

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
ENVIRONMENTAL FINANCIAL ADVISORY BOARD**

May 21, 2000

MEMORANDUM

SUBJECT: The Environmental Financial Advisory Board's (EFAB) Proposals with Regard to the Gap Analysis

TO: Charles Fox, Assistant Administrator
Office of Water

Introduction

We are pleased to offer these ideas and suggestions in support of the Office of Water's Gap Analysis. We believe that the Gap Analysis will be extremely important to the future of the water programs and offer the following suggestions to help make the Gap Analysis even more effective.

Discussion

Central points arising from the Gap Analysis are the pressing needs, first, to significantly increase capital investments in sustainable public purpose water infrastructure and, second, to establish rate structures that ensure sufficient revenue to both operate and maintain facilities, and to provide for replacement, upgrade, and/or expansion of facilities as future needs dictate. These findings regarding affordability are sobering and challenge us to fashion appropriate financial assistance mechanisms. The Gap Analysis and other information sources, such as the Cost of Clean, predict approximately \$320 billion in wastewater and \$300 billion in drinking water facility needs at the local government level. In the absence of deliberate and effective action, the country stands to lose the gains made to date in water quality improvement and our efforts to move forward will be in jeopardy.

Several EFAB members raised a concern at its March 2000 meeting which we feel EPA should pursue. Essentially, these members observed that the circumstances of cities with which they had personal experience might be more positive than that reflected in the national findings of the Analysis. They suggest that some local governments may perceive that they face no present or future capital investment problem, and indeed they may be correct.

EFAB suggests sampling perhaps 20-30 municipalities of various sizes with regard to the core issues of the Gap Analysis and assessing how well its general findings correlate with these individual situations. The Board recognizes that several needs surveys are available whose data may contribute to such an inquiry.

Not surprisingly, EFAB's members hold a significant diversity of views with respect to the Gap Analysis, ranging from the findings themselves to the best options available to cope with the

needs. We believe that this diversity is a strength not a weakness of the Board. It will certainly aid in getting the major issues on the table, and it will subject the options to a rigorous and healthy debate. The range of views also suggests that any consensus reached by the Board would have broad support.

In several general areas, however, there is unanimity among the members. We believe that all members would agree that the Federal government should play an important role in the financing challenges facing public-purpose environmental infrastructure. These roles should include that of a funding source and a provider of technical assistance. And most members believe that any strategies designed to increase environmental investments and cut costs must be entrepreneurial, flexible, and eclectic, especially in the willingness to experiment with new approaches.

The list that follows is intended to be a partial selection of ideas to show the breadth of the means at hand with which to frame strategies to address the gap.

- Increase emphasis on water conservation and pollution prevention. Enormous opportunities exist here to significantly reduce capital spending requirements and operation and maintenance expenses, especially through new techniques of managing flow rates (e.g., reducing peaks, flow routing, natural detention ponds). Widespread adoption of demand management strategies could reduce needs.
- Achieve greater application of cost effective environmental management, by encouraging:
 - - Capacity development of smaller systems;
 - - Comprehensive asset management on a system wide basis;
 - - Administrative consolidation, including financial and capital planning and management of operation and maintenance functions;
 - - Development of commercialization and optimization models;
 - - Public-private partnerships; and
 - - **Increased use of design/build/operate, build/own/operate/transfer and similar alternate delivery methods.**
- Encourage alignment of infrastructure planning with local livable community/Smart Growth initiatives and the maintenance and improvement of in-place infrastructure rather than the creation of new service areas. Efforts to limit the urban footprint could yield benefits to both point source and non-point source flows and loading.
- Implement the Clean Water Action Plan and the financing strategies set forth in EFAB's report that address non-point pollution loadings. Use available stewardship tools, including tax and economic incentives, to ensure the integrity of priority watershed lands and thereby reduce the need for capital investments in wastewater infrastructure.
- Evaluate new institutional approaches including providing states with the option to merge and expand their Revolving Fund programs as well as environmental SRFs with multi-media eligibilities; and allow states to create basin-wide, multi-state revolving funds.
- Identify options that result in more efficient and cost-effective project finance. Examine lifting restrictions affecting the issuance and use of proceeds of tax-exempt bonds for

environmental purposes, an area the Board has reported on several times. Significant savings in borrowing costs could be achieved by leveraged state financial assistance programs, most notably the SRFs, and by municipalities issuing bonds to pay for water infrastructure projects.

- Improve analytical techniques to address affordability. Support efforts to target and deliver subsidies to recipients with demonstrable financial needs. Extend the amortization period beyond 20 years to reduce annual financing costs where consistent with the useful life of the financed facilities.
- Advocate the selection of more cost effective technologies and increase the use of staging/phasing techniques. Greater use of incentives in financial assistance programs and in the tax code would encourage the use of alternative technologies that reduce costs while achieving the same results. Expand efforts to design and construct treatment mechanisms using natural processes, e.g., wetlands treatment, ponds, natural drainage ways, and riparian corridors.
- Increase emphasis on rate setting and other capacity building measures to fully reflect costs (both capital and noncapital) of water infrastructure. Often water and sewer rates undercharge the true costs of providing environmental services. In such cases, the systems are being either subsidized from other sources or are being "mined" in the sense that postponed or inadequate investments in maintenance eventually degrade the system. Cost savings achieved in capital spending can help offset or reduce rate increases required for operation and maintenance purposes.
- Support expanded use of pooling and leveraged financial structures where needs and capabilities coincide.
- Evaluate in realistic terms the practical considerations of raising dedicated revenues through special fees and taxes that support water infrastructure financing through existing financial institutions as well as through new ones such as national or regional trust funds.
- Support state efforts to increase program and infrastructure funding.
- Identify for state and local governments optional financial tools for cost-effective development and implementation of total maximum daily load allocations in rural and urban areas.

Current Activities of EFAB and Environmental Finance Centers Relevant to the Gap Analysis

EFAB has had a long standing interest in gap-related issues affecting the water programs. Its first four advisories (1991-92) explored a wide range of ideas for lowering the costs of and increasing investments in water infrastructure. More recently, the Board sent the Assistant Administrator for Water its "*Recommendations and Final Report on Financing Opportunities for the Clean Water Action Plan.*" The principal recommendation of that advisory is to develop a long term financing strategic plan for the water programs, which seems to fit well with the direction of the Gap Analysis. The adjective "financing" is not intended to constrain the strategy solely to raising

capital. Indeed, the report outlines a range of financial, incentive, tax and fee, management and institutional options that could serve as a starting point for framing a strategic approach.

The Gap Analysis has focused thus far on capital and operating and maintenance spending for water infrastructure. EFAB agrees fully with the emphasis of the Analysis in looking at all realistic financial and non-financial remedies. We, in particular, believe that pollution prevention and cost-effective management tools and techniques hold great promise in reducing needs.

EFAB is currently involved in the following studies which are relevant to the Gap Analysis:

1. The State Revolving Fund Workgroup is preparing a revised draft of its Environmental State Revolving Fund (ESRF) report. The ESRF concept holds promise to provide States the opportunity to more efficiently finance single and multi-media environmental infrastructure investments. As part of the report the Board is asking the Environmental Finance Centers to provide examples of situations where an ESRF would have been a helpful option in financing projects that otherwise were ineligible under the existing SRF programs. We will send the next draft of the report to the Office of Water.
2. The Cost-Effective Environmental Management Workgroup is developing an agenda from the set of findings that resulted from a public meeting it held on March 6, 2000 at the National Press Club regarding cost effective management issues and options. Numerous ideas were presented that hold promise for "faster, better, cheaper" investments in environmental infrastructure, particularly improvements in procurement practices and public-private partnerships. The workgroup is developing its findings and recommendations which will be sent to the Office of Water.
3. The Brownfields/Smart Growth Workgroup (in coordination with the Cost-Effective Environmental Management Workgroup) has the lead on an analysis of the potential environmental and financial impacts of Government Accounting Standards Board (GASB) Statement No. 34 (the "Statement") that will require state and local governments to provide a full accrual accounting for all their activities (i.e., transactions and changes relating to assets, liabilities, revenues, and expenses). Among other things, in many cases the Statement requires the collection and submission of new financial data, such as reporting and depreciating infrastructure assets. The workgroup will study how the phased implementation of the Statement may affect public investments in environmental facilities and services. It will also consider how implementation of the Statement may influence future economic development/redevelopment and local and regional growth patterns. The analysis will be sent to the Office of Water and the Office of Policy and Reinvention.
4. The Great Lakes Environmental Finance Center (EFC) at Cleveland State University is developing the concept of "sustainable infrastructure development." This strategy seeks to engage a region's communities in promoting the long term integrity of the system of physical infrastructure. It seeks to define the most productive and sustainable mix of infrastructure alternatives through the integration of environmental, economic, and quality of life considerations. The EFC plans to pilot the concept in five urban centers in northeast Ohio, with the idea that successful aspects of the strategic approach might be replicable throughout Region 5 and perhaps the nation.

5. The Environmental Finance Center at Boise State University has developed software that programs capital improvement needs for water and wastewater utilities. This capital finance and planning tool complements the Center's successful rate setting workshops that already use an advanced water and wastewater rate model. Rate setting workshops have been held by several centers including Syracuse University, the University of Maryland, and the University of Louisville. In addition, the Boise State EFC and the Center at the University of New Mexico have worked for several years with the Office of Ground Water and Drinking Water to help States develop their capacity development strategies required under the Safe Drinking Water Act. Efforts are underway to include the EFC rate setting and capacity development workshops as part of the curriculum of the new Drinking Water Academy.

6. The Environmental Finance Center at the University of North Carolina is well underway in the development of an environmental finance course which will provide an extensive education to government officials about many of the issues raised directly and indirectly by the Gap Analysis. The course will be made available to all EFCs for workshops throughout the country. Additionally the center will examine, through a sampling effort, the extent to which asset management strategies are employed by utilities in the Region. New management approaches and ways of lowering costs will also be featured in the course curriculum.

7. The Environmental Finance Center at the University of Maryland has pioneered the use of charrettes to provide a forum to local governments to present their environmental financing issues to a panel of public finance experts who provide advice and recommendations. Over the past 7 years, the charrettes have proven to be a highly effective tool to provide communities with real world, useful and knowledgeable assistance to plan and finance their environmental facilities and services. Additionally, the center is working with the Office of Water to design and deliver several financial training workshops in support of the Clean Water Action Plan.

8. The Environmental Finance Center at the Maxwell School at Syracuse University conducts a wide range of effective capacity building projects for local governments including charrettes, rate setting and capital budget workshops, and finance forums. The Center has collaborated closely with local, state and national agencies and organizations to develop the "Public Management and Finance Institute," which will serve as a unique means for municipal professionals and leaders to learn the principles and practices of public finance.

9. The *Guidebook of Financial Tools* is a joint product of EFAB and the EFC Network, available at the Environmental Finance Program website (<http://www.epa.gov/efinpage>) and now on compact disk. It summarizes over 340 useful tools for lowering costs and increasing investments in environmental facilities and services. The Guidebook will undergo its second revision later this year. A new section on Cost-Effective Management will consolidate and add tools on management, technology, and financial strategies, such as commercialization and utility asset management.

Possible Role(s) for EFAB to Assist with the Gap Analysis

As a FACA advisory committee, EFAB's primary role is to serve as a resource to the Agency and to recommend policy and program actions with respect to major environmental finance issues.

The Board's offer of assistance with the Gap Analysis is an excellent example. Since EFAB's charter is quite broad, the Board could undertake a variety of activities, as suggested below:

1. Review the Gap Analysis and other recognized sources to provide comment upon the comprehensiveness of available data and information.
2. Organize a workgroup to draft a long term financing strategic plan for the water programs (as recommended in the Board's Clean Water Action Plan report).
3. Request information and public comment (in a Federal Register Notice, for example) on new infrastructure strategies, such as asset management by utilities.
4. Together with the Office of Water, consult with the public and key interested organizations regarding developments in water and wastewater utility cost-effective management, competitiveness, optimization, regionalization, asset management, financing opportunities and promising cost effective technologies.
5. Serve as a sounding board for Agency proposals and proposals from other sources. Collect public comment on new approaches, for example, by hosting a series of public meetings to raise understanding and awareness of cost saving ideas and new financing and management approaches.
6. Collaborate with the EPA-funded network of nine, university-based Environmental Finance Centers to study how local governments are coping with their capital needs for water infrastructure. As noted above, the EFCs are already engaged in many projects that deal directly with the issues raised by the Gap Analysis.
7. Provide an in-depth report on several key finance issues or innovations, in addition to those noted above.
8. Support state led efforts that encourage increased state and local resources directed toward water infrastructure and management.

Conclusion

EFAB is prepared to make a major commitment to assist the Office of Water with follow up to the Gap Analysis. We already have begun to meet with representatives from your office and the Office of Ground Water and Drinking Water to determine ways the Board can be the most helpful. The Board looks forward to your comments concerning its ideas and suggestions outlined in this paper. Thank you.

(signed)

Robert O. Lenna, Chairman

(signed)

John C. Wise, Executive Director

cc: Michael Cook, Director Office of Wastewater Management

