

**Financing Sustainable Water  
Infrastructure with the State Revolving  
Fund: 2-Part Virtual Training Series**



**Part 1: August 11, 11am MT**  
**Part 2: August 18, 2 pm MT**

# Financing Sustainable Water Infrastructure with the State Revolving Fund: 2-Part Virtual Training Series



Q&A

**You ask:** 13:05  
How do I use these awesome tools?

**Joshua Jones answered:** 13:06  
You are already using one of the most awesome tools. We'll discuss the rest right away.

Please input your question

Send Anonymously Send

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WaterNow works to advance transformation in the urban water sector to accelerate the widespread adoption of resilient and environmentally sustainable strategies.

We do this as a national network for local water leaders and decision makers, empowering them with the technical assistance, resources, and tools they need to implement innovative One Water drinking water, stormwater, and wastewater solutions in their communities.



# About EFCN

The **Environmental Finance Center Network (EFCN)** is a university- and non-profit-based organization creating innovative solutions to the difficult how-to-pay issues of environmental protection and water infrastructure.

The EFCN works collectively and as individual centers to address these issues across the entire U.S, including the 5 territories and the Navajo Nation. The EFCN aims to assist public and private sectors through training, direct professional assistance, production of durable resources, and innovative policy ideas.



# Certificate of Completion

This session has **NOT** been submitted for pre-approval of Continuing Education Credits, but eligible attendees will receive a certificate of attendance for their personal record.

## **To receive a certificate:**

- You must attend the entire session
- You must register and attend using your real name and unique email address - group viewing credit will not be acceptable
- You must participate in polls
- Certificates will be sent via email within 30 days

If you have questions or need assistance, please contact [smallsystems@syr.edu](mailto:smallsystems@syr.edu).

# Agenda

## *Session 2: Digging Deeper & Connecting to Assistance – From Planning to Funding*

- Meet Today's Speakers
- Diving Deeper into the Colorado SRF
- Case Study: Upper Thompson Sanitation District
- Innovative Financing for Source Water Protection Projects
- Q&A



# Today's Speakers



Sean Oliver  
Project Manager  
CDPHE



Emma Troller  
Project Development Manager  
Blue Forest



Austin Reichel  
Financial Analyst  
CWRDPA



Phil Saksa  
Co-Founder & Chief Scientist  
Blue Forest



Suzanne Jurgens  
District Manager  
Upper Thompson  
Sanitation District



Will Sollish  
Program Manager  
WaterNow Alliance

# Who's in the room?

0%  
City council member

0%  
Tribal government officer

18%  
Special district board member

59%  
Utility staff

0%  
State agency staff

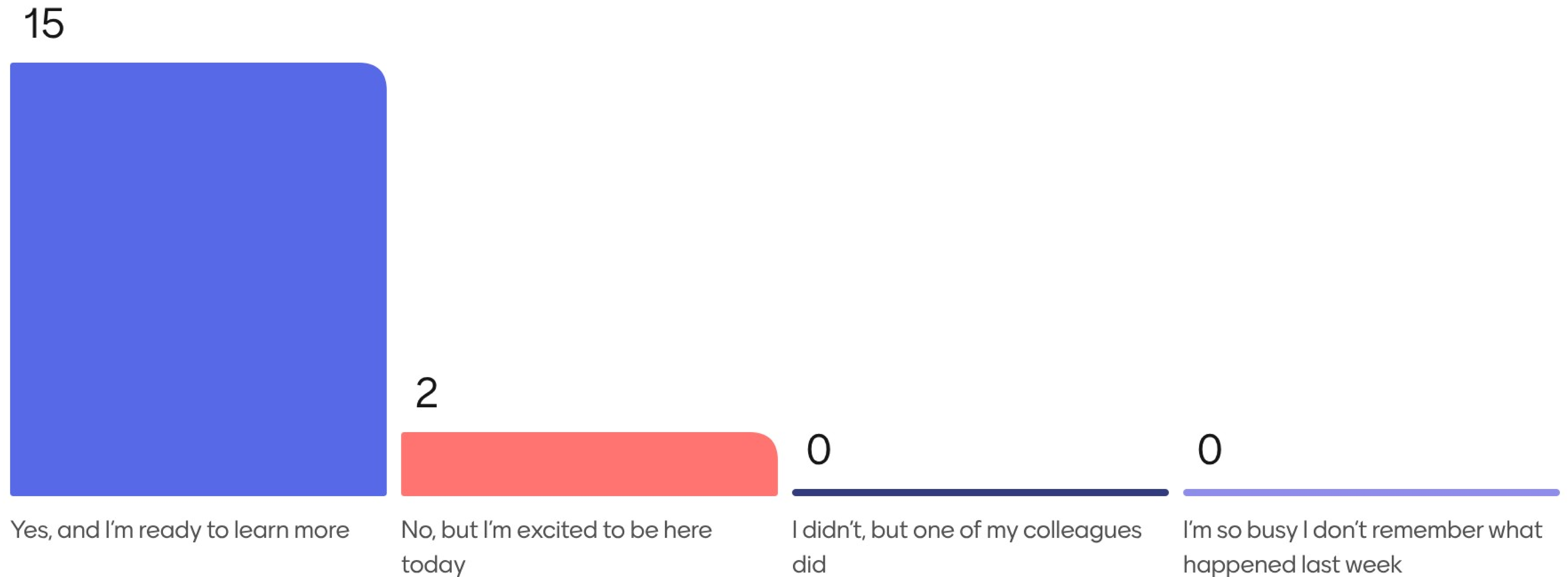
0%  
Federal agency staff

12%  
NGO staff

0%  
Academic

12%  
Private sector

# Did you attend Part 1 of our webinar series last week?





# **Part 1 Recap: SRF 101 & Setting the Stage – Laying the Foundation for Success**

**Will Sollish**

Program Manager  
WaterNow Alliance

# What is the State Revolving Fund?



- **Low-interest, below market rate loans** to design and build water, wastewater and stormwater projects.
  - Terms up to 30 years
  - Interest rates: **1.5% – 3.5%**
- **Drinking Water Revolving Fund (DWRF)**
  - Drinking water infrastructure
- **Water Pollution Control Revolving Fund (WPCRF)**
  - Wastewater, stormwater, and water quality infrastructure

# Colorado State Revolving Fund Technical Assistance

- **Drinking Water Revolving Fund (DWRF)**
  - **Water Pollution Control Revolving Fund (WPCRF)**
- GSI, indoor and outdoor water efficiency, water reuse, source watershed protection, lead service line replacement, and more!
- WaterNow helps Colorado communities secure financing for sustainable and innovative water infrastructure projects

New  
WaterNow  
Program!

Sustainable Water  
Projects

Application  
Process

Support for  
DACs

Technical  
Assistance

Resources &  
Tools



# Environmental Finance Center Network

## Supporting Rural, Small & Tribal Wastewater Systems' Access to Infrastructure Financing



About Us ▾

Training & Events

Resources ▾

Our Initiatives

Contact

Get Help



## Get Help

### Tackle Your Technical, Managerial, and Financial Challenges: Services from the EFCN

We offer free, customized support services to water and wastewater systems, decentralized systems, local governments, and others seeking technical, managerial, and financial (TMF) solutions to environmental infrastructure challenges. Our team of experts work hand-in-hand with operators, elected officials, utility directors, and other utility staff to identify barriers and address challenges head-on.

Request Help Now

<https://efcnetwork.org/get-help/>

# Technical Assistance Available to Colorado Communities



- WaterNow Alliance’s Colorado State Revolving Fund Technical Assistance Program and Dashboard: <https://tapin.waternow.org/colorado-state-revolving-fund-technical-assistance/>
- Environmental Finance Center Network (EFCN): <https://efcnetwork.org/get-help/>
- EPA Water Technical Assistance (TA): <https://www.epa.gov/water-infrastructure/water-technical-assistance-waterta>
- Environmental Finance Centers (EFC): <https://www.epa.gov/waterfinancecenter/efcn>
- National Rural Water Association (EPA Region 8 EFC): <https://region8efc.nrwa.org/>
- Rural Community Assistance Corporation (RCAC): <https://www.rcac.org/>
- Colorado Rural Water Association (CRWA): <https://crwa.net/>
- Colorado Department of Public Health & Environment (CDPHE): <https://cdphe.colorado.gov/dwtrain>
- National League of Cities (NLC) Local Infrastructure Hub:
  - Drinking Water SRF Bootcamp: <https://localinfrastructure.org/application-bootcamp/dwsrf/>
  - Clean Water SRF Bootcamp: <https://localinfrastructure.org/application-bootcamp/phase-8-cwsrf/>



Tell us which TA providers you've worked with!

none

sgm

none yet

crwa



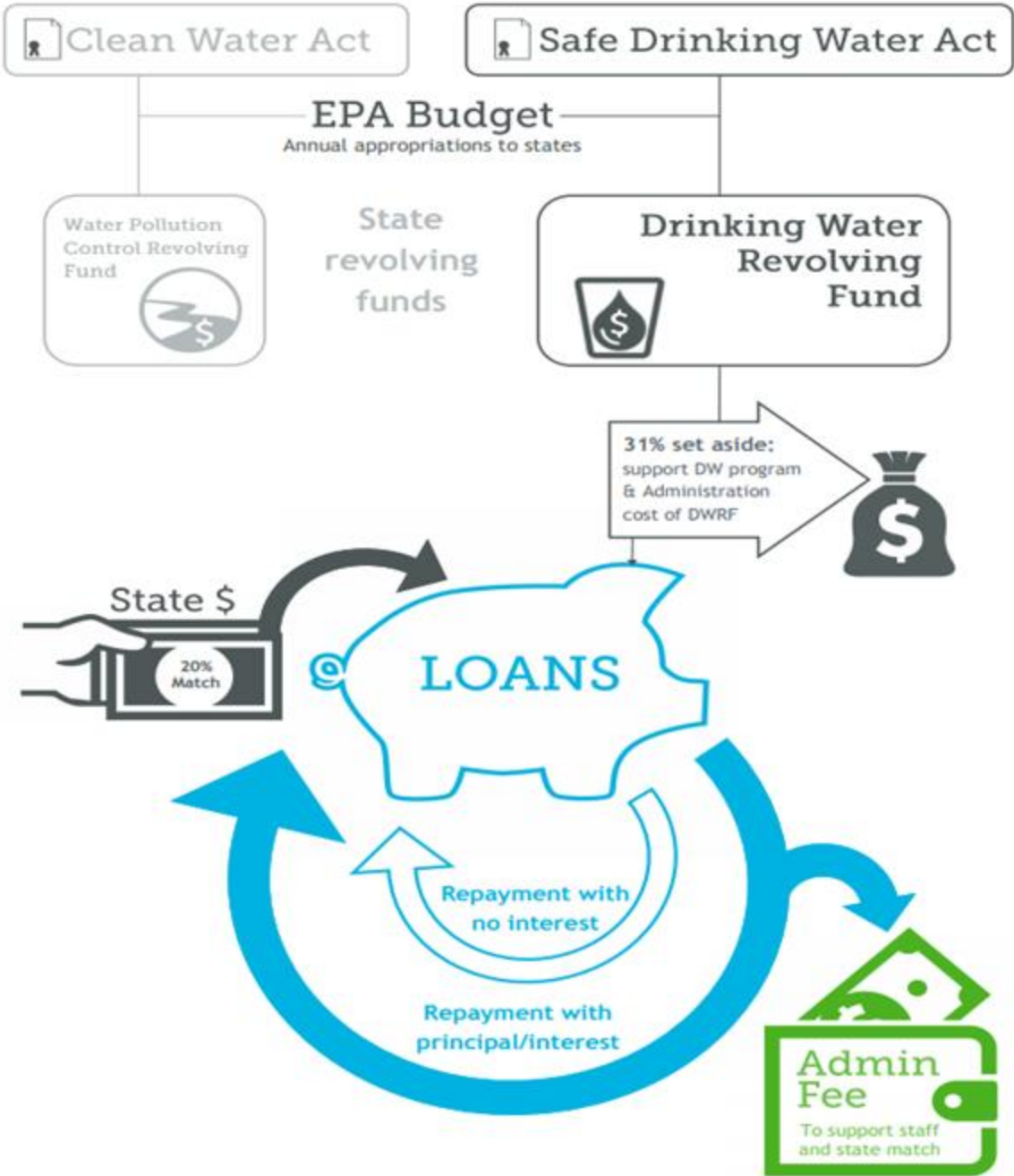
# Deep Dive into Colorado's SRF Program

## Sean Oliver

Project Manager  
Colorado Department of Public  
Health Environment

## Austin Reichel

Financial Analyst  
Colorado Water Resources and  
Power Development Authority



# Colorado's State Revolving Fund Program Requirements, Application and Closing

# SRF Major Program Milestones

Eligibility Survey



Pre-Qualification



Project Needs  
Assessment (PNA)



Loan Application



Loan Execution



Construction

## Environmental Review

- Preliminary Environmental Determination
- Final Environmental Determination
- Environmental Clearance

## Design Review

- Design Submittal
- Design Review/ RFI
- Design Approval



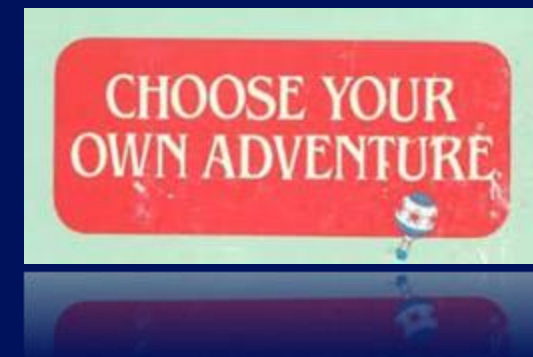
# Environmental Review

- At Pre-Qual - Preliminary Env. Determination
- At Project Needs Assessment - Final Env. Determination
  - Categorical Exclusion (CatEx)
  - Environmental Assessment (EA)
    - Finding of No Significant Impact (FONSI)
  - Environmental Impact Statement (EIS)
- Public Participation and Comment Periods
  - All projects - Public meeting with public notification 30 days prior
  - EA/FONSI - State publishes FONSI with 30 day comment period.
- **NO CONSTRUCTION CAN BEGIN UNTIL ENVIRONMENTAL CLEARANCE IS COMPLETE.**



# Design Review

- Pre-Qual: Preliminary Design Review (eligibility review)
  - Prior or during development of PNA
  - Submit for PELS / Water Quality Planning Targets / Permit considerations
  - Site Application
- Project Needs Assessment:
  - TMF approval for Drinking Water Projects
  - Identify if eligible for Streamline Review and/or Self-Certification
  - GPR Review and Approval
  - PDR Review & Approval
- Loan Application: Submit Final Plans and Specs.
- Loan Execution: Final Design Approval required.



# Major Program Milestones

Eligibility Survey



Pre-Qualification



Project Needs  
Assessment (PNA)



Loan Application



Loan Execution



Construction

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- Preliminary Environmental Determination
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- Design Approval



# Approval Process

- Approval by CWRPDA Board
- Approval Letter and Draft Loan Agreement sent out
- Resolution or Ordinance needed to take on Loan (CWRPDA reviews prior to adoption)
- General Counsel and Bond Counsel Opinion required to close on the Loan.
- Some loans may require a Parity Certificate if same pledge and existing debt is there.
- Closing dates and times vary per project. Average loan closing time approximately 6-8 weeks from approval of the Loan. Leveraged loans will have a bond schedule timeline to get to closing.



# Post Loan Closing

- Form of Requisition
- Semi-Annual Payments
- Audits options to meet loan compliance annually due to the CWRPDA/the Authority
  1. Audit/s can be sent to [audits@cwrpda.com](mailto:audits@cwrpda.com)
  2. Or audit/s submitted to the Office of the State Auditors (OSA) and accepted by the OSA
  3. Or audit/s posted to municipal government or private non-profits website
- Most loan covenants checked in audit/s



# Construction Process

1. Project Bidding
2. Pre-Construction
3. Construction
4. Project Completion



# Major Program Milestones: Construction

## Build America, Buy America (BABA) Act

- All manufactured products used in the project are produced in the United States, greater than 55 percent of the total cost
- All construction materials are manufactured in the United States. (plastic, composite building materials, polymers used in fiber optic cables, glass, lumber and drywall)
- American Iron and Steel

## American Iron and Steel

- All iron and steel products that are 50% or greater by cost must be produced in the U.S.A.
- This includes: pipes, fittings, municipal castings, hydrants, tanks, flanges, pipe clamps, valves, structural steel, reinforced precast concrete, construction materials (roofing, ductwork, doors, fasteners, etc).

## Davis Bacon Wage

- Lock in the wage decision during bidding.
- Certified payrolls checked against wage decision.
- Interviews (sample of workers from GC and subs).



# Co-Funding

## Challenges

- Timing/order of applications/execution
- Program requirements
- Savings not guaranteed
- Potential need for interim/bridge funding
- Effort
- Additional administrative duties



## Keys to Success

- Early planning: Get all potential funders to the table early in the planning process
- Communication: Regular communication between applicant and funders

# Additional Funding Resources

Available Financial Assistance Guide: <https://dlg.colorado.gov/colorado-water-funding-guide>

## DOLA

Energy and Mineral Impact Assistance Fund

Community Development Block Grant

Regional Manager map and contact information: <https://dlg.colorado.gov/regional-managers>

## WQCD

Water Quality Improvement Fund Grant

Small Communities Grant

Stay informed: <https://cdphe.colorado.gov/glu>

## CWRPDA

Water Revenue Bond Program

Small Hydropower Loan Program

<https://www.cwrpda.com/>

## CWCB

Water Project Loan Program

Numerous grant programs

<https://cwcb.colorado.gov/funding>

## USDA

Grants and loans for drinking water and wastewater projects

Emergency Community Water Assistance Grant

<https://www.rd.usda.gov/programs-services/water-environmental-programs>



Think you have a project?  
Need help figuring out a project?  
Other assistance needed?

For General Inquiries and Questions  
Please Contact:

[cdphe\\_grantsandloans@state.co.us](mailto:cdphe_grantsandloans@state.co.us)

Stay Informed



## Websites

WQCD - <https://cdphe.colorado.gov/glu>

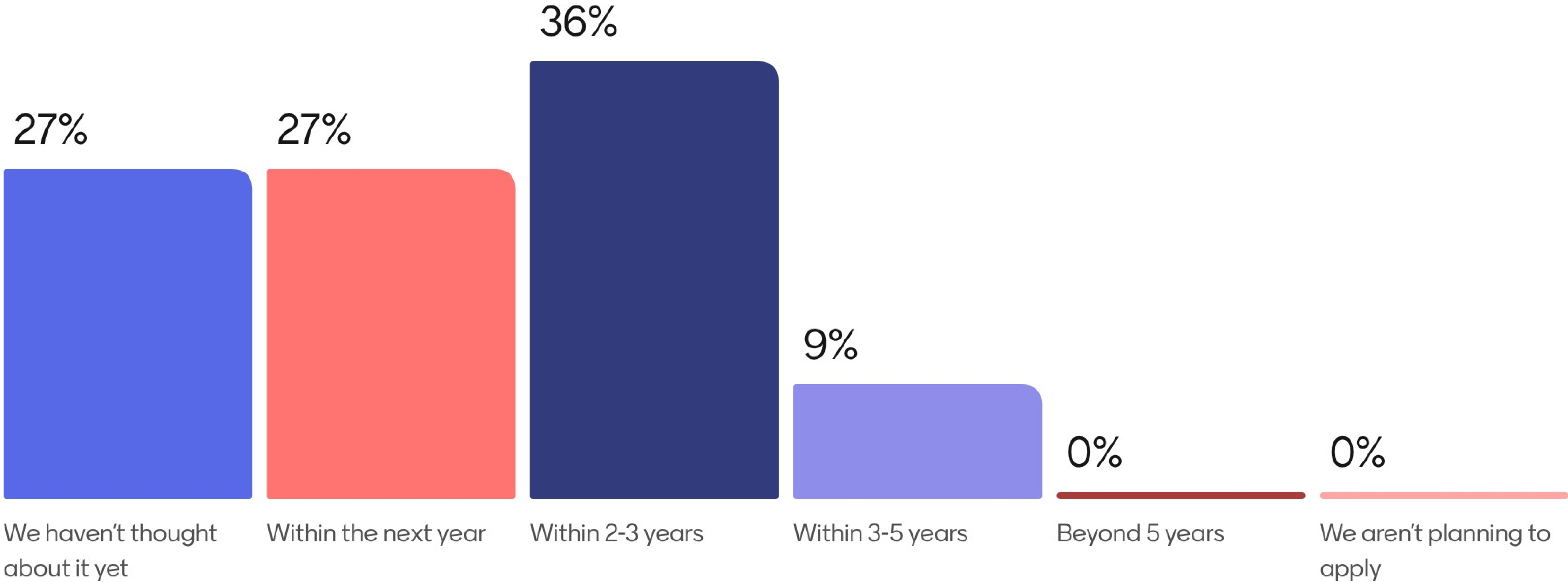
CWRPDA - <https://www.cwrpda.com/>

DOLA - <https://cdola.colorado.gov/>

Colorado Environmental Online  
Services System (CEOS) -  
<http://ceos.colorado.gov/CO/CEOS/Public>



# When is your community thinking about applying for a SRF loan?





# Case Study: Upper Thompson Sanitation District, CO

**Suzanne Jurgens**

District Manager

Upper Thompson Sanitation District

Financing Sustainable Water  
Infrastructure  
With the  
State Revolving Fund

Digging Deeper  
& Connecting to Assistance –  
From Planning to Funding

Upper Thompson Sanitation District  
Estes Park, Colorado



August 18, 2025

# ABOUT UPPER THOMPSON

- Special District formed in 1971
- Provide wastewater collection and treatment
- 17 full time employees
- Serve 5,000 residential and commercial customers
- 2 MGD treatment facility
- 93 miles of collection system
- 44 square mile service area
- Aging infrastructure
- Unable to meet impending water quality standard discharge regulations
- Began planning a new WRF more than 10 years ago



# PROJECT CHALLENGE:

## FINANCING THE CONSTRUCTION OF A NEW WRF

- Revenue derived solely from service fees and system development charges
- No mill levy
- Available funds are insufficient to cover the costs of constructing a new WRF

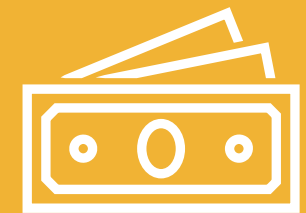
Secured two loans to pay for the cost of building the new WRF with a maximum \$100M construction budget.



### FUNDING SOURCES

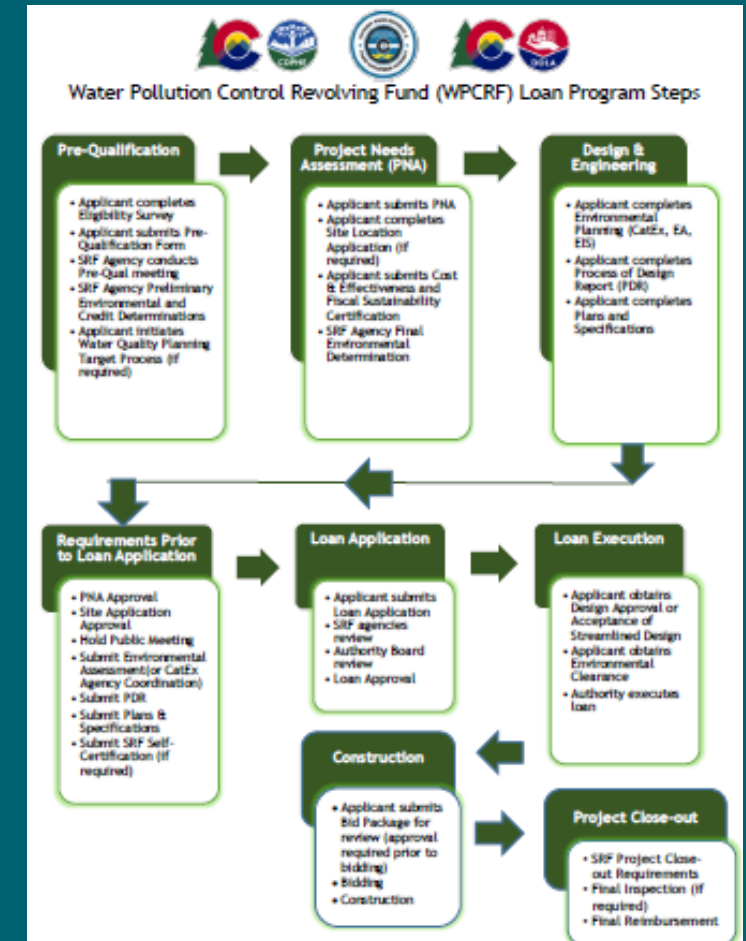
Loan from CWRPDA WPCF  
= \$18M

Loan from US EPA WIFIA  
= \$96M



# SECURING FUNDING ONE SMALL STEP AT A TIME:

- ❖ Start now
- ❖ Attend SRF program presentations and meet the CRWPDA and CDPHE teams
- ❖ Develop fluency with the loan program steps
- ❖ Complete eligibility survey by June 30 of each year (whether planning for funding or not)
- ❖ Identify grant opportunities in addition to the loan program
- ❖ Invite CWRPDA to present to staff and Board of Directors
- ❖ Initiate project development
- ❖ Begin to execute tasks outlined in each of the loan program steps
- ❖ Build the team: accountant, engineer, general counsel, financial advisor, bond counsel, public relations, rate consultant



- ❖ Engage key personnel
- ❖ Organize and enhance internal business processes
- ❖ Align the financial and budgetary strategy



- ❖ Provide documentation to support the application (budget, audits, etc.)
  - ❖ Confirm environmental and permitting requirements are complete
  - ❖ Utilize the expertise of the team to understand and navigate each step and gather all required documentation to finalize the loan
- ❖ Keep the professional services team informed and involved as each piece of the program moves forward
  - ❖ Upon closing of the loan, familiarize yourself with loan details and covenants
- ❖ Comply with reporting and disbursement requirements
  - ❖ Update rate analyses and frameworks to support rate covenant requirements
  - ❖ Sustain outreach efforts to inform customers about the status of the project and associated funding obligations



## PROJECT STATUS: “CONSTRUCTION” STEP OF WPCRF LOAN PROGRAM

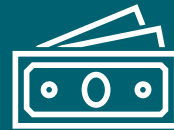
- In early 2024, at 60% design, it was determined the project was not within budget
- Value engineering was performed on entire project – WRF, 2 Lift Stations, and Force Main
- Project was segmented into three bidding components
- WRF component was bid in March 2025
- Upon receipt of the bid on the WRF component, it was determined the entire project was not within budget
- As result, a Notice of Award for WRF component was not issued
- Currently executing value engineering of the WRF component in partnership with low bid contractor
- In November 2025, at 20% redesign of WRF, it will be determined if construction of WRF is within budget and final redesign will proceed with construction scheduled in 2026



# FUNDING HAS NOT BEEN THE BIGGEST CHALLENGE



The CWRPDA and CDPHE funding partners have demonstrated exceptional commitment to the project, offering flexible support in the face of challenges to help ensure its successful completion.



# Q&A



**Upper Thompson  
Sanitation District**

Suzanne Jurgens, District Manager

Email: [Suzanne@utsdco.gov](mailto:Suzanne@utsdco.gov)

Phone: 970-586-4544

Website: [utsd.colorado.gov](http://utsd.colorado.gov)





**THANK YOU!**



# Innovative Financing for Source Water Protection Projects

**Emma Troller**

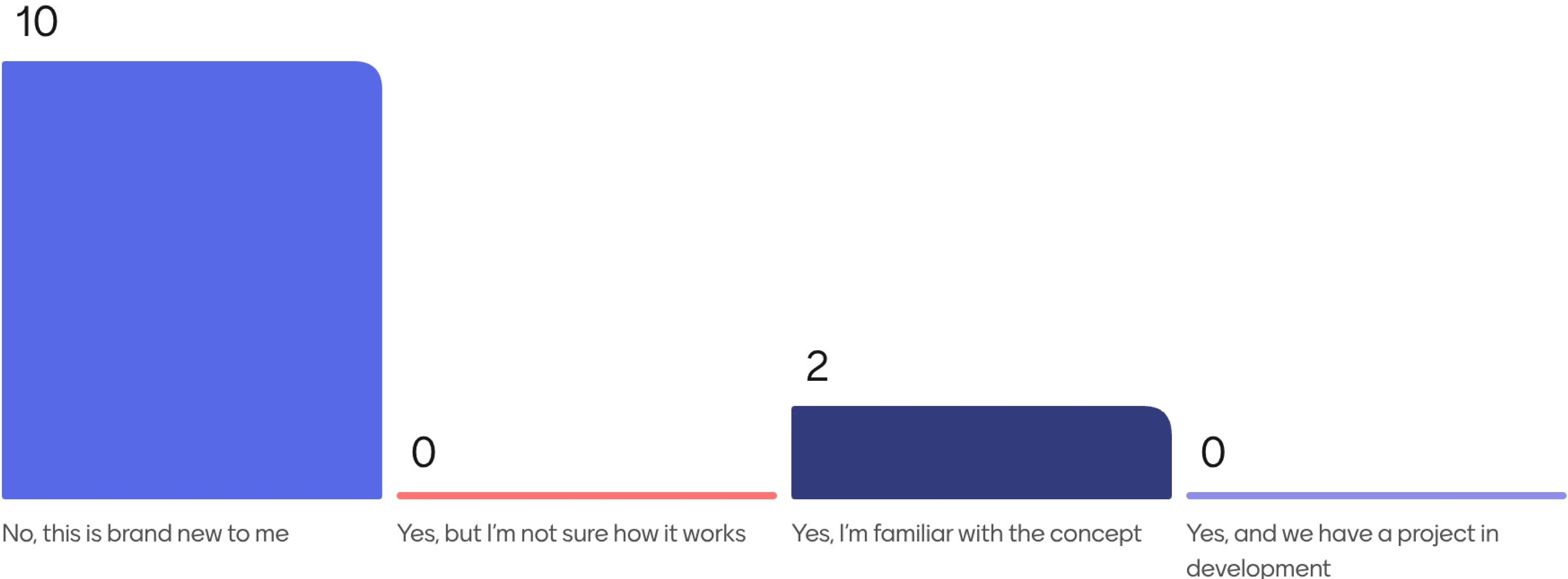
Project Development Manager  
Blue Forest

**Phil Saksa**

Co-Founder & Chief Scientist  
Blue Forest

WATERNOW ALLIANCE

# Have you heard of a Forest Resilience Bond (FRB) before?





Blue Forest

# Blue Forest and the Forest Resilience Bond

July 2025

[blueforest.org](https://blueforest.org)

Science + Finance + Collaboration

# About Blue Forest

*Accelerating ecological restoration through conservation finance*

## Our Areas of Expertise:

- **Science:** Quantifying the environmental and economic benefits of forest and watershed restoration
- **Finance:** Creating financeable projects to increase the pace and scale of wildfire risk reduction
- **Collaboration:** Supporting community partnerships for long-term natural resource stewardship



# How Blue Forest Partners With Utilities

1

**Exploring and identifying shared interests** between Blue Forest/WRI, utilities, and land managers



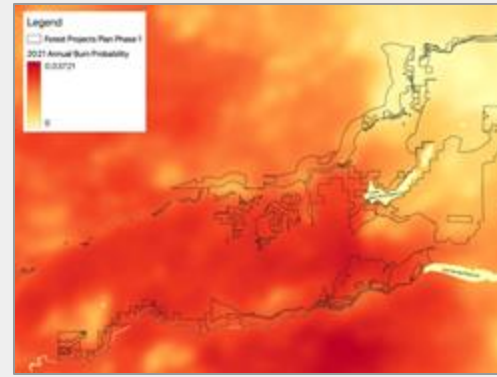
2

**Understanding adjacency** of utility assets to landscape restoration projects and anticipated benefits



3

Work with utility staff to understand, assess, and **quantify environmental and economic benefits** of restoration projects



4

Collaborate with utility on **structuring funding agreements** for restoration projects if interests align



Example utilities we've worked with: Yuba Water, PG&E, Metropolitan Water of Southern California, CA Department of Water Resources, East Bay Municipal Utility District, Chelan County PUD, Salt River Project, Truckee Meadows Water Authority



# Goals of Conservation Finance



## Larger Projects

Leveraging new funding sources to support landscape-scale active management



## Faster Projects

Streamline project management and contractor payments to enable quicker implementation



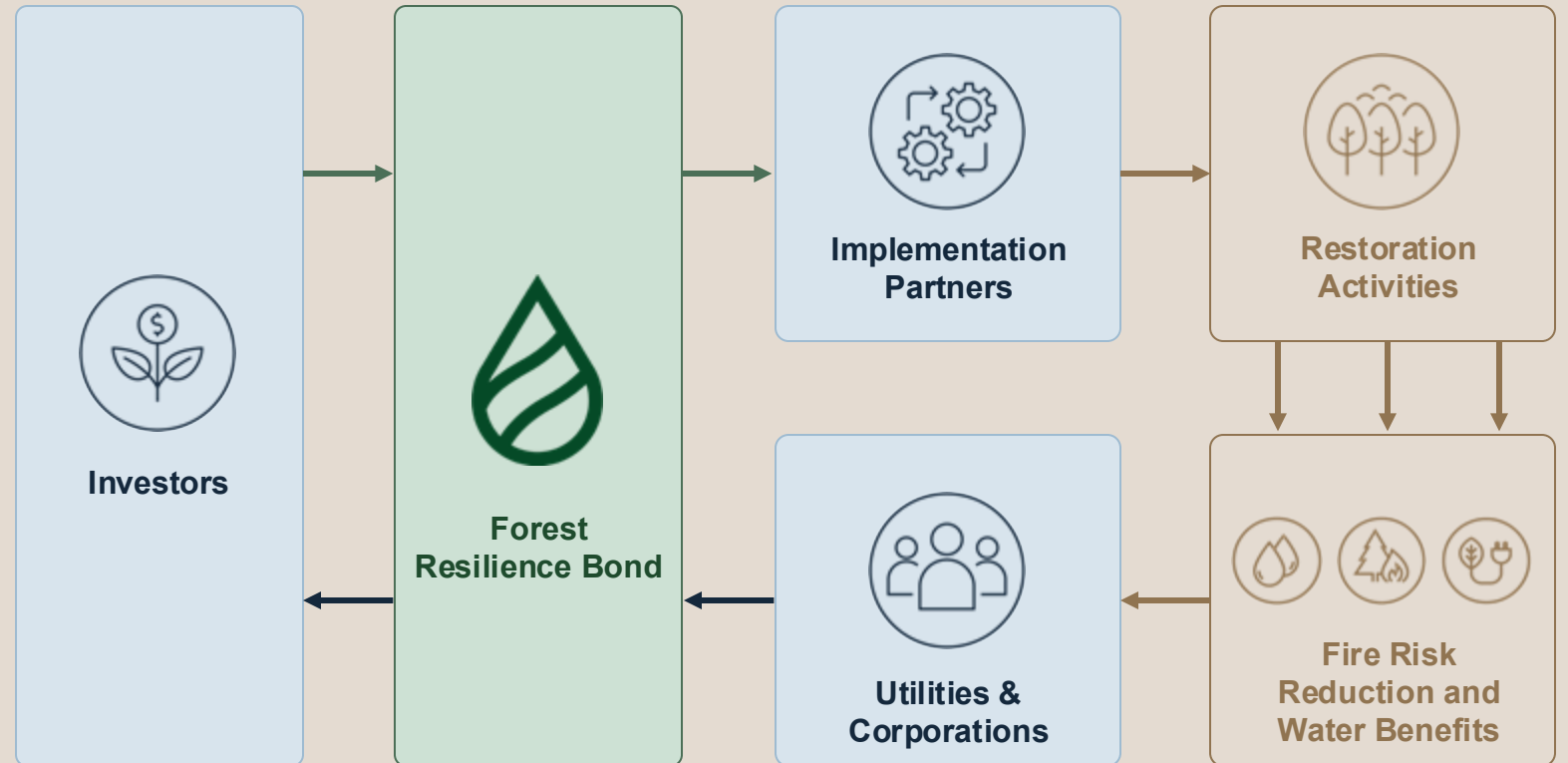
## Capacity Building

Promote partnership opportunities, support rural economies, and leverage funds



# The Forest Resilience Bond (FRB)

The Forest Resilience Bond is an innovative public-private partnership that deploys private capital to **ease cash flows** and **add new revenue streams** to fund restoration work.



→ Outbound Cash Flow    → Inbound Cash Flow    → Resource Flow



# Roles & Responsibilities of Key Partners



## Land Manager

- Plan & approve projects
- Identify and select implementation partner(s)
- Oversee implementation



## Implementation Partner

- Implement or contract out planned actions, submitting invoices to the FRB
- Lead applicant on state grants, collect funds from grantors



## Utilities & Corporations

- Work with Blue Forest and Land Managers to identify priority areas
- Cost share funding
- Collaborate with Blue Forest on benefit evaluation process *if needed*



## Blue Forest

- Engage project stakeholders through ecological and economic modeling
- Arrange financing and contracts for project



# Multiple Benefits of Forest Restoration



# Multiple Benefits of Forest Restoration

## Water Supply Enhancement



*Reduced ET*

## Water Quality Protection



*Fire and Erosion  
Risk Reduction*

## Infrastructure and Community Protection (Landscape Resilience)



*Asset and Liability  
Risk Reduction*

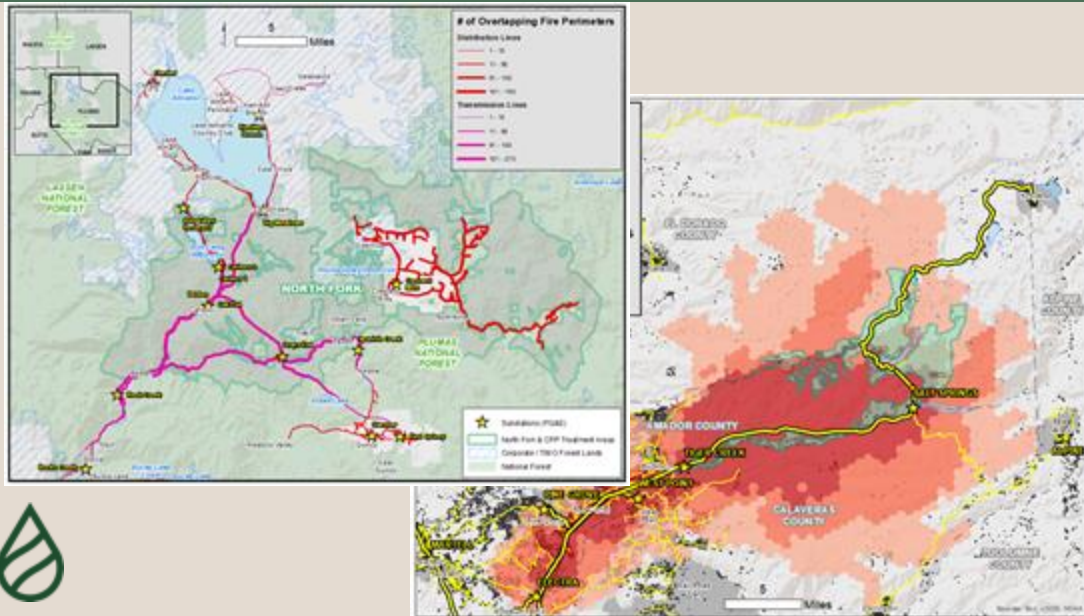


# Wildfire Risk Assessment

## Project Prioritization & Area of Impact

*Evaluate avoided ignitions from a portfolio of projects and the wildfire footprints impacting utility assets*

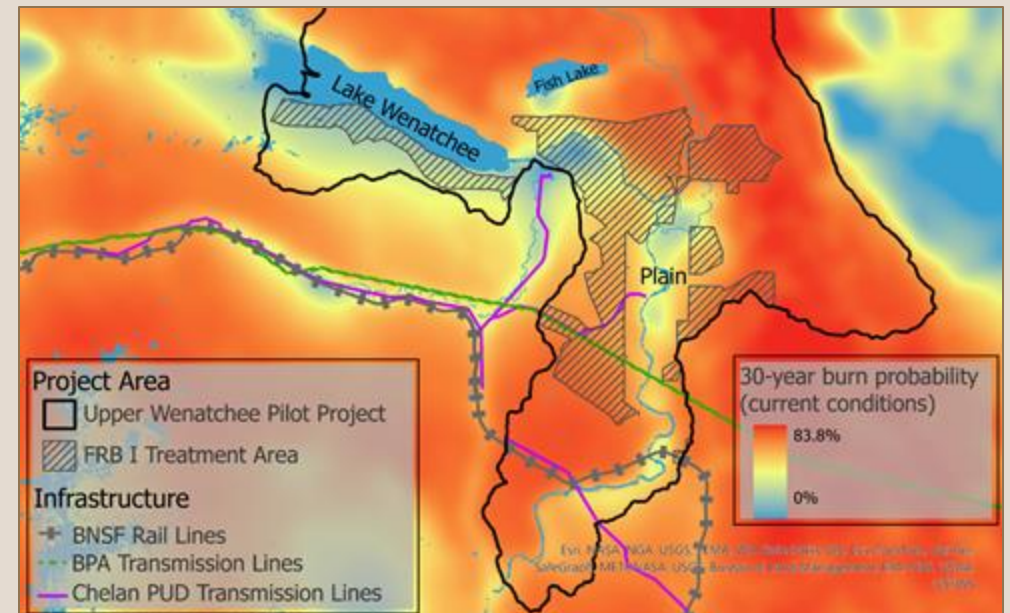
Example: FSim analysis in the Upper Mokelumne



## Post-treatment Change in Fire Risk



*Pre- and post-treatment wildfire risk analysis to utility infrastructure.*

Example: Wildfire analysis in Wenatchee, WA



# FRB Projects in the Western U.S.



 Launched  
 In development

State	Project	Land Manager	Implementation Partner
<b>Completed</b>			
CA	Yuba I FRB	Tahoe NF	National Forest Foundation
<b>Implementation</b>			
WA	Upper Wenatchee I FRB	Okanogan-Wenatchee NF	Chelan County
OR	Rogue Valley I FRB	Rogue River-Siskiyou NF + adjacent lands	Lomakatsi Restoration Project
OR/CA	SONEC I WRB	Private working lands	Pheasants Forever
CA	North Feather I FRB	Plumas NF + adjacent lands	Sierra Institute
CA	Yuba II FRB	Tahoe NF	National Forest Foundation
CA	Upper Mokelumne I FRB	Eldorado NF	Upper Mokelumne River Watershed Authority
<b>Contracting</b>			
CA	Colfax I FRB	Shingle Springs Band of Miwok Indians, BLM	Koy'o Land Conservancy
CA	Community Protection I FRB	Plumas NF	National Forest Foundation
CA	Butte Fire Safe I FRB	Private and State lands	Butte County Fire Safe Council
CA	Yuba Aspen and Meadows I FRB	Tahoe NF	SYRCL



# Thank you for your time

**Emma Troller**  
*Project Development Manager*  
emma@blueforest.org

**Phil Saksa**  
*Chief Scientist*  
phil@blueforest.org



The background of the slide is a dense, overlapping collage of rectangular sticky notes in various colors including shades of blue, teal, green, and purple. Each sticky note features a large, dark blue question mark. The notes are scattered across the frame, creating a textured and busy visual effect.

# Q&A

# JOIN WATERNOW

LEARN MORE AND SIGN UP



[www.waternow.org/join-the-leaders](http://www.waternow.org/join-the-leaders)





Please Complete the Post-Training Survey!

# THANK YOU TO OUR FUNDERS & PARTNERS!



**COLORADO**

Colorado Water  
Conservation Board

Department of Natural Resources



SOUTHWEST  
ENVIRONMENTAL  
FINANCE CENTER

# THANK YOU!



## For more information email:

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Suzanne Jurgens, [suzanne@utsd.org](mailto:suzanne@utsd.org)  
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Phil Saska, [phil@blueforest.org](mailto:phil@blueforest.org)  
Will Sollish, [wsollish@waternow.org](mailto:wsollish@waternow.org)



## Resources:

[waternow.org](http://waternow.org)  
[tapin.waternow.org/toolkit](http://tapin.waternow.org/toolkit)  
[efcnetwork.org/get-help/](http://efcnetwork.org/get-help/)  
<https://tapin.waternow.org/colorado-state-revolving-fund-technical-assistance/>