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Tuesday, May 13, 2014

Introductions and Opening Remarks

Mike Shapiro, EFAB Designated Federal Official (DFO)

Karen Massey, EFAB Meeting Chair

Maryann Froehlich, Acting Chief Financial Officer

With shrinking budgets for infrastructure and tighter pockets across federal agencies, the appetite for finding creative ways to improve programs while leveraging resources has grown in the policy realm. In light of today's challenges, members of the Environmental Financial Advisory Board (EFAB) convened for their spring meeting May 13-14, 2014, to welcome new members, discuss pending and ongoing projects, and identify innovative, cost-effective ways to protect the environment.

EFAB Chair *Karen Massey* opened the meeting at 1:30 p.m. *Mike Shapiro*, EFAB's Designated Federal Official, followed up with additional comments, noting that the new members have jumped right into their work-group assignments with energy and excitement. *Mr. Shapiro* concluded by inviting all participants to give brief introductions.

Maryann Froehlich, the Acting Chief Financial Officer for the Environmental Protection Agency (EPA), highlighted the critical work of the board in her welcoming remarks. Board members have thought creatively about environmental finance and about how to pay for environmental protection. As federal, state and tribal resources become increasingly constrained, helping communities find ways to pay for environmental protection will be key.

The recently finalized FY 2014-2018 EPA Strategic Plan gives all EFAB members a blueprint of the direction the agency will take during the next few years. The plan, which has a strong focus on communities, outlines priority areas for agency work within EPA Administrator Gina McCarthy's theme:

- Making a visible difference in communities across the country;
- Addressing climate change and improving air quality;
- Taking action on toxics and chemical safety;
- Protecting waters;
- Launching a new era of state, tribal, and local partnerships;
- Embracing EPA as a high-performing organization; and
- Working toward a sustainable future.

Cross-agency strategies in the Strategic Plan focus on:

- Working toward a sustainable future;
- Working to make a visible difference in communities;
- Launching a new era of state, tribal, local, and international partnerships; and
- Embracing EPA as a high-performing organization.

Ms. Froehlich said that EFAB's work should focus through this lens. EPA's strategies also line up with EFAB's current project list.

The FY 2014 enacted budget is at \$8.2 billion, which is \$300 million above what the agency received at the FY 2013 enacted level, a sequestration year. The budget provides \$2.4 billion for the combined state revolving fund (SRF) for clean water and drinking water, which is about \$119 million above the FY 2013 enacted. \$1 billion out of the budget will go toward categorical grants. The budget also provides \$65 million for Tribal grants. *Ms. Froehlich* noted that the increase for Tribal general assistance grants has been going up steadily.

The budget also includes \$415 million for geographic programs, a \$28 million increase from the enacted FY 2013 budget. That amount includes \$300 million for the great lakes and \$70 million for the Chesapeake Bay.

Congress must now act on the President's FY 2015 budget request for \$7.89 billion. The agency hopes to have a real bill by October 1, instead of a continuing resolution or an omnibus bill.

Seeking to reduce the threat from climate change, EPA's request for climate change and air quality was more than \$1 billion. It designates almost \$200 million specifically for climate change work.

The budget also requested \$673 million to support chemical safety for all Americans, especially children. The request for revolving loan funds was at \$1.775 billion for the combined clean water and drinking water state revolving funds. It is a bit down from the current enacted level, said *Ms. Froehlich*. The FY 2015 budget proposal also requested \$1.33 billion to continue approaches for cleanup under RCRA Superfund, leaking underground storage tanks and brownfields. This will ensure land returns to beneficial use.

The request for tribal general assistance grants of \$96 million is an increase from the \$65 million in the FY 2014 enacted budget. Unfortunately the Environmental Finance Center grants have been decreasing over time. That doesn't reflect on the importance of the work; instead, it is simply a result of the circumstances and choices EPA has to make.

Questions and Answers

Phil Johnson asked if the strategic plan gives consideration to the impact of climate change in relationship to coastal cities. Given Hurricane Sandy and a recent storm that drowned low-income communities in Pensacola, Florida, and Mobile, Alabama, the reinvestment issues that coastal cities face are enormous. Private sector involvement will play a critical role in getting coastal cities prepared for climate change.

Ms. Froehlich said the EPA is working on how communities adapt to the changing climate. There's growing interest in finding out how wastewater treatment facilities and other utilities can withstand major weather events.

Mr. Shapiro added that the Office of Water has developed some tools that utilities can use to assess their vulnerability and identify actions they can take to increase resilience.

Going forward, EPA seeks to incorporate resilience considerations into the general guidance provided for SRF programs. The federal government also continues to look for ways to coordinate all agencies, such as the Department of Transportation and Department of Energy, as well as state and local governments to provide tools and assistance in a smart way.

Eustace Uku asked about strategies for establishing consensus about climate change even though doubters remain in key leadership positions. Despite the naysayers, EPA makes its decisions on the basis of science, said *Ms. Froehlich*, and the agency will continue to look at mitigation and adaptation as part of its efforts to slow the extent of climate change.

In response to a question from *Heather Himmelberger*, *Mr. Shapiro* said the SRFs faced cuts due to the hard choices the agency has to make between a dollar for infrastructure or a dollar to pay the salaries of EPA inspectors. The revolving funds have been essential to making progress in drinking water and clean water but those funds have to fit within other needs.

Returning to the topic of climate change, *Suzanne Kim* asked what percentage of the \$1 billion targeted in 2015 toward climate change will go toward actually mitigating climate change versus mitigating against the effects of climate change. *Ms. Froehlich* said the \$1 billion is for climate change and air quality, so about \$200 million will go for climate change. *Ms. Froehlich* further said that, while numbers were not available during the meeting, the mitigation at this point is related to rule makings that are going on for reducing greenhouse gasses in power plants.

Action Items

- *Mr. Shapiro* noted that EFAB will pursue another project with the Office of Air and Radiation after the spring meeting.
- *Ms. Massey* introduced another mini-project: developing a summary of a green infrastructure report submitted to the Office of Wastewater Management following the December meeting. Former DFO *Vanessa Bowie* will send EFAB members the link to the report via e-mail. Interested members can schedule a conference call to boil the report down to a one- to two-page summary of actionable items.
- As part of this effort, members could consider reviewing a number of past projects to identify other green infrastructure opportunities and writing a paragraph or two of practical advice based on the reports.

The Council on Environmental Quality's Engagement in Water Infrastructure Financing

David Wilkinson, Senior Policy Advisor for Social Finance and Innovation, White House Council on Environmental Quality

Chitra Kumar, Deputy Associate Director for Water, White House Council on Environmental Quality

The idea of innovative finance around water infrastructure has been of great interest lately, said *Chitra Kumar*, Deputy Associate Director for Water in the White House Council on Environmental Quality.

CEQ and a number of other components of the White House, including the National Economic Council and the Council on Economic Affairs, seek to identify policy levers to provide more opportunities for private finance in water infrastructure. These efforts follow in the footsteps of opportunities leaders have taken in the transportation realm and other infrastructure investments. CEQ continues to talk to experts such as EFAB board members to identify such opportunities.

CEQ staff also have been involved with the administration's transportation reauthorization package, for example, in an effort to connect to a large pot of infrastructure funds that can benefit environmental purposes. *Ms. Kumar* highlighted a few areas where CEQ succeeded in getting some environmental language, specifically with a stormwater and/or climate resilience focus, into the administration's proposal:

- Formula funding programs: CEQ included some language that requires states and metropolitan planning organizations (MPOs) to complete a transportation resilience assessment as a part of their mandated planning process. CEQ also got some language about considering stormwater planning through those planning processes and added green stormwater infrastructure as an approved use of funding in a number of places, including environmental restoration funding, eligibility under the surface transportation program and permitting green stormwater infrastructure to replace more traditional transportation-related stormwater infrastructure.

Green stormwater planning can also be an eligible activity with safety improvements. Getting the Department of Transportation to identify green stormwater solutions as a way to increase safety is meaningful because it puts the issue of water on that Department's radar. Such language clarifies the intent in the formula funding programs.

- Competitive grants: The proposal continues the TIGER grants and includes a Race to the Top type of program called FAST, Fixing and Accelerating Surface Transportation. Both programs include stormwater and green infrastructure/environmental considerations as a ranking criteria. Further, the TIGER Notice of Funding Availability that went out and just closed recently provided \$600 million. That NOFA included some ranking criteria around resilience and stormwater funding for their planning grants. That is 2014 money that is totally independent of the new authorization. This is an example of a pot of money others can use for environmental purposes.

Various components of the White House also have focused on how to do a better a job of valuing ecosystem services or environmental benefits of water and other environmental goods such that it can influence financial decisions. This builds off of a 2011 report on the importance of ecosystem service valuation from the President's Council of Advisors on Science and Technology.

Focus on ecosystem services also builds on Principles and Requirements for water investments and work under the Sandy Rebuilding Task Force strategies. The Sandy work group is looking at green infrastructure valuation broadly (not just stormwater but large landscape scale/natural infrastructure) to advance the ball in the area of valuation techniques to provide more tools for local communities, government decision makers and practitioners.

David Wilkinson further discussed this topic, noting that current accounting practice doesn't adequately value natural infrastructure as an economic asset on the books of utilities or other government entities.

Seattle, for example, spent a modest sum at the turn of the century to buy acres of land, which today is worth vastly more dollars. But on its books, Seattle must still value that land at the original level due to accounting board rules. Valuing an asset at a low level creates difficulty in trying to justify bonding to maintain the land.

Mr. Wilkinson also highlighted these concepts:

- A January EFAB report recommending expanding SRF guarantee authority resources by using excess credit capacity -- excess guarantees or recycled fund asset turnover resources that may be on books or flow/average cash balances. These can supplement current uses of SRFs to advance green stormwater infrastructure and other innovations such as those addressing water scarcity.

Mr. Wilkinson recommended turning the 30-page report into a two-pager and taking it from a concept to an implementation strategy by identifying which states have the authority, technical capacity, balance sheet, and interest to do this and estimating the kind of scale required to pilot something like this.

- Pay for Success Strategies: Similar to pay for performance, this strategy pays for outcomes, encouraging governments to attempt innovative ideas that might otherwise seem risky. These strategies typically involve private finance or philanthropy. Pay for Success includes many possible applications in the context of green stormwater infrastructure. Pay for Success in the transportation bill will help fund water installations. This strategy also is called for in the Sandy CDBG guidance, which all states can use. New York, as part of a \$650 million pot, is applying Pay for Success strategies for nitrogen remediation and other stormwater solutions.

Other ideas included:

- Private activity bonds;
- Long-term financing to match financing with asset expected asset lifecycles through "century bonds;"
- Using SRFs as takeout financing, a strategy Onondaga County, New York, is using;
- Stormwater credit trading, a promising new tactic being deployed in Washington, DC; and
- Commercial PACE strategies that allow water solutions on private property to be financed in connection with a tax assessment, which can encourage owners today to implement solutions knowing that even if they don't own the property forever - the cost will be connected to the property rather than the specific entity that makes the solution at the time, for solutions that may pay off over years, which is relevant for water-conservation strategies.

EFAB board members suggest the White House should pay attention to these issues:

- City officials in small cities and towns may not have the training and know-how to leverage Pay for Success and other innovative strategies. *Mr. Johnson* recommended setting vehicles in place to promote conversations between the private sector financing entities and public officials. *Mr. Wilkinson* said specific efforts are under way to help in this area, including the recent West Coast Infrastructure Exchange, which lines up deal flow for infrastructure transactions and financiers who seeks to fund those transactions. The exchange also wants to help small or medium-size cities collaborate.
- *Ms. Himmelberger* noted that the pay for performance idea may work well at the beginning, but maintenance and upgrades must continue. In the long term, problems can occur when cities own the stormwater infrastructure but another entity manages it.
- *Ms. Himmelberger* also pointed out that jobs in water typically don't face outsourcing to other countries. The next goal is to figure out how to value water enough to turn that work into high-paying jobs in small communities.
- *Vernice Travis-Miller* asked about elevating the concern about communities that still don't have indoor plumbing. As cities and agencies discuss fixing and repairing infrastructure, some communities have never received infrastructure, typically as a result of historic segregation. Further, new development often gets infrastructure faster than existing, low-income Tribal or communities of color.

Questions and Answers

Thomas Liu asked about a federal program Water Infrastructure Finance and Innovation Act (WIFIA) that would provide low-cost funding or guarantees for qualified water-financing projects. Where does the White House stand with this program?

Ms. Kumar said the Administration is on the record as not supporting WIFIA for a couple of reasons, including that prior versions of the program have been incompatible with the SRFs. Further, the administration had a proposal for a national infrastructure bank. *Mr. Liu* noted the dollars for the national infrastructure bank are limited, and water projects can't compete against projects for transportation, bridges and schools. *Ms. Kumar* responded to that as new information and said others argue that water infrastructure could be more cost-effective if it were in tandem with other infrastructure improvements, so having an infrastructure bank could facilitate cross-sector collaboration.

Comments about valuing ecosystems raises significant concerns about valuing assets at something other than original cost for purposes of securing debt, said *Rick Giardina*. *Ms. Kumar* recommended developing a group that looks at these issues and determines the right solution because the issue deserves some attention.

Marie De La Parra wondered about the possibility of working with or commenting on a White House pilot program regarding greenhouse gas reductions. In addition, the focus on climate change issues seems to offer no guidance on how cities can really work more collaboratively. Many of the cities in California don't have strategic plans, and one isn't in place statewide. *Mr. Wilkinson* said

the West Coast Infrastructure Exchange, a partnership between the governments of Oregon, Washington, British Columbia and California, primarily focuses on infrastructure.

Lisa Daniel reminded the panelists and members of the tried-and-true successful programs, such as state revolving funds. Policy decisions should focus on how to loosen the constraints on SRFs. Further, bureaucracy often keeps innovative ideas from becoming reality. Cities must learn to shift their focus from cost to value and from compliance and outputs to success and outcomes. Protecting what's in place is important, said *Mr. Wilkinson*. However, new solutions are necessary when ongoing programs face threats from policymakers.

Report Out: Transit-Oriented Development Final Report

Philip Johnson, EFAB Work Group Chair

After a couple years of work, the transit-oriented work group has brought this process to closure in a good way, said Mr. Johnson. The work included numerous conference calls, collaborative meetings and a great deal of effort.

Group members initially planned to work with the Office of Policy and Sustainable Communities in looking at the notion of transit-oriented development in terms of the charge presented to the group around four different communities: Salt Lake City, Denver, Chicago and Atlanta. These four communities had done a significant amount of work and planning but couldn't finance the infrastructure for transit-oriented development.

Atlanta, for example, faced a major task of trying to expand MARTA, which runs north and south of Atlanta, to running east and west, and the use of an existing old rail line circling the city. The agency brought in a consultant and looked at a variety of ways to come up with a toolbox and other strategies to finance the development.

The work group sought to uncover the impediments and the barriers that stood in the way of these communities. After some discussion, members brought together a group of experts, developers and transit officials from around the country into a daylong workshop. During this event, work-group members attempted to learn whether communities had conducted adequate planning or created a development strategy for multi-station systems.

Work group members also sought to answer such questions as these:

- What were assets? Amenities typically part of a sustainable community, such as land, bike paths, walking paths and green spaces weren't necessarily assets in terms of infrastructure;
- How can private sector financing get involved? A second roundtable discussion brought together a number of private sector financing entities such as the Unilabor Life Insurance Company as well as EPA staff; and
- What are the missing components? Members decided the four areas needed the involvement of the private sector.

The final report presented to EFAB concludes that private sector involvement and public-private partnerships (P3s) were the missing link in the consultant's report prepared for the Office of Policy.

Work-group members provided a succinct and precisely written summary to bring the work to closure. Although the group ran into issues and delays due to sequestration, members believe the time devoted to the project was well-spent and successful.

Ms. Bowie submitted a form for concurrence so that the report can go to the agency.

EFAB staff member *Tim McProuty* committed to sending all board members a summary of the workshop and the roundtable as well as the prior P3 report done by EFAB referenced in the work-group's report.

Report Out: Leveraging Technology and Finance

Chiara Trabucchi and Bill Cobb, EFAB Work Group Co-Chairs

This project seeks to take a look at the interaction of technology and finance in environmental issues. The Office of Research and Development has the primary interest in this topic. Research and Development sent the group a market-stimulation challenge around the development of a nutrient sensor. Nutrients in surface water pose a significant contamination problem, but current technology is pricey. The challenge: How do you make something more affordable for a broad-scale application? ORD would like something that costs less than \$5,000 that is completed in less than three years.

Mr. Cobb and Co-chair *Chiara Trabucchi* have discussed the project but the work group has not had a chance to convene. *Ms. Bowie* added that an initial conference call took place with OCFO, which has done some limited technology work in the past year. The Office of Water submitted a framework on technology that its staff members are developing. The EFAB work group must meet and determine what the charge is actually going to be.

During the EFAB board discussion, *Tracy Mehan* said this type of discrete project should offer a prize to stimulate interest. *Ms. Himmelberger* suggested the traditional academic model of bringing competitive organizations together to collaborate on a solution. *Mr. Cobb* said that this is a wide-open discussion on a project in its infancy. Interested board members are welcome to get involved in further conversations.

Questions to Consider

- Is there a way to bring money to bear to create a solution?
- Is there enough interest among the board to create a working group to be able to work with this issue?
- What is EFAB's role in this particular issue?
- How does it fit within the board's mission statement?

Action Item

- Ms. Trabucchi hopes to pitch the project to the Office of Air and other areas to gauge further interest.

Mr. Shapiro adjourned the day's session at 4:30 PM. The EFAB meeting continued on Wednesday, May 14th.

Wednesday, May 14, 2014

Environmental Finance Center Network Update

Lauren Heberle, Director, EFC at the University of Louisville

Ms. Heberle began the second day of the EFAB meeting with a discussion of the Environmental Finance Center Network projects as well as future ideas and challenges. Following her brief remarks, *Ms. Heberle* asked *Ms. Himmelberger*, the longest-standing director of the EFC, to set the stage for the conversation.

EFCs began in 1992 at the University of New Mexico. EPA created the sites to fill in the gap between the regulators and regulated communities, providing assistance in coming up with innovative ways to address local challenges. Today the 10 centers work at all levels, including EPA headquarters, EPA regions, the states, both regulatory and funding agencies, and local governments. The centers cover the entire environmental arena: water, stormwater, wastewater, brownfields, solid waste, smart growth, climate change and more.

Ms. Heberle added that the network is unique because it is university-based, which provides access to students, faculty members and other technical-assistance resources. EFCs can also reach out to each other for follow up or additional grants/technical assistance.

Joanne Throwe highlighted the activities of the Environmental Finance Center at the University of Maryland, which covers EPA's mid-Atlantic region. The EFC addresses Chesapeake Bay activities, covering stormwater, agriculture and land preservation. The Maryland EFC has a staff of 12 with support from 12 graduate students. EFC staff have also incorporated classroom activities into some projects to allow students to work on some community efforts. The EFC continues to welcome new opportunities.

Angela Buzzard, directs the Region 7 EFC, now in its fifth year of operation. This region covers Kansas, Missouri, Nebraska and Iowa. *Ms. Buzzard* noted some other nontraditional EFC projects within the Network, including:

- An oil company recently hired an EFC to look at compliance with drinking water systems on their oil platforms in the Gulf of Mexico;
- Another EFC is assisting the Idaho Department of Environmental Quality in looking at rulemaking for surface water quality standards in Region 10;
- On the wastewater side, analyzing a variety of community population factors, to determine community affordability related to additional infrastructure investments. Staff have started in Nebraska and are now looking in Missouri. As the Midwest sees population decline in rural communities, what is the ability to pay in looking forward to implementing new regulations and new infrastructure to maintain that?;
- Stormwater and green infrastructure, following up on a GI summit in New York. Another summit will occur in Ohio; and
- Providing services to the Idaho Office of Energy, identifying drivers for statewide acceptance of some recently enacted energy efficiency codes.

Ms. Heberle also recognized *Chris Dodson* and *Melissa Young*, representing Syracuse University. Syracuse and the University of Maryland have just launched Sustainable Finance International in partnership with the California contingent EFC.

Due to budget cuts across EPA, EFCs have struggled to maintain their core functions. EPA should consider its funding of the EFCs as an investment, said *Ms. Himmelberger*. Every dollar EPA invests pays off at least three or four times and allows EFCs to provide the innovation that benefits communities. Without EPA funding, the EFCs will end up much more project-based and less collaborative. The network will remain strong without funding but may look somewhat different in the future.

Questions and Answers

- Regarding funding in the future, *Mr. Johnson* commented on the role the corporate world can play in support of environmental issues. The EFCs should begin to collaborate and speak a language with corporate America to replace some of the funding. Corporate America, for example, needs water as well for manufacturing facilities and other projects. Further, manufacturing companies may bring jobs, but communities should aggressively ask for assistance with economic development, water issues or other concerns.

Because EFCs are university centers that seek to remain neutral, they tread carefully with corporate support, said *Ms. Heberle*. EFCs, however, do provide leadership training for state and local governments to empower officials to advocate for their communities when economic development comes to an area.

Report Out: Improving Compliance at Small Water Systems in Puerto Rico/Pacific Island Territories

Blanca Surgeon, EFAB Work Group Chair

The charge of this group is to provide assistance to small systems in Puerto Rico. In their discussions, group members discovered that the small systems aren't part of the Puerto Rico Aqueduct and Sewer Authority (PRASA). PRASA manages most of the population when it comes to people. But other small, private systems exist. The group needs more information on whether the small systems are private for-profit or private nonprofit.

The project goal is to help the small systems achieve compliance. The systems face issues with billing and collecting revenues. There is no culture of paying for water. Further, a lot of the infrastructure consists of just a pipe in the ground from a spring. The area encompasses about 250 systems for over 100,000 people.

The work group has discussed such strategies as creating a management umbrella entity that will manage all the systems, a regional collaboration that will create a culture of billing and collections as well as customer service. PRASA could possibly be that entity rather than creating a new organization. The big question: What is in it for PRASA? Group members continue to brainstorm

possible incentives. The work group must also determine whether the small systems will respond to PRASA. The work group has scheduled a conference call on May 21.

Action Items

Members plan to:

- Continue discussions on the structure of the management entity;
- Get more information from the agency that gave the charge. Members would like to see a map of where the systems are located. PRASA or the management entity could start with a cluster of systems and build incrementally. Members also want to know about rates, enforcement actions and ownership of the project;
- Determine the needs as well as the incentives for the non PRASA water systems;
- Find the right leadership in PRASA that is willing to take on this effort;
- Develop a financial plan for how much this effort will cost; and
- Connect with EPA contacts in the region and headquarters who may be familiar with previous compliance efforts in Puerto Rico. Those contacts can participate in future conference calls.

Members hope to achieve at least one of these outcomes in time for the fall EFAB meeting and have a draft of the others.

Questions and Answers

Mr. Giardina said the charge also includes Pacific regions, which lack resources, technology and expertise. The solution for that region might be vastly different. *Ms. Himmelberger* said EPA is happy with a focus on Puerto Rico for now.

Mr. Giardina also asked about taking PRASA's pulse to determine its level of interest. *Ms. Surgeon* said the work group would continue to build a structure, develop some bullet-point incentives and then go in and talk to PRASA. And at the appropriate time, the group can reach out to *Mr. Weiss's* senior-level contacts within PRASA and with other PRASA leadership, EPA and state folks to work with.

Report Out: Financial Capability Analysis Guidance

Tom Liu, EFAB Work Group Chair

The Office of Wastewater Management asked this group for a follow up to a 1997 report on Combined Sewer Overflows: Guidance for Financial Capability Assessment (FCA) and Schedule Development. The report talked about the procedure, looking at the impact on residential rate payers and also the financial capability of the permittee in evaluating indicators in terms of affordability.

Other reports have come out since then, but the office has put in additional information that EPA should consider. That information is in a draft memo that came out March 4. Work group members

agree that other factors should weigh into the decision in terms of implementing clean water requirements.

EPA has asked work-group members to look at three specific questions regarding the March 4 report:

- Discuss the usefulness of each type of additional information that they have identified as well as potential challenges and concerns with the information.
- Offer recommendations regarding other metrics that may be considered for inclusion as part of the draft framework.
- Provide recommendations on how this additional information can be used in terms of a two-part assessment.

Work-group members have spent some time talking to EPA staff about the background of the assessment framework and clarifying the charge. Members want to get a better understanding of what more the office is looking for. The group also had lengthy discussions on the original 1997 analysis and EFAB's view on the issue and affordability, especially in economically challenged communities.

Other topics of discussion include:

- Metrics that rating agencies have used to evaluate the financial strength of a system and assess affordability issues;
- Recent developments within the industry; and
- Changes in accounting rules that may affect balance sheets and put additional strain on systems.

Action Items

- An e-mail with potential meeting dates will go out so work group members can reconvene.
- The group will develop a skeleton outline of the topics group members want to discuss. A report could be ready before the next EFAB meeting if that works for EPA. The report could go out electronically to get all EFAB members' approval. *Ms. Massey* encouraged the group to move the process along without delay.

Questions and Answers

Ms. Tobias posed these questions:

- Are there standardized metrics that are already collected by the rating agencies or in the context of the municipal bond practice that might be helpful? *Mr. Liu* said rating agencies do have more current views. Work group members have access to that information and can add it into the report;
- Does EPA have a standardized collection format? The March 4 draft report as well as the 1997 document did identify certain metrics. Some of the metrics, for example, were oriented

toward a system that received general obligation funding, not necessarily revenue backed funding. Work group members agree they can add more to that -- not providing a formula for EPA but providing additional insights; and

- EPA has raised concerns about the valuation of certain assets. Is there a need to consult with the appraisal community on that issue? *Mr. Liu* said he was unsure if that was part of the group's charge but the group can include that.

Regarding metrics that other ratings agencies produce, *Ms. Cregger* said they all have rich repositories of different metrics along which they evaluate systems that are available for free to any issuer who has a rating with any one of the three rating agencies.

Report Out: Funding/Financing Legacy O&M Costs at Green Infrastructure, Brownfields, and Superfund Sites

Donna Ducharme, EFAB Work Group Chair

This has been a project in search of a client, said *Ms. Ducharme*. Although the brownfields office wasn't interested, other potential clients are on the horizon. A number of regions have expressed interest in this issue as well. *Mr. McProuty* has noticed increasing attention to the solid waste issue regarding what happens beyond 30 years in terms of operations and maintenance.

EPA's Superfund side might be interested because it has a much more long-term involvement with sites than the brownfields folks. *Ms. Travis-Miller* mentioned that staff members from the Superfund Reuse Initiative are always open to more partnerships to get the word out. The Office of Sustainable Communities also is providing technical assistance around green infrastructure from the Sustainable Communities Building Blocks technical assistance efforts. Finding a client will help the work group develop the scope of the project.

In addition to ideas about endowments and trusts, other strategies for funding O&M have emerged from around the country, including:

- watershed improvement districts;
- financing mechanisms tied to property taxes;
- stormwater assessment districts;
- ecosystem services payments streams; and
- tax credits.

Further, some nonprofits see this issue as an economic development tool in low-income communities. And as part of new social ventures, businesses would train and employ low-income residents and use streams of job-training money and other things to help create a favorable cost structure while achieving other social benefits.

Action Items

- Identify the work group members.

- Nail down the client and scope the project. *Ms. Bowie* will contact the Superfund office, the regions and others mentioned to give *Ms. Ducharme* a chance to pitch this project.
- Characterize the issues that work group members want to address. Should work group members focus solely on green infrastructure and use brownfields and superfund as examples to learn from?
- Determine the magnitude of the costs. What kinds of costs go with which approaches, and what are the related issues? For instance, how does one value ecosystem services?
- Collect some best practice or emerging case studies that group members can use as an example.
- *Ms. Bowie* will e-mail information to the entire EFAB board regarding the work group's client and scope of project.

Questions and Answers

Ms. Tobias said EFAB has a strong opportunity to develop a work group on green infrastructure, and in the past work groups have been able to do more than one report. Green infrastructure is an emerging area that has generated tremendous interest in the agency, the EFCs and the administration. Further, the identification of some best practices would be an excellent deliverable. *Ms. Throwe* added that green infrastructure is an important issue for the Region 3 EFC.

Ms. Massey noted the Syracuse EFC could offer assistance as well. Further, ORD may be working with a few communities and pilot projects in Region 5 on green infrastructure issues.

Ms. De La Parra said the city of Alameda has a Superfund site that was formerly the Alameda Naval Base. The city has designated the site for total green infrastructure.

Report Out: Financing Small Community/Rural Brownfields Site Remediation

Karen Massey, EFAB Work Group Chair

This group seeks to answer these questions: How can revolving loan funds be more productive for small communities, and what are the knowledge gaps that keep small communities from moving a deal forward?

Brownfields revolving loan funds are small awards for cleaning up priority redevelopment parcels for future use. These projects typically involve a partnership between a city and a redevelopment authority. Although work group members initially had different ideas for this project, brownfields staff and others believe communities struggle with financing issues -- finding ways to structure loans. Political issues, conflicting priorities and an inability to collaborate at a local or regional level also can cause a deal to fail. Leaders of small communities can benefit from training in how to manage these processes.

Work group members must also consider these issues:

- What are the best practices of state programs that successfully reach out to small communities? What lessons have they learned?

- What technical and other types of assistance are available?
- What are the different ways of putting a deal together in a rural or small community? What funding sources are available?
- How can the office get more statewide RLFs to focus on rural communities?
- What could a deal look like for a small community?
- How can the office connect and package the RLF with other funding sources? An RLF award is usually no more than \$1 million at a time.

Action Items

- Identify all work group members. *Ms. Tobias, Ms. De La Parra, Ms. Ducharme* and *Mr. Cobb* expressed interest in joining the group.
- Go back and work with the brownfields staff to define the project scope clearly.
- Send the work group charge out to the entire board for approval.

Questions and Answers

Ms. Travers-Miller noted that local officials and developers often leave taxpayers and community residents out of reuse planning. Including that input creates a more complex, dynamic plan that addresses the need for supermarkets, laundromats and other commercial resources.

Ms. De La Parra added that the historic components of successful communities include water access, food, housing and education. Today the process seems to involve putting in a manufacturing plant to attract workers or building a housing development and then trying to attract jobs. The goal should be creating sustainable communities.

General Discussion and Next Steps

Ms. Daniel proposed establishing the definition of a green bond. A few clients have endeavored to deem their bonds as green bonds but with really no protocol, which can lead to a lack of consistency, continuity or standards.

Ms. Tobias asked whether EFAB could complete the work rapidly enough before the market moves past what the members might develop. Most reports require a year or more. A lot of data seems to exist, said *Ms. Daniel*, but the group would have to decide how to harness it. *Ms. Kim* asked about verifiers. Who would be the body that verifies the definition of a green bond: the government or an independent body?

Mr. Weiss recommended looking at the certification processes that multilaterals such as the World Bank have used. *Ms. Cregger* said a year isn't necessarily too long because green bonds are a nascent market.

Mr. Liu's firm, Bank of America/Merrill Lynch, has come up with a common definition of green bonds by consolidating requirements from a variety of industry groups, including nonprofits and

accounting firms that have green standards. *Mr. Liu* said he could share that information with EFAB.

Mr. Kim said the European market for green bonds is more mature than the U.S. market, and all of the certified green bond issuances have occurred outside of the United States. The World Bank did the first green bond issue in 2008 and has laid out a number of criteria to follow. Further, a lot of European entities have issued debt, and they have established a protocol that they follow, which includes independent second-party opinion providers.

EFAB could speak to the Office of Policy or the Office of Research and Development to determine EPA's interest and role in a certification process. Developing a full-blown standard for green bonds might be difficult for a group like EFAB to do given the number of outside stakeholders that would want to engage in the process, said *Mr. Shapiro*. Members could instead advise the agency on merits, parameters and kinds of models worth considering.

Mr. Shapiro also mentioned that EFAB members might be able to tour or conduct part of the next EFAB meeting at DC Water. The fall meeting should occur in October.

Action Items

- Ms. Bowie will schedule a new members' orientation conference call for *Ms. Travis-Miller* and *Mr. MacAdam*. *Ms. Himmelberger* will participate in a separate call on special government employees (SGE).
- Following the meeting, EFAB staff leads will initiate work group conference calls. Staff will also send information to the Environmental Finance Centers to see who wants to serve as an expert witness for the groups.
- Staff will pursue a conference call with *Betsy Shaw* in the Office of Air and Radiation to determine if there is an air project that *Suzanne Kim* will lead.
- The Transit-Oriented Development report will go to the Office of Policy with a request for a response from the program office.

Mr. Shapiro adjourned the meeting at 2:20 PM