

U.S. ENVIRONMENTAL PROTECTION AGENCY
ENVIRONMENTAL FINANCIAL ADVISORY BOARD (EFAB)
Meeting Summary

December 12 - 13, 2013

Held at the

Potomac Yards North Building, Room 4120
Arlington, Virginia

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December 12, 2013

Introductions and Opening Remarks

Mike Shapiro, EFAB Designated Federal Official

Karen Massey, EFAB Chair

David Bloom, Acting Deputy Chief Financial Officer

Mike Shapiro, EFAB Designated Federal Official, called the meeting to order. He thanked everyone for coming and stated that EPA appreciated everyone's patience because the government shutdown had required rescheduling this EFAB meeting into mid-December. *Mr. Shapiro* said that first he would ask for introductions from the EFAB members around the table, and then for introductions of observers. All of the EFAB members and observers introduced themselves.

Mike Shapiro thanked EPA's Acting Chief Financial Officer for her cooperation in allowing EFAB to hold an in-person meeting. He stated it was great to have three new EFAB members and that this in-person meeting would be helpful with onboarding the new members. He anticipated closing out some of the remaining EFAB projects at this meeting and having the EFAB members review some potential new projects.

Mike Shapiro referred everyone to a handout in the meeting packets with the EPA Administrator's seven themes. In particular, *Mr. Shapiro* emphasized that the Agency will be looking for new approaches and to strengthen EPA's work in cooperation with other government agencies, nonprofit organizations, and other stakeholders. He said the current climate within the Agency was open to new ideas from EFAB. *Karen Massey* said she was glad to see everyone, especially the three new members. She explained that she sat in on the new member orientation that morning, and thanked Vanessa Bowie from EPA's EFAB staff for organizing a successful orientation. *Ms. Massey* expressed her appreciation for EPA's Chief Financial Officer allowing an in-person EFAB meeting. She emphasized that EFAB should use this meeting to look at what EFAB can offer the Agency and how to add value to the Agency's priorities.

David Bloom, EPA's Acting Deputy Chief Financial Officer, welcomed everyone to the meeting and welcomed the new members to the Board. He thanked all of the EPA staff for their work in preparing for this meeting. *Mr. Bloom* outlined some of the current EPA budget issues under the continuing resolution. He stated that the recent budget agreement was good news for the agency; however, Congressional appropriations committees will decide how to distribute the overall Federal budget increase from this budget agreement. *Mr. Bloom* said the current EPA budget level is very challenging for internal operations and EPA partners, but he is hopeful that the "top line" resource levels for FY14 and FY15 will be higher and that those fiscal years will operate more like a traditional budget cycle.

Mr. Bloom stated that EPA is now in the process of preparing the FY15 budget. It will support the EPA Administrator's seven themes, which were released by the Agency this summer. Parts of the FY15 budget will address the new Executive Order on climate change issued by President Obama. *Mr. Bloom* said that, moving forward, an increasing emphasis on partnerships will be critical, and EPA will emphasize becoming a high-performing agency by supporting the EPA workforce. He also said that the

FY15 budget will reflect priorities in EPA's new Strategic Plan with five goals and four cross-cutting strategies.

Mr. Bloom said he would be with EFAB throughout this meeting and was glad that EPA could support EFAB members attending an in-person meeting in Washington. He stated that EPA appreciates EFAB's work.

Mike Shapiro asked if there were any questions on the opening remarks, and no questions were asked. He said the EFAB meeting now would turn to the first new project for consideration: Financial Sustainability of Tribal Environmental Infrastructure.

New Project for Consideration: Financial Sustainability of Tribal Environmental Infrastructure

Sarah E. Bahrman, Chief, Drinking Water Program, EPA Region 8

Mike Shapiro introduced Sarah Bahrman, Chief of the Drinking Water Program for EPA Region 8, who was on the phone along with other EPA staff from Region 8 field offices. *Sarah Bahrman* introduced herself and all of the others from EPA Region 8. Ms. Bahrman explained that operation and maintenance (O&M) of tribal environmental infrastructure is a big challenge for EPA Region 8. Their region has 27 tribes on 26 reservations. These tribes struggle to access O&M funding for their environmental infrastructure. Other challenges faced by these tribes are high O&M costs and obtaining manpower for O&M operations. *Ms. Bahrman* explained that EPA addresses capital construction costs through the State Revolving Fund (SRF) and that all other relevant agencies (such as the Indian Health Service) also focus on capital construction costs. *Ms. Bahrman* stated that EPA Region 8 submitted their proposal to EFAB because they want to shift the focus to O&M costs and issues.

Barbara Burkland, Environmental Scientist in EPA Region 8's Montana Office, discussed O&M issues at the seven American Indian reservations in Montana. She explained there was a significant lack of operating funds for O&M of drinking water infrastructure on these reservations and that the rural nature of the reservations leads to high O&M costs. Because only a small number of users exist to pay for those high O&M costs, the tribes face significant problems raising their own O&M funds. However, unlike the other tribal environmental infrastructure, drinking water can be shut off to compel payment. Ms. Burkland also explained that solid waste disposal costs are high because solid waste must be transported to one of only 14 landfills in Montana. She said that poor economics on reservations makes it difficult to provide sufficient pay for operators of environmental infrastructure. In addition, with around 70% unemployment, it is difficult for customers on reservations to pay their bills. Ms. Burkland concluded by providing several examples of O&M funding issues at Montana reservations.

VelRey Lozano discussed wastewater O&M issues on reservations, which are similar to drinking water O&M issues. She explained that the Indian Health Service has provided most of the tribal wastewater infrastructure, which is now old and failing. This wastewater infrastructure gets turned over to the tribes for operation even there has been a shortage of trained operators. Septic tanks are also provided by the Indian Health Service, and septic tank failures are also a problem. The Indian Health Service can provide funding for additional capital costs, if projects meet the criteria, but this funding cannot cover O&M costs. *Ms. Lozano* explained that wastewater O&M costs are high because of long travel times for

operators to cover large service areas. She also mentioned that package plants put in by manufacturers are also a problem after manufacturers “walk away” and tribes are left with no certified operator and high chemical costs that they had not experienced before. Other problems mentioned by *Ms. Lozano* were lack of back-up pumps leading to failures and theft of supplies (e.g., fence posts).

Suzanna Trujillo, Environmental Protection Specialist for the EPA Region 8 Tribal Solid and Hazardous Waste Program, provided an overview of tribal solid waste issues among the 27 federally recognized tribes. She explained that each tribe is at a different stage for its tribal solid waste program, with some tribes working on basic solid waste collection and others on comprehensive solid waste management. Barriers to solid waste management among the Region 8 tribes include lack of planning, staff turnover, lack of equipment, and the need for some tribes to transport solid waste to transfer stations instead of landfills. More education about recycling is needed, especially for separation of wastes. *Ms. Trujillo* explained that no EPA funds are available for O&M of tribal solid waste infrastructure or programs. The U.S. Department of Housing and Urban Development can provide some O&M funding, but she said most tribes do not know about it. For solid waste bill collection, she mentioned that some tribes do solid waste bill collection under their drinking water programs and that seems to work best.

Sarah Bahrman referred the EFAB members to the specific charge questions listed in EPA Region 8’s proposal, which was one of the documents in the EFAB meeting packet. *Ms. Bahrman* then asked the EFAB members if they had any questions on this new project proposal.

Blanca Surgeon said that these are familiar issues in her work with the Rural Community Assistance Corporation in New Mexico. *Ms. Surgeon* emphasized that to provide new information that will help rural communities, you must do innovation. She summarized her recent experience with rate setting for a tribe, where they looked at how to increase internal efficiencies to lower O&M costs and ways to spread the rate increases over several years. *Sarah Bahrman* commented that EPA Region 8 is interested new ways to look at this problem as well as information about any innovative approaches that were successful elsewhere in the country.

Bill Cobb explained that he was Chair of the EFAB Tribal Work Group for the August 2013 report *Financing Tribal Environmental Programs* from EFAB. This report responded to a charge from EPA’s Office of International and Tribal Affairs (OITA). *Mr. Cobb* asked if *Ms. Bahrman* or other EPA Region 8 staff had looked at this EFAB report to see if any of the recommendations and information provided for OITA could address any of Region 8’s problems. *Mr. Cobb* said this EFAB report provides a good discussion of options for funding tribal environmental infrastructure and programs. He emphasized that there is “no magic bullet” for sources of revenue, but said the first place to raise revenues for O&M is user fees. *Mr. Cobb* said the EFAB Tribal Work Group found during this recent project that no one wanted to discuss casino revenues as an option. He emphasized that the Environmental Finance Center training programs can help EPA Region 8. His opinion was that capacity building is the “magic bullet” for financing tribal environmental programs.

Mr. Cobb summarized lessons learned from the recent EFAB Tribal Work Group, specifically the lack of publicly available data associated with tribal budgets and tribal environmental infrastructure or program financing. Because of the limited information available in the public domain, their Work Group could not complete OITA’s charge as written. The EFAB Tribal Work Group also found it was difficult to get any information from tribes even to prepare case studies. *Mr. Cobb* asked, given these constraints, how would information on innovation be obtained? *Ms. Bahrman* replied that EPA Region 8 had initially

submitted a proposal in 2007, but had updated their proposal to focus on O&M when they resubmitted it in 2013. *Mr. Cobb* said that the recent EFAB Tribal Work Group project was not capital-focused, but covered financing all tribal environmental program costs. The workgroup also published a separate letter on the use of bonds for tribes.

Phil Johnson said one question was to what degree is recycling feasible given the rural nature of tribal lands and the distances. *Mr. Johnson* said that Washington DC is considering separating organic waste, which could be turned into compost that could be sold to create income and jobs. Regarding the issue of casino revenues, he suggested that it may be possible to create a mutual fund that casinos could buy into. He asked if such a fund were created, could it fund items on tribal lands without casinos. *Mr. Johnson* thought this mutual fund suggestion could create a capital pool to help tribes without casinos. *Suzanna Trujillo*, from the EPA Region 8 Tribal Solid and Hazardous Waste Program, said they emphasize recycling and waste minimization. *Ms. Trujillo* explained that the distance-to-haul is the problem so sometimes tribes have to stockpile recyclables. She mentioned that North Dakota and South Dakota have the biggest problem with distances. *Sarah Bahrman* added that few tribes in EPA Region 8 have casinos successful at raising revenues.

Leanne Tobias stated that if EFAB were to look at Region 8 tribal issues, then EFAB would need information provided directly by the tribes. *Ms. Tobias* emphasized *Mr. Cobb's* previous comment about the lack of public domain information available on tribal environmental infrastructure and programs. *Ms. Tobias* explained that EFAB would need a method to access information directly from tribes in EPA Region 8. *Julie DalSoglio* from EPA Region 8 asked for clarification about whether EFAB would need more detailed financial information. *Bill Cobb* replied yes. *Julie DalSoglio* from EPA Region 8 provided some examples of relevant financial information. *Mr. Cobb* said that such detailed financial information would have to be made publicly available as part of the EFAB process and questioned whether the tribes would allow that.

Suzanne Kim stated that capacity building is a “huge problem” that must be addressed for tribes. She said that Harvard University has a database of tribal case studies that should be reviewed for useful information. *Ms. Kim* suggested that EPA Region 8 should look at CoGen, but cautioned that it is expensive. *Ms. Kim* also suggested that carbon projects may be able to generate revenues for tribes. *Mike Shapiro* wrapped up this part of the agenda by stating that EPA will need to do more follow-up on the EPA Region 8 proposal.

New Project for Consideration: EPA's Financial Capability Assessment Supplement

Kevin Weiss, Chemical Engineer, Office of Water

Andy Crossland, Senior Environmental Specialist, Office of Enforcement, Compliance, and Assurance

Mike Shapiro introduced the next new project for EFAB's consideration: EPA's Financial Capability Assessment Supplement. *Kevin Weiss* introduced himself as EPA staff from the Office of Water, Office of Wastewater Management, Municipal Section. *Andy Crossland* introduced himself as EPA staff from the Office of Enforcement, Compliance, and Assurance working on the municipal sector. Before beginning the presentation, *Kevin Weiss* explained that EPA's updated draft Financial Capability Assessment Supplement addresses wastewater infrastructure in the municipal sector. *Mr. Weiss* further explained that Total Maximum Daily Loads (TMDLs) are creating new requirements for addressing nutrients, and

there are also legacy wastewater infrastructure problems. Mr. Weiss mentioned that stormwater infrastructure may be a more important problem for municipalities in the future.

Andy Crossland began the presentation by stating that developing appropriate compliance schedules is an important issue for EPA and that a community's financial capability has always been a part of this decision process. He explained that the existing financial capability assessment method for the Office of Wastewater Management is now 15 years old. Their existing method was issued in 1997 within EPA's "Combined Sewer Overflows: Guidance for Financial Capability Assessment and Schedule Development" (1997 Guidance). *Mr. Crossland* explained that the U.S. Conference of Mayors, National League of Cities, National Association of Counties, Water Environment Federation, and other stakeholder groups have been involved in the process of developing the updated draft financial capability assessment framework. This updated framework is intended to be a companion document to EPA's 1997 Guidance to provide clarification and ensure uniformity in application across the country. More specifically, this updated framework:

- Seeks to clarify existing guidance on how financial considerations should impact Clean Water Act compliance schedules for municipalities, and
- Offers examples of "additional information" that is appropriate for communities to supply to augment information analyzed as part of the existing guidance.

Mr. Crossland then provided some historical background. Because combined sewer overflow (CSO) programs and infrastructure are expensive, this issue led to EPA's 1997 Guidance. That guidance does not say what is affordable, but provides guidelines for extending compliance schedules for Clean Water Act requirements related to EPA's CSO Policy when costs represent a high burden. Later, use of the 1997 Guidance was expanded to other Clean Water Act compliance issues.

Mr. Crossland explained that EFAB has previously prepared two papers related to EPA's financial capability assessment framework. The 2006 EFAB paper was about affordability rate design for households and the 2007 EFAB paper reviewed the 1997 Guidance. Many of EFAB's 2007 recommendations on the 1997 Guidance were embraced in the updated framework under development.

On June 27, 2011, EPA issued the "Integrated Municipal Stormwater and Wastewater Planning Approach Framework." This Integrated Planning Framework encouraged communities to develop integrated plans for all Clean Water Act requirements and to set priorities for environmental projects. Also communities were allowed to bring all Clean Water Act requirements for consideration under the 1997 Guidance. On January 13, 2013, EPA Headquarters issued a memo to the EPA Regions about the dialogue with stakeholders to provide additional clarity on developing financial capability assessments. On October 18, 2013, EPA's Draft Financial Capability Assessment Framework was shared with stakeholders. EPA is getting feedback on the October 18 draft framework from the U.S. Conference of Mayors and other stakeholders on December 13, 2013. If EFAB accepts the charge, EPA will send the revised draft framework in January or February of 2014 for EFAB review.

Mr. Crossland explained that the updated draft financial capability assessment framework is based on two indicators. The residential indicator is intended to measure the impact on households. It is based on Clean Water Act related cost per household as a percentage of median household income. The permittee financial capability indicators (comprising six potential indicators) are intended to measure

the permittee's ability-to-pay or raise revenue. A matrix approach will be used to examine the indicators to assess the level of burden of Clean Water Act obligations. Increased burden suggests longer timeframes for compliance may be appropriate. The updated draft Financial Capability Assessment Supplement is intended to expand on the existing flexibility in the 1997 Guidance, rather than to revise it.

Mr. Crossland discussed in detail the principles EPA used to guide development of the updated draft Financial Capability Assessment Supplement. These principles are listed below:

- EPA's 1997 Guidance will continue to serve as guidance in establishing a baseline assessment.
- Additional information on a community's unique financial circumstances will be considered. A non-inclusive list of examples is included.
- Financial capability is on a continuum—not just “high, medium, or low.”
- All Clean Water Act costs may be included in a financial capability analysis.
- Safe Drinking Water Act costs can be considered as additional information about a community's financial capability.
- EPA supports programs to assist low income customers with paying wastewater utility bills.
- Permittees should provide appropriate assurances that Clean Water Act expenditures will be made as planned.

In closing the presentation, *Mr. Crossland* said that if EFAB accepts the charge to review the updated draft Financial Capability Assessment Supplement that EPA would be interested in EFAB's insights on the applicability of this updated framework. He also said that EPA would be interested in EFAB's insights on any other metrics that should be included.

Leanne Tobias asked what timeframe was necessary for getting a product from EFAB. *Andy Crossland* said he was not sure, but *Kevin Weiss* added that they want to discuss the timeframe with the U.S. Conference of Mayors on December 13, 2013. *Mr. Weiss* asked for pointers from EFAB on the length of a reasonable timeframe.

Ms. Tobias asked whether any stakeholders from the finance industry or rating agencies were involved in developing the updated framework. *Mr. Crossland* said not yet, but EPA would like to get feedback from EFAB on whom to get involved.

Rick Giardina stated that it was great to see EPA moving beyond the 2% of household income measure previously used for financial capability analysis. *Mr. Giardina* said he remembered an article in the press about EPA considering individual ability-to-pay in rate setting and asked for more information. *Kevin Weiss* stated that the U.S. Conference of Mayors was sensitive about EPA getting involved in rate setting. *Andy Crossland* explained that in enforcement actions, EPA is very careful not to get involved in rate setting. *Mr. Giardina* agreed that rate setting should be left to local governments.

Mathilde McLean mentioned that New York City had a “huge” percentage increase in rates due to EPA mandates. She said it was great that Safe Drinking Water Act costs could be included in EPA's updated financial capability assessment framework. *Ms. McLean* stated that unique local circumstances can be important considerations. For example, she said that New York City has very high housing costs with monthly rents for the average apartment around \$3,000. Given such high costs for basic household expenses, she thought the median household income in New York City is actually relatively low. *Ms.*

McLean said she had seen an earlier draft of the updated framework and emphasized that both drinking water and wastewater need to be addressed in financial capability assessment.

Chiara Trabucchi said it was a good idea for EFAB to assess this topic and recommended that EFAB consider taking on this project. She believed EFAB could add value.

Tom Liu stated that a banker would look at EPA's previous 2% of household income measure as a very limited approach for financial capability analysis. Regarding the timeframe, *Mr. Liu* said that the next EFAB meeting was planned for March or April and he thought EFAB could be ready to approve any final EFAB report on this topic by their next meeting.

Leanne Tobias asked whether EPA would review a draft EFAB report before a report would go EFAB for final approval. *Karen Massey* explained that EFAB needs to develop a process to get reports done faster. *Ms. Massey* also explained that the EPA Headquarters January 13, 2013 memo to the EPA Regions about financial capability assessments got a strong reaction. This is another reason for producing a final report in a timely manner.

Bill Cobb explained that the process of getting the Tribal Work Group's final report approved by EFAB took a longer time than he anticipated. *Karen Massey* added that one of EFAB's problems is they start crafting a product from scratch and it takes too long to develop those EFAB products. *Ms. Massey* stated that because the updated draft financial capability assessment framework is already a vetted product with stakeholders, she thought that EFAB could commit to a shorter timeframe for reviewing it.

Mathilde McLean asked whether the updated framework was still 7-8 pages. The answer from several people was yes. *Ms. McLean* proposed that EFAB could commit to a 4-6 week long process to complete an EFAB product with a review of EPA's updated draft Financial Capability Assessment Supplement. *Karen Massey* emphasized again that EFAB needs to think more about expedited products. There was some general discussion about committing to a 6-week timeframe for this product.

Karen Massey asked if EFAB wanted to accept this project, and the EFAB members were unanimous in agreement about taking on this project and committing to a 6-week timeframe.

Report Out: Transit-Oriented Development

Phil Johnson, Work Group Chair

After reconvening from a break, *Mike Shapiro* said that *Phil Johnson*, Work Group Chair, would provide a report from the Transit-Oriented Development (TOD) Work Group. The TOD Work Group had their meeting in the morning prior to the full EFAB meeting.

Phil Johnson said the TOD Work Group was trying to bring their work to a close. He explained that the initial charge was nebulous, so the Work Group had broadened the topic from the initial charge. The TOD Work Group had broadened the topic to what they thought their final report should do to benefit the Agency. *Mr. Johnson* said he had recruited the three new EFAB members (*Lisa Daniel*, *Ed Crooks*, and *Suzanne Kim*) who participated in that morning's TOD Work Group meeting. He said the TOD Work Group appreciated the wisdom and knowledge added by the new members.

As a result of the TOD Work Group meeting that morning, the draft report outline previously prepared by Phil Johnson and Leanne Tobias will be expanded based on feedback from the new members. *Phil Johnson* said they plan to have a draft report prepared by March, have a conference call with the TOD Work Group, and present a revised draft report to EFAB at the next meeting in 2014.

Phil Johnson stated that private funding for infrastructure will be part of their TOD report, given the recent budget agreement in the U.S. Congress. He explained that EPA's Office of Sustainable Communities staff already made a presentation to private sector experts at a TOD roundtable organized by the TOD Work Group. The Work Group also wants to look at how Federal government programs can help get TOD included more often in the sustainability efforts of Federal agencies.

Phil Johnson discussed the relationship of environmental amenities to TOD. Examples of relevant environmental amenities are walking and biking paths, and green space. He said the issue of how to monetize the value of environmental amenities will be important.

Phil Johnson explained that they anticipate the TOD Work Group report will help provide information about what public sector officials need to know about structuring deals. He commented that public-private partnerships or P3 real estate development is not as common in the United States compared to some other countries.

Lisa Daniel explained that the discussion during the TOD Work Group meeting that morning had covered the spectrum of funding options from general obligation bonds to purely private financing. She said it will be important to recognize that the cost of capital will change with the expected future risk of a TOD project. She also thought there will be an issue of control for the local government, for example, for setting rates.

Suzanne Kim provided examples of options the TOD Work Group had discussed in the morning. These examples included congestion pricing, carbon auction proceeds, and infrastructure banks, in addition to the more traditional approaches of tax increment financing and exactions.

Ed Crooks stated that "the hinge point is where is the value?" along with what part of the value to try to monetize to pay for a TOD project. He said it will be important to focus on value streams to pay for a project and what are the attributes of these value streams. *Mr. Crooks* explained that it will be important to compare developed urban settings versus suburban settings. He said the TOD Work Group may look at case studies.

Leanne Tobias observed that a common theme has arisen in many EFAB projects of how to monetize values to pay for projects. She stated that for TOD, it will be important to determine how to make the real estate development project a more predictable revenue stream. *Ms. Tobias* said she wanted to discuss later whether EFAB should discuss monetizing values to pay for projects and present a report to EPA or develop a list of general principles for EPA.

Phil Johnson explained that one result of the TOD roundtable was suggested case studies of how to get the private sector involved in TOD. He proposed an idea to organize a conference with the U.S. Department of Transportation, U.S. Department of Housing and Urban Development, nonprofit organizations, and other stakeholders.

Mike Shapiro asked about the timing for the TOD Work Group's report. *Phil Johnson* said a draft will be prepared in March for Work Group review and a final report will be prepared before the next EFAB meeting. *Mr. Shapiro* encouraged the TOD Work Group to set a goal to finalize a product by spring of 2014. *Karen Massey* said it would be good to bring the TOD Work Group to closure and asked *Vanessa Bowie* from the EFAB staff when the dates for the next EFAB meeting will be finalized. *Ms. Bowie* said EPA will try to finalize the next EFAB meeting dates as soon as possible.

Report Out: Drinking Water Pricing and Infrastructure Investment

Rick Giardina, Work Group Chair

Mike Shapiro said the EFAB meeting would now turn to the next Work Group chaired by *Rick Giardina*. The Drinking Water Pricing and Infrastructure Investment Work Group had their meeting in the morning prior to the full EFAB meeting.

Rick Giardina said the charge received by EFAB was related to the trend of declining water sales/revenues and increasing costs. He said the Work Group had developed an initial outline for their report, but that initial outline was very broad and long. Subsequently, the Work Group learned of a major research project being conducted by the Water Research Foundation (WRF) and decided to wait for those results. *Mr. Giardina* introduced *Mary Tiger* from the Environmental Finance Center in North Carolina, which was the prime contractor for that WRF report. *Ms. Tiger* said that the final WRF research report should be published in around a month. She mentioned that *Mr. Giardina's* company, *Raftelis Financial Consultants*, had teamed with them on this project so he is familiar with this WRF report. *Rick Giardina* stated at their Work Group meeting today they looked at public-private partnership options. He explained that earlier the Work Group had looked at operating efficiencies, but today they decided to focus only on the revenue side instead of the cost side.

Mathilde McLean said it is important to consider what are fixed costs versus variable operating costs and how to finance both. She said the challenge is to bridge the gap between revenues and operating costs.

Rick Giardina asked if there were any other comments from the Drinking Water Pricing and Infrastructure Investment Work Group members. No Work Group members had further comments. *Rick Giardina* asked *Mary Tiger* to report on results from the WRF research study that looked at revenue resiliency. *Mary Tiger* explained that they looked at this issue in three different ways:

- 1) The state of revenue resiliency across the country,
- 2) Relevant factors, and
- 3) Strategies to improve revenue resiliency.

Rick Giardina explained that the WRF research study also looks at whether there is too much reliance on the variable side of revenues. He stated that the challenge is to strike a better balance between the variable and fixed side of revenues.

Rick Giardina mentioned that EPA's Office of Water is rethinking their charge to EFAB and whether to continue with this project. *Mr. Giardina* stated that after getting the WRF report to the Work Group

members, the Drinking Water Pricing and Infrastructure Investment Work Group will wrap up their report by the next EFAB meeting.

Helen Akparanta recapped the next steps for this Work Group. *Rick Giardina* indicated they had completed their Report Out for Drinking Water Pricing and Infrastructure Investment Work Group.

Summary of Day 1

In a brief conclusion for Thursday, *Karen Massey* said it had been a good day both for the Work Group meetings in the morning and the full EFAB meeting in the afternoon. *Ms. Massey* said she was pleased that it sounded like both Work Groups that met and reported out today were getting to a focus point. She stated she was looking forward to more interesting discussions tomorrow on the proposed new tribal environmental infrastructure project from EPA Region 8.

Mike Shapiro said he enjoyed the discussions today and observed that it seemed the new EFAB members are getting engaged. *Mr. Shapiro* stated that he agreed with *Karen Massey* that the two outstanding Work Group projects now have a focus and should be nearing completion.

Mike Shapiro and *Karen Massey* adjourned Day-1 of the meeting.

December 13, 2013

Opening Remarks

Mike Shapiro, EFAB Designated Federal Official

Karen Massey, EFAB Chair

David Bloom, Acting Deputy Chief Financial Officer

Karen Massey, EFAB Chair, called the meeting to order and reviewed the agenda. *Mike Shapiro*, EFAB Designated Federal Official, thanked *Ms. Massey* for a good summary of the agenda. He said that everyone will have time later in the morning to discuss new projects for consideration plus new ideas from the EFAB members.

Environmental Finance Center Network Update

Mark Lichtenstein, Executive Director and Principal Investigator, Syracuse University Environmental Finance Center

Mike Shapiro introduced *Mark Lichtenstein*, from the Syracuse University Environmental Finance Center (EFC), and thanked him for coming to make a presentation to EFAB. *Mark Lichtenstein* began by introducing two other staff members from EFCs: *Melissa Young*, from the Syracuse University EFC, and *Mary Tiger* from the University of North Carolina EFC. *Mr. Lichtenstein* said his presentation would focus on green infrastructure leadership, a few additional initiatives, and smart management for small water systems.

Mark Lichtenstein summarized the Community Summit on Green Infrastructure, held in Syracuse, New York, on October 22-23, 2013. He explained that EPA identified the communities that would send delegates to attend and develop action items to address barriers to green infrastructure. He said several high-level EPA representatives also attended this summit. A report will be distributed and they intend to conduct another summit next year, probably in Los Angeles. He summarized the slides that provided the summit's draft conclusions and recommendations on:

- Program development and project selection,
- Innovative financing,
- Maintenance challenges and opportunities,
- Performance: new science and technology, and
- Promoting adaptation.

Leanne Tobias asked how they were defining green infrastructure. *Mr. Lichtenstein* gave some examples of green infrastructure, but said the focus of the summit was integrated stormwater management (both green and gray). He added that the summit also focused on environmental justice.

Mark Lichtenstein described new initiatives the EFCs were conducting for international work. He described some recent work in Puerto Rico and the Virgin Islands by the Syracuse University EFC. *Mr. Lichtenstein* said the EFCs are planning to increase their focus on international work in the future. *Mr. Lichtenstein* briefly summarized sustainable community capacity building initiatives, and said that the EFCs will continue this work where they can identify partners. He explained that they still do a lot of work on tribal financial capacity. In addition, they are interested in cutting edge projects on brownfields.

Mary Tiger discussed Smart Management for Small Water Systems, which was funded under a cooperative agreement with EPA. It is the first collaborative effort among all the EFCs, and includes work in all states and territories. This program offers assistance to small systems in the following areas:

- Asset management,
- Water loss reduction,
- Water system collaboration,
- Fiscal planning and rate setting,
- Energy management,
- Funding coordination, and
- Managerial and financial leadership.

Ms. Tiger explained that they are 14 months into the grant, and have four additional months. So far, they have conducted 91 in-person workshops, seven webinars, over 300 points of direct technical assistance on finance and management, in-depth technical assistance on regionalization and energy management, and four Rates Dashboards for states that had rates data. She went through the website for the Smart Management for Small Water Systems project. *Mary Tiger* and *Mark Lichtenstein* provided several examples of the in-depth technical assistance.

Mark Lichtenstein said the Community Summit on Green Infrastructure was such a successful model that they will use the same format for a sustainable materials management summit, perhaps in June 2014. This topic will help EPA as it moves to a sustainable materials management approach for solid waste.

Karen Massey asked the EFAB members if they had any questions.

Leanne Tobias said she had a comment that EFAB's Financing Green Infrastructure Work Group should be considered a resource. She also commented that the participation of the EFCs at recent EFAB meetings has been smaller than in the past, which is unfortunate because of budget and legal reasons. She would like to see their participation increase in the future.

Karen Massey asked if there were any other comments. None of the other EFAB members had questions or comments.

Mike Shapiro said that EPA saw the Community Summit on Green Infrastructure as "a real home run" for the Agency. He also stated that EPA appreciates the work that EFCs do with small systems/utilities. It is harder and harder to get small utilities into compliance as the sophistication of requirements increases. *Karen Massey* suggested that EFAB could work with EFCs on EFAB Work Groups to get better products. *Tim McProuty* from EPA's EFAB staff asked about "leadership," which he said is something new. *Mark Lichtenstein* said the EFCs will focus more on leadership if their application for additional funding is accepted.

New Project for Consideration: Improving Compliance at Small Public Water Systems in Puerto Rico and Pacific Island Territories

Robbi Farrell, Environmental Protection Specialist, Office of Enforcement, Compliance, and Assurance

Mike Shapiro, EFAB Designated Federal Official, explained that the representative from the sponsoring EPA office for this new project for consideration is not available for that presentation. He asked *Tim McProuty* from EPA's EFAB staff to summarize it.

Tim McProuty said the key word is "d  j   vu" because the problems that exist in Puerto Rico and the Pacific Island territories with those small systems are the same as with tribes. He explained that this new project for consideration is looking for help through solutions or partial solutions to help bring those small systems into compliance. He said that those small systems cannot pay fines because they don't have anything, so enforcement is difficult.

Mr. Shapiro suggested that EPA Region 2 and EPA Region 9 should get involved because they have their own focus on activities. *Tim McProuty* said that the Syracuse EFC has expertise in Puerto Rico and the Virgin Islands and other EFCs have experience with tribes. *Mr. McProuty* thought it would be helpful to put the EFCs in touch with EPA Regions 2 and 9.

Blanca Surgeon stated that she has been doing regionalization for 10 years. She explained that it is difficult to find volunteers anymore to participate in these small systems. It takes a lot of time to put together a regionalization. She has found that people want something to regionalize into, and it took her awhile to understand what they are looking for are business models tailored to their state or region and specific steps to follow to regionalize. *Ms. Surgeon* recommended that creating these business models for small system regionalization is a topic that EFAB could work on to help.

Mike Shapiro asked whether there was a database of benefits and costs of regionalization from the work of the Rural Community Assistance Corporation. *Blanca Surgeon* said there was no database, but case

studies exist that people are willing to share. She also commented that once a regionalization gets established, they often grow because neighboring systems will want to join.

Eustace Uku asked if grants are available to small systems for access to funding in the initial stages before revenues are available. *Blanca Surgeon* said that was a good question. The U.S. Department of Housing and Urban Development's Community Development Block Grant (CDBG) program and the U.S. Department of Agriculture (USDA) provide grant funding as start-up money. The CDBG funding can be used to develop business plans. USDA funding can be used to purchase office furniture and similar items, if a USDA project exists for that system. *Ms. Surgeon* recommended that Federal funds could be used to help in the first year, but later the small systems should operate on their own.

Karen Massey asked whether the tribal proposal from EPA Region 8 (discussed the previous day) and the similar proposal about small public water systems compliance in Puerto Rico and the Pacific Island Territories should be combined. She also asked the EFAB members whether anybody wanted to pursue either of these new projects for consideration.

Donna Ducharme suggested that EFAB may need to ask if what the sponsoring offices are asking for is the most valuable thing or whether it may be better to take a piece and review that in depth. *Ms. Ducharme* provided an example of such a piece, which could comprise a project on finding value in a waste stream. She mentioned CoGen examples that she is aware of where she works. *Ms. Ducharme* thought it would be less useful to try to address systemic problems behind poor, small communities and recommended that EFAB should be looking at selected solutions or approaches in more depth. *Suzanne Kim* commented that she liked the idea of providing solutions instead of general discussions.

Blanca Surgeon stated that low income communities need to bring in revenue and then prioritize their revenues. She provided the example of revenues from casinos in tribal communities. She thought that leadership is the big challenge in low income communities. For tribes, she explained the challenge is that water has always been subsidized so there is no culture of billing and collection. For the potential tribal project from EPA Region 8, *Ms. Surgeon* recommended that EFAB would have to go to the tribes to have a conversation about how to get a culture of paying for O&M. She believed the potential tribal project could only be successful if EFAB got the tribes involved and had the funding to involve them. She also said that the tribes are not ready for regionalization.

Rick Giardina stated that small system compliance is a complex problem, but that the availability of funding is a common theme. EFAB could help tribes facilitate application for available funding sources and help them get into a better position to get that funding. *Mr. Giardina* also said that some states have unique funding sources and EFAB could help the tribes identify that state-level funding.

Leanne Tobias suggested that the EFCs and EFAB tackle the small system problem in a coordinated way. She assumed that EFCs have a knowledge base that is ready to be tapped. *Ms. Tobias* said that it will be important not to make a new project so broad that it takes several years, and not too narrow that it will only apply to tribes. She said she will only favor a new tribal project if resources are available to work with tribes, because she felt EFAB had already stumbled on its first tribal project.

Tom Liu stated that the "bottom line" is that grant funding is very limited. He recommended that a zero percent interest rate loan may be an option for small systems. *Mr. Liu* said the State Revolving Funds (SRFs) are successful and have excess cash that may help, but SRF funds should be used as loans not

grants. However, the issue with loans is repayment. SRFs would not want to be in a loss position so essentially they end up providing a grant. *Mr. Liu* described an approach used by the Ohio SRF to create a “direct link account” to provide SRF funding to small or low income communities. The Ohio SRF puts money in an account at a local bank, which then offers the community a below market rate loan. *Mr. Liu* also suggested that EFAB should look at SRF programs in the Great Plains states for possible examples.

Mike Shapiro said that by law, both tribes and Pacific Island territories get a specific set-aside from the SRF that must be provided in the form of grants. When authorizing the SRF, the U.S. Congress recognized there would be a class of communities where loan repayment may not work. The problem is that O&M issues will cripple these small systems over the long-term. Another problem may be that some of these small systems are too complex in engineering design. *Mr. Shapiro* reminded everyone that the tribes are different from local governments, because they do not have the states to provide back-up funding.

Bill Cobb explained that initial charge for the EFAB Tribal Work Group, which he chaired, was gap funding that gets the tribes started, but then goes away. Given recent Federal budget issues, Federal funds are not going to be available so tribes will need options for raising revenues. The August 2013 EFAB Tribal Work Group report lists potential revenue streams for tribes.

Mr. Cobb commented that if a project gets too site-specific on revenue sources, then it would seem more like an EFC project where the EFC would work directly with tribes. He reminded everyone that EFAB’s work should be conducted based on the collective expertise of EFAB members. He thought the key question was how EFAB should be working as a Board, not how much funding would be available for a new project. *Mr. Cobb* believed that if EFCs are driving the work product, then it is not an EFAB work product. *Karen Massey* emphasized that EFCs cannot drive an EFAB work product.

Leanne Tobias said the conversation should be with the financial community, such as bankers. But she also felt that a conversation with tribes was important. *Ms. Tobias* recommended that EFAB could bring the perspective of institutional financing sources to tribes. She thought it would be helpful to address any disconnect between tribes and institutional financing and how it could be bridged.

Donna Ducharme recommended that EFAB provide information that might potentially solve the revenue problem. She was not sure that grants in general, without other help to move small systems past their problems, would be useful.

Karen Massey said that for clarification, she thought what she was hearing from the group was that making a decision on these new projects for consideration was primarily a specificity issue.

Blanca Surgeon said that the small community issue will take a long time to solve, and grants are definitely needed. She recommended that EFAB work on an approach that would invest in 100% grant funding for the first year of operations for small systems that form a regional entity that would run their systems as a business exercising economies of scale. Grants are needed as a “carrot” to help them build a business model over the next 3-4 years to become a self-sustaining system. She suggested that EFAB look at case studies of regionalization and that EFAB should look at the issue of access to funding to help with start-up O&M costs.

Leanne Tobias summarized three topics she had synthesized from the discussion. First, small systems need a source of initial planning capital and *Blanca Surgeon* had suggested that be grant-based. Second,

small systems need revenue generating models, and *Donna Ducharme* may be able to provide some examples. Third, small systems need revenue to cover O&M costs. In addition to these three items, *Leanne Tobias* said there is also the important issue of capacity for governance. She thought there may be models available in the area of socially responsible investment.

Leanne Tobias said that *Toby Rittner*, an EFAB member who could not attend this meeting, may have additional examples that would be helpful in addressing the small system problem. She also recommended considering how to get examples from the outreach work of the EFCs.

Lisa Daniel thanked Ms. Tobias and said she had synthesized the discussion well. *Ms. Daniel* added another observation that sustainability is dependent on revenue sources. *Lisa Daniel* emphasized that if a second charge is accepted by EFAB on tribal issues, it should be specifically defined so that EFAB doesn't repeat itself.

Suzanne Kim asked if EFAB could do a demonstration project, such as CoGen for a tribe. *Mike Shapiro* stated that EFAB could do an analysis of such a demonstration project.

Vanessa Bowie, of EPA's EFAB staff, said that a client is necessary for a charge to EFAB. She also explained that in the past, EFAB members have worked with the client to work out more specificity to a charge for EFAB projects. Ms. Bowie suggested that EFAB staff could have a conference call with Region 8 to discuss how to make their charge more specific so that EFAB could help them.

Public Comment

Vanessa Bowie, of EPA's EFAB staff, announced that there was one person registered to provide public comment. *Mike Shapiro*, EFAB Designated Federal Official, introduced *Bob Weaver* of *Kelly & Weaver* in Washington, DC. The EFAB staff distributed two handouts from Mr. Weaver to the EFAB members. The first handout was a December 2013 report by Mr. Weaver entitled "National Investments in American Clean Water Infrastructure: An American Clean Water Trust Fund to Support National Clean Water Goals." The second handout was an opinion piece published by The Brookings Institution on December 11, 2013 on the Murray-Ryan Budget Deal.

Bob Weaver thanked the EFAB Chair for the opportunity to provide public comment. *Mr. Weaver* stated that he understood EFAB was created to advance Title 2 and Title 6 of the Clean Water Act. He believed that EPA depends on EFAB to find ways to advance the SRF program. He also emphasized that state leadership is important for the SRFs. *Mr. Weaver* stated that he thought EFAB's best work was its reports on the SRF program.

Mr. Weaver discussed recent legislation introduced in the U.S. Congress related to the SRF program as well as a proposed Clean Water Trust Fund. His opinion is that the SRF program needs more funding through continued and growing annual Federal capital grants, not more authority. In particular, he emphasized an idea to exempt the SRF program from Federal arbitrage regulations. He also emphasized that new national revenue sources dedicated to advancing the SRF program are vital, and explained that he believed the best example is a national user fee on flushables (e.g., toilet paper). He encouraged EFAB to conduct analyses of potential dedicated national revenue options for the SRF program.

Blanca Surgeon asked who had been working with Mr. Weaver on these ideas and he explained that many of the national associations representing local officials and utilities have position statements about the SRF program. *Mr. Weaver* also said that Tennessee and Ohio had SRFs that could provide ideas to other states.

Leanne Tobias described her opinion that the messaging on the SRF has been inadequate. She believed that the SRF program is the closest to an infrastructure bank in the United States, but felt this was not understood. *Bob Weaver* (public commenter) stated that the message on the SRF is not getting to President Obama, and suggested that EFAB should endorse it now.

Lisa Daniel said she fully endorses the SRF, but commented that the arbitrage rebate issue has already been debated for years. *Ms. Daniel* explained that her company works with a large number of the states with leveraged SRFs. In particular, she knows that the Tennessee SRF is flush with extra cash, and their funds are not being fully distributed so leveraging is not their issue. *Ms. Daniel* suggested that stakeholders need to ask elected officials (e.g., governors) why they aren't using the SRF program more effectively.

Bob Weaver (public commenter) said that governors are important, and suggested the example of Oklahoma. *Mr. Weaver* stated that the arbitrage issue must be addressed and recommended that EFAB should report to the EPA Administrator on the arbitrage issue as soon as possible.

Mike Shapiro, EFAB Designated Federal Official, announced that Mr. Weaver had used the allotted time for his public comment. *Mr. Shapiro* asked Vanessa Bowie of EPA's EFAB staff whether any other commenters had arrived. *Ms. Bowie* said no. *Mr. Weaver* mentioned that he had handouts, and *Ms. Bowie* replied they had already been distributed.

Tim McProuty, of EPA's EFAB staff, stated that EFAB had already addressed the arbitrage issue, and that he could provide a copy of that EFAB letter to the current EFAB members. *Mr. McProuty* also mentioned that the U.S. Department of Treasury is adamantly opposed to changing the Federal arbitrage regulations. *Karen Massey* added that it was helpful that *Mr. McProuty* provided a reminder about the previous EFAB letter on the arbitrage issue.

Final Report Out: Energy Efficiency/GHG Emissions Reduction

Karen Massey, Work Group Co-Chair

Karen Massey described the charge from EPA Region 1 to prepare a handbook on energy efficiency. *Ms. Massey* said the Work Group's product was in the EFAB meeting packets. Their EFAB final draft report is entitled "Municipal Energy Efficiency and Greenhouse Gas Emissions Reduction: Financing and Implementing Energy Efficiency Retrofits in City-Owned Facilities."

Vanessa Bowie, of EPA's EFAB staff, passed out concurrence forms for EFAB members to use to concur, not concur, or concur with comments. *Ms. Bowie* said she wanted these concurrence forms filled out at the meeting that afternoon. *Karen Massey* explained that the concurrence form is a new approach to obtain finality for an EFAB project. *Ms. Bowie* said she would be responsible for contacting the EFAB members not in attendance to complete their concurrence forms about this EFAB report.

Bill Cobb commented that it was nice to have this EFAB report completed. There was general agreement with his comment.

Later in the meeting, *Vanessa Bowie* announced that all eleven voting members of EFAB in the room had concurred on finalizing the EFAB report “Municipal Energy Efficiency and Greenhouse Gas Emissions Reduction: Financing and Implementing Energy Efficiency Retrofits in City-Owned Facilities.”

Final Report Out: Green Infrastructure Finance

Chiara Trabucchi and Tom Liu, Work Group Chairs

Mike Shapiro, EFAB Designated Federal Official, said the meeting would now proceed to the Financing Green Infrastructure Work Group’s Final Report Out. Their EFAB final draft report is entitled “Utilizing SRF Funding for Green Infrastructure Projects.” It was also in the EFAB meeting packets.

Chiara Trabucchi said the Financing Green Infrastructure Work Group received their charge from EPA’s Green Infrastructure Work Group. After their EFAB Work Group got comments on their draft Work Group report, they made revisions, and changed the title to “Utilizing SRF Funding for Green Infrastructure Projects.” *Ms. Trabucchi* said their experience was a good example of how it can be challenging for an EFAB Work Group to address an “open-ended charge.” She mentioned that *Jim Gephardt* (a former EFAB member) helped to focus their charge on a particular solution. This solution addressed the issue that some SRFs have reached a point where they could support credit guarantees for green infrastructure. *Ms. Trabucchi* reminded everyone that an EFAB charge must be focused and relate to EFAB purposes. She thanked *Tom Liu* for his role in completing their Work Group report.

Tom Liu said he would provide a summary of the report findings and then explain enhancements from their previous draft report. First, they reviewed the successful green infrastructure program in Philadelphia. Second, they considered that SRFs are mostly successful, with most achieving AAA ratings and strong cash flows. The question was whether SRF cash flows are strong enough to support an AAA-rated credit guarantee program for green infrastructure. *Mr. Liu* stated that SRFs have authorization for credit guarantees, but this option has not been used much in the past.

Mr. Liu said their Work Group looked at which SRFs have credit guarantees. They found that SRFs with a good leveraging ratio could provide credit guarantees for green infrastructure. Through this option, their Work Group is proposing better utilization of the existing SRF program. *Mr. Liu* emphasized that this option is better suited for the larger, leveraged SRF programs. He also stated that their Work Group recognizes that implementing this option will take state resources.

Tom Liu mentioned that they had recently included *Lisa Daniel*, a new EFAB member, for her SRF expertise. In preparing their EFAB final draft report, which was in the meeting packets, they simplified the language and charts. They also have included a companion MS Excel spreadsheet, which was not available in the meeting packets. *Mr. Liu* stated there was still some minor editing needed, which would be completed by him, *Karen Massey*, and *Lisa Daniel*.

Lisa Daniel added that she thought this EFAB final draft report was a great long endeavor. *Ms. Daniel* cautioned that everyone should not lose sight of the fact that green infrastructure projects could be funded through the traditional SRF program.

Tom Liu commented that after Jim Gephardt left EFAB, the EPA's EFAB staff could not communicate directly with Mr. Gephardt so both himself and Karen Massey served as "interpreter" on behalf of the EPA EFAB staff with Mr. Gephardt regarding his previous contributions to their draft report.

Vanessa Bowie, of EPA's EFAB staff, passed out concurrence forms for EFAB members to use to concur, not concur, or concur with comments with the Financing Green Infrastructure Work Group's final draft report. If possible, she wanted these concurrence forms filled out at the meeting that afternoon. *Ms. Bowie* suggested that those who agreed with Lisa Daniel's comment to include information regarding green infrastructure project funding through the traditional SRF program should add that when they concur with comments.

General Discussion and Next Steps

Karen Massey, EFAB Chair

Mike Shapiro, EFAB Designated Federal Official

Karen Massey, EFAB Chair, stated that the meeting would now move to a discussion of next steps for EFAB. She suggested that the EFAB members should brainstorm about the new projects for consideration and new ideas from members. Then a small group of EFAB members could work with EPA's EFAB staff to vet whether the ideas were useful to the Agency and whether a "champion" exists within the Agency for those useful ideas. *Vanessa Bowie*, of EPA's EFAB staff, agreed with this approach. *Donna Ducharme* summarized her new ideas. She suggested that EFAB could look at options for funding the ongoing O&M costs for selected environmental infrastructure that tends to have high O&M costs. As examples, she mentioned green infrastructure projects and Brownfields institutional controls (e.g., monitoring at Brownfields sites). *Ms. Ducharme* stated that she has known about some proposed green infrastructure projects where nobody would take ownership of the property because of concerns about high O&M costs—so the project didn't happen.

Leanne Tobias asked whether *Ms. Ducharme* had specific examples of the amount and types of O&M costs that she had referred to. *Donna Ducharme* said she did not bring specific examples of these costs. *Mike Shapiro* mentioned there was work underway at EPA evaluating the ongoing O&M costs of green infrastructure. *Tim McProuty*, of EPA's EFAB staff, mentioned that EFAB has looked at trust fund and annuity models in other contexts.

Chiara Trabucchi said that EFAB has previously reviewed the costs and responsibilities of post-closure care, for example, under the RCRA program. She explained that there can be many issues with long-term bonding, insurance products, and trust funds.

Blanca Surgeon explained an idea that she got from her Congressional delegation. She said that data shows only 2-3% of water produced by drinking water systems will get used for drinking and cooking. The question is whether it is a good investment to continue treating 100% of water to that level. *Lisa Daniel* said she will react to that idea, because there is a "huge" public health issue. *Ms. Daniel* said she would be afraid of putting out an EFAB report that could be criticized on public health concerns. *Eustace Uku* commented that there were so many "downsides" to this idea that he was not sure how far this idea could go.

Karen Massey stated that Brownfields projects in small communities do not have the same economic impact as those in larger communities, but they are still important. She understood that the requirements in the Brownfields Revolving Loan Fund program drive away small communities, even for grant funding. *Ms. Massey* said that some of those requirements are statutory and cannot change, but EFAB could review processes.

Leanne Tobias suggested there may be a connection between *Donna Ducharme's* idea and *Karen Massey's* idea. *Donna Ducharme* replied that she did not see any connection, and asked for more explanation. *Ms. Tobias* said that the connection would be looking at financial and organizational issues in a more holistic way. *Donna Ducharme* said that although there was a Brownfields application to her idea, she was looking more broadly at green infrastructure and the “recent push” on green infrastructure and she did not want that lost.

Bill Cobb asked *Karen Massey* whether a Brownfields project in a small community would still happen if funds were available as a zero percent interest rate loan. *Karen Massey* she wanted to focus on processes, not the funding or capital available. She recapped that her suggestion was to look at processes that hinder environmental investment in small communities without resources (e.g., staff, expertise). *Bill Cobb* asked whether the overall EFAB purpose was to look at how to pay for environmental investment, instead of processes. *Mr. Cobb* asked whether looking at processes would be out-of-scope for EFAB. *Mike Shapiro* said it might be worthwhile to have a conversation with EPA's Brownfields program. *Karen Massey* reminded everyone that a lot of the requirements are embedded in Federal statutes. *Donna Ducharme* added that she has had a lot of conversations with communities about hindrances to environmental investment.

Chiara Trabucchi suggested that EFAB could look at the relationship between technology and decision making. She thought exploring the relationship between them might be useful in analyzing how to leverage technology and finance. *Mike Shapiro* asked for examples of such technology. *Ms. Trabucchi* said one such example would be financial models developed by the Agency and whether they could be made more available to communities.

Karen Massey told the EFAB members that *Mathilde McLean* (who was not in attendance the second day) had mentioned that EFAB could look at opportunities for funding resiliency measures. *Ms. McLean* had heard that communities had backed away from implementing resiliency measures because of funding issues. *Ms. Mclean* had asked if EFAB could look at resiliency “barriers” that they had found in New York City as well as other communities.

Leanne Tobias mentioned that the TOD roundtable held by EFAB's TOD Work Group was an example of a successful forum to explore new ideas. She asked whether EFAB would have the ability to convene small forums with institutional financing professionals and small groups of EFAB members. She also asked whether this could be a more targeted and beneficial way to provide information. She suggested that such small forums could be recorded or a white paper could be written after a forum. *Ms. Tobias* asked if small forums might be a better way to provide insight on a particular problem.

Mike Shapiro asked *Ms. Tobias* if there was any particular problem she had in mind. *Leanne Tobias* said that a 1-day or 1/2-day forum with institutional financing professionals might be beneficial in providing insight on the new project for EFAB's consideration: EPA's Financial Capability Assessment Supplement.

Karen Massey said she believed that expertise already on EFAB would be sufficient for that potential new project, but there may be other topics. *Ms. Tobias* asked whether *Ms. Massey* had any other specific topics in mind, and *Ms. Massey* said she was not sure.

Chiara Trabucchi stated that EFAB should only convene a forum if expertise was lacking among the EFAB members. She also mentioned that current resource constraints within the Agency might impede additional forums. *Ms. Tobias* said that she agreed.

Blanca Surgeon proposed that EFAB accept the charge for the new project for consideration: Improving Compliance at Small Public Water Systems in Puerto Rico and Pacific Island Territories. *Karen Massey* said she liked that project and would like to talk with EPA Region 2 to better understand it and narrow the charge. *Ms. Massey* suggested that EFAB form a small group to talk with EPA Region 2 and asked *Vanessa Bowie*, of EPA's EFAB staff, to get volunteers after several EFAB members said they had experience in Puerto Rico. *Mike Shapiro* said the group should talk with EPA Region 9 too, because the new project may not focus just on Puerto Rico if EFAB also looks at the Pacific Island territories. *Suzanne Kim* asked if EFAB could analyze the option of financing a national carbon emissions program. *Mike Shapiro* stated that topic was not an EFAB issue at this point, but a legislative matter. Also *Mr. Shapiro* mentioned that President Obama's direction has specified a particular approach.

Donna Ducharme asked how EFAB will deal with the proposed new tribal project from EPA Region 8, and mentioned that she was interested. *Karen Massey* asked if any other EFAB members were interested in talking with EPA Region 8 to narrow the scope of this charge.

Leanne Tobias proposed that another area for EFAB review could be the whole issue of monetizing waste streams. She thought the idea of distributed biomass projects would be interesting to examine from a financing perspective. *Suzanne Kim* stated that typically the numbers don't work for these projects without a subsidy. *Ms. Kim* said it will become a question of where to find the capital. *Leanne Tobias* added that she was particularly interested in the setting of campus development for biomass. *Karen Massey* said that after reviewing her notes as well as the notes taken by EPA's EFAB staff during this discussion, they will work with EPA's EFAB staff to discuss EFAB's ideas within the Agency to ascertain whether there is any interest. *Vanessa Bowie*, from EPA's EFAB staff, started to ask about the schedule but *Karen Massey* replied that they needed more conversation first among EFAB. *Karen Massey* asked for volunteers to form an EFAB Work Group for the new project for EFAB's consideration: EPA's Financial Capability Assessment Supplement. Several EFAB members said they are interested in this new EFAB Work Group and a few EFAB members who were absent were recommended for this Work Group based on their expertise.

Blanca Surgeon asked to be included in the Drinking Water Pricing and Infrastructure Investment Work Group. *Vanessa Bowie*, of EPA's EFAB staff, said she will send *Ms. Surgeon* their draft final report to review.

Karen Massey wrapped up by stating that two EFAB Work Groups are expected to finalize products for the next EFAB meeting. These two Work Groups are the Drinking Water Pricing and Infrastructure Investment Work Group and the TOD Work Group. The new EFAB Work Group for EPA's Financial Capability Assessment Supplement should also have a final product at the next EFAB meeting.

David Bloom, EPA's Acting Deputy Chief Financial Officer, said he appreciated the opportunity to participate in the EFAB meeting. *Mr. Bloom* mentioned that agency senior leaders are interested in understanding the results of EFAB's discussions and reports and how those results will be beneficial to the Agency's work and mission.

Mike Shapiro, EFAB's Designated Federal Official, congratulated the EFAB members on a productive meeting. *Mr. Shapiro* said they had generated good ideas for new productive projects and for moving forward existing EFAB projects. He also commented that the onboarding process for new EFAB members, which was implemented at this meeting based on suggestions from EFAB, had worked well. *Mike Shapiro* adjourned the meeting.

Appendix

Attendance List

December 12, 2013

EFAB Members Present: Chiara Trabucchi, Wayne Seaton, Rick Giardina, Lisa Daniel, Tom Liu, Philip Johnson, Leanne Tobias, Eustace Uku, Blanca Surgeon, Suzanne Kim, William Cobb, Edward Crooks, Mathilde McLean, Helen Akparanta, Donna Ducharme, Karen Massey

EFAB Members Absent: Ann Grodnik-Nagle, Tobias Rittner, Cynthia Williams, Eric Draper

December 13, 2013

EFAB Members Present: Chiara Trabucchi, Rick Giardina, Lisa Daniel, Tom Liu, Leanne Tobias, Eustace Uku, Blanca Surgeon, Suzanne Kim, William Cobb, Edward Crooks, Donna Ducharme, Karen Massey

EFAB Members Absent: Ann Grodnik-Nagle, Tobias Rittner, Cynthia Williams, Eric Draper, Helen Akparanta, Wayne Seaton, Philip Johnson, Mathilde McLean