
External Funding //

Connecting Water Projects to External Funding to Reduce Overall Project Costs

Brown AND Caldwell :



Existing funding for Water Infrastructure is falling short

Annual Investment Needs for Water Infrastructure is **\$123B**



Annual Investment Gap for Water Infrastructure is **\$82B**

New project drivers, priorities and proponents opening new opportunities

More and more agencies are seeking external funding sources to move projects forward, to address new demands

New Project Drivers

PFAS, Lead Line, Climate Resilience (drought, flood, water supply, GHG reductions), Biosolids, Nutrients, Stormwater, Clean Energy / Carbon Sequestering, Solar, Pre-disaster mitigation, Digital Cybersecurity, Regional Projects, Multi-benefit projects (Flood and Stormwater)

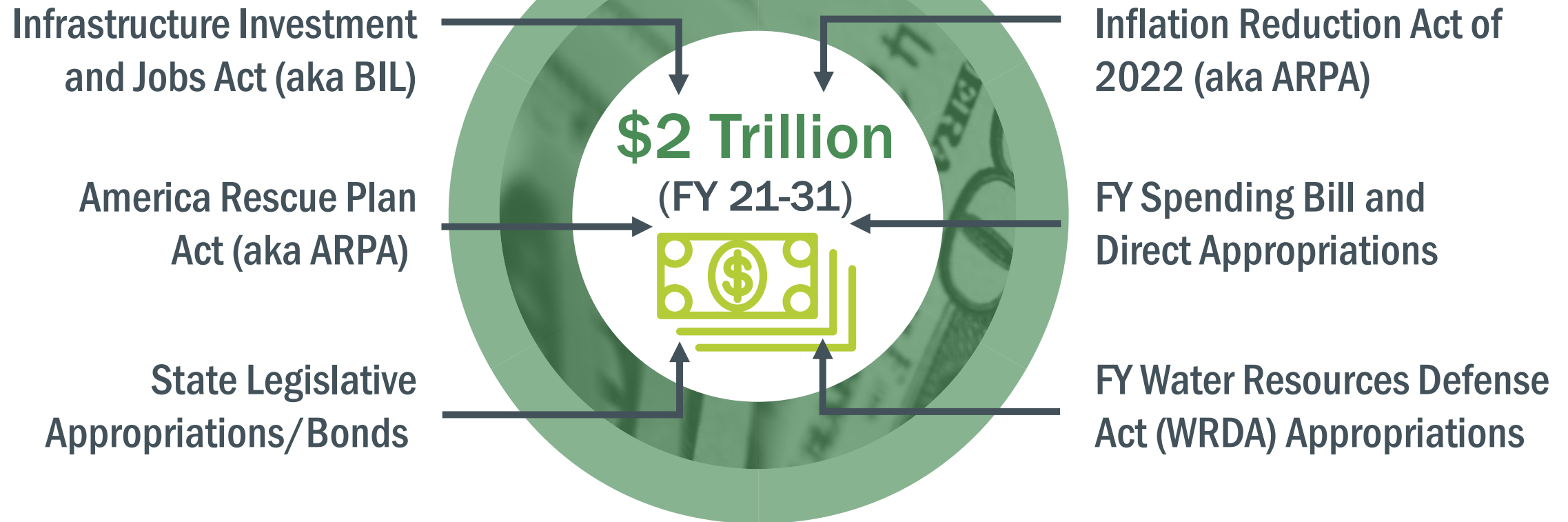
Project Proponents

- Utility Projects
- Multi-Agency Projects
- DAC / Underserved Communities
- Tribal
- Private (Intel, Chevron, Mining, etc)



Water infrastructure funding appropriations

IIJA and BIL provide a Tremendous Opportunity for Water Infrastructure



External funding opportunities

Funding Mechanisms



External Funding Opportunities

State Loans and Grants



Other Stated Based Programs (Varied)

Federal



FEMA



Federal & State



Federal and State Appropriations and Earmarks

Alternate Mechanisms

Private / Water Stewardship
Public Private Partnerships
Incentives

State Agencies With Funding For Water and Wastewater Projects

Oregon



Washington



Idaho



External Funding (Federal and State): *Is it worth it?*

Project Priority

- Grant
- Loan
- Direct Inv.
- Varies

Funding Agency

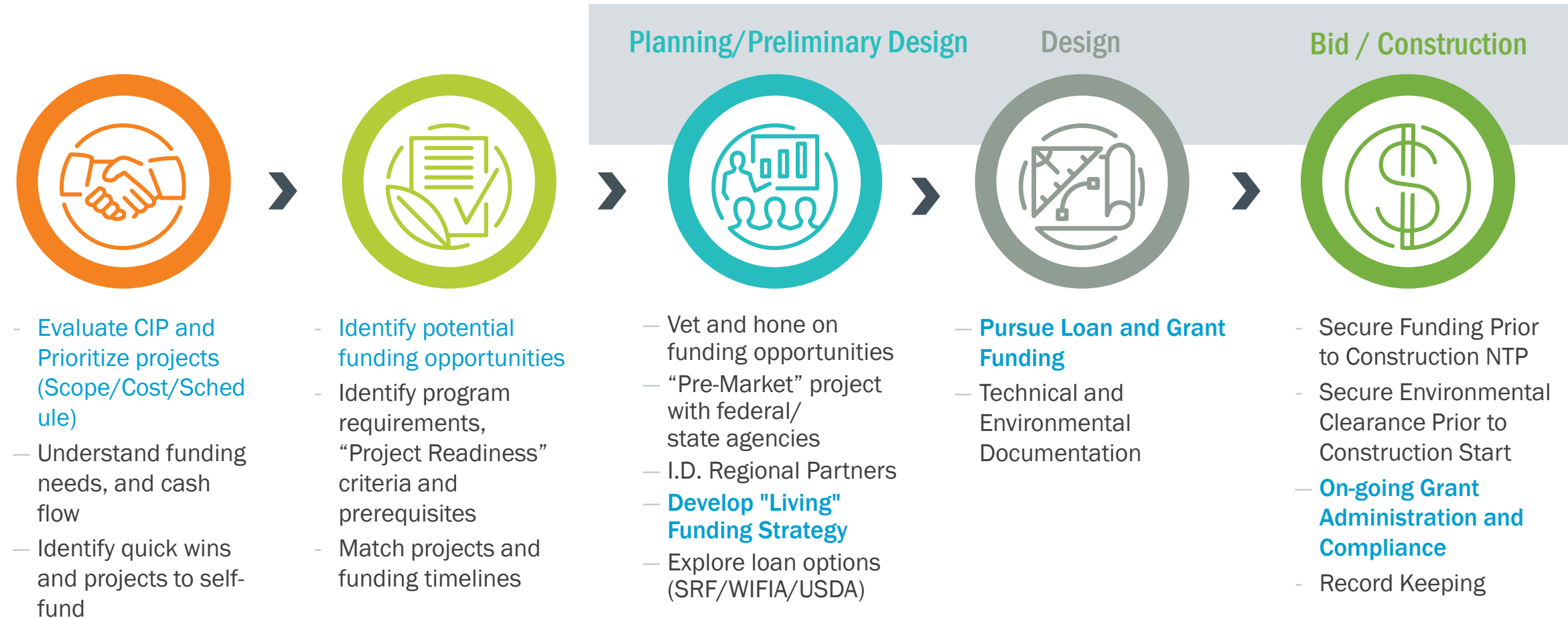
	Water /WW Infrastructure	Stormwater/ Nature Based Solutions/ Non-point Source	Flood Mitigation	Source Water Protection and Fire Resiliency	Recycled Water / Desalination / Water Storage	PFAS	Lead Line Inventory and Replacement	Climate Change/ Drought Resiliency	Biosolids/ GHG/ Carbon Sequestering Energy Efficiency	Pre-Disaster / Disaster Mitigation	Septic Conversion Consolidation	Cybersecurity
FEDERAL AGENCY FUNDING PROGRAMS												
EPA	● ●	● ●	● ●	● ●	● ●	● ●	● ●	●	● ●	●	● ●	●
U.S. Bureau of Reclamation	●	●		●	●			●				
U.S. Dept. Of Energy	●								●			
U.S. Army Corp of Engineers	●	●			● ●	● ●						
Federal Emergency Management Agency	●	●	●	●				●		●		
National Oceanic Atmospheric Assoc								●	●			
Treasury (Tax Credits)									●			
Dept of Homeland Security												●
Congressional Directed Spending	●	●			●	●	●	●	●	●		
State SRF Programs	● ●	● ●	● ●	●	● ●	● ●	● ●	● ●	● ●	● ●	● ●	●
PFAS Settlements						●						
Private Sector		●			●							
State Programs	●	●	●	●	●	●	●	●	●	●	●	●

External funding opportunities

Connecting Projects....How to Increase Success at Securing External Funding



Funding activities start well before design and continues through construction



Funding Strategy Matrix

Identify and Evaluate External Funding for project "Fit"

Colorado River Indian Tribes (CRIT) – Funding Source Summary
Updated Jan. 2023

Program	Agency	Type	Description
Water Infrastructure Finance and Innovation Act (WIFIA)	U.S. Environmental Protection Agency (EPA)	Loan	Low-interest financing mechanism for wastewater, stormwater, green infrastructure, alternative water supply, aquifer recharge, and water conservation projects. Provides up to 49% of the total project cost. Maximum loan term is 35 years from start of repayment. Interest rate is equal to the US Treasury rate plus 100 basis points. Two step application process. Announcement released in April 2022. Pending reviews and legal review. FY22 lending capacity is \$5 billion. Starting September 6, 2022.

Section 219: Environmental Infrastructure Program
U.S. Army Corps of Engineers (USACE)
Grant
Section 219 authorizes communities, water and water-related environmental development projects. Program requires the application to be reviewed and approved by the Army Corps of Engineers. The application is required followed by a...

Program	Agency	Type	Description	Deadlines/Next Steps	Project Relevance
Drought Response Program	U.S. Bureau of Reclamation (USBR)	Grant	Drought Resiliency Project funding is for planning and implementation projects building long-term resiliency to drought and reduce the need for emergency response actions that are identified in a Drought Contingency Plan. Drought contingency planning. Provides grant funding up to \$200,000 to support agencies with the development of a Drought Management Plan or to update an existing Drought Management Plan. Grant funding requires a 50% cost share. Drought resiliency projects building long-term resiliency to drought and reduce the need for emergency response actions that are identified in a Drought Contingency Plan. Projects eligible for funding must serve to increase the resiliency of the community through water management, implementation of water conservation measures, transfers, or exchange of water rights. Types of projects include: storage reservoir construction, water conservation, drought, requires apply (NEPA, AIS).	Grant opening announcement for year 2023 is pending. Contact Program Coordinator Sheri Loooper at 303-445-2232 or slooper@usbr.gov or https://www.usbr.gov/drought/	Water and wastewater grants for projects that improve community's water resiliency.

Program	Agency	Type	Description
Title XVI WIIN-Water Reclamation and Reuse	U.S. Bureau of Reclamation (USBR)	Grant	Through the Title XVI Water Reclamation and Reuse program, the USBR provides grants to states and localities for water reuse projects. Link: https://www.usbr.gov/water/programs/title-xvi/
Small-Scale Water Efficiency Projects (SWEPE)	U.S. Bureau of Reclamation (USBR)	Grant	Reclamation states an eligible project. Link: https://www.usbr.gov/water/programs/swepe/

Program	Agency	Type	Description	Deadlines/Next Steps	Project Relevance
Community Development Loans	Rural Community Assistance Corporation (RCAC)	Loan	Low-interest, long- and short-term loans available to Tribes, Tribal communities and individual Native Americans for small business, housing and community facility projects in Arizona. Rates vary based on loan amount and term, but most are approximately 5% with 1% loan fee. Eligible projects: <ul style="list-style-type: none"> • Energy efficient affordable housing • Infrastructure (including water and wastewater projects) • Community facilities • Native owned small businesses • Sustainable agriculture Link: https://www.rcac.org/	No deadlines. Contact Juanita Halstrom, Loan Fund Director at jhalstrom@rcac.org or 916-447-9832 ext. 1065 or Robert Longman, Credit Officer, 530-692-9625 or rlongman@rcac.org . https://www.rcac.org/wp-content/uploads/2022/07/07Rainna-headers-Collaborative-one-page-with-back-02-78-72.pdf	Loans for rural water and wastewater projects.
Water & Wastewater Loans	Rural Community Assistance Partnership/Communities Unlimited	Loan	Communities Unlimited is a U.S. Treasury-certified Community Development Financial Institution (CDFI). The organization offers financing to rural communities and tribal nations to improve and maintain their drinking water and wastewater systems. Eligibility includes local government, nonprofit corporations, and tribal nations that: <ul style="list-style-type: none"> • Serve a significant number of low-income customers. • Population of < 20,000. • Have the cash flow for debt service or have permanent takeout financing; and • Are willing to accept no-cost technical assistance if needed. Maximum loan is \$750,000 with 15-year maturity. Interest rate of 7% and origination fee of 1% loan amount. Link: https://communitiesu.org/apply-for-a-loan-2/	No deadlines. Call 479-443-2700 to begin application process.	Loans for rural water and wastewater projects.
CoBank	Private Lender	Loan	CoBank works with rural water and wastewater not-for-profit systems, municipalities, and investor-owned utility companies to provide interim and bridge financing, refinancing of existing debt, term loans for system upgrades, and lines of credit. Term Loans with maturities up to 30 years. Link: https://www.cobank.com/	No deadlines. Contact Bentley Hodges at 303-793-2139 or bhodges@cobank.com	Loans for rural water and wastewater projects.

Mapping of External Funding to CIP Could Influence Project Ranking

Map EXTERNAL FUNDING to CIP Projects and either Identify Eligible CIP Projects or Use to Help with Prioritization

- Identify Near Term Projects for Self-funding
- Align projects and grant timelines
- Choose the “Right” Project for the Opportunity
- Initiate project development early
- Allocate local funds for early phase tasks and for match requirements
- Opportunities for multiple sources? Make sure they line up!
- Collaborate with agencies and partners to create multipurpose projects

Table 5 Summary of CIP Projects and Funding Opportunities

		Low-Interest Loan	
		EPA WIFIA	Oregon IFA SDWRLF
S-01	SCADA Program	√	√
T-24	15,000-Gallon Diesel Fuel Tank ⁽¹⁾	√	√
T-03	Hazard Mitigation Study	√	√
T-18	Replace Chlorine Gas System	√	√
T-05	Initiate Study with BOR for SHPP ⁽²⁾		
D-09	Beaverton and TVWD Billing Meters	√	√
D-03, D-08	Seismic Valves on N-5 Intertie and Fern Hill Force Mains/ Replace/Improve Transmission Lines in Critical High-Hazard Areas (20-year CIP) ⁽³⁾	√	√
T-06	Hazard Mitigation Implementation	√	√
T-07, T-21	Replace Rapid Mix Facility/ Replace O&M Building ⁽⁴⁾	√	√
T-19	Install OSHG Equipment into Hypo Facility ⁽⁵⁾	√	√
T-20	Construct New Chemical Building ⁽⁶⁾	√	√
T-04	New Intake or SHPP Upgrade	√	√

Approach to funding: Creative stacking of programs

Other/Local funding opportunities

Re

- Smaller funding opportunities
- Require time to develop required partnerships agreement

State Funding Programs

- Moderate funding opportunities
- Fewer compliance requirements

Federal Funding Programs

- Highest grant & loan opportunities
- More compliance requirements



Drinking Water Treatment for PFAS

Community in Northern Colorado of 62,500 people considered Disadvantaged & EJ

- 2018 PFSA detected in drinking water supply
- 2021 Initiate Design New Ion Exchange WTF
- 2022 Initiate Funding Activities
- 2023 Competitive Selection of Contractor
- 2024: Construction Start
- 2026: Construction Completion

Estimated Construction Cost: \$80M

Federal/State Grant: \$61M

Federal Requirements: BABA, AIS, etc

Other: Congressionally Directed Spending (\$900K)

**Low Interest Loans: up to \$30M
Colorado DWSRF Loan**

**Grant Funding Programs: \$61M
DWSRF Emerging Contaminants
Emerging Contaminants in Small or Disadvantaged
Communities**

Increasing opportunities for funding

Increasing Available Funding Opportunities

- Whole project
- Project components
- Benefit area
- Early Start = Planning, Design and Construction

Increasing Scoring Potential for Funding Opportunities

- Regional projects
- Multi-benefit
- Stakeholder engagement in planning increase points
- DAC and Underserved community focus

Pure Water Monterey Groundwater Replenishment Project

BORROWER: Monterey One Water

LOCATION: Monterey County, CA

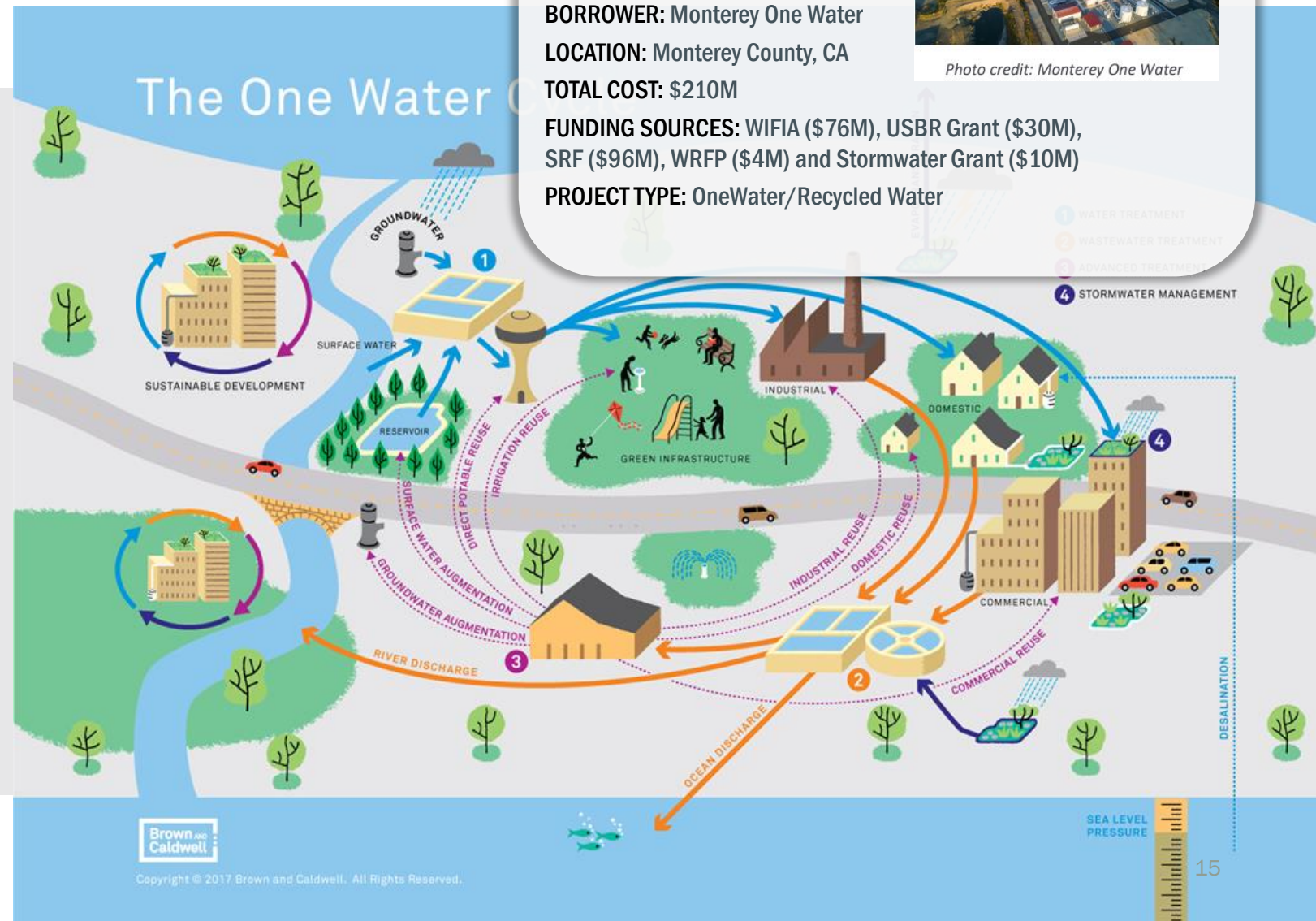
TOTAL COST: \$210M

FUNDING SOURCES: WIFIA (\$76M), USBR Grant (\$30M), SRF (\$96M), WRFP (\$4M) and Stormwater Grant (\$10M)

PROJECT TYPE: OneWater/Recycled Water

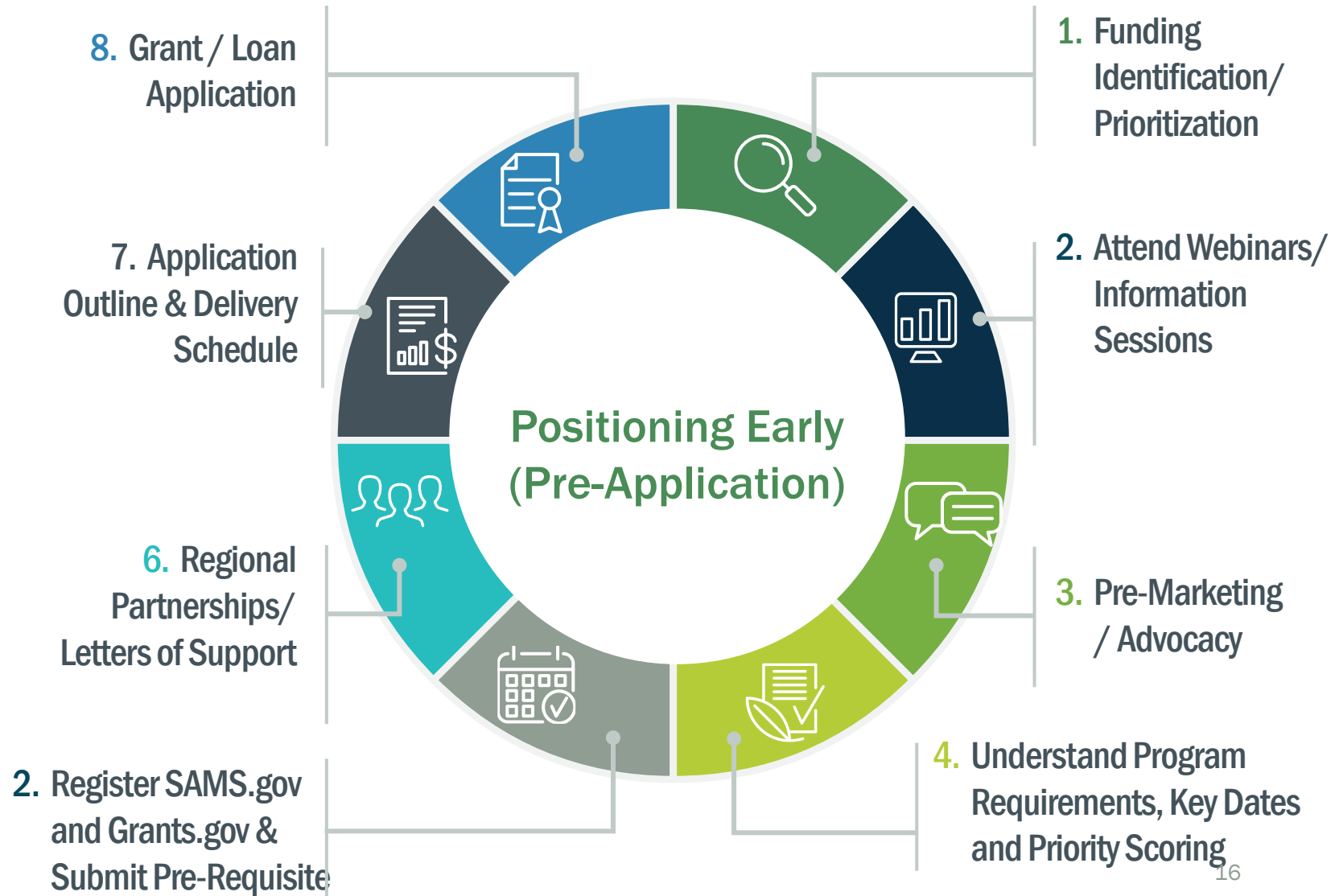


Photo credit: Monterey One Water



Pre-Application Strategies

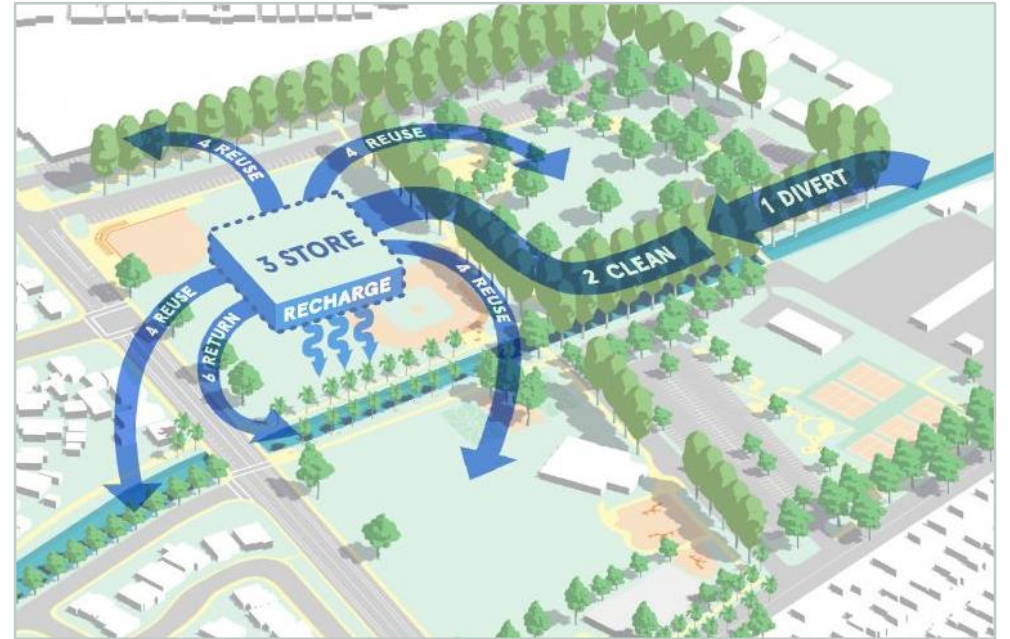
- ✓ Early identification of funding & gaps
- ✓ Higher probability of selection
- ✓ Increased award probability
- ✓ Maximize award \$\$



Orange Memorial Park Water Capture

A regional stormwater capture facility draining more than 6,500 acres from 6 different municipalities

- Multi-benefit project - water quality, water supply, alleviates flooding
- Extensive public and multi-agency engagement
- Funded by \$15.5 million Caltrans Cooperative Agreement grant
- Strong partnerships continue to advance other regional stormwater projects



Strategies and Tips to Consider in Developing Grant and Loan Applications



Attend Webinars and Input & Information Sessions



Ask questions and engage early!



Read the instructions of the NOFA and the Program Handbook Prior to Applying



Remember your audience is learning about your system for the first time and needs contextual information to understand your project



Know the funding deadlines and program requirements (e.g., documents, preapplication meeting or submittals)



Answer every question posed, when relevant provide additional supporting material to support your answer



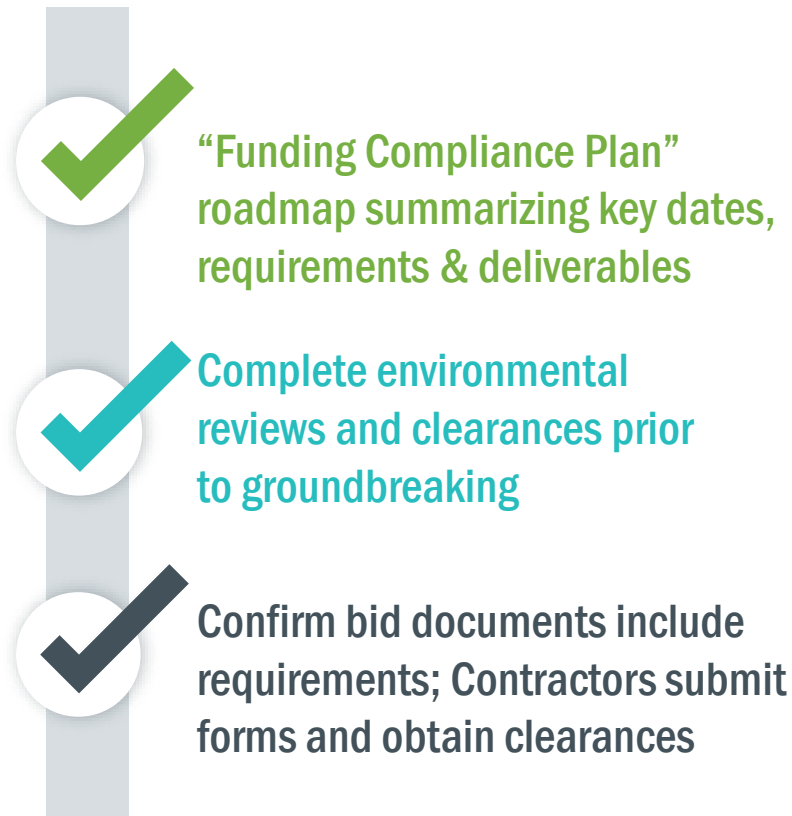
Provide specific references or details (Avoid simple “No” responses)



Submit early to avoid issues with large files and deadlines

Strategies for Post Award

- ✓ Avoids jeopardizing grant award
- ✓ Avoids schedule delays or grant compliance issues
- ✓ Efficient and (relatively) quick disbursements
- ✓ Fully secure award and maintain compliance



External Funding: Guiding Principals

- 1 It costs \$ to secure \$
Make sure the purpose/objectives of the project match program priorities
- 2 A small investment in project design to advance projects significantly increases chances of award.
Define project, costs and benefits early to align projects with programs.
- 3 External Funding can impact project schedules (12-18 months)
Start Early!
- 4 Grants typically require Agency match
Evaluate budgets and make sure match sources are available
- 5 Federal funding require compliance with federal requirements and administrative reporting
Identify and allocate tasks to reduce burden
- 6 **Federal compliance requires and Grants Administration. *There are strings attached that should be considered in design, costs and schedule.***
- 7 **FEDERAL PROGRAMS: highest grant/loan opportunities and more compliance requirements.**

STATE PROGRAMS: moderate funding opportunities and less compliance requirements.

External funding opportunities

Bonds, WIFIA or SRF...Considerations



Bonds, WIFIA or SRF . . . *which way to go?*

Comparison of Bonds, WIFIA, and SRF Program Details			
	Bonds	WIFIA	State Revolving Fund
Application Date	As Needed	Rolling Process	Set Dates
Total Funding Provided / Min Funding	Fully Fund / (>\$25M per issuance)	49% project funding / >\$20M	Partial/ Full/ Program Cap
Match Required	No	Requires 51% Match (private equity, revenue bonds, grants, and SRF loans)	May require alternate funding to fully fund project
Funding Term	30 years	35 years	30 years
Reimbursement	Money available Immediately	Yes	Yes
Cost of Issuance	Varies (Underwriter discount, rating fees, advisory fees, bond & disclosure counsel, trustee)	\$100,000-\$300,000 (application and loan review) + legal, advisory, and rating fees	City's legal (bond counsel) fees
Repayment Timing	Within 1 year of issuance.	Defer Principal Repayment up to 5 years	Within 1 year
Interest Rate	Fixed Rate - Primarily based on term, size, & credit rating, tax status (exempt vs taxable)	Fixed Rate - Equal to or greater than the US Treasury Rate of a similar maturity	Fixed Rate - CWSRF/DWSRF set by state (<i>typically the lowest of options</i>)
Interest Rate Influenced by	Agency Rating & Bond Sizing	Not dependent on Rating	Not dependent on Rating
Interest Incurred:	Immediately upon Bond issuance	Upon first disbursement drawdown	Upon first disbursement drawdown
Reset Interest Rate	No	1 time interest reset	No
Ability to Sculpt Loan Term	"Wraparound" structuring possible, 30-year term limitation	"Wraparound" structuring possible, 35-year amortization limitation	No - Amortization must be level annual repayments
Annual Fee	Trustee Costs	Construction and Annual Fee	No
Penalty	Required to use full Bond Issuance on identified project(s)	No penalty for not drawing down total loan or pre-payment	No penalty for not drawing down total loan or pre-payment
Time to Secure	4-6 months	12-14 months	14-16 months
Environmental Clearance	If maybe City/Agency requirement	NEPA	NEPA
Federal Requirements	None	Yes	Yes

OTHER CONSIDERATIONS:

- Project definition / packaging
- Over "funding"
- Cash Upfront vs Reimbursement
- Funding Term
- Interest Rate Risk
- Federal Compliance Requirements

City of Santa Cruz (CA): Santa Cruz Water Program



Backbone water infrastructure improvements to build resiliency to natural hazards & long-term water supply reliability, improve water quality & operational flexibility and address aging infrastructure

WIFIA “Project”

- Graham Hill Water Treatment Plant Facility Improvements Project
- Newell Creek Pipeline
- University Tank #4 Replacement
- ASR Project

Total Project Cost:

\$370.3M

- WIFIA: \$128M (Loan 1)
- WIFIA: Loan 2 Pending
- Match: SRF; Cash and Revenue Bonds
- **Anticipated Total Savings: \$15M**

Application time:

- WIFIA LOI (7/21)
- Invitation (11/21)
- Application (7/22)
- Agreement (5/23)

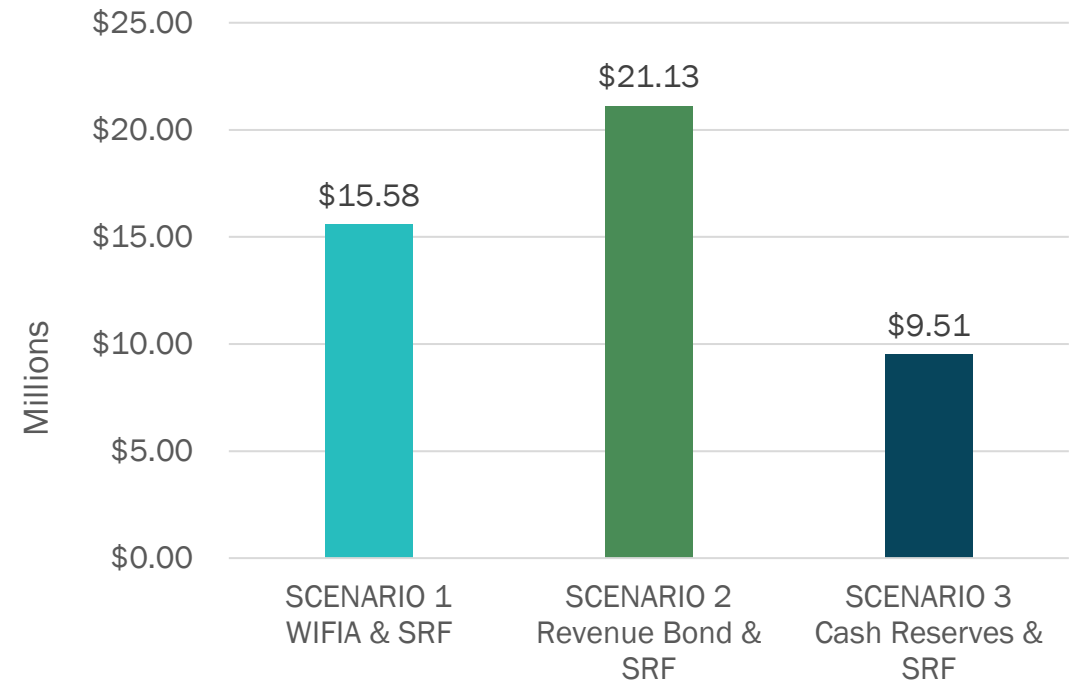


WIFIA: Water Treatment Plant Project (\$47.8M)

Annual Debt Service by Scenario



Total Interest Cost & Fees by Scenario



- Project secured 76% SRF funding: Evaluated potential funding options for match (Bonds, WIFIA and Cash)
- Assumed: 30-year term, Interest rate (WIFIA 2.75%, SRF 1.5% and Bonds 4%), Issuance Cost and WIFIA fees (\$23,000)
- Assumed annual payments assume a typical amortization schedule based on level debt service payments

External funding opportunities

Key Take Aways

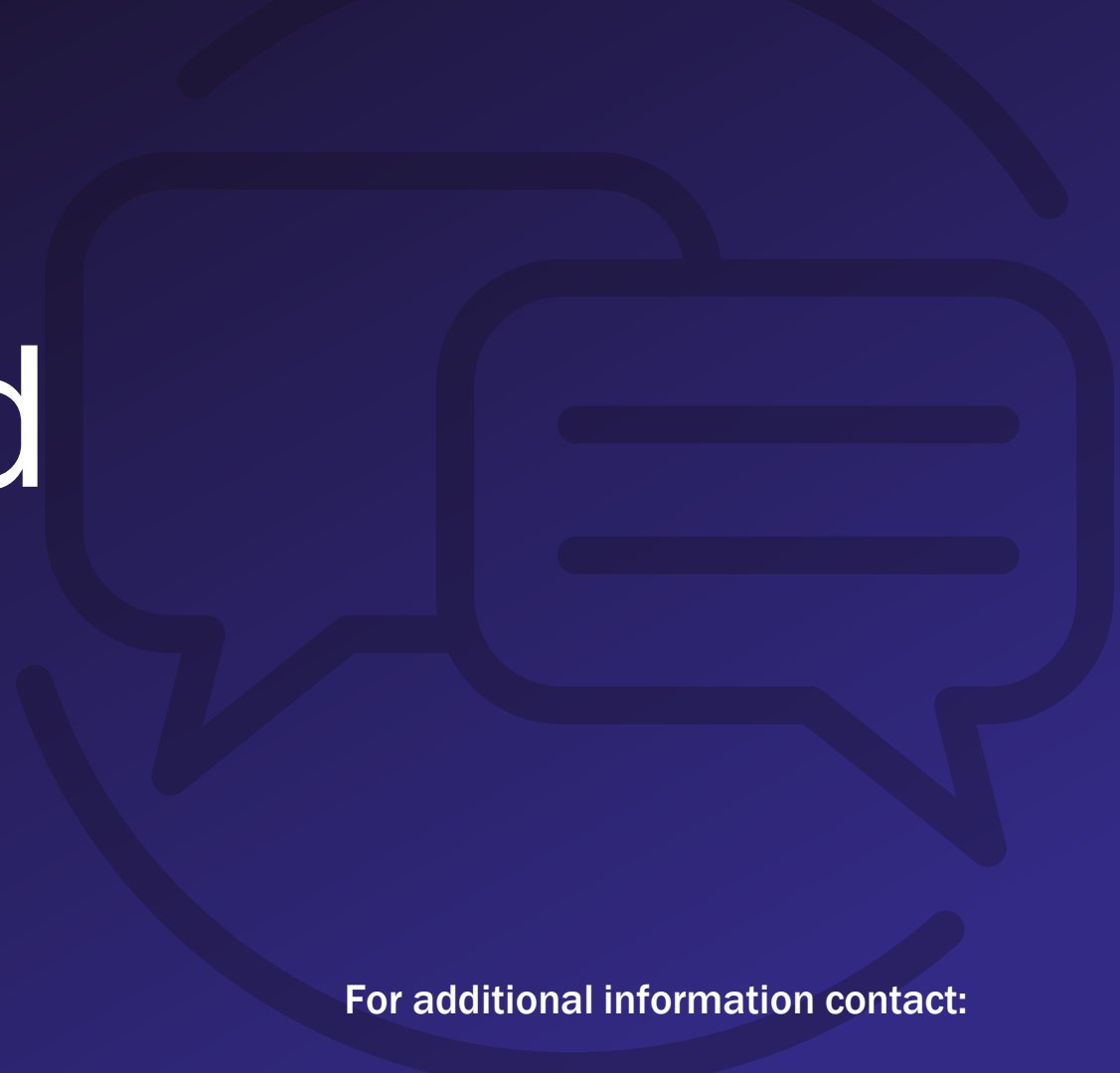


Key take aways

- Federal and State agencies are working hard to push out BIL/IRA and ARPA monies (FY 22 through FY 31)
 - Slow pushout of appropriations but pace is likely to pickup!
- BIL water infrastructure funding primarily through SRF programs but other programs can also provide opportunities
 - Emphasis on Underserved and Disadvantaged Communities
- A proactive and planned approach will lead to a higher rate of success due to preparedness, project alignment and schedule



Questions and Discussion



For additional information contact:

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SChavan@BrwnCald.com | 408.703.2539

Senior Director of Strategic Funding

Brown AND Caldwell :



Federal Compliance and Administration requirements: *The Strings*

Primary compliance regulations

NEPA & environmental cross-cutters // A/E procurement requirements // **Davis Bacon Wages (and prevailing wages)** // **American Iron & Steel** // **Build America, Buy America** // Sole source considerations // Civil rights, nondiscrimination, EEO, and civil rights // **DBE compliance** // **Debarment and suspension** // Restrictions in lobbying // Uniform Land Act // Telecommunications prohibition // Others

Administrative requirements

Financial reporting requirements // Quarterly and close out reports // **Quarterly disbursement requests** // **Compliance reporting/site visits** // **Davis Bacon compliance certifications** // Project monitoring accounting (generally accepted accounting principles [GAAP]) and audits // Record maintenance and retention (5 years beyond loan agreement term) // Program specific requirements



Table 12.1. SRF Compliance Summary

Federal or State Reporting Requirements	Frequency/Timeline	Notes	Federal or State Reporting Requirements	Frequency/Timeline
DWSRF Notice of Contract Award	Within 10 days after contract award	• Required for contractor payments, but will to disbursement requests • Contractor/Construction Management prep. make - it easier to develop quarterly reports • Will - records	Federal or State Reporting Requirements	Frequency/Timeline
Progress Reports/Invoicing	Monthly		DWSRF Section 4.25	Quarterly
System for Award Management Registration	Annual (January)		DWSRF Section 4.29	Quarterly
Verification of Non-suspension/Debarment for Receipt of Federal Funds	Annual (January)		Project Signage	Start of Project As needed
SEPA & Cultural Documentation	As soon as possible		Project Site Access & Record Access	As requested by EPA or DOW
Suggested: Contractor "Certification" of Bid Preparation in Compliance of SRF	Bid		End of Performance	As requested by EPA or DOW
Davis Bacon Compliance and Prevailing Wage Requirements	Project Completion			
Project Report 100% Desig Document	Project Completion			
Bid Adv	Project Completion			
Construction Documents/Records Transfer	Prior to last Contractor disbursement			
Records Retention	Prior to consultant contract closeout			
Records Retention	6 years after grant is paid in full			



Build America, Buy America (BABA) Act

Implements new domestic preference requirements

(Requires more than 55% of the cost of components be made in the US and the product itself made in US)

- Iron and steel (AIS)
- Manufactured products
- Construction materials

Program Waivers

- Department of Transportation
- EPA WIFIA and SRF (Amended) Program
- EPA Small Project and De Minimis General Applicability
- FEMA

Product Waivers: Non-Availability, Cost or Public Interest

Wastewater Reclamation Facility Improvements Project

With 66% of nutrient loads from WW Dischargers, CA SWRCB adopted Nutrient reduction requirements

Total Project Cost: \$520M

Options		Amount
Federal	USEPA Water Infrastructure Finance & Innovation Act (WIFIA)	\$255 million (49% of project cost)
Private	Municipal Bond(s) (assume 2 bond draws)	\$235 million
Cash	Wastewater Enterprise Fund	\$25 million (5%)
Cash	Previously Incurred Expenditures	\$5.4 million
State	State Revolving Fund (SRF)	\$50 million (cap)
Other	Water Resources Development Act Project Funding	TBD
Other	Grant	Investigating

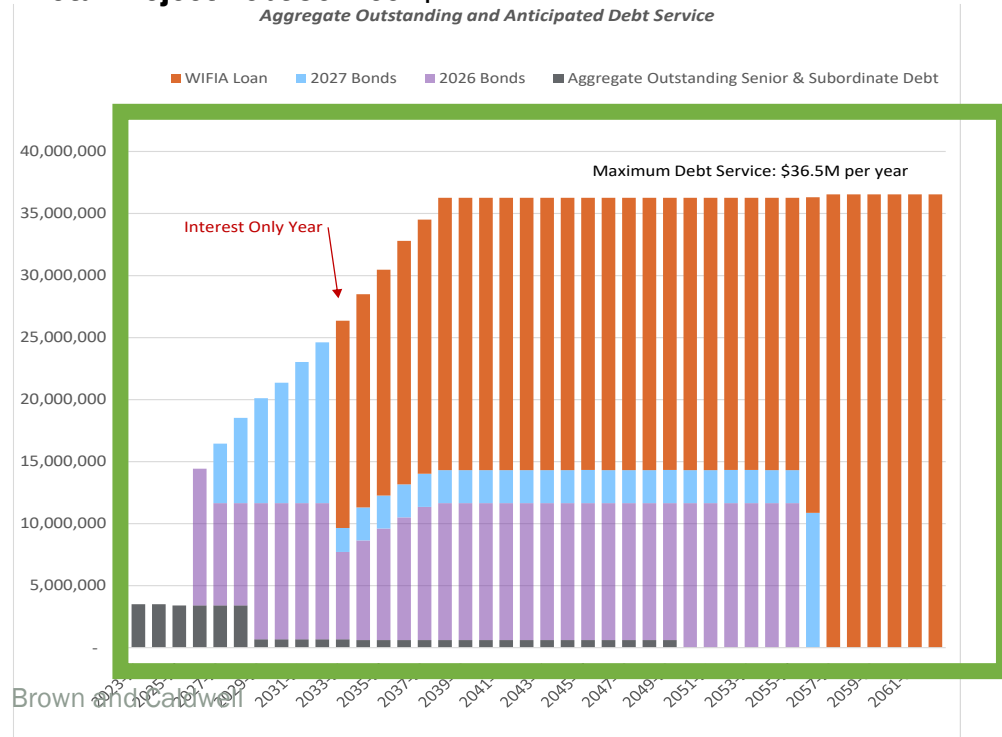


Loan and Bond Structuring Options

NHA Advisors

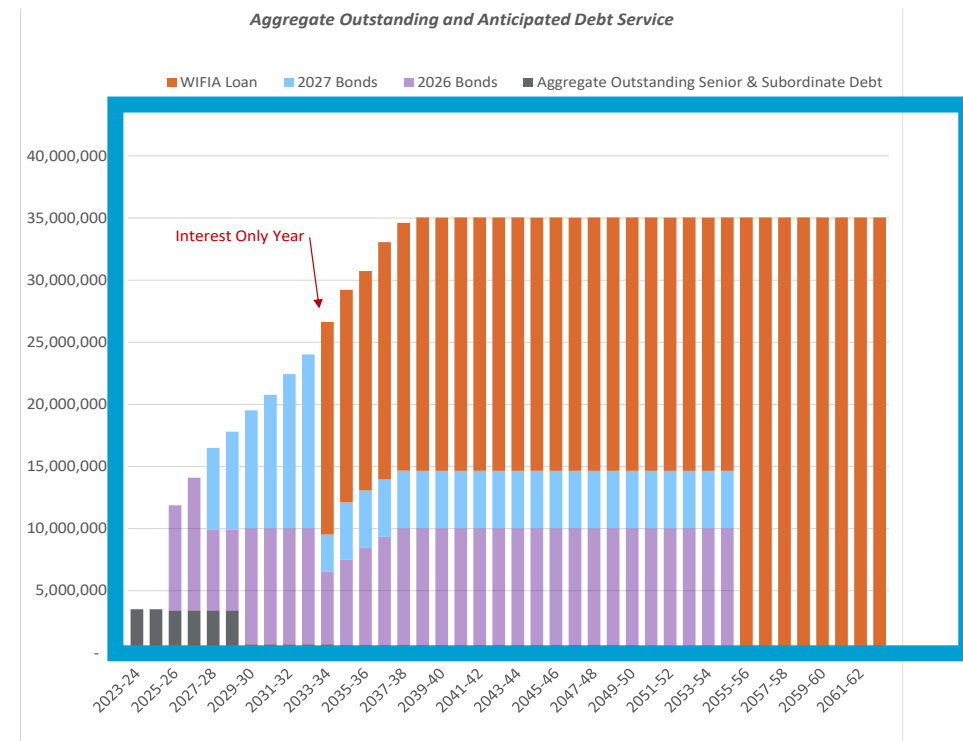
Option 1: Draw WIFIA Loan First

- Close WIFIA early 2025 and immediately start to draw WIFIA to fund construction costs
- Issue Bonds in Fall 2026, second series in late 2027
- Larger capitalized interest accrual (\$117M) given WIFIA loan draws outstanding longer
- Less risk if the City decides to cancel the project after financing (WIFIA loan liability limited to actual amounts drawn)
- Total Project Debt Service: \$1.2B



Option 2: Draw Bond Money First

- Close the WIFIA in early 2025, but wait to draw until Fall 2026
- Issue Bonds in early 2025 and use bond proceeds to fund construction upfront; second series in late 2027 to fund final costs
- Save on WIFIA capitalized interest (\$103M) accrual
- Preserve the WIFIA Loan interest rate reset option
- Total Project Debt Service: \$1.15B (\$25M savings)



The City of Columbus (OH): Southerly WWTP Bioenergy Project

Scope

- Anaerobic digester expansion
- Organics receiving station
- Combined heat and power system

Estimated Construction Cost

- \$290M

Funding

- Ohio EPA Water Pollution Loan Fund – approximately \$290 M loan
- Investment Tax Credit – approximately \$95M direct payment
- Pursuing the Water and Wastewater Infrastructure Grant Program (estimated \$5M grant)

