

**Selectmen's Meeting  
Monday, May 9, 2022**

Chairman Les Babb called the meeting to order at 6:00 PM. Present were Selectmen Les Babb, Ernie Day, and Melissa Florio, and Ellen White, Town Administrator, who recorded these minutes. This meeting was held at the Town Office.

Also in attendance were Jamie Mullen, Rob Cunio, Justin Brooks, Jeff Nicoll, Matt Howe, and Tom Gross.

**Non-Public Session:**

*Les made a motion to enter into a Non-Public Session at 6:00 PM pursuant to RSA 91-A:3, II (c) for reputation. Ernie seconded. Roll call vote was taken: Ernie-yes, Melissa-yes, Les-yes. All in favor, the motion passed. Les made a motion reconvene public session at 6:10 PM. Ernie seconded. All in favor, the motion passed.*

**Discussion:**

*Les made a motion to write a letter and return a donation received. Ernie seconded. All in favor, the motion passed.*

**Non-Public Session:**

*Les made a motion to enter into a Non-Public Session at 6:10 PM pursuant to RSA 91-A:3, II (c) for reputation and also RSA 91-A:3, II (l) for legal. Ernie seconded. Roll call vote was taken: Ernie-yes, Les-yes, Melissa-yes. All in favor, the motion passed. Les made a motion reconvene public session at 6:37 PM. Ernie seconded. All in favor, the motion passed.*

**Review of Mail, Sign Manifests, Approval of Minutes**

The accounts payable and payroll manifests were reviewed as well as the red folder containing correspondence.

*Ernie made a motion to approve the minutes of the Selectmen's Meeting and Non-Public Sessions held on April 25, 2022. Melissa seconded. All in favor, the motion passed.*

**Department Head Updates**

Police Department – Chief Jamie Mullen reported he has sent photos of the F-550 to the dealer where the new cruiser was purchased but has not heard back on it. Jamie is in the process of completing a background check on a potential part-time candidate. There are a few active cases going on with subpoenas in process. With a vacation absence this week, coverage focus will be on evening shifts. Melissa reported fireworks activity this past weekend and questioned the protocol for notifying the police department. Jamie responded that it should be called in through dispatch immediately so they can act on it.

Fire Department Chief Rob Cunio reported call volume for two weeks including 8 medical aid, 2 motor vehicle accidents, mutual aid-fire, mutual aid-car fire, 3 fire alarm, service call, 2 police standby, and 1 outside fire. The meeting held last week regarding town forest trail naming for better emergency response went very well. The group will be taking a field trip Saturday and meeting again next Wednesday. Coverage at the Red Jacket fire commenced at 3:45 PM until 3:00 AM the next day. No injuries were reported and the wind factored in many flareups. There was a 9-acre woods fire today in Tamworth. The boat is at the marina being gone through and marking lights and electronics are to be installed. Lettering will not be added until after training has been completed. The fishing derby will be held this Saturday, May 15<sup>th</sup> from 10-12 with registration opening at 9 am. Rob will be finishing up the inspection at the Masonic Lodge tomorrow for an assembly permit. This request came from Bergeron's report presented to the Town Office Advisory Committee. A list of needs will be compiled.

Transfer Station – Justin Brooks reported permit sales are high, summer hours commenced this past Saturday and a load of scrap iron sent out last week generated \$1,300 in recycling revenue. This load consisted of approximately 2-weeks' worth at 7-ton. Melissa reported she dumped the trash from the Valley Pride Day cleanup and someone was picking in the dumpster.

Town Office – Administrator Ellen White reported an inspection was completed at the 3 Ossipee Lake Road property by her, the Zoning Officer, Health Officer, Fire Chief, and the findings from the inspection are included in the folder for review. The accountant was here last Friday in preparation for the audit in two weeks. Ellen has been working with Gary to create and update necessary forms. These are being posted on the website and all forms will eventually be fill-in PDF versions. Phones and office visits were busy last week. The Zoning Board continues to have a heavy case load and new construction is prominent. A few short-term rental conditional use permit applications have been handed out, but none have been received as of yet. Anne Cunningham is hopeful to have some to review at the May 19 Planning Board meeting. Ellen reported that Scott Brooks went out to assess Jackman Ridge in the Town Forest today but had difficulty with the gate lock. Ron Newbury lent him a key so he could get in. Justin stated there is an issue with the lock on the gate to Trout Pond and new padlocks have been ordered.

### **Appointments:**

*Matt Howe, GMCG - Culvert Modernization Financial Feasibility Study* – Matt thanked the Board for their past support and involvement in their expansion of water sampling. He then presented the goal of the feasibility study, with help from the community, is to assess 450+ culverts in the area to identify those in need of repair or replacement. Tom Gross of Saco River Headwaters Alliance was also present and provided further detail on the project and the request for Freedom to act as municipal fiscal agent on the grant agreement being applied for through the Clean Water SRF. The application deadline is June 1. The cost to complete the feasibility study is \$100,000 with the grant coming from the Clean Water SRF, a loan-grant with principal forgiven. SRHA will be responsible for paying applicable interest. Les discussed the standards in place for a culvert replacement noting the significant costs for engineering. Tom discussed the responsibilities of a municipal fiscal agent referring to a packet of information provided and attached to these minutes for reference. Discussion on borrowing authority and whether approval for acceptance of funds would have to be granted by Town Meeting. A few questions will have to be deferred to town counsel before a decision is made. FCC Chair Jeff Nicoll is in support of resources that will help to protect the natural resources and water quality. Melissa discussed the significant concern with recent rain events as noted in the hazard mitigation

plan update where storms although shorter are creating more costly damage. Tom added that he spoke with Courtney Jordan from NH HSEM and there may be additional funds available to assist with their efforts. Ernie would like to run this request by legal. Les is concerned with getting involvement from other towns as they are very independent and would like more time to review the information provided. The information will also be forwarded to the FCC for review at their March 18 meeting as well as to the Road Agent. An agenda item will be added to the May 23 meeting notice for follow up.

### **Old / New Business / Discussion:**

*Open/ Review Bids – Intervale Ave (Abutter's Request for Bids) – One bid was received from an abutting property owner in the amount of \$5,000 with a deposit enclosed. **The Board was in agreement to not accept the bid, and to combine this with the property on Pequawket Trail and offer for sale.***

*Abandoned Cemeteries – A copy of RSA 289 was provided which outlines the process in which abandoned cemeteries are taken over by the Town. Discussion on past repairs completed and what level of maintenance is required. The Board would like to see the consensus vote of the Cemetery Trustees to take over abandoned cemeteries. This discussion will be continued as an agenda topic in a few weeks. Ellen will reach out to Alan Fall for attendance.*

A request received from Bill Carney of the Old Home Week Committee was presented for the installation of flags on utility poles in the village which requires approval by the municipality. Ellen spoke with Bill and the length of time for placement has yet to be determined as does the installation but the plan is to only place flags on utility poles with existing street lights so the flags are illuminated at night. Gary Williams may have a contact that could install them. The Board discussed the flags that are already in place including the Town Office, Town Hall, Post Office, and the planter in the square. Many residents in the village also put out the small flags along their property. Is this request necessary? **Les was not in favor, nor was Melissa. Agreed.**

**All were in agreement to reappoint Scott Cunningham to the MWV Economic Council.** An open seat is available for an alternate. This vacancy will be posted on the town website for anyone interested.

Ellen announced the bids are due for the Ford F-550 on May 23 as well the bids for gravel crushing. Justin stated the RFP for Transfer Station hauling and recycling will be going out in June.

Ernie reported on the Town Office Advisory Committee meeting held last week. The Town Office is noted to be in sound condition and acceptable for remodel. The second floor and roof of the Masonic Lodge are not safe structurally and is not recommended for a temporary office relocation. Les stated Dave Senecal's assistance should be requested to obtain a second opinion from an independent architect. Ernie questioned if the Town Office remodel should contain a meeting space. Agreed. A 10–12-month Town Office relocation is anticipated for renovations to take place. The end goal is to have a Town Office that operates and functions properly.

## **Public Input:**

Jeff Nicoll provided an update on the Meena, LLC gas station stating North Point reviewed the application and validated similar concerns to those presented by the FCC. The case has been continued by the Effingham Planning Board until 7/7 to allow time to address spill prevention and control.

A request for appointment to the FCC has been received from Linda Mailhot and will be reviewed at the next FCC meeting. Ernie suggested reaching out to Brian Taylor to see if the two potential candidates he had in mind are interested.

Melissa stated 12 people assisted with the Valley Pride cleanup. Town roads were focused upon and resulted in 50-bags of trash collected.

## **Non-Public Session:**

*Ernie made a motion to enter into a Non-Public Session at 8:15 PM pursuant to RSA 91-A:3, II (c) for reputation and also RSA 91-A:3, II (1) for legal. Melissa seconded. Roll call vote was taken: Melissa-yes, Ernie-yes, Les-yes. All in favor, the motion passed. Les made a motion reconvene public session at 8:20 PM. Ernie seconded. All in favor, the motion passed.*

*Les made a motion to enter into a Non-Public Session at 8:20 PM pursuant to RSA 91-A:3, II (a) for personnel. Ernie seconded. Roll call vote was taken: Melissa-yes, Ernie-yes, Les-yes. All in favor, the motion passed. Les made a motion reconvene public session at 8:30 PM. Ernie seconded. All in favor, the motion passed.*

## **Discussion continued:**

Discussion on the trash removal plan requirement for short-term rentals. This was discussed but guidance within the STR conditional use permit application packet differs. Seasonal renters are able to dispose of trash without a permit for \$5/bag per the ordinance. Further discussion on commercial use restrictions. The ordinance requires review for further clarification.

Ellen reviewed a pending intent to cut requiring a second owner's signature before it is acted upon.

Discussion on current Carroll Lodge membership and the assembly permit requirements forthcoming.

Les suggested Scott Brooks obtains a scrap value on the Tahoe from Rickers.

## **Adjournment**

Being no further input, Les made a motion to adjourn. Ernie seconded. All in favor, the motion passed.

The meeting adjourned at 8:50 PM.

## Consent Agenda

Minutes – Selectmen’s Meeting– 4/25/2022	Approved
Minutes – Non-Public Session – 4/25/2022	Approved
Accounts Payable – Week ending 4/29/2022 & 5/6/2022	Approved
Payroll Manifest – Week ending 4/27/2022 & 5/4/2022	Approved
Intent to Cut – Jeremy Rathbun, Map 15, Lot 11	Approved
Intent to Cut – Margaret Gibbs Trust, Map 9, Lot 12	Approved
Property Tax Levy – 2022 P01	Approved
Letter of Appreciation – Peg Scully re: Heritage Commission membership	Approved
Voluntary Compliance and Remediation Agreement – Sholomith	Approved
Voluntary Compliance and Remediation Agreement – Johnson	Approved
Application for Veteran’s Tax Credit	Denied
Trustees Request for Reimbursement – Town Hall/Office CRF	Approved
State of NH DNCR – Request for Federal Excess Property Program Equipment	Approved
Eversource Pole Attachment Application	Denied
Employee Time-Off Request	Approved

## Correspondence

Minutes – Work Session for Town Forest Trail Mapping	Reviewed
Letter – Peg Scully re: Resignation from Heritage Commission	Reviewed
Letter – to Jake Stephan re: Appointment to ZBA	Reviewed
Letter – MWV Economic Council re: Request for representative reappointment	Reviewed
E-Mail – David Smith, Ossipee Lake Alliance re: Dump request	Reviewed
Public Notice - Invitation to Bid – 2016 Ford F-550	Reviewed
FAQ – Short-Term Rentals updated	Reviewed
Report – Zoning Officer re: 3 Ossipee Lake Road inspection	Reviewed
Report – Fire Chief re: 3 Ossipee Lake Road inspection	Reviewed
Report – Zoning Officer re: 33 Watson Hill Road inspection	Reviewed
Report – Zoning Officer re: 180 Village Road inspection	Reviewed
Report – Facilities Update – 5/9/2022	Reviewed
Report – Northpoint Engineering, LLC re: Meena LLC technical review	Reviewed
Report – Lien Execution Report – Levy Year 2021	Reviewed
Article – Ossipee Lake Alliance re: Meena, LLC gas station	Reviewed
Receipt – Tax Payment as Agreed	Reviewed
Receipt – Tax Payment as Agreed	Reviewed
Receipt – Rick Auto Salvage – Scrap Iron Recycling Revenue	Reviewed
Receipt – State of NH Aquatic Plant Control Activities	Reviewed
Receipt – State of NH Highway Block Grant	Reviewed

Respectfully submitted,  
Ellen N. White, Town Administrator

Approved by the Board of Selectmen on \_\_\_\_\_:

\_\_\_\_\_  
Leslie R. Babb

\_\_\_\_\_  
Ernest F. Day, Jr.

\_\_\_\_\_  
Melissa M. Florio



DRAFT 4-19-22

April 20, 2022

Dear Town Administrator,

I am writing to invite the Town of \_\_\_\_\_'s to serve as the Municipal Fiscal Agent for a \$100,000 grant (i.e., a loan with principal forgiven) from NH DES's Clean Water State Revolving Fund. The funding will be used to conduct a Culvert Modernization Financial Feasibility Study to assist municipalities across the Saco watershed with the acquisition of funding to replace or repair deficient culverts. GMCG is partnering with the Saco Headwaters Alliance (sacohdwatersalliance.org) who is coordinating the project. The total budget is targeted for \$250,000 with the additional \$150,000 being sought from other sources.

Preliminary discussions with DES officials have resulted in strong interest on their part and a high likelihood that our proposal will be funded. The deadline to submit the grant application is June 1, 2022. NHDES requires that a single municipality serve as fiscal agent to administer the funds. The budget will include reimbursement to the Town of \_\_\_\_\_ for costs associated with receiving, accounting for and disbursing these funds.

**Why are we applying for funds for a Culvert Modernization Financial Feasibility Study (FFS)?**

**1) The Compelling Need**

Clean and abundant surface and groundwater for drinking, recreation, wildlife habitat, wetlands and forests represent the foundation of the robust economy and vibrant economies that all towns and citizens and visitors enjoy across the entire Saco Headwaters Watershed, including all 50 towns that are totally or partially part of it. (See map) The Saco Headwaters Watershed is an increasingly rare treasure to our local region, states (NH and ME), our NE region, the USA and the world. Clean and abundant ground and surface water is diminishing as aquifers and rivers and streams are increasingly drained dry and polluted due to inexorable human development.

**2) The Problem**

Assessments of the structural viability of all ~1000 culverts across the Saco Headwaters Watershed by GMCG, NH Fish and Game and the North Country Council commenced in 2020 and are scheduled for completion by autumn 2022. Estimates from prior watershed assessments such as the Ammonoosuc, et al and NHDES suggest that 50%--70% of the culverts are undersized and/or aged and in disrepair, i.e., 500-700 culverts. Consequently, due to the increasing frequency and severity of storms, the resultant floods are inadequately contained resulting in increasingly harmful results:

- Human injuries and deaths
- Damage to the built environment, including structures and roads, at considerable cost

- Damage to the natural environment, including permanently
- Damage to aquatic organism passage with resultant impaired viability of various species
- Increasing pollution to our ground and surface waters from impervious surface run-off, i.e., “non-point source pollution which accounts for 90% of drinking water pollution in NH” (NHDES)

3) **The Question to be answered by the Culvert Modernization Financial Feasibility Study**  
Is the answer “Yes” or “No”? Will it be possible finance the modernization of 500—700 culverts over a period of an estimate 10 years for long term, multi-generational resilience @ a minimum of \$200,000/culvert or a minimum of \$100 Million?

4) **The quid pro quo between the Municipal Fiscal Agent and the project leaders, GMCG and SHA**

The municipality that agrees will have its administrative costs paid for by the project budget.

And this generous municipality will be performing a great service in the interest of its own citizens and visitors and all its neighbors across the entire Saco Headwaters Watershed today and for future generations. Not only will its role be substantive in helping critically to raise the necessary funds by enabling the Financial Feasibility Study. It will also serve as an opinion leader and role model of collaboration in the shared interest we all have in the future, multi-generational resilience of our shared watershed ecosystem.

If the Financial Feasibility Study is a “Yes” and the culvert modernization is funded and completed, the return on investment to the towns, including the fiscal agent, of the entire Saco Headwaters Watershed will a major contribution to the longevity of our shared robust economy and vibrant communities, and natural environment.

FEMA studies have shown that stormwater infrastructure modernization produces a 6 times Return on Investment (ROI) by preventing costly damage and repairs after the fact, i.e., an investment of \$100 Million would be expected to yield a return of \$600 million in damage prevention.

The key will be multiple towns to collaborate and share the financing over time to amortize the costs and make annual outlays acceptable compared to current municipal infrastructure budgets.

5) **Culvert Modernization Financial Feasibility Study across all towns in the Saco Headwaters Watershed (SHW)—What will it entail?**

**In this 8–12-month feasibility assessment, an impact investment intermediary firm such as Quantified Ventures, would partner with local staff (TBD) who would serve as liaisons to municipalities and agencies, where appropriate.** Accordingly, the contractor will develop a cost-benefit analysis for the culvert modernization program, design a funding and financing approach, and validate interest in this approach among investors, payors and other key stakeholders. This would include State Agencies such as NHDES, MEDEP, NHDOT, MEDEP, NH Municipal Bond Bank, et al. and the municipalities within the boundaries of the Saco Headwaters Watershed, as well as private impact investors. Given that this proposal is

being submitted to NHDES we may not be able to include the Maine towns. This remains an open question.

To complete this Feasibility Assessment, the contractor would collaborate with the following entities and together the Project "Council" to monitor the unfolding project:

1. The Saco Headwaters Alliance, and Green Mountain Conservation Group, who are partnering to lead the study
2. The North Country Council, NH F&G and NHDES, who are in process of completing the assessments and prioritization of all the culverts and where possible, would participate in outreach to municipalities
3. A municipality, TBD, who would serve as Fiscal Agent
4. Local consultants who would assist in liaising with local municipalities and agencies.

### **The Draft Budget**

This budget is modeled after a budget submitted by our preferred contractor, Quantified Ventures. Quantified Ventures has agreed to partner with us in the development of the CWSRF proposal with the understanding the if the funds are awarded, there would be a required competitive bidding process. Their selection cannot be guaranteed up front and the work in assisting with the proposal development would not be retroactively compensated.

<b>Phase</b>	<b>Name</b>	<b>Fee</b>	<b>Total Est. Hours</b>
1	<b>Baseline Data Gathering</b>	\$ 23,974	125
2	<b>Cost Benefit Analysis</b>	\$ 47,863	250
3	<b>Funding &amp; Financing Strategy</b>	\$ 31,844	165
4	<b>Stakeholder Validation</b>	\$ 46,319	240
<b>Total</b>		<b>\$150,000</b>	<b>780</b>
	<b>Local consulting support</b>	<b>\$50,000</b>	<b>Tbd</b>
<b>Grand Total</b>		<b>\$200,000</b>	

**We assume that the proposal for the CWSRF loan would be for no more than the limit of the principal forgiven portion of \$100,000. The balance will be sought from foundations such as the NHCF or other sources, TBD.**

**Towns in the Saco\*  
Headwaters Watershed**

	Number of Towns completely in watershed	Number of towns partially in Watershed	Total number of Towns	Total in Entire Watershed
Maine	6	12	18	50
New Hampshire	13	19	32	

\*Note that some towns are 98-99% in the watershed (Jackson, Ossipee), or 3% or less in watershed (Mason Twp, Newfield, Bethlehem, Brookfield, Carroll, Lincoln, Thompson & Meserve).

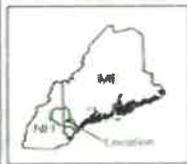
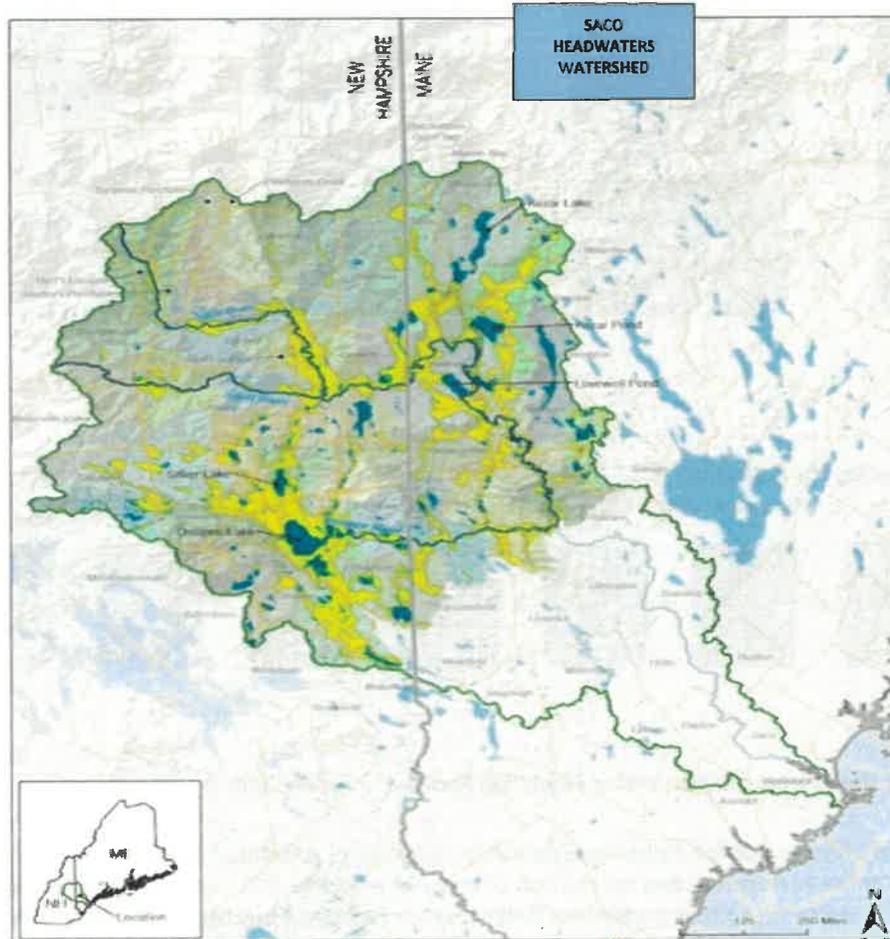
Sincerely,

Matt Howe  
Executive Director

*The Saco Headwaters Watershed (SHW) is one ecosystem comprising the Saco River and its tributaries, including the Ossipee Aquifer and River; the Saco Aquifer and the Wards Brook Aquifer. All waters in the SHW flow into the Saco River from its source in the White Mountains to Hiram, ME.*



**Culvert Modernization Financing Feasibility Assessment  
 for the Saco Headwaters Watershed  
 DRAFT May 8, 2022  
 Proposed by:  
 The Saco Headwaters Alliance  
 The Green Mountain Conservation Group**



■ Aquifer \*     Watershed Boundary  
■ State Border     River  
■ Waterbody     Town Border

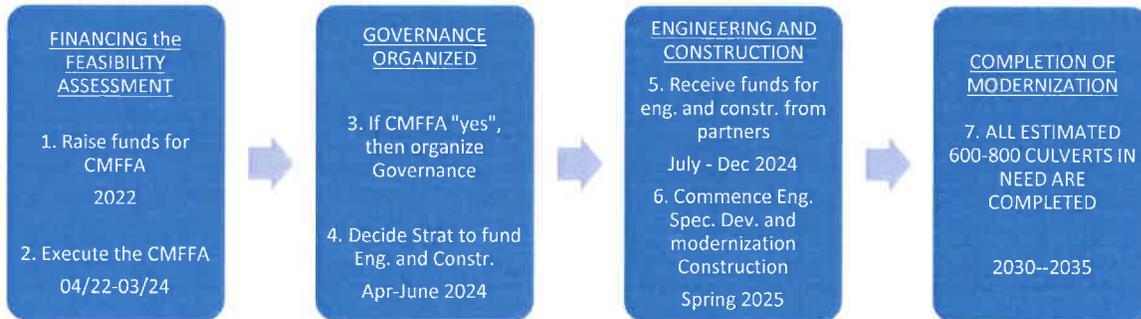
\*Aquifers in New Hampshire represent "Small Scale Aquifers". Aquifers in Maine represent "Large and Small Scale" and can further be represented by their production capacity.



**Introduction**

This proposal for a Culvert Modernization Financing Feasibility Assessment is the first step of a plan to modernize every culvert in need across the entire Saco Headwaters Watershed.

**The Culvert Modernization Program  
From Financing the Feasibility Assessment to  
Completion of the Modernization of all designated culverts**



**Timeline**

**Step 1: Financing the Feasibility Assessment (CMFFA) with Submission of the proposal, June 1, 2022 and  
Step 2: Execution of the CMFFA 2, to completion of CMFFA, if funded, March 2024**



**I. The Purpose of the Culvert Modernization Financing Feasibility Assessment**

This proposed *Culvert Modernization Financing Feasibility Assessment* will determine if and how the financing can be carried out for the restoration and renovation of an estimated 600-800 undersized and/or aged and deteriorated culverts in the Saco River Watershed (SHW), which represent approximately 50%-70% of the total 1200+ culverts in New Hampshire. These estimates are based on prior watershed culvert assessments by NH Fish and Game and Trout Unlimited in other parts of New Hampshire.

The vulnerable culverts exacerbate flooding as they become overwhelmed by increasingly severe and frequent storms and sudden snow melts, which in turn, exacerbated by Climate Change. Over the past 60 years the Northeast has experienced the largest increase in the frequency of storms among all regions in the US. according to FEMA.

The destructive consequences include:



1. ever increasing nonpoint source pollution and threats to the quality of our drinking water which we currently draw, untreated, from the Saco, Ossipee and Wards Brook Aquifers
2. damage to the built and natural environment including compromised stream connectivity
3. stranded homes
4. human injuries and fatalities
5. impeded transportation and expensive road repairs
6. impaired rivers and streams due to sediment being deposited into the water
7. degraded wildlife habitat, especially aquatic organisms
8. woefully inadequate municipal and NH State Agency budgets to address the totality of the challenge
9. threats to the quality of life of our communities and the regional economy including tourism, progressively worsening over time.
10. a weakening of resilience—environmentally, economically, and socially—to the inexorable forces of climate change

**The beneficial outcomes we are expecting and driving to achieve with the completion of the modernization of all estimated 600-800 culverts in need by 2030-2035 include the following:**

1. Mitigation of all the threats listed above!
2. Addressing many of the NHDES criteria listed:

**NH DEPARTMENT OF ENVIRONMENTAL SERVICES CLEAN WATER STATE REVOLVING FUND  
2022 RANKING CRITERIA  
FOR STORMWATER PLANNING AND/OR INFRASTRUCTURE PROJECT PRE-APPLICATIONS**

**1) Protection of Water Quality, Public Health, and The Environment**

- **Water Quality Impairment**  
By modernizing the culverts in need, the nonpoint source pollution from flooding runoff which overtops, and bypasses culverts will be dramatically mitigated.
- **Chronic Flooding that causes a water quality problem**  
Modernizing culverts will mitigate flooding in the face of more frequent and severe storms, which are predicted due to climate change.
- **Improve water quality in unimpaired watersheds**  
The Saco Headwaters Watershed is significantly unimpaired. The Saco, Ossipee and Wards Brook Aquifers provide untreated drinking water to the public.

**2) Water Quality Plan**

- **Our proposal is a de facto NH Nonpoint Source Plan as described in our Purpose, above.**

**3) Green Project Reserve**

- **Protection or restoration of natural hydrology, floodplains, and wetlands**  
The geographic scope of our plan—the entire Saco Headwaters Watershed—encompasses
  - i) the totality of the natural hydrology given that is one ecosystem whereby the Saco River is confluent with the Saco, Ossipee and Wards Brook Aquifers, the Ossipee River, the Swift River, all of the headwater streams, and all lakes and ponds (either directly or through intermediary waters such as the Ossipee Aquifer)
  - ii) All floodplains
  - iii) All wetlands
- **Improved stream connectivity with respect to aquatic life**  
Aquatic organism passage enablement is an explicit criterion for assessing and modernizing the culverts



- **Environmentally innovative infrastructure**  
The most innovative ideas in this proposal are
  - i) Its comprehensive scope: to modernize for multiple generations **all culverts in need**.
  - ii) To modernize to a multi-generational standard with the necessary investment that will require and with the knowledge that FEMA has published its research that proper modernization of culverts yields a 6 x's ROI (6 times Return on Investment)

#### 4) **SUSTAINABILITY**

- **Aging infrastructure**  
This is the central problem our proposal addresses: See #1 above.
- **Flooding/Resiliency**  
This is a corollary of aging infrastructure. The increased severity and frequency of storm induced flooding has catalyzed to propose a solution of resiliency! This is consistent with the SHA Urgent Vision: A resilient and sustainable watershed with the Mission of protecting ground and surface water.
- **Local capacity**  
A significant portion of the funds remaining to be raised for this proposal will be devoted to Municipal Outreach and Capacity Building to be carried out by SHA and Green Mountain Conservation Group (see Phase I, Baseline data gathering and The Budget)
- **Relative value to the public and environment**  
We at SHA and GMCG are passionate about the relative value that enactment of this proposal will have for the residents and visitors and the total environment to the Saco Headwaters Watershed for multiple generations.

#### **The Healthy, but threatened, Saco Headwaters Watershed**

The Saco Headwaters Watershed provides abundant clean drinking water from three aquifers: two in NH, the Ossipee and the Saco, and one in Maine, the Wards Brook. This groundwater plus the surface water, are interconnected and flow into the Saco River. They are critical to the health of the entire natural ecosystem, including the pristine forests, (42% of the watershed is White Mountain National Forest), wetlands and wildlife. In addition, municipalities, NGOs such as the Upper Saco Valley Land Trust and Green Mountain Conservation Group and private citizens also have protected extensive conserved land (~20,000 acres), critical food agriculture and a dynamic year-round tourist economy.

In sum, the residents, visitors, and economies of both states depend on a healthy SHW. The shared urgent vision of all stakeholders supporting this work is a sustainable and resilient SHW for multiple generations.

**All culverts in the Saco Headwaters Watershed have been in the process of being assessed** for vulnerabilities since the summer of 2020 by the North Country Council, NH Fish and Game and the Green Mountain Conservation Group. Completion and prioritization for renovation are expected by late March 2023.

**This effort is part of the New Hampshire Stream Crossing Initiative**, using a standard NH DES Protocol, a multiagency effort, to assess and inventory the conditions of stream crossings statewide. All findings are recorded and maintained in the New Hampshire Statewide Asset Data Exchange System (NH SADES).

## II. **The Project Approach**



**The Project Team**

1. **An impact investment firm**, with relevant experience, would be selected via the Qualifications Based Selection (QBS) Procedures to lead and execute the work.
2. **The Saco Headwaters Alliance, and Green Mountain Conservation Group**, are partnering to
  - a. propose the study
  - b. oversee the study
  - c. and serve as liaisons, in collaboration with the contractor, with all relevant stakeholders including municipalities and state agencies.
3. **The North Country Council, NH Fish & Game and Green Mountain Conservation Group**, are in process of completing the assessments and prioritization of all the culverts and where possible, would participate in outreach and capacity building to municipalities such that they develop buy-in and commitment to comprehensive nature of this proposal which aspires to modernizing all culverts in need for a resilient, multi-generational future.
4. **A municipality, TBD**, who would serve as Fiscal Agent

**The Municipalities**

<b>Towns in the Saco* Headwaters Watershed (Focus on the NH Towns for this NH CWSRF Proposal)</b>				
	<b>Number of Towns completely in watershed</b>	<b>Number of towns partially in Watershed</b>	<b>Total number of Towns</b>	<b>Total in Entire Watershed</b>
Maine	6	12	18	<b>50</b>
New Hampshire	14	18	32	
*Some towns are 98-99% in the watershed (Jackson, Ossipee), or 3% or less in watershed (Mason Twp, Newfield, Bethlehem, Brookfield, Carroll, Lincoln, Thompson & Meserve).				

Given that this CWSRF proposal is being submitted to NHDES we may not be able to include the Maine towns at this time. In parallel to our effort to raise funds in NH for this project, we have begun to search for funds in Maine, as well.

**Timing: several forces are converging synergistically to drive forward on this initiative NOW.**

- The assessments of all the culverts across the Saco Headwaters Watershed are nearing completion.
- The Federal Infrastructure legislation has produced considerable available funds which enable large scale, urgent infrastructure projects.
- *A growing community of multiple stakeholders share the awareness of the critical important of the Culvert Modernization project across the entire ecosystem of the Saco Headwaters Watershed, including benefits for the preservation of our clean and abundant drinking water, the pristine natural environment, the robust economy, and the vibrant communities. More long term, they increasingly share the urgent vision of a sustainable and resilient Saco Headwaters Watershed for multiple future generations.*

**A strong financial case, notwithstanding the complexity**

This 8–12-month feasibility assessment takes into consideration the high degree of complexity of the challenge, including many culverts, many municipalities, a large geography, and considerable required capital and the unprecedented scope of the project. The proactive program would require substantial upfront funding, along with



commitments from numerous organizations, including governments at the state, county, and municipal levels (ultimately in two states), to coordinate implementation and contribute financially.

### **Evidence of a strong Return on Investment**

FEMA reported in 2018 that natural hazard mitigation saves \$6 on average for every \$1 spent on federal mitigation grants (a 6Xs Return on Investment), according to an analysis by the National Institute of Building Sciences. This is based only on the differences in repair and remediation costs and not the wider benefits to the environment and community. The actual Return On Investment would be much larger economically, socially, and environmentally and will provide additional incentives for organizations to participate and collaborate.

### **Outcomes-based financing structures enable high-impact/highly complex projects**

The premise of the feasibility study is to finance the upfront capital required based on the long-term cost savings and other economic, health, public safety and environmental benefits that would accrue to multiple stakeholders. By tying repayment contributions to the total outcomes of the program, beneficiary organizations will have a powerful incentive for to pool their resources to reduce the burden on any single organization. The long-term cost savings and other benefits would be used for repayment.

We would bring stakeholders from the municipal, county, and state government, commercial, and nonprofit sectors into a 'multi-payor' structure that would pool resources to make financing such a program attractive and viable. All partner organizations would share the motivation to pay in advance for improved public safety, water quality, habitat, and other outcomes to reap the benefits economically, environmentally, and socially in the future. Making the case compelling would comprise the following:

- Monetizing the long-term benefits for use as outcomes payments, enabling beneficiaries to borrow the upfront capital which is often a barrier to project deployment
- Incentivizing project beneficiaries to come to the table as payors, by tying their payment obligation to the actual achievement of project outcomes
- Making participation as a payor more financially viable by bringing together multiple project beneficiaries who share in the project cost, sometimes by stacking different types of project outcomes
- Motivating participation from private investors who care about the project outcomes and are willing to share in the risk
- Drawing on similar work underway, such as currently, in Oregon, through the U.S. Forest Service Innovative Finance for National Forests program, (<https://www.nationalforests.org/grant-programs/innovative-finance-for-national-forests-grant-program>) in which outcomes-based financing is being developed to restore salmon habitat across the Oregon coast.

**The outcomes-based financing structures can take various forms as the payors would be brought together in the form that is most efficient and effective.**

- **Environmental Impact Bonds (EIB):** issuance of government debt to finance a project, with one or sometimes multiple project beneficiaries repaying the bondholders based on the outcomes of the project
- **Environmental Impact Funds (EIF):** use of a revolving fund capitalized by government debt to finance projects; beneficiaries of these projects pay into the fund based on project outcomes, with their payments used to pay off the initial bond issuance and replenish the fund so it can finance future projects
- **Public-Private Partnerships (P3):** arrangements with private entities to finance and implement projects, with governments and other beneficiaries agreeing to make payments to these entities based on project outcomes
- **Stormwater Utility:** This concept could be combined with any of the above structures. Multiple municipalities could be partners in a governance structure to achieve economies of scale, beginning with culvert modernization. Stormwater utilities rely on taxes from residents for revenue. To design this model in a manner acceptable to the taxpayers, it would need to demonstrate that the taxpayers and the municipality could actually save money over time rather than shoulder another expense. Given that flooding, pollution, and drought do not respect municipal boundaries, a partnership of



municipalities could add functions and benefits for all, over time, and progressively contribute to the Urgent Vision of a resilient and sustainable Saco Headwaters Watershed for multiple generations.

**Examples of other watershed-wide functions could include:**

- Combatting Nonpoint Source Pollution by controlling runoff from impervious surfaces, such as parking lots, roofs, and roads
- Adopting brine as the preferred treatment for road ice to reduce road salt in our waterways
- An integrated Water Quality Monitoring organization for the Saco Headwaters Watershed that would function as an “early warning system”; and engage proper agencies and authorities for preventative and ameliorative action
- Support for homeowners with private septic systems to monitor and maintain them properly

**III. Project Approach**

This work envisions completing the *Culvert Modernization Financing Feasibility Assessment* in 4 phases over a period of 8 months, as described below.

**Summary Scope of Work**

Phase	Objectives	Timeline
1. Baseline Data Gathering	<ul style="list-style-type: none"> <li>● Identify stakeholders and their key drivers:</li> <li>● Understand the regulatory environment</li> <li>● Confirm the type, scope, number, and location of culvert restoration and renovation projects that would require financing</li> </ul>	Months 1 – 2
2. Cost-Benefit Analysis	<ul style="list-style-type: none"> <li>● Calculate the costs required for implementation over the life of the program</li> <li>● Identify and quantify the full range of benefits and whom they accrue to</li> <li>● Prioritize potential payors</li> </ul>	Months 2 – 3
3. Funding & Financing Strategy	<ul style="list-style-type: none"> <li>● Design the outcomes-based financing, including financing approach, governance model and transaction participants</li> </ul>	Months 4 – 5
4. Stakeholder Validation & Next Steps Planning	<ul style="list-style-type: none"> <li>● Validate and refine the transaction design with investors, payors, and implementation partners</li> <li>● Plan next steps for the Transaction Structuring phase if the financing is deemed to be viable</li> </ul>	Months 6 – 8

**Phase 1. Baseline Data Gathering (Months 1 – 2)**

Too short a time; We could conceive that while the contractor moves on to #2. The Cost Ben Analysis, The Municipal Outreach and capacity building to municipalities such that they develop buy-in and commitment to comprehensive nature of this proposal which aspires to modernizing all culverts in need for a resilient, multi-generational future by SHA and GMCG will continue and overlap.

In this initial phase, the study will gather key data to be able to commence the cost-benefit analysis, financing design and stakeholder engagement in Phases 2 -4. The data will include:

- An inventory of stakeholder organizations and their contacts; An inventory is inadequate. We need to build into our plan intense time-consuming work to build shared understanding and buy-in with each one of the municipalities as well as the state agencies such as DES, DOT, Fish and Game, etc. This why we added \$50K for SHA and GMCG to have people who will do this work in collaboration with the contractor
  - Information on policies, regulations and other programs impacting culvert modernization



- Summary of the likely scope of the modernization program, i.e. number of culvert restoration or renovation projects, their categorization by culvert and/or project type, locations and notional timing: this will be done by March 2023 (NHF&G, Ben Nugent)

Additionally, it will summarize the likely program scope at a high level, to frame our design and assessment of the financing strategy, with the expectation that further planning, and engineering design would be required to proceed with project implementation.

**Deliverables:**

- Stakeholder inventory
- Development of allies among the municipalities and state agencies as a foundation for building shared understanding, buy-in and commitment to implementation
- Memo or presentation summarizing the policy and regulatory environment along with likely program scope

**Phase 2. Cost-Benefit Analysis (Months 2 – 3)**

Leveraging the baseline data collected in Phase 1, this work will build an economic model for the modernization program as a basis for designing an optimal funding and financing strategy. SHA, GMCG and their consultants will gather data through research and stakeholder interviews to:

- Estimate the costs of the culvert modernization program along with any known funding sources
- Identify the full range of benefits or outcomes and which organizations these accrue to
- Quantify the value of these outcomes and compare them to the costs

The analysis of costs and available funding will help estimate how much financing could be required to provide the upfront capital needed for implementation, whereas the assessment of benefits will indicate whether sufficient payment streams can be generated to make the program financially viable. The economic model also will help us identify beneficiaries to focus on as potential payors, based on which benefit the most and have the greatest interest and capacity. In researching benefits and the organizations these accrue to, we will explore broadly across the myriad public safety, transportation, water quality, habitat, economic and other impacts of culvert modernization while attempting to home in on a smaller list of organizations who could act as anchor participants.

**Deliverables:**

- Economic model for the transaction, comparing costs of the restoration and renovation projects with benefits that could be monetized
- Memo or presentation assessing which organizations the benefits accrue to, with an assessment of which should be prioritized as potential payors for further outreach and vetting

**Phase 3. Funding and Financing Strategy (Months 4 – 5)**

The objective of this phase is to design the financing approach and develop materials that will be used in the next phase to vet and finalize our ideas with investors, payors, and other key stakeholders. Drawing on experience designing transaction structures for other projects, this phase will recommend an approach best suited to raising the required capital, soliciting commitments from payors, and successfully governing the program implementation. We have also structured private financing models as an alternative to EIBs, in which a private entity finances a project through a mix of debt, equity, and grants, leads the implementation, and collects outcomes payments from project beneficiaries. In determining the approach for a culvert modernization program, we would pick the most cost-effective mix of options that align with the requirements of the transaction participants.

**Deliverables:**

- Transaction Overview, memo, or presentation to enable engagement with payors and investors summarizing the financing vehicle, capital stack, legal structure, and outcomes-based payments
- An indicative Term Sheet for investor guidance and payor information



- Recommendations on outcome metrics and outcome payment triggers based on the type(s) of investment vehicles chosen as viable.
- Draft Financing Model demonstrating project cash flows to all parties, including baseline, upside and downside sensitivities tailored to the transaction.

**Phase 4. Stakeholder Validation & Next Steps Planning (Months 6 – 8)**

- In this phase, the study will present the results of the program scoping, cost-benefit analysis, and financing strategy in a draft report that we will review with potential investors, organizations who could act as payors, implementation partners, and other stakeholders in the government, commercial, and conservation arenas. In collaboration with SHA and GMCG, we will conduct interviews by phone and in person as required to gather feedback, refine our recommendations, and solicit commitments for participation in the follow-on *Transaction Structuring* phase. Following these interviews, a final report will be produced which will include recommendations on next steps and an overall plan for the next phase. Consult with all municipalities, fully or partially, residing within the SHW
- Identify and consult with stakeholders and their key drivers
- Understand the regulatory environment
- Confirm the type, scope, number, and location of culvert restoration and renovation projects that would require financing
- Calculate the costs required for implementation over the life of the program
- Identify and quantify the full range of benefits and whom they accrue to
- Prioritize potential payors
- Design the outcomes-based financing, including financing approach, governance model and transaction participants Validate and refine the transaction design with investors, payors, and implementation partners

**Phase 5: Engineering cost estimates for the priority culverts (Months 9-15)**

**Deliverables of the Culvert Modernization Financing Feasibility Study**

<ul style="list-style-type: none"> <li>• Draft Feasibility Report for review with investors, payors, and implementation partners</li> </ul>	Contractor, SHA and GMCG
<ul style="list-style-type: none"> <li>• Final Feasibility Report, which will include a plan for the next phase(s), including requirements for implementation</li> </ul>	Contractor, SHA and GMCG

**Deliverables of the Implementation of the Financing Feasibility Plan to modernize all the culverts deemed by the Assessments and Prioritization to be in need**

<ul style="list-style-type: none"> <li>• <b>Implementation action plan and execution</b></li> </ul>	<b>SHA and GMCG</b>
<ul style="list-style-type: none"> <li>• <b>Engineering cost scoping of the priority culverts in need of modernization</b></li> </ul>	<b>SHA, GMCG and their engineering consultants</b>
<ul style="list-style-type: none"> <li>• <b>Establish governance structure and finalize a plan for complete modernization of all culverts in need</b></li> </ul>	<b>SHA, GMCG and partners</b>



**V. Budget**

It is estimated that the proposed *Culvert Modernization Financing Feasibility Assessment* would require \$255,000 for the 8-month period.

<ul style="list-style-type: none"> <li>• <b>The Financing Feasibility Contractor: All phases</b></li> </ul>	\$155,000
<ul style="list-style-type: none"> <li>• <b>Saco Headwaters Alliance and Green Mountain Conservation group:</b> intensive outreach to and capacity building with municipalities and state agencies.</li> </ul> <p>With municipalities, we foresee it will be necessary to engage the entire governance structure of each municipality to develop trust, build shared understanding and ultimately, develop buy-in. This would include the Conservation Commission, the Planning Board, The Budget Committee, The Board of Selectmen and the Town Management. To propose collaboration among multiple municipalities is relatively unprecedented. To propose collaboration on this scale would build on and potentially challenge hundreds of years of culture and budgetary practices. It will be necessary to invest time with each municipality, listen carefully to their existing priorities and find linkages of the benefits of large scale culvert modernization to each municipalities existing priorities.</p>	\$50,000
<ul style="list-style-type: none"> <li>• <b>Engineering consultant to scope the cost of modernizing the priority culverts</b></li> </ul>	\$50,000

**To: Steve Landry and Deb Loiselle,**

Dear Deb and Steve,

We would be very grateful to be awarded the CWSRF loan, principal forgiven of \$100,000 from NHDES for which we are submitting this proposal. We believe that if we received that award it would raise the probability of success of raising the remaining \$155,000 from other sources that we are pursuing such as the Hazard Mitigation Assistance Program and the New Hampshire Charitable Foundation and others.

Thank you for your consideration,  
 Tom Gross, Saco Headwaters Alliance  
 Matt Howe, Green Mountain Conservation Group

# Clean Water and Drinking Water State Revolving Funds (SRFs)

Quantified Ventures connects innovative natural infrastructure and technology projects to low-cost public financing by leveraging our expertise the Clean Water and Drinking Water State Revolving Funds (CWSRF and DWSRF, collectively known as SRFs). The U.S. Environmental Protection Agency funds SRFs, which are administered by the states.

The Infrastructure Investment and Jobs Act (IIJA) provides a once-in-a-generation opportunity to upgrade America's infrastructure. The IIJA allocates \$55 billion to water infrastructure during the next five years and directs more than \$23 billion to SRFs.

Quantified Ventures helps to:

- connect non-traditional projects to below-market rate loans provided by SRFs;
- apply for, secure, and administer SRF loans; and
- pair SRF dollars with other innovative financing vehicles to catalyze and scale natural infrastructure and technology projects.

Read the [U.S. EPA Bipartisan Infrastructure Law SRF Implementation Memo](#) >>

Join EPA webinars scheduled March 10 and March 16 >>

## Why Quantified Ventures?

We bring:

- Robust experience in the water sector and with leveraging SRFs to finance non-traditional projects
- Proven ability to efficiently collaborate with financial, legal, and engineering teams to deliver innovative financing for natural infrastructure and technology projects
- Contacts with investors and stakeholders in relate industries to supplement the capital stack

Our knowledge of and experience in the water sector and outcomes-based financing includes pioneering Environmental Impact Bonds to finance nature-based solutions to stormwater and flooding and developing the



### Tee Thomas

Contact Tee at [thomas@quantifiedventures.com](mailto:thomas@quantifiedventures.com) to learn more



### Lake Hampton natural infrastructure, Hampton, VA

(Credit: Waggoner & Ball)



### Buffalo, NY urban green infrastructure

(Credit: Buffalo Sewer Authority)

Soil and Water Outcomes Fund, a leading ecosystem services program to incentivize farmers to implement conservation agriculture practices that sequester carbon and improve water quality.

**How Do I Learn More?**

Contact Tee Thomas at [thomas@quantifiedventures.com](mailto:thomas@quantifiedventures.com).

## SRF Resources

Highstead Insights: What's new with state revolving funds?

Feb 22, 2022

Environmental Policy Innovation Center: Financing Green Stormwater and Natural Infrastructure with Clean Water State Revolving Funds

Feb 14, 2022

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Oct 14, 2021

## Case Studies: Financing Natural Infrastructure and Water Quality Improvement



DC Water



Soil and Water Outcomes Fund



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DC Water



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Atlanta Environmental Impact Bond

**From:** lindsay@quantifiedventures.com,

**To:** ThomasFGross@cs.com,

**Subject:** QV Projects Win Awards from EPA + Environmental Finance; New SRF + Water Infrastructure Services; Novel Model to Scale Substance Use Disorder Recovery

**Date:** Wed, Apr 6, 2022 4:05 pm

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## Spring 2022 Newsletter

**QV Wins EPA's PISCES Award and Environmental Finance Award | Launching SRF Services for Underserved Communities | Scaling Access to Substance Use Recovery | New Team Members | Our Original Articles | In The News | Speaking Engagements**

## Quantified Ventures Projects Win EPA + Environmental Finance Awards

Two Quantified Ventures initiatives recently received notable awards for their innovation and impact. These accolades are a testament to the quality of the partnerships we've fostered in conservation agriculture and municipal water infrastructure to bring these impact-driven projects to fruition.



The U.S. Environmental Protection Agency recognized ReHarvest Partners, a QV Company, and the Soil and Water



The Buffalo Sewer Authority Environmental Impact Bond that QV

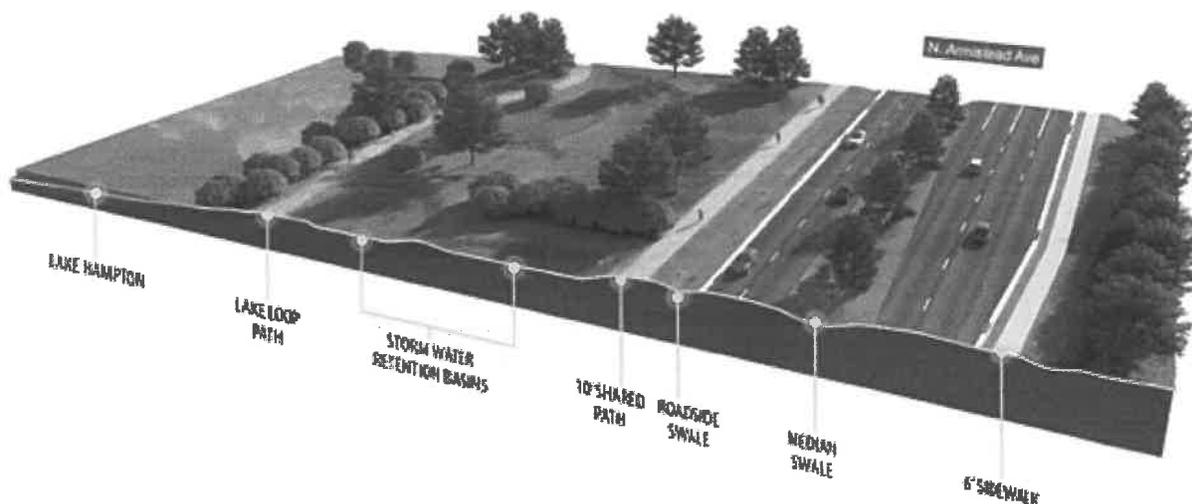
Outcomes Fund with the PISCES award for excellence in innovative financing and as an "Exceptional Project" during the **George F. Ames Performance and Innovation in the SRF Creating Environmental Success** program awards.

During the awards ceremony EPA Assistant Administrator for Water Radhika Fox noted, "This example speaks to all the innovative and flexible ways that SRFs are investing in communities."

structured was named the **U.S. Muni Green Bond of the Year** by *Environmental Finance*. The award judges noted that:

- "This issuer was able to garner strong demand through an innovative structure that combined a green bond with a sustainability linked bond (SLB) component. The pricing levels were commensurate of this despite the smaller issuance size."
- There was a "very strong impact reporting commitment including using a third party to calculate, verify and report."

## Enhancing Water Infrastructure in Underserved Communities with Clean Water + Drinking Water State Revolving Funds (SRFs)



The Infrastructure Investment and Jobs Act (IIJA) presents a once-in-a-generation opportunity to upgrade America's infrastructure. The IIJA's allocates **\$55 billion** to water infrastructure during the next five years and directs more than **\$23 billion** to Clean Water and Drinking Water SRFs.