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Introductions and Opening Remarks

Mike Shapiro, EFAB Designated Federal Official (DFO)
Karen Massey, EFAB Chair
David Bloom, Acting Chief Financial Officer

EFAB DFO *Mike Shapiro* opened the meeting at 1:30 p.m. Participants were given an opportunity to introduce themselves and logistics for the meeting and group dinner were discussed. EFAB Chair *Karen Massey* encouraged Board Members to congratulate themselves on the work product accomplished since the previous meeting. She thanked everyone for their hard work on the two projects. Staff is working out details for the next EFAB meeting in May, which may be held at DC Water's facility. *Mike Shapiro* echoed Karen Massey's congratulations on completing important work and added that not only was the timeframe very short, the quality was very high.

David Bloom, the Acting Chief Financial Officer for the Environmental Protection Agency (EPA), provided an update. Since the EFAB last met, EPA has released its Clean Power Plant Rule which will cut carbon pollution from the power sector by using cleaner energy sources and cutting energy waste. The rule is a key component of the President's Climate Action Plan, meant to protect public health while driving innovation and creating jobs. The comment period has been extended to December 1. EPA is also taking important steps to provide clarity on Clean Water Act protections for streams and wetlands.

As EPA deals with tighter budgets and a shrinking workforce, it is exploring ways of working more efficiently. One of the tools EPA has implemented is the Lean process. The system has become established within the agency and a great deal of emphasis is being placed on it. If EPA keeps doing things the way they have in the past, the agency will not be able to accomplish some of the goals that are so important to environmental protection.

EPA is under a continuing resolution until December 11. Prior to the CR, the House was able to move a bill through Full Committee proposing an overall budget of $7.5 billion for FY 2015, a $400 million reduction from EPA's requested level. This level assumes a revolving state level fund as proposed by the President. The Lean effort is one way EPA is dealing with these constrained budgets, particularly the impact it is having in operating programs. The Senate did not have a full mark-up but the Chairman issued a Chairman's mark-up online with an overall funding level of $8.2 billion and significant increases for State Revolving Funds. The Chairmen of both sides of Congress would like to see an omnibus bill after the election with the House and Senate conferencing together and completing the work by December 11. EPA has been formulating its FY 2016 Budget which has been submitted to OMB; a response is expected by early December. The agency expects to be facing tight budgets again and will need to continue identifying reductions going forward.

Questions and Answers

Leanne Tobias asked what, if anything, the Lean process would mean for the types of project EPA wants the EFAB to address.

David Bloom responded that the Lean process is about evaluating processes to see if any steps can be eliminated and establishing how fast something should happen then holding people to that standard. As far as the EFAB is concerned, it is important that they have the right projects to work on. The nature of the projects the EFAB is working will determine how long they take.

Blanca Surgeon asked how staff is adjusting to the years of reduced budgets.

David Bloom said that everyone would answer that differently. EPA has identified 15,000 FTE as an appropriate staffing level which is several thousand fewer than the agency had just a few years ago. EPA is still adjusting to managing with fewer resources, especially people. It is incumbent upon EPA leadership to continue to reach out and work with staff to balance concerns and find smarter ways of doing things. The Administrator has repeatedly said that we will not say "do more work with less." It is also critical that employees know that the work they do is tremendously valuable.

Implementing Provisions of the Water Infrastructure Finance and Innovation Authority (WIFIA)

Andrew Sawyers, Director, Office of Wastewater Management, EPA Office of Water

Peter Grevatt, Director, Office of Drinking Water and Ground Water, EPA Office of Water

Andrew Sawyers thanked the EFAB for their work on the Financial Capability Assessment. His team is considering how to incorporate many of EFAB's comments on addressing affordability for communities.

Andrew Sawyers presented an overview of the WRRDA provisions related to the Clean Water State Revolving Fund (CWSRF). He believes that the amendments to WRRDA have been very constructive and will likely improve how the SRF operates. The fiscal sustainability plan presents some challenges for certain communities, but he is confident solutions will be reached.

The CWSRF now has 11 project eligibilities. It can now provide assistance for privately owned stormwater projects in MS4 areas, new decentralized systems, water efficient appliances in private residences, and technical assistance for small and medium publicly owned treatment works.

The CWSRF opens the possibility of non-profits playing a supportive role. Since non-profits are eligible to receive support but not to receive direct funds from the SRF, the Office of Water is currently working on how to incorporate them into the funding structure. The portion of a drinking water facility that treats and distributes reclaimed wastewater would be considered eligible under the CWSRF, which is not something previously considered.

Under the CWSRF, states have the permanent authority to provide additional subsidization but there is no minimum amount of additional subsidization required. The maximum percentage that may be provided ranges from 0%-30%. Additional subsidization may only be provided to a municipality or inter-municipal, interstate, or state agency for the following purposes:

- To benefit a municipality that meets the state's affordability criteria;
- To benefit individual ratepayers in the residential user class;
- To implement a process, material, technique, or technology that:
    - Addresses water or energy efficiency goals;
    - Mitigates stormwater runoff; or
    - Encourages sustainable project planning, design, and construction.

Most states have affordability criteria in place that is based on income. The CWSRF requires that states establish affordability criteria that are also based on unemployment data, population trends, and other data determined relevant by the state. The CWSRF does not prescribe how to weight the criteria and if a state has existing affordability criteria that meet the requirements, they may continue to use them, provided they go through notice and comment.

EFAB has devoted a lot of attention to ways of ensuring that municipalities are building systems that are fiscally sustainable. Under CWSRF, projects involving the repair, replacement, or expansion of POTWs are now required to develop a fiscal sustainability plan (FSP). This applies only to loans and new project applications received on or after October 1, 2014. States will have the flexibility to set deadlines and establish standards for FSP development to meet the following statutory requirements:

- An inventory of critical assets that are part of the treatment works;
- An evaluation of the condition and performance of inventories assets or asset groupings;
- A certification that the assistance recipient has evaluated and will be implementing water and energy conservation effort as part of the plan;
- A plan for maintaining, repairing, and replacing the treatment works; and
- A plan for funding such activities.

The requirement will have to be addressed by states and must be submitted before the physical project is completed.

<u>Other Changes</u>:

- Transactions can now be executed for loan terms of up to 30 years;
- Codifies Davis-Bacon and American Iron and Steel provisions;
- Changes how fees charged by states on loans are used; and
- Changes the calculation for CWSRF state administrative funds.

When the program income is deposited into the fund, it cannot be used as state match. If it is left outside the fund or in a dedicated account it would be allowed to be state matched. This also encourages states, from a fiduciary point of view, to manage the fund well.

Initial Interpretive Guidance was issued on September 18 and four regional and state workshops have been conducted, with ten more to begin in January. Draft Q&A's as well as draft cost and effectiveness guidance are to be sent out to states and EPA regional offices for comment by October 31.

Peter Grevatt discussed WIFIA, an innovative financing mechanism for water-related infrastructure. WIFIA has been authorized but no funds have been appropriated yet. Funds would be appropriated to EPA to serve as budget authority or reserve subsidy for federal credit assistance, in the form of loans and guarantees, and would be provided to borrowers using funds from the Treasury, not EPA. Congress determines the amount of budget authority, but the amount of credit available depends on the credit-worthiness of the projects that would be funded by WIFIA. The amount of the authorization starting in 2015 is $20 million, increasing to $50 million in 2019, but it is important to remember that no funds have been appropriated for it.

The federal credit assistance may be in the form of a direct loan, or a loan guarantee. Under WIFIA, there is a very broad set of eligible entities including corporations, partnerships, joint ventures, trusts, and federal, state or local state entities, agencies, or instrumentalities, tribal governments or consortium of tribal governments, or state infrastructure financing authorities. To be deemed eligible, a borrower must be deemed credit-worthy by EPA - WIFIA essentially makes EPA a bank, bearing the responsibility of assessing credit-worthiness and prioritizing projects. Projects under WIFIA must be reasonably anticipated to have a total project cost of no less than $20 million or, if serving a population of less than 25,000, no less than $5 million. 15% of each appropriation must be set aside for small communities but only until June 1 of the year of the appropriation. 25% of each appropriation may be used to finance projects in the amount greater than 49% of the total project cost, but in general there is a limitation for funding less than 49%. The Drinking Water SRF and CWSRF are given the right of first refusal, which means states have the first say on whether they want to fund it or not. EPA has to notify the relevant state within 30 days of a potential project and the state has to reply within 60 days on whether they wish to fund it. EPA must make its selection to ensure a diversity of project types and geographic locations. Criteria include:

- The extent to which the project is nationally or regionally significant;
- The extent to which the project has additional public or private financing;
- The likelihood that WIFIA will allow the project to proceed faster than it would without WIFIA;
- The extent of new or innovative approaches;
- The amount of budget authority required;
- The extent to which the project protects against extreme weather events or helps to maintain or protect the environment;
- The extent to which the project serves regions with significant energy exploration;
- The extent to which the project serves regions with water resource challenges;
- The extent to which the project addresses identified municipal, state or regional priorities;
- The readiness of the project to proceed (including the likelihood that the contracting process will commence no later than 90 days after the issuance of credit);
- The extent to which assistance from WIFIA would reduce the contribution of federal assistance to the project.

Loans can be up to 35 years or the useful life of the project and EPA can charge fees as they issue the loans. Repayment must begin no later than 5 years after the completion of the project. Davis-Bacon and American Iron and Steel will apply in the same manner as under the SRF.

Listening sessions have been conducted and will continue for WIFIA so that EPA is fully prepared in the event that appropriations should come. Some interesting issues have been raised during these discussions including concerns about WIFIA's prohibition on tax-exempt debt, how project bundling would work, and whether the SRF can be combined with WIFIA financing.

Questions and Answers

Karen Massey thanked the Office of Water for the listening sessions because they have been very valuable from the states' perspective. States have pinpointed FSPs as a key issue for them. Some states have joined together to form a working group with a goal of being able to come to EPA with one voice.

Tracy Mehan asked if anyone has made a serious legal challenge to the recycled funds being considered state funds.

Andrew Sawyers replied that several people have made the case that, under initial usage, the funds are federal, and if recycled through the program, it loses its federal status. The General Counsel has stated that they have lost federal status once they have recycled through the fund. If SRF funds are procured by the sale of tax-exempt bonds, the initial round of funding from those proceeds are considered tax-exempt financing and cannot be paired with WIFIA loans. However, it is our belief that once those proceeds have been recycled through the SRF, they are no longer considered tax-exempt financing.

Blanca Surgeon commented that the name Financial Sustainability Plan can be better understood in small communities than "asset management plan." She has heard from small and rural communities about the importance of speaking in terms that they understand. She also recommended a phased approach for the project and asked if the Office of Water has considered providing guidance to states about that (for FSPs).

Andrew Sawyers responded that they are exploring using phased or tiered approaches and the Interpretive Guidance will feature sections focusing each.

Blanca Surgeon also asked what the difference between WIFIA and SRF will be for small communities, especially in terms of affordability.

Peter Grevatt acknowledged that he has heard from small communities that they don't see a whole lot in WIFIA that will be helpful to them. Bundling projects as part of a regionalization may be the most significant opportunity WIFIA has to offer them. One goal of the listening sessions is to get input on how small communities might benefit.

Marie de la Parra asked getting funding to non-profits.

Andrew Sawyers said that this is still in the development stage but they are looking at a pass-through transaction from the recipient to the potential third party non-profit entity.

Marie de la Parra asked if CDFIs might be considered eligible financing entities.

Andrew Sawyers said that if Congress does provide an appropriation, EPA will be looking to as many parties as possible to get ideas about how best to put this in place. If a CDFI could help assemble and stand up a robust program, EPA would certainly reach out to them.

Heather Himmelberger asked the Office of Water to keep in mind that they are after behavior changes at utilities rather than a plan simply for the sake of having a plan, which is how it is being viewed by some facilities.

Thomas Liu commented that the success of the CWSRF comes down to implementation. He asked if EPA has started the process of deciding how to prioritize, distribute funds, or structure the project review stage?

Andrew Sawyers answered that they are starting to work on these issues and it will function very similarly to an SRF, just at a federal level. EPA has extensive experience with this, so they expect that they will be able to stand it up pretty easily.

Thomas Liu asked if EPA was planning to implement everything in-house.

Andrew Sawyer replied that they have not finalized that yet.

Thomas Liu asked if any cross-cutting requirements have been decided upon, in addition to Davis-Bacon and Buy American.

Andrew Sawyers said AIS and Buy American definitely apply to WIFIA as well as any other federal cross-cutter that applies to federal funding.

Thomas Liu added that it would be helpful to have report outs from the listening sessions to hear what has emerged from them.

Jennifer Wasinger said that, as an SRF manager, it is always great to have another tool in the toolbox. She requested more information on how NEPA requirements fit into WIFIA. She asked at what point right of first refusal would really come into play.

Peter Grevatt responded that it is going to be important for the different finance programs to be able to work well together. EPA will need to set up a well-organized process so states don't waste time and resources on projects that might not ultimately be fruitful.

Andrew Sawyers added that EPA wants to make sure the projects are viable before they have any transaction with the state and will have to figure out when to start the clock. The Office of Water has requested clarification from the attorneys on when traditional NEPA requirements or a state's process should take precedence when WIFIA and SRF cover a project.

Mark Kim asked if the purpose of the listening sessions were to educate the states or to solicit feedback that will be incorporated into the modified version and if there is a timeline for doing that.

Andrew Sawyers answered that the purpose is for both. EPA is not anticipating any statutory changes as a result, just input for implementation and best practices going forward.

Richard Weiss asked if EPA intends to develop some sort of prioritization scoring approach to projects going forward and how that would be rolled out.

Andrew Sawyer replied that developing a ranking process is required under the statute. EPA has an internal work group that is beginning to develop such an approach and will be seeking feedback. Regional significance is critical in the project selection process.

Richard Weiss also asked if WIFIA would allow, as TIFIA does, for public-private partnerships to utilize loans on a subordinate basis.

Andrew Sawyers responded that like TIFIA, WIFIA loans can take a subordinate position, until bankruptcy, at which point WIFIA takes a parity position with the senior debt.

Mathilde McLean asked if EPA would like the EFAB to review and make recommendations on implementing the financial capability report.

Andrew Sawyers said that he can foresee several different entities helping with the amendments and WIFIA. With the expertise the EFAB possesses, it would be very attractive to utilize their assistance/support as the agency works through implementation.

Leanne Tobias asked if there is a schedule for issuing WIFIA guidance.

Peter Grevatt replied that it will be driven by appropriations and guidance will probably not be issued in advance of funds being appropriated to the agency.

Potential New Project: Forestry Carbon Offsets: Delivering Low Cost Emission Reductions

Suzanne Kim, Work Group Chair

The new 111(d) regulation is designed to catalyze more states to enact or join existing greenhouse gas emissions trading systems. It could drive substantial private investment into forest conservation, watershed protection and other offset project types if drafted to explicitly allow the limited use of offsets in new state emissions trading systems. In particular, it could allow development of forest carbon offsets via sustainable forestry which could deliver significant volumes of low-cost emissions reductions.

As presently drafted, however, the ability to incorporate land-based and other offset project types into the new systems is unclear and could be improved. The EPA should also set high minimum standards for the offset protocols through the regulation which would be accomplished by encouraging states/regions to adopt the "California Forest Project Protocol" – the most rigorous protocol available and which could provide an "on the shelf" solution. California's market is expected to generate over $3 billion in revenue for forest conservation and other offset project types through 2020. Properly designed, the new 111(d) regulation could multiply that investment, generating meaningful emissions reductions, and significant co-benefits from land-based offset project types, such as improved watershed protections, reduced wildfire risk, and improved wildlife habitat.

Carbon forests cost 75-80% of each allowance, making it more affordable for companies to meet their obligations. The goal of the project is to get the EPA, when approving these state implementation plans, to scrutinize how they are allowing states to meet offsets. The project may become more about providing information to the Office of Air and Radiation.

Questions and Answers

Tracy Mehan asked if "state implementation plan", a Clean Air Act term tied to criteria, is the term EPA is using for Section 111(d).

Suzanne Kim answered that, yes, it is. While it is a statewide plan, she believes that states can band together to form a regional plan.

Lisa Daniel asked if what is being proposed would be added to a state plan or if offsets are additive to the toolbox companies can utilize.

Suzanne Kim responded that what she's proposing is to urge EPA to standardize the concept of allowable offsets to avoid having dozens of systems across the country.

Mike Shapiro said that an earlier version was presented to the Office of Air and Radiation and was sent back with a number of comments on it. The comment period for EPA's proposal closes in December so it is probably too late to include comments in any meaningful way.

Suzanne Kim agreed that it is probably exogenous beyond their authority but does believe that plans will start being submitted in a couple of years. It may be prudent for the EFAB to provide EPA with ways to start looking at state implementation plans and provide them a framework as to how to evaluate them.

Donna Ducharme commented that one of the biggest benefits of this would be to allow many parties to get involved in the marketplace and to benefit from doing good things in relation to climate change as opposed to just the huge emitters.

Update from the Environmental Finance Center Network

Jeffrey Hughes, President, EFCN and Director, EFC at the University of North Carolina

Jeffrey Hughes provided the EFAB an update on the recent activities of the EFCN by having every Center present one slide highlighting some of their work.

Mark Lichtenstein discussed Region 2’s green infrastructure efforts as a way of supporting the EPA. The Office of Water has rolled out its Trash-Free Initiative and Region 2 is helping the Agency promote it throughout NY, NJ, and Puerto Rico. It comes out of the Office of Water but it clearly concerns solid waste, so it brings together many assets from across the EPA and elsewhere. He looks forward to providing updates on this initiative.

Mark Lichtenstein also provided the update for the Great Lakes EFC while Kevin O’Brien is at the Green Infrastructure Summit in Cleveland, which appears to be a big success. He provided the EFAB with a summary report of the five topical areas from previous year’s Summit. He encouraged EFAB members to review it as it could inform the efforts of the work groups and the Board going forward.

Brent McCloskey updated the EFAB on the Mid-Atlantic EFC. This EFC has a strong partnership with EFC West which is now under the University of Maryland. They are working to bring integrated public-private financing to the region with an emphasis on reducing costs, accelerating implementation, and incentivizing innovation. They recently launched an Environmental Finance Boot Camp for educating communities. The National Fish and Wildlife Foundation has awarded a contract to the EFC to build a Municipal Stormwater and Outreach Online Training Center for stormwater stakeholders, which is heavily focused on green infrastructure financing.

Jeff Hughes discussed UNC EFC’s delivery mechanisms that they are experimenting with. They have moved away from dense 90-page academic reports which have had very little success in conveying ideas to practitioners. They are now creating videos, shorter policy documents, and holding forums. One popular tool they have developed is a dashboard for the state of Alabama that analyzes rates and prices from across the state in real time. Blogs have largely replaced the old report style. When the EFC does write reports, they are shorter and partner with other organizations to tap into their outreach network.

Jeff Hughes also presented University of Louisville EFC’s update. They are the lead on a national project, HUD/EPA Sustainable Communities Capacity Building Technical Assistance (Phases I and II), helping EPA grantees incorporate green and water infrastructure, along with incorporating various aspects of water management into local planning. Through this they have been partnering with other EFCs to host workshops with over 400 communities across the country. They are also very active locally with the Safe Urban Garden Program.

Jeff Hughes presented the New England EFC update. Of all the EFCs, they have taken the most active role in climate adaptation. They have developed a tool showing the financial value of at-risk properties along the coast. They are also working in local schools training kids to compost and collaborating with other EFCs to provide technical assistance and fiscal analysis throughout the region.

Heather Himmelberger discussed the areas the Southwest EFC is addressing, particularly asset management. The WIT group in New Mexico is trying to coordinate several agencies and organizations with funding for water and wastewater systems. They are also working with other EFCs on a HUD Sustainable Challenge Grant which will be wrapping up in another year. They recently received a Water Research Foundation grant on which they will be collaborating with other EFCs.

Jeff Hughes presented Wichita State University EFC's water infrastructure decision-making tool that they created to identify rural communities that could face future challenges in financing and maintaining water and wastewater infrastructure projects. The EFC has performed traditional stand-up training programs on some of the same topics: the Municipal Utility Management Program and the Wastewater Energy Efficiency Assessment Program.

Sarah Diefendorf presented the update for EFC West by showing a picture of the Tijuana River which is as much a dump site as it is a river. The EPA Border Program in Region 9 asked EFC West to assist them in helping to protect the international waters between California and Mexico. The EFC is focusing on three projects: assisting the Tijuana Compost Center, community and government engagement in Mexicali, and a waste symposium in Baja next September on composting Ag waste, construction and demolition, and electronic waste. The primary issue for the EFC is how to make the economic case for getting governments and communities engaged.

Questions and Answers

Marie de la Parra asked if the EFC West office offers the Environmental Finance Boot Camp.

Sarah Diefendorf answered that they easily could offer it since they are part of University of Maryland, but they currently do not. *Mr. McCloskey* added that it is a very new program that is just being rolled out but it is able to be offered throughout the country.

Marie de la Parra followed-up by asking what is required for a non-profit to participate.

Brent McCloskey replied that he or someone on his team would consult with the non-profit to understand what the need is and what level of financing that is being sought.

Tracy Mehan asked if EFCs consider penetrating the market with their programs and products.

Jeff Hughes responded that he is not personally interested in doing this. The dashboard is not a purely academic tool, but is used in the places they are involved; they work with partners on the ground modifying it to make sure it is used. They track usage because much of their work depends on recurring business and one way to ensure recurring business is to demonstrate an impact.

Leanne Tobias asked if EFCs are able to monetize these tools in some fashion.

Jeff Hughes said that most of the EFCs' funding comes from monetizing their products, either directly with utilities or state agencies, through fees for service. They use the core fund to develop prototype products that can be adapted and expanded and monetized later.

Blanca Surgeon asked for an update on the EFCs' capacity development plan for leadership.

Jeff Hughes responded that it is their largest project as a network. Each EFC has expertise focused on certain components of the project. *Sarah Diefendorf* said that her team conducted nine leadership trainings around the country the previous year and seven more are planned for this year. This is a growing program and they are now discussing developing leadership sessions for Green Schools in the Mid-Atlantic.

Heather Himmelberger added that workshops are being conducted in the territories and among tribal entities as well. In-depth trainings are being provided to small (fewer than 10,000 population) water utilities.

Marie de la Parra asked if EFCs are working with non-profits or other entities to help create workforce development models that can be used to supply employment needs.

Sarah Diefendorf answered that they have done that in the Bay Area.

Mark Lichtenstein added that Region 2 has done that as well.

Jeff Hughes said that the EFCs are seeing a trend of their environmental work being integrated more and more with state and local level economic initiatives. *Mr. Shapiro* noted that EPA's Brownfields Program has provided training programs for environmental remediation and has provided funds for water and wastewater treatment operator trainings.

Mike Shapiro adjourned the day's session at 4:20 PM. The EFAB meeting continued on Wednesday, October 29th.

Wednesday, October 29, 2014

Report Out: Leveraging Technology and Finance
Bill Cobb, Work Group Chair

At the previous EFAB meeting the question was raised: "Is there a financing option to bring a new monitoring device to the market that would allow for low-cost high-quality data that could be used to improve water quality health of watersheds?" The work group met with EPA staff to discuss what it was that they were looking for. Two weeks prior to the meeting, EPA announced a series of grants to small businesses for the development of innovative technologies. Clearly alternate funding mechanisms are available for tech development. EPA really wants the EFAB to help them figure out whether or not there is a viable market for selling and buying credits and what is its magnitude? Upon further discussion, it was determined that the request was outside the bounds of the EFAB's skill set and mission statement. They concluded that, at this point in time, there is not a nexus to develop an appropriate charge for the EFAB to take forward, but that this might be brought back to them in the future.

The real issue is: where is the data to establish the need that gets you into a market for buying and selling credits?

Karen Massey said that in Missouri they are not ready to establish anything because sufficient data has not yet been gathered.

Bill Cobb said that if the cost of data collection was lower, which is what the new technology was designed to do, then big data could be analyzed to help create a viable marketplace.

Donna Ducharme noted that the first nitrogen credits for Ag reductions have been sold and there is a developing market for this.

Bill Cobb replied that, the big question with this topic is what is the real issue and where does "how do you pay for it" come into play?"

Report Out: Draft Financial Capability Assessment Framework
Tom Liu, Work Group Chair

Tom Liu reported on the work group's review of EPA's March 4 draft of the Financial Capability Assessment Framework. The document was assembled to provide additional information and supplement the findings of EPA's two-part assessment process for the 1997 guidance. The specific charge from the Agency to EFAB included a review of:

- the utility of each type of information;
- recommendations of other metrics that could be considered for inclusion in the Draft Framework as a means to supplement the findings of the two-part assessment process identified in the 1997 Guidance; and

- recommendations on how the additional information identified in the Draft Framework can be utilized to supplement the two-part assessment process.

The work group recommends the following additions to the Residential Indicator:

- Considering the cost of living and any income-based transfer payments;
- Including drinking water and stormwater user charges, other utility rates/fees, and other dedicated charges; and
- Considering the housing cost burden of the population that is renting or owning.

The work group developed additional financial metrics that EPA should be considering in conjunction with the current metrics. They recommended dividing the metrics into four categories: liquidity, debt, system size/diversity, and operational strength. Additionally, the existing and recommended metrics should be evaluated not only on a current basis but also on a historical, and more importantly, projected basis. The work group also recommended the current debt indicator category be amended to include debt ratio and debt per customer metrics.

The work group further recommends that several qualitative additional considerations be factored into EPA's overall analysis, including:

- **Extraordinary considerations** such as municipal bankruptcies, natural disasters, adverse general financial market conditions, individual utility credit conditions, and legal and statutory consideration;
- **Additional system priorities and environmental/regulatory matters** which may involve incorporating the broader list of water and wastewater capital investment requirements from an operating and maintenance perspective and an environmental/regulatory perspective; and
- **Small system considerations** addressing possible additional challenges related to the small communities they serve, such as managerial competency, staffing consistency and data availability.

The work group's report was sent to the Office of Water in September.

Mark Kim commended Mr. Liu's leadership in bringing all of the viewpoints together on this report.

Mike Shapiro said that the Office of Water felt that this was an excellent product delivered in a very timely way and should serve as a model for how a group like the EFAB can respond in a helpful manner. The document will have use beyond the internal deliberations for the Office of Water. *Karen Massey* echoed this sentiment.

Report Out: Improving Compliance at Small Water Systems in Puerto Rico

Blanca Surgeon, Work Group Chair

Blanca Surgeon reported the work group has been holding conference calls with agencies in Puerto Rico and is working very closely with their partners at EPA. OECA has charged the group with providing innovative ideas for leveraging resources to bring small water systems in Puerto Rico into compliance. Blanca Surgeon believes that the ideas developed from this working group will also be helpful for many small water systems across America. There is one big water system in Puerto Rico, PRASA, which runs all of the water except for more than 200 small regional water systems that provide water to about 400 people per system on average. Puerto Rico wants to stop the proliferation of these smaller systems but there is no way to manage the system in remote areas where people need water service.

The working group proposes that, because paying for water service will potentially pose a significant burden to families reliant on small systems, the EFAB needs to identify and evaluate potential solutions that can simultaneously address OECA's concerns about environmental compliance while mitigating the cumulative financial impact for the following stakeholders:

- Households and other potential ratepayers;
- Small communities; and
- Organizations/systems.

A small public water system must be run like a business to benefit the overall health of the community, families, and the organizations that provide the service. There are international and national examples of rural systems, with issues similar to those faced in Puerto Rico, which have successfully built structures and processes which efficiently and effectively manage and operate water services. The work group has considered the key characteristics of those existing successes and is evaluating the viability of the following approach that incorporates those lessons learned:

- Establishing a regional management umbrella entity that would provide for regional collaboration among small systems; and
- Developing a replicable "business" structure (a formalized organizational structure with complementary processes) and sustainable implementation plan for the regional management umbrella entity.

PRASA may be a solution for management. They have already conducted a study on Puerto Rico's small water systems evaluating which systems they could connect and how much it would cost. Costs were prohibitive so very little has been done. PRASA has already been experiencing again infrastructure problems and has had to raise rates 200-300% over the last ten years. Even where infrastructure is in place, smaller systems do not want to connect because they do not want to pay PRASA's rates.

The Governor of Puerto Rico has issued an Executive Order mandating relevant agencies in Puerto Rico to help the non-PRASA systems, but it does not prescribe what they should do. The order states that several Puerto Rican agencies, led by the Department of Health, are to be brought together to create sustainability in the non-PRASA systems. The DOH has developed a work plan. This is great progress. There is a committee in place and work is under way. The work pan includes capacity building and subsidies for operators and chemicals. We reviewed the Executive Order as well as the Work Plan and agree with the proposed efforts. We prepared comments and suggestions to enhance the work plan. One of our observations is that without legislation to mandate some solution, compliance may not be achieved. Systems can be mandated to build capacity and operate according to business plans or risk being taken over, but who would take them over? The organization/business to take them over has to be in place, thus regional collaboration or system partnership is a viable answer. One municipality model exists that it is working. This model of self-management named AsoCaguas containing 17 systems was presented to us as a pilot to study current regional efforts. The work group will monitor the study's progress. As a closure to this assistance from the EFAB, the work group will send a letter to OECA stating recommendations on the work plan efforts underway as a result of the Governor's Executive Order and offering assistance on an as needed basis. The work group agreed to convene through conference calls if there is a need for our expertise and experience. We also would like to get a follow-up once the work plan has been tried out and results come in.

Helen Akparanta commented on the importance of educating the people on why safe drinking water is what they want. We discussed that it is necessary to do an education campaign on the cost of providing water service as another utility.

Marie de la Parra suggested having University MBA students in Puerto Rico work towards getting a 501(c) (3) status as part of their course work.

Heather Himmelberger said that the universities have been very engaged, so this is a very good suggestion.

Blanca Surgeon added that the schools of engineering have been engaged but this suggestion of engaging the business schools is very good.

Tracy Mehan asked about subsidies.

Bill Cobb responded that ability to pay was discussed during the work group. PRASA is already subsidized by the government of Puerto Rico which would mean that the increments would need to be as well.

Tracy Mehan said that subsidizing the water customer is probably a better model than providing unsustainable subsidies to a system.

Ann Grodnik-Nagle suggested reengaging with OECA on a specific project focused on water pricing and maybe tackling the subsidy question in more detail. They could also provide examples of what pricing might look like in certain scenarios.

Bill Cobb said that the pilot should be pretty illustrative of what the situation is and where the gaps are. Once the data from AsoCaguas becomes available, the EFAB will have something substantial to work with.

Richard Weiss noted that PRASA does have a subsidy program in place to provide support to lower-income customers. He also said that the Regional Management entity could hopefully drive the level of subsidization down by getting lower operating costs on a collective basis for smaller systems.

Marie de la Parra commented that subsidies are beneficial when there is a buy-in from the community, without that it seems like charity and people detach from the outcome. People should be given the opportunity to provide input on what they would like to see happen - they will feel like their personal value is really reflected as to what is going to take place.

Tracy Mehan cautioned against not raising rates for anybody out of concern for the low-income customers. They should distinguish the rate structure from subsidies.

Rick Giardina commented that it would be helpful for the Committee set by the Governor's Executive Order to have a copy of the EFAB's letter and whatever guidance and suggestions it contains before they begin their process.

Action Items

- Bill Cobb will draft a letter of points for consideration for OECA and distribute it to the EFAB for review by early 2015. The Work Group will finalize the letter and we will plan to send it to OECA in time for it to be helpful to the Committee set by the Governor's Executive Order.

A Summary of the Report: Utilizing SRF Funding for Green Infrastructure Projects
Lisa Daniel, Work Group Chair

At its last meeting, EFAB finalized and submitted a report entitled: Utilizing SRF Funding for Green Infrastructure Projects" which generated quite a bit of excitement. There was some confusion about what the report actually said so a summary of the report was drafted to help illustrate the two topics that the report addresses. One is a funding mechanism and the other the use of proceeds. The summary discusses how SRFs can provide assistance through Credit Guarantee Programs and noted that it is an authorized funding mechanism as opposed to a direct or leveraged loan. SRFs are available to fund Green Infrastructure including that in private ownership. GI is being adopted as a lower-cost alternative that can also help create more livable communities. The Act provides an opportunity to use an SRF credit guarantee to support GI solutions including those that incorporate private sector project ownership and repayment responsibility. The report recommends that the EPA take a more active role in helping states facilitate access to those tools.

Hopefully, this summary will provide clarity on what the larger report intends.

Tracy Mehan asked if credit guarantees for private property owners with GI applies to anything under Section 319.

Lisa Daniel responded that she believed it does. The guarantee program is another way of making use of the federal grant and providing a financial benefit. This is a distinct concept from the GI concept. You could use any type of existing leveraged or direct loan portfolio to do the same thing and, likewise, you could use the guaranteed concept to fund traditional SRF uses.

Timothy McProuty said the White House has responded that this summary was very helpful.

Karen Massey said that it will be interesting to see how states do or do not adopt this. As they mention in the report, it simply doesn't work for some states.

Marie de la Parra asked what percentage the loan guarantee is.

Lisa Daniel replied that the benefit of the guarantee is going to vary depending on how far up the credit chain you are going. The loan guarantee means that if you are a municipality and you are looking to enter the marketplace, and you have an A or B rating, you can wrap yourself with the excess assets of an SRF program and bring your credit level up to AAA. The program also included non-quantifiable benefits like disclosure issues and access to the market.

Report Out: Financing Legacy O&M Costs at Green Infrastructure Sites

Donna Ducharme and Leanne Tobias, Work Group Co-Chairs

The work group's charge is very recent and is still being structured. They met with Office of Water staff to discuss how O&M costs might be paid for with GI. There has been a lot of work done exploring how to finance the capital costs of GI and now that it's a more popular option for communities, questions of how to maintain that over the long-term are surfacing. The group came up with ideas for possible ways of funding O&M costs, including:

- Funded trusts, escrow accounts or annuities;
- Stormwater utilities that have user fees providing lower fees for GI;
- Public-private partnerships;
- Insurance;
- Shared responsibility;
- Job training funds to help defray cost by using trainees;
- Carbon market, market for ecosystem services;
- Special taxing districts;
- Bonding.

The work group will look at the feasibility and cost-effectiveness of the different instruments but determined that assessing their suitability in different environments, site, and conditions was beyond the work group's capacity. O&M costs are a key issue for communities, the question for the EFAB is how best to add value to that conversation right now.

Leanne Tobias added a point relating to a new study done by the House Transportation and Infrastructure Committee's public-private partnership panel. It is an excellent report and she will make sure it gets disseminated to the group. The Committee envisions federal financing as a portion of many funding streams for P3s going forward. The report recommends that the government should be developing standards to guide the use of the funds and operation of the P3s to maximize the value to taxpayers.

Philip Johnson discussed the District of *Columbia's* recent experience creating streetcar infrastructure and utility companies preventing GI due to maintenance issues. He suggested attaching a small user fee to be collected into a fund used for the maintenance, or even financing, of GI by the municipality.

Mark Kim discussed issues DC Water is encountering as it attempts to build GI. DC Water does not typically own the property that they are seeking to make green, so who pays to put it in and who pays to maintain it? They are coming up with alternative financing strategies or mechanisms to pay for the GI O&M that could serve for a much broader base. DC Water is exploring alternative delivery mechanisms such as performance-based contracting as a way to off-load some of the risks.

Donna Ducharme said that one of the work group's discussions was around whether to focus on public or private sites.

Mark Kim said that DC Water is finding that there are significant challenges with both and both are equally important.

Leanne Tobias asked about DC's pilot stormwater credit trading program.

Mark Kim responded that it is potentially a good model but that credit given means you're just reallocating costs. Perhaps noncompliant owners can be fined to help pay for GI development.

Tracy Mehan commented on the DoD model using GI. About 90% of military housing is privately built, financed, and managed and is based on a dedicated stream of funding that leverages city investments. That leveraging is very successful.

Marie de la Parra suggested that this might be an opportunity to create a youth-oriented program geared toward high school students that could serve as a job-training program.

Philip Johnson commented on the impervious surfaces charges for vacant big box stores and the advantages of raising real property tax rates on these entities. He suggested that the tax could be eliminated by converting the parking lots to GI.

Mathilde McLean discussed how New York implements this.

Marie de la Parra suggested exploring the possibility of utilizing Brownfield funding.

Leanne Tobias provided a brief update on the Small Community Brownfield Program and the study they are currently undertaking.

Report Out: Certified Green Bonds

Lisa Daniel and Mark Kim, Work Group Co-Chairs

Lisa Daniel reported on the work group's recent activities including the previous day's session with EPA representatives. She provided an overview of green bonds and their emergence over the last two years in the US. In 2014, global issuance of green bonds is expected to total over $24 billion. In the US, green bond issuance has been constrained due to several factors, including the definition of a "green project", project evaluation, monitoring and reporting standards, and independent verification.

Green bonds are defined by their use of proceeds, which is to environmentally beneficial projects spanning a broad spectrum of areas, many of which are outside the scope of EPA's work: energy, transportation, land-use, adaptation infrastructure. Issuers of green bonds are recognizing their ability to expand investor outreach by attracting new capital. An Investor Statement was created by 12 signatories, representing $2 trillion, stating that they are looking specifically for green and climate bond opportunities. These would include Socially Responsible Investing (SRI) funds and corporate pension funds. This may be an opportunity to facilitate the direction of private capital into national infrastructure needs.

In Europe, it has been common practice to have a third party verifier provide accreditation of the bonds and investors have relied on the due diligence and disclosure of these firms. All of the US issuers (except DC Water) have followed the Green Bond Principles (GBP) which were initially developed by a small group of investment bankers focusing on the transparency, disclosure, and integrity of the green bond market. GBP has now grown in membership and their activities involve facilitating information exchanges, gathering information for an annual update of the principles, and advising on the governance and other matters. They have done a masterful job increasing the consistency and transparency of the disclosure process for the developing market but as it's evolved, questions and challenges have emerged. GBP directs the issuer to decide what is "green" and determine the eligible green categories. The issuer also establishes the benefits and review processes. There is some fear about "greenwashing," which would dilute the value of green bonds or lead to mislabeling. There is a plea from stakeholders to standardize the green bond concept.

Mark Kim continued the report, emphasizing that it is very clear that the market is struggling with trying to define "green." The question for EFAB is whether the EPA should play a role in helping to establish market standards and a definition of "green". He presented four reasons why he thought EPA should play a role:

- They would foster the agency's mission to "protect human health and the environment" by establishing an EPA Certified Green Bond Program;
- They would facilitate capital formation and ultimately lower regulatory compliance costs;
- They would actively participate to standardize guideline and protocols to market participants:
    - Definition of a "green" project (i.e., use of proceeds)
    - Project evaluation, monitoring and reporting standards
    - Independent verification
- They would establish a "model" green bond certification program in cooperation with stakeholders that appeals across sectors.

There is a spectrum of possible involvement for the agency, from doing nothing to doing it alone - neither extreme is advisable. A more reasonable approach is to be a market participant in the conversation. There is a lot of dialogue already about what is green. EPA could also play a leadership role, as it did with EnergyStar standards and the Water Sense program.

The work group proposed creating a work shop around the topic of green bonds and aim to host it in the spring, inviting all the relevant stakeholders (investors, issuers, environmental groups, etc.) to inform the EPA what the market would think of this and to help figure out the best way to contribute to the dialogue. EPA representatives should be prepared to provide a sense of its desire to take on helping the green bond market. From the work shop, the work group expects to develop a recommendation or a plan of action to present at the May EFAB meeting.

Mark Kim added that he thought that this would be very consistent with the Administration's Build America Initiative and could be fashioned as an off-shoot of that.

Tracy Mehan asked who reviews issued bonds for transparency and disclosure.

Mark Kim answered that municipal issuers are exempt from registration, but the underwriters are SEC regulated entities.

Tracy Mehan commented that EPA is a regulatory political institution constrained by politics, law, and the Administrative Procedure Act. They should not be expected to be on the cutting edge of administrative operations.

Philip Johnson commented on the role green bonds might play in the massive infrastructure projects happening around the country (e.g., port expansion).

Leanne Tobias suggested the EFAB hold a conference call with the various offices in the EPA that have issued the charge for this project to see what direction they might feel comfortable in going in. That information would be useful in formulating the work shop. It would also be interesting to hear the perspectives of EPA staff that have been involved in developing EnergyStar standards to help guide the EFAB's work.

Mark Kim clarified that the work group does not have a charge.

Donna Ducharme said that she would like to hear from EPA what led them to develop EnergyStar standards internally but to develop LEED standards externally and how that decision making would impact green bonds.

Thomas Liu said that the work shop should be an opportunity to get a better understanding of EPA constraints, such as legal, funding, staffing, etc., that would affect green bonds.

Rick Giardina said that there are capital funding deficits that will require rate increases. Being able to talk in terms of green certification will go a long way with those who ultimately have to pay for those capital needs.

Helen Akparanta suggested looking through EPA's literature on how it has defined and used "green" in the past.

Richard Weiss said that a statement from the EPA that SRFs are green bonds would be helpful.

Tracy Mehan said that there are probably several different agencies that could play a part in defining green bonds. It will be necessary to determine what EPA's role should be.

Action Items

-Staff will explore the logistics of a work shop

-The work group will work on structuring the work shop and inform the EFAB of how it will look

Potential New Project

Heather Himmelberger

Heather Himmelberger presented two components for a new potential project. With SRF or similar federal/state funding, utilities pay for O&M and subsidies are provided for the capital part. The problem is that many utilities defer maintenance and let their systems fail, then collect SRF to fund new infrastructure. She proposed a study of the actual differential for communities if they covered O&M to help prolong the life of the equipment. The second component of the proposal is to explore the unintended consequences of subsidized funding through state grants, SRFs, etc., and whether that is directly impacting the goal of more sustainable infrastructure projects.

James MacAdam asked how to get that information to make a comparison. *Heather Himmelberger* responded that there are a couple ways to do it but it is something that would need to be explored if there is interest.

Lisa Daniel said that she was under the impression that the new WRRDA bill imposed new SRF requirements to consider the sustainability of a project before a loan is issued. *Heather Himmelberger* replied that applicants will only have to prove that they have a plan in place. Maybe this could tie into WRRDA to explain why it is important that they change their behavior.

Jennifer Wasinger said that education is the key, especially among smaller systems. As part of the fiscal sustainability plans, Oklahoma is trying to ensure that systems are keeping logs.

Public Comment

There was no public comment.

General Discussion and Next Steps

Mike Shapiro asked if there was interest in the project proposed by Heather Himmelberger. He noted that, given the subject matter, the Office of Water would be a potential customer but they have not yet been contacted.

James MacAdam said he would be interested but wanted more clarity on what the hoped-for outcomes would be.

Blanca Surgeon suggested exploring case studies that show the difference between a system that does periodic O&M and one that does not and compare what their capital improvements requested are and how often, and it may become clear what the goal of this project is. Are we financing different O&M when we fund full system replacements costs of communities that let their system infrastructure deteriorate completely and seek funding for a whole system replacement?

Jennifer Wasinger said that the proposal needs to be investigated and formulated more fully. She said that she would be willing to work with Heather Himmelberger on doing that.

Blanca Surgeon suggested holding conference calls with EPA Regional Offices to introduce them to the EFAB's work and each board member's expertise. This way ideas may be generated based on the wealth of experience and expertise from the board. People may not read a resume but they would listen if we each took a couple of minutes to explain what the board's experience and expertise is.

Vanessa Bowie said that a solicitation from the CFO will be sent to the Assistant Administrators and Regional Administrators asking if they have projects that they would like the EFAB to work on. If anyone responds, they would have that person present the charge to the group at the May meeting.

Leanne Tobias said that she wondered how the EFAB could better support the Administrator's priorities.

Philip Johnson asked what climate change activities the EPA is involved in that the EFAB might be able to support. *Mike Shapiro* responded that all of the offices within EPA have been developing programs to incorporate climate change into their ongoing work. The Office of Water has been developing tools to help utility planners create vulnerability assessments. He said that he could invite the people who worked on the agency's overall adaptation strategy to discuss what they've been doing.

Thomas Liu suggested giving each of the EFAB members a chance to discuss what they are seeing or working on within their subject matter areas or regions. New projects or priorities may arise from this discussion.

Blanca Surgeon suggested the EFAB tackle WIFIA and present what it might look like if they were organizing it. *Philip Johnson* agreed that EFAB could help shape some of these products that come out of the EPA in a very beneficial way.

Helen Akparanta urged EFAB members to devote their efforts only to what the agency would actually use.

Karen Massey suggested nutrient trading and public-private partnerships as topics for the EFAB to take up.

Tracy Mehan questioned whether nutrient trading was a topic within EFAB's scope. He also mentioned that he has heard from project managers that they felt WIFIA could be a key component in energizing P3s in the water sector.

Thomas Liu said that WIFIA and P3s should be two distinct projects, but that a WIFIA project should include a P3 component.

Leanne Tobias suggested exploring some of the tactics mentioned by Jeff Hughes such as shorter reports, sets of recommendation, more interactive formats that might be more useful for the agency.

Tracy Mehan suggested a modeling exercise on water rate structures to get a better understanding of the issue and where various kinds of communities should be.

Mike Shapiro turned the discussion to Suzanne Kim's proposal on forestry carbon offsets. Certain discussions need to happen with the Office of Air and Radiation before going forward.

Mathilde McLean said that the EFAB does not currently have the necessary knowledge to apply to the subject and that the topic should be considered during the next nomination period for new members.

Vanessa Bowie said that the next appointment period will be November 2015 but there are four open slots on the Board. *Rick Giardina* suggested utilizing expert witnesses where there is a need for expertise.

Donna Ducharme thought the proposal is important but that in its current form it is too narrow and California-centric. She would be very interested if it was more broadly defined.

Mike Shapiro adjourned the meeting at 2:36 PM