Asset Management Plans and the Clean Water State Revolving Fund Webinar Transcript

0:05

Hey everyone. We're just going to give it another minute or two to give attendees and time to log in. We've got close to 400 people registered for this and the numbers are going up. So just give us a couple of minutes.

1:55

Okay, so I think we are at a good starting point. Thank you everyone for logging in to today's webinar, which is on asset management planning and the Clean Water State revolving fund. So this webinar is presented by epa's office of Wastewater management, and I'm Franny Josephs with epa's clean water State revolving fund. I'll be moderating today's webinar for you.

2:17

And I'm happy to say that we've got just under 400 people registered for this and I can see by my attendee list that there is now 208 people signed in and I'm sure, oh the number is 210 now and the number is going to keep going up.

2:34

So with that today, we're going to discuss the components of asset management plans., how state CWSRF programs like Florida and New Hampshire who are signed in as speakers are implementing and running them, and various incentives that borrowers are using for funding projects that include Asset Management plans.

3:01

So just before we get to our presentation, I want to go over a couple of housekeeping items since this is a new platform that we're using. I'm not sure how many of you out there have ever used gotowebinar, but it seems to be pretty good, but as an attendee, you're automatically placed on mute and in listen-only mode for the entire time of the webinar platform, but there are other ways to communicate with us. We've got a Q&A session at the end of the presentation where we're going to ask questions, too.

3:29

And we ask that you try and save your questions for New Hampshire and Florida until the end of the Q&A. This will make things flow a little better and they'll be able to assist you then without any Interruption. To ask a question simply type your question in the question box and we'll try to answer as many questions as possible. But since we've got so many people logging into this not all the questions will be answered, we don't think, depending on how many come in.

4:00

But feel free to contact us at the end of the webinar. We can answer your questions for you and the speaker information is going to be available on the last slide.

So if you have any technical issues type those in an any time to the question pod in gotowebinar and Alison Souders or I will be able to start a private conversation with you to clear any of the issues that you might have to answer a poll question, which will be coming up shortly. You're going to select the radio button with your response when the pole comes up and the results will be shared with you after the audience has had a chance to answer them.

4:39

And lastly we'd like to remind you that the views materials presented by our speakers today are their own and do not necessarily reflect those of EPA.

4:52

Okay. So now we are going to get to the poll question.

5:08

And the first poll question is we want to know who's participating in this webinar. So I'm going to give it about a minute for the results to come in.

5:34

so far, we've got mostly state government people logged into this, private sector is about 14% - oh going up and now changing a little bit, 13 percent local County government, 7% other, and we've got 4% other federal government agency.

6:05

Now I can share that with you guys.

6:11

Alright, so it looks like we've got more State people logged into this and the remainder other Federal agency, local government, private sector, great.

6:24

Okay. Now the next poll question, how familiar are you with the CWSRF?

6:36

Let's see what we get here.

6:46

Looks like a lot of you or at least half work with the CWSRF very closely or manage one.

7:00

Some of you have used the CWSRF to fund projects, heard about us but want to know more. Let's see.

7:16

Give it another few seconds here.

7:26
About five more seconds.
7:29
Get everybody to vote.
7:34
Alright we can share that.
7:38
That's what we've got - about half of you work with the CWSRF or very closely with one. The rest of you have heard about us and want to learn more. This is great. Okay.
7:55
Alright then.
8:08
Okay.
8:10
So before I switch to our first speaker I'd like to let you know a little bit about what the CWSRF is all about. So the CWSRF is a low-cost source of funding for a wide range of water quality projects.
8:27
Each state and Puerto Rico has an SRF program. EPA awards capitalization grants to the state programs each year and the states contribute 20% state match.
8:38
With these funds, the State programs make low-interest loans to eligible assistance recipients. The recipients repay the loans and the loan repayments are recycled back into the program to fund additional water quality projects.
8:52

The state programs are responsible for selecting and funding projects and have flexibility to target resources to their particular environmental needs.

when appropriate.

9:13

The state programs have lots of flexibility where they can set specific loan terms including interest rate

Over the life of the program, the CWSRF has provided over \$138 billion in assistance to projects. In FY19, the CWSRF made over 1,604 loans that provided \$6.2 billion in affordable funding to communities of all sizes.

9:47

So as you can see on the side majority of the funding has been provided to traditional Wastewater infrastructure projects, including secondary and advanced treatment.

10:03

The CWSRF has 12 statutory project eligibilities that allow the program to fund many different kinds of projects. These include the construction of publicly owned treatment works, decentralized wastewater treatment, stormwater management, water and energy efficiency projects, and more.

10:37

Okay, one moment.

10:51

The CWSRF program offers substantial savings to borrowers with low interest rates that are comparable to receiving a partial Grant combined with a market rate loan. For instance, a borrower with a 20-year loan when the market rate is 6%, a 3% CWSRF loan to a \$100,000 project is equal to receiving a \$23,000 grant and getting a loan for \$77,000 at market rate. With a 30-year loan, the savings is even greater.

11:18

But the 30-year loan savings is even greater.

11:23

I see we have some questions. If you can just give us a second, please.

11:32

Okay.

11:52

So in the SRF program, repayment of funds do not need to come from the project itself. Assistant recipients have the flexibility to assess income for many sources to repay SRF loans. For example, borrowers who take out a loan for a wetland restoration project can pay it back through revenue from hunting and fishing licenses and the nonprofit organization could repay a loan using membership dues.

12:16

So there's a great deal of flexibility, and I encourage you to think creatively about where you or your stakeholders could generate revenue to repay an SRF loan.

So we're going to get to a couple of more poll questions in a moment.

12:39

All right, and this is going to be leading us into our section on asset management and state initiatives.

12:57

I see that a couple of you are having trouble answering some of the poll questions.

13:05

We're going to be able to address that at the end of the webinar. I'm sorry about that technical issue and we can actually send you the poll questions at the end of the webinar so that you will have a chance to answer them. I'm just looking at the rest of these questions here, okay?

13:27

I think everything else under control.

13:33

So now for our next poll question. How familiar are you with Asset Management plans?

13:51

I'll give you guys a couple of seconds at least to respond to this.

14:02

I see a lot of you are familiar with them, but you want to learn more.

14:09

Some of you have never worked with one or even seen one. I'm really glad you're signed any today. Let's see, some of you are using them to improve your projects, which is great. Okay.

14:24

We'll give it a few more seconds here So we can give everyone a chance to vote.

14:46

Okay.

14:52

I'm going to share these responses with you.

14:58

So about half of you are familiar with them, a little more than half, but you want to learn more.

A lot of you have not worked with them either and some of you are still using them to improve your project. Okay.

15:14

Now we have our final poll questions.

15:20

How familiar are you with any state CWSRF initiatives are activities towards Asset Management? So for this question, it's basically directed to those of you that work for EPA or state offices or if you're a borrower of the SRF. Just going to launch this for you.

15:42

So initiatives could mean offering incentives to borrowers like a lower interest rate on a loans, providing training or planning requirements to them, marketing and outreach and there's more to that we can get to later. So, let's see what's coming in.

16:04

We've got half of you being somewhat familiar.

16:10

And about a quarter of you don't know if your state works with them, 20% of you are very familiar so far. Let's give it a few more seconds here and give everyone a chance.

16:35

Alright.

16:45

So we've got about half of you somewhat familiar, about a quarter of you aren't sure if your state has initiative and about 20% of you a little more, 21% are very familiar, 6% other, which means you're probably from another sector, but we'll see, okay.

17:11

Now we can talk a little bit about Asset Management. Asset management is the foundation for understanding near- and long-term operational and capital needs. Asset management plans provide a clear picture of infrastructure-related expenses and future investment needs, which inform financial planning processes. EPA's Clean Water State Revolving Fund (CWSRF) is certainly a source of financing for wastewater utilities' asset management planning efforts and capital investments.

The asset management practices require this development of detailed asset inventories, tracking O & M tasks, and developing Capital Improvement Plans. So, while these practices are often done individually, they work very well together when organized into an asset management plan.

17:58

The complexity of asset management plans are not always similar but plans commonly include asset lists or maps that keep track of age, location, conditioning criticality, remaining useful life of assets, and then strategies with standard and emergency operating procedures, as well as the schedule and cost of routine preventive and deferred maintenance of assets.

18:23

Capital Improvement planning that helps to determine short-term and long-term asset rehabilitation or replacement projections that come from asset inventory, O & M data and alternative strategies and Staffing strategies and measurable level of service goals.

18:40

So, with that we can move on to the next part of our presentation that focuses on what some of our states are doing relative to Asset Management because not all of them are going to do the same as the other. Our first speaker is Sharon Nall from the New Hampshire Department of Environmental Services.

18:59

Okay, we are going to hand control over to Sharon.

19:11

Just a moment.

19:20

Sharon Nall has been working with New Hampshire Wastewater Treatment Plants (WWTPs) for over 20 years. Ms. Nall is the Manager of the Planning, Protection and Assistance Section with the New Hampshire Department of Environmental Services (NHDES) Wastewater Engineering Bureau. In this position, Ms. Nall is managing the NHDES effort to help WWTPs become more sustainable through improved energy efficiency, asset management program development and flood resiliency awareness. This work has included design standard rule changes,

19:50

trainings, technical assistance, funding program development and many other outreach efforts. To move the asset management work forward, Ms. Nall teamed up with NH CWSRF to develop a loan forgiveness program and asset management guidance for both wastewater and stormwater infrastructure.

20:07

She's part of New Hampshire's Department of Environmental Services water infrastructure asset management team which encompasses, drinking water, wastewater and stormwater. This team works

closely to bring consistent messages and Training to their communities relative to asset management for their water infrastructure. Take it away Sharon. Thank you, Franny, for that introduction. I can get started right now into my presentation.

20:35

So our overarching goal for Asset Management in New Hampshire is to work together to help communities develop asset management programs for all their wastewater, all their water infrastructure, including drinking water, wastewater and stormwater.

20:52

We are encouraging New Hampshire communities to build an expandable asset management tool to serve their community. We're already starting to see our most proactive communities expand their asset management programs to many other departments such as police, fire, library, parks, just to name a few. I'll Focus today on the work that we're doing specifically with wastewater and stormwater assets since this is a clean water SRF presentation.

21:21

I wanted to mention that we do work in close collaboration with our drinking water Asset Management staff, as well. We have a solid asset management team and we work closely to deliver a unified and consistent asset management message to New Hampshire communities.

21:39

Although we started out really focusing on just drinking water and wastewater assets, we quickly learned many of the benefits of bringing the municipal storm water staff to the table. Some of these benefits included improved communication between road agents, road crews and the water sewer department, improved scheduling of road paving projects to allow time for water and sewer projects to be designed funded and constructed in conjunction with the road project.

22:10

More cost-effective use of taxpayer dollars and reduced service interruptions, just to name a few of the benefits.

22:20

We refer to this as Bridging the silos. We're working on this with in the Water Division at the EES. But we also encourage our communities that we work with to do the same. Silos of people with expertise is not a bad thing. As long as there is communication or bridges between those silos.

22:42

As you probably know, the federal government added a fiscal sustainability plan or FSP requirement to all clean water SRF loans. However, the FSP requirement only covers the funded assets. So, the FSP requirement has limited impact especially for small projects.

We wanted the New Hampshire Asset Management program to lay a foundation for changing how New Hampshire utilities manage all of their water infrastructure assets into the future.

23:17

As I will show you in the next few slides in New Hampshire, we believe that we've made much more progress moving our asset management program forward using carrots in the form of grants for drinking water loan forgiveness for Wastewater and stormwater then we could ever have hoped to do using enforcement sticks or requirements.

23:38

So far, not surprisingly, we're seeing the most success with Asset Management in communities with strong buy-in from both management and staff and they really respond to these carrots.

23:52

The big carrot we have we've been using is financial assistance, a funded, non-mandate. Everyone loves those in New Hampshire, and being it is a small state is an advantage. We have one hundred and thirty five communities in New Hampshire with Wastewater infrastructure, either in wastewater treatment and collection

24:14

Or just collection.

24:16

We've set our loan. There's some

24:22

background noise. We've set our loan forgiveness amounts available for each Seward Community Based on the system size and complexity with available funding ranging from \$30,000 to the small systems up to one hundred and fifty thousand for the larger, more complex systems.

24:46

For Stormwater, the universe of assets needing management is much larger and largely unknown. All 234 communities in Hampshire likely have some type of storm water infrastructure that would benefit from asset management for this reason at this time. We've limited the maximum amount of loan forgiveness / municipality to \$30,000.

25:16

And one more carrot of sorts that we found to be very successful is our dedicated staffs willingness to educate our communities through workshops and conferences, but also and probably more importantly through one-on-one education with the leadership in each Community, this one on one education and involvement with the asset management program development allows us to assist communities in developing Asset Management program.

But capture the unique nature of each community.

25:52

When we started the Clean Water SRF loan forgiveness program in 2013, we developed a guidance document to set minimum requirements that had to be met to qualify for the loan forgiveness each year. Our asset management teams team would review and we review and update this guidance document, and in this way we can incorporate lessons that were learned during the previous year.

26:18

The minimum requirements in this guidance document exceed the FSP requirements.

26:25

Also, as long as the asset management program is continuing to be used as a decision-making tool and is maintained and kept up to date, it can also meet the FSP requirements in future loans as well.

26:41

We're currently working through the details of how we will confirm that the asset management programs previously funded through loan forgiveness are still being used and updated so that we can certify the FSP requirement has been met.

26:57

Our guidance document includes all the typical core elements of asset management, asset inventory, level of service, critical assets, life cycle cost analysis, and funding strategy, as well as FSP specific items such as water and energy conservation measures.

27:18

We also included items that will help build on those core elements. The requirements can basically be broken down into two main functions providing or improving communication among all stakeholder groups and providing data the data feeds the communication.

27:41

The guidance document requires New Hampshire DES attendance at a minimum of three meetings during the asset management program development for each at new Asset Management project. We hold a kickoff meeting with community staff and management, the consultant if there is one, and DES staff. During this meeting, we review the work scope and the guidance document requirements. They need to meet in order to maintain their loan forgiveness eligibility.

28:11

We also typically talk about software options and needs at this meeting giving them a better understanding of the options available.

The second of the three meetings is a level of service workshop. This workshop approach to developing community specific level of service goals came about from watching what was working and what wasn't working

28:36

so well in these Asset Management projects. The level of service workshop is intended to stimulate discussion about what is important in each Community as they work to develop both internal and external level service goals. We encourage communities to invite their users to the workshops so that they can hear what is actually important to the users of the system instead of just making those assumptions. However, if user participation is not a part of the workshop,

29:10

we encourage the community staff to share the level of service goals they've come up with their users and ask for input.

29:19

And then the last of the third of the required meetings is a wrap-up presentation. And this presentation is typically done by either the consultant, the municipal staff most involved in the project, or a combination. The audience for this presentation is the municipal management, and the public. The presentation is an opportunity for the management to gain a better understanding of the valuable assets

29:47

they own and are responsible for. There are typically a few a-ha moments during this presentation. DES attendance of this presentation allows us to stress the importance of continuing the work that has been started and to promote the good work that's already been done by the staff.

30:08

And although we started the asset management loan forgiveness program in 2013, it took two years to have application start coming in. During that time. we were doing a lot of outreach and education to communities.

30:24

We were also learning a lot about Asset Management ourselves. The first applications came in 2015. Then the floodgates opened in 2016, and they haven't yet closed.

30:37

Word is getting out there so that \$3.3 million shown on this slide may not seem that significant to some of the larger States, but it is a very significant investment in New Hampshire, especially when you consider that that 3.3 million dollars represents a hundred and ten bites of that \$30,000 Apple.

Then we look at the map this way, we still have a long way to go. We want to get everyone on board with Asset Management in New Hampshire. And so far we've worked with 43 of our 135 Sewar communities and 22 storm water systems.

31:17

Of those 22, there is some overlap with our communities working on both Wastewater and stormwater with a handful being communities that have a stormwater assets only.

31:31

So, how's New Hampshire DES working in helping communities turn problems into opportunities? Well, all of this work does that but if you consider Asset Management to be the umbrella for effective utility management, then tools like energy efficiency and planning help you develop a more effective umbrella. DES is currently and actively funding asset management, energy efficiency and planning.

31:59

These are all the tools that communities need to be able to make cost-effective decisions in the management of their water infrastructure.

32:09

Since wastewater treatment plants are typically the largest energy user for any municipality, we've started making a significant investment to help them become more energy efficient. We started this work with a grant from the US Department of Energy and we've continued the work using Clean Water SRF funding for both comprehensive energy audits as well as incentives for implementation of the energy audit findings.

32:38

We're also encouraging communities to move forward with wastewater and stormwater planning efforts through another loan forgiveness program. The planning program funding is very competitive and can include things like CIP developments, which is a great use of the data generated from an asset management program. Integrated planning, long-term control plans, facility plans, vulnerability assessments, climate adaptation plans, to name a few,

33:08

are also considered eligible planning projects for this funding and all build on that asset management program foundation.

33:18

So, going forward I should mention we want to expand our program to really help communities develop more tools that make the asset management umbrella even more effective.

Over the next year or two, we hope to be developing programs to assist our communities with understanding and addressing their vulnerabilities, helping them with power resiliency and flood resiliency.

33:46

Then going forward a little bit more, a big part of the long-term cultural shift that all of this work under the asset management umbrella is leading to is shifting the mindset from wastewater to a mindset of resources. This cultural shift is critical if we're to start valuing wastewater infrastructure assets and the people who manage those assets in the manner they should be valued.

34:12

Wastewater treatment was one of the most important improvements to public health ever. And we need to remember that in New Hampshire. We will need to make the same one community at a time approach to educate and increase awareness to succeed with this overall cultural shift.

34:35

As Franny mentioned, we will be taking questions at the end of the presentations, but here's my contact information if you would like to reach out with any questions or learn more about our programs, and with that I'll give it back to you Franny.

34:52

Thank you, Sharon. Okay, so now we're going to introduce our next speakers from Florida. First, we'll have Timothy banks of the Florida Department of Environmental Protection, followed by Ben Lewis and Diana Stewart from the Florida Rural Water Association, who serves as a contractor to Florida DEP to help develop their Asset Management program.

35:17

Tim Banks has been with the Florida Department of Environmental Protection for 32 years. He started with the Department in 1988 as the last grants were made in the old construction grants program and the first loans were made in the Clean Water State Revolving Fund Program. In 1997 he was tasked with starting Florida's Drinking Water State Revolving Fund Program and for the past twelve years he has been the administrator of the Clean Water State Revolving Fund Program. Give me one moment here.

35:49

I'm making Tim a presenter to share his screen, and I'm also going to introduce Ben Lewis and Diana Stewart right now. So Ben Lewis is the program manager with the Florida Rural Water Association as well as the supervisor for the asset management program and groundwater and source water protection program. Ben has been in the water and wastewater industry for 36 years and started his career with the United States Air Force. Ben is a Licensed A Water Operator and a Licensed C Wastewater Operator.

36:19

He is also a Certified Storm Water Inspector. Ben has his Utility Management Certification through National Rural Water Association and just completed the Florida State University Certified Public

Managers Course. He and his wife have five amazing children which are all grown and eight grandchildren.

36:41

And after Ben, we'll be hearing from Diana Joe Stewart who began her career

36:49

with the Department of Environmental Protection and worked in the State Revolving Loan Program for 9 years before moving to Florida Rural Water Association. During her 15 years with FRWA she has worn several hats from Trainer, Source Water Specialist and now Asset Management Utility Specialist.

37:11

Take it away Tim. Thank you, Franny and good afternoon. Everyone adding to what Sharon just said, for years, SRF programs have been providing loans to systems for rehabbing facilities as they wear out for larger systems. These rehab projects were necessary after 20 years more or less, but for smaller financially disadvantaged systems, these projects were often necessary much sooner and in some cases, they were failing halfway through their expected useful life and off.

37:41

Due to lack of Maintenance to compound the problem, these systems were failing with no funds set aside to make the necessary repairs in response to that. We started encouraging asset management by sponsoring free workshops throughout the state. The message from these workshops may or may not have resulted in any local governments adopting asset management plans. We had no way of knowing but participation by small systems was very limited.

38:10

In 2014, to incentivize the process, we began offering a point one percent interest rate break if an asset management plan had been adopted by the borrower and we started seeing a few plans here and there; some attributed to the brake on the entry on the SRF loan. However, the response was not exactly overwhelming.

38:31

More recently, as Sharon just mentioned, WRRDA kind of forced this issue with the FSP requirement for at least the project being funded.

38:39

However, for small systems, we still didn't feel like that was enough. So we made some revisions to rules to take the carrot and the stick approach

38:50

To be eligible for a state grant program or for principal forgiveness in the Loan program, an adopted and implemented Asset Management plan is now required to receive either one of those to grant our

principal forgiveness. It is rescinded if the asset management plan is not adopted and implemented prior to the first repayment.

39:13

Since these financially disadvantaged systems were the least likely to be able to afford to develop an asset management plan on their own, we contracted with the Florida Rural Water Association to create a program that would develop plans for these systems. Later, we added the drinking water program to the mix and to date the Rural Water Association has completed plans for 53 local governments, and they are currently working with twenty one more.

39:41

Initially these plans were more or less paper documents generated in part using epa's checkup program for small systems or cups. We did have some success. The Tiny Town of Jennings was our first plan and we do currently have a construction project to correct an inflow and infiltration problem that was identified in that plan. However, we felt that adding a GIS functionality at a low cost would go a long way in getting the small systems to engage.

40:09

So we contracted with a firm to evaluate the various Asset Management plan software systems on the market, but we really didn't find anything that would was suitable for these systems primarily due to the high cost of the contractor. We did find one company that was willing to work with us to create an inexpensive system on a GIS platform, that would also include the best features in cups.

40:35

We had previously set a target of 20 dollars per month for this system and Diamond Maps agreed to as a base rate of one seat for \$20 a month.

40:46

That monthly cost does go up depending on the number of connections the system has but the maximum cost is \$75 per month.

40:53

Since the initial creation of that program, the company has been working with us to improve it ever since. Diamond Maps now has some really nice features as you can see here and Ben will demonstrate in a minute. This software still lacked one key element. It didn't have anything to do with a financial package that we needed because the owner of diamond Maps didn't feel comfortable with that aspect.

41:21

So We contracted with Rough Talus which is a national company to develop a program that would communicate with diamond maps to bring in the operations and maintenance costs, the capital projects repair and replacement costs, and would allow simple easy-to-use screens to add projected revenues and expenditures. We named this module Rev Plan.

With this addition, the appropriate rates can be determined based on various funding scenarios with and without outside funding sources.

41:56

As Sharon said, if you ask questions in the question box we will attempt to answer them after the presentation is complete. But if you have specific questions for me, my have my contact information is here now. I'll turn it over to Ben Lewis for a quick demonstration of diamond maps and a Dyana Stewart with a will talk about Rev Plan.

42:22

Thanks team.

42:27

And as Tim mentioned in his presentation here in Florida, one of the tools that we use for asset management is Diamond Maps. As you can see on the screen here, as one of the maps for one of the cities that we work with diamond Maps is a low-cost GIS cmms cloud-based system where the system personnel can actually mark their assets in the field on the plane when they work in the office that can draw lines as well.

42:55

Diamond maps runs in your browser on any phone tablet PC. As long as there's internet there's nothing to install. As you can see the assets on the map you can add or take off layers so you can take off anything you want can get crowded. If you don't, you can also have work orders written and they can either be printed or you can issue

43:25

them by email to a system personnel and each asset can have a work order. You can have that work order be a one-time event, so if you have a leak or a pair you can issue the work order, send it to him in the field, or it could be a reoccurring event like valve exercising or flushing. Both work orders and the assets themselves have a note section that logs the time, the date, and the personnel and those are permanent records.

43:55

Those stay in the records entirely. You can import shapefiles, CSV files or KML files from other sources. So if you have other files that you've gotten or people have already iGIS'd some things you can bring those into Diamond Maps or you can start scratched from on the map and map out the entire system.

44:21

You can also take these files and you can share them with other folks. So if you have Engineers that want to see your shape files, then you can import them here. You can import them or you can export them out to your engineers or to other people that need. This you can draw points and lines.

On your assets including you can name the asset including your fire hydrant, manholes, files, meters. So if you click on one, you could change the name, you can put the type, there's all types of information here; design life, when they were installed, so you can customize the information you want inside here.

45:11

Diamond Maps has built-in Google Maps and street views to allow you to start drawing with your mouse. You can see the layers here. We have Ariel roads, terrain. We use Auto Select. So as you zoom in, it will actually change the background for you.

45:32

You can add pictures, you can take a picture in the field and add those, upload a PDF or a Word document, you can add expert Excel spreadsheets, Sops maintenance logs. Some of the benefits also is actually creating a maintenance plan or a flushing schedule. You can do valve exercising as I stated before, put a meter reading list in there for new people, different routes for folks to learn. One of the things I like about Diamond Maps is you can keep up with your leaks so you can map out where you have a leak on a street and you can keep up

46:11

with those, determine if you're having issues on those streets, maybe that pipe or that line needs to be replaced. It also will help you to figure out which valves you need to isolate for a leak or those valves where they're located, have they been exercised, you'll have records for them. As Tim mentioned earlier, this is a low-cost system. It's probably one of the best programs for the cost. You can get that single user account for \$19 a month or you can get an unlimited

46:41

account where it's based off of your meter. So it could be as low as \$15 all the way up, you know to end is based off your meters, 250 meters all the way up to 10,000 years. The one good thing is there is no contract with this system. So if you decide you didn't want diamond Maps after you've done it, you can still get your information. You can export it out and collect all those shapefiles. Diamond Maps works with our other Financial tool, which Tim mentioned

47:11

is Rev Plan and I'm going to turn it over to Dyana to talk about that that tool.

47:19

Thank you, Ben. Good afternoon, everyone.

47:26

I'm going to wait for the screen to catch up.

47:35

Okay, as Ben and Tim mentioned,

the idea behind Rev Plan is to provide an online tool for small water utilities to achieve financial resiliency. Rev Plan can assist users in identifying the various utility funding requirements over a five to twenty year planning window. These funding requirements include the capital financing plan, operating costs, and the debt service. In order for systems to set a budget, they need to know what assets are in their system and the cost to replace when they fail.

48:34

Rev plan works with diamond maps to do just that by importing the assets and looking at the condition design life and replacement cost fields entered for each asset in Diamond Maps.

48:47

I'm going to scroll down and go to the Wastewater.

48:51

Since we are talking about clean water we can see here after we import.

48:58

What assets, the percentage of assets that need to be replaced immediately?

49:04

We can also come up here to the capital Improvement plan and we can see the cost

49:09

to maintain the system. Now after populating each of the data entry screens, I'll scroll through these just so you can get an idea of what they are.

49:24

We go to the output tab.

49:28

Now here our systems can show their elected officials where they stand on the existing rates structure.

49:37

The user can also identify any rate adjustments necessary to meet the utility funding requirements.

49:45

Rev plan allows the user to see the impact rate increases will have on their ratepayers we choose here.

49:56

Change the average use, we see here the rates increase over a 10-year period for the wastewater, drinking water, and this is the combined rate.

I'm going to scroll back up here to let you see Rev Plan will also allow you to give a guideline for setting an annual budget.

50:20

We could see here historically, this was the actual expenses for 2019 fiscal year. This is what we budgeted for 2020 and with the CIP, our CIP being set at three percent. We see what the increases will need to be over the next ten years in this model.

50:39

Franny I'll turn it back over to you.

50:45

Okay.

50:47

Just one moment here.

51:02

All right, everyone. Okay. So I think now is a good time to go on to the questions.

51:15

Let's see.

51:21

So I know there were some questions for New Hampshire and Florida. Let's see here and it may not have been shared with everybody.

51:34

So Sharon, if you wouldn't mind sharing with the audience here, they would like to know how long did it take to develop the program in New Hampshire. That's been a continuous improvement process and I would say it took probably three or four years to really get a good feel for what was working and not working and the key for us was to not be afraid to make changes based on

52:02

feedback from communities and consultants, and we would meet with consulting firms on a regular basis to see what's working, what's not, and incorporate all that information into any changes we made.

52:21

Okay, let's see what other questions we got.

52:31

Okay, do any of the panelists have case studies on savings to treatment plants or a municipality as the result of asset management?

So Sharon or Tim, do you have any of those case studies that you could talk about or share later or expand upon? We don't have case studies yet about money being saved in New Hampshire. Most of the communities realize that their rates have been set lower than they should be. So a lot of times, one of the first results of developing an asset management program

53:12

is a justification for rate changes, usually rate increases. So, it's more the savings would be in more fewer emergency projects because they're planned, they're taking care of, they know where the hot spots are where the issues are.

53:31

But we don't have case studies developed. I would concur with that. Our program is really too new to be showing the savings at this time and like Sharon said the rates are probably going to go up and expenses are probably going to go up. Initially the case studies for project savings are going to be over the next say 10-15 years. At the end of that period I would expect the savings to be quite substantial.

54:00

I would agree with that.

54:06

Okay, let's see what other questions we've got here.

54:16

Okay, I'm assuming this question goes out to both states. Did you pilot the effort to gauge interest before you launch the program?

54:32

Sharon you wanna go first.

54:35

Franny can you repeat the question? I was having trouble finding it. It's a little unclear. So it says, did you pilot the effort to gauge interest before you launched the program?

54:49

We I think it was.

54:53

I think this sounds like kind of both Florida and New Hampshire got in right as asset management was becoming kind of the buzzword of and people were just figuring out that oh, this is something we need to do, so It was kind of the whole country was moving forward on it at the same time. With us, the large systems were progressing fairly nicely with asset management, but the small systems, like I guess what

mostly New Hampshire has, weren't doing much of anything with it. We finally decided, because we were providing state grants to replace projects that we had built 10 years prior,

55:39

we had had enough and we were going to require them to Implement an asset management protocol whether they had liked it or not, but that's again why we went through Florida Rurall water to provide that service for them. And as far as palutena it, we went through some trials and tribulations. The initial plans like I said were paper documents and they weren't being used

56:12

very well. So we've gone through a lot of different iterations on this and I think what we have now is something that is very useful and we've had really good feedback on it over the last two or three years. Yeah, I would say the same thing for New Hampshire, and no we didn't officially do a pilot. We open it up for everyone. But we also developed our program based on what was working

56:40

and what wasn't working, and Tim, to your point, with those kind of reports that were sitting on the shelf. We started having a lot of discussions about asset management plans versus asset management program, and we really have been pushed for the program and to remove the plan from your vocabulary. Same here. We were seeing them we were afraid that would be sitting on the shelves. And for the most part we were right. Yeah. Yep.

57:12

And that's something we've added. One of the requirements for ours is an implementation plan. Meaning, how are you going to keep this program going forward, who's going to be responsible for implementing different parts of it and just moving it forward. Huge concern for us as well in Florida. And one of the problems we've seen is city managers, in particular, tend to be almost transiet.

57:43

And one city manager all not really educate the next one for obvious reasons on the importance of asset management. So we have to start over in cases. Yes. Ours are mostly elected officials. So they're volunteers that manage

58:00

our municipalities, while the cities are city managers but smaller towns are elected officials. Okay. Thank you. Let's see. We've got a couple of more questions if you don't mind for New Hampshire. Under the condition assessments of asset management, does New Hampshire fund sewer cleaning and CCTV?

58:29

If it is in the scope for the asset management program development, we will include that as part of the program for the principal forgiveness because it is a really good way to get condition assessment.

So yes, it is. How many staff does the New Hampshire program have if you can answer that question Sharon?

59:09

For Wastewater, it was until a couple months ago, just me.

59:21

Stormwater, we have two people. So I just hired another person and then we have one in drinking water

59:32

And we all have praising on that.

59:37

We've got time for one more, Tim, this is for you. It says, I hear Cups is not going to be supported in the future. Is that true? As far as I know it is, I think EPA might be working on a new Asset Management program, but I haven't heard much on that recently.

59:59

And that's why we went out on our own and developed something that was going to be what we would have control over. Let's put it that way.

1:00:12

And Sharon, would you mind answering one more question that we've got here? Yep. Okay, are communities in New Hampshire that have adopted Asset Management plans on sticking with them in your opinion? Some are and some aren't and that's where we're figuring out ways to really encourage the continued use.

1:00:41

So it takes a champion in each community.

1:00:47

Great.

1:00:49

So I think it sounds like we're at a good stopping point here. Thank you everyone for logging in. Thank you, Sharon, Tim, Ben, and Diana for joining us today and helping to run this webinar. And thanks to all of the participants for listening in to today's presentation, which is going to be made available on EPA's Clean Water SRF website within a few weeks and we can make sure that that link goes out to you as soon as it's posted.

1:01:19

So, thanks again everyone. This ends our webinar for today. Really appreciate you joining us, and please stay safe. Thank you.	