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Why Is Asset Management Important?

- Asset management is critical to the financial and operational success of drinking water systems.
- It increases a drinking water system's ability to meet federal and state requirements.
- It is important for states, TA Providers, and communities to make continuous implementation improvements with funding, regulatory, assistance, and internal activities that promote asset management.
- States, TA Providers, and communities are encouraged to use the Asset Management Initiatives Document as a resource for networking with one another, to strengthen state asset management programs and overcome barriers.

Asset Management Supports Drinking WaterSystem Capacity

- State Capacity Development Programs protect public health by building the Technical, Managerial, and Financial (TMF) capacity of drinking water systems
 - Achieves safe, reliable drinking water and long-term sustainability
- EPA helps states and drinking water systems through capacity building resources:
 - Outreach, training, and technical assistance
 - Establishes professional standards for operators, promotes compliance, provides training & certification, and encourages continuous learning
- EPA Water Technical Assistance (WaterTA) can help
 - With states, Tribes, territories, community partners, and stakeholders, we help communities solve their water challenges



Key EPA Resources to Support Capacity Building and Asset Management

- Asset Management: A Handbook for Small Water Systems (STEP Guide)
 - Designed for owners and operators of small community water systems (CWSs). This
 guide presents basic concepts of asset management and provides the tools to
 develop an asset management plan.
- Reference Guide for Asset Management Tools
 - For state staff and technical assistance providers and is intended to help assist small and medium sized drinking water or wastewater systems in identifying resources that can be used to implement asset management practices. This guide provides a framework to assist systems in all aspects of developing and implementing an asset management plan.

Key EPA Resources to Support Capacity Building and Asset Management (Continued)

- 2024 State Asset Management Initiatives Document
 - Summarizes the asset management initiatives taken by states as described directly in their revised capacity development strategies to help public water systems (PWSs) to improve their financial health and reliability to provide safe drinking water.

• Scan the QR code to see more resources from EPA linked to capacity building, including asset management.



EPA WaterTA Supports Communities to:



Identify water challenges



Plan for solutions



Increase community engagement



Improve compliance and access to safe and clean water services



Build technical, financial, managerial capacity



Develop application materials to access water infrastructure funding



WaterTA Services

Planning and Assessment

Community Engagement

Plan Development and Coordination

Studies and Assessments

Asset Management Project Development

Preliminary Engineering Reports

Lead Service Line Inventories

Project Design

Environmental Reviews

Partnerships and Engagement

Ongoing Engagement and Outreach

Decision-maker and Board Education

Water Systems
Partnerships

Capacity Building and Training

Funding and Financing

Rates and Revenue Analyses

Financial Planning

Identify Funding Options

Application Support

Program
Management
Support

Bid Support

Change Order Review

> Project Inspection

Domestic Preference and Davis Bacon Assistance



More information on WaterTA

- Visit www.epa.gov/waterta for more information
- Email your questions to <u>WaterTA@epa.gov</u>
- Visit https://www.epa.gov/water-infrastructure/forms/water-technical-assistance-request-form to submit a WaterTA request





What are Assets?

All the physical components, buildings, land, and people needed to deliver safe and clean water.

- Physical components can be small to large, sometimes expensive, often long-lived and buried
- Essential to protect public health



Asset Management is...

"A process for maintaining a desired level of customer service at the best appropriate cost."

This includes:



Building an inventory of your assets



Scheduling and tracking maintenance tasks through work orders



Managing your budgeted and actual annual expenses and revenue



Asset Management will...

Give drinking water systems a documented understanding of:

- The assets they have
- How long assets are going to last
- How much it's going to cost to repair, rehabilitate, or replace assets
- If current rates and other revenue generating mechanisms are enough to fund maintenance and investments in assets.

Why Did EPA Create the Asset Management Initiatives Document?

- Opportunity for state agencies, TA Providers, and communities to learn about the various initiatives that other states are undertaking to promote asset management.
- Encourage collaborations with technical assistance providers.
- Develop and provide resources that guide future asset management assistance for drinking water systems.

The Main Categories of State Initiatives to Promote Asset Management

• **Funding Activities** – The ways in which asset management is funded or awarded funding, including through state grant programs, the utilization of DWSRF set-asides, or part of loan conditions and forgiveness.

 Regulatory Activities – How asset management is integrated into state requirements, such as within state statutes or codes, sanitary survey reviews, or training requirements.

The Main Categories of State Initiatives to Promote Asset Management

• Assistance Activities – Efforts to encourage asset management, including training, outreach, guidance documents, and technical assistance activities.

• Internal Activities – Activities at the agency level to further promote asset management, such as training for state staff and consideration of new asset management requirements.

States' Drinking Water State Revolving Fund Set-Asides Asset Management Activities

Utilizes DWSRF Set-Asides for Asset Management Training/Technical Assistance							
Arkansas	ADH utilizes set-asides from the DWSRF for small systems technical assistance, with areas of assistance including asset management plans.						
Florida	The Florida Department of Environmental Protection's contract with the Florida Rural Water Association (FRWA) to prepare asset management plans was expanded to add drinking water systems using set-aside funding.						
Georgia	Georgia uses set-aside funds to promote asset management plan development and implementation training.						
Idaho	DWSRF set-asides can be used for asset management planning grants.						
Massachusetts	DWSRF set-asides can be used to fund technical assistance providers that assist in leak detection and other asset management activities.						



Which Asset Management Activities are Most Popular Among States?

Table 2: Top Asset Management Activities in Each Category

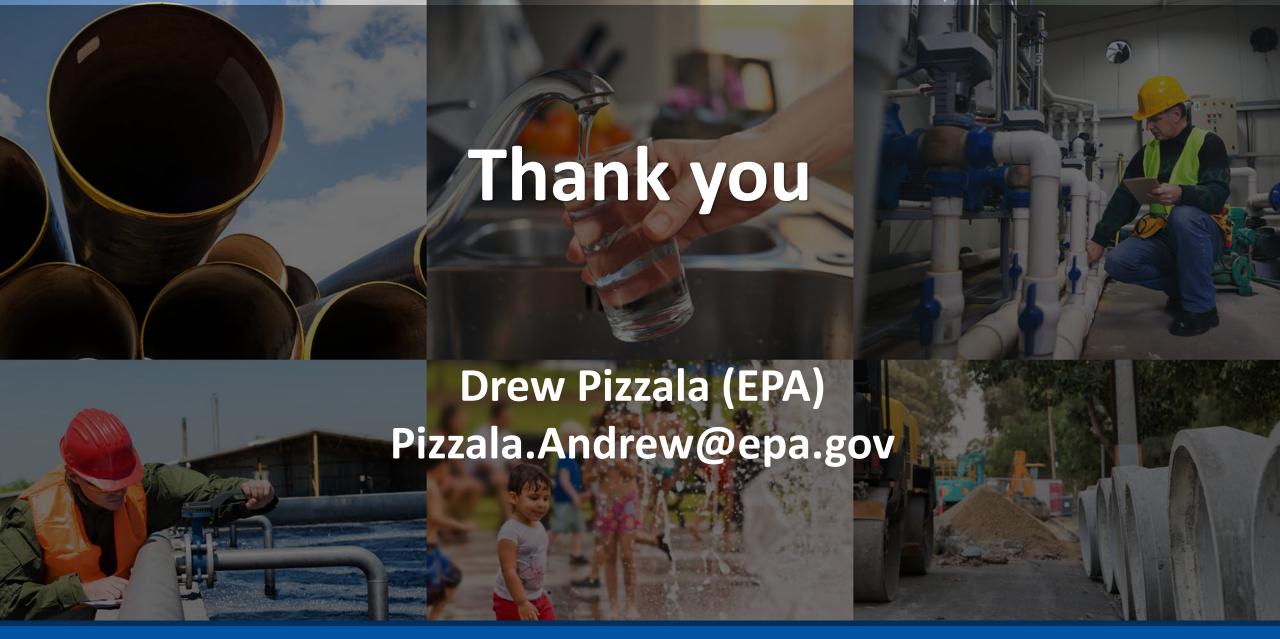
Rank	Funding	Regulatory	Assistance	Internal
1	Loan Condition and Forgiveness Programs (25 states)	Sanitary Survey (32 states)	Training (50 states)	Future Implementation (11 states)
2	SRF Priority Points (23 states)	State Statutes or Codes for Asset Management Planning (13 states) State Statutes or Technical Assistance (43 states)		State Staff Training (8 states)
3	Funding for Asset Management Planning (22 states)	Additional Business or Financial Planning Requirements (13 states)	Outreach (35 states)	Considering Regulatory Requirements (5 states)

Categories of State Initiatives to Promote Asset Management (Data Subset)

		Funding	Activitie	s	Regulatory Activities		Assistance Activities			Internal Activities								
	SRF Priority Points	Funding for AM Planning	Utilizes DWSRF Set- Asides	Loan Condition and Forgiveness Programs	State Statutes or Codes for AM Planning	Training Requirements	Additional Business or Financial Planning Requirements	Sanitary Survey	Needs Assessment	Training	Outreach	Technical Assistance	Guidance Document	Questions in Capacity Assessments	Training for State Staff	Considering Incentives in SRF Program	Considering a Regulatory Requirement	Other Future Implementation
New Jersey	х	х		х	х					х	х	х	х		х			
New Mexico				х						х		х						
New York		х		х				х		х	х	х	х	х				
North Carolina	х	х								х		х	х					
North Dakota	х									х	х	х		х				
Ohio		х	х	х	х			х		х	х	х	х					х
Oklahoma				х						х	х	х		х				
Oregon				х				х		х	х	х	х	х			х	
Pennsylvania	х	х		х			х	х		х	х	х						х
Puerto Rico		х								х	х	х	х				х	х
Rhode Island			х	х			х			х		х						
South Carolina		х		х				х		х	х	х						
South Dakota			х	х				х		х	х	х	х	х				
Tennessee	х	х						х		х	х	х					х	
Texas	х	х								х	х	х	х					
Utah	х	х	х	х	х		х	х	х	х	х	х	х	х				

Conclusions

- Asset management is critical to financial and operational success of drinking water systems.
- It increases a drinking water system's ability meeting federal and state requirements.
- It is important for states, TA Providers, and communities to make continuous implementation improvements with funding, regulatory, assistance, and internal activities that promote asset management.
- States, TA Providers, and communities are encouraged to use the Asset Management Initiatives Document for networking with one another, to strengthen state asset management programs and overcome barriers.







Asset Management in the State of Utah



Utah in General

Population

3,417,473

Area

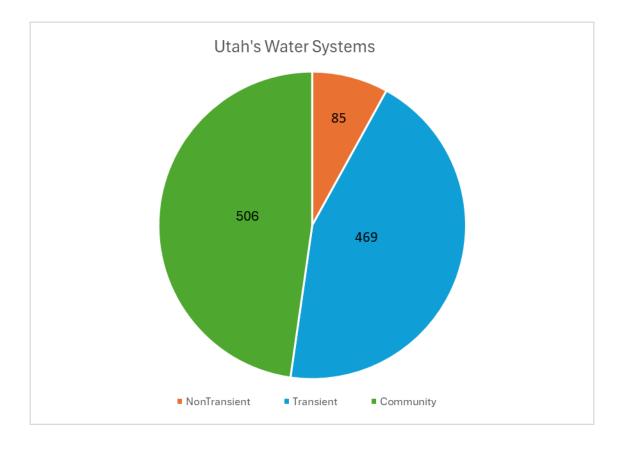
82,168 sq miles

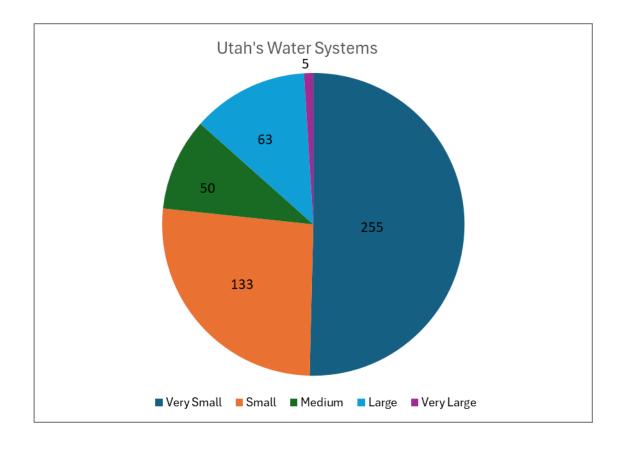
Active Water Systems

1,060



Utah in General







Utah's DWSRF Programs

State SRF Program

Established by legislature in 1984

Funding Source: annual state sales tax allocation

- Capped at \$3,587,000 Provides:
- Financial Assistance for infrastructure projects, political entities only
- Federal program state match

Federal SRF Program

Established by 1996 SDWA Amendments

Funding Source: Annual Capitalization Grant

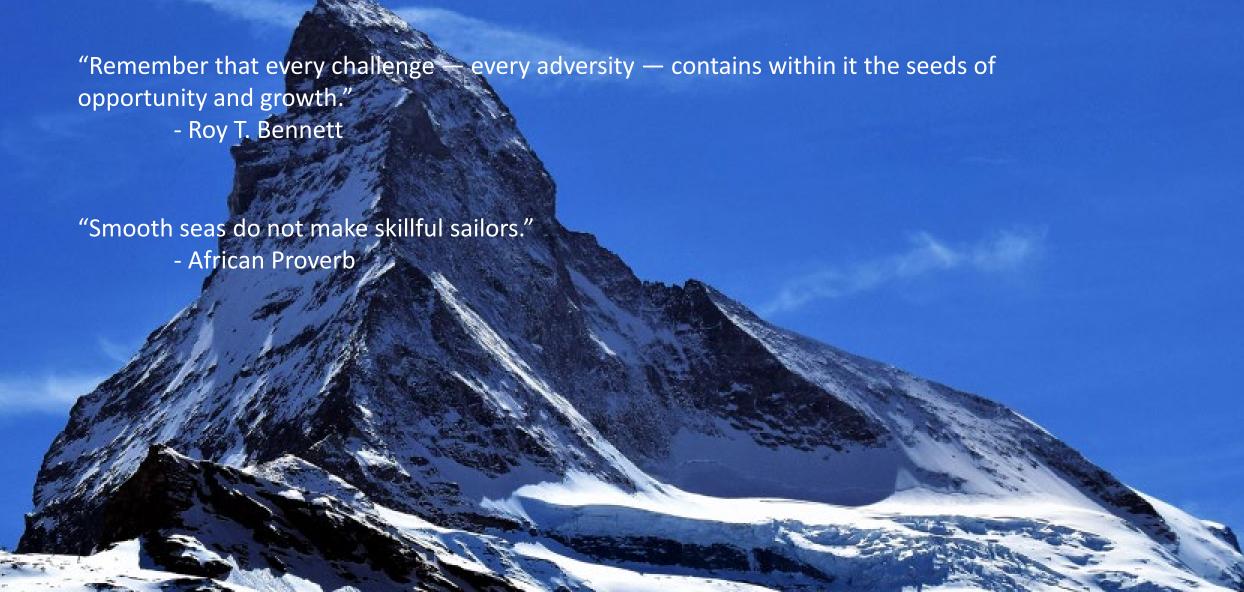
- Utah is a 1% state
- Average around \$10,000,000 per year, prior to BIL
- No leveraging

Provides:

Financial Assistance for infrastructure projects, political entities or privately-owned systems







- AWIA required states to modify their drinking water program to "include as appropriate asset management into their state capacity development strategies."
- Revised strategy documents were due to EPA region offices by December 31, 2021
 - Later modified to December 2022





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON D.C. 2046

DEC - 2 2019

OFFICE OF WATER

MEMORANDUM

SUBJECT: Implementation of Capacity Development Program - Related Safe Drinking Water Act

Amendments in the America's Water Infrastructure Act

FROM: Jennifer L. McLain, Director

Office of Ground Water and Drinking Water

TO: Water Division Directors

Regions I-X

The 2018 America's Water Infrastructure Act (AWIA), Section 2012, requires state drinking water programs to consider and include as appropriate asset management into their state capacity development strategies. Consistent with this statutory change, state drinking water programs are expected to revise their capacity development strategies to include a description of how asset management will be promoted through addressing the five-core-question framework of asset management¹ explained in the attachment. State drinking water programs are expected to submit their revised capacity development strategy to their U.S. Environmental Protection Agency (EPA) regional office for approval by December 31, 2021.

This memorandum assists the EPA and states in implementing the AWIA requirements. The attachment to this memorandum describes the approaches and methods for asset management promotion and training that are consistent with the AWIA requirements. The attachment also presents important considerations that primacy agencies and public water systems should evaluate before pursuing asset management. The EPA Regions should share this information with their primacy agencies. The Office of Ground Water and Drinking Water (OGWDW) conducted outreach with states to learn more about current asset management promotion approaches and possible implementation challenges to revising capacity development strategies, and OGWDW has used the information learned to develop this memo.

Background

Technical, managerial, and financial (TMF) capacity is necessary for a water system to continuously provide safe, reliable drinking water. The Safe Drinking Water Information System (SDWIS) data (reported by the states) show that operational issues account for an increasing number of health-based violations. This is especially true for very small water systems, which can be more challenged to quickly resolve the underlying issues. TMF capacity building includes asset management planning.

¹ The five-core-question framework is a good starting point for any system; the framework walks a system through all the major activities associated with asset management. Visit: https://nepis.epa.gov/Exe/ZyPdf.cgi?Dockey=P1000LTX.txt

- Utah began updating its Strategy Document in mid-2021
- Also updating the required rules
 - Drinking Water SRF Rules
 - Federal Program
 - State Program
 - Capacity Development Rule
- State Legislature introduced a bill mandating asset management in its 2022 session

	114	(b) is owned by a water provider.
	115	(2) "Governing body" means:
1	116	(a) for a political subdivision, the political subdivision governing body defined in
2	117	Section 63 A-15-102; or
3	118	(b) for a private entity, the private entity's board of directors, managing members,
4	119	partners, or equivalent body.
5	120	(3) "Retail water supplier" means the same as that term is defined in Section 19-4-102.
6	121	(4) "Water conservancy district" means the same as that term is defined in Section
7	122	<u>73-10-32.</u>
8	123	(5) "Water provider" means:
9	124	(a) a retail water supplier; or
10	125	(b) a water conservancy district
11	126	Section 6. Section 73-10g-402 is enacted to read:
12	127	73-10g-402. Capital asset management.
13	128	(1) As a condition of receiving state or federal financing or grants to be used for an
14	129	improvement to a capital asset related to water infrastructure, the governing body of a water
15	130	provider shall commit to adopt a capital asset management plan.
16	131	(2) (a) The Drinking Water Board shall make rules, in accordance with Title 63G,
17	132	Chapter 3, Utah Administrative Rulemaking Act, to establish the elements of a capital asset
18	133	mana gement plan required under Subsection (1) for a water provider that is a retail water
19	134	supplier.
20	135	(b) The Board of Water Resources shall make rules, in accordance with Title 63G.
21	136	Chapter 3, Utah Administrative Rulemaking Act, to establish the elements of a capital asset
22	137	mana gement plan required under Subsection (1) for a water provider that is a water
23	138	conservancy district.
24	139	(3) A qualified water conservancy district, as defined in Section 17B-2a-1010, is not
25	140	subject to this section but shall comply with Section 17B-2a-1010.
26	141	Section 7. Section 73-10g-403 is enacted to read:
27		

H.B. 269

Enrolled Copy



 Final Strategy Document submitted to EPA December 2022



Utah DDW will work closely with all stakeholder groups to promote and encourage technical, managerial, and financial capacity and asset management among Utah's water utilities. Utah DDW will encourage stakeholders to take an active role with utilities through training and discussion to answer questions and provide feedback to Utah DDW to continuously improve training and hands-on assistance to water utilities during site visits and assessments.

F. Promoting Asset Management

Section 2012 of the America's Water Infrastructure Act of 2018 requires that states include in their Capacity Development Program Strategies a description of how asset management will be promoted and encouraged within the state. Asset management can help water systems address aging water infrastructure, make sound financial decisions to maximize limited financial resources, make costs transparent, and support budgeting decisions. A proper asset management plan can improve a system's service and reliability, reduce risk and unexpected costs, and enhance communication with customers and stakeholders, in addition to many other benefits.

An asset management plan is the foundation for an effective asset management program and typically includes sections describing level of service goals, current performance metrics and measurements, future demand estimates, risk management, life cycle management plans (e.g., maintenance plans, rehabilitation and replacement plans), and financial forecasts.

The asset management framework is built on the following five core questions, the answers to which will form the basis of each section in the asset management plan.

- What is the current state of the utility's assets?
- What is the utility's required "sustainable" level-of-service?
- Which assets are critical to sustained performance?
- 4. What are the utility's best "minimum life-cycle cost" capital improvement plan and operations and maintenance strategies?
- What is the utility's best long-term financing strategy?

Utah DDW's technical assistance program will use DWSRF set asides and third-party contractors to provide training on these five core elements and promote and encourage asset management for all the state's public water systems. Asset management training will focus on helping systems understand asset management, developing asset management plans, identifying tools & techniques for inventory development, water system mapping methods, financial planning and implementation strategies including rate structures, billing policies and procedures, and proper budgeting methods. Other pertinent aspects of asset management plans and asset management programs will also be included based on water system input and comments.

State of Utah Capacity Development Program Strategy December 2022 Page 14 of 11

- Updated Program Rules became effective May 22, 2023
- Updated program letters, forms, and checklists to implement asset management





November-3,-2023¶ The Honorable Contact Person, M System-Name Address City, Utah 840001 Subject: → Federal SRF Loan Au System:#XXXXX.:Loa Dear-Mayor-Contact-Name-and-To On DWB meeting date, the Drin of \$0,000,000, with \$000,000 in a vears-at-0%-interest/-hardshipcalled-the-"Recipient")-for-the-co Recipient will contribute \$System by General Obligation bond(s), No Recipient as incremental disburser quarterly basis. The Board has det (20) years, with interest/fee asses loan-funds. The annual Interest R Bonds, plus interest assessments to Enclosed-is-the-proposed-bond-rer equal to this annual amount must b Principal forgiveness will be appl account mentioned in item 2 along agreement and completion of bo Special Conditions The recipient is required to pay th new-funding-to-pay-for-project-ac

This financial assistance was auth

this authorization will be funded, in

Telephone



November 3, 2023¶ Page 9¶

> State-Revolving-Fund (SRF) Program (R309-705 of the Utah-Administrative Code), the Utah-Municipal-Bond-Act, the Utah-Money-Management Act, the Utah-Procurement Code and the State of Utah-Legal-Compliance Audit Guide."

- 15. → The Recipient shall submit a cash drawdown schedule prepared and certified by their consulting engineer to be a schedule that coincides with the rate at which expected construction related costs are incurred by the project.¶
- 16. → The Recipient is required to submit a Plan of Operation and Operation and Maintenance Manual according to the following: ¶
 - a. → A Plan of Operation, which includes a schedule summarizing appropriate times for essential actions to be taken for operation of the facility, must be submitted to the committee in draft at initiation of construction and approved in final form prior to 50% of construction completion. As a minimum, the plan of operation must include provisions for an Operation and Maintenance manual, Emergency Operating and Response Plan, properly trained management, adequate number and training of operation and maintenance personnel, budget plan for operation and maintenance personnel.
 - b. → An Operation and Maintenance (O&M) manual which provides long-term guidance for
 efficient facility operation and maintenance must be submitted and approved in draft and
 final form prior to 50% and 90% of completion.

(Note: Keep this section only if project includes a water treatment plan

- 17. → The Recipient must get a Unique Entity ID from SAM.gov. Once the entity record has been validated, submit a copy of the Unique Entity ID to the Division of Drinking Water. ¶
- The Recipient shall comply with the Single Audit Act requirements in accordance with OMB-Circular A-133.¶
- The Resiptent is required to comply with the Federal Project Signage Requirements. See attached Reference Page for document location.
- 20. → In compliance with Utah Code Annotated 73-10g-402, water systems applying for federal¶ financial assistance for improvements to capital assets related to water infrastructure shall commit to adopt a capital asset management plan. The Asset Management Plan shall be submitted to the Division for review and approval prior to loan closing, unless preparing an Asset Management Plan is included as part of the project for which the Recipient has applied for financial assistance. In which case, the Asset Management Plan shall be submitted to the Division as soon as it is completed or prior to the entity submitting its final project reimbursement request. ■

To facilitate the timely completion of the financial assistance requirements outlined in his letter, the Recipient and its attorney and engineer shall submit to the Division of Drinking Water all of the items required before loan-closing no later than 30 days before the bond closing, and the Recipient's bond attorney shall submit to the Board's Attorney the items listed in subsection "b" of paragraph 1 on or before the due date specified.



 Updated program letters, forms, and checklists to implement asset management



Pre-Closing Conference Call Checklist

Bond Counsel	Bill Prater	(801) 566-8882	bill@billprater.com
Borrower Bond Counsel			
DDW Manager	Michael Grange	(801) 674-2563	mgrange@utah.gov
DDW Project Manager			
System Presiding Official			
System Treasurer/Recorder			
Project Engineer			
Environmental Consultant		·	

Project:				
Funding:				
Notes:				
rget Dates:				
	System To-Do	Engineer To-Do	DDW To-Do	

	Task Description	Responsible Party	Target Date	Comments
0	Capacity Assessment	DDW		NA for State
1	DWB Authorization Letter	DDW		
2	Discuss conditions on funding and timeframe to resolve	DDW		
3	Submit Engineering Report / Master Plan	Engineer		Must include ownership of
4	Submit Water Conservation Plan	System		
5	Submit Asset Management Plan	System		
6	Submit Emergency Response Plan	System		NA < 3300 population
7	Submit Engineering Contract	Engineer		
	Legal			
8	Submit Verification of Water Rights	Engineer		Consulting engineer provide
9	Register for a Unique Entity ID at SAM.gov	System		NA for State, required for
10	Submit copy of Project Notification to users / water bill inser	System		
11	Submit copy of Minutes showing public support of project	System		
12	Submit copy of Minutes from Rate Increase Hearing	System		

 Updated program letters, forms, and checklists to implement asset management

	DEPARTA				
	DIN STA		f costs identified in the request are determined to be force account costs, was a force account proposal approved? (Use of water system labor)		РМ
	P	12 4	are the cumulative costs for each contracted service or purchase within the contract ceiling?		РМ
roject	Name	13 :	Date of last inspection:		PM
ayme	nt Request No.		id the latest inspection determine that construction was proceeding without discrepancies which must be corrected prior to further payment?		РМ
Reviev	ver		are there sufficient funds in the project budget to complete the project? (bank/esaraw econciliation worksheet attached)		РΜ
1	Yes/Adequate X Are the correct certification form		loes the request include a cost which was incurred as a direct result of unapproved extended construction periods? If so, should it be paid from liquidated damages?		РМ
2	Are the certification forms (B1, B) individual?	1/ A	land is being acquired for this project, have the provisions of the Uniform Relocation ssistance and Real Property Acquisition Act (40CFR pt. 4) been adhered to? (must be a villing seller, if eminent domain was used, will not be eligible for SRF funds)		РМ
3	Has the community met all of the	18 F	OR FINAL PAY REQUESTS VERIFY THE FOLLOWING:		
			Final Inspection report with all the pending items addressed?		PΜ
4	Are all costs identified in the disb invoices/construction estimate		Certificate of Completion from the Engineer?		PM
5	Are construction estimates of wor		Lien releases secured from Contractors, Subcontractors & Suppliers? Private water systems only		PΜ
J	engineering firm and the contr		Have the appropriate DBE Report(s) been submitted and are they up-to-		D.C
6	Have all change orders for which		date? (DBF: N/A FOR STATE PROJECTS)		PC
٠	to the Project Cost Tracking Sh		System Asset Management Plan Submitted?		PM
7	Do the unit prices on the construct bid proposals and approved ch		o the best of my knowledge and belief, this disbursement request has not been previously request accordance with the loan conditions.	ted and shou	ıld be
8	Are quantities on pay request equippeen negotiated?	Date	Project Engineer		
9	Has the physical existence of mat	Date	Accounting		
10	Are all the costs identified in the accordance with the approved (



Print Form

 Updated Capacity Assessment Worksheets to implement asset management



Asset Management for your System¶

 $Please mark-(_) - the -appropriate box: . Yes, No, or Unknown for -each -section. Please - try-to-determine - the -answer - to-every-question - if-a-section-or-question-does-not-apply-to-your-system, -please-write-NA-for-not-applicable. \P$

Use additional sheets as required. Section Break (Continuous)....

Asset Management Plan →	Yes	\rightarrow	No →	Unknown¶
Do-you-have-an-Asset-Management-Plan?¶	П			
If-Yes, -do-you-know-when-it-was-last-updated?¶				
Plan-Updated:¶				
If-Yes,-how-often-do-you-review-your-plan?-¶				
¶ Plan-Reviewed:¶				
¶ If-No-or-Unknown, -when-do-expect-to-have-an-Asset-Management-Plan-in-	place?¶			
¶ Plan-in-Place:-¶ ¶				
The Current State of System Assets¶				
$Does \cdot your \cdot Plan \cdot include \cdot location, \cdot size, \cdot type, \cdot and \cdot age \cdot for \cdot all \cdot water \cdot lines \cdot in \cdot your \cdot plan \cdot your \cdot your \cdot plan \cdot your \cdot plan \cdot your \cdot plan \cdot your \cdot$	ır-system?¶			
Transmission-Lines¶				
Main-Distribution-Lines¶				
Service-Lines-(where-applicable)¶				
Does-your-Plan-include-location,-size,-material,-and-age-for-all-d storage-tanks-in-your-system?-¶				
Does-your-Plan-include-location,-type,-and-age-for-all-sources-in-your-sys	tem?¶			
Wells¶				
Springs¶				
Other¶				
List-Type(s):-¶	_		_	_
Does-your-system-require-disinfection?¶				
If-yes,-does-your-plan-include-location,-type,-and-age,-for-all↔ disinfection-facilities-in-your-system?-¶				
Does-your-system-require-treatment?¶				
If-yes, -does-your-plan-include-location, -type, -and-age-for-all treatment-facilities-in-your-system?-¶				
a contract therefore in your system.				
${\tt Does\text{-}your\text{-}system\text{-}include\text{-}pump\text{-}stations?\text{-}(Not\text{-}associated\text{-}with\text{-}wells)}\P}$				
If-yes,-does-your-plan-include-location,-type,-size,-and-age-for-all∉ pump-stations-in-your-system?-¶				
Does-your-system-include-pressure-reducing-valves, altitude-valves, eari-release/vacuum-relief-valves, isolation-valves-or-other-valves?¶				
If-yes, -does-your-plan-include-location, -type, -size, -and-age-for-all-e/valves-in-your-system?-¶				