TWV Podcast #024
What Are the Important Issues for Investor-Owned Water Utilities?
With NAWC's Michael Deane
Show Notes at http://thewatervalues.com/pod24

Intro: Welcome to The Water Values Podcast. This is the podcast dedicated to water utilities, resources, treatment, reuse, and all things water. Now here's your host, Dave McGimpsey.

Dave: Hello and welcome to another session of The Water Values Podcast! Thanks for joining me.

And yes, that's still Joey providing the intro and outro voiceovers, so stay tuned until the end of the podcast to hear Joey's outro voiceover and the all-important disclaimer.

Well, we had a great trip to Glacier National Park to celebrate my parents' 50th wedding anniversary – I was able to check going to Glacier off of my bucket list. I've always wanted to go there before the glaciers are gone, which some experts predict will be the case by 2030. We stayed at the Many Glacier Hotel, and they've got an exhibit in the hallway that shows pictures of the glaciers in the early 20th century and then a comparative shot in the early 21st century. The loss of glacial ice is absolutely amazing – you really need to see those glaciers in person. Glacier is tough to get to but well worth it. It's absolutely beautiful.

Well, let's turn our attention to today's guest. Today's guest is a tremendous get for The Water Values Podcast. Michael Deane, the Executive Director of the National Association of Water Companies, joins us to talk about water issues, and in particular, water utilities in the private sector. Michael provides a great deal of insight into a number of issues that our water utilities face, whether they be municipally-owned, not-for-profit or privately held. His wealth of experience both as a water policy expert and as a former EPA regulator who helped get the revolving fund loan programs set up really make this episode chock full of good content, so I hope you take the time to listen to what Michael has to say because it's all good stuff.

With that said, let's get on with it. Open the valves, fasten your seatbelts and here we go.

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Dave: Michael, welcome to The Water Values Podcast. Thanks for coming on, and we greatly appreciate your time. To start off, why don't you tell us a little about your background and how you got interested in water.

Michael: Thank you very much. It's very good to be with you this afternoon. And I got interested in water as a kid in Minnesota, the Land of 10,000 Lakes. Obviously, there's a lot of water and very much took it for granted. And as I looked around a little bit, particularly back in

school, I just happen to take a class in water and realized how important water is to where communities were established, how economies in those communities grew, and the importance to public health. And it really got me thinking a lot more how central water is to so much of our lives and our communities and our economy, and it intrigued me. And I decided to jump in. I started my career in water at the United States Environmental Protection Agency helping set up the state revolving fund program and the public-private partnership program there in water infrastructure and have moved on through my career to work with private water companies. I've gone back to the United States EPA, as well to work on water infrastructure policy and financing, and now I'm very pleased to be with the National Association of Water Companies.

Dave: How long have you been with NAWC?

Michael: I've been here just over five years now as Executive Director.

Dave: And could you give us a little thumbnail on NAWC's background and what its mission is?

Michael: Certainly. The National Association of Water Companies is the association representing private water operating companies in the United States. So our members are private utilities that are fully owned and operated and provide water and wastewater services across the country. And our member companies also operate municipal systems under various types of public-private partnerships, as well. Between our business models, private water companies provide services, their water and wastewater, to around 73 million Americans. And nearly a quarter of the population we touch one or another every day. We strive to serve to be a credible resource for anyone seeking information on the nation's water challenges and obviously, very particularly, solutions that we believe the private sector can bring to communities to help address those water challenges.

Dave: Interesting. I want to get into some of the solutions you can provide. But before we do that, let's continue laying the foundation for what we're talking about today in terms of the private side of the water utility business. And if you could just give us the perspective of the IOUs, or the investor-owned utilities, what's the water industry look like for them today?

Michael: Absolutely. First, just reacting to something you said on the private side, and there are public and private sectors within the water industry. But increasingly, I think it's very important that we all understand and we all work together. And we do work very well with our public sector partners in the utility world, as well as cities where our investor-owned utilities, the private utilities, do their business. So while there are some unique elements to the public and the private sectors in how they go about and perhaps in what they see, I do believe it's important to acknowledge that we're all water professionals working together across the country to provide good service to Americans whatever type of utility happens to serve them.

That said, the state of the water industry – we're all very much aware of the challenges, I think, and I've talked about it a lot. To large degree, that focuses on the infrastructure investment needed primarily to replace, rehabilitate pipes in the ground. Water distribution, wastewater collection gets a lot of attention.

The treatment side, both drinking water and wastewater, sometimes less attention, but it's important for all Americans to know that we, along with the regulators – economic, public health, environmental regulators – are always working to make sure that we're getting the best protection possible. So there's going to be increasing standards as well for drinking water and wastewater, which have clear costs and need for investment. So we look at all of that. I always see solutions, I know these are challenges, but the good news is, there's solutions on all of that.

The private utilities on the infrastructure side face some of the same challenges depending on where we are: aging infrastructure, the high cost of replacing that infrastructure in very populated areas. And I think to some degree, I'd like to believe we're in better shape in the sense that when the regulatory process works well with the public utility commissions, we have in place a very transparent, accountable process for identifying what the needs are, both for our compliance, as well as customer services that the customers demand, establishing what the prudent costs are to deliver that and then establishing a customer rate structure that supports that investment and that allows us ideally to depoliticize the process and make the investments that are necessary. So a lot of the companies, I think, are ahead of the curve on this pipe replacement problem that we often hear about in this country on a 300-year replacement cycle. A lot of our companies are much closer to kind of the conventional wisdom, ideal of 100-year replacement cycle.

Dave: Interesting. And just going back to a point you made, I wasn't trying to draw a wedge between public and private sectors. I just wanted to make sure that was clear.

Michael: No, no, I just took the opportunity – and we do that as well. We kind of talk about the public and the private, and there are these distinctions. But there are those who do try to draw the wedge so.

Dave: Real quick, what is your typical membership? What are the sizes of the utilities and water professional organizations involved? Are we talking 3,500 customer, 10,000 customer? What size of utility are typically members of NAWC?

Michael: It varies widely. I trust most of your listeners know, there's a large number of very small utilities in the United States. Getting the numbers are hard to capture, but 50,000 or more community water systems, 16,000 wastewater systems, and we all know that many of them are very, very small. So the members of the NAWC range from very large multi-state utilities that taken together would be – our largest utility serves more people than the City of New York,

which is a large public utility, but it's across about 16 states. So under that scenario, I believe it's 12 million customers or so. We also have companies that serve 100 or 300 people, as well, in small communities across the country and everything in-between.

Dave: I was just curious because as you were ticking down that list of issues, it would seem to me that infrastructure, treatment and regulators, those might impact the smaller utilities in a different way than it impacts the larger utilities. I'm just kind of curious what your perspective is on how those issues you identified are being perceived and addressed by the various sizes of the utilities involved.

Michael: Yes, you are absolutely right. In large utilities, there's some benefits in the economies of scale. There's a benefit in access to technology and expertise internally and in the resources to fund it externally. And it is very different.

We spend a lot of time with our economic regulators, the public utility commissions trying to help them address small and very small utilities in their states. Even if they are not members of the National Association of Water Companies. Obviously, many of those tens of thousands are not our members, but many cases when they're private they're regulated by the same commissions that regulate our large utilities.

We spend quite a bit of time with them trying to figure out what are some of the regulatory efficiencies that we've put in place, some of the technologies may be better applicable to the smaller communities. Certainly when you get into treatment technologies, that can be a particular issue as Safe Drinking Water Act standards apply to stricter and stricter and smaller concentrations and new chemicals, and treatment technologies are getting much more complex. This is no longer just trickling water through sand and charcoal and this type of thing. It's often membrane, nanofiltration, highly energy intensive types of technologies that both are costly to implement and have a need for particular expertise to operate. And small systems are just going to struggle with that. There's no easy answers when you're talking about the small community situation, public and private.

We work with not just our economic regulators, but EPA and others to try to help deliver some of those solutions and to take what we know and learn and apply at the larger utilities and see if that can be scaled down and, if not, what some of the other maybe lower technology and ideally lower cost solutions would be, as well. Even if you're just talking about the fundamental pipe replacement and infrastructure, it's much tougher to spread those costs across a small customer base simply because the costs of replacement infrastructure are just extraordinarily higher than they were 50, 60 years ago to put a mile or a half a mile of pipe in the ground.

Dave: What's some of the low-hanging fruit that you've seen smaller utilities take advantage of in terms of the technology and things of that nature?

Michael: I think our best smaller utilities realize that they are different and that instead of scaling down, maybe you can scale up. We have one member company who's helped some other small companies, say, when we're facing, for example, arsenic, which a few years ago and still is in some areas of the country a huge, potentially costly treatment. And there's a lot of debate in the regulatory side, it's in many cases small, rural areas where there's natural occurring arsenic that needs to be addressed.

And how do you take some of these high technology systems and apply them and spread them across 30 or 40 households in some cases. Some of the really good ones say, you don't have to do that. You can put in series a bunch of technologies even, as you said, you can buy at Home Depot that are intended to be for one or two houses and put them series. You can scale up.

I think it's really looking at how best to manage it and not just – getting very innovative. That's what it needs to be whether you're small or large these days and get innovative and not just do it because it's traditionally the easy way we've always done it before. It's really an effort to find the particular needs for that particular location and customizing a solution for them rather than try to force fit the cutting edge technology or solutions into all cases.

Dave: I think one of the solutions – what are your thoughts on given that there are, as you indicated, about 50,000 or so privately-held water, wastewater systems and that scale plays such an important role in terms of allowing technologies to be brought to those smaller systems, is consolidation something that you see is going to accelerate in the future? What's your perception on consolidation in the industry?

Michael: The water professional in me says consolidation needs to occur broadly. And this is not just with private utilities but also public utilities. Many of those 50,000 are public, as well. And I personally believe that needs to be a big part of the answer.

It's very, very difficult for a number of reasons. Politically, it's hard to discuss at times. And I think various agencies from the EPA when I was with the United States EPA, as well, to try and talk about the solution for your community is consolidation when people are very proud of what they've been able to do with their water system or historically provide water to themselves and their neighbors and wastewater service.

But the challenges that we're facing going forward, I believe are going to require much more serious consideration of consolidation. It doesn't necessarily have to be physical interconnection. We've got some places where utilities are dozens if not hundreds of miles apart, but from a managerial standpoint and administrative standpoint, a financing standpoint, to try to consolidate them I think is critical.

I just got back from a meeting of the National Association of Regulatory Utility Commissioners or PUC regulators, and this as always was a major topic of discussion. And we're seeing some of the states really aggressively try to identify how they can work with their small utilities to identify potential acquirers to start consolidating. That doesn't answer all the questions. If you're a small system and you require a $500,000 solution for 30 households, simply being acquired by a larger company doesn't necessarily answer that. But there are some things you can start doing to spread this cost perhaps around all the utility system in the state. Again, bring in some expertise to lower the cost to some extent. But I won't say it's an intractable issue, but it's a very serious and difficult issue that the nation is facing.

Dave: We talked a lot about the cost and expense of replacing infrastructure, and that naturally results in rate increases. What are you seeing out there in terms of cost recovery and rate increases for your membership?

Michael: Unfortunately, like everything water, it depends where you are. Clearly, across the country we're seeing the need that people need to pay more to receive the value and the benefits that they get for their water and wastewater services. Whether it be private or public, you're seeing finally in the last few years some significant rate increases to make investments that are necessary. The governing bodies, public utility commissions for the private companies, city councils or their governing bodies for municipal or county or other systems are realizing that this investment needs to be made. You need to make sure you're making it as prudently and as efficiently as possible.

I don't recall what is the overall average national consolidated increase in rates, but I do know from AWWA and other surveys that it is going up significantly greater than inflation to try to make up the disinvestment that we've had in the past. So I think it's incumbent on all of us as water professionals to to be as efficient as possible in operations so that every dollar of revenue we get through customer rates that we can invest in the capital investment that we do and not pay it in inefficient operations.

I think it's going to be crucially important in this rising cost environment that we face, again, because we need to accelerate pipe replacement to address new public health and environmental standards and the least of which is customer service expectations, as well. Large parts of the costs are in order to be able to provide the service, just the quality of water that people want. That is going to be reflected in rates as you say and needs to be reflected in rates.

The challenge that we face in the water industry is getting people to understand that those rates are not just rates. They are investments by the beneficiaries of these systems and the value that they and their families and their businesses and their communities receive for keeping the systems operating safely and reliably.

Dave: Michael, I just think you hit the nail on the head right there. Public education to me is one of the biggest issues that we need to overcome in the water sector. Do you have any thoughts about what you've seen that has worked in public education about water systems, and what can we do better in that area?

Michael: I think there's a lot we can do better. I don't think it's a surprise to anybody in the water industry that we call ourselves the silent service. We've been proud of that over the decades. We've been very effectively in this country for not just the 40 years since the Safe Drinking Water Act was put in place or 42 years now since the Clean Water Act initially was put in place, but for decades and even centuries before that have been working very hard to just deliver service and make sure that people are happy with it and can afford it. And kind of leave us alone to do our business. You benefit from what we deliver, which is clean water and taking away dirty water.

Michael: I think we were too successful in that we let people think it was easy, cheap, costless. Now the challenge is not only to let them know what it takes to deliver that but to transform ourselves to be kind of proud delivers of that news as opposed to them feeling badly about it. We need people to understand this.

We need to speak in a different way that resonates with them. I'd like to say people, when you talk about infrastructure, that's our business, and we need to invest in infrastructure. But I think a lot of people's eyes glaze over when you talk about infrastructure. Somebody should be taking care of that. The utility should be taking care of that.

What people really value is what they receive from that infrastructure, which is, again, their children are healthy, can go to school, their employees are healthy, can come to work. They're not sick from waterborne diseases. Not necessarily talking about what we see in developing countries. The ability that you can go anywhere in this country and know that you're not going to suffer from that.

The reliability of water. If you're a small business and you rely on water for production, that's critically important. If you're down for a week because your water main's down, your people are out of work, you're out of production. That is a serious blow to a small business.

That you can go to parks in the afternoon and wade in the stream with your kids and not worry about what's in that water.

Those are things that people value. There's a disconnect between that and the infrastructure, the pipes, the treating plants, the impoundments to collect that water before it comes to you. And we need to do a much better job of articulating that is what delivers that value to them.

Dave: What are some strategies that you have seen that have worked that have gotten the point across and helped get the message out?

Michael: I think getting the point across, getting the message out and then getting people to understand the personal responsibility for that is the toughest step. For example, there's some great exhibits and utilities, public and private, across the country that people can come in – it's a water treatment plant and look at where your water comes from, what it goes through and how it's delivered. And that's kind of in the front room of the visitor's center.

And then lots of utilities do tours. And I think that one of the first things that people say if you take them to a water/wastewater treatment plant, they look at a huge, big computer control room and huge, big tanks and huge pumps. Their eyes kind of get a little wide. They kind of go, wow, this must cost a lot of money. Yes it does. It's not just a pond and a pipe. So it's getting out there and doing that with them. We're trying to do a better job as an industry to broadly get that message out.

I hope you have heard of the Value of Water Coalition that NAWC and other water associations and some large water sector companies have established to try to get out a broader message, both at kind of a national media level, public policy makers and also materials that utilities can use with their customers, as well, although a lot of utilities are doing a lot of work with their customers. I think it helps if people understand it's a broader, national issue as much as a local issue, and we all need to work together.

Some of the other things I think are good is I've seen people take tours up into the watershed. They take a bike tour up the pipeline and see where it goes. And really getting people to connect.

But then the big, I wouldn't say missing piece, but the toughest piece is they all appreciate that and understand that and then they have to start feeling good about paying their water bill to make the investment necessary to continue to receive all of that. I think we often forget whatever community you're in, we are benefitting from investments that have been made over the last 30, 40, 50, 100 years by people before us whether our families before us or our neighbors. And they made those investments.

And then we need to continue to make that both for our own good but also to pay it forward as they say. These are living, ongoing systems that connect our communities. And when people understand that and their role in it, and you talk with them and are transparent about it and accountable for where those dollars are going, not just we need to raise your rates. Why do you

need to raise our rates? Here's what we're doing with your money, and here's what the result is going to be. Get those communications that you talked about that are so critical. So we're starting there, but there's a long way to go.

Dave: Very well said, Michael, very well said. Let's pivot and talk about the role of the federal government. You've indicated, water is a very local thing, but the federal government does play a fairly large role in it. And you mentioned your experience with EPA. Can you talk a little bit about the role of the federal government in water?

Michael: Certainly. Obviously, one of the first and foremost ones is through the Clean Water Act and the Safe Drinking Water Act, which is this nation coming together through the political process to determine that we need to, as a nation, keep water clean and safe in the environment, the fundamental goal of the Clean Water Act, so that it can be as they say fishable and swimmable. Under the Safe Drinking Water Act make sure that people who consume water, which is all of us every day, are safe in doing so.

So working through the process, we and the States and public and private utilities and others work with EPA and the federal government all the time on an ongoing basis to determine what needs to be done and how best to do it, how to do it most cost effectively and to have EPA and the federal government lead that is critical.

Now, coming out of that, of course, is all the needs for the investments at the local level. At times, the federal government has been a key player in those investments primarily under the Clean Water Act starting in 1972 with a grant program to help communities to build wastewater treatment plants, which was a critical step. Before that, most wastewater was collection and maybe very minimal treatment. When the nation decided we needed to treat that waste before discharging it into waterways, the federal government made a commitment to help communities with those investments and has moved to the state revolving fund program. As I mentioned, I helped establish it at EPA many years ago now to provide low-interest rate assistance to lower the cost and to try to make sure that it's affordable to communities.

So there's a financial funding element for the federal government, as well. The state revolving fund programs continue. In 1990 is when it was established, the drinking water, as well, and there's a role for the federal government to play. It's always been a relatively minor role. Communities and companies, in our case, and the customers are the primarily funders of this and always will be and should be. Again, we as consumers and customers and the community are the beneficiary of that.

But the federal government, I think, has a role in being able to help direct the future of where investments should go. We may have seen a bit of a pivot in the last few years from EPA on SRF

towards green infrastructure and are there better ways and new ways in dealing with storm water discharge, which has huge water quality impacts. And kind of pushing towards the cutting edge.

I personally believe that makes a lot more sense than a federal subsidy dollar going to replace a pipe that's been in the ground for 70 years that we've always known needs to be replaced. Ideally, the utility and the customer should be prepared to do that. But if we're looking at new types, new directions, the federal government can help and kind of nudge us in that direction. I think that's critically important.

More fundamentally on the water financing, certainly for the private utilities and for the public-private partnerships that we undertake with municipalities, there's a leadership role the federal government can take in saying this is the future, that the challenges we're facing require a much more collaborative approach, a mix of public investment and private investment. We work quite hard and well with the federal government to try to identify barriers to bringing more private investment into infrastructure. Not just in our own companies systems but into communities where they still own the systems, but private partners can operate them and make the capital investments with them or for them over a long period of time. A lot of those are too archaic to talk about today, but they're really about removing barriers in the tax code that were put in place for very good reasons at some time, but in this day and age are just obstacles to the way we need to finance going forward.

Dave: I think one of the potential fruits of your efforts in terms of federal legislation was the recently enacted Water Infrastructure Finance and Investment Act. How are the IOUs reacting to the implementation of WIFIA?

Michael: WIFIA is an innovative approach to investing in infrastructure. The idea is to try to help fund, federal assistance, whether it be low-interest loans or loan guarantees or other credit assistance, modeled under the transportation TIFIA program, to try to bring additional investment into the nation's water and wastewaters.

NAWC in those deliberations was consistent on a couple of things, one of which is this program should try to bring in additional capital that otherwise would not flow into the water sector. Not just be a replacement. We don't want 100% municipal bond financed facility or 100% SRF funded facility now simply being financed with 100% assistance from the WIFIA program. I think that it does that with the limitation on 49% of the project costs coming from WIFIA, which requires communities or private companies to look for additional sources of funds.

I think it's an important point to make that this can engender more partnerships. Clearly, just private water companies are eligible for WIFIA, as are municipalities and other public entities, but clearly the interest that we're seeing is in more partnerships. How can you perhaps get a WIFIA loan for part of it, SRF loan for part of the project costs and perhaps private capital, as

well. So we're interested and intrigued that the EPA is starting listening sessions next week, and Chicago's the first one. To figure out how to structure this and how it's going to work and what is the interest and how can they make sure they structure the program that will facilitate some innovation in these projects.

We're hopeful that working with them and others we can come up with a WIFIA structure that will allow the private sector to bring the kind of innovation and additional private investment into municipal systems across the country, as well as our own systems.

Dave: Terrific answer. Do you want to say anything about the 40th anniversary of the Safe Drinking Water Act?

Michael: I do want to recognize that we often take a lot of things for granted, and certainly our friends at the EPA are working with us and others in the water sector to try to really take note of the success of the Safe Drinking Water Act. It was passed in 1974 to protect public health by regulating the nation's public drinking water supply in communities across the country.

As a direct result of that, the United States enjoys some of the safest drinking water in the world. So we are particularly proud in the investor-owned utility community that some research done by American Water Intelligence a couple of years ago showed that we have a near perfect, as they put it, record in compliance with the Safe Drinking Water Act. And that is a direct result of what we've been talking about here, David, which is the partnership between regulators and utilities and our customers to make the investment necessary to bring this forward.

I think we can celebrate and certainly will at the NAWC Annual Water Summit in October in Fort Lauderdale, October 5-8, we're going to take the opportunity to celebrate the successes that we've made together over the last 40 years but also acknowledging that we can't take that for granted.

As I've said before, as a result of investments and decisions and hard work made by our predecessors, and now it's our turn as water professionals and as customers to kind of roll up our sleeves and look at the challenges which are going to be different in the next 40 years. Fortunately, we're looking at much more integrated management of water. We still have the Safe Drinking Water Act and the Clean Water Act, but we understand more than ever the interconnectedness of all this. As we address those challenges in a time of increasing cost environment, as I've said, costs are going to be even more than they were before. And how do we make sure that we continue to make the progress that we've made. So we'll be talking about that at our session.

But I think it's easy to celebrate and kind of rest on our laurels and say, look what good things we've done. And we should and we shall. But I think even more importantly, we're going to take

that and be proud of it and build on it to make sure that we continue to provide safe, reliable service to Americans in every city and every community every day.

Dave: Michael, I just want to thank you for your thoughtful and balanced perspectives and sharing those with us today. To the extent you'd like to send people to learn more about the National Association of Water Companies and what your organization does, where would you send them?

Michael: These days, everyone goes to the web, right? So they can join us and I'd be pleased to have anyone join us at our website at nawc.org. We're also on Twitter @movinwaterforward because of Twitter's length we couldn't put the "g" in there. We're also on Facebook at National Association of Water Companies. Always feel free to call us as well. I'll even put my number out there for you: (202) 379-2329. I'd be happy to hear from anybody.

Dave: Terrific, thank you so much, Michael. Really appreciate it.

Michael: Thank you very much, David.

Dave: You bet.

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Well, that was my interview with Michael Deane of the National Association of Water Companies. A big thank you to Michael and his Director of Communications, Marybeth Leongini for their time and effort in getting this interview scheduled and done. They were fantastic to work with.

And a quick point about the NAWC's Twitter handle. As Michael and I discussed, it's @MovinH20forward, that's @movin without a g H20forward. @MovinH20forward. So follow them on Twitter; they're a great follow.

Well here are my key takeaways. First, it was refreshing to hear about the NAWC's assistance that it provides to some of the utilities that are having trouble coping with a number of water quality problems and the like. The NAWC isn't just looking out for the big guys, they're helping smaller utilities, as well, even if they are not members of the NAWC. We're all in this together, and I think the more we can help out our neighboring utilities, the better off we're all going to be in the long run. So it was great to hear Michael talk about that. And his example of using water filters purchased at Home Depot and placing them in series to remedy a water quality problem stood out to me as a poignant example of the type of help and creative thinking to solve problems related to water.

My next takeaway builds on prior conversations we've had here on the podcast. And that's getting the rates needed to sustain our water utilities. The water infrastructure we've been able to build in this country is amazing, but we need to fund extensions and replacements for it. And that takes money. So it's heartening to hear Michael indicate that he's seeing that rate increases to pay for infrastructure have started to gain steam in the last few years.

The final takeaway I'll offer here is Michael's perspective on funding infrastructure through government programs. His statement that federal funding for new projects and technology makes more sense than for replacing aging infrastructure caused me to think on that after the interview was done. And I think Michael is right – that pipe that's been in the ground for 70 years as he used as an example that should be replaced by the users of the system without subsidy. The users on that system get the benefit of the pipe and they should pay for its replacement.

But when it comes to cutting edge projects and new technologies, I think there's another benefit that merits providing somewhat of a subsidy for that. Technologies are most expensive when they're new. We see this time and again with consumer products like electronics. Remember how expensive VCRs were when they first came out and how quickly the price dropped once the technology matured? For you younger folks, VCR stands for video cassette recorder. I think the same thing can be said for new technology in the water space – by subsidizing new technology, we're helping to speed widespread adoption of that technology, and therefore, the project really benefits everyone because it's allowing that technology to mature and be brought to the consumers faster than it might otherwise get to consumers if we relied solely on private investment. So the subsidy in that case makes sense to me because the project benefits everyone, so I think Michael was right on about that point.

Well, you can check the Show Notes out for this session at http://thewatervalues.com/pod24. And please don't be bashful in letting me know what interested you about the interview by leaving a comment on the Show Notes or by emailing me at david@thewatervalues.com. You can also tweet at me @DTM1993. And don't forget to rate and review the podcast on iTunes, Stitcher and other podcast directories and don't forget to tell your friends and colleagues about the podcast and to sign up for The Water Values Newsletter, which can be done at http://thewatervalues.com.

In closing, please remember to keep the core message of The Water Values Podcast in mind as you go about your daily business. Water is our most valuable resource. So please join me by going out into the world and acting like it.

Outro: You've been listening to The Water Values Podcast. Thank you for spending some of your day with my dad and me.

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Dave: Thank you for tuning in to the disclaimer. I'm a lawyer licensed in Colorado and Indiana. And nothing in this podcast should be taken as providing legal advice or as establishing an attorney-client relationship with you or with anyone else. Additionally, nothing in this podcast should be considered a solicitation for professional employment. I'm just a lawyer that finds water issues interesting and that believes greater public education is needed about water issues. And that includes enhancing my own education about water issues because no one knows everything about water.