

U.S. Environmental Protection Agency Environmental Financial Advisory Board

Public Listening Session Minutes

May 21, 2024

Location: Virtual

Respectfully submitted by Edward H. Chu, EPA Designated Federal Officer
Certified as accurate by Kerry E. O'Neill, Chair, Environmental Financial Advisory Board

NOTE AND DISCLAIMER: The minutes that follow reflect a summary of remarks and conversation during the listening session. Such ideas, suggestions, and deliberations do not necessarily reflect consensus advice from the Board. Formal advice and recommendations may be found in the final advisory reports or letters prepared and transmitted to the agency following public meetings. Moreover, the Board advises that additional information sources be consulted in cases where any concern may exist about statistics or any other information contained within the minutes.

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Purpose

The U.S. Environmental Protection Agency (EPA) Financial Advisory Board (EFAB or Board) is an advisory committee chartered under the Federal Advisory Committee Act (FACA) to provide advice and recommendations to the EPA on creative approaches to funding environmental programs, projects, and activities. The purpose of the listening session was for EFAB to solicit public comment to inform its formulation of recommendations to the EPA on the public benefit of a potential Federal investment tax credit to support private investment in water reuse and recycling systems. An investment tax credit would focus on encouraging investment in equipment at privately owned industrial facilities to enable the use of municipally provided recycled water and/or enable onsite treatment and reuse of different sources of water within an industrial facility.

The listening session was announced in the *Federal Register*; see <https://www.federalregister.gov/documents/2024/05/03/2024-09667/notice-of-public-listening-session-of-the-environmental-financial-advisory-board-efab-water-reuse>.

To view the agenda, see <https://www.epa.gov/system/files/documents/2024-05/efab-water-reuse-tax-incentive-listening-session-framing-document.pdf>.

Welcome, Member Roll Call, and Review of Agenda

Edward H. Chu | EPA Designated Federal Officer

Welcome

Ed Chu opened the listening session and welcomed participants. He said that per the *Federal Register* notice, the Board is accepting oral statements during this listening session. He stated that one written public statement was received prior to the start of the session and was posted on [the EPA's website](#). He explained how members of the public can submit written comments to efab@epa.gov.

Roll Call

Kerry O'Neill, not present
 Courtney L. Black, present
 Steven J. Bonafonte, present
 Angela Montoya Bricmont, present
 Matthew T. Brown, present
 Stacy Brown, not present
 Albert Cho, not present
 Janet Clements, present
 Lori Collins, not present
 Zachary Davidson, not present
 Jeffrey R. Diehl, present
 Sonja B. Favors, not present
 Phyllis R. Garcia, not present
 Eric Hangen, not present
 Barry Hersh, present

Craig A. Hrinkevich, present
 Margot Kane, not present
 Thomas Karol, not present
 George W. Kelly, present
 Gwendolyn Keyes Fleming, present
 Cynthia Koehler, not present
 Colleen Kokas, not present
 Joanne V. Landau, not present
 Lawrence Lujan, not present
 MaryAnna H. Peavey, present
 Dennis A. Randolph, present
 Sanjiv Sinha, not present
 Marilyn Waite, not present
 David L. Wegner, present
 Gwen Yamamoto Lau, present

Investment Tax Incentive for Water Reuse Infrastructure Charge

Justin Mattingly | EPA Water Reuse Program

Justin Mattingly began by explaining that the objectives of the EPA's Water Reuse Program are to integrate water reuse in the EPA's different programs, coordinate the Federal Interagency Working Group for Water Reuse, and help lead the implementation of the National Water Reuse Action Plan. He explained that Congress gave the EPA (in coordination with the Interagency Working Group for Water Reuse) a task to evaluate the public benefit of a potential federal investment tax credit to support private investment in water reuse and recycling systems. He said that their interpretation of the task is that a tax incentive would be focused on encouraging investment in equipment at a privately owned industrial facility. He said that the EPA has requested EFAB's recommendations on this investment tax credit for water reuse. He reviewed the definitions for onsite water reuse, industrial process water, other water sources, and centralized water reuse. He clarified that these definitions were not formal definitions from the EPA but instead were descriptions for the purposes of the discussion. He emphasized that the unifying factor is that the discussion is focused on privately owned infrastructure for either treatment or distribution.

Listening Session Questions

Angela Montoya Bricmont | EFAB Workgroup Chair and Denver Water Chief Financial Officer

Angela Bricmont began by explaining that the workgroup developed a list of six questions to prompt listeners in helping the workgroup provide recommendations on an investment tax incentive for water reuse infrastructure. She thanked Justin Mattingly for walking through the terminology definitions for the purposes of the discussion, as water reuse and recycling can vary dramatically, whether it's municipally provided, part of a manufacturing process, or from another source like stormwater. She requested that commenters provide details on which type of industrial use they were speaking about.

Ed Chu added that commenters are not limited to the provided questions, and the discussion is also open to any other comments about this subject. He clarified that the questions address topics that the workgroup for EFAB, as well as the EPA, are interested in hearing feedback about.

Angela Bricmont reviewed the questions developed by the EFAB workgroup:

1. Should an investment tax credit be developed to support private investment in industrial water reuse and recycling infrastructure, and why or why not?
2. How can an industrial investment tax credit be structured to maximize public benefit and encourage private investments in reuse and recycling infrastructure without providing a subsidy that is too generous? Should only the entity owning the equipment be eligible for the tax credits or should it be available to others in the treatment process? Should the tax credits be transferable?
3. Would a tax credit for industrial reuse and recycled water infrastructure investment look different by industrial sector or type of use, and should there be a minimum volume of recycled use to qualify?
4. Should water reuse tax credits also be considered for large commercial or agricultural uses, and if so, how would you define this?
5. Are there any unintended consequences to public utilities, and if so, how could they be mitigated?
6. Are there any other considerations that should be taken into account?

Angela Bricmont opened the floor for public comment.

Public Comments

Greg Fogel | WateReuse Association

Greg Fogel explained that he did not see these questions in advance and didn't have time to prepare answers. He said that he would be happy to bring them back to WateReuse Association members and other experts within their network and develop written responses to submit.

Angela Bricmont thanked Greg Fogel for starting the conversation and asked if he had input about incentivizing industrial reuse in general.

Greg Fogel said that the WateReuse Association supports the development and enactment of a federal investment tax credit. He said that it is important that the investment tax credit covers multiple forms of investment, including investments in onsite water recycling systems by private companies but also co-investments made in partnership with municipal agencies. He described an example of a co-investment scenario where a private company does not have the adequate municipal infrastructure to support their

needs and so would want to co-invest with a local municipality to build a centralized recycled water system. He encouraged EFAB to think about all different types of investments that a company can make, not just onsite systems. In terms of the structure of the incentive, he said that the WaterReuse Association has started to put together a comprehensive set of recommendations which they intend to deliver to the Board in written form once finalized. He said that these systems are very expensive and said that water, let alone water recycling, is not the primary business of the companies being discussed, so an incentive would go a long way to helping move this forward.

Angela Bricmont said that for anyone who didn't get a chance to participate today, the comment period will be open through next week. She encouraged everyone to submit written comments.

Damian Higham | Denver Water

Damian Higham said that one of the challenges for potential industrial customers of the recycled water program at Denver Water is that most of the subsectors have widely differing needs in terms of quantity, quality, and what their downstream discharges look like. He said that there isn't enough certainty surrounding the suitability of water quality, there aren't enough resources for them to be willing to invest, and the return-on-investment timelines aren't lined up. He said that a depreciation schedule adjustment or a tax incentive would be valuable, but there's also an equal need for a comprehensive resource that can be passed to customers to get them comfortable with a differing water option. He said that providing more information and generating a level of comfort would be valuable in helping with financing. He added that a revolving fund scenario to recoup costs would be valuable as well.

Angela Bricmont asked Damian Higham for examples of water quality and quantity being a barrier to water reuse and recycling. She asked if there are other barriers as well, such as infrastructure.

Damian Higham responded that water quality, quantity, and infrastructure were all barriers. He said that Denver Water went through the regulatory development process to allow commercial laundries and vehicle washing in Colorado, which has been a struggle. He said part of the reason for this difficulty has been a lack of case studies surrounding water quality, particularly in Colorado. He described an example of vehicle washing where they had to consider if the water quality was sufficient, or if they needed a potable rinse on the back end. He added that bringing in an additional water source can be tricky to finance, while the reusability of that water in terms of water rights is also a factor. He said that water reuse in commercial laundries is already quite efficient and instead laundries face the challenge of knowing where to introduce this water and evaluating if it really helps. He described how laundries in the hospital space have additional requirements around pathogens and a dinginess index. He emphasized how some factors are nonfactors to certain industries and are deal breakers for others, which is a challenge for water quality because every industry is different. He said that industrial customers are experts in their industry but not necessarily experts in water, so planning for a capital expansion of a purple pipe system while lacking certainty about demand is a challenge.

Jerri Pohl | New Mexico Office of the State Engineer

Jerri Pohl said that her interest in this meeting stems from her participation in the New Mexico Produced Water Research Consortium. She said that New Mexico passed the Produced Water Act in 2019 as production ramped up significantly. She explained how New Mexico is producing about 4 million blue barrels of produced water each day and is experiencing problems with re-injection due to pressure differentials causing seismic activity. She said that New Mexico has been looking for potential uses of

this produced water and is in the process of rewriting water reuse rules that would allow for a closed loop system to reuse this industrial water in another industry. She said that, on the other hand, the southeast corner of New Mexico in the Permian basin has an acute need for fresh water. She explained how she and the mayor of Jal, New Mexico, met with Moonshot Missions to look for assistance in making a large scale regional produced water treatment facility. She suggested EFAB consider the use of produced water reuse as well. She described how the governor of New Mexico is currently exploring the potential of using produced water to make hydrogen along with other uses. She advocated for a tax credit for this type of venture, especially when it helps with economic development and helps communities that are below the median economic indicators for New Mexico and the United States. She said that, overall, New Mexico supports a tax incentive. She said that New Mexico has also already determined ownership of that water, which is an incentive; however additional incentives through tax credits could help as well.

Angela Bricmont thanked Jerri Pohl for her comments and encouraged her to submit written comments along with her verbal comments today.

Jerri Pohl responded that she would ask the consortium if they would like to provide comments from the whole entity.

Cynthia Wagener | ExxonMobil

Cynthia Wagener said that, overall, she supports having an investment tax credit. She said that important details to consider are water scarcity and location so that incentives are provided for water reuse activities in locations that need it the most. She added that environmental justice could be another consideration for locations. She agreed with prior speakers about how corporations must focus on investing in their businesses first and that water can be a very low-cost commodity item so the justification for water use projects can be challenging in a corporate environment. She said that an opportunity to help corporations with this could be very productive.

Angela Bricmont agreed that corporations look at each investment as a business case that aims to achieve a goal, have payback, and have a definite start and finish. She asked Cynthia Wagener to clarify what kind of investment tax credit would close the gap.

Cynthia Wagener responded that she would consult with her peers and would be happy to provide written comments to the Board.

Anna Bunting | Freshwater Future

Via the chat, Anna Bunting expressed interest in the potential investment tax credit but said she was unsure what this credit would truly look like. She expressed concern about water unaffordability, environmental injustice, privatization, and ensuring that this program would support public utilities in their endeavor to provide clean, safe, and affordable water. She requested to hear more details on what has worked so far, what research has been done, what other credit programs look like, or how public water utilities fit into this picture.

Angela Bricmont responded that EFAB's questions aim to address these concerns. She said that EFAB's research has found that public utilities are an important player in deciding how to deploy their infrastructure and how to incorporate water reuse into their investments. She said that the Board wants to understand how public utilities would be impacted by incentivizing additional reuse in their service

area, what the public benefits are, and what unintended consequences need to be understood and potentially mitigated. She added that it is necessary to evaluate upstream, downstream, and environmental impacts, not just the private industrial user.

David Wegner expressed appreciation for Angela Bricmont's comment about upstream and downstream users who might be impacted by a water reuse program. He said that one of his main concerns is the environmental impact, particularly in the context of the southwest U.S. where water reuse is becoming an important element in the water supply picture. He emphasized that water reuse is a great idea; however there are environmental concerns, especially in watersheds with a diminished water supply.

Anna Bunting | Freshwater Future

Anna Bunting said that she is still trying to understand what unintended consequences could look like because she is not very familiar with this topic. She said that she has personal experiences with water reclamation facilities, and the chlorine smell from the reclaimed water was a nuisance. She expressed concern about creating unintended consequences and environmental injustices from water reuse and recycling facilities. She added that she was concerned about continuing a trend of privatization creating unaffordable water at the municipal level or private takeovers creating unaffordable water for communities. She said that she wants to ensure that these tax incentive programs are created with environmental justice communities being able to weigh in, and that those considerations are not missed in the haste to create these programs.

Justin Mattingly said that Anna Bunting's questions are topics that the EPA has also been asking, and that the EPA wants to ensure they are considering these unintended consequences. He said that the EPA would love to hear more feedback about the structure of a tax credit, so that they can make a more educated report to Congress, who will ultimately determine if there would be a tax incentive and what it may or may not look like.

Damian Higham | Denver Water

Damian Higham said that Denver Water has a wide gap between potable costs and recycled water costs. He said that there is capital expenditure to convert an industrial customer, whether that's bringing pipe to their facility and installing treatment, or rerouting piping. He said that to bridge that gap, Denver Water set up a pilot program to provide funds on the front end and then charged the customer the potable rate until those costs were recouped. He said that Denver Water didn't have great success with the pilot program, but he thinks that it was likely due to administrative execution and bandwidth issues. He said that the timing is a challenge, but he thinks that it is an approach that could work for the right scenarios. He said that the delta and rates are the big drivers in terms of what the timeline looks like.

Angela Bricmont asked Damian Higham to clarify if the delta between the treated water rate and the recycle/reuse cost of that water and the infrastructure costs are both gaps.

Damian Higham responded that the right combination is needed. He described how some municipalities' recycled water rate is 95% of their potable rate, while Denver Water is closer to 25% – a 75% discount – which is more significant and would allow conversions of a larger customer with larger associated capital costs. He emphasized that you would need to have the right combination to make the financials work without a 100-year payback period.

EFAB Discussion

Ed Chu asked the Board if they have received comments from other listening sessions that address the scarcity issue in terms of having these financial incentives for reuse, whether it's a tax credit or other mechanism that is focused on regions where there is a bigger payoff because of water scarcity.

Angela Bricmont responded that the workgroup has raised the water scarcity issue, but they hadn't gotten a comment specifically on that. She said that she's hoping that the workgroup will address that because the workgroup sees the alternative source of supply as an incentive for water reuse. She said that Colorado, for example, will have to look to recycled water as a source.

Ed Chu agreed that the idea of reuse is going to be very critical in certain parts of the country. He suggested that the EPA and Congress could look at financial incentives that are focused on those areas. Regarding Tribal water infrastructure, he asked whether the workgroups are getting comments from rural and small systems, and areas that are being served by those systems. He said that the incentive should be tied to public benefit and that rural and small systems are areas where he sees the greatest benefit. He urged the workgroup and the EPA client to consider seeking more comments on rural and Tribal systems, and how water reuse might help them in terms of water supply and geographic issues.

George Kelly said the associated infrastructure, such as pipes, energy, chemicals, etc., is an important topic. He said that there may be a public-private interface, so there are opportunities with how the tax incentive is structured to engage the private sector and to support infrastructure development. He agreed with Cynthia Wagener's comment that there's not much incentive to reuse water because water is considered a "low-cost item." He questioned whether the cost of water includes the associated infrastructure. He suggested that true cost accounting could help inform decisionmakers within private enterprises about the reality of water cost. He referred to Jerri Pohl's comment about water rights in New Mexico, and asked if there are other incentives using enhanced water rights to motivate others to play a role in water cleanup. He emphasized that everything must be contextual because the incentives in areas with water scarcity may be different from areas facing combined sewer overflow issues with too much water. He said that all the use cases for recycled water systems should be considered, such as the ability to use produced water, to treat and reuse water, and to assist with groundwater recharge.

David Wegner said that the rates and rate subsidies for developing reuse water is an important topic. He asked Damian Higham if his comment referred to a split rate structure in terms of incentives that might be applicable between commercial entities that have a broader financial base (their clients, their customers, their ratepayers, etc.) versus a residential owner at an individual house who wants to do water reuse and recycling. He said that Tribes are a critical part of Western U.S. water systems and that they traditionally have not had access to funding to support water reuse and recycling. He said that one of the issues is that they're distributed across reservations, so they have less opportunity for collaborative efforts. He asked the listening session participants if they had an idea how to better connect with these disenfranchised communities and how to address that issue. He said the workgroup wants to make sure that the available money gets distributed equitably.

Damian Higham responded to David Wegner and clarified that he was referring to the differential in rates between recycled water and potable water. He said that, in most cases, the delta will be different for residential versus commercial, or any of the varying scenarios. He said that customers are paying potable rates for potable water and if they are shifted to recycled water, there is a cost savings. He clarified that the cost savings would be different, depending on the class of customer, which Denver Water has tried to make use of in their pilot programs.

Angela Bricmont emphasized that the value of water is an important question. She questioned whether it fully reflects the cost of recycling or as a water resource. She also asked how energy is related to this conversation, in terms of the cost and the cost savings.

Dennis Randolph agreed with David Wegner's comments. He noted that the Board has another workgroup that's looking at affordability and the two workgroups' work ties together. He said that, since there's a growing incentive to look at recycling water, we should look at the uses for recycled water or purple systems and note that these uses are different from systems that help people stay alive. He suggested that there may be different ways to charge water compared to how we have in the past. He emphasized that environmental justice includes making sure that everyone at least has the necessities for life, which includes water. He said that the workgroups' work is very timely and that there is an opportunity to make a statement about how we deal with water costs in the future.

Janet Clements said that one of the questions that the EFAB affordability workgroup is looking into is how can rate structures be helpful or designed to help address affordability. She said that there's a crossover between the workgroups and that they're looking at a range of different rate models and the possibilities of those models.

Wrap-Up

Angela Bricmont | EFAB Workgroup Chair and Denver Water CFO

Angela Bricmont reminded participants that EFAB is welcoming comments through the following week. She thanked everyone for their participation in the listening session.

Ed Chu added that EFAB is accepting comments through the 31st of May. He encouraged everyone who spoke today to submit written comments.

Justin Mattingly thanked the workgroup and EFAB members for attending, and thanked Ed Chu for providing great leadership. He also encouraged everyone to send written comments. He said that he has heard a fair amount of interest in water reuse and that he believes that water reuse and recycling activity is likely to expand. He emphasized the importance of feedback in guiding their work which they are hoping to get wrapped up towards the end of the year.

David Wegner requested that people let the Board know of any questions that are missing from the list of questions pulled together by EFAB.

Ed Chu said that a full board meeting will be held in the Phoenix area in October, and the announcement of the meeting will go into the Federal Register notice 15 days prior to that meeting.

Adjourn

Edward H. Chu | EPA Designated Federal Officer

Ed Chu thanked all the commenters and urged them to continue to engage with EFAB by sending written comments and adjourned the meeting.