Public Involvement: How Active Participation in Environmental Issues and Decisions Makes Economic Sense and Broadens the Knowledge Base*.

The **UNC EFC (Region 4)** made a number of key publications available on its Web site such as an article called *The Painful Art of Setting Water and Sewer Rates*, a model stormwater ordinance for North Carolina, and a report called *Water and Sewer Needs and Capital Finance Strategies in Appalachia*. The **GLEFC (Region 5)** published the second in a series of articles about a study conducted for the National Oceanic and Atmospheric Administration (NOAA) and several other agencies identifying the information and knowledge needs of local coastal resources decision-makers in the Ohio Lake Erie basin.

The **Boise EFC (Region 10)** developed 10 new software tools, including a full-cost pricing model for water utilities, Rate Checkup™, which integrates the EFC's asset refinancing model, known as CAPFinance™, in developing accurate, fair, and equitable user charges for water utilities, and a model to help water systems calculate the impact of new development and design impact fees to recover those costs. The Boise EFC also expanded the Directory of Watershed Resources to function as a national database, allowing other states and regions to add their funding information into the directory. In addition, the Boise EFC worked with other agencies to develop an analysis tool that provides cost information to landowners to assist them in identifying conservation practices on their land.

EXECUTIVE SUMMARY



CONFERENCES AND WORKSHOPS

As part of their financial outreach efforts, most of the EFCs spend a considerable amount of time organizing or attending conferences, workshops, and other large-venue functions. The **Northeast EFC (Region 1)**, for example, participated in 16 conferences and meetings, ranging from a half-day training event called “Negotiation Skills for Land Conservationists,” to a one-day workshop, “Community Problem-Solving Through Collaboration.” The **Syracuse EFC (Region 2)** hosted more than 10 conferences and gave 17 presentations, ranging from

advice on sustainable development at a Hurricane Katrina “teach-in” to explaining the EFC’s services to a large Chinese delegation at Syracuse University, at state, university, nonprofit, and national and international events.

Likewise, the **Louisville EFC (Region 4)** presented at more than nine meetings/conferences with up to 8,000 participants at each, including “Contamination Information: Source of Stigma or Investment Stimulus?” and “Plots Against the American Dream: Framing Responses to Smart Growth Incentives.” The **GLEFC (Region 5)** convened the fifth year of the BOSS (Brownfields One-Stop Shop) Forum, whose quarterly meetings brought together federal, state, and local government officials with environmental engineers, investment and commercial bankers, insurance executives, real estate professionals, and developers to discuss financial and programmatic solutions to aid Ohio’s small- and medium-sized communities in their redevelopment.

The **Boise EFC (Region 10)** conducted 55 workshops with up to 300 attendees each, including workshops on water utility finances for small water utilities in Idaho, water rate-setting, and asset replacement financing. The workshops included information on planning, budgeting, financial planning, rate-setting, and how the EFC’s financial software tools can help in these areas.

OTHER

EFCs engaged in a wide variety of other activities as well. For example, the **Maryland EFC (Region 3)** participated in a committee whose goal was to devise an implementation plan and identify and make recommendations on a structure for developing a Chesapeake Bay Financing Authority to fund Chesapeake Bay restoration efforts. In addition, the North Carolina Division of Water Quality retained the **UNC EFC (Region 4)** to help develop the state’s model stormwater ordinance. The **GLEFC (Region 5)** commenced a major effort to support the city of Cleveland’s Economic Development Department with the development of a regionwide strategy for an industrial and commercial land bank. In addition, the GLEFC participates as a subcommittee chair in the Greater Cleveland Lead Advisory Council, a consortium of state, county, and municipal governments, and nonprofit organizations, convened to reduce the incidence of lead poisoning.

As part of its drinking water capacity assistance efforts, the **NM EFC (Region 6)** participated in a project to identify and analyze alternatives for small drinking water systems that are not in compliance with drinking water regulations. On a completely different front, **EFC9 (Region 9)** targeted television stations and studios and proposed to adopt the private sector concept of “product placement” to encourage placing environmentally beneficial products and behaviors on television shows. As a result of its efforts, EFC9 expects to develop a partnership with the Disney Environmentality Division to introduce this concept to the Disney television fall shows. The **Boise EFC (Region 10)** provided third-party reviews of financial and management capacity of nine applicants seeking funding from the Idaho Drinking Water State Revolving Fund Program.

Environmental Financial Advisory Board





*The Environmental Financial Advisory Board with EPA Administrator Steven L. Johnson
at the annual EFAB meeting, March 2006.*

The Environmental Financial Advisory Board

Not only is the nation facing many environmental challenges, such as water pollution and suburban sprawl, but it also faces the problem of paying for environmental facilities and services to solve these challenges, as well as creating incentives that promote environmental stewardship. Limited budgets and changes in federal tax laws have constrained traditional sources of capital. At the same time, there are expanding needs and expectations for environmental protection and increasing demands in all municipal service areas. All of these factors make it increasingly difficult for state and local governments to find the resources to meet their needs.

PURPOSE AND GOALS

The Environmental Financial Advisory Board (EFAB) was established to advise the U.S. Environmental Protection Agency (EPA) on ways to address the expanding funding gap. Initially chartered in 1989, EFAB provides “how to pay” advice and recommendations to EPA on environmental finance issues, options, proposals, and trends. The board is an independent advisory committee created under the authority of the Federal Advisory Committee Act (FACA), which provides a role for the public to participate actively in the federal government’s decision-making process. FACA allows the government to draw on the expertise of committee members, providing federal officials information and advice on a broad range of issues affecting federal policies and programs.

EFAB’s mandate is as follows:

- Lower costs by 1) proposing ways to remove financial and programmatic barriers that raise the price of environmental protection and 2) discouraging polluting behavior.
- Increase public and private investment in environmental facilities and services by removing con-



EPA Administrator Steven Johnson addressing the EFAB at the March 2006 meeting in Washington, D.C.

straints on private involvement imposed by current regulations.

- Build state and local financial capacity to carry out their respective environmental programs under current federal tax laws.

EFAB’s work is organized in support of EPA’s five strategic goals:

- **Goal 1: Clean Air and Global Climate Change:** Protect and improve the air so it is healthy to breathe and risks to human health and the environment are reduced. Reduce greenhouse gas intensity by enhancing partnerships with businesses and other sectors.
- **Goal 2: Clean and Safe Water:** Ensure drinking water is safe. Restore and maintain oceans, watersheds, and their aquatic systems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants, and wildlife.
- **Goal 3: Land Preservation and Restoration:** Preserve and restore the land by using innovative waste management practices and cleaning up contaminated properties to reduce risks posed by releases of harmful substances.
- **Goal 4: Healthy Communities and Ecosystems:** Protect, sustain, or restore the health of people, communities, and ecosystems using integrated and comprehensive approaches and partnerships.

ENVIRONMENTAL FINANCIAL ADVISORY BOARD

- **Goal 5: Compliance and Environmental**

Stewardship: Improve environmental performance through compliance with environmental requirements, preventing pollution, and promoting environmental stewardship. Protect human health and the environment by encouraging innovation and providing incentives for governments, businesses, and the public that promote environmental stewardship.

EFAB OPERATIONS

The board is currently comprised of 28 members who serve as representatives of non-federal interests. They are appointed by the Agency's deputy adminis-

trator and represent federal, state, and local government; the banking, finance, and legal communities; business and industry; and academia and nonprofit environmental organizations.

The full board meets at least twice a year in Washington, D.C., for its winter session and in San Francisco, California, for its summer session. In addition, the board hosts workshops and roundtables periodically to gather information for its reports and advisories. All meetings and workshops are open to the public and announced in the Federal Register as required by FACA.

EFAB members are as follows:

Stan Meiburg

Designated Federal Official
Deputy Regional Administrator
U.S. Environmental Protection Agency, Region 4

Terry Agriss

Vice President of Energy Management
Consolidated Edison

A. James Barnes

Professor of Public and Environmental Affairs
Indiana University

Julie Belaga

Co-Chair
Connecticut League of Conservation Voters

John Boland

Professor Emeritus
Johns Hopkins University

George Butcher

Managing Director of Municipal Finance
Goldman Sachs & Company

Donald Correll

President and CEO
American Water

Michael Curley

Executive Director
The International Center for Environmental Finance

Rachel Deming

Associate General Counsel
Ciba Specialty Chemicals Corporation

Honorable Pete Dominici

United States Senate

Honorable Kelly Downard

Chairman
Louisville Metro City Council

Mary Francoeur

Director
Financial Guaranty Insurance Co.

Honorable Vincent Girardy

Mayor
Peapack and Gladstone, NJ

Steven Grossman

Executive Director
Ohio Water Development Authority

Jennifer Hernandez

Partner
Holland and Knight LLP

ENVIRONMENTAL FINANCIAL ADVISORY BOARD

Keith Hinds
Merrill Lynch

Stephen Mahfood
President
Mahfood Associates LLC

Langdon Marsh
Fellow National Policy Consensus Center
Portland State University

Gregory Mason
Assistant Executive Director
Georgia Environmental Facilities Authority

Cherie Rice
Vice President of Finance and Treasurer
Waste Management, Inc.

Andrew Sawyers
Program Administrator
Maryland Department of the Environment

James Smith
Retired
Environmental Finance Consultant

Greg Swartz
Vice President
Piper Jaffray & Company

Sonia Toledo
Managing Director
Merrill Lynch

Helen Sahi
Director of Environmental Services
Bank of America

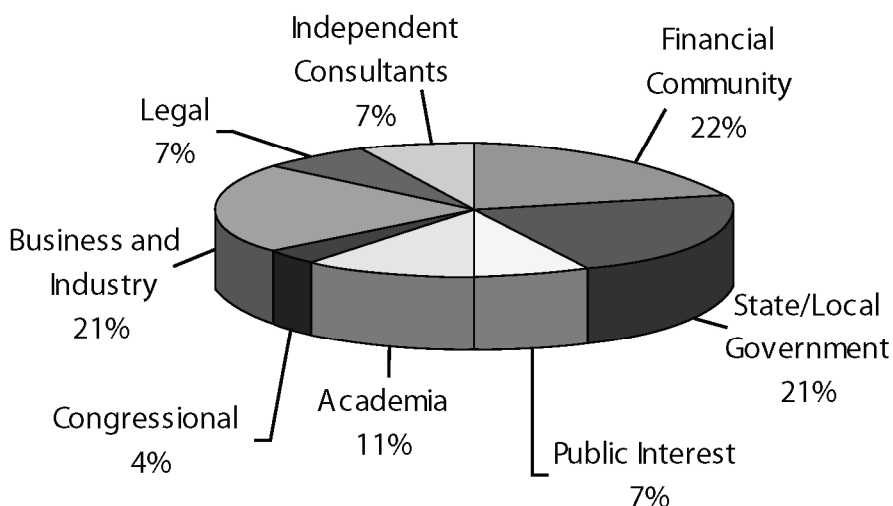
Jim Tozzi
Multinational Business Services, Inc.

Billy Turner
President
Columbus Water Works

Justin Wilson
Waller Lansden

John Wise
Retired
Environmental Finance Consultant

EFAB Composition



EFAB'S WORK PRODUCTS

The board often receives requests from EPA on specific environmental finance challenges. Through public meetings, working group sessions, and workshops, EFAB develops advisories, reports, and letters to the Agency that offer independent and expert views on environmental finance issues and opportunities.

During its annual summer meeting, the board updates its Strategic Action Agenda to reflect projects both completed and ongoing, and uses the meeting to bring forward new projects of great interest to the Agency. During 2005-2006, the board transmitted eight reports to the Agency and is working on another four projects for 2006-2007.

Although water financing has traditionally been the majority of EFAB's work, the board is excited to recently expand its focus to other media areas such as solid waste, air, and crosscutting management issues.

Set forth below is a list of recent work products of the board, including the title and summary of the project or report and the date issued, followed by the EFAB member serving as project chair, the primary Agency customer, the Web addresses of the full EFAB report, and, where available, EPA's response.

COMPLETED PROJECTS/REPORTS 2005-2006

Useful Life Financing of Water Facilities (January 2005)

EFAB is deeply interested in leveraging existing funding to help address the unmet environmental needs facing communities nationwide. This report advises how environmental goals and objectives might be more affordable by using debt management practices that reduce the current budgetary impact of funding capital expenditures. Specifically, the board examined how more closely aligning the period over which the costs of environmental facilities are amortized with their useful life can lower annual debt service costs. Attention was paid to the costs, benefits, and fairness of this approach over the entire useful life of environmental facilities.

Project Chair: George Butcher

EPA Strategic Goal: Clean and Safe Water

Primary Customer: Office of Water

Cover letter: <www.epa.gov/efinpage/efab/usefullifeletter.pdf>

EFAB Report: <www.epa.gov/efinpage/efab/usefullifereport.pdf>

EPA Response: <www.epa.gov/efinpage/efab/epa_ul_financing_response.pdf>

Watershed/Non-Point Source Financing (January 2005)

Non-point sources of pollution are the dominant contributors to degraded water quality in most watersheds. Paying for projects to correct non-point source problems is difficult because of the complexity of the sources and the declining availability of grant funding. Working with EPA's Office of Wetlands, Oceans and Watersheds, EFAB identified options for financing needed projects using financing entities within the watershed itself.

Project Chair: Langdon Marsh

EPA Strategic Goals: Clean and Safe Water; Healthy Communities and Ecosystems

Primary Customer: Office of Water

EFAB Report: <www.epa.gov/efinpage/efab/innowaterfinletter.pdf>

EPA Response: <www.epa.gov/efinpage/efab/epa_nps_financing_response.pdf>

Application of Innovative Finance Techniques in the Transportation Infrastructure & Financial Innovation Act of 1998 to Environmental Finance Issues (March 2005)

The board's charter directs it to provide advice on new and innovative financing approaches. In this regard, EFAB has identified a financing technique known as backloading in the Transportation Infrastructure and Financial Innovation Act of 1998 and recommended that it be adapted to financing brownfields cleanup and redevelopment and rural water/wastewater facilities. (In using backloading, the federal government would serve as a patient investor in a project with the

loan repayments it receives occurring later in the project timeframe and/or ramping up over time.)

Project Chair: Michael Curley

EPA Strategic Goals: Clean and Safe Water; Land Preservation and Restoration

Primary Customers: Office of Water; Office of Solid Waste and Emergency Response

EFAB Report: <www.epa.gov/efinpage/efab/appinnofintech.pdf>

EPA Office of Water Response: <www.epa.gov/efinpage/efab/ow_backloading_response.pdf>

EPA Office of Solid Waste Response: <www.epa.gov/efinpage/efab/oswer_backloading_response.pdf>

Combined Operations of the State Revolving Fund Programs (May 2005)

In this report, the board examines whether there are advantages—financially, administratively, or otherwise—to allowing states the option to operate their Clean Water and Drinking Water Revolving Loan Funds as one. The board issued a report to EPA pointing out the advantages of combined operations of the two state revolving funds and recommending that the Agency examine this topic in depth.

Project Chair: Sonia Toledo

EPA Strategic Goal: Clean and Safe Water

Primary Customer: Office of Water

Cover Letter: <www.epa.gov/efinpage/efab/srfcombopscoverltr.pdf>

EFAB Report: <www.epa.gov/efinpage/efab/srfcombopsreport.pdf>

EPA Response: <www.epa.gov/efinpage/efab/epa_comb_ops_srf_response.pdf>

EFAB Follow-up: <www.epa.gov/efinpage/combinedops.pdf>



Innovations in Watershed Financing: The Bay Restoration Fund Act (December 2005)

In its letter to EPA, the board is referring to the Bay Restoration Fund Act as an example of the type of innovation that is needed at the state level to address the growing challenge of financing water pollution control in a watershed context. The board believes this Act is innovative for three reasons. First, it envisions future income to the “restoration fund” secured by the majority of Bay Restoration fees. Second, it imposes a statewide fee on septic tanks at personal residences. Third, it dedicates the income from the septic tank fees to support specific non-point source pollution programs within the state.

Project Chair: Michael Curley

EPA Strategic Goal: Clean and Safe Water; Land Preservation and Restoration

Primary Customer: Office of Water; OSWER

EFAB Report: <www.epa.gov/efinpage/Bay_Restoration_Fund_report.pdf>

Financial Assurance in RCRA Programs (January 2006)

Despite legislation, regulations, and policies, industrial and solid waste facilities continue to be abandoned with little or no resources available to deal with contamination. EPA has sought advice from EFAB on uses of financial assurance mechanisms to help address this problem. Financial assurance mechanisms such as insurance, financial tests, corporate guarantees, bonds, and trust funds seek to ensure that resources will be available to address the environmental consequences of industrial and business activities. The board hosted an information-gathering workshop with industry and state experts to explore these topics and determined topics for further investigation. As a first product, the board issued a report to EPA on the strengths and weaknesses of the current financial test used by corporations to demonstrate that they have the capacity to meet their financial assurance obligations.

Project Co-Chairs: Mary Francoeur and A. James Barnes

EPA Strategic Goals: Land Preservation and Restoration; Compliance and Environmental Stewardship

Primary Customer: Office of Solid Waste and Emergency Response

EFAB Report: <www.epa.gov/efinpage/fintestlet06.pdf>

Agency Response: <www.epa.gov/efinpage/BodineResponse06.pdf>

Affordability of U.S. Water and Sewer Rates (February 2006)

EFAB explored ways to help governments, the private sector, and the general public address the costs of water and sewer services. The board examined issues such as bottom line costs, uneven costs and cost distributions, affordability criteria, the problems of low-income households, utility losses, and consumer concerns. EFAB hosted a workshop in August 2005, where it heard knowledgeable speakers from the utility industry, consumers, and local governments speak on these issues. Based on the workshop and later discussions, the board developed a report suggesting an approach for dealing with household affordability problems and utility viability issues through the careful design of utility policies involving subsidies, collections, and financial assistance.

Project Co-Chairs: Andrew Sawyers, John McCarthy (former member), and John Boland

EPA Strategic Goals: Clean and Safe Water; Compliance and Environmental Stewardship

Primary Customer: Office of Water

EFAB Report: <www.epa.gov/efinpage/Affordability_Rate_Design_report.pdf>

Establishing a New SRF Loan Guaranty Program (June 2006)

EFAB continues to devote significant attention to financing issues associated with the Clean Water and Drinking Water State Revolving Fund Programs. In this latest project, the board has been asked by EPA to examine ways in which loan guaranties might be



used by the Agency to more efficiently meet the funding demands for water infrastructure projects. Specifically, the board will be studying ways in which loan guarantees might be used as one of the tools in a tailored environmental project funding mix which might also include clean water and/or drinking water state revolving loans, U.S. Department of Agriculture Rural Utility Service grants and loans, Department of Housing and Urban Development Community Development Block Grants, and/or other federal and state funding sources.

Project Chair: George Butcher

EPA Strategic Goal: Clean and Safe Water

Primary Customer: Office of Water

EFAB Report: <www.epa.gov/efinpage/loan_g.pdf>

Application of Useful Life Financing to State Revolving Funds (June 2006)

In this report, EFAB supports making extended term financing of environmental facilities available through state revolving funds (SRFs). To the extent that a financing period beyond 20 years is currently authorized by statute, the board recommends that EPA approve requests by state SRFs for approval of useful financing up to 40 years.

Project Chair: George Butcher

EPA Strategic Goal: Clean and Safe Water

Primary Customer: Office of Water

EFAB Report: <www.epa.gov/efinpage/useful.pdf>

ONGOING PROJECTS/REPORTS 2006-2007

Financial Market Incentives and Environmental Management Systems

EPA has recently requested EFAB's advice on identifying additional organizations in the financial and business communities having a demonstrated or potential interest in environmental management systems, environmental performance improvement, and financial risks/rewards. The Agency has also asked the board to help provide a better understanding of current financial services industry beliefs, practices, conventions, and challenges regarding the consideration of environmental performance and systems. EFAB has begun a dialogue with the Agency and plans to meet in the coming month to determine the project's next steps.

Project Chair: Rachel Deming

EPA Strategic Goal: Compliance and Environmental Stewardship

Primary Customer: Office of Policy, Economics and Innovation

Sustainable Watershed Financing

The board held a roundtable meeting in March 2006 to bring together experts from around the country to explore innovative ways to use sustainable and innovative financing tools to accelerate the implementation of projects in a watershed plan. Follow-up actions from the roundtable will contribute to increased understanding of both innovative financial tools available to watershed communities and the governance processes necessary to get them accepted through political institutions. The board is currently drafting a report from the information gathered.

Project Chair: Langdon Marsh

EPA Strategic Goals: Clean and Safe Water; Healthy Communities and Ecosystems

Primary Customer: Office of Water

SmartWay Transportation Upgrade Kit

The SmartWay Transport Partnership is actively investigating ways to make investment in the SmartWay Transportation Upgrade Kit more attractive to trucking companies. EPA's Office of Air and Radiation has requested EFAB's assistance to study way in which innovative financing and other related arrangements can be structured so as to increase the adoption of the various technologies in the SmartWay Transportation Upgrade Kit.

Project Chair: Langdon Marsh

EPA Strategic Goals: Clean Air and Global Climate Change

Primary Customer: Office of Air and Radiation
Sustainable Water Infrastructure

Sustainable Water Infrastructure

EFAB is working with the Office of Water, pursuant to a charge from EPA Administrator Johnson, to explore ways to further leverage public and private investments in wastewater and drinking water infrastructure. This area will be a major focus for the board in the coming year and will involve collaboration with the National Advisory Committee on Environmental Policy and Technology.

Project Chair: To Be Determined

EPA Strategic Goals: Clean and Safe Water

Primary Customer: Office of Water

Environmental Finance Center Network

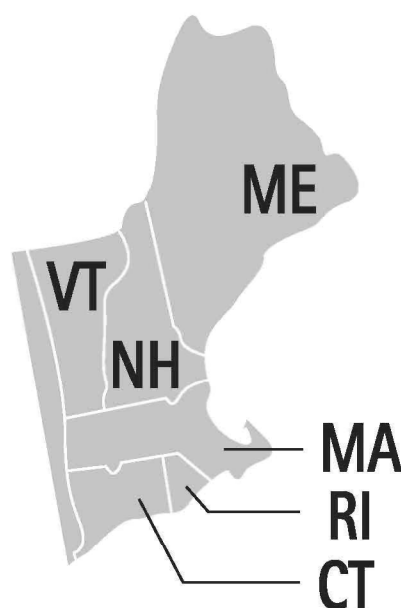




Directors of the Environmental Finance Center Network with EPA Administrator Steven L. Johnson at the annual EFAB meeting, March 2006.

Region 1 Environmental Finance Center

AT THE UNIVERSITY OF SOUTHERN MAINE



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BACKGROUND & SUMMARY

The Environmental Finance Center (EFC) at the University of Southern Maine, located in the Muskie School of Public Service, serves the six New England states of the U.S. Environmental Protection Agency's (EPA's) Region 1 (Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut). The primary focuses of the New England EFC are land use and conservation issues. The purpose of the EFC is to further the joint goals of EPA and the Muskie School of advancing creative approaches to environmental protection and management, especially with regard to the associated "how-to-pay" questions.

In particular, the center works to promote the understanding and practice of smart growth throughout New England, build local capacity to deal with related issues, and develop and apply techniques that go beyond basic compliance with government regulations.

The New England EFC began its activities in 2001 and has undertaken a broad range of initiatives in the intervening four years. Calendar year 2005 was a period of considerable activity in numerous areas, including the following:

- Completed the development of an online course on conservation finance.
- Developed a public lecture series on changes in Maine from 1960 through 2010.
- Developed and delivered a training series for communities on controlling sprawl.
- Created a video and also wrote articles, reports and case studies to promote financing approaches and land development issues.

REGION 1



- Worked with legislative and related groups to research options for a legislative agenda to control land use in Maine.
- Moderated conference sessions, gave presentations, and organized workshops related to smart growth, land management, sprawl, and watershed management.
- Analyzed issues associated with military base closings in Maine.



ACTIVITIES & ACCOMPLISHMENTS



Completed Projects & Initiatives

CONSERVATION FINANCE COURSE

The New England EFC developed an online course in conservation finance, now available at <http://efc.muskie.usm.maine.edu/tools.html>. The EFC began advertising in June, including demonstrating the course during a webcast entitled “Protecting Water Resources Through Land Conservation: Funding Options for Local Governments” to encourage use of this tool. The webcast presentation was a collaborative effort between the International City/County Management Association (ICMA) and the Trust for Public Land (TPL), in cooperation with EPA.



PUBLIC LECTURE SERIES

The EFC initiated a “Changing Maine” public lecture series, presented by the Old Fort Western of Augusta, Maine, based upon the book, *Changing Maine, 1960–2010* and oriented toward the historical and decision-making communities of Maine’s Kennebec Valley. The book summary can be viewed as publication #04-05 at <http://efc.muskie.usm.maine.edu/pubs.htm>.



ARTICLES AND MEDIA OUTREACH

The EFC posted the following articles on its Web site (<http://efc.muskie.usm.maine.edu/pubs.htm>):

- **Stormwater Utility Fees: Considerations and Options**
<http://efc.muskie.usm.maine.edu/docs/StormwaterUtilityFeeReport.pdf>.
- **Analysis of Per Capita Expenditures of Suburbanizing Communities in Maine**
<http://efc.muskie.usm.maine.edu/docs/PerCapitaExpenditureAnalysis.pdf>.
- **Standardizing Geospatial Information for New England Conservation Lands**
<http://efc.muskie.usm.maine.edu/docs/StandardizingGeospatialInformation.pdf>.

ACTIVITIES & ACCOMPLISHMENTS

In 2005, the New England EFC...

- ◆ Provided nine technical assistance responses to individuals or organizations requesting assistance with finance issues in smart growth or planning of smart growth-oriented projects in New England.
- ◆ Published three articles on its Web site.
- ◆ Moderated, presented, organized, hosted, or participated in 16 conferences and meetings.
- ◆ Developed more than six outreach and educational tools, such as a video, case studies, and a lecture series.

Ongoing Projects & Initiatives

COLLABORATIVE ACTIVITIES

Next Communities Initiatives



From model ordinances to financial instruments, a wide variety of smart growth tools are now available to local land use decision-makers and stakeholders. The piece of smart growth that the Next Communities Initiative (NCI) addresses is the effective use and implementation of these tools at the local government level. NCI is training motivated community leaders and lay planners to help them facilitate smart growth-oriented change in their cities and towns. The first step, in calendar year 2004, was to develop a three-day workshop series for citizen leaders to 1) teach that change toward more sustainable land use is both desirable and possible; 2) foster an understanding of the intricacies and subtleties of local government and politics; and 3) explore obstacles to smart growth and how they can be overcome at the local level.

The workshop was delivered twice in 2004 and once in 2005. The curriculum now exists as three eight-hour, highly interactive and experiential sessions:

Session One: Participants come to understand sprawl not as a technical problem, but as (in Maine terms) a “wicked” problem, and one that is ill defined. The EFC explores sprawl as a problem because there is a lack of consensus on its causes and because it lacks obvious solutions. Often proposed solutions involve challenging trade-offs, and fierce, value-based opposition. Participants gain insights to become informed leaders in the discussion of sprawl and advocates of solutions that seek a wider public good without undue injury to private interests and concerns. Participants leave the session with a mindset that smart growth is an objective worthy of pursuit and are ready to explore how to navigate change through the local political system.

Session Two: This session educates individuals about local government processes, both formal and informal. It helps those interested in changing local land use policies understand the twists and turns of local government, what motivates and constrains it, how to mobilize and support the town’s opinion leaders and citizens, and how to navigate the system to effect change.

Session Three: Conflict and change often go hand-in-hand. This session teaches community leaders basic skills to deal constructively with conflict over both basic values and perceived interests. It prepares them to handle both personal and social conflict in the community setting. It also includes a final capstone game where the skills, ideas, and information learned in the previous sessions are applied to a practical case.

Building on the successful delivery of the first sets of workshops, the New England EFC aims to move the NCI curriculum into a train-the-trainer format. By equipping organizations with these curriculum materials and a comprehensive instructor’s manual, it should be possible to reach a broader audience and

ACTIVITIES & ACCOMPLISHMENTS

make a substantial contribution to smart growth-oriented local land use change.

Water Program

In 2005, the EFC continued its program in water-related finance and outreach activities. These activities included:

- Expanding the Directory of Watershed Resources, originally created by the Region 10 EFC in Boise, Idaho, and now updated to include more than 300 funding sources specific to New England (posted at <http://efc.boisestate.edu/>).
- Conducting additional outreach activities based on the watershed directory and developing a report documenting lessons learned and recommended protocols for maintaining and updating the directory.
- Releasing an updated version of the EFC's Stormwater Finance report, which includes a new financial analysis section (see Stormwater Utility Fees: Considerations and Options at <http://efc.muskie.usm.maine.edu/docs/StormwaterUtilityFeeReport.pdf>).
- Organizing and moderating finance panels for two EPA-sponsored workshops on reducing beach closures in New England (see Presentations/Conferences below).
- Presenting finance options at a Maine Beaches Conference (see Presentations/Conferences below).
- Organizing a forum on asset management attended by three of Maine's larger public water systems.
- Co-sponsoring a train-the-trainer event on asset management for the Maine Rural Water Program, Maine Drinking Water Program, and others.
- Developing an interactive, online self-evaluation on water system financial capacity.



Smart Growth Video

In 2005, the EFC produced a video ("Growing Together: Consensus Building, Smart Growth, and Community Change") for communities in New England grappling with tough issues around land development. The video provides municipal officials, developers, and community members a step-by-step guide on working together to arrive at mutually beneficial land development plans. The video includes examples of places like Lawrence, Massachusetts, that have been successful using consensus-building techniques to achieve smart growth. Case studies and interviews with experts emphasize the need for community visioning and engaging everyone affected by a proposed development.



The video was shown to select audiences around New England in late 2005 and also was a recipient

ACTIVITIES & ACCOMPLISHMENTS

of a bronze Telly, an international award given to honor outstanding video and film production. In 2006, the video was made available to municipal officials, local opinion leaders, lay planners, community activists, developers, and others via the New England EFC Web site at <efc.muskie.usm.maine.edu>.

Implementation of Recommendations to Strengthen Maine's Rural Economy and the Natural Resource-Based Industries on Which It Is Based

In 2005, the EFC provided continuing chairmanship of a "Steering Committee to Oversee Implementation of Recommendations from the Blaine House Conference on Maine's Natural Resource-Based Industries." The November 2003 Blaine House Conference produced 75 recommendations for action in the agriculture, aquaculture, forestry, fisheries, and tourism sectors that are the foundation of Maine's rural economy and landscape. As documented in its December 2004 report to the governor, which can be viewed at <www.state.me.us/spo/natural/gov>, the Steering Committee oversaw significant progress on implementation of 60 of these recommendations by the executive agencies directly responsible. Implementation of these recommendations continued in 2005.

Land Use Law Provisions

In 2004, the New England EFC published some model amendments to Maine's (and other states') land use control legislation in the Maine Law Review. This document is available as publication #04-06 at <efc.muskie.usm.maine.edu/pubs.htm>. The model amendments originated directly from the EFC's roundtable discussions in 2002, and are designed to address the legal obstacles to smart growth identified by roundtable participants. The EFC assisted (and continued to assist in 2005) the Community Preservation Advisory Committee of the Maine Legislature, GrowSmart Maine, and others in researching options for a legislative agenda based upon these model amendments.

GIS Inventory of Protected Lands Data

In 2005, the EFC completed a Geographic Markup Tool to allow online upgrades to conservation lands

data sets. Complementary software applications were also incorporated into the tool, contributing to the creation of a unified framework for capturing conservation lands data in Maine and EPA Region 1 as a whole. Discussions continued about how to incorporate all or a portion of the technology into existing open space data management efforts in the six New England states.

Other Efforts

At the request of the governor of Maine, the EFC conducted economic impact analyses of the Department of Defense (DoD) recommendations for military base closures and realignment in the states of New Hampshire and Maine. The EFC reported and presented results to the Base Realignment and Closure Commission at a public hearing in Boston, and thereafter conducted cost impact analyses of these DoD recommendations at the request of the commission.

PRESENTATIONS/CONFERENCES

- Moderated a conference session, "The Frontiers of Rural Smart Growth" at the Smart Growth Network annual meeting in Miami, Florida.
- Moderated a conference session, "Regional Land Management and Sprawl" at the Legislative Policy Forum on Economic Development in Augusta, Maine.
- Delivered a presentation, "New Initiatives for Maine's Natural Resources-Based Industries" at the Maine Legislators Policy Forum on Economic Development in Augusta, Maine.
- Delivered a half-day workshop in Concord, New Hampshire, to 100 planners and others interested in smart growth. This event focused on policy innovations developed through the New England EFC.
- Delivered a half-day training event, "Negotiation Skills for Land Conservationists" at the Maine Coast Heritage Trust Annual Meeting.

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- Co-organized a one-day workshop, “Community Problem-Solving Through Collaboration” at an event sponsored by the Maine Collaborative Practices Working Group in Hallowell, Maine.
- Hosted a half-day conference for the EFC-led initiative, Forum on Residential Density, in Portland, Maine.
- Participated on a panel session, “A Web-Based Geographic Markup Tool for Capturing Conservation Lands Data” at the 20th Annual Northeast Arc-Users Group Conference.
- Presented “Smart Growth and Water Resources: The High Density Dilemma,” a speech at an EPA-sponsored workshop on the Saco River Watershed in Biddeford, Maine.
- Discussed “Funding and Donation Sources for Watershed Management” at an EPA-sponsored workshop on the Saco River Watershed in Biddeford, Maine.
- Spoke about “A Web-Based Geographic Markup Tool for Capturing Conservation Lands Data” a session at the 20th Annual Northeast Arc-Users Group Conference in Portland, Maine.
- Spoke about “Rural Land Protection: Thinking Strategically” at the Annual Meeting of the Western Foothills Land Trust in Oxford, Maine.
- Spoke about the book, *Changing Maine, 1960–2010* to the Maine Society of Washington D.C. at its annual meeting in Arlington, Virginia.
- Provided an overview and moderated finance panels at two conferences on reducing beach closures, one held in Warwick, RI, and the other in Portsmouth, Rhode Island.
- Presented “Financing Approaches and EFC Resources” at annual Maine Beaches Conference in Wells, Maine.
- Spoke about “Land Conservation in Urban Areas: What Is Most Strategic?” at a Greater Portland Neighborhoods Conference in Portland, Maine.

New Projects & Initiatives

FORUM ON RESIDENTIAL DENSITY

The escalating debate in New England between those who advocate for smart growth and those who advocate for the suburban lifestyle associated with sprawl urgently need reference points on the question that is central to both sides: residential density. The New England EFC has conducted initial investigations into a two-year expert consensus forum on residential density as an aid to the small cities, towns, and suburbs of New England embroiled in this debate. Efforts are underway to fund a forum devoted exclusively to this issue, the product of which would be an authoritative manual on the standards of residential density that best promote the public health, safety, and welfare.

A LIBRARY OF CASE STUDIES

One obstacle to smart growth across New England is that so few smart developments have been built in the past three-quarters of a century. Here and there on the New England landscape they are beginning to appear. As they do, however, it is important to learn how and why they come to fruition. The EFC is developing a series of case studies as the basis for both establishing the causes and means of these developments and as useful tools for instructing others how they may be replicated on the landscape. The cases are being identified in collaboration with EPA Region 1. As they are completed they will be



ACTIVITIES & ACCOMPLISHMENTS

posted on the New England EFC Web site in an accessible and interactive format.

MILITARY BASE REDEVELOPMENT CONSULTING/INVOLVEMENT

In late 2004, the President released a new round of military base closures for the United States, including several in New England. Given the difficulties of accomplishing large-scale smart growth development in the New England context, each base closure represents an opportunity for smart growth implementation. In 2005, the EFC assisted in capitalizing on these opportunities through economic impact analysis for several installations in Maine.

SMART GROWTH IMPLEMENTATION/DEMONSTRATION

Housed within a university, the EFC is in a position to explore opportunities for utilizing university-owned land and facilities to develop in a smart growth manner. In 2005, the EFC coordinated multi-stakeholder input on redevelopment options being considered by the University of Southern Maine for the Portland Hall parcel (3.5 acres) in downtown Portland. Based on the feedback, the EFC created a suggested approach to redevelop the parcel for the president of the university.

Contacts

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Outcomes

As a result of the activities and accomplishments outlined in the previous section, outcomes have included the following benefits to communities and individuals:

- A clearer understanding of tradeoffs involved in choosing various methods for financing stormwater utilities.
- A clearer understanding of the need for public investment in open space acquisition.
- A broader understanding of the role that the creative economy has in supporting downtown revitalization efforts.
- A broader understanding of the social, political, and other changes that have transpired in Maine during the last 40 years and how they should shape current policy discussions.
- A broader understanding among land trusts and other conservation groups of the need for incorporating growth-related criteria in their land acquisition prioritization systems.
- A broader understanding of the role that a vibrant natural resource-based economy plays in the protection of the landscape, the restraint of sprawl, and the promotion of smart growth.
- A greater chance that novel, comprehensive innovations in land use law might be adopted in Maine and throughout New England.

Because the work of the New England EFC focuses on reducing sprawl, we are asked to help identify and recommend modifications in land use policy at the state level. Impacts of some of these changes might be observable as a decline in the number of standard subdivisions in the state over a substantial period of time.

Impacts

In 2005, the New England EFC continued its mission to helping communities identify methods for funding environmental initiatives. Specific environmental issues addressed through the EFC's activities and accomplishments include:

- Land use and conservation
- Smart growth
- Watershed protection

Region 2 Environmental Finance Center

AT THE MAXWELL SCHOOL AT SYRACUSE
UNIVERSITY



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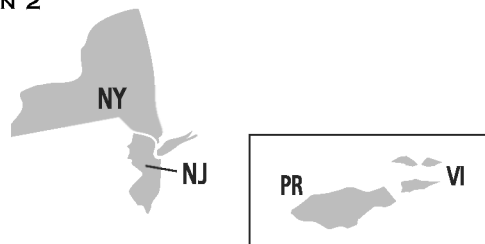
BACKGROUND & SUMMARY

The U.S. Environmental Protection Agency's (EPA's) Region 2 Environmental Finance Center (EFC) at Syracuse University's Maxwell School was established in 1993 and serves New York, New Jersey, Puerto Rico, and the Virgin Islands. Since that time, and throughout 2005, the Syracuse EFC continued its mission to enhance the administrative and financial capacities of state and local government agencies and the nonprofit and private sectors as they endeavor to improve environmental quality and maintain environmental infrastructure.

Throughout 2005, the Syracuse EFC continued to establish working collaborations with government officials and nonprofit and private sector programs that provide technical assistance. One result of these efforts has been the continued development of the Public Management and Finance Program (PMFP). Within the framework of the PMFP, the EFC provides public outreach and training and facilitates partnerships. In fact, one of the hallmarks of the EFC's work under the PMFP is its collaboration with its partners to provide customized outreach and training for individual communities, providing tailored approaches rather than a one-size-fits-all approach. In this way, the EFC has been successful in helping individual communities understand specific issues of concern.

The intent of the PMFP is to introduce local officials and public managers, as well as other community leaders, to the fundamental concepts and practices of local government finance and strategic planning; holistic approaches to environmental stewardship, infrastructure improvements, and planning; and other forms of technical assistance. It can also be described as a "technical assistance cooperative" that forges teams among various technical assistance providers to assist communities. Areas of application include source water protection, solid waste, water and wastewater problem-solving, asset management, and other environmental improvements.

REGION 2



In 2005, the EFC also started developing a program on sustainability as well. The intent of the program is to offer process facilitation, public outreach, training, education programs, and direct and indirect technical assistance to support sustainability initiatives. Climate change and renewable energy, green buildings, and resource use and waste reduction are some of the issues targeted under sustainability. To this end, the EFC has engaged in intensive collaboration with a number of national and local agencies and organizations and has already begun more than a dozen new initiatives in New York and nationally.

Another major area of involvement has been development of a substantial partnership with the Syracuse Center of Excellence in Environmental and Energy Systems (CoE), created by the state of New York and funded by the state, EPA, the U.S. Department of Energy (DOE), and private sector sponsors. The intention of the CoE program is to foster innovations to improve health, productivity, security, and sustainability in various environments. Activities include product development and educational programs affecting built environments and the urban and rural setting. The EFC is engaged in several new initiatives with CoE, two of which involve the U.S. Green Building Council.

Other services provided by the EFC in 2005 include assistance with rate-setting and analysis, facilitation of processes to guide environmental improvements, training events focused on environmental issues, and analyses of funding options.

The Syracuse EFC's goal for the future is to have three major functional areas: 1) the PMFP, 2) a sustainability program, and 3) the partnership with CoE.

ACTIVITIES & ACCOMPLISHMENTS



Completed Projects & Initiatives

PUBLIC MANAGEMENT AND FINANCE PROGRAM (PMFP)

Since the Region 2 EFC was established at the Maxwell School, it has become a resource for municipal professionals and other community representatives through a variety of presentations, workshops, and interactive forums. The PMFP has served as a means for municipal professionals and leaders from EPA Region 2 communities to learn, explore, and discuss public finance and other issues relative to environmental improvements.

The U.S. Department of Agriculture (USDA) continued its support for the water- and wastewater-related activities of the PMFP, awarding \$205,300 to the Region 2 EFC for 2004 and 2005 program activities. The bulk of activities performed under the USDA grant involved specific municipal water or wastewater projects in which there was a need to facilitate the processes involved in the planning, financing, and implementation phases. These processes involved community-specific public outreach and education strategies related to the costs associated with water or wastewater projects, a critical link needed to generate public awareness and support and to reduce project costs.

There is little change in the primary functions of the PMFP to facilitate partnerships among the technical assistance community, provide public outreach and education to facilitate environmental improvements, and training local government officials and technical assistance providers. These three functions, or components, of the PMFP can be critical links to the ability of a community to successfully develop a project. The subsections that follow identify those links.

The focus of PMFP activities has historically been in New York State, but because the PMFP program can be replicated elsewhere, EFCs located in Kentucky,

Maine, North Carolina, California, and New Mexico collaborated in late 2004 to submit proposals to build upon the PMFP concept in their respective states. In addition, the Region 2 EFC started to promote the PMFP in New Jersey in 2005.

Technical Assistance Partnerships

The EFC sponsors quarterly Technical Assistance Partnership Forums for the purpose of promoting and sustaining collegial relationships among technical assistance providers (TAPs). In 2005, each forum was attended by an average of 20 TAPs representing non-profit, public, private, and academic organizations

In 2005, the Syracuse EFC...

- ◆ Invited more than 1,000 local government officials and TAPs to its specialized training events.
- ◆ Reached 1,750 people through its newsletter.
- ◆ Facilitated information exchange among 346 active members of its listserv.
- ◆ Gave 17 presentations at state, university, nonprofit, and national, and international events.
- ◆ Hosted more than 10 conferences.
- ◆ Attended more than 13 conferences.
- ◆ Facilitated process discussions at approximately 50 meetings with local, state, and federal agencies and nonprofit groups.
- ◆ Developed new collaborations through more than 25 meetings with city, state, national, university, and tribal agencies as well as companies and nonprofit groups.
- ◆ Attracted 22 to 150 people to each of its training events.

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that serve New York as well as other states. The forums have created an environment in which an exchange of information reduces duplication of efforts, thereby maximizing technical assistance resources available to other communities. These forums also promote efforts that complement one another, enhancing the ability of the communities the TAPs serve to access new or additional resources. Meeting on a regular basis allows TAPs to 1) share information about projects without interruptions; 2) discuss solutions to particular situations and brainstorm relevant ideas; 3) learn about new statutes, procedures, or guidelines in their fields; and 4) receive new or advanced training.

Communicating with one another about project planning and implementation and sharing challenges and successes is a benefit to all communities, and these forums provide ample opportunity for TAPs to connect with one another and facilitate communication about community infrastructure projects and ideas. The forums begin with each TAP representative briefly mentioning projects or issues s/he is working on, followed by a specific topic of discussion. Among the topics at the 2005 forums were trends in construction methods/costs; issues of affordability; standardization of income surveys and project development; updates from the Environmental Finance Center Network (EFCN), Environmental Financial Advisory Board (EFAB) and the Council of Infrastructure Financing Authorities (CIFA); asset management; USDA news, including underwriting and other credit issues; the Syracuse Center of Excellence as a resource for technical assistance providers; and comprehensive planning. The meetings also include open discussions about a range of issues, concerns, or projects with ample opportunity for people to network and share information.

Stakeholder Outreach and Education

The EFC has developed a distinctive niche with respect to generating public interest in environmental infrastructure projects. Public outreach and education activities are critical links for communities to generate public awareness and support and reduce project

costs. Over the past several years, the EFC has received calls from municipal leaders who worked to develop a much-needed project but feared that it might be rejected by voters due to a lack public understanding. It is not uncommon for the public to vote against a project due to misperceptions, particularly related to household cost issues.

The EFC has found that public education and outreach strategies have been successful in relaying an understanding about the impetus for the project, the process of project development, and the derivation of the household cost. The EFC approaches each community as a distinct entity for outreach and education services rather than applying a “one-size-fits-all” model. To begin, EFC staff meet with community leaders to learn the historical elements of a prospective project as well as the current conditions prompting the planning for the project. Information concerning the extent to which groups have formed in favor or opposition to the project is obtained as well as all information concerning estimated costs.

The EFC customizes the outreach strategy for each community. In some communities, the EFC develops a community-specific survey to gauge the level of public interest and identify public perceptions. Alternatively, or in tandem with the surveys, the EFC might conduct a series of focus groups to elicit input from homogenous factions within the population and to get insight into any concerns that might exist, what information (accurate or inaccurate) people have received, and what the general perceptions are. These tools enable the EFC to create a sensible strategy for the public outreach and education process. Depending on the community, the EFC might create



A focus group meeting

ACTIVITIES & ACCOMPLISHMENTS

materials for display and/or distribution in which information, such as the cost of wells/septic systems, is effectively depicted using graphic and verbal methods. Other material might include information concerning the costs associated with getting water from source to tap. EFC material is created to be specific to the community and consequently enjoys an element of responsiveness from community members that generic material cannot provoke.

Another outreach tool is the Community Roundtable. The EFC brings a light meal in the early evening and creates a panel of experts at the front of the room. The panels are typically comprised of at least one local government official, an engineer, and a representative from a government-sponsored funding agency. The facilitator leads the panel through a brief series of questions concerning the impetus for the project, the technical feasibility of the project, and the anticipated costs per household. The panel provides information on how financing takes place, the length of time it will take for the project to be built, and other issues the EFC believes appropriate. The audience is then engaged in a facilitated discussion in which they are provided the opportunity to express their concerns.

In 2005, the EFC's public outreach strategies were successful in involving the public and relaying, at the very least, an understanding of the reasoning behind the government's decision to consider or proceed with a particular project. For example, in the town of Windsor, New York, EFC staff developed and implemented a survey to build upon the public outreach efforts underway in the town. The EFC continued to assist the town of Windsor in the development of this potential project.

In the town of Inlet, New York, EFC staff helped facilitate a discussion about the development of a wastewater infrastructure project. The town is located in the Adirondack Mountains, and like most Adirondack municipalities, has a large seasonal community. Inlet officials have made at least two attempts to pursue a water project and one recent attempt to pursue a wastewater project—all of which failed. Inlet officials are concerned about drinking

water quality, but at this time are concentrating efforts on the development of a wastewater system. All properties adjacent to the Fifth Lake outlet in Inlet are nonconforming to New York Department of Environmental Conservation (DEC) requirements. Cost and public distrust are perceived as the main impediments. The EFC conducted community surveys, focus groups, and roundtables to assist Inlet with the development of this potential wastewater project. Efforts are ongoing.

Training

The EFC has developed a unique role in providing customized training. As the PMFP was being developed, the EFC sought to ensure that its trainings complemented the training provided by its partners, including organizations such as the Rural Water Association, Rural Community Assistance Partnership (RCAP), RCAP Solutions, the New York Conference of Mayors, and the Association of Towns. In order to impart the greatest benefit to communities without duplicating existing training available, the EFC has collaborated with its partners to create customized instructional formats, focused on smaller groups and individuals, which take place over a multi-day period and incorporate a multitude of subject areas. This approach allowed the EFC to “fill the gaps” that were believed to exist in the delivery of technical assistance and training among smaller communities. In 2005, the EFC invited more than 1,000 local government officials and technical assistance providers to its specialized training events. Furthermore, the EFC made itself available to provide content to the trainings held by its partner organizations as needed and appropriate.



July 2005 training participants

ACTIVITIES & ACCOMPLISHMENTS

The EFC held four separate multiple-day training events in 2005 around New York State. The topic areas presented at the training events were determined primarily by responses from the EFC's TAPs and community representatives. The subjects addressed in the 2005 trainings included public finance, capital planning and budgeting, municipal bond issuance, computer finance models, rate-setting and analysis, asset management, environmental conflict management and resolution, project financing procedures and regulations, and strategic management.

Source Water Protection Project

Under the initial guidance of the University of New Mexico EFC and in cooperation with EPA Region 2, the EFC has been working with communities in Chenango County, New York, with common concerns for potential drinking water contamination. To achieve an outcome that combines both process facilitation and direct technical expertise, the EFC continued a collaborative relationship with the Water Resources Institute to carry out the activities of the project. The project was completed in June 2004, but the EFC has continued to work with the Chenango County Water Operators Council (a group of public and private water system operators and representatives from the County Health and Planning Departments, Soil and Water Conservation District, and the local Environmental Education Center). Through the council, the EFC secured a \$6,000 grant from the Altria Group, a private foundation, to work on a county project aimed at raising awareness of

drinking water sources and protection among private water system users. The following activities were completed on behalf of the Source Water Protection Project during 2005:

- Conducted focus groups and community meetings and developed outreach materials to promote source water protection practices among homeowners.
- Facilitated meetings of the Chenango County Water Operator's Council.
- Created a booklet on source water protection in cooperation with the Chenango County Health Department to be distributed to citizens and municipalities in the county.

The Source Water Protection Project took a watershed management approach and is based on the notion that communities working proactively to protect their health and resources will prevent contamination of their drinking water sources. A proactive approach can help a community avoid serious health risks associated with drinking water contamination. It can also be an economical approach—preventing contamination can be much less expensive than cleaning a contaminated source.

Rate-Setting Assistance

In 2005, the EFC continued to work with communities attempting to create equitable user rates as they pursued water and wastewater system improvements. The EFC learned through evaluations that training events often resulted in “information overload,” and municipal representatives derived greater benefit from more one-on-one methods of instruction. Providing individual assistance requires more time on the part of EFC staff; however, it results in the delivery of more comprehensive information to communities and ensures their ability to develop a stronger internal capacity to work with rate structures. In turn, this ensures that the government's investment in the EFC will have the longer-term impact it seeks.



Well testing

ACTIVITIES & ACCOMPLISHMENTS

Panels on Wastewater for Local Representatives

First developed and implemented in 2004, the “Wastewater Panels” are the product of a collaborative approach involving the New York Water Environment Association (NYWEA), the New York Rural Water Association (NYRWA), DEC, and the EFC. While many think of the chief operator as the responsible party for a municipal wastewater system, the overall success or failure of the system largely depends upon the local officials and other non-technical staff. Informational sessions were specifically designed to reach out to local officials and other non-technical staff; the target audience was comprised of local representatives who contribute to the management of their wastewater facility, including mayors, supervisors, clerks, and sewer board members.

A key component of each session focused on funding sources for wastewater infrastructure improvements. Representatives from the New York State Environmental Facilities Corporation, USDA/Rural Development, and the New York State Energy Research and Development Authority talked about potential sources of funding for wastewater projects and provided a wealth of information for participants.

Several factors were instrumental to the success of this project including: free-of-charge evening sessions, an interactive agenda, and conveyance of technical information in layperson terms. Additionally, a comprehensive marketing approach, using printed and electronic media buttressed by personal contact, was implemented to reach the target audience throughout New York State. A pre-session questionnaire focused on participants’ needs and key issues, coupled with a facilitated roundtable discussion, allowed each session to be responsive and individualized. Participants were afforded the opportunity to network with both funding agency representatives and technical staff.

PUBLICATIONS AND MEDIA OUTREACH

The EFC produced a number of printed outreach materials, including the following:

Articles

Wrote articles for NYWEA’s Clearwaters magazine (Fall 2005 issue), the New Jersey League of Municipalities, and for the DEC’s “Water Week.”

Asset Management Information Brochure

Created brochure for the Advanced Asset Management workshop discussed later in this report.

Newsletter

Produced two issues of the comprehensive EFC newsletter, *Connections*, and mailed it to 1,750 individuals.

Source Water Protection Brochure

In conjunction with the Chenango County Department of Health, and as supported by the Altria Foundation, the EFC produced a brochure to be disseminated to citizens and municipalities in Chenango County.

Ongoing Projects & Initiatives

The EFC’s guiding principles for ongoing projects and initiatives are as follows:

- Attend professional association meetings and presentations about the EFC Network on relevant issues such as capital planning and financing, water and wastewater rate-setting, collaborative planning, capacity building, asset management, and sustainable community development.
- Participate in planning prospective projects with government, nonprofit, and private sector partners of the PMFP, including projects that can receive support from funders.
- Collaborate with other technical assistance organizations to provide assistance to rural communities seeking to address environmental infrastructure improvement projects.
- Serve as a content provider to government and nonprofit organizations that provide assistance and conduct workshops for municipal decision-makers.

ACTIVITIES & ACCOMPLISHMENTS

- Continue to emphasize collaborating with other universities and nonprofit organizations to develop proposals addressing environmental concerns, particularly those relating to water issues, but also including Brownfield redevelopment, sustainable development, asset management, and waste management.
- Respond to requests from communities for assistance ranging from how to finance major water system repairs and how to develop capital budgets for environmental improvements to conducting focus groups to elicit public input or assess public awareness and support of environmental projects.

COLLABORATIVE ACTIVITIES

Below is a representative listing of EFC activities that exhibit major collaborative efforts.

EFC Network

PMFP. The Public Management and Finance Program (PMFP) was the most significant collaborative activity during 2005. EFCs located in Kentucky, North Carolina, New Mexico, Idaho, California, Maine and Maryland were included in a proposal submitted to the USDA in December 2004 to fund the water and wastewater work of the PMFP.

Source Water Project. With the initial guidance of the New Mexico EFC and in collaboration with four other EFCs, the Region 2 EFC continued to collaborate on a Source Water Project. The EPA funding for the project officially ended in June 2004; however, the Region 2 EFC sustained the project through support from a private foundation. Finalization of activities occurred in 2005.

Other

Center of Excellence. The EFC increased its programmatic collaboration with the Syracuse Center of Excellence in Environmental and Energy Systems (CoE), a major initiative of the federal and New York State governments. The CoE is a federation of 72 academic, government, and private sector partners. The EFC assisted the CoE with planning and carrying out a major symposium and reviewed and edited the

production of the CoE's annual progress report. The CoE helped sponsor an EPA Advanced Asset Management workshop hosted by the EFC.

Community Assistance. The New York State Environmental Facilities Corporation (NYSEFC), RCAP Solutions, Inc. and EFC staff collaborated on two occasions in 2005 to provide comprehensive assistance to communities (the towns of Inlet and Windsor) in need of drinking water and wastewater systems. RCAP and NYSEFC provided assistance in developing the applications for grants and loans while the EFC focused on methods to generate community support and customize public education efforts concerning the costs of systems and issues surrounding the impetus for the projects.

Grant Collaboration. The EFC collaborated on an EPA grant proposal with New York Water Environmental Association (NYWEA), the New York State Department of Environmental Conservation (DEC), and the Maryland Center for Environmental Training (MCET), in addition to numerous other nonprofit and state agencies within the Susquehanna River Basin.

Intermunicipal Cooperation. The EFC facilitated discussions with the town of Hanover and the villages of Silver Creek and Forestville regarding inter-municipal cooperation and shared services. The EFC brought the New York State Office of State Comptroller to the table to assist with this project.

Wastewater Panels. The EFC continued implementation of a unique series of training events, the "Panels on Wastewater for Local Representatives," which were developed in collaboration with the DEC, the New York Rural Water Association, and NYWEA. The EFC built on this project throughout 2005 with additional funding from the DEC. The Region 2 EFC advised the state of Rhode Island about the Wastewater Panels and offered to help establish a similar program in that state.

ACTIVITIES & ACCOMPLISHMENTS

Media. The EFC produced and will continue to update several electronic media communications, including:

Listserv. *PMFPTalk* is a listserv providing local government leaders and technical assistance providers a means to submit questions or disseminate information. Currently, there are 346 active members. *PMFPTalk* is primarily promoted and utilized as a tool for community members to obtain answers to questions they have about issues of water rates, water systems, wastewater treatment, finance programs, and technology. TAPs that have expertise in a range of issues prepare responses. Members can also search the archives of the listserv to get answers to questions that might have been addressed in the past. Additionally, *PMFPTalk* is a venue for posting information about upcoming EFC events such as conferences and training sessions. It also disseminates information about events, funding opportunities, and other important notices on a routine basis.

Web Site. The EFC updated its EFC Web site (www.maxwell.syr.edu/efc) to include community-specific Web pages, relevant technical assistance links, and more. The Web site will continue to undergo additional changes.

PRESENTATIONS, CONFERENCES, AND MEETINGS

Presentations

The following list shows the conference or event EFC attended, followed by the topic of the presentation.

- New York Association of Towns conference: EFC and PMFP services for rural New York communities including rate analyses, technical assistance coordination, public outreach methods, and meeting facilitation.
- NYWEA spring conference: EFC services and Wastewater Panels—highlighting results of sessions, plans for future sessions, and integration of asset management principles and training.
- New York Council of Mayors spring conference: EFC services, projects, and program highlights.
- Cornell University Local Government Program: Working with consultants to develop successful infrastructure projects.
- Meetings of the Syracuse University Maxwell School alumni from Central New York—mostly public officials: Capabilities of the EFC.
- Hurricane Katrina “teach-in” (Syracuse University): Advice on sustainable redevelopment.
- FOCUS Greater Syracuse (sustainable communities non-profit group) presentation on the progress toward cleaning up central New York water and waterways: EFC services.
- Adirondack Ecology Center networking meeting (intent was to collaborate over sustainability projects and better leverage resources for the Adirondack region): EFC services.
- Large Chinese delegation at Syracuse University: EFC services and NYS local government perspective.
- NYDEC headquarters in Albany: NYDEC-led program for the Chinese delegation.
- Onondaga County Cornell Cooperative Extension annual meeting: Presentation on Syracuse Center of Excellence (CoE).
- Invitation-only meeting in Syracuse with U.S. Green Building Council President Rick Fedrizzi: EFC capabilities.
- Oswego County School Boards Association: Interest-based negotiation.
- Meeting with New Jersey Department of Environmental Protection Commissioner, New Jersey Highlands Commission, New Jersey



ACTIVITIES & ACCOMPLISHMENTS

Environmental Financing Program, New Jersey State League of Municipalities, and mayor of Peapack and Gladstone: overview of EFCN and Region 2 EFC capacities.

- Sustainability networking meeting (“Leveraging Central New York’s Resources to Increase the Movement Toward Sustainability”) co-hosted and presented at this collaboration between Syracuse University and the SUNY College of Environmental Science and Forestry.
- *Syracuse Post Standard* editorial board meeting: EFC and CoE activities and sustainable communities principles.

Conferences—Hosted

- Four PMFP Technical Assistance Partnership Forums (TAPF) at Syracuse University for local government officials and technical assistance providers.
- A PMFP/EFC three-day conference at Beaver Hollow Conference Center for local government representatives and technical assistance providers. Training was provided in rate-setting, public outreach strategies, innovative financing, drinking water security, asset management, wastewater treatment operations, and project development.
- Four training events, “Panel on Wastewater for Local Representatives” (advanced and basic), in collaboration with the DEC, New York Rural Water Association, and NYWEA (two in Findley Lake and one each in Lake Placid and Albany).
- Highly successful two-day EPA Advanced Asset Management Workshop in Syracuse.
- PMFP two-day workshop in Findley Lake for local government representative and TAPs. Training was provided in strategic management, innovative financing, working with consultants to gain successful project completion, asset management, and computer-based capital planning.

- Three-day Syracuse CoE conference in Syracuse on indoor air quality (co-hosted and helped plan).

Conferences—Attended

- EPA Advanced Asset Management seminar in Pennsylvania to improve the range of services offered by the EFC/PMFP.
- Two EFAB and EFCN meetings (Washington and San Francisco).
- Invitation-only Asset Management Working Session in Washington, D.C.
- Maryland Center for Environmental Training, Asset Management “Train the Trainer” national conference in San Antonio. Staff received certification.
- Invitation-only “Presidential Forum on Ethics and Entrepreneurship” held at Lemoyne College in Syracuse.
- Council of Infrastructure Financial Authorities (CIFA) conference in Chicago.
- Annual conference of the New Jersey State League of Municipalities in Atlantic City.
- U.S. Green Build Council annual convention in Atlanta (represented EFC and hosted major CoE exhibit).
- Sustainable Tompkins County symposium in Ithaca, New York.
- Invitation-only annual meeting of the University Hill Corporation (Syracuse).
- Invitation-only U.S. Green Build Council innovative financing summit (McGraw Hill, New York City).
- Underground Infrastructure Management conference (Washington).

ACTIVITIES & ACCOMPLISHMENTS

Meetings—Process Facilitations

- Seven meetings in the town of Windsor to discuss the results of the resident survey and the final engineering report, and to facilitate the public outreach process.
- Four meetings with town of Inlet representatives and citizens regarding a comprehensive community survey pertaining to the potential infrastructure project in the town.
- Eight town meetings in Chenango County regarding the Altria and Source Water Project, including two Water Operators Council meetings.
- Two meetings with town of Fenton officials to gather data on potential wastewater project.
- Ten meetings with Oswego County officials regarding the facilitation of public input into the process of potentially privatizing the existing public solid waste management system.
- U.S. Department of Agriculture panels reviewing Maxwell School capstone projects on alternative water rates and affordability.
- Five meetings of FOCUS Greater Syracuse (feedback on presentations on the Syracuse Center of Excellence, Sustainable Cities, Sustainable Waste Management, Sustainable Development, Indoor Air Quality and Community Development).
- Two meetings with the town of Hanover, one meeting with the village of Silver Springs, and one meeting with the village of Forestville, regarding inter-municipal cooperation and the potential of shared services.
- Six meetings of the spring 2006 conference planning meeting of FOCUS Greater Syracuse (representing both the Syracuse CoE and the EFC). The topic was building a sustainable community.
- Met with the village of Silver Creek to present a water rate analysis.
- Met with the town of Cortandville Citizens for Aquifer Protection and the Economy (CAPE) regarding a local dispute over aquifer protection and economic development.

Meetings—Development of New Collaborations

- Three meetings with city of Syracuse Economic Development representatives regarding EFC's assistance with Brownfield development projects.
- Meeting with a liaison to the Onondaga Indian Nation regarding the potential of EFC collaboration over land-claim issues.
- Meeting with Syracuse University's Global Affairs Institute regarding the EFC participating in a study focusing on the effectiveness of environmental non-governmental organizations.
- Meetings with three local technical assistance providers and NYWEA regarding co-sponsorship of future Asset Management Workshop.
- Meetings with the Syracuse Center of Excellence in Environmental and Energy Systems (CoE), the Campbell Public Affairs Institute (CPAI) and the Center of Environmental Policy and Administration (CEPA), all at Syracuse University, regarding collaborative programming.
- Two meetings with representatives of EPA and GHD (a company that provides asset management training) regarding the development of a university based academic and professional training program on Asset Management.
- Three meetings with representative of the Syracuse Program on the Analysis and Resolution of Conflicts regarding collaborative planning for an Environmental Dispute Resolution program.

ACTIVITIES & ACCOMPLISHMENTS

- Meeting with Syracuse University representative regarding the EFC's assistance with Syracuse led post-Katrina sustainable rebuilding efforts, particularly at Tulane, Loyola, and New Orleans Universities.
- Seven meetings with the EnSPIRE program (Office of Environment and Society) at Syracuse University/SUNY College of Environmental Science and Forestry with the intent to collaborate over creation of joint sustainable development programs.
- Three meetings with a Central New York American Institute of Architects (AIA) Sustainable Design Assessment Team (SDAT) grant program exploratory task force.
- Meeting with representatives from New York State Energy Research and Development Authority's (NYSERDA) ENERGY STAR® program to discuss collaborations.
- Meetings with various upstate New York organizations to build new collaborative relationships (e.g., DestiNY USA, Syracuse Chamber of Commerce, National Grid Corp., Manufacturers Association of CNY, Time-Warner, Metropolitan Development Association, Upstate Medical University, CNY Small Business Technology Development Office, and the SUNY College of Environmental Science and Forestry).

New Projects & Initiatives

The central purpose of the EFC continues to be to enhance the administrative and financial capacities of state and local government officials and the nonprofit and private sectors to respond efficiently and effectively to a demanding set of federal and state environmental regulations, mandates and challenges. Building upon the success of prior program years, the continuing work of the EFC is now based on achieving the following six discrete functional goals:

Goal 1: Increase the administrative and long-term planning capacity of local government officials.

Goal 2: Maintain and foster project-based partnerships with various agencies.

Goal 3: Collaborate and build relationships with faculty and professional staff from various institutions.

Goal 4: Collaborate with other service providers to further develop the public management and finance program to meet the needs of primarily rural communities.

Goal 5: Expand service throughout EPA Region 2.

Goal 6: Develop and implement new, creative, and entrepreneurial approaches to achieve sustainable environmental results.

The following new initiatives began in 2005:

SUSTAINABILITY PROGRAM

In 2005, the EFC started developing a program on sustainability. The intent is to offer process facilitation, public outreach, engagement, training, education programs, and direct and indirect technical assistance. These activities entail more intensive collaboration with Maxwell School faculty and other institutions and organizations, such as:

- Syracuse Center of Excellence in Environmental and Energy Systems
- Maxwell School's Center for Environmental Policy and Administration
- Syracuse EnSPIRE Program (Office on Environment and Society)
- Other Syracuse University Departments and Schools
- SUNY, College of Environmental Science and Forestry
- Environmental Finance Center (EFC) Network

ACTIVITIES & ACCOMPLISHMENTS

- U.S. Green Building Council
- GreeningUSA
- National Grass Roots Recycling Network
- National Recycling Coalition
- New York State Association for Reduction, Reuse, and Recycling
- Local economic development agencies
- Local nonprofit organizations

The following target areas represent the EFC's foci. These also serve as indicators of sustainable development (as modified from EPA's National Center for Environmental Innovation's *Environmental Innovation Portfolio*, March 2005):

Promote *strategic direction and priorities* through:

- Strategic management and planning (e.g., training and consultations).
- Innovative and sustainable financing information transfer (e.g., "affordability," enterprise accounting, public/private partnerships).
- Infrastructure asset management (e.g., training, consultations and academic programming for water, wastewater, solid waste, fleet operations)

Support *superior environmental performance* through:

- Leadership development programs.
- Conflict management and interest-based negotiation programs and interventions.

Facilitate *environmental sustainability* with a focus on:

- Climate change and renewable energy (e.g., "local" options such as biofuel).

- Energy and environmental systems in buildings (in cooperation with the Syracuse CoE).
- Resource use and waste management (waste reduction, reuse and recycling, resource recovery parks, extended producer responsibility, and other sustainable consumption and waste management approaches).
- "Design for the Environment" (e.g., "green" buildings and environmental management systems).

Promote *collaborative partnerships for environmental protection* through:

- Community-based environmental partnerships.
- Government-industry partnerships.
- Intergovernmental partnerships (e.g., facilitation of intermunicipal cooperation, network governance, and governmental consolidation).

Encourage *sustainable economic development* through:

- Targeted geographic solutions (e.g., Brownfield development, watershed quality).
- Establishment of a pragmatic balance between economic development and preservation (including assistance with job creation at the local level).

Specific new initiatives include:

Adirondack Ecological Center

Exploring potential project collaborations in the sustainable development area for the Adirondack Mountain region of New York State.

American Institute of Architects Sustainable Design Assessment

Working with an interdisciplinary group in central New York to design a unique program to evaluate sustainable indicators in the area.

ACTIVITIES & ACCOMPLISHMENTS

Department of Energy Industrial Assessment Program

Collaborating on the next grant application; this program is housed at Syracuse University.

Environmental NGO Evaluation

Working with Syracuse' Global Affairs Institute regarding the EFC's potential involvement with a National Science Foundation project to evaluate environmental organizations.

FOCUS Greater Syracuse

Working with this sustainable communities grassroots nonprofit organization to build a sustainable central New York. This includes hosting a major spring exhibition, as well as promoting 82 goals related to environmental stewardship, social equity, and economic development.

Hurricane Katrina Aftermath

Offering technical assistance to the Red Cross, EPA Region 4, EFCs in Regions 4 and 6, Habitat for Humanity, and Syracuse University to help in efforts to rebuild New Orleans area universities.

Institute for Sustainable Communications

Working with the founder of this organization, who is also a faculty member at the City University of New York, on the establishment of a collaborative program on sustainability that would target the printing and graphics industry.

Major Collaboration on Sustainability Programming

Working with other key organizations at Syracuse University to build a cohesive and synergistic program on sustainability.

Oswego County Environmental Management Council

Assisting with program structure.

Program on the Analysis and Resolution of Conflicts (PARC)

Working with PARC to design an environmental dispute program; this renowned program is housed at the Maxwell School.

Puerto Rico

Researching environmental problems and opportunities for collaboration.

Steel Recycling Institute (SRI)

Exploring the opportunity to participate with a Department of Energy/SRI program related to "cool metal roofing."

Various Municipalities

Developing potential assistance programs in areas such as water, wastewater, and inter-municipal cooperation.

SYRACUSE CENTER OF EXCELLENCE IN ENVIRONMENTAL AND ENERGY SYSTEMS (CoE) PARTNERSHIP



Created in 2002 by New York Governor George E. Pataki, the Syracuse CoE is a federation of 72 partners, including industrial firms, businesses, research organizations, local government economic development agencies, the state and federal government, and a number of academic institutions. Its intention is to create innovations to improve health, productivity, security, and sustainability in various environments. Syracuse University sponsors the CoE, but other academic partners include the SUNY College of Environmental Science and Forestry, Alfred University, Clarkson University, Cornell University, the Institute of Ecosystem Studies, Rensselaer Polytechnic Institute, SUNY Upstate Medical University, SUNY at Albany, SUNY at Buffalo, the University of Rochester, and the Upstate Freshwater Institute.

ACTIVITIES & ACCOMPLISHMENTS

Activities within the Syracuse CoE include research, product development, and educational programs. The scope of the CoE has expanded beyond the initial focus on “built and urban environments.” For instance, challenges facing rural areas and local governments are being incorporated into the activities of the CoE. Another expansion of the original core mission of the CoE is into the area of renewable and clean energy sources, from wind and solar power to geothermal and fuel cells. In addition, the CoE has been charged with making the biofuels industry in New York one of the strongest in the nation. A key vision of the CoE is to promote more sustainable economic development by reducing energy consumption, decreasing air and water pollution, and improving environmental quality.

The EFC enjoys a collaborative relationship with the CoE. The objective of the collaboration is to utilize the EFC’s and PMFP’s strengths—including public outreach, process facilitation, focus on local government needs, and assistance to rural communities—to augment the CoE’s mission. In addition, this relationship will assist the EFC with its intent to more aggressively promote sustainable development.

In total, nearly \$190 million in private and public funds have been invested in the CoE. This includes a New York State commitment of \$44 million from Governor Pataki and more than \$96 million in private and foundation investments. It also includes more than \$30 million in federal resources secured by Congressman James Walsh. Collaboration between the EFC and the CoE will further maximize the impact of the existing funds for each organization.

Specific new initiatives include:

Annual Symposiums

Assisting the CoE with design and implementation of annual symposiums. The first was in October 2005 and focused on indoor air quality.

Campus Sustainability

Increasingly involved in supporting Syracuse University, which has made a major commitment to sustainability, including pursuing U.S. Green Building Council LEED (Leadership in Energy and Environmental Design) certification for all new major construction projects (only one of two universities to make this commitment).

Green Buildings

Assisting the CoE in its green building endeavors and expecting to play a major role in the future. The CoE is taking the lead on promoting green buildings and is a major affiliate of the U.S. Green Building Council. A major exhibit at the U.S. Green Building Council annual convention in Atlanta served as the kick-off event.

PUBLIC MANAGEMENT AND FINANCE PROGRAM (PMFP)

Specific new initiatives include:

Asset Management

Promoting asset management. This important initiative began with staff receiving extensive training in this field and culminated in a highly successful workshop hosted by the EFC in Syracuse on advanced asset management (led by EPA). The Syracuse EFC is now working on new initiatives in this area, such as the development of a major university-based academic program on infrastructure and asset management with the Syracuse Center of Excellence, L. C. Smith College of Engineering at Syracuse and the Maxwell School. One targeted audience for this new academic based program will be local officials. In addition, the EFC is exploring partnerships with other institutions, such as the City University of New York. The EFC is also preparing a proposal to the USDA to continue its training for local officials in the field of asset management and to complete consultations in this field with local municipalities.

ACTIVITIES & ACCOMPLISHMENTS

Expansion into New Jersey

Developing activities in New Jersey. This initiative started with the EFC's proposal for doing work with the New Jersey Pinelands Commission on a waste management district project. In addition, the EFC has been corresponding with Vince Girardy, mayor of Peapack and Gladstone, who is helping the EFC establish contacts in the region. This effort has already resulted in meetings with the New Jersey State League of Municipalities, the New Jersey Department of Environmental Protection, and the New Jersey Environmental Infrastructure Financing Program. The EFC will build on these efforts and continue to identify potential partners and projects in New Jersey.

International Programs

Helping facilitate the Maxwell School's international programs in terms of integrating environmental management and finance and infrastructure development components. The EFC participated in a large RFP to which Maxwell responded for an Infrastructure Management Program with India's Institute for Public Administration. In addition, the EFC presented to a large contingent of Chinese municipal officials and facilitated a meeting by the New York State Department of Environmental Conservation with that group. The EFC is currently designing a program on solid waste management for a group of Vietnamese officials.

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Lake Ontario Efforts

Explored potential opportunities with the International Lake Ontario—St. Lawrence River Study and the Lake Ontario Coastal Initiative and continuing to review opportunities for collaboration.

Solid Waste Management

Working with the county of Oswego to help facilitate public input into a year-long process of evaluating alternative management models for its integrated solid waste management system. This initiative could include moving toward a public-private partnership, full privatization, enterprise accounting or some other management and/or financing model.



Outcomes

As a result of the activities and accomplishments outlined in the previous section, outcomes have included the following:

PRESENTED AND DISSEMINATED INFORMATION EFFECTIVELY TO WIDE AUDIENCES

Not only has the EFC continued to give presentations and trainings to large and varied audiences, but the EFC has improved its training abilities over time. Over the past decade, the EFC recognized that rate-setting training delivered in the classroom to groups of practitioners does not have long-term value, particularly in regard to changes in political administrations leading to changes in rate-setting decisions. In addition, the nature of classroom training does not always account for differences in learning styles, and human nature inhibits many individuals in a group setting from asking specific questions related to their circumstances. By working with communities on an individual basis instead, the EFC is not only facilitating



A TAP presentation

capacity-building within a community, it is complementing the broader training provided by other TAPs, such as the Rural Water Association, which continues to deliver training using classroom methods.

In addition, post-event evaluations from EFC training programs support that training designed around existing municipal situations provides more effective learn-

ing. The EFC elicited specific information from participating communities in advance of events to integrate “real world” situations during training. In addition, participants were afforded significant opportunity to pose situation-specific questions to the trainers, which resulted in extensive follow up after the training. Community representatives and technical assistance providers alike highly rate the PMFP training on a consistent basis in terms of both format and content. The training events have continued to expand the clientele of the EFC, as many community leaders have requested specific assistance or asked to be put in contact with partners’ technical assistance services. The trainings are a significant accomplishment, “bridging the gaps” in terms of having a means for TAPs and local governments to interact in a comprehensive manner, using a variety of methods to promote learning, networking, and the delivery of solid expertise relative to environmental improvements. The PMFP will continue to use highly interactive and participatory methods of delivering all of its components.

ENHANCED PUBLIC UNDERSTANDING OF CRITICAL COMMUNITY ISSUES

The PMFP’s public outreach process has developed a reputation for enhancing the public’s understanding of water and wastewater projects, essential in New York communities where voter approval is necessary for debt to be acquired. Roundtables have always resulted in positive and highly constructive discourse focused on each project. Public officials frequently glean insight they previously did not have, and the public always gets accurate information framed in terms they can understand. These successes are exemplified by the numerous requests the Syracuse EFC has received from other communities to provide facilitation.

EXPANDED REACH OF PROGRAM

While the EFC’s PMFP program has historically focused on New York State, because of its success and replicability, EFCs located in Kentucky, Maine, North Carolina, California, and New Mexico collabo-

PERFORMANCE MEASURES

rated in late 2004 and submitted proposals to build upon the PMFP concept in their respective states. In addition, the Syracuse EFC began to promote the PMFP in New Jersey in 2005.

In addition, the EFC was asked to present information about the PMFP program to a large contingent of Chinese municipal officials, and is currently designing a program on solid waste management for a group of Vietnamese officials.

Finally, the Syracuse EFC continues to receive calls and other solicitations to perform its services throughout New York, the base of operations. For example, municipal leaders who fear voter rejection for municipal projects continue to call the EFC requesting outreach and education efforts.



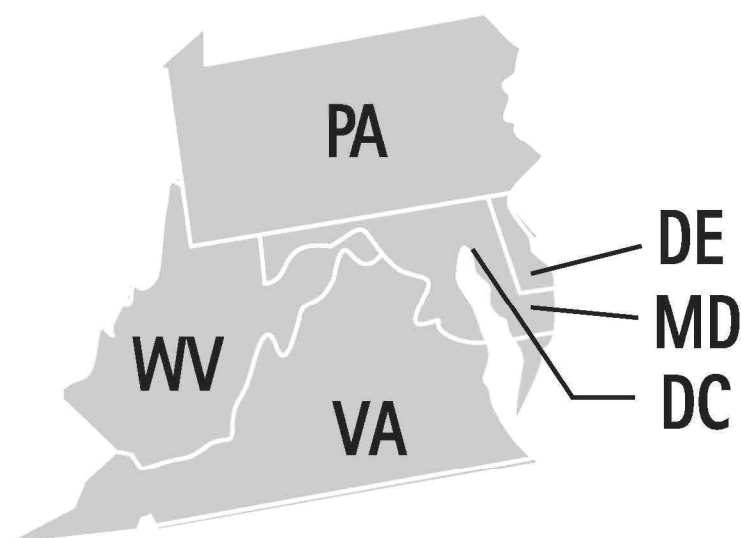
Impacts

In 2005, the Syracuse EFC continued its mission to enhance the administrative and financial capacities of state and local government agencies as well as non-profit organizations and private entities as they endeavor to improve environmental quality and maintain environmental infrastructure. Specific environmental issues addressed through the EFC's activities and accomplishments include:

- Drinking water protection and security
- Wastewater infrastructure
- Aquifer protection
- Sustainable redevelopment/sustainable communities
- Climate change and renewable energy
- Resource conservation
- Waste management
- Green buildings
- Indoor air quality

Region 3 Environmental Finance Center

AT THE UNIVERSITY OF MARYLAND



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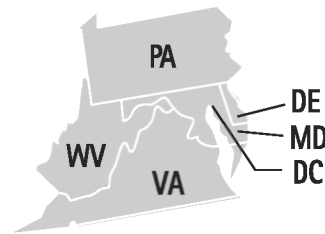
BACKGROUND & SUMMARY

With support from the U.S. Environmental Protection Agency (EPA), the Environmental Finance Center (EFC) at the University of Maryland was created to assist the six communities of EPA's Region 3 (Pennsylvania, Delaware, Maryland, Washington, D.C., Virginia, and West Virginia) in identifying innovative and equitable means of paying for environmental projects. The center promotes ways to manage the cost of environmental activities through technical assistance, training and curriculum development, and outreach activities such as workshops, charrettes, and conferences.

To help communities and local governments participate in effective and responsible environmental management on a watershed scale, the Maryland EFC works to develop and deliver useful, innovative technical assistance and training for financing environmental protection and restoration. To advance this goal in 2005, the EFC focused on the following key objectives:

- Delivering training and information on watershed-based financing.
- Investigating new and innovative uses of funding sources and emerging markets.

REGION 3



- Assisting communities and local governments with capacity development.
- Developing efficient and effective outreach and education tools to deliver information about innovative and sustainable environmental finance approaches.
- Working with key partners, such as the Chesapeake Bay Program and the University of Maryland Institute for Governmental Service.

ACTIVITIES & ACCOMPLISHMENTS



Completed and Ongoing Projects & Initiatives

In its ongoing work with local decision-makers about the benefits of sound environmental management, the Maryland EFC continues to provide general technical assistance to local governments, land trusts, homeowners associations, and others interested in finding new and innovative ways to pay for environmental restoration and protection activities in their watersheds. In addition to responding to needs and requests for assistance, the EFC has participated in several watershed financing initiatives, as follows:

THE SUSTAINABLE FINANCING INITIATIVE

In 2005, the EFC expanded its watershed financing programs with the development of the Sustainable Financing Initiative. Funded by a grant from the EPA Sustainable Finance Team. The goal of this initiative is to provide communities with the tools they need to effectively finance and implement watershed protection plans. The EFC held three workshops, and planned one more, throughout Region 3 focused on helping communities overcome barriers to implementing their watershed plans:

1. Financing Open Space Protection: Talbot County, Maryland – June 22, 2005

The first workshop in the series took the form of roundtable discussion with a panel of regional financing and resource experts and representatives from the Talbot County government and agricultural community. The goal of the event was to develop a sustainable financing strategy for financing and implementing its Countryside Preservation Area Program to protect more than 11,000 acres around the county's four incorporated towns.

After conducting the full-day workshop, the Maryland EFC prepared a follow-up report

In 2005, the Maryland EFC...

- ◆ Held 12 charrettes, workshops, and trainings.
- ◆ Plan to conduct 26 additional trainings.
- ◆ Drew more than 100 participants to its charrettes.

(see <www.efc.umd.edu/pdf/TalbotReport.pdf>) that outlines in detail the recommended financing strategy for county officials. In this report, the EFC suggested that effective implementation of the Countryside Preservation Area Program would require an open dialogue with municipal officials from the county's four incorporated towns and offered to facilitate a workshop to engage the municipal officials while presenting the results from this project. The EFC is currently awaiting word from the Talbot County Council as to when to schedule this next step.

2. Sustainable Watershed Financing in Pennsylvania: State College, Pennsylvania – October 5, 2005

The second workshop in this series was held at the Fifth Annual Conservation District Watershed Specialists Meeting in coordination with the Pennsylvania Department of Environmental Protection. The Maryland EFC conducted a full-day watershed financing workshop for more than 100 state watershed specialists. Presentations focused on three core areas: 1) developing financing strategies, 2) financing stormwater management, and 3) coordinating financing with watershed organizations. Guest presenters included the URS Corporation, the Center for Watershed Protection, and the Region 10 EFC at Boise State University. All attendees received a binder containing additional resources and reference materials, as well as a copy of the EFC at Boise State's Plan2Fund software program for use with their local watershed organizations.

ACTIVITIES & ACCOMPLISHMENTS

3. Financing Land Preservation in the Cacapon and Lost River Watershed: Berkeley Springs, West Virginia – November 2, 2005

On June 27, 2005, the Maryland EFC held an initial meeting with the executive director of the Cacapon and Lost River Land Trust and a handful of land protection experts familiar with the region and the work of this trust. The trust has been successful in protecting farmland in the watershed, primarily through donated easements, but is now faced with the challenge of developing a long-range financial strategy for purchasing easements to protect a particularly critical section of land in the watershed. The trust determined that an EFC facilitated financing charrette would be an effective tool in the problem-solving process and ultimately served as the steering committee for the event, holding a series of planning meetings throughout summer 2005.

On November 2, 2005, the EFC conducted the financing charrette for the trust at Cacapon Resort State Park in Berkeley Springs, West Virginia. A panel of land preservation and financing experts from around the region joined members of the Cacapon and Lost River Land Trust to develop a sustainable financing strategy for acquiring land that would link the currently protected Hampshire County Conservation Hub to the George Washington National Forest as well as to the Short Mountain Wildlife Management Area.

The EFC is presently assembling data and conducting additional research on the programs and suggestions discussed in the charrette. This information will be included in a final report to the trust outlining, in detail, the recommended land protection financing strategy. An additional follow-up meeting is anticipated for the formal presentation to the trust of the recommendations in this final report. To see the results of this and other charrettes, visit www.efc.umd.edu/charrette.html



4. Financing Land Protection on Virginia's Northern Neck

A final workshop is planned for Virginia's Northern Neck. The EFC has been coordinating with the newly formed Northern Neck Land Conservancy to conduct a workshop to develop a financing strategy to help the conservancy manage the increasing growth that currently threatens the region's natural and cultural resources.

The EFC conducted two charrette planning meetings with representatives of the Northern Neck Land Conservancy's board of directors and anticipates holding at least one more planning meeting prior to facilitating a full-day financing charrette on preserving natural and cultural resources in the region. The recommendations of the resource protection and financing experts in attendance will be compiled into a comprehensive strategy document for the Northern Neck Land Conservancy.

ADDITIONAL TRAINING

The EFC continues to conduct training sessions and workshops targeting elected officials, utility operators, engineers, and others interested in the concepts and technicalities of properly managing and sustaining utility systems. During the past year, the EFC training manager has conducted training sessions at six locations on a variety of topics:

ACTIVITIES & ACCOMPLISHMENTS

- At the National Environmental Services Center Annual Training Institute: *Local Officials' Responsibilities, Budgeting from Scratch*, and *Financial Management Basics*
- At the request of the Virginia Rural Water Association: *Utility Rates and Cost Recovery*
- At the request of the Delaware Rural Water Association: *Capital Improvements Planning*
- At the request of the Delaware Office of Drinking Water: *Capital Improvements Planning*
- At the joint request of the Delaware Office of Southeast Rural Community Assistance Partnership (RCAP) and the Delaware Rural Water Association: *Capital Improvements Planning and Asset Management*
- At the request of the American Water Works Association (AWWA) annual Distribution System Symposium conference planning committee: *Rates and Cost Recovery for Small Systems and Asset Management for Small Systems*

The EFC expects to conduct 26 additional training sessions across the region. These sessions will be offered in partnership with organizations such as:

- The Rural Water Associations of the states of Delaware, Maryland, Pennsylvania, West Virginia, and Virginia.
- The Environmental Training Centers in Delaware and Maryland.
- The Small Public Water Systems Technical Assistance Center (SPWSTAC) at Penn State-Harrisburg.
- Maryland Rural Development Corporation (MRDC).
- Southeast Rural Community Assistance Partnership (SERCAP serving Delaware).

- RCAP Solutions (formerly Northeastern RCAP, serving Pennsylvania).
- Great Lakes RCAP (serving West Virginia).
- The Maryland Municipal League and the Academy for Excellence in Local Government.
- The National Environmental Services Center (NESC) at West Virginia University (WVU)

CHESAPEAKE BAY FINANCING AUTHORITY

With support from EPA and the Maryland Sea Grant College, the Maryland EFC played a key role in staffing the Chesapeake Bay Watershed Blue Ribbon Finance Panel. The EFC and the Sea Grant College helped support the early planning and formation of the panel, especially in gathering and synthesizing background and analytical materials. Although the panel concluded its work in October 2004, important follow-up activities continued through 2005, including distributing the report, presenting to stakeholder audiences, and helping to plan for implementation.

The EFC continues to distribute both the final report and a CD created by the Chesapeake Bay Program (the EFC helped provide digitized information for the CD) to a broad range of stakeholders, from citizens to graduate-level university classes. The EFC's staff also distributed a white paper on models for various types of financing authorities.



ACTIVITIES & ACCOMPLISHMENTS

Of particular importance was the EFC's ongoing participation in last year's planning efforts for devising an implementation plan for a Chesapeake Bay Financing Authority. The EFC, in partnership with the Chesapeake Bay Program Office, staffed and managed the committee charged with developing a framework for this new authority. The idea for the authority was a cornerstone of the work of the Blue Ribbon Panel, and this new committee was charged with providing the Chesapeake Executive Council with a proposal for how the authority should be structured, funded, and implemented. The goal of the committee was to identify and make recommendations on a structure for developing the regional financing authority to fund Chesapeake Bay restoration efforts.

Working in partnership with the Institute for Governmental Service, the EFC managed the staffing effort, including coordinating, facilitating, and implementing three committee meetings. Most importantly, the EFC provided the committee with analysis and technical assistance on issues related to fiscal, legal, political, and administrative barriers to implementing a financing authority. Finally, the EFC was responsible for writing and producing the final proposal document. A white paper report (see <www.efc.umd.edu/pdf/FinancingAuthorityTemplate.pdf>) was delivered to the Principals' Staff Committee on July 1, 2005.

INTER-AGENCY TECHNICAL ASSISTANCE COMMITTEE FOR WASTEWATER SYSTEMS IN MARYLAND

The EFC continued its participation and leadership with the Inter-Agency Technical Assistance Committee for Wastewater Systems in Maryland (ITAC). In 2005, ITAC embarked on the second phase of its duties following the submission of its first report to the governor and legislature in December 2004. As part of its continuing work to provide specific recommendations and technical assistance to wastewater systems throughout Maryland, ITAC formed the Financial Management Practices Subcommittee and instructed the committee to form recommendations for improving the Maryland



systems' management practices, as well as specific training programs and products to enhance financial management proficiencies. The subcommittee is charged with formulating recommendations on how to improve planning practices among Maryland's small systems and how to encourage and ensure the inclusion of small system plans and needs in the surrounding county's comprehensive utility plans.

The EFC's training and education manager was named chair of the Financial Management Practices Subcommittee. The subcommittee identified the need for a streamlined, statewide application review for systems applying for financial assistance from the various state programs and called upon the Maryland EFC for assistance. ITAC delivered a final report to the Maryland Legislature in September 2005.

In addition, a memorandum of understanding has been approved by the subcommittee outlining a pledge by the Maryland Department of the Environment, U.S. Department of Agriculture/Rural Utilities Service, and Maryland Department of Housing and Community Development to consult with each other and meet at least once per year to review applications and direct funding to the most needed recipients. If approved and implemented, such a joint effort will be a first for the state. In addition, the subcommittee is considering other measures, such as establishing a training requirement for non-technical system personnel (managers and governing board members) and specific training programs to address management and finance deficiencies that have been identified in the course of the committee's ongoing activities.

New Projects & Initiatives

STORMWATER FINANCING INITIATIVE

Financing stormwater management is one of the most pressing issues facing communities throughout the region and the country. The cost of meeting federal and state stormwater permitting programs is an extraordinary fiscal burden on many communities. Often complicating efforts to finance large-scale stormwater management projects is the lack of local financial and fiscal capacity. The first step in financing extensive stormwater management efforts is understanding a community's capacity to plan, finance, manage, and implement complex programs. The Stormwater Financing Initiative will provide communities with a tool to gauge their capacity to implement these projects.

The EFC's goal is to convene a team of experts to help local officials develop a framework for financing extensive stormwater management programs as part of the state permitting processes. As part of an intensive two- to three-day financing charrette, the team will work with local officials to identify key community strengths and weaknesses related to fiscal, political, and institutional capacity. The team will focus on issues such as financial management, developing local ordinances, and organizational and institutional capacity.

The following core outputs have been achieved:

- The EFC developed the basic program objectives and structure and began discussions with necessary stakeholder groups. As part of that effort, the EFC conducted and/or participated in three community outreach events to explain the new program and offered the service to interested participants.
- The EFC held several meetings with officials from the Pennsylvania Department of Environmental Protection (DEP). The DEP is a strong supporter of the project and has offered technical assistance and support.

- The EFC developed a core implementation team that includes technical consultants and outreach organizations, including the Center for Watershed Protection.

As a result of initial meetings with the Pennsylvania DEP, the EFC identified two pilot watersheds for this project: the Piney Creek watershed outside Pittsburgh and the Upper Darby watershed outside Philadelphia.

FINANCING LAND PROTECTION IN VIRGINIA'S SHENANDOAH VALLEY

The Shenandoah Resource Conservation and Development Council invited the Maryland EFC to participate in initial regional discussions on how to approach land preservation, direct growth, and improve water quality around the Shenandoah River. Seven Virginia counties were represented at the November 16 meeting and all were interested in the concept of an EFC-facilitated financing charrette to examine the range of issues as well as develop sustainable, long-term financing and implementation strategies for protecting water resources in the region.

The EFC participated in the initial meeting and a series of additional planning meetings to determine the most effective method of engagement.

SCHUYLKILL RIVER AND DELAWARE RIVER FINANCING PROJECTS

The EFC was contacted by the Schuylkill Action Network (SAN) and the Partnership for the Delaware Estuary (PDE) to provide assistance in developing a



ACTIVITIES & ACCOMPLISHMENTS

feasibility study for a regional financing authority to fund strategic projects throughout the Schuylkill and Delaware River watersheds. The EFC has agreed to assist SAN and PDE in developing a strategic approach to identifying watershed protection and restoration costs, community fiscal capacity, and strategies for protecting the two watersheds and anticipates ongoing work on this project throughout the next fiscal year.

The EFC participated in several steering committee meetings and submitted a proposed implementation strategy to SAN and PDE officials.

CHESAPEAKE NONPOINT EDUCATION FOR MUNICIPAL OFFICIALS (NEMO) INITIATIVE

The EFC agreed to participate in the new Chesapeake Bay NEMO project, which will provide technical assistance and outreach support to coastal communities throughout Maryland and Virginia. The goal of this initiative is to coordinate activities of a network of technical service organizations and agencies to protect coastal environments and communities. The Maryland EFC has offered to lead the efforts to provide financing and capacity development services. The first NEMO meeting was held on June 24, 2005, with subsequent meetings scheduled for the upcoming calendar year. Targeted focus areas include Maryland and Virginia communities along the Delmarva Peninsula.

EPA SOURCE WATER COLLABORATIVE

The Maryland EFC, in partnership with leaders from other EFCs around the country, has been participating in a new EPA-led effort to facilitate source water protection efforts across the country. The work of this coalition of organizations is focused on the source—the lakes, streams, rivers, and aquifers tapped for drinking water and the land needed to protect and recharge those bodies of water. The Source Water Collaborative brings together a broad set of constituencies and competencies to work on a single issue—protecting the sources of drinking water. Working together, the collaborative has the credibility, reach, and expertise to speak and act with authority, an impact no single member can achieve.

The coalition will develop useful recommendations about what is needed to protect sources of drinking water. In addition, the coalition will share—through regular communication and during quarterly meeting—information about best practices in source water protection and the people who make land use decisions, both in community planning and in stewardship practices.

C & O CANAL STEWARDSHIP TASK FORCE

The EFC director was contacted by the staff of Maryland Congressman Chris Van Hollen, who sought assistance for facilitating and directing a task force dealing with forest stewardship issues along the Chesapeake & Ohio (C&O) Canal National Historic Park. The goal of the task force was to provide recommendations for more effective local, state, and federal stewardship of public and private lands along the park's boundaries. The EFC facilitated monthly task force meetings and provided technical assistance for the activities of the task force.

FINANCIAL MANAGEMENT TRAINING INITIATIVE

The EFC has become a regional leader in developing and implementing small system utility training programs. The EFC's work focuses on providing in-depth training on issues related to financial and asset management, capacity development, and revenue and rate-setting. Throughout the next fiscal year, the EFC will continue to expand its systems training and outreach efforts.

The EFC has recently begun the Financial Management Training Initiative in partnership with the Institute for Governmental Service (IGS). The aim of this initiative is to create a comprehensive training program for system operators at all levels of expertise, capacity, and experience that will utilize Web-based technologies, training manuals, and onsite programs. The EFC training manager recently convened a steering committee comprised of state, local, and organizational training experts that will work with the EFC and IGS to identify issues and resources essential to local systems.

ACTIVITIES & ACCOMPLISHMENTS

The initiative will develop training tools on issues essential to effectively managing wastewater and drinking water utilities. The first product will be a comprehensive Web-based search tool that will assist communities in finding training tools and programs from around the country. In addition, the Web site will include online training programs, white papers, and training resources. The second product will be a comprehensive training manual that will serve as a utility system's "textbook" for systems operators. The textbook will address issues such as:

- Drinking Water System Capacity—Technical, Managerial, and Financial
- Analyzing Financial Capacity
- Revenues and Rate Setting
- Calculating General Overhead
- Minimum Reserve Levels
- Government Finance Officers Association recommended practices
- Budgeting and Planning
- Accounting and Bookkeeping
- Master Business Planning
- Capital Improvement Planning
- Integrated Asset Management
- Asset Management and Compliance—GASB 34
- Legal, Financial and Administrative Responsibilities
- Overview of regulations and compliance issues

The EFC's goal is to develop an implementation strategy and template for both the Web site and the guidebook during the upcoming fiscal year.

COMMUNITY VISIONING

Maryland's Eastern Shore is under strong development pressure as a result of an increasing population. The Eastern Shore has become a popular place to live because of its proximity to major cities and surrounding suburbs, recreational opportunities, low cost of living, and low crime rate. Small municipalities on the Eastern Shore are struggling to cope with the onslaught of growth with limited, or sometimes non-existent, staff. These communities typically have insufficient financial resources and often outdated zoning ordinances. Many are looking for ways to turn this growth into sustainable community development.

The EFC has developed a partnership with Washington College in Chestertown, Maryland, as part of its community visioning initiative. As part of this relationship, the EFC is serving on a steering committee, which provides guidance on issues related to implementing and financing environmental initiatives. In addition, the EFC is working with program partners to develop implementation and follow-up resources for communities that participate in the visioning process.

The partnership began its first community pilot in Talbot County, Maryland. The program is focusing on the community's agricultural industry and ways to protect farming economies and agricultural lands in the face of increasing development pressure. Through a series of forums and workshops, the partnership is providing community officials with the resources they need to make more informed decisions related to the future of agriculture in the region. This program is building on recent work conducted by EFC in Talbot County, which has focused on the county government's ability to protect and preserve critical open space and farmland.

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Outcomes

As a result of the activities and accomplishments outlined in the previous section, outcomes have included or will include the following:

SERVICES PROVIDE BASIS OF MUNICIPAL STRATEGIES

The workshop/charrette process and the final recommendation reports from the series of four meetings regarding sustainable financing will serve as the foundation for sustainable financing strategies to be instituted by county officials, watershed specialists, and trusts. With the continued success, this model could serve as a national example of effective land preservation.

In addition, as a result of the EFC's capacity development and training program, communities across the region have had access to training that will enhance their knowledge and commitment to responsible and effective utility management practices, including planning, budgeting, and rate-setting. The result will be better and more effective fiscal management in small communities throughout the region.

The recommendations developed in the regional financing charrette will provide local elected officials, resource protection agencies, and watershed organizations with a template for effective coordination for financing natural resource protection efforts in the Shenandoah region.

WORKSHOP EFFECT GROWS EXPONENTIALLY

Many participants in the sustainable financing workshop mentioned their intention to share what they had learned with other local officials, watershed organizations, and trusts. In addition, several watershed specialists from various regions of the state requested the EFC's participation in stormwater management efforts in their communities. The EFC is currently involved in intense follow-up activities in these communities.

EFC PROVIDES BASIS OF INFLUENCE ON KEY ISSUES

The recommendations of the C&O Canal task force will be used to influence local, state, and federal efforts to protect this significant regional natural resource. Task force recommendations will play a significant role in strengthening local land use and forest stewardship regulations and could provide a national example of effective inter-jurisdictional coordination of land protection efforts.

ROLE AS REGIONAL TRAINING LEADER EXPANDS

As a result of the EFC's capacity development and training program, communities across the region will have access to coordinated, effective training tools that will leverage a variety of training and technical assistance resources. This outcome should lead to better-coordinated, more effective training programs, intended to produce more effective fiscal management in small communities throughout the region.

Impacts

In 2005, the Maryland EFC continued its mission to help communities identify innovative ways to pay for environmental projects and promote ways to manage the cost of environmental activities. Specific environmental issues addressed through the EFC's activities and accomplishments include:

- Watershed restoration and protection
- Source water protection
- Open space protection
- Land preservation
- Forest stewardship
- Natural and cultural resource protection
- Wastewater and stormwater management
- Chesapeake Bay restoration

Region 4 Environmental Finance Center

AT THE UNIVERSITY OF NORTH CAROLINA AT
CHAPEL HILL



In This Report

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BACKGROUND & SUMMARY

The Environmental Finance Center at the University of North Carolina at Chapel Hill (known as the UNC EFC) works with local communities and government agencies throughout the eight states of the U.S. Environmental Protection Agency's (EPA's) Region 4 (Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Alabama, Mississippi, and Florida). Its purpose is to address environmental management challenges by developing innovative financial management and environmental policy strategies and systems. The UNC EFC assists communities by "providing a bridge between students and faculty in the university who work principally on environmental financing, management, and planning tools, and the governments and businesses whose job it is to use those tools for the public interest." It receives its core support from EPA and University of North Carolina at Chapel Hill.

The UNC EFC is one of a network of university-based centers that concentrates on problems in financing of environmental services. It was created in 1998 as a joint venture between the Institute of Government and the Office of Economic Development, both at UNC-Chapel Hill, and is one of two EFCs in Region 4. Faculty and students working with the UNC EFC concentrate on helping improve the financing and delivery of environmental goods and services by local governments.

In 2005, the UNC EFC focused its attention on providing training, workshops, presentations, and other forms of technical assistance to groups, such as small water utilities, and 14 individual communities. The EFC focused heavily on building the capacity of training providers throughout the region and thus worked collaboratively with many other organizations, particularly with the states of Florida, Georgia, Mississippi, and North Carolina. Its conference pre-

REGION 4



sentations focused on capital finance strategies; wastewater, stormwater, and agriculture issues; fundraising and collaboration; easement and contract language; and disadvantaged communities. The EFC also spoke to various audiences on such matters as working with local governments on source water protection projects and how to communicate information about rates.

In its work with the individual communities, the UNC EFC worked towards improving a failing water system, expanding a sewer system, selecting a new consultant for a rate study, examining elements of financial policies, evaluating landfill franchise issues and landfill fees, proposing new ideas for a failing septic system, developing a business plan, and starting a regional water and sewer initiative.

The EFC also devised various other related activities during the year, such as designing a new course on the management and funding of local government stormwater program, carrying out a survey of water and sewer rates in North Carolina, working to improve water operator retention in North Carolina and Georgia, printing a series of financial resource materials, and drafting and reviewing comments on a model stormwater ordinance for North Carolina.

ACTIVITIES & ACCOMPLISHMENTS



Completed Projects & Initiatives

FINANCIAL MANAGEMENT GUIDE AND BOARD TRAININGS:

The Mississippi-based Southeast Regional Small Public Water Systems Technical Assistance Center (SETAC) awarded funding to the UNC EFC to provide financial planning assistance to small water utilities. As part of that effort, the EFC developed a detailed water utility financial management guide that targets individuals that sit on governing boards responsible for drinking water service. The guide focuses on the legal and financial obligations and expectations assigned to these boards under U.S. and North Carolina law (many financial management and rate-setting responsibilities are based on state law) and serves as the basis for statewide board trainings that provide financial planning assistance to small water



utilities in North Carolina with funds from SETAC. Over the year, the EFC completed three five-hour, individualized board trainings for the following communities in North Carolina:

- Gibson and Wagram, January 18, 2005
- Handy Sanitary District, February 9, 2005
- Pine Knoll Shores, February 23, 2005



- Davidson Water, Inc., March 11, 2005
- Woodfin Sanitary District, March 28, 2005
- Navassa, April 21, 2005

The UNC EFC also finalized and printed a series of financial resource materials, including a detailed water utility financial management guidebook, *Financial Leadership for Water Utility Boards*. The guidebook was designed for use in workshops attended by individuals that sit on governing boards responsible for drinking water service. To access the guidebook and other materials, visit www.efc.unc.edu/projects/WaterLeadership.htm.

STORMWATER ORDINANCE:

The North Carolina Division of Water Quality retained the UNC EFC to help develop the state's model stormwater ordinance. In 2005, the UNC EFC finished drafting and reviewing comments on the model stormwater ordinance. Local governments in the state will use the final version of the model ordinance to develop a post-construction program that best fits their long-term growth and fiscal needs and that complies with the requirements of Phase II stormwater regulations. For more information on the model stormwater ordinance, visit www.efc.unc.edu/projects/stormwater.htm.

ACTIVITIES & ACCOMPLISHMENTS

WEB SITE AND PUBLICATIONS:

The UNC EFC has several key publications available on its Web site:

- *The Painful Art of Setting Water and Sewer Rates*, an article by Jeff Hughes (downloaded more than 600 times)
- Phase II Stormwater Model Ordinance for NC (downloaded more than 475 times)
- Water and Sewer Needs and Capital Finance Strategies in Appalachia (downloaded more than 300 times)

Other publications available from the UNC EFC include:

- *Comparison of Drinking Water State Revolving Fund (DWSRF) Programs and Other Federal Assistance to Disadvantaged Communities in EPA Region 4*
- *One Person's Trash is Another's Treasure: What Landfill Capacity Statistics Mean to Different Levels of Government*

In 2005, the UNC EFC...

- ◆ Delivered 50 presentations, trainings, and facilitated discussions in many states.
- ◆ Distributed about 200 hard copies of the *Financial Management Guide* and Board Trainings to local governments.
- ◆ Made key documents accessible on its Web site that were downloaded in excess of 600 times.
- ◆ Attracted 425 members to listservs for local water managers and operators created in June 2005.
- ◆ Provided direct technical assistance to at least 14 communities in the states of Florida, Georgia, and North Carolina.

- *Defining Affordability: Targeting Federal Funds to Improve Water Quality to "Disadvantaged Communities" in North Carolina*
- *Examination of the Relationships Between Public Funding for Water and Sewer Infrastructure and Indicators of Need in the Appalachian Region*
- *Multi-level Financial Analysis of Residential Water and Wastewater Rates and Rate-Setting Practices in North Carolina*

Ongoing Projects & Initiatives

COLLABORATIVE ACTIVITIES

The UNC EFC focuses heavily on building the capacity of training providers throughout Region 4. As a result, most of the EFC's work is done in partnership with other organizations, particularly in Florida, Georgia, Mississippi, and North Carolina. In 2005, the UNC EFC collaborated with approximately 15 other organizations. These partner organizations are listed throughout this report where the specific project is described. The following two examples are 2005 collaboration efforts within the Environmental Finance Center Network itself:

Maine Asset Management Course

The UNC EFC helped the New England EFC run an asset management workshop for a group of Maine utilities. The workshop provided these utilities with a forum to share asset management information, practices, and views, and served to identify the most pressing financial, legal, and political obstacles to implementing advanced asset management techniques.

Rate-Setting Training for Southeast Rural Communities Assistance Partnership (SE RCAP):

The UNC EFC and the MD EFC held a rate-setting training workshop for staff and two Florida communities in Gainesville during the month of June.

ACTIVITIES & ACCOMPLISHMENTS

PRESENTATION, CONFERENCES AND MEETINGS

Capital Finance Strategies for Water and Wastewater Utilities

This course took place at the UNC School of Government in January. It was designed to provide approximately 30 utility practitioners with new skills and up-to-date information on capital finance planning strategies and funding resources. Courses included:

- New Trends and Development in Capital Finance and Budgeting
- Case Studies of Successful Capital Financial Planning
- Capital Planning Techniques and Tools
- Update on Available Finance Sources
- Techniques for Including Capital Costs in Rates and Fees

Water and Wastewater Capital Planning for Budgeting Staff

In January, the UNC EFC presented a session during a UNC School of Government/Capital Budgeting Course for finance directors, budget directors, and management on water and wastewater finance issues.



Water Resources for Local Government Officials

In February, the UNC EFC presented an overview session during another UNC School of Government course for municipal and county officials on water, wastewater, and stormwater.

Regional Water and Sewer Initiatives Workshop

During the Annual North Carolina City and County Managers Conference, the UNC EFC organized and presented at a four-hour intensive workshop on water and wastewater issues.

Basic Training for New Soil and Water Supervisors

In February, the UNC EFC assisted in course preparation and gave an oral presentation on water and agriculture issues as part of this conference.

Water 2030 Advisory Committee

Throughout the year, the center has served on the general advisory committee to the Water 2030 statewide water planning effort. This committee works to assess water and sewer needs in the state of North Carolina. The center also served on a specific task force to strengthen the operation of North Carolina water and sewer facilities and to develop a work plan of capacity building tasks.

Stormwater Model Ordinance Stakeholders

The EFC held a discussion to solicit input on a draft model stormwater ordinance that the center had prepared.

Stormwater Western Council of Governments meeting

At a meeting in Asheville, North Carolina, the EFC met with stakeholders from western North Carolina on stormwater concerns.

Mountain Land Trust Joint Fundraising

The EFC traveled to Asheville, North Carolina to facilitate a discussion of models for joint fundraising and collaboration among North Carolina mountain land trusts in January.

ACTIVITIES & ACCOMPLISHMENTS

Conservation Reserve Enhancement Program (CREP) Forestry Management Working Group

EFC staff advised stakeholders on easement and contract language to resolve disputes centering on the use of Clean Water Management Trust Fund money for CREP easements.

Perquimans County, North Carolina Water System

The EFC participated in detailed discussions about options for developing a water system large enough to accommodate a new subdivision in this county.

North Carolina Disadvantaged Community Program

The UNC EFC met with the North Carolina State Revolving Fund (SRF) coordinator to present information on disadvantaged community programs in other states in an effort to encourage the state to establish a disadvantaged community program. UNC EFC prepared an inventory of other programs in other Region 4 states and a cash flow model. For more information, see <www.efc.unc.edu/projects/DisadvCommunities.htm>.

North Carolina Environmental Cleanup Liability Reform Stakeholder Meeting

In January, the UNC EFC met with stakeholders to review draft legislation, refine legislation, and produce a bill that addressed consistency issues in environmental cleanup liability programs. For innocent landowners and prospective purchasers, the bill would make defenses to environmental cleanup liability consistent across all cleanup programs.

North Carolina Department of Environment and Natural Resources (NC DENR) Collection System Permit Capital Improvements Planning (CIP) Trainings

In April, in Raleigh, North Carolina, the UNC EFC presented two CIP trainings for NC DENR. Twenty participants attended the session, each representing communities applying for collection system permits. (New North Carolina law requires these communities to complete a CIP in order to obtain a permit.)

Land Trust Assembly

The EFC made a presentation at a land trust summit in Guilford County, North Carolina, and facilitated a discussion for about 110 attendees on joint fundraising and other collaborative efforts of 23 North Carolina land trusts.

North Carolina Water Operators Board

Jeff Hughes, director of the UNC EFC, has been serving on the North Carolina Water Operators Board and providing the board with guidance on water operator certification issues. The board's objective is to ensure that North Carolina facilities have qualified water operators.

Economic Subcommittee of the Environmentally Superior Hog Waste Technology Determination Advisory Committee

Richard Whisnant, senior advisor to the UNC EFC, became the chair of this committee. In this capacity, he continued to facilitate economic feasibility advice to the designee who had to decide what, if any, better hog waste technology should be used in North Carolina.

Protecting Your Drinking Water at Its Source

The EFC co-sponsored this drinking water workshop in Greensboro, North Carolina. EFC Director Jeff Hughes led a session on strategies and tips for organizations interested in working on source water protection projects with local governments.

North Carolina Section of the American Water Works Association and the Water Environment Association (AWWA/WEA) Customer Service Seminar

The EFC delivered a presentation in Wilmington, North Carolina, on how to communicate information about rates to clients at a workshop teaching utility managers and customer service professionals new ways to address the challenges in dealing with customers.

ACTIVITIES & ACCOMPLISHMENTS

Resource Enhancement, North Carolina Division of Marine Fisheries

The EFC assisted the North Carolina Division of Marine Fisheries by exploring the financial aspects of a Senate Bill on recycling oyster shells. The EFC delivered a memo to the division examining the cost of recycling oyster shells from large private companies in North Carolina.

Environmental Financial Advisory Board (EFAB)

In August, the UNC EFC participated in the summer EFAB meeting in San Francisco, California.

EPA Drinking Water Capacity Development Workshop 2005

This workshop, held in Atlanta at the end of summer, involved Regions 1, 2, 3, and 4. More than 70 representatives from EPA, state agencies, and other organizations involved in assisting water systems with capacity development attended the workshop. EFC Director Jeff Hughes presented on the topic of “Challenges to Applying Asset Management at the System Level” during one of the plenary sessions. EFC UNC staff also led the entire group of participants in a small-group case study exercise on “Assessing Community Capacity Development Needs.”

Joint Southeastern Stormwater Management and Erosion and Sediment Control Conference

Staff from the new UNC EFC satellite office in Atlanta made a presentation on financing local government stormwater programs.

Direct Technical Assistance

Brightwater, North Carolina. The EFC is working with the Brightwater community in North Carolina to improve a failing water system. Thus far, this work has involved a series of phone calls, a cash flow analysis, and a visit to the neighboring town of Hendersonville. Conversations with Hendersonville are underway with the goal of the town partnering with Brightwater on a new water system.

Laurel Park, North Carolina. The EFC is working with this community to expand its sewer system. Using material from its existing water leadership notebook, the EFC has been meeting with town and board officials of Laurel Park to lay out funding options for the expansion.

Orange Water and Sewer Authority (OWASA), Carrboro, North Carolina. The EFC assisted the OWASA utility with the selection of a new consultant to carry out an innovative rate study.

Water and Sewer Authority of Cabarrus County (WSACC), North Carolina. The Water and Sewer Authority of Cabarrus County is one of North Carolina’s largest regional sewerage providers. Work with the authority has been an extended project, wherein the EFC has had several meetings to provide guidance to WSACC in reexamining elements of its governance structure and financial policies. The EFC presented interview results and reports to the WSACC board this quarter.

Camden County, North Carolina. The UNC EFC has worked with Camden County on landfill franchise issues. This work has involved legal research and an assessment of the legality of their landfill franchising process.

Polk County, North Carolina. The EFC has been working with Polk County on landfill availability fee issues. The EFC produced a letter to the county attorney.

Nags Head, North Carolina. In the last quarter of the year, the UNC EFC has been working with the town of Nags Head to develop a draft proposal for an innovative finance program for failing septic systems.

Navassa, North Carolina. In October, the UNC EFC developed a rate study and business plan for the town of Navassa.

Watauga Region Governments. In November, EFC Director Jeff Hughes facilitated a work session for three local governments and a state university that want to work together on a regional water and sewer initiative.

ACTIVITIES & ACCOMPLISHMENTS

OTHER PRESENTATIONS, CONFERENCES AND MEETINGS

- Western North Carolina Stormwater Working Group, January 28, 2005, Asheville, North Carolina.
- American Water Works Association National Source Water Protection Conference, January 25, 2005. Palm Beach, Florida.
- Environmental Financial Advisory Board Meeting, March 14–15, 2005, Washington, D.C. Participated in the annual EFAB winter meeting and small group work sessions. Washington, D.C.
- Environmental Finance Center Network Meeting, March 15–16, 2005. Washington, DC
- Environmental Law for New City and County attorneys, April 1, 2005, Chapel Hill, NC. EFC presented a two-hour session on cleanup liability issues and brief overview of stormwater Phase II to 50 attendees.
- UNC School of Government, MPA Graduate Capstone Presentation on disadvantaged community programs, April 8, 2005 and on solid waste, April 8, 2005. The 20-minute presentations took place before an audience of approximately 30 people, including officials from the North Carolina Department of Natural Resources.
- Water Resources Research Institute (WRI) Conference, April 15, 2005, Raleigh, North Carolina. The UNC EFC presented the results of the Appalachian Regional Commission Water and Sewer Infrastructure Needs Study.
- AWWA Finance and Management Meeting, April 15, 2005, presentation to AWWA Finance Committee on the EFC rate survey project.
- Georgia water resources presentation, April 27, 2005, Athens, Georgia. Presentation of EFC capabilities to other funding agencies and communities.



- Urban Water Consortium, June 9, 2005, Wilmington, North Carolina. Presentation of North Carolina rates model.
- National Air & Waste Management Association Annual Conference, June 21–23, 2005, Minneapolis, Minnesota. Presentation before 1,500 conference attendees. The UNC EFC research assistant had an abstract published in the conference materials based on Appalachian Regional Commission Study research and thesis research.
- Council of Governments Regional Water Planning Session, June 28, 2005. Meeting to discuss methods of providing regional planning assistance to North Carolina communities.

New Initiatives

The UNC EFC initiated the following new projects during 2005:

STORMWATER MANAGEMENT COURSE

The UNC EFC designed a new School of Government course on the management and funding of local government stormwater programs. The course, titled, “Managing and Funding Local Government Stormwater Enterprises,” took place in June. The course provided local North Carolina government managers, finance directors, planners, and public works officials with an in-depth introduction to planning and funding stormwater utilities. More information is available at <www.efc.unc.edu/projects/stormwater_06_2005.htm>.

ACTIVITIES & ACCOMPLISHMENTS

STORMWATER IMPLEMENTATION GROUP (SWIG) WORKSHOPS

This is an ongoing seminar to improve the implementation of stormwater programs in North Carolina. The group consists of local and state government officials and other key persons involved in stormwater implementation. There are typically 40 individuals from approximately 20 counties at these monthly work sessions. The work sessions focus on topics involving stormwater implementation and address many questions now facing North Carolina communities about Phase II and other state stormwater programs.

NORTH CAROLINA WATER LISTSERV AND WATER OPERATORS LISTSERV

In May, the EFC created the North Carolina Water Listserv for Water Managers. The listserv has about 375 members and has been very active. The Water Operators listserv was also created with 50 members who work more specifically in the area of operations of water facilities.

NEW SATELLITE OFFICE IN ATLANTA, GEORGIA

The UNC EFC established a satellite office in Atlanta, Georgia, in June. The Atlanta EFC staff member has been building stronger relationships with organizations and communities in Georgia, Tennessee, and South Carolina.

STATEWIDE WATER & SEWER RATES SURVEY AND ANALYSIS

The UNC EFC began carrying out a comprehensive survey of water and sewer rates in North Carolina. Data from EFC questionnaires and from databases compiled by other agencies will be combined and used in EFC-designed models to project the financial impacts—at the state, utility and household levels—of different policy options and changes in consumption patterns.

WATER OPERATOR RETENTION

The UNC EFC was again successful in winning a grant from the Southeast Regional Small Public Water

Systems Technical Assistance Center (SETAC) based in Mississippi. This year's proposal involves a project to improve water operator retention and recognition, particularly focusing on the states of North Carolina and Georgia. This project will run from late 2005 to early 2007.

The UNC EFC intends to begin work in the following areas in 2006:

- Lend support to the Small Community Water Infrastructure Exchange (SCWIE) in an effort to enhance cooperation between state funding programs for utilities.
- Assist/present at the South Carolina Rural Communities Assistance Partnership (RCAP) Economic Development and Wastewater Management workshop in Columbia, South Carolina.
- Make presentations to between 800 and 1,000 elected officials on issues related to managing water resources at the North Carolina Essentials of Government Program.
- Promote best practices in retaining water operators, especially for Georgia and North Carolina.
- Prepare an Environmental Funding Matrix for the state of Georgia.
- Research water and sewer rate data for Georgia communities and municipalities.
- Address the areas of education materials, management, and full cost pricing as they relate to sustainable infrastructure.

Contact

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Outcomes

As a result of the activities and accomplishments outlined in the previous section, outcomes have included the following:

VERBAL FEEDBACK

Stormwater Management Course

Participants of the “Managing and Funding Local Government Stormwater Enterprises” course that took place in June provided the following remarks in the written evaluations of the course:

- “Very informative, enjoyed the presentations and meeting others in the state with similar issues, and those who have already implemented programs.”
- “Good information, a lot of resources, and good clarification of data”.
- “Extremely good course of instruction. Excellent speakers all around. I will look forward to more of this type of education. Excellent effort.”
- “Excellent course that pulls together all the elements. Really helped to bring focus to the issue of stormwater.”

One county waste department sent the following in a note to the UNC EFC: “The specialized financial assistance provided by the EFC has been invaluable in our efforts to provide accurate and reliable financial information and policy advice to the Board of County Commissioners. The EFC’s expertise in governmental financing has resulted in several recommendations regarding financial assumptions and responsible financial management practices for enterprise funds.”

Regarding the Resource Enhancement project for the North Carolina Division of Marine Fisheries, a state official described the report as “helpful in providing a non biased view of the situation.”

AWARDS

- The UNC EFC was again successful in winning a grant from the Southeast Regional Small Public Water Systems Technical Assistance Center (SETAC).
- Recognition Award Graduate Poster—presented by the North Carolina Water Resources Association Board for the EFC poster titled, “Water and Sewer Needs and Capital Finance Strategies in North Carolina’s Appalachian Region.”
- Bryan Fellowship Award—for an EFC research assistant to conduct a project titled, “Financial Management Assistance for Low-Income Communities” in Brunswick County, North Carolina. The award was presented by the Carolina Center for Public Service.

Impacts

Specific environmental issues addressed through the EFC’s 2005 activities and accomplishments include:

- Drinking water
- Stormwater
- Source water
- Agriculture
- Environmental cleanup
- Recycling and landfills





Region 4 Environmental Finance Center

AT THE UNIVERSITY OF LOUISVILLE



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BACKGROUND & SUMMARY

The Louisville Environmental Finance Center (EFC) was established in 1998 to serve the eight states of EPA's Region 4 (Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Alabama, Mississippi, and Florida).

In 2005, the Louisville EFC continued to provide and broaden its technical assistance and training services to communities regarding contaminated land revitalization and is working with a number of different cities on brownfield redevelopment. As part of that initiative, the EFC has been planning and developing more economically efficient and environmentally friendly incentives and other measures to encourage stable and sustainable human settlements. The EFC served as co-host, participant, or organizer to several community forums aimed at providing technical assistance to those interested in sustainable development activities.

The center is also working on smart growth planning for area development agencies, municipalities, and states, focusing on the role environmental insurance can play in mitigating risks and attracting investments in reclamation. The EFC also provided input to the efforts of the Environmental Financial Advisory

REGION 4



Board (EFAB) in addressing issues of financial assurance with regard to the Resource Conservation and Recovery Act (RCRA) and addressed ways of providing greater certainty over firms' financial capacity to remediate after completing ongoing operations.

The center continued to produce its *Practice Guides* series of briefing papers for local officials, volunteer boards, and citizen committee members, and also produced a number of published articles in trade magazines and academic journals. The *Practice Guide* series is focused on aspects of land use planning and information system development for promoting urban infill, brownfield redevelopment, and other aspects of smart urban growth.

ACTIVITIES & ACCOMPLISHMENTS



Completed Projects & Initiatives

COMPLETED PRACTICE GUIDES

These guides, along with those developed in the previous years, continue to be regularly downloaded by users, according to the EFC's Web site tracking system:

- Practice Guide #9: *Contaminated Properties: History, Regulations, and Resources for Community Members**
- Practice Guide #10: *Brownfield Redevelopment: Make It Possible!**
- Practice Guide #11: *Brownfields Program Placement in Local Governments**
- Practice Guide #12: *Public Involvement: How Active Participation in Environmental Issues and Decisions Makes Economic Sense and Broadens the Knowledge Base*
- Practice Guide #13: *Do You Want Utilities with That? Avoiding the Unintended Economic Impacts of Poorly Planned Growth on the Provision of Water, Sewer, Gas, and Electric Infrastructure*

TECHNICAL ASSISTANCE AND PUBLIC OUTREACH

- EFC staff organized an address by Julia Christensen, who presented "Reusing the Big Box" on September 27, 2005, at the Urban Design Studio in downtown Louisville. Ms. Christensen has traveled throughout the United States documenting the reuse of abandoned big box stores such as Target and Wal-Mart. This event was organized and sponsored by the Center and the Planning Student Organization (PSO). More than 60 people attended this event and the diverse audience included University of Louisville students and faculty; students and faculty from Spalding University and Jefferson Community

College; Metro Louisville government officials including the planning director and staff; a representative from inspections, permits, and licensing; economic development officers; planning commissioners from Louisville and Clarksville, Indiana; commercial and real estate developers, realtors, real estate analysts and consultants; architects, artists, and a representative from Federal Reserve Bank; and neighborhood association members. The Louisville Courier-Journal ran a front page story in the Sunday, September 25, issue and the EFC also arranged for Ms. Christensen to be a featured speaker on 89.3/WKPL's State of Affairs radio program (the local NPR station).

- EFC Director Peter Meyer provided review and comment on SMARTe, the new brownfields* electronic information system being developed by the EPA Cincinnati lab and the Interstate Technology and Regulatory Council (ITRC).

In 2005, the Louisville EFC...

- ◆ Posted six new practice guides.
- ◆ Published articles in eight magazines and other venues.
- ◆ Presented at more than nine meetings/conferences with up to 8,000 participants at each.
- ◆ Attracted 425 members to listservs for local water managers and operators created in June of 2005.
- ◆ Conducted four interactive workshops attended by 40 to 50 people each.

*Leveraged project, which is not funded through core grant money.

ACTIVITIES & ACCOMPLISHMENTS

- EFC Co-Director Lauren Heberle met with the Metropolitan Housing Coalition to provide technical assistance regarding housing and environmental policies.
- The EFC commenced a series of interactive workshops that provide technical assistance meant to improve community participation in brownfields redevelopment* with the intention of developing a replicable model. The first four workshops have been completed and attendance at each workshop has ranged from 40 to 50 people. These participants have a wide range of knowledge about brownfields and experience with urban redevelopment. They are a diverse set of stakeholders, including residents, developers, city officials (elected and appointed), property owners, business owners, realtors, nonprofit organizations, social service providers, and environmental specialists.

TECHNICAL ASSISTANCE WITH PUBLIC SECTOR BROWNFIELDS INSURANCE ACQUISITION*

As part of this support task, the EFC provided technical assistance to brownfield projects attempting to use environmental insurance in Louisville, Kentucky; Kansas City, Missouri; and Kenosha, Wisconsin, in order to develop a practice guide on best approaches for municipal uses of this risk transfer tool to revitalize brownfields. Extensive telephone consultations were held with municipal agency officials and their advisors in all three cities.

The Louisville, Kentucky, project's initial prospective purchaser dropped out, but two new ones entered the picture, reflecting a major turn-around in demand

for industrial land in the metro area, and thus for the target site. One of these two had reached the final negotiations stage by September, using as its environmental counsel the same attorney with whom the EFC has dealt when advising the development agency about a possible public purchase. A purely private effort is now underway to acquire and redevelop the site. Given the level of private sector interest, the city's industrial brownfields regeneration efforts moved on to other sites, the EFC is supporting their efforts to reclaim an abandoned chemical site that has yet to be fully remediated, but which could anchor an area-wide revitalization.

The Kansas City, Missouri, project only began negotiations in May—with the master developer selected in late March, and, in the end, was unable to arrange a satisfactory agreement with that party within the 180-day negotiation period specified in the Request for Qualification (RFQ) process. Effective September 2004, the project restarted its efforts with the second choice master developer. The EFC supported this second round effort, which came to its completion before by July 2005. In the interim, assistance to the Kansas City Port Authority, which was dealing with brownfield issues, has primarily involved issues associated with liability insurance coverage for a BRAC closure for which the authority is acting as the Local Redevelopment Authority (LRA).

The Kenosha, Wisconsin, project encountered a failure on the part of its selected fixed price remediation contractor to deliver a guaranteed schedule and price for the work on which the firm bid and had to reopen the process. In September 2004, Kenosha officials completed review of the final proposal from their new remediation firm and were in the process of getting municipal council approval of all contractual matters and documents. The Potentially Responsible Party (PRP)—the property owner—continues to work closely and constructively with the city, and the EFC remains on call for assistance with that and other sites in the city. This very specific technical assistance activity terminated in Summer 2005.

*Leveraged project, which is not funded through core grant money.



ACTIVITIES & ACCOMPLISHMENTS

COMPLETED PUBLICATIONS

EFC staff continues to succeed in disseminating technical assistance and policy evaluation broadly through trade and academic mediums. Staff and associates have published articles in the following publications:

- Karen Cairns, with David Wicks, completed “Environmental Education: The Keystone for Green City Initiatives” for the Spring-Summer 2005 issue of *Sustain Magazine*.
- Peter Meyer, with Kris Wenstedt, Lauren Heberle, and Anna Alberini, completed “Public Policy to Attract Private Capital to Contaminated Sites: The Relative Values Developers Assign to Different Incentives”^{*} for K. Millar and P. Nathanail (eds) *Proceedings of the 2005 CABERNET Conference*. 2005: Laganside Development Corp., Belfast, NI.
- Peter Meyer published a commentary on the Atlantic Station brownfield regeneration project^{*} in Atlanta in the January 2005 issue of *Partners*, the newsletter of the Community Affairs Department of Federal Reserve Bank of Atlanta.
- Peter Meyer with Lin Ye and Sumdha Mandpe published “What IS Smart Growth? – Really?” in the January 2005, issue of the *Journal of Planning Literature*.
- Kris Wernstedt and Peter Meyer published “What Do Developers Want? Attracting Private Investment to Brownfields”^{*} in *Brownfield News*. IX(3):12.
- Karen Cairns published “Environmental Education: The Keystone for Green City Initiatives” in *Sustain: A Journal of Environmental and Sustainability Issues*, Issue 12, Spring/Summer 2005: pp. 44-53.

COMPLETED WORKING PAPERS

- Karen Cairns placed *Environmental Education Unit Study: Model Community Meetings and Activities to Address Citizenship Skills and Public Participation in Environmental Decision-making* on the center Web site, under “working papers.”



COMPLETED PRESENTATIONS

EFC staff and associates presented at multiple major national and international conferences and at several regional venues. These public presentations serve to disseminate technical advice, analysis, and assistance. The audiences consisted of public and private practitioners, other academic researchers, and advocacy agencies.

- For the April 2005 Urban Affairs Association Meetings (500 participants), Lauren Heberle and Peter Meyer presented “Public-Private Partnership Problems: Mismatched Public and Private Sector Perceptions of the Brownfield Issue and the Effects on Redevelopment Policy”^{*}; Carol Norton presented “Brownfields Outside the Box: Offsite Impacts and the Returns to Local Remediation Subsidies”^{*}; and Karen Cairns presented “The Long and Rocky Road: A Case Study of Public Involvement and Participatory Planning in Environmental Justice Policy Issues.”
- Peter B. Meyer presented “Public Policy to Attract Private Capital to Contaminated Sites: The Relative Values Developers Assign to Different Incentives”^{*} for the April 2005 Conference of CABERNET (Concentrated Action on Brownfields and Economic Regeneration NETwork) in Belfast, Northern Ireland. (150 participants)
- Peter B. Meyer presented “Contamination Information: Source of Stigma or Investment Stimulus?”^{*} at the 2005 Annual Conference of the Association of European Schools of Planning, Vienna, Austria, in July. (400 participants)

^{*}Leveraged project, which is not funded through core grant money.

ACTIVITIES & ACCOMPLISHMENTS



- Presentations at *Brownfields 2005** in Denver in November that involved EFC staff included (6,000 participants):
 - “Moving Brownfield Redevelopment Forward Through Smart Growth Initiatives in the United States,”* Lauren Heberle part of the “Growing Smarter” Panel with Adhir Kackar, EPA; Ferd Belz, Cherokee Denver; and Tara Penders, Baltimore, MD.
 - “Negotiating Environmental Insurance: Pitfalls and Opportunities for Public Sector Representatives,” a session involving two attorneys and two brokers as presenters, organized by Peter Meyer.
 - A session of EPA STAR research products relating to brownfields* included Peter Meyer, proposed by project officer Matt Clarke, EPA, Office of Policy, Economics and Innovation, National Center for Environmental Research.
 - A session on “The Future of Brownfield Environmental Risk Management,”* that included Peter Meyer, proposed by Susan Neuman, president of the Environmental Insurance Agency, a private brokerage firm.
 - Lauren C. Heberle and Diane Bates from The College of New Jersey presented a paper entitled “Plots against the American Dream: Framing Responses to Smart Growth Incentives” at the American Sociological Association Meetings. (8,000 participants)

- Peter B. Meyer took the lead in preparing a paper on “Preferences and Perceptions: Efficiency Losses from Public Sector Failures to Recognize Brownfield Developers’ Valuations of Alternative Incentives”* that was presented at the Southern Economics Association Meetings. (400 participants)
- Peter B. Meyer participated in writing “Attracting Private Investment to Contaminated Properties: The Value of Public Interventions,”* a paper presented to the annual meeting of the Association for Public Policy Analysis and Management. (500 participants)
- Lauren C. Heberle presented financing strategies for land conservation to the Conservation Committee of the Kentucky Sierra Club. (50 members)
- Lauren C. Heberle reviewed and discussed policy implications of the Louisville Metropolitan Housing Coalition State of Housing report at their annual meeting and press conference. (50 in audience and regional TV news coverage)

Ongoing Projects & Initiatives

ONGOING PRACTICE GUIDES

Status of *Practice Guides* developed by the EFC include:

- **Practice Guide #W: *Financing Local Public Infrastructure: Determining an Effective Revenue Stream That Supports Local Projects***

Status: In process; graduate research assistant Allison Houlihan has now taken the lead on this *Practice Guide* and will move forward with assistance from Dr. Sarah Coffin.

SUPPORT FOR LAND CLEANUP AND REVITALIZATION EFFORTS*

This expanded activity is intended to involve training workshops for revitalization efforts involving all

*Leveraged project, which is not funded through core grant money.

ACTIVITIES & ACCOMPLISHMENTS

forms of contaminated lands. This effort is not limited to the brownfields focus that the EFC has had in the past, but includes Superfund, the Resource Conservation Recovery Act (RCRA), Base Realignment and Closure (BRAC), and federal facilities, as appropriate and as needed by communities in Region 4.

- The EFC remains available for the Spartanburg County Community & Economic Development Department and the ReGenesis organization in Spartanburg, South Carolina, in support of its efforts associated with one of the 16 demonstration projects of the Environmental Justice Interagency Work Group.
- Dr. Peter Meyer, director of the EFC, continued ongoing technical assistance on area-wide approaches to brownfields*, working with brownfields and economic development offices in Louisville, Cincinnati, Indianapolis, St. Louis, Trenton (New Jersey), New York, and other metropolitan areas that consulted with him on issues.
- Dr. Meyer expanded his support for the development of regional sustainable development planning in northern Kentucky, conducting a series of economic forecasts for the region.
- Dr. Meyer continues to play a formal role in facilitating and participating in the consultations of the Environmental Financial Advisory Board's RCRA Financial Assurance Project, including follow-up reporting on the state of the environmental insurance industry and its willingness to underwrite certain forms of financial assurance and bonding.



*Leveraged project, which is not funded through core grant money.

ORGANIZATIONAL DEVELOPMENT AND EFAB SUPPORT

This activity primarily involved EFC Director Dr. Peter Meyer:

- Continued involvement with two Environmental Financial Advisory Board (EFAB) task forces, on (1) Innovative Environmental Financing Tools, and (2) Preventing Future Non-Funded Abandoned Sites, and in initial conference calls on the financing tools task force.



- Represented the EFC at EFAB's summer meeting, during which he serves as an expert witness, and participated in the EFC Network's summer meeting, both in San Francisco in August.
- Continued a project with Dr. Thomas Lyons of the School of Urban and Public Affairs, University of Louisville. Collaborated with Dr. Lyons to examine "Entrepreneurship Opportunities and Responses in the Brownfield Redevelopment Arena—Factors Affecting Capacity to Capitalize on Opportunities in an Emerging Marketplace" through research on developers that have pursued contaminated land redevelopment under state voluntary cleanup programs in Region 4 and other states.

WEB SITE MAINTENANCE AND TRACKING

Due to continued Web site tracking, the EFC is able to determine that Web site usage first peaked in the spring of 2005, and then again during the fall, when

ACTIVITIES & ACCOMPLISHMENTS

Chart 1

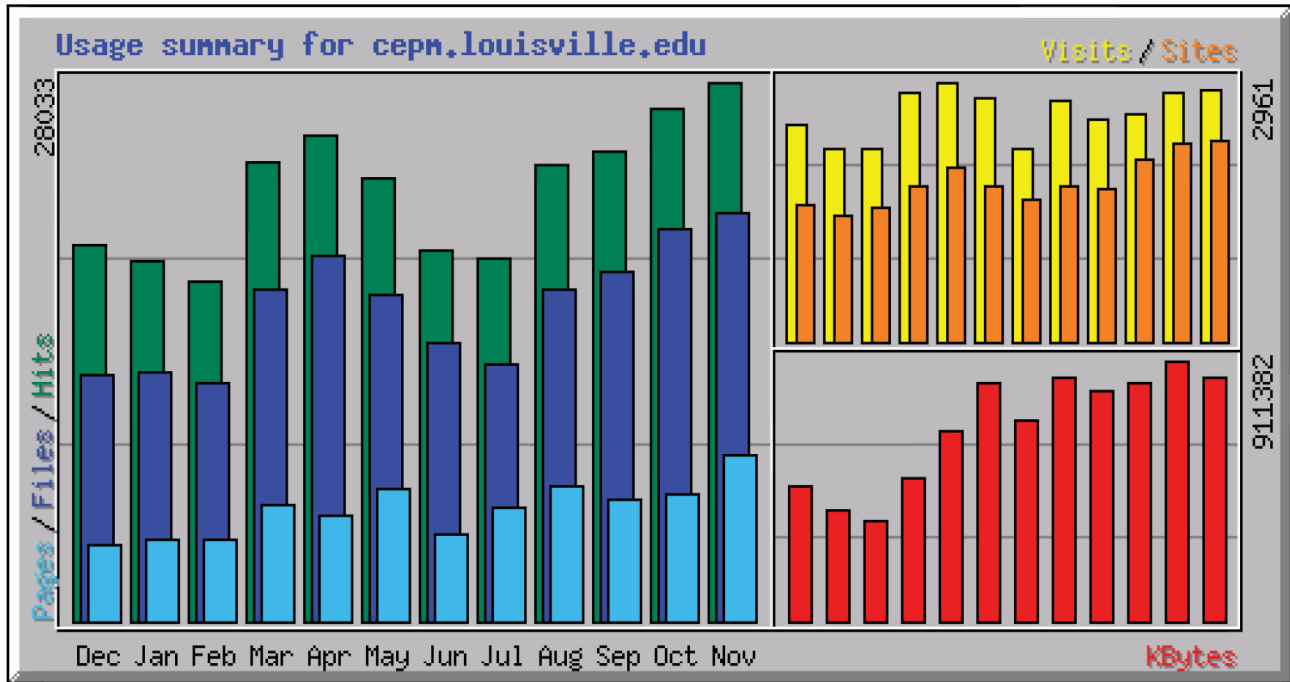


Chart 2

Summary by Month										
Month	Daily Avg				Monthly Totals					
	Hits	Files	Pages	Visits	Sites	KBytes	Visits	Pages	Files	Hits
Nov 2005	934	707	286	94	2286	855138	2847	8606	21236	28033
Oct 2005	857	656	211	91	2241	911382	2836	6557	20364	26580
Sep 2005	813	606	209	86	2078	835585	2589	6294	18206	24407
Aug 2005	764	553	224	81	1751	808945	2528	6960	17146	23712
Jul 2005	606	432	187	88	1778	853986	2735	5817	13395	18816
Jun 2005	641	481	149	73	1613	702935	2194	4496	14433	19245
May 2005	743	547	220	89	1765	827774	2777	6828	16979	23047
Apr 2005	839	631	181	98	1987	660372	2961	5459	18938	25184
Mar 2005	766	556	193	90	1769	501062	2811	5998	17245	23771
Feb 2005	630	443	149	78	1515	350313	2191	4178	12428	17648
Jan 2005	605	416	135	70	1439	385675	2176	4214	12922	18766
Dec 2004	628	413	129	79	1565	472612	2469	4003	12821	19481
Totals						8165779	31114	69410	196113	268690

ACTIVITIES & ACCOMPLISHMENTS

it began a steady increase (Chart 1). This might be attributed to the academic calendar. A detailed summary by month appears in Chart 2.

An evaluation of the 'Top 30' total URL hits per month reveals that the EFC's *Practice Guides*, some of the Working Papers, and the International Urban Planning and Environment Association (IUPEA) conference continue to draw people to the site. The EFC continues to work on improving the accessibility of information on the site and will be reorganizing the site to make it easier to update more frequently.

Several of the EFC staff's public speaking opportunities have been the direct result of the presence of the center Web site, and those public engagements have led to requests for technical assistance.

New Projects & Initiatives

Several new initiatives have been undertaken as Dr. Lauren Heberle, the new co-director of the EFC, took on more responsibility for staff hiring, grant writing, project development, and outreach.

NEW PRACTICE GUIDES

Staff have been developing several new *Practice Guides* during this calendar year:

- *Citizen Participation and Its Contributions to Financial Efficiency in Environmental Planning* (Karen Cairns and Susan Opp)
- *Farmland Preservation and Conservation: Conservation Tools, Financing Strategies, and Economic Benefits* (Preston Scott Lacy)
- *Learning from Sustainable Military Base Practices: Energy and Water Conservation Systems That Can Save Municipalities Money* (Erika Marelich)
- *Attracting Investors to Brownfields: Lessons for Communities About What Developers Really Value** (Peter Meyer)

*Leveraged project, which is not funded through core grant money.

NEW TECHNICAL ASSISTANCE TO FACILITATE COMMUNITY PARTICIPATION IN BROWNFIELDS REVITALIZATION*

This new project is headed by EFC Co-Director Lauren Heberle. In collaboration with local government officials, community organizers, and Dr. Thomas Lyons from University of Louisville, Dr. Heberle headed up preparation and launch of activities to develop a model and provide technical assistance to increase community participation in brownfields redevelopment in economically distressed neighborhoods. The project will serve to develop a nationally replicable model. The area in Louisville, Kentucky, selected for consideration is the Park Hill Corridor, known for its former industrial uses, abandoned buildings, vacant lots, physically isolated neighborhoods, extreme poverty, and problems with known contamination. The first phase of this project includes a series of educational, participatory workshops for local stakeholders across the entire community to begin to build knowledge of the brownfields redevelopment process and to break down misperceptions about the area that are based on race and class. This is a three-year project expected to end in September 2008.

NEW TECHNICAL ASSISTANCE TO THE PRIVATE SECTOR

EFC staff members Carol Norton and Karen Cairns initiated and continue dialogue with and support to the director of development Midwest for YUM! Brands regarding the improvement of the company's policies on deconstruction, demolition, and handling of demolition waste. The EFC has also included the Kentucky Pollution Prevention Center in this conversation. Further meetings are expected throughout 2006, when one demolition project begins. This initiative is expected to turn into a substantial project and potential model for best practices.

ACTIVITIES & ACCOMPLISHMENTS



NEW ORGANIZATIONAL DEVELOPMENT/BUILDING CENTER NETWORKS

- EFC Co-Director Lauren Heberle initiated a report that will connect the profitability of smart growth policies and practices for brownfield redevelopment projects.* The report will include case studies of brownfield redevelopment projects that have either benefited from smart growth policies or have implemented smart growth principles in the redevelopment plan. The work here involves connecting with agencies and individuals involved in the cases and gathering key information about what connections were made between smart growth and brownfields redevelopment in each scenario.

- EFC Co-Director Lauren Heberle worked with EPA's Environmentally Responsible Redevelopment and Reuse Initiative (ER3) to develop a Memorandum of Cooperation (MOC) that would outline the Region 4 EFC's role in participating in an ER3 network of experts.
- Ms. Heberle will serve on the U.S. Regional and Local Land Revitalization Planning Team (part of Phase 4 of EPA's United States and German Bilateral Working Group on Redevelopment of Contaminated Sites)
- The center offered, and will continue to offer, its support for the Louisville Green City Partnership among Metro Louisville, Jefferson County Public Schools, and the University of Louisville. This support included developing a smart growth class for Jefferson County School Teachers Continuing Education program and continued technical assistance to the partnership taskforce.

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Outcomes

As a result of the activities and accomplishments outlined in the previous section, outcomes have included or will include the following:

- Ongoing, frequent dissemination and use of *Practice Guides*.
- Opportunities for dissemination of information through papers and journal and magazine articles.
- Opportunities for education and technical assistance ranging from presentations to training workshops.
- Active outreach and education stemming from the EFC Web site.
- Ongoing technical assistance opportunities for communities and other stakeholders.
- Influence on the ways in which a major fast food corporation engages in environmentally friendly practices.

Impacts

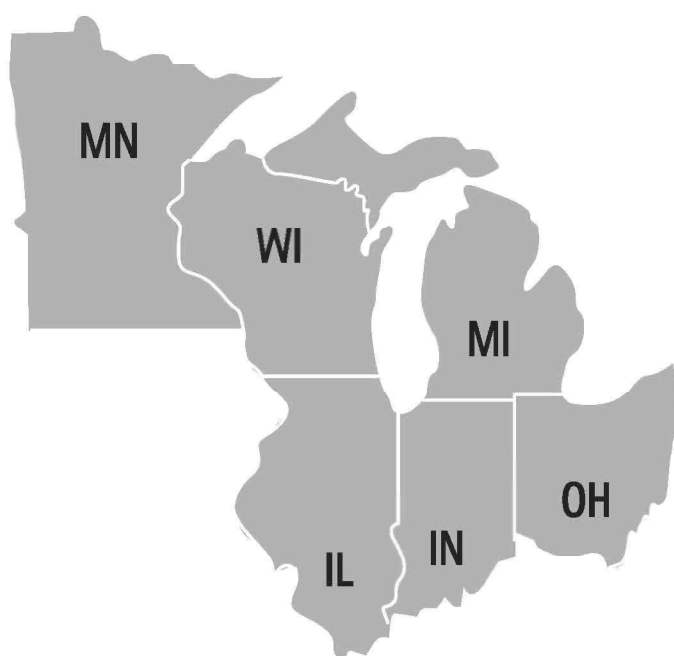
Specific environmental issues addressed through the EFC's 2005 activities and accomplishments include:

- Brownfields*
- Sustainable development
- Smart growth planning

*Leveraged project, which is not funded through core grant money.

Region 5 Environmental Finance Center

AT CLEVELAND STATE UNIVERSITY



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BACKGROUND & SUMMARY

The Environmental Finance Center (EFC) at Cleveland State University assists communities as well as public, private, and nonprofit sector entities in the Great Lakes (EPA Region 5) states of Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. Specifically, this EFC (known as the Great Lakes EFC or GLEFC) helps build innovative, cost effective, and high-quality strategies for environmental improvement and sustainable economic development.

The GLEFC is housed within the Maxine Goodman Levin College of Urban Affairs and provides technical assistance, training, and applied research. The center assists communities and other entities in solving financial problems related to environmental facilities and resources. Services include financial and economic analysis and strategies, policy analysis and planning, urban redevelopment community advisory services, research and information services, and training seminars and conferences. The center utilizes many tools to assist clients, including financial and budget analysis, market and impact analysis, best practice reviews, training seminars and conferences, focus groups and community visioning/strategic planning processes, and environmental planning and program evaluation.

REGION 5



In 2005, as in prior years, the GLEFC continued to provide technical assistance, applied research, seminars/training, counsel, and testimony to local, state, federal; and nonprofit organizations and clients throughout Region 5. The GLEFC operational portfolio included several new projects as well, driven by continuing partnerships with federal, state, and local governments spanning two or more years. In addition, the GLEFC is engaged in policy-related work with the committees of EPA's Environmental Financial Advisory Board (EFAB), in developing strategies for the efficient and effective management and financing of water and wastewater utilities.

ACTIVITIES & ACCOMPLISHMENTS



Completed Projects & Initiatives

URBAN REDEVELOPMENT TECHNICAL ASSISTANCE

The GLEFC provided urban redevelopment technical assistance to several communities and organizations throughout Region 5. Participants at the GLEFC technical assistance sessions represented the following organizations:

- Bolinds Incorporated
- Perry County, Ohio
- David Kramer Development
- Rib Lake, Wisconsin
- Syracuse EFC

TRAINING NEEDS OF COASTAL RESOURCES DECISION MAKERS IN OHIO'S LAKE ERIE BASIN

The GLEFC published the second in a series of articles in *Coastal Management: An International Journal of Marine Environment, Resources, Law, and Society*, Volume 33, Number 3, July–September 2005, on a study conducted for the National Oceanic and Atmospheric Administration (NOAA), Old Woman Creek National Estuarine Research Reserve, Ohio Sea Grant Program, and the Ohio Department of Natural Resources. The purpose of the study is to identify the information and knowledge needs of local coastal resources decision-makers in the Ohio Lake Erie basin. The article determines that training providers and local coastal resources decision-makers have differing perceptions of knowledge and informational needs and training venues. Based on these findings, the article suggests a role for state and federal agency training providers as coordinators and facilitators of an enhanced learning network among decision-makers.

In 2005, the GLEFC...

- ◆ Composed at least two articles for publication.
- ◆ Convened meetings and provided technical assistance sessions for up to 45 attendees.
- ◆ Attended/presented at six conferences.
- ◆ Participated in three international projects.

LOCAL BENEFITS FROM STEWARDSHIP, LAKE ERIE COMMISSION

The GLEFC conducted a project to define the benefits accruing to a local jurisdiction/broad spatial area from efforts in environmental stewardship (externally funded by the Lake Erie Commission). Local decision-makers are key in achieving many objectives of the Lake Erie Protection and Restoration Plan and other water quality initiatives because of their role in land use and zoning decisions, infrastructure construction and maintenance, storm water management, and economic development activities. The GLEFC developed a comprehensive understanding of the knowledge base and expertise in the Lake Erie basin regarding the beneficial economic and fiscal impacts of coastal and watershed stewardship.

JOURNAL ARTICLES

The GLEFC staff composed an article, "The Use of Focus Groups for Design and Implementation of Environmental Administrative Programs: A Comparison of Two State-Level Processes in Ohio," for publication in an academic journal resulting from GLEFC's experience utilizing focus groups in the development and implementation of administrative public policy programs. The article highlights the advantages that focus groups provide compared to other forms of data collection methods in the development of public policy programs. (Publication is pending.)

ACTIVITIES & ACCOMPLISHMENTS

The GLEFC also published an article, “Cleveland’s Industrial Land Bank” (*Brownfield News*, August 2005), on the creation of an industrial land bank by the city of Cleveland as a vehicle to accumulate and market vacant land to attract industrial businesses back to Cleveland.

Ongoing Projects & Initiatives

The GLEFC worked on a broad array of environmental public policy initiatives in 2005 that included ongoing as well as collaborative activities:

BROWNFIELDS ONE-STOP SHOP FORUM (BOSS FORUM)

The GLEFC convened the fifth year of the BOSS Forum, in collaboration with the Ohio Brownfields Finance Partnership. The BOSS Forum’s quarterly meetings brought together federal, state, and local government officials with environmental engineers, investment and commercial bankers, insurance executives, real estate professionals, and developers to discuss financial and programmatic solutions to aid Ohio’s small- and medium-sized communities in their redevelopment. The GLEFC convened four meetings throughout 2005:

- January 13, with 40 in attendance
- April 7, with 22 in attendance
- July 7, with 24 in attendance
- October 6, with 16 in attendance

The BOSS Forum schedules several brownfield redevelopment project profiles to be presented at each meeting with the intent of having attendees, who are brownfield professionals, provide a supportive critique of the individual projects. The critiques provide access to information and organizational, operational, and funding-related strategies. The early BOSS meetings focused on projects that were brought forward by larger cities. Now that brownfield redevelopment capacity has expanded in Ohio’s metropolitan areas,

the attention has shifted to the state’s medium and small cities. This was a leveraged project, not funded with the core grant.

BEST PRACTICES IN LAND BANK OPERATION

In early 2005, the GLEFC commenced a major effort to support the city of Cleveland’s Economic Development Department with the development of a region-wide strategy for an industrial and commercial land bank. The concept of land banking was not new to the city; however, the typically residential practice required a national study to model its applicability for an industrial or commercial framework. The GLEFC published its Best Practices report in June 2005, after six months of study. The report is available at the GLEFC Web site at <<http://urban.csuohio.edu/glefc>>.

LAND BANK STRATEGY DEVELOPMENT

Subsequent to the research and identification of land bank best practices, the GLEFC also created a strategic framework for the development of a new industrial/ commercial land bank for the city of Cleveland. This major effort not only involved extensive research and study, but also involved the collaboration of several regional partners in both the public and private sectors, as a needs assessment for commercial/industrial land. The report, *Strategy for the Implementation of an Industrial Land Bank*, is available on the GLEFC Web site at <<http://urban.csuohio.edu/glefc>>. This model continues to be used for implementation and further financing discussions in the region, and has received national attention for its concepts and strategy recommendations.

NUTS AND BOLTS OF BROWNFIELD REDEVELOPMENT FOR LOCAL COMMUNITIES TRAINING

The GLEFC, in collaboration with the EPA Region 5 Brownfields Office, the U.S. Department of Housing and Urban Development (HUD), and the Northeast–Midwest Institute, conducted an interactive training session for local development professionals on financing the redevelopment of environmentally contaminated

ACTIVITIES & ACCOMPLISHMENTS

properties. The GLEFC staff participated in developing the finance curriculum and conducted the financing portion of the week-long Nuts and Bolts training program in Chicago. The June 2005 Nuts and Bolts session included the development and use of three real-life case studies introducing the seminar participants to financing strategies in different settings, as well as redevelopment strategies in greater Chicago, utilizing industrial, commercial, and residential development as practical examples. The case studies provided participants with practical knowledge that they could relate to their own communities. For the past four years of the course, the GLEFC staff has prepared and devised the site pro forma statements and related educational curriculum for this important component of the course. In addition, the GLEFC conducted the final capstone presentations resulting from students' work on the pro formas. The June 2005 Nuts and Bolts training seminar attracted 45 participants. The Nuts and Bolts task is a leveraged project, not funded with the core grant.

PREPARATION FOR 2006 NUTS AND BOLTS OF BROWNFIELD REDEVELOPMENT FOR LOCAL COMMUNITIES TRAINING

The GLEFC, in collaboration with the EPA Region 5 Brownfields Office, HUD, and the Northeast-Midwest Institute, is hosting the Nuts and Bolts Brownfield Re-development training course in Cleveland in June 2006. In Fall 2005, the GLEFC initiated the planning stage for the annual week-long Nuts and Bolts seminars. The GLEFC will co-host, plan, and conduct the week-long brownfield finance training program for 2006. The Nuts and Bolts task is a leveraged project, not funded with the core grant.

USEFUL LIFE WHITE PAPER

The GLEFC participated as a member of the EFAB Useful Life Subcommittee, which was charged with exploring ways to create new sources of funding or to leverage existing sources of funding to address the significant unmet environmental needs that face communities across the country. The subcommittee drafted a white paper to underscore the linkage between capital financing strategies and the useful life of capital assets. EPA published the white paper in April 2005.

GREATER CLEVELAND LEAD ABATEMENT FINANCE PROGRAM

The GLEFC, in collaboration with EPA HUD, the city of Cleveland, and Cuyahoga County, Ohio, participates as a subcommittee chair for the Greater Cleveland Lead Advisory Council (GCLAC), a consortium of state, county, and municipal governments, and nonprofit organizations convened to reduce the incidence of lead poisoning through lead abatement procedures. This \$1.2 million regional effort focuses on the ways in which local partnerships can work together on specific topics, including infrastructure and sustainability (financing for long-term lead elimination), advocacy and outreach, and medical and workforce development issues. The GLEFC chairs the infrastructure and sustainability committee; and a major focus of the GLEFC's work is a best practices study to identify successful financing strategies that are adaptable for lead remediation and abatement in northeast Ohio. This work commenced in late 2005 and will continue through 2006.

In 2005, the GLEFC convened a focus group with members of the GCLAC to identify the parameters of the best practices study. An additional survey was conducted as planned with the subcommittee to better define the scope of work for a best practices scan for the sustainability of lead abatement practices.

In addition, the GLEFC initiated work on a review of model local government ordinances to assist the city of East Cleveland in its local efforts to better define its own lead hazard prevention capacity.

The best practices reports will serve as a guide for new strategy development in Cleveland and East Cleveland.

EPA INTERN

The GLEFC hosted Christopher Gollan, an EPA (post-graduate) intern on outplacement rotation from January to June 2005. Mr. Gollan assisted the GLEFC in managing the best practices in industrial land banks project.

ACTIVITIES & ACCOMPLISHMENTS

CAPFINANCE, BOISE STATE UNIVERSITY ENVIRONMENTAL FINANCE CENTER

The GLEFC continues to partner with the Boise State University EFC on providing training for the CAPFinance capital planning software program to local government water and sewer utilities. The CAPFinance training seminars have proved invaluable in addressing the growing need for new approaches to financing and planning for capital improvements and asset management to maintain a jurisdiction's capital stock.

BROWNFIELD NEWS EDITORIAL BOARD

The GLEFC Executive Director Kevin O'Brien serves on the editorial board of *Brownfield News* magazine, as the brownfield finance editor.

PRESENTATIONS, CONFERENCES, AND MEETINGS

Capital Asset Planning, Management, and Finance in Greater Cleveland—Town Meeting sponsored by Congresswoman Stephanie Tubbs-Jones and the Northeast-Midwest Institute. The GLEFC collaborated with the office of Congresswoman Stephanie Tubbs-Jones and the Northeast-Midwest Institute in organizing a town meeting of community leaders in greater Cleveland to discuss the economic importance of public sector investment in the construction and maintenance of infrastructure. The GLEFC executive director gave a presentation to the 50 participants on the economic impact of investment in infrastructure, and the greater Cleveland capital investment needs and investments over the past 25 years.

Rural Community Assistance Partnership (RCAP) Conference, Washington, D.C. The GLEFC presented at a workshop called "Rural Brownfield Redevelopment Strategies" to an audience of 50 local government and tribal officials. The presentation reviewed the recent increases in capacity in brownfield development in rural Ohio.

"Brownfields 2005" National Conference, Denver Colorado, sponsored by EPA. The GLEFC served as a panel moderator at the national brownfields

conference. The GLEFC presented "Land Banks and Land Trusts as a Tool for Brownfield Redevelopment" as the moderator of a panel titled, "Marketplace of Ideas." Approximately 30 people attended.

Council on World Affairs. The GLEFC hosted several groups of academics and government officials from China and Canada traveling throughout the United States through the CWA's International Visitor Leadership Program seeking information on maintaining economic growth with concerns about the environment and environmental finance and sustainability. The GLEFC executive director presented the visiting officials with profiles of projects on brownfield finance, sustainable development, and asset management as guiding examples on managing environmental finance and sustainability.

National Vacant Properties Campaign Conference, Cleveland, Ohio. The GLEFC made a presentation on the Industrial Land Bank Strategy and its impact on the reuse of vacant land. The presentation, based on the data, information, and analysis of the GLEFC's work in developing a strategy for an industrial land bank in Cleveland, identified that many of the vacant properties in Cleveland were environmentally contaminated and required alternative strategies.

Cleveland's Industrial Land Bank Program—Press Conference Announcing the Release of the Industrial Land Bank Strategy, Cleveland, Ohio. Cleveland Mayor Jane Campbell and the GLEFC Executive Director announced the release of the city's Industrial Land Bank Strategy and program on the site of the first industrial property to enter the program (a recently secured industrial property that had received environmental remediation). The press conference served as the kick-off to the land bank operation of the city of Cleveland.



ACTIVITIES & ACCOMPLISHMENTS

New Projects & Initiatives

INDUSTRIAL LAND BANK STRATEGY DEVELOPMENT

The GLEFC assisted the city of Cleveland in the development of a strategy to design an industrial land bank to accumulate and market vacant properties with the specific mission of attracting industrial companies to the city. The GLEFC conducted a best practices study and an implementation schedule of activities outlining an optimum mission, operations, and governance structure, and financing to empower the strategy to reuse industrial land. The GLEFC will assist the city of Cleveland in initiating the policy and process for the land bank.

CURRICULUM DEVELOPMENT IN REAL PROPERTY ASSET MANAGEMENT FOR LOCAL GOVERNMENTS IN CROATIA

The GLEFC developed a curriculum for conducting seminars for Croatian local government officials (funded by U.S. Agency for International Development [USAID] through the Urban Institute mission in Zagreb, Croatia, and with the programmatic support of the Unger Croatia Center for Local Government Leadership at CSU). The Urban Institute coordinates all government training in Croatia for USAID and collaborates with the Unger Center to provide management and finance training throughout Croatia. The GLEFC worked with the Urban Institute mission in Zagreb, Croatia, in developing a curriculum to teach local government officials on the importance of managing the land and building assets owned by the public sector (in the de-evolution from the central government of former Yugoslavia). The central thesis of the program was to facilitate the transfer of property from public to private ownership when the conversion would facilitate private economic growth.

Capital Asset Management Seminar for Local Government Officials in Croatia

The GLEFC conducted seminars in Zagreb, Rijeka, and Sibenik, Croatia, on capital asset management for local government officials and academics (from the Zagreb School of Economics and Management, the University of Rijeka, and the College of Sibenik) in March, October, and December 2005 (funded by USAID, directed by the Urban Institute, and with the programmatic support of the Unger Croatia Center for Local Government Leadership). The mission of the seminars was to introduce local government officials to the best practices in financing infrastructure in both the European Union and the United States. Many practices and tools described in the seminars have not yet been introduced into practice in Croatia. The intent of the seminar was to stimulate dialogue and debate on the best solutions to managing and financing capital assets.

Financing of Capital Assets in Croatia

The GLEFC also conducted seminars for local government officials and academics on financing capital assets in Zagreb, Rijeka, and Sibenik, Croatia, in October and December 2005 (funded by USAID, directed by the Urban Institute, and with the programmatic support of the Unger Croatia Center for Local Government Leadership). The mission of the seminars was to introduce local government officials to the best practices in financing infrastructure in both the European Union and the United States.

URBAN REDEVELOPMENT METRICS PROJECT

The GLEFC initiated a study for the Ohio Department of Development (ODOD) and the Clean Ohio Revitalization Fund to assess the impacts of the Clean Ohio Revitalization Fund investments on leveraging local public and private investments in the redevelopment of Ohio brownfields. In 2005, the GLEFC identified six project sites to review data and information. The scope of work has been approved by ODOD. GLEFC has begun data collection as well

ACTIVITIES & ACCOMPLISHMENTS

as the development of a preliminary template to gather cost metrics (i.e., types of and how funds were spent on each site). The project will develop a needs assessment for the kind of development finance related metrics that can be utilized in assessing the cost or outcomes of urban redevelopment proposals or projects.

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Outcomes

As a result of the activities and accomplishments outlined in the previous section, outcomes have included or will include the following:

- Reports and feedback from the 2005 events where the GLEFC presented, facilitated, and/or coordinated were favorably received.
- Regarding the GLEFC's leading role in the strategy and program design and implementation for the city of Cleveland's industrial land bank process, both city and county staff continue to cite the GLEFC as the leader in helping bring this to fruition.
- During a public press conference, Cleveland's Mayor Jane Campbell described the GLEFC's leadership role in the development of the industrial land bank strategy as entrepreneurial.
- The GLEFC was highly rated for its presentation and participation in EPA's Nuts and Bolts of Brownfield Development training event held in Chicago in June 2005. On a scale of 0 to 10 (10 being the highest), the GLEFC staff was rated as 9 across all engagements for the week-long session.
- The Council on World Affairs issued an appreciative letter to the GLEFC for its continued participation and support of CWA's International Visitor Leadership Program. The GLEFC's Asset Management, Capital Improvements Planning, and Capital Finance seminars in March, October, and December 2005, in Croatia were also highly rated by the 70 participants as well as the sponsor, Urban Institute, and the Zagreb School of Economics and Management.

Impacts

Specific environmental issues addressed through the EFC's 2005 activities and accomplishments include:

- Brownfields/redevelopment
- Coastal/watershed stewardship
- Stormwater management
- Land use/zoning
- Lead abatement

The impact of the GLEFC's work is demonstrated through policies, strategies, practices, and programs implemented as a result of the GLEFC's involvement and activities. Specific impacts include the following:

- The Clean Ohio Revitalization Fund project was undertaken to determine the structure and program rules of the fund. The GLEFC's work resulted in design of the structure of the policy rules governing the program.
- Brownfields One-Stop Shop (BOSS) Forum resulted in 14 federal agencies collaborating on public development projects for brownfield redevelopment. The BOSS strategy is ongoing today, with quarterly sessions delivering public opportunities for communities to present their brownfield redevelopment concepts in a conversational forum format that allows for direct feedback from federal agencies.



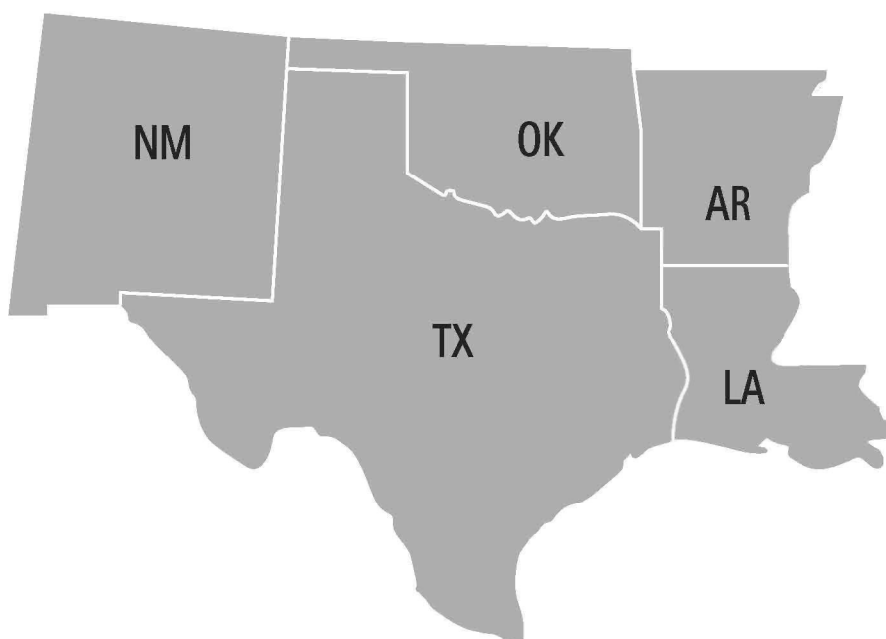
PERFORMANCE MEASURES

- The GLEFC's work with the Old Woman Creek National Estuarine Research Reserve (NERR) assisted the reserve in framing the structure and design of its coastal resources management training program.
- The GLEFC's work with the National Oceanic and Atmospheric Administration (NOAA) allowed NOAA to develop a synthesis of program activities and define the trends of these activities across its reserves, and subsequently initiate strategies for measuring outcomes and performance with regard to coastal training activities of the NERRS.
- The GLEFC's recent work with the city of Cleveland to develop a strategy and program design for the city's industrial land bank program, has provided a platform for redevelopment opportunities throughout greater Cleveland. The strategy and design have received broad public review, by the press, the economic development community, and the newly elected Mayor of Cleveland. In addition, the concept has attracted attention on regional and national levels.



Region 6 Environmental Finance Center

AT THE NEW MEXICO INSTITUTE OF MINING
AND TECHNOLOGY



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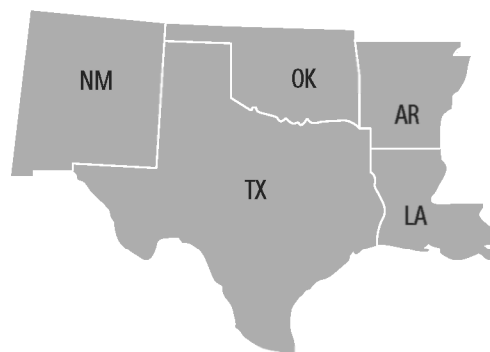
BACKGROUND & SUMMARY

The U.S. Environmental Protection Agency's (EPA's) Region 6 Environmental Finance Center is located at the New Mexico Institute of Mining and Technology (New Mexico Tech) and serves New Mexico, Texas, Oklahoma, Arkansas, and Louisiana. The core mission of the New Mexico Environmental Finance Center (NM EFC) is to help state, local, and tribal governments meet environmental infrastructure needs and regulatory compliance through state and local capacity building and technical information transfer. Capacity building includes enhancing technical, managerial, and financial capabilities to achieve consistent and sustainable regulatory compliance and develop sustainable infrastructure.

The NM EFC assists in local capacity building by:

- Examining alternative approaches to meeting regulatory compliance or environmental infrastructure needs.
- Empowering communities to act as the “drivers” for their own projects.
- Assisting with procuring professional services.
- Presenting funding alternatives.
- Acting as a bridge among federal, state, local and tribal governments.
- Presenting neutral analyses of issues or projects.
- Gathering stakeholder input.
- Capacity development activities for Region 6 states
- Capacity development program for New Mexico
- Capacity development for tribal water systems
- Tribal operator certification program
- Feasibility analysis of water treatment for small public water systems
- Independent analysis of leak detection technology for Albuquerque
- Water system collaboration project for New Mexico
- Arsenic treatment outreach efforts for New Mexico water systems

REGION 6



The NM EFC has been extremely active during the past year and has experienced significant growth in its program activities. The major projects that were active or completed in 2005 include the following, each of which is described in more detail in this report:

ACTIVITIES & ACCOMPLISHMENTS



Completed Projects & Initiatives

CAPACITY DEVELOPMENT ACTIVITIES FOR REGION 6 STATES

The EFC continued to assist Region 6 with implementation activities associated with capacity development strategies, as required under the 1996 Safe Drinking Water Act (SDWA) amendments. This work included activities in three different categories described as follows:

Technical Information Gathering and Transfer

The NM EFC attended workshops and conferences to present papers, interact with states and technical experts, and gather information on techniques, approaches, and tools that could be used by the states. The topics of workshops included new regulations under the SDWA, asset management, capacity development, drought management, and water conservation.

Capacity Development Implementation Assistance to Region 6 States

The NM EFC worked with Region 6 states on capacity development assistance. Discussions with individual states included sharing information regarding capacity activities in other states and discussing potential capacity development training programs. The NM EFC has continued discussions with the New Mexico Environment Department (NMED) on ways to improve its capacity development program, particularly in capacity assessments, prioritization of water systems, and potential water system assistance. These activities continue under a separate contract with NMED. The NM EFC also has a separate contract from the Texas Commission on Environmental Quality (TCEQ) to conduct capacity assessments for noncompliant small water systems.

EFC Network Assistance

The NM EFC works with the other EFCs in the network on projects, answering questions, providing

In 2005, the NM EFC...

- ◆ Held 10 training events during for tribal water operators and managers.
- ◆ Attracted 143 participants to these events, including representatives from water systems from 20 of the 21 Region 6 tribes in New Mexico.
- ◆ Completed 112 assessments of community water systems.

information, and other collaborative activities as needed. The NM EFC also attends the Environmental Financial Advisory Board (EFAB) meetings twice a year as well as the EFC director's meetings.

CAPACITY DEVELOPMENT PROGRAM ASSISTANCE FOR NEW MEXICO ENVIRONMENT DEPARTMENT

The NM EFC continued to assist NMED with revisions to the capacity development program under a contract initiated in 2004. The assistance consists of three main tasks: 1) revising the capacity assessment procedures and conducting capacity assessments of water system; 2) assisting in developing a new prioritization program; and, 3) training NMED staff to conduct capacity assessments.

The NM EFC developed a three-tiered approach to capacity assessment. The systems are prioritized into tiers based on factors such as compliance history,



ACTIVITIES & ACCOMPLISHMENTS

customer complaints, requests for funding, drought concerns, and other known problems or issues with the systems. They are also prioritized based on the need for information.

- **Tier 1:** Systems with the greatest concerns; requires a significant amount of information. Receives an in-depth assessment process that requires interviews and multiple days to complete.
- **Tier 2:** Systems with minimal concerns; consists of a questionnaire that takes approximately two hours to complete.
- **Tier 3:** Systems with no known concerns; consists of a short questionnaire that takes about 30 minutes on the phone to complete.

The NM EFC has completed 112 assessments of community water systems across New Mexico. Based on the information gathered during the assessments and discussions with NMED staff, the assessment forms have been revised several times. The assessments have been used by the NMED to direct technical assistance to communities of concern and determine sufficient capacity for Drinking Water State Revolving Loan Fund approval.

The new prioritization process will involve gathering data from the Safe Drinking Water Information System (SDWIS), the capacity assessments, and other sources to determine what systems have a need for funding and where they should be ranked on the priority list.

The final component of the project is to train NMED field staff to oversee the assessment process. The training will also involve managerial and financial capacity in general.

STRENGTHENING PUBLIC HEALTH PROTECTION THROUGH THE MULTIPLE BARRIER CONCEPT

The NM EFC continued its efforts to assist tribal water systems in improving public health protection. The NM EFC frames the assistance in terms of maxi-

mizing the use of each of the barriers—source, treatment, and distribution. Water system managers and operators need to clearly understand each of these barriers to prevent contamination from entering the system or reaching users.

One of the measurements of the overall effectiveness of the program is the compliance record of the tribal water systems. The NM EFC and EPA Region 6 developed a graph that plots the number of Total Coliform Rule (TCR) violations by month. The number of violations continues to decrease each year; and although the summer months show peaks in the number of violations, these peaks are decreasing each year. The NM EFC plans to provide assistance and training to the water systems to continue to reduce the summer peaks. The graph showing compliance trends for 2000 to 2005 is included in the section on performance measures.

A summary of the various activities of the NM EFC in assisting tribal water systems is presented as follows. Because the tribal assistance is an ongoing, multi-year project, the activities provided are similar from year to year.

Compliance Monitoring and Technical Assistance

The NM EFC coordinates the sampling required under the Safe Drinking Water Act, and also assists with the development of Consumer Confidence Reports, Total Coliform Rule compliance and sampling plans, operation and maintenance support, and troubleshooting.

Managerial and Financial Capacity Building

The NM EFC assists tribes with utility ordinances and bylaws, rate-setting, and budgeting.

Public Education and Outreach

The NM EFC assists with the development of educational display boards, brochures, pamphlets, and handouts. In addition, the NM EFC participates in community events, such as environmental, health, and water fairs.

ACTIVITIES & ACCOMPLISHMENTS

Information Management Activities

The NM EFC gathers information for EPA Region 6 regarding system inventories, new systems, populations, system classification, and other necessary data.

Under these broad headings, the EFC has provided a wide array of assistance including developing utility boards, setting utility rates, developing public education campaigns on the need to charge for water, assisting with sampling and analysis, sharing information regarding potential funding sources, providing training classes, and helping with preparation of Consumer Confidence Reports (CCRs). A particular focus of the 2005 program was to reduce the occurrences of “summer hits.” During the warmer summer months, the number of total coliform hits generally increases. The EFC is offering training and assistance to try to reduce these occurrences.

The fact that the compliance situation has improved dramatically throughout the past five years has provided the opportunity to move the assistance activities to the next level. The NM EFC has now fully implemented its “beyond compliance” program to encourage tribes to make improvements beyond simply doing the minimum to meet compliance. These efforts are aimed at optimizing water system operation. Activities in this area include the following:

Multiple Barrier Evaluations and Associated Training

Multiple Barrier Evaluation training is similar to sanitary survey training, but is presented from an operator focus, rather than a regulatory focus. It is intended to present the “big picture” to operators and to help them understand the reason why sanitary deficiencies are a problem. In addition to the training, the NM EFC performs Multiple Barrier Evaluations (MBEs) on water systems. These MBEs are voluntary and identify potential health and safety concerns with the water systems. A report is presented to the system staff, describing the potential concerns.

Groundwater Comprehensive Performance Evaluations

Groundwater Comprehensive Performance Evaluations (CPEs) provide a snapshot of whether a water system is fully optimized in all three barriers (i.e., source, treatment, distribution) and provides an indication of what factors are preventing the system from being fully optimized if it is not meeting all of the optimization goals. The NM EFC has linked elements of the groundwater CPE program to the MBE activities for a more comprehensive approach.

Performance-Based Training

For 18 months, the NM EFC worked with Process Applications, Inc. and EPA Region 6 on Performance-Based Training (PBT). This training was intended to provide water operators with the skills necessary to conduct water system studies, troubleshoot problems, collect and analyze water quality data, and communicate more effectively with management. Six pueblos participated in the program. The formal training activities were completed in January 2005. The group decided to continue to meet on a quarterly basis to share information and work together informally to solve water system concerns. Three quarterly meetings were held in 2005, and these meetings are anticipated to continue through 2006.

TRIBAL OPERATOR CERTIFICATION PROGRAM

In January 2003, the NM EFC gave its first Region 6 Tribal Water Operators Certification Exam. Since that time, the EFC has been providing Operator Certification Exams approximately every quarter (in some cases additional exams are given to meet tribal operator needs.) In 2005, 14 operators received certification and one operator achieved a Level 3 water distribution certification, which is the highest distribution category. This program is only open to operators of tribal drinking water systems in EPA Region 6.

In addition to the Operator Certification Exams, the Tribal Operator Certification Program includes the Tribal Utility Advisory Committee and Gap

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Certification Training, which are described in more detail as follows:

Tribal Utility Advisory Committee

As part of the initial development of the Operator Certification Program, the NM EFC formed a Tribal Utility Advisory Committee (TUAC). Membership was open to all tribes and pueblos in Region 6. After the completion and approval of the Operator Certification Guidelines, the TUAC is now focused on review of the training program, modifications to the guidelines, proposals for future activities, and the annual review of the program.

Gap Certification Training

The NM EFC provides training opportunities for tribal water operators to fill voids or needs that are not being met by other training providers. The topics for these classes are suggested by tribal operators through surveys, based on responses provided on evaluation forms for other EFC trainings, suggestions of the TUAC, or based on observed needs. During 2005, the EFC held gap trainings on the Safe Drinking Water Act Regulations, Disinfection, Arsenic Rule compliance, and Multiple Barrier Evaluations (non-regulatory sanitary surveys).

INDEPENDENT ANALYSIS OF LEAK DETECTION TECHNOLOGY FOR ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY

The Albuquerque Bernalillo County Water Utility Authority received a grant from the Governor's Innovative Fund to investigate a proactive leak detection technology. This technology is being installed and operated by Fluid Conservation Systems (FCS) Inc., a manufacturing company that developed and sells the technology. The approach involves installing data loggers on top of meters within the water system. The data loggers listen for leaks in the middle of the night to determine if there is a potential leak in the system. If there is a leak, the units go



into alarm mode. A patroller is used to pick up the alarm signals at the various units placed within the system. A correlator can then be used to determine the location of the leak within the pipe.

The intent is to capture information regarding leaks of which the system operations staff might be unaware. The theory is that not all leaks will surface; some leaks will remain below ground level and can leak for a long time before detection. With a more proactive approach to leak detection, it is hoped that more leaks can be found and that the unaccounted for water losses can be reduced.

The EFC's role in this project is two-fold: 1) to investigate the economics of using the FCS technology within the system to improve overall asset management and water conservation in the system, and 2) to investigate five years worth of leak data (FY 00 to FY 04) to provide a more complete picture of the current leak situation within the system. The first portion of this study is similar to work that the EFC did for the city of Albuquerque when it was investigating a non-destructive pipe evaluation technology. The second portion also builds upon previous work of the EFC when it analyzed five years worth of leak data and provided a profile of leakage within the city water system.

This project was initiated in 2004, continued through 2005, and is expected to be completed in late 2006.

FEASIBILITY ANALYSIS OF WATER SUPPLY FOR SMALL PUBLIC WATER SYSTEMS

Under a subcontract with Parsons Infrastructure and Technology Group, Inc., the NM EFC participated in a project to identify and analyze alternatives for small drinking water systems that are not in compliance with drinking water regulations. The NM EFC evaluated the capacity of water systems to determine their ability to implement compliance alternatives. In addition, the NM EFC assisted in the evaluation of the financial condition of the water systems. This project built upon the previous efforts during 2004 and

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included 15 water systems. This project was completed between June and August of 2005.

WATER SYSTEM COLLABORATION PROJECT FOR NEW MEXICO

The NM EFC received a contract from the NM Department of Finance and Administration, with the funding from the Office of the State Engineer (OSE), to work with 10 groups of water systems throughout the state to determine if these systems would agree to any type of collaboration. This project is a follow-on to a project completed the previous year for three groups of water systems. The NM EFC teamed up with Rural Community Assistance Corporation (RCAC) and New Mexico Rural Water Association (NMRWA) to complete this project. In addition, several state agencies formed a management team to assist with direction for the project, including the OSE–Local Government Division, NMED, and the New Mexico Finance Authority.

The individual make-up of the participants and participating water systems in each group varied. In one case, two groups that were located in somewhat close geographic proximity agreed to form one larger group, leaving nine groups total. The project used a facilitated set of meetings to lead the groups through the following stages:

- **Convening.** The group will agree that the participants reflect the people that need to take part in these facilitated meetings in order to develop a successful regional water system. If not, others will be invited and a second convening meeting will be held.
- **Learning.** The group will agree on ground rules, review the existing water delivery system(s), and learn about the current context that has consequences for the development of a regional water system. One or more presentations will be made on potential management and facility design options. Two meetings will be allocated for learning.
- **Planning and Choosing.** The committee will determine the options most acceptable to people once they have considered factors such as the history, context, and design options. One or two meetings will be allocated for planning and choosing.
- **Changing.** A final meeting will present the final option(s) preferred by the group, along with a visual report of the process. While all meetings will be open to the public, those impacted will be especially encouraged to attend this meeting and learn what the group is proposing.

Each group was assigned a team including a facilitator and a technical advisor who worked together to lead the group through the stages.

One goal of the project was to have each regional entity develop a document that would specify the nature of the collaboration, including the short- and long-term goals of the group. The intent was to have these documents structured as some type of inter-governmental agreements so that they were somewhat binding on the groups.

By the end of the project, seven of the nine collaborative groups signed agreements to work together and had developed a plan for the short- and long-term needs of the communities. Many of the groups are currently seeking funding to implement these plans.

ARSENIC RULE COMPLIANCE OUTREACH EFFORTS FOR NEW MEXICO WATER SYSTEMS

The NM EFC has been working in a partnership with Sandia National Laboratory, University of New Mexico, the Waste Education Research Consortium (a partnership of New Mexico State University, University of New Mexico, New Mexico Tech, and Dine College) to assist water systems that might be impacted by the new Arsenic Standard, which limits arsenic concentrations to 10 parts per billion. It is estimated that 80 to 90 water systems in New Mexico will not meet the new standard, as nearly half of the potentially affected systems currently have arsenic levels between 10 and

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15 parts per billion. Due to sampling and analytical uncertainties at low levels of arsenic and variations based on geologic and climatic conditions, it is unclear how many water systems will ultimately be required to remove arsenic or provide some other method of compliance.

The arsenic outreach partnership is providing direct one-on-one assistance or assistance in regional clusters to water systems that might be impacted by the arsenic standard. The assistance will include free arsenic testing by Sandia Labs, assistance with compliance options, and information regarding appropriate funding sources. Thus far, the NM EFC has assisted approximately eight non-tribal and 10 tribal water systems with arsenic-related concerns.

NEW MEXICO FINANCE AUTHORITY ENGINEERING AND ENVIRONMENTAL ASSISTANCE

In July 2005, the NM EFC began a project with the New Mexico Finance Authority (NMFA) to assist with engineering and environmental reviews. Drinking Water State Revolving Fund (DWSRF) applicants are required to submit various documents to receive funding, including an Environmental Information Document (EID) and a Preliminary Engineering Report (PER). One of the tasks of the NMFA, as the administrator of the funds, is to ensure that these documents meet all the funding criteria and that the EID complies with the State's Environmental Review Process (SERP).

One of the difficulties the NMFA has had regarding environmental documents was related to difficulties interpreting the SERP. To resolve this issue, the NM EFC worked with EPA Region 6 and NMFA to develop a revised SERP to clarify the requirements and streamline the review process.

The NM EFC also reviewed environmental documents from water systems and provided guidance for water systems seeking DWSRF funds.

ARSENIC PILOT PROJECT

The NM EFC worked with a tribal water system to evaluate a new method of arsenic removal. This system was installed in the summer of 2005. Initial sampling and analysis showed that the system was not effectively removing arsenic from the raw water. The equipment supplier reformulated the media, and the test was restarted in the fall of 2005. The sampling after this reformulation also showed disappointing results and the pilot was concluded in December 2005. This method of arsenic removal is currently being tested at another site in southern New Mexico. The results of that testing will be compared to the results of this pilot.

New Projects & Initiatives

The new initiatives for the NM EFC are highlighted as follows. These initiatives build upon the work efforts of the NM EFC for the past several years.

ADVANCED ASSET MANAGEMENT – PHASE II

In 2005, the NM EFC embarked on a new initiative to assist with the promotion and implementation of advanced asset management for smaller water systems, as discussed previously in the section titled, "Capacity Development for Region 6 States." This effort is considered to be a long-term, multi-phased program. Phase I was started in FY 06 and will continue until early FY 07. In FY 07, the NM EFC will begin Phase II of this program, which includes working with a few water systems in Region 6 to develop an Asset Management Plan and to test the Advanced Asset Management approach developed in Phase I.

USDA TECHNICAL ASSISTANCE AND TRAINING GRANT

Tribal communities often do not have established rate schedules to require residents to pay for water and wastewater services. In other cases, a rate structure is established, but it is either not adequate to cover the actual costs of operation or residents are unwilling to

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pay the rates, or both. This situation means that tribal water and wastewater utilities do not function, in general, as enterprise operations. Many tribal water and wastewater utilities in New Mexico have expressed an interest in setting rates that cover the cost of service and have described frustration with their inability to collect rates if they do enact a rate schedule. In the past, assistance has been provided to tribal communities by several organizations to help them develop an adequate schedule, but to date these efforts have been largely unsuccessful.

Some of the issues regarding why rates are not effectively collected are deeply cultural and specific to tribal communities. The difference in tribal social structures might explain the failure of so many distinct attempts to institute rates in tribal communities. All of these efforts relied on proven techniques that have worked in non-tribal communities and did not fully consider the specific cultural differences that prevented success. Unless an effort is made to understand and embrace the culture of these communities and devise a solution that would be acceptable to the community, a system of rates will never be established that can be effectively implemented.

The NM EFC is submitting a proposal to the U.S. Department of Agriculture to use a process of community collaborative learning to address this issue in a site-specific way.



REGIONALIZATION/COLLABORATION EFFORTS IN NEW MEXICO

The NM EFC has been working with the New Mexico Office of the State Engineer (OSE) for the past two years on a project to promote regional collaboration between water and wastewater utilities. The OSE would like to expand this effort to additional communities and additional services in the next year.

PILOT PROJECT TO PROMOTE ASSET MANAGEMENT, WATER AUDITS, AND FINANCIAL PLANNING

The NM EFC will be working in partnership with the New Mexico Rural Water Association (NMRWA) and the Rural Community Assistance Corporation (RCAC) to pilot three programs in small community water systems—asset management, water auditing, and financial planning. The pilot projects will help demonstrate the value from these types of approaches in terms of system improvements. Another goal of the pilot projects is to assess the feasibility of funding agencies using these tools to help ensure that their investments are operated and maintained in the best possible way. This project will be completed under a grant from OSE.

CLEAN AIR INVESTMENT FUND

The NM EFC worked in collaboration with the EFC in Region 9 to complete a procedures document to establish a Clean Air Investment Fund (CAIF) in the El Paso/Juarez/Dona Ana County air shed. The project determined that at the time of completion (December 2002) there was not a need for the fund in terms of a regulatory relief valve mechanism (i.e., addressing high compliance costs). However, the CAIF has remained in the attention of the Clean Air Act Advisory Committee, and discussions have been reestablished to see if the fund can be used for other non-regulatory purposes, such as voluntary compliance, voluntary supplemental environmental projects, additional monitoring, research, and others. The NM EFC might work on this project if interest continues.

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EFC NETWORK COLLABORATIONS

The NM EFC has collaborated with other EFCs this past year on a variety of projects and efforts:

- Clean Air Investment Fund, including the NM EFC (leader) and EFC9.
- Resource Based Source Water Protection Collaborative Efforts with EPA Office of Ground Water and Drinking Water, with the NM EFC, Syracuse EFC, Maryland EFC, Boise State EFC, and UNC EFC.
- Rate-Setting, with Syracuse EFC and Maryland EFC.

CONFERENCES

- Made presentation at workshop at the Arsenic Treatment Technologies for Small Water Systems, Indian Health Service, January 6, 2005, Albuquerque, New Mexico.
- Participated in workshop at the Professional Training Techniques, Indian Health Services, January 11–13, 2005, Albuquerque, New Mexico.
- Participated in workshop at the Association of Boards of Certification Annual Conference, January 25–27, 2005, New Orleans, Louisiana.
- Participated in the Sandia National Labs Arsenic Workshop, January 28, 2005, Jemez Pueblo, New Mexico.
- Participated in the Amigos Bravos Clean Water Act, Clean Water Workshop, January 29, 2005, Taos, New Mexico.
- Participated in the Environmental Financial Advisory Board Meeting, March 15–16, 2005, Washington, D.C.
- Participated in the Environmental Finance Center Network Directors Meeting, March 17, 2005, Washington, D.C.
- Participated in Tribal Roundtable at the New Mexico Rural Water Association Annual Conference, March 21, 2005, Albuquerque, New Mexico.
- Attended EPA webcast “TCR Implementation Issues,” March 23, 2005.
- Participated in National Tribal Environmental Council “Emergency Response Planning and Preparedness” workshop, April 6–7, 2005, Albuquerque, New Mexico.
- Delivered presentation and participated in IHS Annual Workshop, April 12–13, 2005, Durango, Colorado.
- Delivered presentation and participated in Regions 6 and 8 Capacity Development Workshop, April 19–21, 2005, Dallas, Texas.
- Attended EPA webcast “Stage 1 Disinfectant and Disinfection By-Products Rule,” April 27, 2005.
- Participated in Asset Management Workshop, May 5–6, 2005, Washington, D.C.
- Participated in Area-Wide Optimization Meeting – Region 6, May 11–12, 2005, Albuquerque, New Mexico.
- Participated in New Mexico Water and Wastewater Association Northern Short School workshop, May 16, 2005, Taos, New Mexico.



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- Attended EPA webcast “Consumer Confidence Reports,” May 25, 2005.
- Delivered presentation and participated in Regions 5, 7, 9, 10 Capacity Development Workshop, July 28, 2005, Portland, Oregon.
- Participated in Environmental Financial Advisory Board Meeting, August 15–16, 2005, San Francisco, California.
- Participated in workshop of the New Mexico Water Research Symposium, New Mexico Water Resources Research Institute, August 16, 2005, Albuquerque, New Mexico.
- Made presentation and participated in Regions 1, 2, 3, and 4 Capacity Development Workshop, August 30–31, 2005, Atlanta, Georgia.
- Participated in Rural Community Assistance Corporation Management Workshop, September 7, 2005, Zia Pueblo, New Mexico.
- Made presentation and participated in workshop at the American Water Works Association, Rocky Mountain Section, Annual Conference, September 27–28, 2005 Albuquerque, New Mexico.
- Participated in workshop at the Third Annual Drought Summit, October 6, 2005, Albuquerque, New Mexico.
- Participated in the Waste-Management Education & Research Consortium (WERC) Sandia National Labs Arsenic Workshop, October 11, 2005, Albuquerque, New Mexico.
- Made presentation and participated in New Mexico Infrastructure Financing Workshop, October 25–27, 2005, Albuquerque, New Mexico.
- Made presentation and participated in Association of Drinking Water Administrators Annual Conference, October 18–20, 2005, St. Louis, Missouri.
- Made presentation and participated in State/Tribal/EPA Ground Water/Source Water Protection Representatives Meeting, November 1–3, 2005, Acoma Pueblo, New Mexico.
- Made presentation and participated in Clean Air Act Advisory Committee Meeting and Subcommittee Meeting on Economic Incentives and Regulatory Innovations, November 16–17, 2005, El Paso, Texas.
- Made presentation and participated in WERC/Sandia National Labs Arsenic Workshop, December 8, 2005, Santa Fe, New Mexico.
- Made presentation and participated in WERC/Sandia National Labs Arsenic Workshop, December 9, 2005, Jemez Pueblo, New Mexico.

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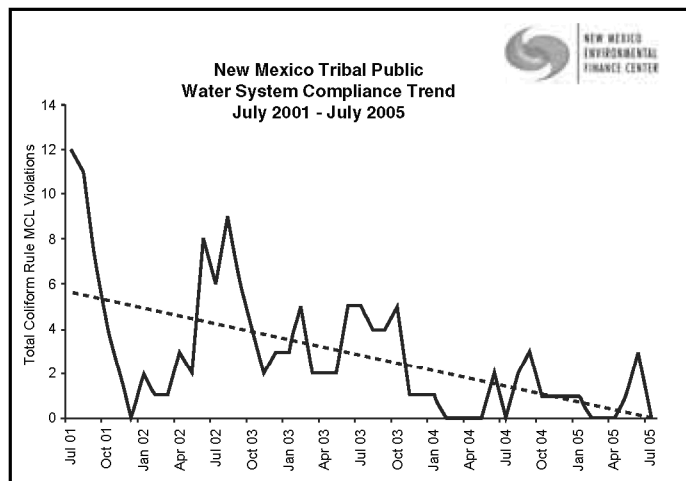


PERFORMANCE MEASURES

Outcomes

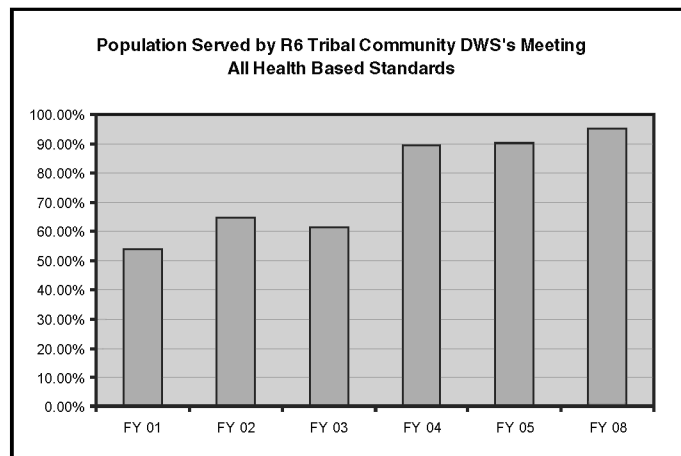
As a result of the activities and accomplishments outlined in the previous section, outcomes have included the following:

- Nearly every client with which the NM EFC has worked has come back to the NM EFC for an additional or follow-up project.
- Representatives from water systems from 20 of the 21 EPA Region 6 tribes located in New Mexico attended training events.
- Compliance with the Total Coliform Rule, one of the most critical requirements of the Safe Drinking Water Act, has greatly increased throughout the years. Part of this improved compliance is a direct result of a major initiative on the part of the NM EFC to educate tribal water system personnel on the requirements of the rule and to provide direct one-on-one assistance to water systems to ensure they meet the requirements.



- The tribal population served by Region 6 tribal community drinking water systems meet all health-based standards. Currently, 90.4 percent of the population is served by compliant water systems, and the work of the NM EFC has contributed to the dramatic increase in compliance since 2001.

- Seven of nine groups of water systems signed collaborative agreements. The NM EFC worked with the New Mexico Rural Water Association and Rural Community Assistance Corporation to assist regional collaborative groups in developing and signing a document formalizing the collaborative working relationship.



Impacts

Specific environmental issues addressed through the EFC's 2005 activities and accomplishments include:

- Drinking water
- Drought management
- Clean air



Region 9 Environmental Finance Center

AT CALIFORNIA STATE UNIVERSITY,
EAST BAY



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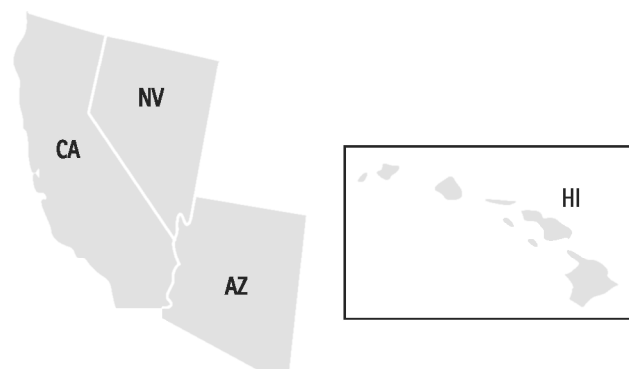
BACKGROUND & SUMMARY

The U.S. Environmental Protection Agency's (EPA's) Region 9 Environmental Finance Center (known as EFC9) is a university-based EFC affiliated with California State University, East Bay, working for greener communities through cleaner business, by promoting pollution prevention, source reduction and energy conservation. EFC9 serves the EPA Region 9 states of California, Nevada, Arizona, and Hawaii, and the tribal lands and trust territories of Guam and American Samoa, and is the only EPA EFC dedicated to resolving environmental issues in the private sector.

EFC9's mission is to: 1) encourage business to undertake source reduction, pollution prevention, and energy conservation, 2) educate and encourage consumers to choose green business products and services, and 3) help communities promote cleaner business. Working with both the private and public sectors, EFC9 pursues its mission through numerous tools, including environmental facilitation and mediation; green business program development; innovative finance program development; business incubator development; and conferences, workshops, and roundtables.

The major focus of EFC9's work during FY 2005 was

REGION 9



to build on experience working with industry and small businesses. For example, the EFC continued its efforts to promote, develop, and institutionalize pollution prevention and resource conservation in regional businesses as part of the Green Business Program. Among its business-related projects, EFC9 continued its efforts with the Regional Green Business Program, the Western Regional Pollution Prevention Network, and a new project, called ACT Environmentally, which encourages the placement of environmentally beneficial products and behaviors on television and in movies. EFC9 also embarked upon three new projects that focus on the harmful chemicals used in the hair and nail salon industry, as well as efforts to promote a cohesive California chemicals policy, and California environmental incubators.

ACTIVITIES & ACCOMPLISHMENTS



Completed Projects & Initiatives

NETWORK COORDINATION AND PARTNERSHIPS

EFC9 continues coordination and outreach activities with other EFCs, the Environmental Financial Advisory Board (EFAB), and EPA. The EFC Network and EFAB have become an extension of EFC9's capabilities, contributing valuable insight into numerous environmental and financial issues and providing new work and investigation opportunities for EFC9. As an expert witness to the EFAB, EFC9 participates in two EFAB workgroups. The first workgroup examines the financial assurance for the long-term environmental health of a company and the land it occupies. EFC9 is working with a number of EFAB members as well as the Kentucky EFC on this project. The second workgroup examines the financial value of developing a corporate environmental management system (EMS). Both EFC9 and the Syracuse EFC are participating in this workgroup.

As the current network president, the EFC9 director maintains constant contact with all EFCs. In addition, the EFC9 director maintains an ongoing relationship with the other network officers, specifically the directors of the EFCs in Maine and North Carolina, which currently hold the vice president and secretary positions. The network officers work together to develop agendas, plan presentations, and make arrangements for the EFC network's biannual meetings. In addition, network officers plan presentations for the biannual EFAB meetings and update the EFAB on the status of each workgroup.

ACT ENVIRONMENTALLY: ENVIRONMENTALLY BENEFICIAL BEHAVIOR PLACEMENT IN TELEVISION

In 2004/2005, EFC9 proposed to adopt the private sector concept of "product placement" to encourage placing environmentally beneficial products and

In 2005, EFC9...

- ◆ Engaged in one progressive new project idea.
- ◆ Engaged in a dozen activities supporting Green Business Programs.
- ◆ Attended, participated in, or presented at 10 meetings and conferences.

behaviors on television shows. Possible examples included having actors bring cloth bags to the grocery store, recycle soda cans, use worm bins, and consider how to properly dispose of a computer monitor or other electronic waste.

In consultation with EPA, EFC9 gathered and evaluated information regarding the placement of environmentally beneficial behavior in television shows. Through informal meetings with targeted groups, EFC9 determined certain environmentally beneficial behaviors on which to focus. EFC9 identified target markets, including specific groups within the markets, and determined which groups would be most receptive to each message. Finally, EFC9 identified target shows, television stations, and/or studios receptive to the environmentally beneficial behavior placement concept and determined which would most effectively reach the target markets.



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In consultation with EPA, EFC9 created a list of eight to 10 best potential environmentally beneficial behavior messages. EFC9 also developed methods to measure the success of environmentally beneficial behavior message placement, including tracking numbers of viewers for each show. An early achievement was the placement of pollution prevention posters in the Coast Guard background scenes in the film, “Yours, Mine and Ours.”

Throughout 2005, EFC9 continued to contact and work with shows, studios, and industry personnel on environmentally beneficial behavior and product placement. To date, EFC9 has succeeded in contacting every show it identified, and every producer has been interested in the idea, which is called ACT Environmentally. As a result, EFC9 has become more strategic about what and how many shows it contacts because each production has its own set of requests in response to ACT Environmentally. In follow-up tasks to the EFC’s initial efforts, EFC9 has accomplished the following:

- In June 2005, EFC9 held an industry roundtable with individuals who have worked in television and movie production and product placement to solicit their feedback on EFC9’s efforts and suggest other ways to green the industry.
- Via e-mail, phone calls, and several in person meetings, EFC9 staff worked with the executive producer of a new HBO series, “Lucky Louie,” that aired January 2006.
- EFC9 staff attended the Set Decorators Society of America Marketplace to inform set decorators about this project.
- EFC9 staff met and held conference calls with Disney staff to explore the feasibility of introducing the ACT Environmentally concept to the Disney Corporation.
- EFC9 has developed a growing portfolio of products for placement.

- EFC9 provided information on green landscapers to “Landscape Smart,” an HDTV program that showcases landscape redesign.
- EFC9 provided targeted suggestions on green products and behaviors to a new HBO series, “Lucky Louie” that aired January 2006.
- EFC9 developed and shared environmental behaviors suitable to specific ABC shows and characters within those shows.
- EFC9 developed a pro bono partnership with a product placement expert in Los Angeles.

As a result of the EFC’s work in 2005, EFC9 expects to develop a partnership with the Disney Environmental Division to introduce ACT Environmentally to the Disney television fall shows, which run on the ABC, Disney Channel, ESPN, and ABC Family networks. EFC9 is working with set decorators from the hospital-based shows on the three major networks (ABC, NBC, and CBS) and will have environmental posters and products placed in the 2006 fall season.



WESTERN REGIONAL POLLUTION NETWORK (WRPPN) SESSION DEVELOPMENT

EFC9 worked with the Western Regional Pollution Network (WRPPN), headquartered in Reno, Nevada. The WRPPN is a strategic alliance involving local, state, federal, and tribal pollution prevention

ACTIVITIES & ACCOMPLISHMENTS

programs throughout EPA Region 9. WRPPN was established in 1997 by EPA to improve communication and spread useful information among network members to increase the efficiency of pollution prevention implementation. As a member of the WRPPN Steering Committee, EFC9 helps determine the network's annual direction and develops and facilitates several sessions at the annual conference. For the September 2005 WRPPN Conference, EFC9 developed and led sessions on chemical legislation and policy in the United States and abroad, emerging pollutants, and the Green Business Program's relationship to state and federal agencies.

GREEN BUSINESS PROGRAM (GBP) COORDINATION

Supported by EPA funding, EFC9 continued its role as the Western Regional Green Business Program Coordinator to promote, develop, and institutionalize multimedia pollution prevention and resource conservation in Region 9 businesses, while ensuring consistent growth and continuity for regional green business programs. Specifically, EFC9 worked in partnership with San Francisco and Sacramento counties, as well as the Bay Area Green Business Program, CalEPA, and EPA to achieve the following tasks:

- Facilitated development of statewide GBP network.
- Provided grant opportunities for start-up GBPs that agreed to accept Bay Area Green Business standards as a baseline.
- Assisted start-up GBPs in San Francisco and Sacramento to help launch their programs.
- Provided basic information and presentations on the GBP throughout the region, including the annual WRPPN conference.
- Helped new and existing GBPs identify, establish, and expand partnerships with key agencies and organizations.
- Supplied technical assistance to all GBPs.

- Helped create industry-specific beyond compliance checklists.
- Hosted a GBP resource Web site.
- Sought broad support at the state and national level for the expansion of the GBP concept.

Promoting and Coordinating Green Business Programs State- and Regionwide

EFC9 provided basic information and presentations on the GBP throughout the region with presentations at the annual WRPPN conference. EFC9 developed a standard presentation that promotes the GBP concept generally, but also identifies Bay Area GBP standards as the guideline and baseline from which all new GBPs will be expected to develop. In return for accepting Bay Area GBP standards, emerging GBPs will benefit from partnering with EFC9 and other Region 9 GBPs. EFC9 staff have also assisted communities interested in developing their own program by providing CDs with GBP overview, Green Government Pledge, and checklists to more than 25 different agencies.

In addition, EFC9 facilitated GBP events at the annual WRPPN conference and continued to coordinate all GBP efforts throughout the region. EFC9 continued to maintain and update the GBP resource Web site, including its Green Business Recognition Program Clearinghouse, which includes program descriptions and guidance, checklists, and links to technical and other resources.

Assisting New and Existing Green Business Programs

EFC9 helped new and existing GBPs identify, establish, and expand partnerships with key agencies and public, private, and nonprofit organizations. Examples of partners include state and local regulatory agencies, small business assistance programs such as the Green Team and Greening Southeast Asian Restaurants, appropriate trade associations, and the Department of Toxic Substances Control's "model shops" program.

ACTIVITIES & ACCOMPLISHMENTS

EFC9 also supplied technical assistance to all GBPs, when requested. When necessary, EFC9 worked with emerging GBPs to help them identify their needs. EFC9 has identified strong interest in developing a GBP by Ventura County and the city of Santa Monica and moderate interest by Fresno, Humboldt, Madera, and San Benito counties as well as the cities of Los Angeles and Torrance.

Developing a Regional Approach to Green Business

As of October 2005, there were 11 GBPs in Region 9, with 758 businesses and 49 government agencies verified as green. As the number of GBPs continues to grow, these programs need to be coordinated so that the GBP certification will not be diluted.

Coordination is the first step toward developing a Region 9 GBP in which all local coordinators will be working under the same guidelines and standards, toward the same end, and under the same logo. To that end, EFC9 organized and facilitated two GBP summits, a follow-up session at the annual WRPPN conference, as well as numerous conference calls and e-mail communications among all GBP coordinators in the region to identify their needs, desires, and concerns regarding regional coordination.

First Summit: EFC9 organized and facilitated an all-day Green Business Program Summit in Oakland, California, on April 25, 2005, attended by GBP coordinators from all nine active GBPs in California. Attendees agreed on the value of developing a statewide program and identified and agreed on key elements common to all GBPs. With assistance from EFC9, attendees prepared a draft mission statement, which served as the starting point for further discussion later in the year.

Other summit issues included possible administrative structures for the statewide organization, as well as the decision-making process (one program, one vote was the consensus). The summit concluded with an identification of next steps including electing how to address relationships with regional, state, and federal agencies; checklist development and coordination; organizational structure; key elements shared by all programs; and organizational purpose. Attendees signed up to

participate in subcommittees addressing each of these issues. Following up on the summit, EFC9 organized statewide conference calls and coordinated e-mail communication by the subcommittee participants.

WRPPN Session: At the annual WRPPN Conference, EFC9 facilitated a dialogue among the GBP Coordinators in California, focusing on the most critical issues identified at the summit. Topics included GBP relationships with federal and state agencies, how to respond to emerging programs, and the definition and key elements of a GBP. After considerable revisions, attendees agreed that to be a GBP, a program must agree to the following:

Element 1: The GBP is a “beyond compliance” program. A business cannot become a “green business” unless it is in compliance with environmental protection laws and regulations and has completed a minimum number of “beyond compliance” measures toward pollution prevention, waste reduction, and resource conservation.

Element 2: Verification of environmental regulatory compliance as well as “beyond compliance” performance is required by the GBP.

Element 3: After a pre-determined number of years, all participating businesses must undergo a renewal and verification process in order to continue their green business status.

Element 4: The network is committed to measuring the success of the program.

Element 5: The GBP is a voluntary program, free to participating businesses. There is no cost to become a green business.

In addition, attendees spent considerable time developing the California Green Business Program Network Operating Guidelines, which lay out the organizational mission, goals, membership, and operation of the network. This document was further refined during e-mail communication and conference calls following the conference.

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Finally, the WRPPN session concluded with identifying further issues to resolve, including: developing a logo, identifying how to work together to insure consistent checklists, sharing communication/information, and measuring program success.

Conference Calls: EFC9 set up and facilitated five conference calls among the GBP coordinators to address checklists, measurement, and communication/information-sharing.

Second Summit: EFC9 is planning a second summit to allow GBP coordinators to meet in person and resolve any of the critical outstanding issues in January 2006.

Providing Funding Opportunities for Emerging Programs

EFC9 assisted the start-up of new GBPs by providing grant opportunities. To support and guide the orderly growth of new GBPs, a major portion of this grant was committed to two emerging programs: San Francisco and Sacramento counties.

To participate, each new GBP agreed to adopt Bay Area Green Business Program standards and to work with other GBP coordinators throughout the state and region to ensure continuity and harmony.

A grant to the San Francisco Occupational and Environmental Health Section (OEHS) of the San Francisco Department of Public Health (DPH) allowed OEHS to expand the DPH Clean and Green Program to a variety of industry types and to

become the foundation for the San Francisco Green Business Program. The San Francisco Green Business Program partnered with available staff at the San Francisco Department of Environment, San Francisco Public Utilities Commission (PUC) and Pacific Gas and Electric (PG&E) to assist businesses with onsite audits and consultations, as well as answer questions and provide information on the latest techniques and alternative technologies available to that business type. The program is focusing the automotive repair sector, hotels, printers, marine repair, and hospitals.

The grant to the Business Environmental Resource Center (BERC), a unit of the Sacramento County Economic Development Department, allowed it to establish the Sacramento Green Business Recognition Program (SGBRP), a pilot GBP within Sacramento County (including the incorporated cities of Sacramento, Elk Grove, Galt, Isleton, Rancho Cordova, and Citrus Heights) and supported a regional Pollution Prevention Roundtable to serve the counties of Sacramento, El Dorado, Placer, Sutter, Solano, and Yolo. The pilot SGBRP focused first on automotive service operations and, secondly, on mobile contractors including carpet cleaners, landscapers, and power washers.

Program partners include:

- Sacramento County Environmental Management Department (EMD) (the local California designated Certified Unified Program Agency)
- Sacramento Metropolitan Air Quality Management District
- Sacramento County Department of Water Resources
- Sacramento Regional County Sanitation District
- Sacramento County Department of Water Quality
- Sacramento County Planning and Community Development Department



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- Sacramento County Building Inspection Division
- Sacramento Regional Solid Waste Authority
- City of Sacramento Department of Utilities – Storm Water Program
- Sacramento Municipal Utility District

PRESENTATIONS/CONFERENCES

EFC9 staff attended and participated in a wide variety of meetings and conferences in 2005, including the following:

- EFC directors' meeting in Washington, D.C. (March) and San Francisco (August).
- Annual Western Regional Pollution Prevention Network (WRPPN) conference in Lake Tahoe in September 2005 (as steering committee member).
- Golden Gate Pollution Prevention Committee (as co-chair: planned, attended, and recorded minutes).
- California Resource Recovery Association's Annual Meeting.
- Women's Foundation of California Environmental Health Summit titled, "In the Shadow of Pollution."
- Planned, attended, and participated in a United Nations World Environment Day session entitled "Protecting Environmental Health for the Long-Term: Models for Comprehensive Change," held in San Francisco.
- 2005 Regional Children's Environmental Health Summit in Helena, Montana.
- San Francisco Green Festival, in conjunction with the Bay Area Green Business Program.
- Green Business Program Development in Seattle; presented to participants from the states of Idaho, Oregon, Alaska, and Washington.
- Walt Disney Corporation Environmentality Program; met in June 2005, to develop a partnership based on the EFC9 project ACT Environmentally.

WEB SITE UPDATE

EFC9 moved its Web site to a new URL, <www.efc9.org>, and updated material and the presentation of the site to ensure that all reports and available information are current.

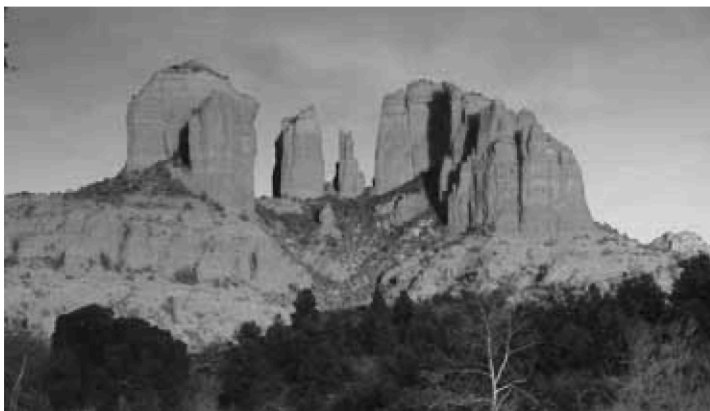
New Programs & Initiatives

TOXICS AND HAIR AND NAIL SALONS

EFC9 is laying the groundwork for planning a multi-stakeholder roundtable to address the hair and nail salon industry. Recent studies have found that the presence of chemicals in hair and nail products can adversely affect human health and the environment. For example, phthalates, which are found in many leading beauty care products, including hair spray and nail polish, can damage the liver, kidneys, lungs, and reproductive system. Sodium lauryl sulfate (SLS) and sodium laureth sulfate (SLES), widely used in hair conditioner and about 90 percent of all shampoos and products that foam, have been found to cause eye damage and skin inflammation and can weaken the immune system. Some studies suggest that hair relaxers might be connected to early onset of puberty, especially in African-American children. In addition, numerous studies have indicated that salon workers have a higher rate of several different types of cancer, including pancreas, cervix, lung, and breast. Since they are virtually unregulated, the environmental impact of products used in salons is currently unknown.



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As a result of these problems, EFC9 began the process of identifying and coordinating stakeholders to attend a salon roundtable meeting. The primary purpose of the meeting will be to facilitate an open exchange of information on the use and potential environmental and human health impacts of current salon products and practices and their alternatives. Meetings will also cover motivational impulses that influence product choices. The meeting will also seek to identify a set of information gaps and follow-up steps (including research needed) to be undertaken by some of the stakeholders.

To prepare for the upcoming roundtable meeting, EFC9 has been participating in meetings and conference calls of the California Healthy Nail Salon Workgroup as well as the national Healthy Nails Network Listserv, which was an outgrowth of the session EFC9 organized on Nail Salons for the 2004 WRPPN Conference. In addition, to educate EPA staff in Region 9, EFC9 organized and facilitated a presentation by Dr. Devra Davis, director of the Center for Environmental Oncology at the University of Pittsburgh. Finally, EFC9 attended meetings with EPA staff from Region 9 to begin the process of developing a roundtable partners list and identifying target ingredients and practices.

CALIFORNIA CHEMICALS POLICY

In partnership with EPA, the Women's Environmental Leadership Network (WELN), Commonweal, the Gellert Foundation, the Marisla Foundation, and California Assemblywoman Wilma Chan's office,

EFC9 will hold an educational roundtable on the possibility of developing a state-based chemical policy. As Europe comes closer to establishing a new, more comprehensive policy regarding chemicals, state industries and communities are wondering what it will mean to California. California citizens and companies are growing wary of the "single chemical" approach to regulating chemicals and wonder if there is a better and more proactive way to determine which chemicals are safe and how they should be regulated. The California legislature typically sees at least 10 bills per session devoted to individual chemicals and chemical uses. This approach is time-consuming, confusing, and damaging to industry, nonprofit organizations, government, and the general public. As a result, EFC9 has been asked to explore the possibility and ramifications, good and bad, of a California Chemical Policy.

In March 2006, EFC9 will plan and co-host a California Chemical Policy Symposium to educate attendees on current policy as well as potential options for the state. The one-and-a-half day symposium will be held in downtown Oakland and will include panel sessions and a stakeholder roundtable.

To prepare for the upcoming symposium, EFC9 has attended 10 planning meetings with partners and additional stakeholders, including representatives from University of California-Berkeley, the offices of California Assemblywoman Fran Pavley and California Assembly Speaker Fabian Nuñez, and numerous environmental justice advocates in California. The group developed the symposium attendee list, speaker list, and agenda. They also secured initial symposium speakers, including representatives from the California State Assembly, the European Union, and industry.

CALIFORNIA ENVIRONMENTAL INCUBATORS

More than 10 years after EFC9 was founded, the California Environmental Incubator project was established to revisit EFC9's roots and determine the status and success of environmental incubators in

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California. The original mandate for EFC9 was to help promote and finance new and innovative environmental technologies. In response, EFC9 planned, developed, and launched an environmental small business incubator, the Alameda Center for Environmental Technologies (ACET), to house and foster start-up environmental companies. Opened in 1995, ACET was one of six existing or planned environmental incubators in the state and was heralded as one of the most promising efforts to promote new

environmental technologies. In 2005, ACET was renamed Advancing California's Emerging Technologies and houses both environmental and biotechnical companies

The California Environmental Incubator project determined the status and success of environmental incubators in California. It also determined why some incubators succeeded while others failed, and provided closure to an effort that has been included in EFC9's task plan since its inception. In general, only one incubator has survived while the others, hampered by their narrow focus, were not sustainable over the long term and were forced to close their doors.

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Outcomes

As a result of the activities and accomplishments outlined in the previous section, outcomes have included the following:

- Raised awareness of environmentally beneficial behaviors by marketing the placement of them in television and movies.
- Increased awareness and fostered networking to facilitate the development of and continue the effectiveness of regional Green Business Programs.
- Increased awareness of the health and environmental impacts of hair and nail products.
- Increased awareness of the “single chemical” approach to regulating chemicals and possibility of a California Chemical Policy.

Impacts

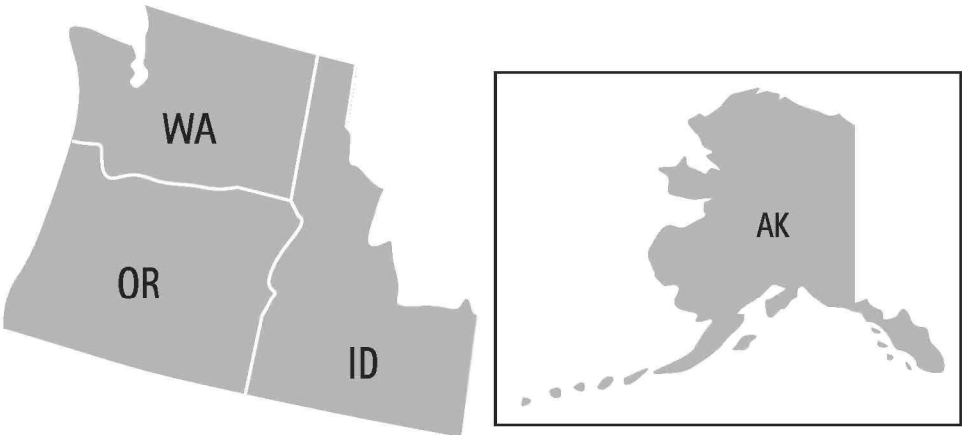
In 2005, EFC9 continued its mission to encourage businesses to undertake source reduction, pollution prevention, and energy conservation. It continued to educate and encourage consumers to choose green products and services. Specific environmental issues addressed through EFC9’s activities and accomplishments include the following:

- Environmental Management Systems
- Pollution prevention
- Resource conservation
- Green products
- Environmental behaviors
- Chemical policies



Region 10 Environmental Finance Center

AT BOISE STATE UNIVERSITY



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BACKGROUND & SUMMARY

The mission of the Environmental Finance Center at Boise State University (Boise State EFC) is to help communities with issues surrounding “how to pay” for environmental protection. The primary focus of the Boise State EFC is the development of broadly applicable, practical tools that improve the efficiency and effectiveness of environmental systems in meeting the challenges of protecting the environment and public health.

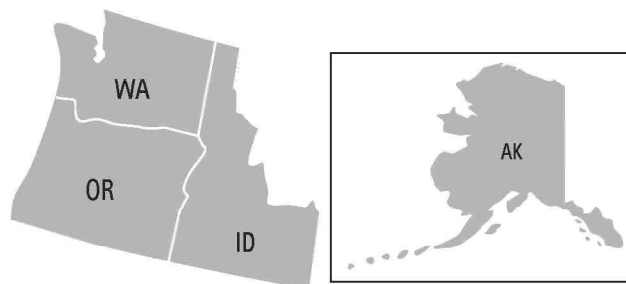
The Boise State EFC serves the U.S. Environmental Protection Agency (EPA) Region 10 states of Alaska, Idaho, Oregon, and Washington. In addition to Region 10 states, this EFC has been called upon to provide its specialized services and tools in other areas throughout the country.

The Boise State EFC creates computer-based tools that provide important information for decision-makers to use in financing environmental systems. Among the financial outreach methods developed by the EFC are intensive training programs and workshops concentrating on computer programs for utility rate-setting and capital improvement planning for environmental facilities.



Amy Williams and Bill Jarocki, Boise State University Environmental Finance Center

REGION 10



Consistent with the network of university-based EFCs, the Boise State EFC pursues its own environmental goals and effectively supplements its core funding with funding from other sources. In 2005/2006, EFC attracted 16 grants and contracts, which were sponsored for international, national, private sector, and regional (both within and outside of EPA Region 10) projects. This leveraging of resources demonstrates the real value of the Environmental Finance Center Network to Region 10 and EPA.

The major focus of the center's work during FY 2005 was to continue and complete the development of innovative software to address non-point source water pollution challenges. The center participated in dozens of conferences and workshops, providing software, training, and technical assistance to scores of national, state, and local decision-makers.

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Completed Projects & Initiatives

DEVELOPMENT OF INNOVATIVE FINANCIAL TOOLS

In 2005, the major emphasis for the center was developing innovative tools to respond to the needs of water and wastewater systems, as well as stakeholders involved in addressing non-point source water pollution challenges. The goal is to reach communities in need nationwide. The EFC's new tools for this year are the following:

Rate Checkup™

A full-cost pricing model for water utilities, Rate Checkup™ integrates the EFC's asset refinancing model, known as CAPFinance™, in developing accurate, fair, and equitable user charges for water utilities. The wastewater version is under development. A simplified version of Rate Checkup™ for water utilities was developed for the Kansas Drinking Water Program in 2005. Training on the software tool will take place in early 2006 and Kansas is licensed for statewide distribution of CAPFinance™.

System Development Charge Software Model

Development of this tool was completed in 2005 for the University of Illinois' Midwest Technical Assistance Center. The model will help water systems calculate the impact of new development and design impact fees to recover those costs. The model can import data from CAPFinance™ into the design of impact fees.

Electronic Sanitary Survey (Iowa Model)

Working with EPA's Drinking Water Academy, the Boise State EFC had previously developed a sanitary survey data collection system that is operated on personal digital assistants or handheld Windows-based computers. In 2004, Iowa contracted with the EFC to produce a variation of this approach that will allow information to be shared across Internet

In 2005, the Boise State EFC...

- ◆ Developed 10 tools for water and wastewater systems.
- ◆ Conducted nine applicant reviews for the Idaho Drinking Water State Revolving Fund.
- ◆ Provided direct technical assistance to five communities.
- ◆ Conducted 55 workshops with up to 300 attendees each.
- ◆ Participated in or presented at 11 workshops.

networks, linking the central and regional offices of the state drinking water program. The product was completed and launched in 2005. Additional work to integrate it with Iowa Safe Drinking Water Information System will be completed in 2006.

Idaho 319 Grant Program

The Idaho Department of Environmental Quality asked the center to modify Plan2Fund—a financing and implementation software model—for application to the Clean Water Act Section 319 financing program in 2004. In 2005, the project was reworked to be a Web-based application program. This work is expected to be completed in 2006.

Financial Analysis Calculator for Exemptions

In 2005, the Boise State EFC continued its development of a software tool to help regulatory agencies quickly determine the financial capacity of communities seeking exemptions from the implementation deadline for the arsenic rule. This tool is designed to assist regulatory staff unfamiliar with financial analysis by automatically generating a financial capacity report. Included in the report are the current financial and economic conditions of the system and

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trends throughout time, affordability of current water rates, and financial and affordability impacts of financing capital improvements to meet the water quality standard. This model will be available for all future rule exemption scenarios in 2006.

SRF Financial Capacity Template

A modified version of the Financial Analysis Calculator for Exemptions was developed for the Washington Department of Ecology to assist the department's staff in reviewing the financial capacity of applicants for Clean Water SRF loans.

Enhanced Version of Plan2Fund

The Boise State EFC made several enhancements to Plan2Fund, which included adding a grant-tracking feature, additional reports, and run-time functionality. The enhanced version of Plan2Fund can be accessed and downloaded on the EFC's Web site at <http://sspa.boisestate.edu/efc/services.htm>.

National Directory of Watershed Resources

The Boise State EFC made enhancements to the Directory of Watershed Resources, enabling it to be accessed nationally. In 2005, Region 1 added its funding information into the database, and the Boise EFC anticipates other regions will add their watershed resources to the directory in the future, thus creating a national tool for watershed protection.

Prioritization Tool Beta Model

The EFC developed a prioritization tool to assist stakeholder groups when prioritizing objectives using pre-established decision rules. A beta model is available on the EFC's Web site.

One Plan BMP Financing Model

The EFC is working with the Natural Resource Conservation Service, Idaho Soil Conservation Commission, and others to enhance the Idaho One Plan model with an environmental finance subroutine. The EFC is developing a model that will be linked to Idaho One Plan that will identify the costs and environmental effects of individual agricultural



best management practices. This model is a direct response (and the outcome of an EFC-sponsored charrette) to the conflicts between water users and environmentalists in the Klamath Basin.

Nevada Statewide CAPFinance License

The state of Nevada specified the use of the EFC's CAPFinance in its request for proposals for improving the asset management capabilities of water and wastewater systems in the state. The winning proposal offered by Farr West Engineers of Reno led to the establishment of a statewide license for the use of CAPFinance in Nevada. Training and technical assistance was extended to Farr West Engineers in the summer of 2005.

MICRO-ENVIRONMENTAL FINANCE— FOCUS ON INFRASTRUCTURE

While watershed financing technical assistance and training has increased significantly during the past several years, the EFC maintains an important core of tools and services related to the traditional full-cost funding challenges of providing essential public services. The following are highlights of EFC's new State Revolving Fund activities and a variety of training and technical assistance events:

State Revolving Funds (SRFs): Providing Financial and Management Capacity Analysis

Since 1997, the Boise State EFC has provided third-party review of financial and management capacity of applicants seeking funding from the Idaho Drinking Water State Revolving Fund (DWSRF) Program. Similar

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services are provided under contract to the Alaska Clean Water Fund and Drinking Water Revolving Fund for the analysis of financial capacity. The Boise State EFC conducted nine reviews in 2005. Information about the review criteria and the latest compiled statistics on the characteristics of DWSRF applicants in Idaho as of May 2005 can be found on the EFC's Web site at <<http://sspa.boisestate.edu/efc/Publications>>. Look for "Financial Capacity Assessment Indicators: Idaho DWSRF".

In 2005, the following financial and management capacity review reports were completed:

Alaska

City of Nome

Mile 8 Utility, LLC

City of Petersburg

City and Borough of Sitka

City of Ketchikan

Also in 2005, the EFC entered into a contract with the Washington Department of Ecology (WDoE) for financial capacity analysis services related to the Clean Water State Revolving Fund. The Department of Ecology asked the center to not only conduct

Idaho

City of Burley

City of Bancroft

City of Chubbuck

City of Homer

financial capacity reviews of its recipients for funds, but also to design a computer-based model that would expedite such financial reviews and automatically generate financial capacity analyses. This new computer tool will be used in the State of Washington beginning in 2006.

The development of the WDoE SRF financial capacity analysis tool opens the door for the EFC to provide third-party review services to other state SRF programs at a lower cost, while decreasing the production time per review. Idaho's DWSRF will experiment with the new model at the end of 2005, and is expected to shift to the new technology in 2006. In addition, the DWSRF will monitor post-award financial capacity using and EFC-developed computer model, Capacity Tracker. This test will measure the efficacy of using a tool like Capacity Tracker to measure the impact on financial capacity derived from taxpayer-supported grant and capital financing taxpayer subsidy programs like the SRF.

The Idaho Clean Water SRF may adopt the review methodology in 2006, pending legislative approval of new SRF processing cost requirements for loan recipients. In mid-2006, the EFC expects to convert the Alaska SRF financial review process to the new technology as well.

COMMUNITY	CONDITION	CHALLENGE
Moro, Oregon	Water and wastewater rate increases	Acceptance of rates
Tenino, Washington	Establishing wastewater system	Extreme cost \$ per capita
Dietrich, Idaho	Upgrade of sewer system	Extreme cost \$ per capita
Mat-Su Borough, Alaska	Water system management	Remote systems
Buhl, Idaho	Wastewater upgrade/NPDES violations	Extreme cost \$ per capita

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Specific Technical Assistance Projects

In 2005, the center extended special technical assistance attention to a number of communities. These communities were facing significant financial challenges in regard to implementing improvements to their water or wastewater systems, or both. Assistance included financial analysis, grant writing, town hall meetings, and other onsite support. The communities and their challenges are listed as follows:

Presentations, Training and Technical Assistance Events—Highlights

Idaho Rural Water Association Finance Workshops

The EFC teamed up with the Idaho Rural Water Association in 2005 to deliver several one-day workshops on water utility finances for small water utilities in Idaho. The workshops included information on planning, budgeting, financial planning, and rate-setting and how the center's financial software tools can help them in these areas. Four workshops were held in Idaho in 2005, and four more workshops were planned for 2006.



Bill Jarocki presenting financial management training workshop for the Idaho Rural Water Association in Twin Falls, Idaho

Washington Infrastructure Assistance Coordinating Council Conference

In November 2005, the EFC presented a training session on water rate-setting, using its Rate Checkup™ software tool, at the Washington Infrastructure Assistance Coordinating Council 2005 Conference.

The session covered rate-setting, as well as infrastructure replacement financial planning using CAPFinance™. Approximately 25 to 30 people attended the session.

Great Lakes Rural Community Assistance Partnership (RCAP) In-Service Training

In May 2005, the EFC presented an all-day workshop on water rate-setting at the Great Lakes RCAP In-Service Training provided by the National Environmental Services Center in Morgantown, West Virginia. The workshop included information on planning, budgeting, financial planning, and rate-setting and how the EFC's financial software tools can help them in these areas. The workshop was conducted in a computer lab at the University of West Virginia, and the 11 attendees received hands-on experience in running Rate Checkup™ and CAPFinance™. The EFC also participated in a half-day session (approximately 20 attendees) on capital improvement cost estimating.

Eastern Oregon AWWA/PNCWA Fall Conference

In September 2005, the EFC presented a training session on utility finances for water and wastewater utilities in Pendleton, Oregon, for the Eastern Oregon subsections of the Pacific Northwest Section of the American Water Works Association (AWWA) and the Pacific Northwest Clean Water Association (PNCWA). The eight-hour session included information on planning, budgeting, financial planning, rate-setting, and how the EFC's financial software tools can help them in these areas. Fourteen people attended.

EPA Region 7 Combined Sewer Overflow (CSO) Long Term Control Plans (LTCP) Workshop

The center presented a session on utility financing for stormwater utilities in May 2005 at the Region 7 EPA Headquarters in Kansas City, Kansas. The four-hour session covered budgeting, reinvestment in capital assets, and full-cost pricing for CSO/SSO (sanitary sewer overflow) implementation. Approximately 65 people attended.

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Idaho Department of Commerce and Labor Conference

The EFC conducted a workshop on “Community Development Financing: New Realities of Environmental Finance” for the Idaho Department of Commerce and Labor conference. The EFC presented the issues of implementation finance for environmental projects and the impact on community development efforts. About 300 community development and local, state, and federal government professionals attended.

Oregon Utility Finance Workshop Series

The EFC delivered a series of eight regional workshops on utility finance in April and May 2005. These full-day workshops were sponsored by the League of Oregon Cities and the Oregon Department of Environmental Quality (ODEQ) and funded by ODEQ. Approximately 200 local government officials received the training as well as copies of the EFC's software products for improving financial capacity. Workshops were conducted in LaGrande, the Dalles, Prineville, Salem, Roseburg, Florence, Ashland, and Tillamook. Three hundred copies of CAPFinance™ were provided to ODEQ for distribution to Oregon communities.

Following the workshops, individual communities were invited to receive direct technical assistance from the EFC in June. Initial assistance sessions were funded by ODEQ with follow-up assistance work funded through the Boise State EFC. Communities taking advantage of the technical assistance were Scappoose, Yachats, Independence, Moro, Cottage Grove, Monmouth, Huntington, and Nyssa.

U.S. Army Corps of Engineers Western Region Meeting, Salt Lake City

In April, the EFC was invited to address the western states representatives of the U.S. Army Corps of Engineers (USACE) regarding issues of financial capacity measurement and leveraging capital financing for water and wastewater projects funding through the USACE 595 process.



Colorado CAPFinance Workshop Series

The EFC, in cooperation with the Colorado Department of Community Affairs and the Colorado Municipal League, conducted a series of eight regional workshops throughout the state on the topic of asset replacement financing. The EFC demonstrated CAPFinance to the workshop participants and provided copies of it to more than 300 Colorado communities, special districts, and private water systems. Workshops were delivered in Alamosa, Cortez, Delta, Glenwood Springs, Fort Collins, Limon, LaJunta, and Colorado Springs.

Syracuse University's Environmental Finance Center's PMFP Training

In July, the EFC teamed with the Region 2 EFC at Syracuse University by presenting a CAPFinance workshop at the 2005 Public Management and Finance Program (PMFP) seminar at the Peek N' Peak Resort in western New York. PMFP delegates received copies of the CAPFinance model along with a conceptual framework for meeting the challenges of infrastructure gap financing for water and wastewater systems. An outcome of this workshop was the genesis of developing a version of CAPFinance that will address solid waste facility needs. The Syracuse EFC is working with the Boise State EFC to develop this new version of the model.

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Environmental Training Institute for Small Communities—Morgantown, West Virginia

West Virginia University was the site of a full-day training session on water and wastewater system financing delivered by the Boise State EFC during the Environmental Training Institute for Small Communities Conference. Fifteen people attended.

Alaska Water and Wastewater Management Association—Sitka Conference

Since its establishment, the Alaska Training and Technical Assistance Center (ATTAC) at the University of Alaska at Sitka has relied on the Boise State EFC for training and technical assistance on utility finance issues. In September, the Boise State EFC presented three workshops for ATTAC at the Alaska Water and Wastewater Management Association Training Workshop at Sitka. The EFC presented workshops about planning, budgeting, and capital investment for continuing education unit credit. Approximately 35 people—primarily water and wastewater system operators and managers—attended each work session. Attendees received copies of CAPFinance and other EFC software.

Oregon League of Cities Water and Wastewater Financing Workshop

In November, the Oregon League of Cities invited the EFC to conduct a workshop on utility finance in Eugene in conjunction with the league's 50th Anniversary Conference. Nearly 40 city officials attended this full-day workshop, which featured EFC software products such as CAPFinance and the new System Development Charge model.

Regions 7, 8, 9, and 10 Capacity Development Workshop—Portland, Oregon

In July, EFC Director Bill Jarocki facilitated workshops at the Regions 7, 8, 9, and 10 Capacity Development Workshop in Portland.

Region 7 State Drinking Water Program Stakeholders Meeting Series

In August and September 2005, the EFC facilitated four meetings of drinking water program capacity development stakeholders in the Region 7 states of Iowa, Missouri, Nebraska, and Kansas. The purpose of these meetings was to revisit state program priorities developed under the Safe Drinking Water Act's (SDWA) state capacity development strategy requirements. EFC staff assisted state drinking water program staff members and stakeholders in reviewing the original capacity development strategies, preparing the annual reports to the governors (required by the SDWA) and in discussing how the strategies should be adjusted to better meet future needs. The EFC has been assisting the Region 7 states' drinking water programs on drinking water capacity development implementation since 1997.

Idaho City Clerks, Treasurers, and Finance Officers Association Institute (ICCTFOA)

The EFC staff presented two workshops at the ICCTFOA Institute in September 2005. This annual institute conference is the primary training event for municipal fiscal officers in Idaho. Workshop topics focused on the methodology and legality of system development charges (sometimes called development impact fees), and utility rate setting. Approximately 70 people attended each workshop.

Como Manejar las Oficinas Prestadoras de Servicios de Agua con Criterio Empresarial ("How to Provide Water Service According to Business Principles")

The Institute of Technology in Santo Domingo, Dominican Republic, was the venue for the first Spanish presentation of the Boise EFC's training and financial tools. About 15 water service professionals representing various sized water systems in the Dominican Republic attended this two-day workshop, arranged by Ing. Fidel Perez of WeGroup, S.A. The event demonstrated the nearly universal challenges of providing the best quality water service to the most people at the lowest cost for the longest period of time. Workshop participants were

ACTIVITIES & ACCOMPLISHMENTS

enthusiastic about the usefulness of the EFC financial management tools and are eager to have these provided in Spanish. The invitation from WeGroup, S.A. to the EFC to conduct the event was the result of WeGroup representatives having attended the EFC financial training workshop at West Virginia University earlier in the year. The center is expected to return to the Dominican Republic to provide specialized services (see new initiatives for 2006).

MACRO-ENVIRONMENTAL FINANCE FOCUS ON WATERSHED FINANCING

Boise State's 2002 Annual Report introduced the division of activities between the focus areas of macro-environmental and micro-environmental finance. This division is useful in separating traditional utility-based financing work from the emerging challenges of financing non-point pollution reduction at the watershed level.



Jarocki (center) with participants of the financial management workshop in Santo Domingo

Watershed Funding Workshops

Watershed restoration is important throughout the region. In order for watershed planning and implementation to be effective, identification and acquisition of resources are necessary. Due to the differences in sophistication levels of different watershed groups, the EFC has tailored its workshops to levels that best address these differing needs. In 2005, the center presented seven watershed funding workshops:



Amy Williams (left) presenting watershed funding workshop in Hauser Lake, Idaho.

Intermediate Workshops

Intermediate workshops focus on watershed stakeholders that are familiar with the watershed process but lack the knowledge and skills needed to weave together a funding strategy. The workshop covers principles of developing a finance strategy and identifying the funding tools and techniques that support the strategy to achieve a watershed vision. The EFC presented four intermediate workshops in 2005.

EPA Region 7 Watershed Financing Workshops

In August 2005, more than 50 people attended workshops in Omaha, Nebraska, and Kansas City, Kansas. Attendees received CDs with PowerPoint presentations, Plan2Fund, handouts, and additional tools and resources. The EFC provided additional assistance following the workshop and set up a Web site with numerous resources for workshop participants.

Advanced Workshops

Many watershed groups are sophisticated in watershed planning and fundraising; however, some often have unique funding challenges. The EFC provided three workshops in the region to assist these communities by addressing their specific financing needs. Participants at each of the advanced workshops received one-on-one assistance both prior to the workshop and following the workshop.

- **Anchorage, Alaska—Advanced Workshop.** The EFC presented an advanced workshop for the

ACTIVITIES & ACCOMPLISHMENTS



Anchorage Waterways Council. The meeting focused on particular challenges of the council and identified and made available tools and other resources to assist.

- **Chehalis, Washington—Advanced Workshop.** The EFC held two advanced workshops in Chehalis in 2005, to assist the group in prioritizing objectives in its watershed plan. The meeting resulted in the development of a new rating tool that can be used by other groups to assist in the prioritization process.

Online Training Workshop

The EFC is developing an online version of the watershed funding workshop. The online training includes information on the basic principles of watershed funding using the “community quilt” model, the importance of partnering, leveraging opportunities, identifying matching resources, budgeting, researching resources, and grantwriting basics. The EFC developed supplementary information for the training that included information on community asset inventories, task prioritization, and fundraising. The EFC also developed online tutorial demonstrations for the centers tools, including Plan2Fund and the Directory of Watershed Resources. These demonstrations use animated screen shots to demonstrate how to use the tools. The training material has been posted to the EFC’s Web site.

DIRECTORY OF WATERSHED RESOURCES DATABASE UPDATE

In 2003, the Boise State EFC in Region 10 developed the Directory of Watershed Resources, a database of funding sources for watershed protection and restoration. The initial directory included information on federal, state (Oregon, Washington, Idaho, and Alaska), private, and other funding sources and assistance.

The directory has been a huge success, identifying nearly 800 programs within Region 10. More than 100 people visit the site per month and the numbers are growing as people become aware of the resource. In addition, several agencies have begun to link to the directory Web site and are directing unfunded applicants to the EFC for assistance. However, for this database to continue to be a resource for watershed stakeholders, the information must be kept up to date.

In 2005, in order to make the updating process more efficient, the EFC enhanced the e-mail update function of the Directory of Watershed Resources. The e-mail function allows the EFC to send e-mails to program contacts that includes a link to their specific programs for review. The enhancement allows each contact to link directly to its program information, edit the program, and submit the changes online. The database tracks the programs with changes, as well as the programs that have been accepted without changes. This new function allows the EFC to track completed updates and identify programs that need additional research. An update request was e-mailed to more than 600 program contacts in 2005. The EFC is now in the process of completing the updates to the database.

NATIONAL EXPANSION OF THE DIRECTORY OF WATERSHED RESOURCES AND PLAN2FUND

The positive response to the Directory of Watershed Resources generated a strong demand for the tool in other regions. The demand was recognized by EPA’s Sustainable Finance Team, which provided additional

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financial resources to the EFC in 2005, to enhance and expand the directory and Plan2Fund for distribution to watershed groups in other regions throughout the United States.

Directory of Watershed Resources

In 2005, the EFC expanded the Directory of Watershed Resources to function as a national database, allowing other states and regions to add their funding information into the directory. The New England EFC was the first EFC to utilize the national structure, adding more than 600 programs to the database. The EFC is currently working with Region 3 and the states of Montana and Arkansas, which have expressed an interest in adding their states' financing resources into the database in 2006. It is expected that, as resources allow, additional EFCs in the Network will also add information into the database.

Plan2Fund™

Many watershed groups struggle with the task of moving from the actual watershed plan to locating funding sources. During 2003, the center responded to this need by developing Plan2Fund, which was developed in Microsoft Access and walks users through the process of estimating the costs of their watershed program plan's goals and objectives, assessing local matches, and determining funding needs to meet goals and objectives. The results from Plan2Fund can be used to search for funding sources utilizing the Directory of Watershed Resources.

In response to feedback received from users of the original version, the center completed enhancements Plan2Fund in 2005. The enhancements included developing a runtime version of the program, allowing users to access Plan2Fund without owning Microsoft Access. In addition, the center added more detailed budgeting information to the program, as well as adding new reports and a function that allows collaborative watershed groups to identify the tasks that are assigned to different stakeholders. The center also added a grant-tracking section that allows users to identify and track grants and resources for

specific tasks. Since the enhanced version became available this fall, several hundred copies of Plan2Fund have been distributed free of charge to conference attendees and workshop participants. In addition, more than 50 copies have been mailed by request, and more than 200 people have downloaded Plan2Fund from the EFC's Web site at <<http://sspa.boisestate.edu/efc>>.

AGRICULTURAL BEST MANAGEMENT PRACTICES (BMP) COST ANALYSIS

The EFC's extensive work with watershed stakeholders throughout Region 10 has provided the EFC with opportunities to listen to challenges and needs expressed by various watershed groups. At the Klamath Watershed Funding Workshop in particular, watershed stakeholders expressed a need to identify the costs and benefits of conservation efforts for landowners in the region. This information could be used to inform landowners of the economic costs and benefits of implementing best management practices on their land and help identify what additional incentives might be required to reach the conservation goals in the watershed.

The EFC worked with the Natural Resources Conservation Service (NRCS), Idaho Conservation Commission, Idaho Association of Soil Conservation Districts, and other state and federal agencies to develop an analysis tool that provides cost information to landowners to assist them in identifying conservation practices on their land.

The EFC developed the methodology for creating a model that would provide information on the costs of various conservation practices and the environmental effects those practices have on resources. Using NRCS research data, the model would allow landowners to compare conservation practices that have high costs and low benefit with practices that have low costs and high benefit. The EFC continues to work with the various agencies to develop a stand-alone model that can be linked to the Idaho OnePlan Conservation Planning Tool.

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WATERSHED PRIORITIZATION TOOL

In 2004, the EFC provided an advanced workshop to the Chehalis Basin Watershed Partnership in Washington, which just completed a nearly six-year effort to finish its watershed plan, only the second plan in the state to be finalized. Following the workshop, the group requested additional follow-up and technical assistance from the EFC to assist in moving forward to implementation.

The largest challenge faced by the Chehalis group and many others that have completed a watershed management plan is setting priorities for implementation. With many collaborative stakeholder groups, prioritization is a difficult undertaking due to the variety of interests at the table and the often-contentious nature of environmental protection. In 2005, the group requested the EFC's assistance in developing a tool to help it through the prioritization process. Through a series of meetings, the EFC helped the partnership identify multiple decision rules it could use to determine the priority of objectives identified in its plan.

Prioritization is a major challenge among watershed groups. The Chehalis case study provides stakeholder groups with a successful example of how prioritization can be done, demonstrates a process to follow, and provides a tool that can be adjusted to address their unique circumstances.

The Excel-based prioritization tool developed for the Chehalis group is available on the EFC's Web site. The EFC created a template that can be used by other groups in developing their own decision rules and prioritization tools. The template has been posted to the EFC's Web site.

ENVIRONMENTAL FINANCE E-NEWSLETTER

The EFC prepares a quarterly newsletter that focuses on watershed funding issues within Region 10. In 2005, the EFC expanded the newsletter to include micro-financing issues such as utility finance,

rate-setting, and point source funding challenges. The newsletter is e-mailed to more than 500 recipients, including past workshop attendees, watershed groups, various EFC contacts, and local governments. The response to the newsletter has been positive. The EFC continues to receive requests from individuals to be added to the e-mail subscription list. The newsletter is available on the EFC's Web site at <<http://sspa.boisestate.edu/efc/news.htm>>.

IACC Newsletter

In 2005, the EFC assisted the Washington Infrastructure Assistance Coordinating Council (IACC) by providing a quarterly newsletter on infrastructure financing in Washington State. The goals of the newsletter are to provide relevant and timely information on infrastructure financing and related issues and enhance communication between state and federal financing programs, as well as the systems and public. *The IACC Newsletter* can be viewed at: <<http://www.infracfunding.wa.gov>>.

EFC INFORMATION ACTIVITIES – WEB SITE

The activities of the EFC are profiled on its Internet Web site, <<http://sspa.boisestate.edu/efc>>. The Web site allows the EFC to make available information on its programs and projects without incurring the expenses of publishing a newsletter or other periodical. Information such as *The Watershed Newsletter*, various PowerPoint presentations, Capacity Tracker, the Financial Analysis Calculator for Exemptions tool, and new publications were added to the Web site in 2005.

OTHER MISCELLANEOUS MEETINGS AND TECHNICAL ASSISTANCE

Participants at watershed-funding workshops often pass information on to the other stakeholders who contact the EFC for additional information and assistance. In addition, the EFC is often contacted by agencies and organizations that would like it to participate in conferences, meetings, and various watershed events. The conferences allow the EFC to share valuable tools and services with large numbers of stakeholders and result

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in positive responses and requests for additional information. The following are some examples of events and services the EFC provided in 2005:

EPA Watershed Funding Workshop, August 3, 2005

The EFC participated in a Watershed Funding Workshop presented by EPA's Sustainable Finance Team in Washington, D.C. Attendance for the workshop was limited to 51 participants, although more wanted to attend. The high demand for this workshop demonstrates the need for watershed funding tools and information. Response to the EFC's presentation was very positive. Sixty-nine percent of the attendees rated the usefulness of Plan2Fund as "High," and 76 percent said they would use the tool. As a result of the high demand for the workshop, and in order to reach a broader audience, a webcast of Plan2Fund and overview of watershed funding tools and information has been developed and posted on the EFC's Web site.

Funders Fair, May 9–10, 2005

Congressman Michael Simpson (Idaho) requested the EFC's participation in two funding fairs offered in Twin Falls and Idaho Falls. The fairs targeted rural stakeholders in southeast and south central Idaho facing financing challenges in infrastructure, agriculture and natural resources, small business, and art and historical fields of interest. At the fair, the center presented valuable information and resources to participants. In addition, the EFC hosted a display booth at each fair and provided software CDs and information with other agencies and participants. As a result of the fair, several participants requested additional assistance.

Watershed Dialogue—EPA Office of Wetlands, Oceans and Watersheds, January 17, 2005

The EFC participated in a Watershed Dialogue presented by the EPA Office of Wetlands, Oceans and Watersheds (OWOW). The EFC gave a brief presentation on its watershed funding tools and participated in the dialogue discussion. The meeting gathered together several of the nation's leaders in watershed protection with EPA staff to discuss current and

planned activities undertaken by OWOW. The dialogue helped EPA gain insight on how to better serve watershed groups and provided a forum to discuss resources and networking opportunities with other participants.

U.S. Forest Service and the State of Washington Department of Ecology Meeting, May 3, 2005

The EFC presented information on funding strategies that focused on road stabilization work needed to meet the water quality requirements for the department's Washington Administrative Code 222 rules. The EFC assisted the group in identifying potential funding alternatives to a congressional appropriation request.



Idaho Water Reuse Conference, May 25, 2005

The EFC presented information on tools and services available to assist with funding water reuse projects in Idaho.

Pennsylvania Conservation District Watershed Specialists Meeting, October 5, 2005

The EFC partnered with EFC Region 3 and presented a demonstration workshop on Plan2Fund to Conservation District Watershed Specialists in Pennsylvania. CDs of Plan2Fund were provided to more than 100 participants.

EPA Headquarters Brown Bag Presentation, August 3, 2005

The EFC participated in a brown-bag presentation for EPA headquarters staff on Plan2Fund and the Directory of Watershed Resources.

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Idaho Nonprofit Development Conference, October 21, 2005

The EFC participated in the Idaho Nonprofit Development Center annual statewide conference titled, "The Power of Nonprofits: Influence, Impact, and Investment."



Washington Department of Ecology Watershed Leads Meeting, October 20, 2005

The EFC gave a presentation at the Department of Ecology's Watershed Leads Meeting on the EFC and the tools and resources available to assist with Water Resource Inventory Areas (WRIA) implementation in Washington. Additional assistance was requested from WRIA groups as a result of the presentation.

Northwest Power Planning Council Presentation, October 19, 2005

The EFC presented a brief workshop on Plan2Fund and the Directory of Watershed Resources to the staff from the Northwest Power Planning and Conservation Council, Bonneville Power Association, and the National Oceanic and Atmospheric Administration.

Watershed Funding Customer Service Assistance

In 2003, the EFC established a toll-free telephone number for watershed stakeholders to call if they needed one-on-one technical service assistance when searching for watershed funding within Region 10. The center has continued this service for Region 10.

Watershed Financing Individual Assistance

During 2005, the EFC responded to requests for individualized assistance for planning, researching funding options, or other assistance from a number of individuals and organizations including Canyon County, Washington State Parks Department, and Hauser Lake Watershed Association.

New Initiatives

The EFC will pursue several new initiatives in 2006 in the policy areas of Safe Drinking Water, Clean Water, and Watershed Protection.

WATERSHED FUNDING WORKSHOPS

The EFC is developing an online watershed funding workshop. The workshop will include video, Web tutorials, and links to resources and tools to assist watershed groups, local governments, and tribes in developing strategies for financing watershed protection efforts. In addition, the EFC will provide ongoing Web support and assistance to groups developing and implementing long-term funding strategies.

DIRECTORY OF WATERSHED RESOURCES

The EFC is expanding the directory to a national database. In addition, the EFC will continue to update and expand the funding sources within the directory.

PRIORITIZATION TOOL

The EFC is developing a computer-based prioritization model to assist watershed organizations in ranking the goals and objectives of their watershed plan. The prioritization model will ultimately help community-based organizations accomplish their tasks more efficiently. Field testing in late 2004 led to the delivery of a full-beta model in 2005. The next step is to develop a user-friendly version of the tool using conventional software platforms.

ACTIVITIES & ACCOMPLISHMENTS

BARAHONA PROJECT (DOMINICAN REPUBLIC)

A spin-off of the EFC's work in the Dominican Republic in November, the Barahona project is the vehicle through which the EFC's utility finance and financial management tools, training methodology and technical assistance will be adapted for Spanish-speaking professionals and managers to improve their financial capacity of water and wastewater systems. The Barahona project is a \$72 million (U.S.) construction project—internationally funded and overseen by the national water production agency in the Dominican (INAPA). A team of 11 consultants will be involved, including the EFC for software development and financial management capacity building.

EFC NETWORK COLLABORATIONS

Watershed Protection

The EFC will continue to collaborate with the University of Maryland EFC on watershed protection and watershed funding efforts. Together, these EFCs expect to introduce watershed planning and financing tools to stakeholders in Virginia.

Directory of Watershed Resources

The EFC is collaborating with the Region 1 EFC and the EFC Network to expand the Directory of Watershed Resources to other EFC regions. This work, funded through EPA's Office of Wetlands, Oceans and Watersheds, is designed to lay the groundwork for eventual nationwide application of EFC tools.

Conferences and Meetings

The EFC will continue to collaborate with the EFC Network to provide information and presentations at conferences.

Dashboard Project

In 2006, the EFC began work on a new EPA-funded project that will include the Environmental Finance Centers at the University of North Carolina, University of Maryland, and Cleveland State University. Code-named the "Dashboard Project," this effort will tackle the next big challenge in environmental financial management training—translating financial management information to aid in better decision-making by local officials. This project will include the development of a new tool—called the "Dashboard"—that will integrate and digest the output of the variety of financial management tools produced by the EFC Network. The project will also examine the information used by decision-makers, best practices that lead to financial capacity, and the best methods for exchanging information effectively. By leveraging the multi-regional coverage of the cooperating EFCs on this project, the EFC hopes to create techniques and tools that will have nationwide application.

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PERFORMANCE MEASURES

Outcomes

As a result of the center's activities and accomplishments outlined in the previous section, outcomes have included the following:

- Widely distributed tools assisting numerous water and wastewater systems in the region and beyond.
- Nationwide reach of software, training, and technical assistance for stakeholders involved in addressing non-point source water pollution challenges.
- Maintenance of important core of tools and services relative to the traditional full-cost funding challenges of providing essential public services.
- Dissemination of training and technical assistance at numerous public and private forums via workshops, presentations, and conferences.

Impacts

In 2005, the center continued its mission to improve the efficiency and effectiveness of environmental systems. It offered intensive training programs and workshops concentrating on computer programs for utility rate-setting and capital improvement planning for environmental facilities. Specific environmental issues addressed through the center's activities and accomplishments include the following:

- Wastewater and water systems
- Watershed management
- Water conservation





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