U.S. ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL FINANCIAL ADVISORY BOARD

Meeting Summary
August 14–15, 2006

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MEETING SUMMARY

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EPA staff present: A. Stanley Meiburg (Designated Federal Officer), Vanessa Bowie, Joseph Dillon, Timothy McProuty, Vera Hannigan and Alecia Crichlow

MONDAY, AUGUST 14, 2006

Opening Remarks from the Designated Federal Official

Stan Meiburg (1:10 PM)

Mr. Meiburg convened the meeting, introducing himself as the Designated Federal Official (DFO) for the Environmental Financial Advisory Board (EFAB) and noting the meeting's purpose to not only hear reports from work groups, but also to plan the Board's work for the coming year. The meeting was public and would permit public comment on the second afternoon. He welcomed all attendees, adding that the work groups had had productive meetings that morning, which all would hear more about later. The day's agenda involved reports from the Environmental Finance Center (EFC) Network, followed by reports from the Financial Assurance, Environmental Management Systems, and Innovative Environmental Financing Tools work groups. The next day's agenda would focus a great deal on water issues through reports from the two remaining work groups and on potential new projects that respond to the Administrator's charge to EFAB in March to focus on state revolving funds (SRFs).

Mr. Meiburg then welcomed Mr. Rich Sustich, who represented the National Advisory Council on Environmental Policy and Technology (NACEPT). Mr. Sustich briefly mentioned that a NACEPT work group is looking at sustainable water infrastructure, that is, the policy implications and application of integrated watershed approaches to enhancing coordination between water and wastewater.

Mr. Meiburg also extended condolences to EFAB member Michael Curley on the death of his son Andrew and appreciation for Mr. Curley's continued work with EFAB, despite his loss. He also noted that EFAB had at last found a new Chair, Jim Barnes, one of the most distinguished Americans working in environmental protection with a long and distinguished career of service with the U.S. Environmental Protection Agency (EPA) as well as Indiana University. Mr. Barnes has been instrumental in training a new generation of environmental professionals and leaders through his EPA and university service and has made tremendous contributions. He congratulated and welcomed Mr. Barnes to his new post.

Opening Remarks from the EFAB Chair
A. James Barnes

Mr. Barnes noted his initial hesitance to accept the position as EFAB chair, wondering if it made sense for a former senior official to head the group. Lyons Gray had done a particularly effective job and would also be a tough act to follow. He decided to go ahead and take the position, knowing that the real strength of the Board is its remarkably expert and experienced members who commit a great deal of time and thought to EFAB efforts, including senior political and career leadership. It is they who make it one of the really effective working advisory groups.

After taking care of a few administrative issues, Mr. Meiburg then introduced Joe Dillon, Director, Office of Enterprise Technology and Innovation, who described EPA's first combined report on EFAB and EFC efforts. Mr. Dillon described the report as a good research tool for those interested in EFAB efforts and contributions to EPA and those seeking ways to finance environmental efforts. In a way, the report also represents EPA's thank you for EFAB member efforts. He hoped they would find it a positive representation of EFAB/EFC work. He especially thanked Vera Hannigan for her great effort working with EFAB to pull the report together.

Mr. Meiburg also thanked Mr. Dillon for his efforts to ensure the report was ready for the current meeting. Copies of the report would be made for EFAB members present. Mr. Dillon welcomed their feedback and comments as EPA developed future reports. Mr. Meiburg then introduced Sam Merrill, President of the EFC Network, for an update on network activities.

Environmental Finance Center Network Update
Sam Merrill

Mr. Merrill referred EFAB members to the glossy color product provided them for a general list of EFC projects and said he would instead focus on EFC teaching of environmental finance: how EFCs communicate on this topic, to what audiences, and why. Three EFC directors would present on this topic, followed by dialogue with EFAB members on how the Board and network could collaborate. He had decided to focus on teaching for three reasons. First, it gives EFAB members a broader sense of the range of environmental finance products and tools that EFCs produce and services they provide. Some EFC directors are also faculty members who spend a great deal of time teaching undergraduate and graduate students. They also work with tribes and state and local officials. They conduct "train the trainer" events and work with nongovernmental officials and organizations. Second, the topic helps expand dialogue between the network and the Board and sharing of resources, expertise, and environmental finance "stories." Third, each of the EFAB members are experts in various ways, that is, all practitioners of environmental finance in one form or another, and can share some of these stories with the next generation of practitioners.

Mr. Merrill then raised the issue of defining the boundaries of environmental finance. Everyone present has a definition, probably representing a variety of answers. Ensuring that all present are on the same "page of music" might be a good idea. He then introduced the two EFC speakers: Jeff Hughes from the University of North Carolina's EFC and Kevin O'Brien from the Great Lakes EFC. Mr. Merrill asked EFAB members, as they listened, to think through their own experiences in the field to share colorful vignettes that relate to the discussion. He also wondered if a list of EFAB members willing to give guest lectures on particular topics might also be generated for EFCs or, if there is funding, for graduate assistants to travel to interview EFAB members to write up case studies from their experiences. All this would help create channels for sharing information.

Mr. Merrill also hoped they would discuss how the EFC network could be of greater value to the Board. Even though EFAB's primary audience is the Administration, much of EFAB's work could have great juristic value for a great number of other groups. For example, he was making Lang's watershed finance report last March's roundtable as required reading for a course on how municipalities might evolve toward sustainability, which he will pepper with finance sections. The question is how can the network help get some of these products out, to whom, which products, and why? He welcomed their thoughts. Mr. Merrill then turned to Jeff Hughes, director of the EFC at the University of North Carolina.

The University of North Carolina EFC

Jeff Hughes

University of North Carolina EFC does three types of work: direct community assistance, teaching, and policy analysis and applied research, which enrich each other. Working in communities provides rich real-life experiences and, along with work at the state and Federal levels on policy issues, can be worked into courses and other university offerings. The University of North Carolina has an amazing faculty in environmental management and finance. There is also a business school and a great economics department. The EFC works with these faculty and departments occasionally and tries not to overlap with them. Its work in training and university courses and with public officials is all based on applied examples: how it has been done in the field and what obstacles people have encountered.

Referring to a three-page handout, Mr. Hughes described EFC's three main target audiences. The largest group consists of public officials, including anyone from elected officials and public works directors to finance directors and state officials, that is, practitioners who make decisions. The handout listed types of programs EFC had conducted for this audience, both one-off and annual, which have been written up in some of the EFCs' reports. Programs can involve anything from three hours with five people elected to run a water utility with no finance or environmental experience to seasoned finance and public works directors who think they do not need to know anything more, because they have worked so long. In all our programs, the EFC tries to partner with a group, such as the American Water Works Association (AWWA), municipalities, and other technical assistance providers, such as the Rural Communities Assistance Partnerships.

A second type of audience is academic. Mr. Hughes referred to a description in the handout of a course he teaches every two years called "Applied Environmental Finance," which attracts mostly graduate students. The course focuses on case studies of environmental finance that have worked or not worked, but not ideas—even good ones—that have not yet been tested. Graduates from our program are going to work in particular agencies and need exposure to what has actually been tried in those types of agencies.

The EFC in North Carolina is always looking for guest speakers; he invited any EFAB member willing to travel to that state later in the fall to help out with any of the topics under discussion at the meeting, as they are all appropriate for EFC courses in North Carolina. In the applied environmental finance course he teaches, he uses EFAB's famous guidebook and readings from specific documents related to an environmental finance system, such as a state statute, Dr. Sawyer's web site on the Chesapeake Bay Fund, that is, materials they need to read with a critical eye. He does not use peer-reviewed research journals, as they get this kind of reading done in other courses. He added that the bulk of his students are majoring in public administration, but also business, environmental science and engineering, planning, and occasionally law.

A third audience, which Mr. Hughes considered one of the most fulfilling, involves mentoring and hands-on training. When the EFC is asked to do policy analysis work, it often sends along a student or two from a variety of departments. Some students have worked with the EFC for as long as two years, working half-time, and have learned a great deal through this hands-on mentoring.

Great Lakes Environmental Finance Center, Cleveland State University

Kevin O'Brien

Mr. O'Brien focused on the Great Lakes EFC's work with the U.S. Agency for International Development (USAID) and Croatia on a range of environmental finance and redevelopment issues. After hundreds of years of domination by other countries, Croatia at last attained its independence from Yugoslavia. It is a beautiful coastal nation along the Adriatic Sea with an average per capita income of $4,500 a year. In separating from Soviet and Yugoslavian centralized decisionmaking, Croatia was left with few tools as government managers. The Great Lakes EFC, along with USAID and the Urban Institute, went to Croatia to develop a broad public administration curriculum for public managers, academics, and private managers sent to the country to manage utilities or businesses that must interact with public officials, especially environmental finance and environmental organizations.

They had to work at a very basic level. Public administration was brand new. People had a very low understanding of finance in general. They had no property tax, just value-added taxes. Although local governments were being asked to plan for and manage change in their communities with physical assets, such as water treatment and distribution plants, the Croatians did not understand the basics.

They were particularly interested in brownfield redevelopment. In a country with central ownership of all property, they understood that public ownership of real property assets was a drag on the economy. How did one finance redevelopment of brownfields and turn them into constructive property for economic growth? They had not yet mapped property ownership throughout their country, including in the capital and other cities that had existed for centuries.

It was necessary to start at the basic level of geographic information systems and computer mapping of property, of lining up coordinates. To make progress, a five-day training on all this was conducted six or seven times after his first trip to Croatia in March 2005. They discussed what environmental finance was, why it was important, and what were its goals and tools, using in part the curriculum developed by EFAB and the EFCs at the University of North Carolina several years ago. At the end of the five days, after focusing on very minute detail, trainees began to see the broader picture: what can be expected to result from investment and what would the return on investment be if brownfields were cleaned up? Should this be done in rural areas at all; should one only worry about them in urban areas or only in industrial and commercial areas of bigger cities or along the Adriatic? They decided to invest in areas with the greatest return, but also areas that the EU, which the country hopes to join in 2009, would notice most.

Croatia has a dramatically high level of public debt to growth in the economy, so they are looking for ways to buy down the public debt. There has been a battle across Eastern Europe between setting up rational systems to manage real assets and the propensity to invest in developing countries. In some cases, Croatia's political system has not matched up well with the management system of assets, so the country has financed projects, such as highways, through a Croatian bank when it could have found more favorable terms in open markets elsewhere in the world.

USAID has done a great job in Croatia and is now about to pull out of the country. The EFC has trained academics from Croatian universities to teach environmental finance and helped these schools start public administration programs and create continuing education programs for public managers, which is creating a class of public managers in general. This environmental finance program has been crucial to Croatia's future, helping them to convert from an old dirty industrial economy to one based more on tourism, agriculture, and light manufacturing.

Mr. Merrill then asked each EFAB member in turn to comment or ask questions on the three EFC presentations. Ms. Francoeur commented that a continuing theme in EFAB financial assurance discussions was the importance of providing information and education to state environmental officials to perform financial assurance, evaluate financial assurance requirements and mechanisms presented by obligated parties. This is an opportunity that should continue to be discussed.

Mr. Grossman asked what is relevant to EFCs on funding of nonpoint source (NPS) areas and watershed activities for a presentation he is putting together for the following Friday. He also asked what the EFCs have done that is similar to legislation recently introduced in Ohio on funding for septic systems and a study done in Nags Head, North Carolina. He further wondered how many EFC staff do and do not serve on teaching faculties of their universities and was told that some are, some are not, and some teach on the side, even though they are not appointed.

Mr. Wise then contributed some thoughts on EFC work. First, he encouraged EFCs to continue forging customer and client relationships to be of service to regional EPA offices, which was one of the original purposes of EFCs. Second, he encouraged all attending the meeting to consider two particular dimensions of sustainable finance: application of scarce capital to advance not only environmental objectives, but also protecting ecological services, enhancing economic productivity, and advancing social equity. Building on environmental finance is a perfect bridge to thinking about teaching and policy analysis on a sustainable future. Third, he urged EFAB to think more about how to make finance systems themselves sustainable through revolving funds and creative, innovative financing techniques.

Ms. Belaga was pleased that EFCs were also doing international work, urged them to coordinate in locations where EPA also has international activities, and wondered how to get EPA working more collaboratively with USAID.

Ms. Toledo suggested that, rather than asking EFAB members to provide guest lectures, which is not practical for most of them, EFCs should take their students into the real world, for example, on-site visits to a New York trading floor or to have credit experts walk them through how municipal credits work.

Mr. Swartz, noting his experience with Mexican officials, noted that, if you are designing a system to finance environmental infrastructure in another country, the U.S. system would not be a good model, as there are a myriad of different entities involved in different places; perhaps the fewer chefs in the kitchen, the better?

Complimenting the work of the National Water and Wastewater Leadership Center, in which Mr. Dorfman is involved, Mr. Turner suggested that someone needs to do work in the area of security financing, which has received a great deal of funding since 9/11; however, it is difficult to discuss security in a public setting, so it is difficult to get the money to do the job. Implementation of security programs in this kind of environment is a difficult issue.

Mr. Mahfood made several comments. First, the sustainable finance issue is an overarching EFAB view that had culminated in a past EFAB paper called *Environmental SRFs*, which he urged be gotten back out in circulation. Second, the SRF financing should be linked to environmental restoration, habitat protection, watersheds, and NPS, but often land resource organizations and public land and other local land trusts know nothing about SRFs. Third, he noted that many environmental decisionmakers at higher government levels are still not aware of the EFCs, even when their staff work closely with EFCs. The U.S. Department of Agriculture, Fish and Wildlife Service, Geological Survey are all looking for partners from a financial standpoint to accomplish many of the same things as EFAB and the EFCs. Fourth, the Governmental Advisory Commission to the North American Free Trade Agreement (NAFTA) also had virtually no knowledge about the good work of EFCs.

Dr. Sawyers suggested that the EFCs find ways, such as through EFC partnering with MBA programs, to help develop greater leadership and management skills in university students.

Following up on comments on finding an intersection between sustainability issues and industry, Ms. Deming said that one of the greatest new challenges for industry are retrospective liabilities associated with watersheds. The joint and several liabilities under the Superfund Statute make industry wary in approaching these remediation and natural resource damage issues. She wanted to see work done to integrate the retrospective issues into a future, as it is now being addressed by a number of separate entities.

Mr. Barnes reinforced the merits of students taking theory and tools and skills courses, looking at how they have been applied in historical problems and case studies, as well as their application to current issues. Students will often find that the problems do not break down as cleanly into the topics presented in their courses and that one must find new tools and approaches to use.

Mr. Meiburg, while recognizing the amazing returns from the investment in EFCs, noted that EFCs face a challenge in reaching out to individual communities beyond the centers' immediate range, including in other states.

Mr. Mason thanked the group for their comments, urging them to continue the dialogue with EFCs after the meeting. EFCs need to take a prominent role in getting at the issue of paying for sustainable water infrastructure. Partnerships and relationships are critical. He also asked for their input on, for example, comparative analysis on organizational structure.

Mayor Girardy urged the EFCs to use elected officials from municipal to state levels, who can be of assistance from both a financial and knowledge standpoint.

Ms. Rice applauded efforts to tie university student work to community applications as helpful to both students and communities. She also urged EFCs to do more interactive webcasts to cut down on travel required by students to get real-world experience.

Regarding EFC work in other countries, such as Croatia, Mr. Correll remarked that U.S. elected officials might also learn from such experience overseas. In seeking public/private solutions here, U.S. officials might want to consider what Eastern European folks are dealing with.

Ms. Agriss remarked on the local nature of EFC work with officials and urged EFCs to also work with environmental officials at the state level, because many of them do not understand financing very well. She noted that, in terms of public/private partnership and privatization issues, EFCs could help many EFAB members out with work that EFCs have done on rates.

Mr. Hines urged EFCs to expand, move into states, and get state-level schools involved; EFC should get its last region completed so its network is a true EPA national network. Although EFCs' natural audience is public managers, EFCs should also pay attention to the people who run the cities and waste water systems at the local level, including those owned and operated by the private sector. He noted that Tim McProuty had compiled a great deal of useful information and resources on privatization and public/private partnerships. A book had been published based on a series of workshops in each of the regions on these topics. Two other resource persons are Charles Grizzle and George Raftelis**,** who was a former EFAB member.

Remembering a lunch with George Ames, when he first spawned the idea of an environmental finance center, Mr. Curley reminded the group that seldom does someone come up with a good idea that is, first, adopted by government, second, survives for 15 years, and, third, does what is was originally intended to do and does it well. EFCs are imparting the basics of environmental finance—including knowledge, tools, and resources—to people and states in each of the regions needing it. EFCs are an incredible success story. Wherever they can, they should develop more resources to develop more and better of these services for people in their regions.

Mr. Boland reiterated the importance of the professional education mission of EFCs. A great deal of environmental finance is done in small towns and cities as well as not-so-small cities and states by people who may not even know they are doing environmental finance, much less how to do it.

Mr. Smith cautioned the group not to underestimate the lack of familiarity of the public works engineering community with financial mechanisms. In addition, great distrust, fear, and lack of understanding and any desire to get involved in innovations or anything new and different permeate the system. The more EFCs can counter this, the greater a public service they provide.

Mr. Merrill thanked EFAB members for the wealth of ideas and information they had provided that morning, whereupon Mr. Meiburg suggested a five-minute break.

(break)

Workgroups Report Out
Stan Meiburg

Mr. Meiburg introduced Mary Francoeur, who would give the first of three reports from the various workgroups.

Financial Assurance Workgroup
Mary Francoeur

Ms. Francoeur first thanked Terry Agriss, Cherie Rice, and EFAB staff, for helping to pull together a workshop in June in New York on regulating captive insurers. The workshop brought together people from the financial community, environmental insurance area, and state regulators. They came away with an understanding that captive insurers are not treated differently from a regulatory or rating standpoint than other commercial insurers. The workgroup drafted a letter for the Administrator with two recommendations: (a) provide guidance to states on differences in regulating captive insurance and other insurance and (b) use a rating for captive insurers that do not pass the financial test. The next step for the workgroup on financial assurance evaluation is to review commercial insurance as a financial assurance mechanism, no matter how broad a subject that is.

She expects comments on the draft letter from workgroup members by mid-September, followed by a conference call in early October through which they would reach agreement on a final draft to bring to the full Board for consideration, before it is finalized for signature and sent to the Administrator. She concluded her report by noting that the guidance provided and some kind of educational mechanism will be an important outcome of the workgroup. She also noted additional questions raised by the workgroup: What exactly is the nature of the policy associated with financial assurance? Does insurance remain a viable and useful mechanism for providing financial assurance? She then invited comments from other members of the workgroup.

Mr. Meiburg first noted that EFAB members had received a copy of Ms. Rice's draft letter, which they were welcome to comment on; however, the workgroup is not ready to present the letter to the Board for official review. A workgroup conference call in October will help assimilate a round of comments that morning from workgroup members into a more final letter for the entire Board to review. He went on to thank everyone involved in setting up the workshop, especially Ms. Rice, who had taken the lead in drafting a letter that the workgroup could work through that day. He also noted that a copy of the workshop summary had been sent to workgroup members. Ms. Francoeur recommended that EFAB members read it after workgroup members go through it to make corrections.

Mr. Meiburg concluded the session by saying that the workgroup meetings continue to be a good forum for the exchange of information among Board members as well as with the Agency, state and local governments, and other interested individuals. He reiterated that once work on captive insurance is completed, the workgroup will move ahead to the topic of insurance in general, because many of the questions are the same. Education and competence issues are very important. People's lack of understanding manifests as fear, which ends up driving policy decisions. The more understanding promoted, the less the fear, which is an impediment to more efficient and economic functioning in the environmental arena.

Environmental Management Systems Workgroup

Rachel Deming

Ms. Deming first noted a request given the Board at last year's meeting to find connections between financial performance and environmental management systems (EMSs) to identify opportunities in the financial sector to promote EMS use within companies and by all organizations. This is challenging, because little exists on the financial side that has actually measured these systems at all. So the questions have become: what are the metrics, what can be measured, and what can be done to measure performance? The workgroup mapped out a course of action that, for a variety of reasons, it did not take, that is, interview a number of people in equity markets, financing or bond markets, and the insurance sector. The workgroup did, however, hear a presentation (included in EFAB member packets) from someone from the American Chemistry Council (ACC), who has been active in discussing the value of these systems with certain segments of the financial sector. The presentation highlighted (a) experiences in instituting a particular EMS or program embodying an EMS, that is, the ACC's Responsible Care Code, and (b) ways to find overlap with other financial and government programs to leverage the value of that system, which ACC has tried going well beyond regulation to be proactive.

She noted that the workgroup has decided to move on to where a potentially quantifiable benefit appears to exist: the insurance sector, particularly in use of EMSs and how they interface with risk assessment. The workgroup is putting together a workshop to address specific insurance issues, using information and resources provided by Sarah Diefendorf, Dr. Meyer, and others. Ms. Diefendorf is drafting a list of questions for the workshop to address. Issues of timing and financing for the workshop will be discussed with the EFAB leadership. EPA's Office of Policy Economics and Innovation (OPEI) has offered to sponsor the workshop, which may be associated with the March 2007 EFAB meeting.

Mr. Meiburg then began fielding comments and questions from the group. In response to a question on the direction of the study and whether firms with better environmental records have preferred insurance status or better premiums, Ms. Deming said insurance companies are reluctant to share details on who gets better deals. If EFAB convened an EPA panel to bring in the insurance industry, they might have a better dialogue that avoids being company specific and be able to figure out the interface between risk assessment that is part of EMSs and insurance a company might provide for different risks. A firm with an EMS with different divisions or operations should be able to identify risk better, so could have lower premiums. The risk assessment piece has broader applicability than just insurance, because it also helps inform companies' financials. It is very difficult, however, to relate a company's EMS to any kind of financial metric benefit, because it cannot be isolated from a range of environmental components (of which EMSs are only one), as well as health and safety social responsibility.

To a question on whether the workgroup was thinking about ISO 14000 and similar standards, Ms. Deming responded that ISO 14000 is not universally accepted as the best EMS. The Responsible Care System goes far beyond the ISO 14001 system, even on environmental metrics. The ISO system is certainly a baseline. By not limiting it to ISO 14001, one allows for more sophisticated EMSs.

Ms. Sahi commented that finding out which components of EMSs are weighted more heavily than others permits assessment of what are the best components. She thought dialogue with insurance companies would be useful in this respect. Ms. Deming responded that EMSs are not well-defined identifiable concepts and figuring out baseline components that are the most important pieces for certain market areas on which to give advice is important.

Ms. Diefendorf mentioned two useful data points in California: a beyond-compliance certification program of the Sustainable Wine Growers Association in which certified wine growers are offered a 15 percent discount on insurance rates and a dry cleaner who switched from perchloroethylene to CO^2 to negotiate his rates down.

Mr. Wise said insurance was a very large subject. EFAB is intersecting with the insurance industry at many levels. EFAB needs to keep an eye on the larger picture as it works on individual pieces. Insurance may become a significant driving force, and part of EFAB's task is to understand the dynamics.

Mr. Meiburg concluded the session by thanking Ms. Deming and other members of the workgroup. Insurance issues present a bit of a challenge, he said, in terms of what focus to take. The benefits of having the workshop, as Ms. Sahi noted, was to engage the industry itself to help frame the questions better. The Agency does believe that the environment will benefit from more widespread adoption of EMSs; to help make the case for EMSs, many people would like to see an association, even if not cause and effect, with something that affects the financial bottom line. Mr. Kent and Ms. Rice both expressed gratitude for the comments from the group on the workgroup's efforts.

Innovative Environmental Financing Tools Workgroup

Michael Curley

Mr. Curley described the workgroup's current focus—as requested by the EPA Office of Air and Radiation (OAR)—on the Smartway Program, which combines several unrelated elements to reduce emissions from diesel trucks. The workgroup first asked OAR whether sufficient funds were on the table for emissions credits, which were possibly gainable by installing Smartway devices, to offset the cost of one of the more expensive elements of the Smartway kit; this piece produced no fuel savings at all and was, therefore, the least desirable part of the kit. The value of the credits, however, in terms of the cost of the Smartway kit is 23–28 percent, a significant amount over five years.

Two impediments to credits could form the basis of recommendations to the Administrator: (a) enabling national tradability and (b) identifying an exact amount. On the first, defining the value of credits, for example, for NO_x, is air shed specific and, therefore, not definable. The Agency might want to work with industry to agree on a tradable value of emissions if a cross-country vehicle installs the Smartway kit. The second impediment is how to come up with an exact amount, that is, a mileage standard for particular criteria—age and type of engine, and so on—acceptable to the Agency and industry, as well as politically.

Mr. Curley then described what the workgroup will study in the next few months: The first will be the impact of stationary sources of mobile emissions, for example, ports and truck stops. Ports present the possibility of tax-exempt financing. In addition, a port in a severe nonattainment area could simply forbid entrance of trucks that do not have a particulate matter scrubber installed. A second item for discussion will be aggregation systems for credits, that is, moving the administration and financing of a program of credits to users of credits, for example, a utility company, as opposed to the user of the trucks. Such a body could aggregate credits to be more saleable and send out checks to the individuals who own trucks. Another area of study for the workgroup will be, again, the national tradeability and calibration of emissions credits.

He concluded his report by listing next steps for the workgroup: to gather more information on the three study topics and issue a memo on tradeability and calibration for further discussion, supplemented by additional information on stationary sources of mobile pollution. By the middle of the fall, he hoped this would shape up into a draft report for comment by the workgroup and, eventually, by the Board in time for the March 2007 meeting. Mr. Meiburg then opened the floor to questions and comments.

Ms. Sipes pointed out that she had worked for the Smartway Transport Partnership and just started working for the Region 9; they are facing the same challenges with the upgrade kits being discussed. Apportioning emission reductions gotten only in Oregon and attributable to Oregon's money is difficult. Global positioning system (GPS) trackers might be useful in solving the problem. Oregon's great reporting system on attainment and nonattainment areas can help. It is a challenge in major transportation corridors like Oregon and Washington to require every truck owner or company to have a global positioning system (GPS) and track all their travel. The stationary source issue is interesting. Truck stop electrification avoids truck idling and is easier to calibrate. The Office of Transportation and Air Quality had a guidance document on the Smartway web site on getting credits for truck stop electrification.

Mr. Meiburg added that the regional administrator, Wayne Nastri, has been pushing on the ports, such as the Ports of Los Angeles and Long Beach, which may be a coincidence, but a great deal of interest exists nonetheless. Mr. Nastri has been talking to other regional administrators on expanding this concept beyond California to address the comparative advantage issue, particularly regarding ships. Ms. Sipes added that the Port of Long Beach's web site includes a Clean Air Action Plan on cleaning up the port, including a large section on trucking at the ports.

Dr. Sawyers noted that a lot of states are shying away from adopting truck stop electrification and diesel retrofit, perhaps for financial reasons. Maintenance costs were the reason that people did not want to retrofit school buses, despite a Maryland program to encourage this. Before discussing financing tools, it might be better to discuss the benefits and encourage more states to get involved. Mr. Curley agreed that an education program must go along with any retrofit efforts.

Mr. O'Brien described Region V's Clean Diesel Emissions Program as one of their priorities for the next few years. The Great Lakes EFC partnered with them to facilitate discussions with industry and trucking companies to determine their interest in doing something. Because the pollution is mobile, the problem is that pollution is created in states where the trucks are not registered; traditional state use of financing sources is not applicable. It is also difficult to convince trucking companies to do something that does not increase productivity for them. Their EFC is holding a conference on September 23 in Chicago for investment banks, insurance companies, trucking companies, and others to discuss financial capacity or capabilities to move this further down the road, including trading of credits.

Mr. Wise commented that if a financial hook could be found that could help existing truck owners and companies in interstate commerce capitalize on their investments and get some payback, it would be a huge victory. Mr. Meiburg added that the FY 2007 budget before Congress has provisions for grants for diesel retrofits of somewhere between $25 and $27 million. Because of this, the Agency may ask EFAB how to allocate that money to produce the "biggest bang for the buck." He suggested that, when Mr. Wise talks with Mitch Greenberg that he raise that as a possible extension to OAR's charge to EFAB.

Ms. Himmelberger then mentioned that Mexican truckers have been going through substantial hoops raised by the U.S. government at great expense in order to get across the border more quickly. These hoops are much stricter than those placed on U.S. companies. Perhaps they would spend more money if there were other incentives.

Ms. Diefendorf wondered if looking into building better technology for retrofitting trucks might also be a good idea, as particulate filters can cost $6,000 per truck, which may need as many as two or three during its life. Perhaps it could be part of some kind of design challenge. Ms. Sipes thought the price would go down drastically, as the device requires ultra-low sulfur diesel (ULSD) to work properly and EPA has mandated ULSD use by 2006.

There is still not much of an incentive to use the filters, however, because it does not translate into fuel savings.

Mr. Meiburg thanked the workgroup for struggling with these issues. One of the greatest difficulties is how to get a substantial amount of pollution reduction in small increments of time. The group then agreed, because there was still time, to move into Langdon Marsh's report, scheduled for the next day, from the NPS Workgroup.

Nonpoint Source Financing Workgroup
Langdon Marsh

Mr. Marsh began by noting that, for several years, the Nonpoint Source Workgroup has considered how localities can finance the portion of watershed plans and projects and so on that is not financed by Federal grants and loans or private foundation contributions. The proportion can vary from 10 to 70 percent depending on availability of grants and eligibility. The workgroup has focused on nonpoint source (NPS) pollution because it has received less attention on financing questions. Given tremendous flexibility in SRFs to pay for various kinds of NPS programs, the issue is really lack of adequate funding to cover all the work that needs to be done.

On March 9, the workgroup held an excellent roundtable of experts from a cross-section of government, industry, local authorities, and nonprofits, including several EFAB members. These experts were asked what should be included in a sustainable finance initiative that EPA might assist in some way.

He took a minute to thank Alecia Crichlow, Vanessa Bowie, Tim McProuty, and Tim Jones, as well as staff of the Office of Water; Office of Wetlands, Oceans, and Watersheds (including the Targeted Watershed Grant Program); and the Sustainable Finance Team and for their organizational help on the roundtable.

Mr. Marsh then summarized the results of the roundtable, as presented in a report in EFAB member packets, noting that some of the points could apply equally to financing the non-Federal, non-state share of infrastructure. He is also interested in the Board's thoughts on whether the roundtable results can be applied to the "hardware" side of things.

The roundtable's focus was so important because total maximum daily load allocations are increasingly driving the need to address issues on a watershed basis. EPA and/or the states have moved toward watershed permitting, and the policy for sustainable infrastructure certainly includes the notion of taking a watershed approach. Traditional sources of funding just cannot do it all, so local governments within watersheds and watershed organizations that care about improving the situation are more or less on their own to find financing. This has always been true; much financing for infrastructure has come from the local level.

The report covers several areas addressed by the roundtable. First, presentations by George Ames and Stephanie von Feck on state revolving funds and on drinking water reiterated the flexibility inherent in SRFs. More work can be done to find opportunities for leveraging of funds, that is, how investments through SRF programs can be associated with other investments, which is particularly possible for NPSs.

Second, John Boland (Johns Hopkins University) and Josh Farley (University of Vermont) discussed principles for allocating costs to meet a variety of tests, for example, simplicity, fairness, equity, efficiency, and so on. There are many ways to finance things—taxes, fees, charges, and so on—and none of them are easy. To make the case for additional fees, taxes, or whatever politically achievable, one should craft something simple enough to be understood, as well as fair and equitable to be acceptable.

Third, the roundtable looked at several models of collaborative governance: how to bring government, business, nonprofits, and citizens who represent the relevant financial and economic interests together to think about the most effective ways to raise revenues locally for an entire watershed. If such a group has an appropriate convener, is adequately sponsored, and has a neutral forum, it has a better than average chance to come up with an agreement that can be implemented by the various jurisdictions in the watershed. A wonderful presentation by Maryland folks on just such an initiative suggested keeping such efforts simple and transparent, sharing financing costs as broadly as possible, assuring accountability, making revenue sources sustainable, and seeking broad political acceptability.

Fourth, they looked at a variety of innovative financing and market methods. Existing efforts include special purpose financing, special district financing, surcharges on water fees (including the New York City watershed case), different kinds of watershed assessments, transfer of development rights, tax increment financing, and some very interesting market-based programs. Karl Morgenstern presented the case of the Eugene, Oregon, Water and Energy Board, which used fees and Federal grants to finance an effective economic development scheme to connect organic farmers upstream on the McKenzie River to consumers and customers in Eugene, while reducing impacts and loadings to the river. The goal has been to become a self-sustaining and -financing market system with associated water quality benefits.

Mr. Marsh then concluded his report by reviewing the report's six recommendations to the Administrator:

- Use its Targeted Watershed Grant Program or other programs to develop a demonstration project in one or two watersheds to demonstrate collaborative governance and sustainable finance techniques to see if the Agency can actually help make it happen in a watershed. He noted that lack of data for nonpoint source impacts is often lacking, but a critical part of any innovative financing scheme.
- Promote collaborative approaches at the local level. Consider helping establish collaborative approaches to addressing complex and politically touchy issues without advocating that locals raise their taxes.
- Improve, update, and disseminate a list of tools that draws on EFAB's past work. The EFCs could play an enormously important role in doing this.
- Encourage an ecosystem services approach by investing in work with universities and other Federal agencies, particularly the Forest Service, to develop ideas on incorporating

such values into market schemes and revenue-raising systems to address water quality problems.

- Look for ways to leverage existing financing tools. This should really be a cooperative effort between the Agency and states and local governments and watershed groups.
- Develop a compendium or list of potential entities—utilities, special districts, or whatever—to implement watershed approaches and pros and cons associated with each.

Mr. Marsh said the report was a draft that awaited EFAB member reactions. The next step will be to incorporate their comments into another draft, pass it around the workgroup, and come up with a final report, together with a proposed letter to the Administrator to be circulated for EFAB approval.

Mr. Meiburg opened the floor to comments and questions. When asked if there has been interaction with the Natural Resource Damage Assessment Trustees on how they value ecosystems, Mr. Marsh said he did not know, but they want to develop information on it; some agencies, including Agriculture, are working on it. Mr. Boland said that the techniques to do natural resource damage valuations under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) would be similar to those they would use, but more narrow due to a history of litigation. It is supposed to begin with an objective assessment of damages, and the methods are supposed to be comparable. Ms. Deming noted that using the same terminology in two contexts can be confusing, but there is value in having consistency, because it opens the possibility of credits in natural resource damage situations. The more this is considered in terms of moving forward, the greater the availability of funds.

Mr. Sawyer commended the workgroup on its draft and presentations. He noted the real opportunities for some entities now working separately in Maryland on different issues to step up and borrow the money. Mr. Marsh responded that if one tries to work on a truly watershed basis, an entity has to have authority throughout the watershed; for example, in Washington State they are called public utility districts. In many states, it is not so clear how easy it would be to create a special district that would cross town, village, county, and/or even state lines. That is more the issue than the ability of the entity to issue finance. Dr. Sawyers cited the Restoration Fund as an example of a multistate effort, but they have not been successful. Unfortunately, some of these efforts must start at a county level and may eventually work together across the watershed.

Responding to the point that New York City's efforts cannot be easily be replicated elsewhere as the city owns a great deal of land in the watershed, Mr. Marsh noted that the New York City case was a landmark agreement because private land owners were paid for implementing best practices on farms and forestlands by those city customers who benefited.

Ms. Agriss suggested that EFC could productively focus on collaborative governance, because it is difficult for EPA to encourage various political jurisdictions to work together on watersheds. Perhaps EFAB should discuss the concept of beneficiary pays more, she added. A great deal of interesting work is being done on this on electric transmission lines, both siting and financing.

Ms. Belaga thought EFCs had a unique opportunity to get involved more aggressively because states will need some real hands-on help in these areas. EFCs could not only help states, but take a regional look, helping neighboring states in dealing with these issues.

Mr. Zaragoza returned to the natural resource damage assessment (NRDA) issue. Regarding CERCLA actions, NRDA claims are typically based on whatever is left. Superfund cleanups deal with the bulk of the claims, which is why claims are not greater. Two ongoing activities are addressing the harmonization issue now: The National Oceanic and Atmospheric Administration (NOAA) is having a series of workshops that include industry, states, various other Federal agencies, and the public to try to harmonize things, and the Department of the Interior (DOI) has brought people in to look at the whole FACA, Federal Advisory Committee Act process. States have also set up their own harmonization processes for doing certain things. The DOI rules cover CERCLA NRDA, and the NOAA rules cover OPA, Oil Pollution Act NRDA.

Ms. Deming said that CERCLA has not addressed many watershed issues. The CERCLA and NRDA processes and watershed issues should be integrated, which provides the opportunity to go outside the usual paradigm. Point sources or a specific facility can be taken care of by the CERCLA cleanup, and the residual is negotiated as a natural resource damage claim. Watershed opportunities, however, are evolving to a point where there may be some opportunities for using available funds better.

Mr. Hughes suggested that EFCs' experience was that there may be many great ideas but the implementing entity issue must be addressed first. Across states, what is legal can be very different. EPA has generated guidebooks that may be able to help, but one could perhaps develop criteria for a potential entity, and then each state could decide what kind of entity it would mean.

Mr. Wise thought the roundtable last March was excellent, especially the papers by Mr. Boland and Mr. Farley, which contained good solid information on financing some of these matters. The papers set the right tone, that is, that the job can get done.

Mr. Turner noted that the Ohio River Valley National Sanitary Commission is doing things on a watershed basis and has gathered a lot of data. Some environmental groups think highly of the Delaware River Basin Commission as a good watershed-based organization. Mr. Correll added to the list the New Jersey Water Supply Authority, which is a statewide agency that leverages money from the Department of Environmental Protection (DEP), charges its users, and is acquiring a lot of watershed land,

Mr. Meiburg noted an interesting disconnect between promoting innovative forms of finance and the need for education on conventional finance. Regarding promoting collaborative government approaches, he wondered what exactly EPA could do. EPA could be a convener, but how to promote these approaches can be challenging, particularly given the role of states, as EPA needs to be careful not to overstep its role. He suggested that the Department of Transportation's Ecosystem Enhancement Programs to identify mitigation for some large-scale highway projects in advance based on ecosystem principles may be a good model. He added that actual implementation of ideas in the roundtable paper is very sensitive to local circumstances and conditions.

The group agreed to defer discussion on EFAB's role in advancing the recommendation, once EFAB has delivered it.

First Day Summary
Stanley Meiburg

Mr. Meiburg took a few minutes to summarize his impressions of the afternoon's reports. He noted that Sam Merrill had received considerable feedback from the Board that will take a bit of synthesis and work to mine all the "nuggets" provided, but was a fertile exercise.

Ms. Francoeur's report on financial assurance had laid out a clear schedule of next steps. EFAB member feedback on captive insurance led to additional ideas for insurance in general, but the timetable for comments on the draft letter to the Administrator is well defined.

Ms. Deming's presentation on EMSs outlined the progress the workgroup had made that morning in focusing on producing information on some of the potential financial benefits of EMSs for use in looking at companies that are wavering about moving ahead with such systems.

Mr. Curley provoked a wide-ranging discussion on innovative financing tools that touched on the Smartway program as well as other areas, so there is good follow-up work to be done.

Mr. Marsh had addressed the need for people to develop an intellectual framework on what can be done on sustainable financing of watersheds and principles to follow in applying them. One must be ever mindful, however, that on-the-ground application will vary a great deal from place to place.

Mr. Meiburg then adjourned the meeting for the day.

Adjournment (4:52 pm)

TUESDAY, AUGUST 15, 2006

Opening Remarks
Stan Meiburg (9:00 am)

Mr. Meiburg convened the second day of the EFAB meeting, taking a minute to thank Alecia Crichlow and Vanessa Bowie and others responsible for the previous evening's EFAB dinner. He also welcomed EFAB member Jennifer Hernandez, who could not attend the previous afternoon, as well as Steve Hanna from the Office of the Inspector General, who did some of the Inspector General work on financial assurance and addressed EFAB at the New York workshop on captive insurance. Referring to that day's speakers, he also welcomed Jim Hanlon of the Office of Water and Wastewater Management and Cynthia Dougherty of the

Office of Ground Water and Drinking Water. Discussion later that day on future EFAB work, especially on SRFs, would benefit tremendously from their participation.

Workgroups Report-Out (continued)
Stanley Meiburg

Mr. Meiburg then introduced George Butcher, who spoke on expanding the definition of SRF finance.

Expanding the Definition of SRF Finance
George Butcher

Mr. Butcher referred EFAB members to a draft concept paper in their packets on the topic, which describes an alternative approach to achieving arbitrage relief to make SRFs more efficient. Getting the Internal Revenue Service to make an exception to generally applicable arbitrage rules have been unsuccessful. Expanding the definition of permitted SRF financial assistance to include operating and capital assistance would permit state SRFs to give financial assistance without triggering application of generally applicable arbitrage rules. The perpetuity rule would still apply. This would make additional dollars available in the SRFs for additional assistance. The workgroup has discussed whether this could be accomplished through a regulatory change, avoiding a statutory change. The workgroup could not identify a workable way to accomplish this through regulation, so a statutory change would be necessary. Additional work is needed before submitting the paper to the Board:

First, EPA has historically been reluctant to give operating assistance. From an economic perspective, EFAB's discussion uses the same dollars for the same projects in a way that is more efficient for the program, but nevertheless recognizes that sensitivity. The nexus in the paper between eligible projects and provision of operating assistance needs strengthening, probably by permitting operating assistance only if the bar receives a loan or loan guaranty.

Second, area of emphasis is one he had just mentioned: emphasize the potential impact on this proposal in terms of the ability to grow the SRF or to provide assistance to more projects. And although EFAB has done some diligence with tax lawyers, they will go through an additional diligence process to get more comfortable that this idea should accomplish its objectives by circumventing the application of the arbitrage rule.

The plan is to get comments from the workgroup by September 15 and then circulate a revised draft to the workgroup by early October, resulting in a final product for consideration by the Board. The Board should consider the form of its consideration.

Mr. Meiburg then opened the floor for comments and questions. Ms. Agriss reiterated the Administrator's charge to EFAB to come up with innovative financing to accomplish more than would otherwise be achievable in the face of reduced capitalization grants for SRFs. She thought the workgroup had definitely come up with something that meets that challenge.

In answer to a number of questions from Dr. Tozzi, Mr. Butcher explained that there is a cost to the workgroup's proposal. Because the government is not benefiting from the restriction of the yield, there should not be a cost; however, if this proposal were passed, programs that do not currently leverage and those that leverage without investing their equity would be expected to switch to a model allowing them to invest. The theoretical cost to Treasury would be, if more tax-exempt debt is issued, that the government would forego more benefit; however, the government is not issuing those bonds now, so it depends on the way one looks at it. The concept would be very specific to SRFs. The amendments implemented would be an addition to EPA, not an amendment to the Tax Code. The list of permitted financial assistance would be modified.

Mr. Hinds suggested tweaking the proposal to gear it more toward communities. This led to a general discussion on whether to gear it toward the affordability issue, because if more subsidy is offered, the cost of environmental protection for smaller and other communities would decrease, because they can subsidize the cost of borrowing. Although these funds could be useful to states on affordability issues, an argument can be made to work to simply get more money overall into the funds and leave it to the states to make the determination on guiding money to one goal or another. Because the states would administer the additional capital on the basis of the individual state SRFs, individual communities will, in any case, not have a say on how the monies are administered. Perhaps EFAB should be going more in the direction of flexibility in making determinations?

Mr. Butcher then addressed a number of questions on the perpetuity requirement, which means that equity contributed to the SRF must continue to exist in perpetuity. Any operating subsidy can be taken away at the end of the length of the loan. The SRFs functionally provide subsidies from earnings on the equity contributed to the fund. This equity must be maintained; the perpetuity earnings provide the funds that actually go into subsidies, whether an interest or operating subsidy. There is no difference in the functioning of the fund from an economic perspective, other than the ability to garner additional earnings, which would then be available to provide additional subsidies or to make additional loans.

These subsidies are called operating subsidies, because they cannot be debt service subsidies, as there must be an associated cost. Two examples of cost are the capital paying for a portion of the project cost or operating assistance related to the project during which financing would otherwise occur. It is not operating assistance in perpetuity. The intention is to avoid characterization of the subsidies as debt service assistance and have something that is clear, understandable, and relates to the project. The operating subsidy does not have to go back into the specific operation; the money would simply be in the hands of the operator, such as a utility, much like savings from lower debt service. Ms. Agriss thought this point should be considered in revising the workgroup's paper.

At some point in the future, Mr. Wise said, the Federal capitalization grants will cease to flow into the system. At that point, all kinds of cross-cutting requirements vanish. This is a generally applicable rule that applies whenever taxes and bonds are issued while monies are invested, replied Mr. Butcher. Debt service is being traded for operating assistance, potentially dollar for dollar. Mr. Wise thought EPA was ambivalent about whether or not Federal requirements dissolve when Federal capitalization quits coming in. Mr. Butcher's understanding was that all requirements are attached to grants and state matches. When a state match expires or no capitalization exists, those grant requirements disappear. The perpetuity requirements are obviously continued, but many cross-cutting grant requirements only attach to grant dollars. Even today, a third of the loans made from clean water SRFs are repaid dollars or interest-earning dollars. Arbitrage requirements, however, attach to earnings from tax-free debt and so are different in this respect. Mr. Dorfman added that the requirements of the SRF program itself of Title VI will continue as long as each SRF program exists, because that was part of the establishment of the SRF program. The cross-cutting requirements attached to grants from the Federal government will cease to exist and often expire now.

Mr. Butcher noted that the next steps for the workgroup included getting a final revised draft of the proposal to the Board in early November. Mr. Meiburg thanked the workgroup for their well-thought-out proposal, a good example of a creative idea to work around arbitrage requirements that are not amenable to frontal assault.

Potential New Projects
Stanley Meiburg

Mr. Meiburg then introduced Greg Mason of the Georgia Environmental Facility Authority (GEFA) and Jordan Dorfman, who reported on a conference planned for Atlanta next spring on paying for sustainable water infrastructure.

Paying for Sustainable Water Infrastructure Conference

Comments by Greg Mason

The genesis of the conference was last March's EFAB meeting, when Deputy Administrator Marcus Peacock challenged EFAB to crack the problem of water infrastructure financing. GEFA was asked to cosponsor a national conference to address this question, which involves some initiatives in which EFAB has been greatly engaged. The date has been set March 21-23. The title is "Paying for Sustainable Water Infrastructure in the 21st Century." It will take place at the Atlanta Hilton after the March EFAB and before the May CIFA, Council of Infrastructure Financing Authority meeting. Attendance is estimated at between 300 and 500. The audience sought will be a broad spectrum of key public and private senior policy and decisionmakers, obviously from state and local levels, the public finance field, and water professionals within the industry and environmental sector. The Administrator and Ben Grumbles very much have these conference plans on their radar screen.

Goals include raising the profile and awareness of EPA's sustainable infrastructure initiative, including the four pillars; creating a national forum to advance the Administrator's priority; exchange ideas on state and local financing innovations; learn about revenue financing innovations in other countries; and recognize 20 years of the Clean Water and 10 years of the Drinking Water Program.

The conference will have four tracks: sustainable infrastructure and the four pillars; the SRF and Federal assistance, that is, lessons learned and how to integrate activities with Federal programs; the Federal role after Federal funding ceases (led by George Ames and Peter Shanahan); and state and local innovations (led by Michael Deane).

Mr. Mason referred to specific expected deliverables in one of four slides he presented, saying that the intention was to have meaningful dialogue that will move the audience to action and successful measures. Invitations have gone out to key government and nongovernmental officials to participate. He invited EFAB members to suggest how they might get involved, whether as speakers or even by holding an EFAB public hearing. The intention is to report back on the meeting to the Administrator. A website, "Paying for Water" will be operational within a week.

Comments by Jordan Dorfman

Mr. Dorfman said that Mr. Mason had covered much of what he had wanted to say, but added that logistical questions could be directed to George Ames or Kelly Kunert. He had spoken with Sam Merrill on the EFC Network cosponsoring the conference. EFAB could hold a meeting on the last day, but they were open to any other ideas the Board had. At this point, Mr. Mason asked EFAB members if they had any suggestions for speakers, if they wanted to reserve a session, or if they would literally like to take ownership of a session with a kind of town meeting or public hearing.

Mr. Meiburg further clarified the feedback being sought from EFAB members. Their participation in the conference would be a new type of activity for EFAB than in the past. The Board could take a number of roles, ranging from participation by individual members; sessions sponsored by Board members within the individual tracks laid out, for example, on expanding the definition of SRF assistance; creation of EFAB's own track to cover all that the Board has been working; some form of cosponsorship by EFAB, although it could not be financial due to limited EFAB funds; to the concept of a public EFAB meeting.

EFAB members then had a lengthy discussion on various aspects of the Atlanta conference, including desired audience and speakers; EFAB's role, especially whether to sponsor the conference; encouraging audience participation and generation of new ideas; specific topics to cover; and logistics, especially whether to combine the spring EFAB meeting in some way with the conference.

EFAB members mentioned a great range of individuals as part of the desired audience, including people who run SRF programs, high-level state environmental agency officials, as well as nontraditional invitees, such as from the Farm Bureau, USDA, and others managing money for watershed improvements. Individuals involved in municipal leagues and county commissioners are dealing directly with questions EFAB members have raised, such as affordability, and should be invited. EFAB members should also feel free to send out personal invitations to individuals in their particular industries.

A great deal of time was spent discussing how EFAB should get involved in the conference. Regarding cosponsorship by EFAB, Mr. Meiburg did not see it as a problem, because EFAB is a Federal advisory board chartered by EPA with sufficient independent status. In addition, sponsorship of the conference would simply entail use of EFAB's network to help distribute information on the conference and participation by its members. It was agreed that Vanessa Bowie should, in any case, check with the Office of Cooperative Environmental Management to see if sponsorship would break any FACA rules.

Invitations for other cosponsors have resulted in positive replies from the Water Environment Federation, National Association of Clean Water Agencies, American Water Works Association, Association of State Drinking Water Authorities, and CEFA. The Environmental Council of the States (ECOS) is considering sponsorship, as are four or five other entities. Mr. Sustich planned to speak with John Howard about sponsorship by NACEPT.

Mr. Smith raised the question on how EFAB could most efficiently benefit from the conference. Would this be an opportunity for EFAB members to harvest innovative ideas or to test fledgling ideas with a range of individuals? Mr. Meiburg thought that getting EFAB out into the marketplace of ideas was certainly respectful of the role of the Board as a source of recommendations for the Administrator. Mr. Marsh pointed out that EFAB had in essence sponsored the roundtable last March with the Office of Water, Wetlands, Oceans, and Watersheds. Dr. Sawyers noted that EFAB also has a wealth of its own ideas; even though EPA is its prime audience, it was time for the Board to take some of these ideas beyond EPA to gain support for them.

The discussion generated a number of ideas on structuring the conference to encourage interaction and generation of innovative ideas. Mr. Merrill expressed concern on whether four tracks with 28 speakers might turn the conference into just another set of "talking heads," albeit fascinating and engaging. Perhaps some EFAB members could end each day by facilitating an hour and a half hash session to brainstorm a list of barriers and develop problem-solving action steps. EFAB members could offer consultative advice on whether one or another innovation that has been case studied or profiled might have transferability and how it could be integrated into other systems. Such critiques could give an audience of policymakers perspective on the potential of ideas and encourage action steps. Another idea was having break-out sessions of 10 to 12 attendees who would focus on a specific case study to generate ideas.

Mr. Wise suggested showcasing and distributing EFAB's very well-done document to all conference participants. He also noted that it was important to seize the high ground on issues of sustainability, fresh perspectives, and innovations. The conference could otherwise easily degenerate into a complaining session on cross-cutting requirements and lack of money and Federal grants.

Mr. Mahfood emphasized the need to look at nontraditional organizations that are currently funneling money to issues, for example, on agricultural water quality, and to have real results from the conference. Related to this were comments from Dr. Tozzi and Mr. Sustich on inviting speakers on specific projects, like George Butcher project. NACEPT is currently working on 18 to 20 real-world watershed case studies. EFAB could supply questions to be answered in these studies that could contribute to the conference discussion. Ms. Francoeur suggested looking at work by seemingly unrelated agencies, such as the Federal Highway Administration in the Department of Transportation, which is pursuing public/private partnerships and ways to modify Federal legislation and requirements to encourage similar kinds of innovations.

As part of discussion on watersheds, Mr. Turner said the conference should analyze the figure of $400 billion needed for water infrastructure in the next 20 years, questioning whether the dollar figure was correct. The conference should also discuss the part of the program dealing with total maximum daily loads. Mr. Miller added that the other end of the equation was the perceived value of a utility, that is, what it is worth to the user.

As an aside, Mr. Curley mentioned that he would like to invite the head of the Global Environment Facility to join other invited "heavy hitters" to contribute to international discussions at the conference.

The group spent a great deal of time discussing how to coordinate next spring's EFAB meeting with the Atlanta conference. A number of ideas were discussed to make attendance at both meetings more convenient for EFAB members; siting the EFAB meeting in Atlanta either before, after, or during the Atlanta conference would help and even contribute to outcomes of both meetings. A concurrent, albeit abbreviated, EFAB meeting would thereby become an open public session and give EFAB additional visibility and opportunities to hear new ideas and test out EFAB ideas. The Atlanta EPA office would be happy to handle logistics of holding both meetings at or near the same time. The drawback would be that EFAB members would miss the annual opportunity to meet more easily with Washington EPA officials; however, it raised the possibility of meeting more conveniently with regional EPA staff. One logistical detail was the possible conflict of holding an EFAB meeting, which is public, as a conference track when conference attendees had paid fees. One suggestion was that a short EFAB meeting be held on the Tuesday before the conference, which would allow for discussion of some of EFAB's other topics and specific sessions at the conference relating specifically to conference-related EFAB activities, especially on Wednesday, to make it more convenient for EFAB members.

Mr. Smith cautioned the group to be careful not to take over the conference planning process; Mr. Meiburg agreed that EFAB should seek only to find ways to get economy of operations and would work with the Office of Water and Greg Mason.

Ms. Himmelberger then noted that state and Federal legislators and what they do impact anything that is done on SRF funding or innovations. In her state, legislators grant a great deal of money without strings attached, which affects the ability of systems to work together in a consolidated way and the ability of the SRF program to advance sustainability. The same thing happens at the Federal level. The legislative level really impacts the ability to do different innovations or undercuts innovations that are tried. If a lot of strings are placed on SRFs and state money comes without strings, ability to make progress is undercut. If this cannot be addressed in the conference, it is something that EFAB should keep in mind. Perhaps some legislators can be invited to the conference or be briefed afterwards? Mr. Meiburg then quoted a comment by Deputy Administrator Linda Fischer, who said "Congress is educable." He added that money with no strings attached usually had strings attached that were not apparent. He also noted that earmarks themselves have shrunk and would probably continue to shrink. The same forces that are affecting capitalization grants are at work on earmarks. Mr. Meiburg finished by announcing a short break.

(break)

Mr. Meiburg reconvened the meeting and welcomed and thanked again James Hanlon, Director of the Office of Waste Water Management, and Cynthia Dougherty, Director of the Office of Ground Water and Drinking Water, for participating in the EFAB meeting. They would discuss financial capability guideline review and affordability, respectively, for EFAB members.

Financial Capability Guideline Review
James Hanlon

Mr. Hanlon thanked EFAB for the invitation to attend what would be his first EFAB meeting. He first announced Ben Grumbles' appointment of a former EFAB member, Michael Deane, to Mr. Grumble's immediate office in the Office of Water to work on a range of municipal finance issues. Mr. Hanlon also thanked EFAB for its March 2006 report on affordability; Mr. Grumbles had responded positively to the recommendation to develop a handbook for local drinking water and waste water utilities on dealing with challenges of local affordability.

Mr. Hanlon then turned to the timely topic of financial capability. As background, he noted the Agency's 1994 completion of the combined sewer overflow (CSO) policy, which set forth the Agency's approach to compliance requirements with respect to the Clean Water Act for municipalities with combined sewers; all permits to the CSO community must conform to the CSO policy. Some of the 730 cities with such sewers have moved forward on this; others have not. The policy was later codified by Congress as part of the 2000 Wet Weather Water Quality Act. After policy issuance, the Agency followed up with five to six guidance documents. A key one from 1997 was the "CSO Guidance for Financial Capability Assessment and Scheduled Development," which provided the Agency's approach to how the CSO community's financial capability should be assessed as they proceed through the long-term control plan development and implementation process. This document was important, because EPA's Enforcement Office refers to it as they review capital improvement plans proposed by municipalities: what the financial capability of that utility is to implement a long-term control plan and what time considerations should go into the plan.

Mr. Hanlon also noted his responsibility, not only for clean water SRFs, but for the Clean Water Permitting Program, which issues NPDES, National Pollutant Discharge Elimination System permits to 87,000 point sources of waste water across the country. The financial capability guidance for the permit program is important to the NPDES program and used by EPA's compliance program as well.

To date, 76 percent of long-term control plans have been completed, and nearly 50 percent have been approved, either by state or regional offices, as part of the permitting process. More work is needed, including some of the most challenging work. Again, the financial capability guidance has broader impacts than just CSOs across EPA's clean water programs.

His office recently received a white paper from the National Association of Clean Water Agencies (NACWA), which represents the largest municipal waste water utilities in the country, suggesting updates to the financial capability guidance. Mr. Grumbles recently announced the Agency would review the guidance, which includes a two-phased process, first, looking at residential indicators (costs per household compared with median household income values) and then more broadly at financial indicators of the permittee or community. NACWA is so excited about EPA's review of the guidance, the association is redoing its white paper and is willing to help.

Although the guidance has worked well, it is 10 years old. EPA would like to ask the Board, if willing, to assess the guidance in a fairly crisp fashion—sort of a 100-day review. EPA would send EFAB all background documents by September 1. One question is whether tools, techniques, or approaches have evolved enough in the past 10 years that EPA should address them in the guidance? Mr. Hanlon then asked for EFAB member comments and questions.

In response to a number of questions related to the EPA request for EFAB assistance, Mr. Hanlon said that the requirement to achieve certain levels of water quality is driven by state adoption of water quality standards, which trigger numerical requirements that all permits must achieve as part of the state-run water quality standards process. The financial capability guidance often deals not with the scale of a project, but the pace at which utilities need to comply. The process for either a variance or downgrade of water quality standards includes a "widespread social and economic harm" component; if a water quality objective is not attainable for whatever reason, the "off-ramp" is through the water quality standards process and the factor would be the widespread social and economic climate. States and the public are very reluctant to give up water quality objectives, but often there is a delay in schedules for meeting these objectives through the variance process. The target date is deferred for meeting the objectives, which adds more time to the process, but it does not change the underlying objective.

He did not think that total maximum daily loads have impacted wet weather capital planning processes that much, because the key pollutants in dealing with CSOs are pathogens. The greater issue within individual watersheds in terms of CSO policy implementation has been assessment of water quality standards. EPA authorizes the states to implement the process. Some states set very high standards in the 1970; in the 1990s, it was easy, therefore, in implementing CSO policy to violate these high standards to the point that no overflows were allowed in these states. Combined sewer systems are designed to allow for as many as 70 to 75 overflows a year. The CSO policy recognized this issue and encouraged, as part of the long-term control planning process, the permittee to work with the state to review water quality standards to look at the attainability issue, where most of the opportunities lie; what the end points are and dealing with them in terms of driving the local infrastructure needs of waste water utilities. The CSO policy relies on, but does not affect, the requirement of the Clean Water Act to meet water quality standards. Utilities can choose one of two tracks:

- A presumptive track, in which a utility reasonably presumes that getting overflows down from 70 to 6 a year will meet water quality standards; after it proceeds to do so, it must re-evaluate to see whether the standards were indeed met or go through the standards review process with the state.

- A demonstration track, in which a utility conducts an engineering analysis to determine what level of control is needed to meet the standards applied to receiving waters and then demonstrates that the design will meet water quality standards.

Mr. Hinds then asked Mr. Hanlon to give EFAB members a brief primer on combined sewer overflow issues. Most are in the east in EPA Regions I, II, III, and V; some are in Region IV. Some are undersized when built and overflow up to 100 times a year; others were designed to move most storm water out of the city at strategic overflow points in order to be able to move day-to-day waste water to the treatment plant.

So, the options on handling CSOs depend on with what one starts. A not so trivial number of municipalities have decided to separate their sewers, but this is not an option for some cities, such as San Francisco. Sophisticated engineering designs have a capture rate, based on historical weather patterns, that take most of the need for overflow to adjoining water bodies away from the city. The system then must have a combined storage capacity, pumping capacity, and treatment ability, so the overflow can be treated before the next storm. Designs that include subsurface tunnels have significant construction implications. Surface storage is cheaper, but not available to all municipalities.

New technologies, called ballasted flocculation treatment units, have emerged in the past five or six years that can start up very quickly and provide almost secondary treatment.

The larger sewer districts, usually with older central areas—Chicago, Milwaukee, Chicago, and others—are combined sewers; many of the newer suburbs have separate sewers, but they all essentially go to the same treatment plant. Optimizing the flow of separate sewage to get it all to the treatment plan, so that any overflow is the most dilute of the waste water is a very sophisticated engineering design issue in these systems.

The group then focused discussion on EPA's desire that the Board respond to its request within 100 days and whether this was reasonable. Mr. Hanlon explained that they needed Board input quickly, because the Agency was expecting a revised NAWCA white paper within 30 to 60 days and also had some contract assistants looking at many of the same issues. He did not want to get into the position of having some of these inputs on the table and be several months away from Board input. Mr. Hughes pointed out that, in contrast to other EPA requests, the Board was only being asked for direct member input, rather than the more time-consuming gathering of information and opinions from other experts. Mr. Meiburg suggested that Dr. Sawyers sit down with Mr. Hanlon very soon to lay out a reasonable schedule and then asked Board members interested in joining this workgroup to identify themselves.

Affordability

Cynthia Dougherty

Ms. Dougherty wanted first to review what EPA is doing on affordability and then address larger issues of affordability. The Safe Drinking Water Act requires EPA to determine if any new regulations will be affordable for small systems. If they are not, EPA must identify variance technology that is affordable for those sized systems. People with those systems can then apply for an individual system state variance, which requires installation of the variance technology. Ten years ago, EPA issued criteria for making that determination, which looked at the cumulative cost of regulations to drinking water systems. In the past 10 years, EPA never found any standards that were unaffordable for small systems. In 2002, Congress required EPA to review these criteria. EPA asked the National Drinking Water Advisory Council (NDWAC) and Science Advisory Board (SAB) to look at EPA's methodology, and both said EPA should take a different approach, particularly by looking at the incremental cost of treatment. Looking at the cumulative cost, the data was spread out nationally, so the unaffordability approach was never triggered. NDWAC recommended that EPA use 1 percent as the incremental number. In March 2006, EPA asked for public comments on redoing the affordability criteria to apply to future regulations. So the Agency is dealing with whether there should be variances available for systems to meet a different number than the standard. The state revolving funds, under the Safe Drinking Water Act, have authorities to require states to provide a certain percentage of the SRF loans to small systems and to do disadvantaged community loans that include principle forgiveness, which makes them almost grants. There also set-asides on the SRF that provide technical assistance.

There are broader issues to discuss in affordability. The scope of the drinking water universe is much greater than that of the clean water universe; the 171,000 public water systems are largely skewed by the 54,000 community water systems, which are very, very small. Ms. Dougherty then asked EFAB if they could take a look at the issue of a continuum or spectrum of restructuring options, not to consolidate to get to fewer systems, but what can be done to gain efficiencies by system partnering or even total restructuring. The continuum contains many approaches to getting smaller systems to think not just about affordability, that is, how can one get out of a standard, and to help people more efficiently meet the standards so people are affordably provided safe water.

Mr. Meiburg opened the floor to questions and comments. He first expressed his interest in how the difference between this utility sector and other sectors creates unique problems. Mr. Boland remarked on the complexity of the affordability issue, which is typically treated simplistically and unsatisfactorily. It does not mean that the problem does not exist, but applying criteria does not uncover it. A recent Board paper pointed out that a lot of affordability is within the power of the utility itself to mitigate. If they have not done it or done a bad job of it, there may be modest unaffordability with fairly significant investment requirements imposed by EPA; whereas if they have done a good job, it may be affordable with fairly significant investment requirements by EPA. So, these kind of tests just do not work; what tests could be used instead is an interesting subject.

Ms Dougherty responded that what she wanted EFAB to address was what other things EPA could build on, that is, what EFAB did in the report in terms of household affordability. NDWAC has already come back with a set of recommendations in line with what EFAB has generated, that is, the issue is not just unaffordability for a small system, but for certain households within those systems, as well as within larger systems. Someone should be looking at that.

Asked if the charge from EPA was more of a management than financial issue, Ms. Dougherty said she was not giving EFAB a specific charge, but understood the Board was interested in public/private partnerships, and she was suggesting that drinking water systems might be good to look at, one of the things along the continuum in terms of restructuring. How can EPA look differently at the way water utilities are structured or find ways to gain efficiencies in terms of costs or ways to provide safe drinking water with infrastructure that will be sustainable over time? Mr. Meiburg clarified that Ms. Dougherty was there to provide context for EFAB' consideration of future projects, not to request EFAB assistance.

Ms. Hernandez said that water rights law was one of the extremely challenging parts of the water utility world; all source water is not created equal. Consolidation is a complicated issue, given huge variability among states, unless one creates huge joint powers authorities (JPAs), in which jurisdictions maintain their authorities within the larger entity. She suggested borrowing from other types of utilities the notion of universal access, that is, protecting the rates of the lowest 10–20 percent of median income. Ms. Dougherty added that JPAs do provide efficiencies in operating costs for small, but not large systems. Ms. Hernandez suggested looking at the Fort Ord example, which has critical and complicated land-use, utility, and water supply issues, but whose water system is working all right now.

Responding to whether a test is needed for consolidation, Ms. Dougherty agreed, saying that before you get an SRF loan, an exemption, or a variance, demonstration that restructuring has been studied for possible efficiencies is required. Dr. Sawyers agreed that consolidation was very difficult to encourage, citing examples from Maryland; yet consolidation and partnership are key. Mr. Mahfood described how Missouri law forces a continued designated authority in cooperation with the state regulatory agency and public utility commission. Any time a facility is built, for example, for a small subdivision, that facility must be given to the continuing authority; however, there is usually strong resistance from such entities as county associations and municipal leagues. Mr. Mahfood added that Missouri is becoming dominated by privately owned sewage companies, because no public initiative exists.

Ms. Himmelberger echoed Mr. Boland's point on the complexity of affordability, which is added to by the fact that systems do not always agree with the standards. She cited examples from Texas of communities that resisted adding nitrate and arsenic treatment, in one case, preferring to import bottled water for households with babies. The State of Texas is trying to cut through what is affordable and what is not, but it is very complex to do so.

Ms. Agriss asked to bring financing back into the discussion. She thought that privately owned and publicly owned systems have different dynamics. In New York, small private systems had no access to financing, and finding ways to help finance them had been very helpful. EFAB could be helpful in finding some pooled financing constructs to address that, as well as how to give very small privately owned companies incentives to look at combined management or cooperative programs.

Mayor Girardy pointed out that "home rule" was often an obstacle, because people are afraid that if they consolidate their public works with a neighboring municipality, they will next lose their police department. Giving statistics on how much they might save does not necessarily convince them. Ms. Dougherty agreed, saying that it will be difficult to get very small systems to consolidate, but other approaches may exist that can help them—for example, shared management or operation—while keeping them independent. Ms. Francoeur cited a personal example from Pennsylvania that illustrated that economics becomes a compelling argument. In her case, PenVest wanted to provide the best bang for the buck and so sought consolidation instead of lending to her local homeowner's association to improve its groundwater system; PenVest was also not convinced the community could repay the loan.

(Lunch)

General Discussion
Stan Meiburg

Mr. Meiburg introduced the agenda for the afternoon session: to complete work on timing of projects for next year. Not yet covered were two topics: leveraging and public/private partnerships, which Mr. Grumbles had raised with him as good issues for EFAB to examine. He passed out an analysis for the Clean Water State Revolving Loan Fund, which ranked states on the ratio of assistance provided to the amount they have received in capitalization grants, which suggested some interesting points for discussion that afternoon.

First, however, he reviewed the status of existing workgroups: The Financial Assurance Workgroup was finishing work on captive insurance and moving on to more general issues. The Innovative Financing Tools Workgroup still has work to do that it will pursue with the Office of Air in the next six months, which will be reviewed at the March EFAB meeting. The EMS Workgroup is continuing to make progress, with prospects of a workshop, which would probably have to be scheduled, Ms. Deming said, in Washington in May or June 2007. She also noted a new workgroup member, Mayor Girardy. The Nonpoint Source Workgroup, according to Mr. Marsh, would, it was hoped, get approval from the Board for the report and letter with recommendations to the Administrator and would follow up on any response as well as keep track for awhile of EPA implementation of any of the recommendations. He added that more work was needed to refine the recommendation exploring the utility concept of how to implement some things agreed to by a watershed governance process. The workgroup would like to stay in operation until after the next EFAB meeting and then revisit its future role. Mr. Grossman added that EFAB should look at what assistance it could give Tim Jones from OWOW on several areas that he had mentioned. Rich Sustich was also interested in some potential areas of collaboration on watershed activities and NACEPT. The workgroup on expanding the definition of SRFs has nearly completed the paper and will move on to other areas. Mr. Mason asked the Board if something could be circulated to the Board for comment prior to its next meeting, to which the Board agreed. The workgroup would probably disband by the time of the March meeting.

Mr. Meiburg then started a discussion on future work, especially in the two areas of potential collaboration with EPA discussed with Mr. Grumbles. On leveraging, the data suggest that the programs that have leveraged their funds have provided greater assistance as a percentage of their capitalization grants than those that have not been leveraging. At a time that budget constraints will continue to limit additions to capitalization grants, money already provided must be put to work as much as possible. Mr. Grumbles, Mr. Hanlon, and Ms. Dougherty have all expressed interest and support for EFAB exploring this issue. Mr. Meiburg suggested creating a new workgroup on encouraging leveraging by programs not now leveraging and increasing the efficiency of programs that are leveraging. Mr. Grossman expressed interest in the issue, but thought the workgroup would need staff support to delve into certain of the states. Mr. Wise and Mr. Swartz also expressed interest in the workgroup. Mr. Curley asked about political constraints on such a workgroup, to which Mr. Meiburg replied that EFAB members were seasoned enough to make prudent, feasible recommendations; the Board also has a strategic advantage in being able to say things to EPA that the Agency cannot say to itself. Mr. Swartz noted the workgroup might also provide the opportunity to present its conclusions to certain key states, such as Hawaii, for example, that they have a golden opportunity to make some profound investments in infrastructure.

The group proceeded to discuss some of the challenges of the workgroup's topic. First, Mr. Hughes noted that the handout did not cover the terms for SFR programs issuing loans to communities. States such as West Virginia, North Carolina, and Alabama handle them differently. On drinking water, people that have disadvantaged community programs are automatically much lower on the list. So, it is important to be careful about using the handout data as a metric. Mr. Swartz agreed, saying that these data show up each year on the National Information Management System Report, but there is no correlation between interest rates and program efficiency at originating loans. Mr. Butcher thought an important part of the task then was to articulate a rationale for EPA on whether leveraging should be encouraged. Quite a few people are interested in the topic, he noted. Ms. Hernandez asked if it was true that a consulting group single-handedly stopped EPA from pursuing leveraging a while ago. They apparently had put together discouraging data on the economic efficiencies of the leveraging process, which planted a bias at EPA that no longer exists there, Mr. Smith said. Dr. Sawyers noted that Maryland saw a direct correlation between decrease in interest rates from 3.5 to 1 percent and an increase in the number of loans. Nonetheless, some states will be concerned about interest rates going up, which must be addressed. Ms. Agriss said that this only supports the need to look at the whole picture; this is only one metric and others need to be considered.

Mr. Meiburg then summarized the discussion, saying that he heard great enthusiasm for the Board setting up a workgroup on this topic. The frame for the issue is how to give useful advice to the Agency on the topic and how to make existing dollars in this area work as hard as possible. He asked for a show of hands from those willing to serve on the workgroup and recorded their names. He would speak with Mr. Grumbles about a timeframe for a response from the workgroup. Mr. Smith noted that a critical factor would be getting the most current data on the actual SRF operations, which come in at the end of August, and that the workgroup would need analytical assistance from EPA on these data.

The group then turned to discussion on public/private partnerships. Interest in the topic, Mr. Meiburg said, derives from (a) the ability of the public sector to raise capital to use for other purposes by selling certain assets, (b) opportunities to look for efficiencies in operations, (c) opportunities to take advantage of historic patterns of alignment, for example, on ownership of infrastructure assets. If one needs to figure out if one has the means to meet needs for waste and drinking water, such partnerships are a tool that bears further exploration. People have learned from earlier less successful partnership efforts, and interest in them is growing again.

The Board has actually done a fair amount of work on this over the years, but it is worth reviewing. Mr. Meiburg proposed establishing a workgroup on the topic, specifically how those partnerships can help address or meet infrastructure needs in waste and drinking water in the next five to ten years. The group then discussed whether the workgroup should broaden this to include other topics, such as air, and it was agreed that whatever resulted would certainly be relevant across a range of media; the water program, however, was now very interested in the topic and water was an area where one might get the most "bang for the buck." The group also discussed alternative terms to public/private partnerships, but ultimately decided to keep the term and stay away from using "privatization." Ms. Francoeur reiterated that those working on transportation had done a lot of work related to the topic that was worth looking at. She also noted that such partnerships were a timely topic, as a lot of private equity and a willingness to invest it infrastructure existed.

Ms. Agriss said that the heart of the matter was how one ensures that organizations or structures exist that can fund the projects that need to be done. She liked the idea of the workgroup not just looking at the privatization side, but also structures that can be used to achieve the same ends, citing the example of the New York City watershed authority, described earlier in the meeting. It would be hard to ignore certain governmental or quasi-governmental that could be similarly effective. The definition of a public/private partnership can be anything from a long-term concession of existing assets or a project on a design to build financial basis for a metropolitan water district, such as in Chicago. She thought the only consistent part of a definition for such partnerships is that some private entity is involved.

Dr. Tozzi pointed out that discussion on public/private partnerships was often simply a nice way of saying more money was needed. There are many aspects to public/private partnerships that one might look at that would not bring in money. He thought it was important to differentiate the work of the workgroup from the many other studies EFAB has done. Mr. Hinds disagreed with Mr. Tozzi's initial point, saying that one never meets a Fed who does not want more money. The private sector can fill some of the gap that the public sector is now willing to for one reason or other, which has been successful. EFAB should not waste its time trying to change legislation or financing rules, which the IRS would almost certainly turn down, but should focus on what is being done and whether it can be pushed forward somehow. Mr. Boland asked if EPA's interest was in finding ways to get utilities out from under political influence and finding more capital for them; would EPA want to look at that too, or does EPA want to restrict it to things that involve private sector participants? Mr. Meiburg thought EPA was truly interested in the most efficient ways to meet the Agency's overall goals, which in this case relates to whatever instrumentalities that efficiently contribute to provision of clean water and safe drinking water.

Mr. Wise then reminded the group to not lose sight of EFAB work on affordability. One possible outcome could be that public/private partnerships yield major efficiencies in providing environmental services and thus a better rate structure and speak directly to the affordability issue. It is just as plausible that engaging the private sector would mean rate adjustments to accommodate private profitability and worsen affordability.

Mr. Butcher expressed strong intellectual interest in the topic. Public/private partnerships represent an easily identifiable spectrum, and it will be easy to focus on the benefits, costs, and risks of the portion of the spectrum that can potentially contribute to funding capital needs, compared with existing alternatives. He thought the workgroup should answer the question: what do public/private partnerships offer relative to current practice and what alternatives, even though not yet functional, can achieve some, all, or even more than public/private partnerships can achieve? The workgroup should start by looking at existing technologies in the private sector to see what they contribute and then focus on alternatives.

Ms. Hernandez encouraged the workgroup to look at a couple other programs as examples of where early money has tremendous value: the EPA brownfields grant program, which is all about site characterization and giving a little money to get people to figure things out, and the Habitat Conservation Plan Planning Agreement, with early infusions of funding to groups of local agencies that need to cooperate to get technical support and facilitation to get people into a working relationship.

Mr. Meiburg also hoped the workgroup would focus on what EPA should do in regard to public/private partnerships. He then asked for and received a show of hands from those willing to serve on the new workgroup. Those members would receive relevant Board and possibly EPA documents to review. Mr. Smith thought it would be helpful for workgroup members to receive a summary of the long history of argument, rule changes, and interpretive shifts in policies, often by General Counsel on how much involvement a private entity participating as part of a public facility can have.

Mr. Wise suggested collaborating with NACEPT, as it has done some work on these partnerships. Ms. Himmelberger mentioned it might be worth looking at case studies that came out of the Cost-Effective Environmental Management Workgroup and seeing what has happened in those cases since they were written. Mr. Meiburg thought one of the first tasks of the workgroup would be to compile information on work that has been done to date and what has changed. He noted that it might be difficult for the workgroup to break up its task into manageable chunks, as they did for financial assurance.

Ms. Dougherty said good contacts in her office would be Peter Shanahan. She agreed that the workgroup should review what EFAB has done before in order not to duplicate it and reiterated that EPA wanted to know what financial tools water and waste water systems could use to ensure they are sustainable in the long term, not just in terms of capital improvements, but daily operation.

Mr. Hanlon added another question: what is EPA's interest in drinking water/waste water infrastructure other than fiduciary responsibilities in terms of perpetuity aspects of SRFs and compliance responsibilities in terms of meeting Maximum Contaminant Levels (MCL) and National Pollutant Discharge Elimination Systems (NPDES) permit loans? EPA had engaged the industry through an interesting project with six professional associations—the Water Environment Federation, National Association of Clean Water Agencies, American Water Works Association, Association of Metropolitan Water Authorities, National Association of Water Companies, and National Public Works Association, representing utility managers. EPA asked them what a well-managed water utility is, outside of a regulatory context, dealing with the principles of financial management, asset management, EMSs, and so on. EPA suggested these six associations had an interest in bringing their leaderships together on this question. They responded positively by signing a statement of intent with EPA in early May to identify principles or practices across their memberships that will provide direction on how to manage municipal water utilities prospectively. How can these associations with EPA's participation work toward improving the management of infrastructure that is critical not only to the environment, but the economic future of the country?

When asked why EPA as a regulatory agency is involved at all, Mr. Hanlon noted that the Administrator definitely has sustainable infrastructure on his priority list. Mr. Sustich said he had been watching and dealing with the issue of trying to develop new water technologies to deal with the infrastructure gap, that is, how to find leading edge research, materials, and technology that can move the processes forward in terms of current efficiency as well as responding to loss of good quality source water in the distant future, which may not be so distant, for example, for Chicago. Do we switch much of the Midwest, where freshwater aquifers are being depleted? How do we fund water research, knowing that most of the customers are going to be public utilities, not private entities with the pockets? Addressing current needs gets in the way of supporting long-term research.

Mr. Wise followed up on comments he made the previous day, proposing for a variety of reasons that EFAB do a policy paper on the notion of sustainable finance. First, this is an emerging direction at EPA, which just published a seminal piece entitled "Everyday Choices" on EPA's role in advancing stewardship and sustainability. Second, the Office of Research and Development is formulating a five-year research strategy to advance sustainable technologies, inviting the Science Advisory Board for comment. Third, The Innovative Action Council has just issued a letter to the Assistant and Regional Administrators asking for an inventory of all local activities and efforts to advance the cause of sustainability within their offices and regions. Fourth, Mr. Wise himself is helping develop a course called "Sustainability in EPA." For all these reasons, he thought it was timely for the Board to articulate the whole idea of sustainable finance. Such a paper would benefit from a workgroup exploration of the issue, which would involve the idea that EPA should begin investing its scarce capital and resources to produce sustainable outcomes. It should address how to make financing sustainable over time without a constant infusion of new money. There is an audience for such a paper, and the timing is appropriate. Mr. Wise proposed the paper as a new EFAB project, well aware that he was also nominating himself to lead a small workgroup to put a five- to six-page paper together. It would not make specific recommendations to EPA, except perhaps that EPA embrace the concept of sustainable finance and begin to plan its budgets and activities around the idea. Dr. Meyer suggested that the Office of Solid Waste and Emergency Response (OSWER) would be interested in such a paper, due to its great interest in financing long-term stewardship.

Ms. Deming asked whether the U.S. Securities and Exchange Commission (SEC) had asked for any guidance from or had interacted with EPA on financial triggers for closure of a facility, to which Ms. Sahi replied that SEC had not asked for EPA's advice. Ms. Sahi added that Mr. Wise's idea was an excellent one and should encompass the whole concept of sustainability. It even relates to EMSs—what insurance companies are studying, what indices look at—not just EMSs, but sustainability management systems. She then volunteered to serve on the workgroup for the policy paper.

Mr. Butcher wondered whether EFAB should undertake an effort to describe the gap in a way relevant to understanding the potential financing solutions. The cost should be articulated in a way that is relevant to the ultimate cost of funding it. It is difficult to discuss raising rates as a way to address funding needs, in all or part, without describing the gap in a way that is conducive to identifying what the rate impact would be or addressing it directly. He also wondered whether EFAB should articulate the gap in a way that is conducive to financial analysis and then talk about the impact on the ultimate payers, whether user fees or taxes, in a way that allows assessing the impact of addressing that cost over time.

Mr. Meiburg suggested that EFAB set up an opportunity for further discussion on these points at a future meeting, instead of setting up a workgroup. He wondered if Mr. Butcher was looking for a better understanding of the term gap and how it is used. Mr. Hanlon noted that both his and Ms. Dougherty's office had participated in the EPA gap analysis, released in the fall of 2002 and the primary authors are still at EPA, so a briefing could certainly be arranged, although the data are a bit dated. The Congressional Budget Office followed up with another analysis that came up with similar numbers on the scale of the issue, which might be helpful. They could get EFAB this report too and do a briefing or even a web cast.

Mr. Marsh suggested that someone look at whether the problem EFAB is defining is still the same problem, which in the past has been defined largely by traditional engineering solutions. The emphasis on sustainability concerns ways to deal with water quality problems or clean water supply that do not rely exclusively on these traditional solutions, but the possibility of other actions, either through different programs or developing markets.

Mr. Hughes noted that looking at the problem in the aggregate clouds the picture. Many systems do not need help, and many need help far beyond the policy prescriptions in the gap report. The gap disappears when rates are raised to 3 percent, but there are thousands of systems for which 3 percent does nothing to close the gap. It would be good to look at implementation issues on the ground, but the big picture policy numbers have not been useful in getting at what specific communities need to do.

Mr. Tozzi added that the gap analysis had some categories that might not be of concern. If the Board looks at closing the gap, the Board should not look at fine-tuning the numbers, but rather which of those categories should be fulfilled. Mr. Wise noted that one is doing a disservice to describe the problem as $400 billion, as if it needs to come out of pocket tomorrow. These things are financed over time, and it is well within the financial capacity of the country to do it. It depends on how you define the problem. The overall gap of $400 billion over 20 years means an average of $20 billion a year, and that sounds more feasible to generate that much capital a year within the financial markets of the United States. So, Mr. Tozzi added that the prescription drug program, which is a little more than a trillion dollars and came out of nowhere, also provides perspective on how much can be raised by the government. Mr. Butcher agreed that EFAB should address quantifying the costs of making progress in an understandable way. Mr. Turner also suggested involving Ken Rubin, one of EFAB's original members, to review ways that different estimates have been put together.

Ms. Agriss wondered how fruitful it was to spend time looking at numbers used for policy reasons; the pertinent issue to focus on is that communities need to be able to do more than they are doing now. Ms. Himmelberger thought it important to break the numbers down by the size of the system, because it makes a big difference in accessing financial markets. Bigger systems have more access to capital; this raises the questions of privatization and collaboration in terms of bringing small systems together to become larger systems, for example, forming some kind of umbrella group that can buy bonds for them. Mr. Hanlon thought the gap report did not break the numbers down into large and small systems, but started with need surveys, but these do not capture estimated costs that utilities will recognize over the next 20 years and beyond for repairing in-place underground infrastructure. Most of this was put in between the 1940s and 1960s as part of the post-war building boom. Some of the tools EPA has worked on—asset management and so on—encourage utilities to do those in-place assessments; most of that buried infrastructure is large.

From a practical standpoint, Mr. Grossman noted, EFAB had in essence created four new workgroups and also has Mr. Mason's conference coming up, which Mr. Meiburg acknowledged. EFAB certainly had a lot on the table. He summarized EFAB response to Mr. Butcher's points as great interest in responding, but uncertainty on how to frame the task. Perhaps, rather than taking on a specific project now, EFAB should explore a somewhat more structured discussion for March, developing a list of questions and/or bringing in a speaker and then deciding how to proceed. Ms. Hernandez thought EFAB should break the gap into different categories of needs and different types of public/private partnership solutions, as more than enough models exist to solve for most categories. The aggregate number is not quite as important as having sustainable solutions for categories.

Responding to concern that the Atlanta conference discussions could degenerate into a discussion of what the gap is about, Mr. Meiburg thought Mr. Mason, Mr. Dorfman, and conference organizers were certainly aware about what they will have to grapple with. Mr. Hughes offered to send everyone a three- to four-page summary of all the different needs and gaps; he said it was not possible to do per system numbers on the gap, but EPA does have two needs surveys with more recent data than the gap report that break need down by private system compared with public systems, by size of system, and so on.

Mr. Hinds said he would scout around among insurance executives in his office for any interest in joining the Board as members. Mr. Meiburg also noted that some existing members were coming up for renewal and asked them to please let him know if any of them decided they could no longer devote time to the Board, as that would be useful information. EPA is very aware that members serve for free, for which the Agency is grateful, and does not want to abuse member willingness. He also took the opportunity to mention that former member Lyons Gray had just awarded the Environmental Finance staff a bronze medal, a significant reward within EPA's system of recognition, for the work they have done in support of the EFCs and EFAB over the years.

Public Comment Period

Mr. Meiburg then opened the floor for public comments. Hearing none, he thanked EFAB members for their time and energy, reiterated that the next EFAB meeting would take place in Atlanta in March, and in the meanwhile the workgroups would be active, especially in getting the two new workgroups organized and off the ground. He expected to be touch with members over the next several months. With that he adjourned the meeting.

Adjournment (3:32 pm)

ATTACHMENT 1: EFAB MEMBERS

Designated Federal Officer:
A. Stanley Meiburg, DFO, EPA

Congressional:
Honorable Pete V. Domenici, United States Senate

State and Local:
Kelly Downard, Chairman Louisville Metro City Council
Honorable Vincent A. Girardy, Mayor, Peapack & Gladstone, New Jersey
Steve Grossman, Executive Director, Ohio Water Development Authority
Gregory R. Mason, Asst. Executive Director, Georgia Environmental Facilities Authority
Dr. Andrew Sawyers, Program Administrator, Maryland Water Quality Financing, Maryland Department of the Environment
Billy Turner, President, Columbus Water Works

Business and Industry:
Terry Agriss, Vice President, Energy Management, ConEdison
Donald Correll, President and CEO, American Water
Rachel Deming, Associate General Counsel, Ciba Specialty Chemicals Corporation
Stephen Mahfood, President Mahfood Associates
Cherie Collier Rice, Treasurer and Vice President of Finance, Waste Management
Dr. Jim J. Tozzi, Multinational Business Services

Banking, Financial, and Legal:
George Butcher, Managing Director, Municipal Finance, Goldman, Sachs, & Co.
Michael Curley, Executive Directory, The International Center for Environmental Finance, Towson University
Mary Francoeur, Director, Financial Guaranty Insurance Co.
Jennifer Hernandez, Partner/Co-Chair, National Environmental Team, Holland and Knight
Keith Hinds, Merrill Lynch & Co.
Helen Sahi, Director, Environmental Services Department, Bank of America
Greg Swartz, Vice President, Piper Jaffray & Co.
Sonia Toledo, Merrill Lynch
Justin Wilson, Waller Lansden

Associations, Organizations, Academia, and Public Interest Groups

A. James Barnes, Professor of Public and Environmental Affairs, Adjunct Professor of Law, Indiana University
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