



CIP Planning And Implementation Presentation

*Durham Irrigation District
Board Meeting*

June 8, 2023

Meeting #2

Eddy Teasdale/Jacques DeBra



DID Board Meeting – CIP Planning Item

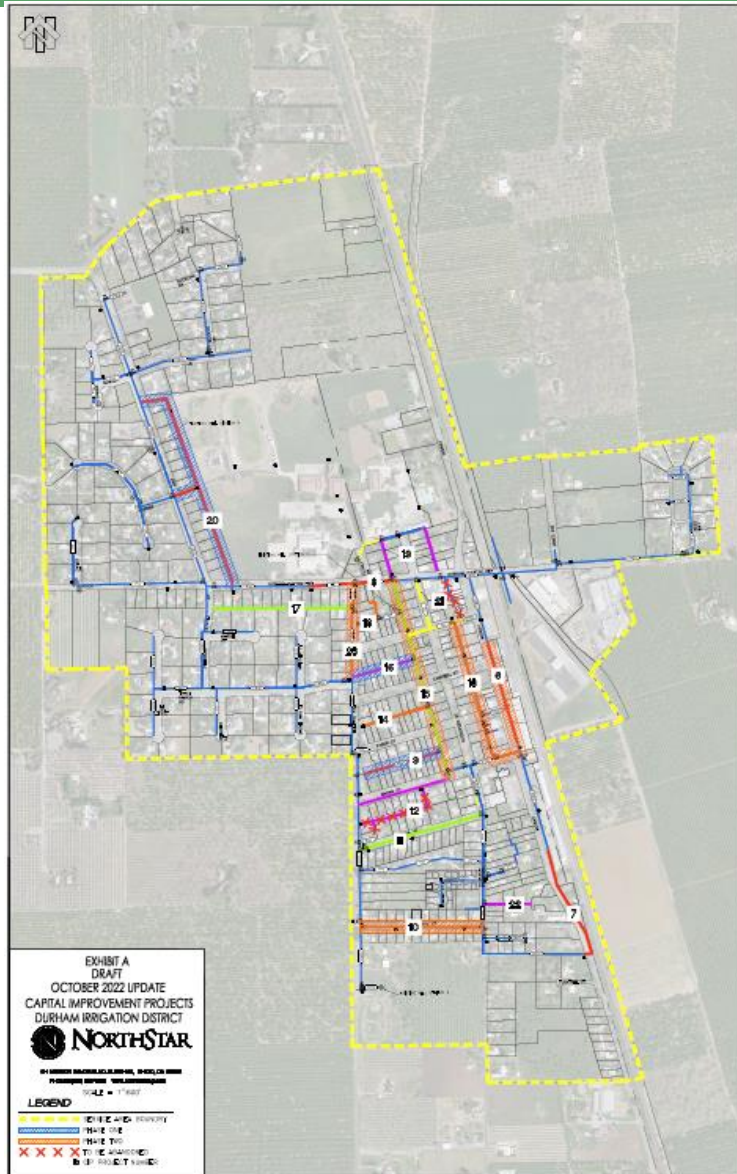
- 1. Discuss Water CIP Plan**
- 2. Discuss Implementation Plan – funding options**
- 3. Implementation Plan – funding options**
- 4. Next Steps**



DID – October 2022 CIP Plan Update



CAPITAL IMPROVEMENT PROGRAM PROJECT LIST and PROJECT COSTS DRAFT - October 2022 Update



Project #	Project Description	Project Cost
Infrastructure Improvements		
1	Lead Service Pipe Study - PROJECT COMPLETED UNDER USBR GRANT	\$
2	Wharf Hydrant Replacement - 14 Locations District Wide	\$ 153,615.00
3	PHASE ONE Isolation Valve Replacement/Installation - District Wide (Completed Separate of Projects Below)(20 Valves)	\$ 114,380.00
4	Metering of Flat Rate Services (Approximately 121 Services)	\$ 277,695.00
5	Automatic Meter Reading Conversion	\$ 155,000.00
6	New 8" Main on Midway - Durham St. to Brown St. (Complete Loop)	\$ 318,393.00
7	New 8" Main on Midway - South Loop Connection	\$ 247,860.00
8	Durham Dayton Hwy. - Replace 6" Main with 8" Main	\$ 242,964.00
9	Alley Between Brown & Faber - Replace 4" Main with 8" Main	\$ 213,894.00
10	Serviss St. - Replace 4" Main with 8" Main	\$ 375,538.50
11	Florida Ln. - Replace 4" Main with 8" Main	\$ 367,506.00
12	Brown St. - Replace 4" Main with 8" Main - Abandon Alley	\$ 347,157.00
13	Alley Between Midway & Goodspeed - Replace 4" Main with 8" Main	\$ 435,897.00
14	Alley Between Campbell & Faber - Replace 4" Main with 8" Main	\$ 236,155.50
15	Alley Between Holland & Goodspeed - Replace 6" Main with 8" Main	\$ 552,330.00
16	Alley Between Campbell & Durham - Replace 4" Main with 8" Main	\$ 176,026.50
17	Abandon Ex. Main in Backyards of Houses South of Durham Dayton - Connect Existing Services to 8" Main in Durham Dayton	\$ 53,550.00
18	Alley West of Well #3 & South of Durham Dayton Hwy. - Replace 2" Main with 8" Main	\$ 178,474.50
19	Alley Loop North of Durham Dayton & South DUSD/DPRD - Replace 6" Main with 8" Main (Partially completed by DUSD and DRPD)	\$ 246,636.00
20	6" Main on West PL of Durham High School - Replace 6" with 8" in PUSD Easement	\$ 519,358.50
21	Goodspeed St. - Durham Dayton to Durham St, Durham St - Alley to Midway - New 8" Main - Abandon Alley between Durham Dayton and Durham	\$ 308,448.00
22	Sakeley Lane - Replace 2" Main with 6" Main	\$ 120,487.50
23	Holland Avenue - Replace 2" Main with 8" Main	\$ 264,384.00
24	Solar at Holland Well Site	\$ 120,000.00
Infrastructure Improvements Total		\$ 6,025,750.00
Well Improvements		
25	Well Station 3 Upgrades (Building, Filter & Generator)	\$ 399,000.00
26	XIO - Cloud Based SCADA Controls & Metering	\$ 50,050.00
27	Well Station #5 Upgrades	\$ 120,000.00
28	Well Sonic Water Level Monitoring (2 locations)	\$ 10,000.00
29	Groundwater Well Assessment (3 locations)	\$ 15,000.00
30	Well Station #5 - 1.0 MG Steel Reservoir with Booster Pump	\$ 2,677,500.00
Well Improvements Total		\$ 3,271,550.00

PHASE ONE CAPITAL BUDGET \$ 2,015,404.00

PHASE TWO CAPITAL BUDGET \$ 1,946,542.50

ADDITIONAL NOT INCLUDED IN PHASE ONE AND PHASE TWO \$ 5,335,353.50

TOTAL OF ALL CAPITAL IMPROVEMENT PROJECTS \$ 9,297,300.00

DID 2022 CIP Plan Priorities

CIP Project Priority	Target	Useful Life	Actual Life
Lead Service Line Study	Field Surveys – SDWA Compliance	40 years	If found, replace with C-900
Hydrant Replacements	24	30 years	50-75 years
Valve Replacements	70	40 years	50-75 years
Meter Installations	141 unmetered flat rate customers	20 years	New meters to be installed
SCADA System	Install XiO System For 3 Wells	20 years	Operational savings
Pipelines	1 mile (5,280 ft.) - failing	50-75 years	50-75 years
Well Rehabs (#3, #4, #5)	Various items (R&R)	30-40 years	> 30 years



DID 2022 CIP Plan Priorities

CIP Project Priority	Phase One Capital Budget	Phase Two Capital Budget	Phase 3 Capital Budget
Valve Replacements	\$114,380	\$0	TBD
Hydrant Replacements	\$0	\$0	TBD
Main Replacements	\$909,279	\$1,946,541.50	TBD
Meter Installations (121)	\$277,695	\$0	TBD
Well Rehabs/SCADA	\$714,050	\$0	TBD
Total	\$2,015,404	\$1,946,542	\$5,335,300

Total capital budget phases 1-3 = \$9.3M over next ten years!



Current Water CIP Funding Needs

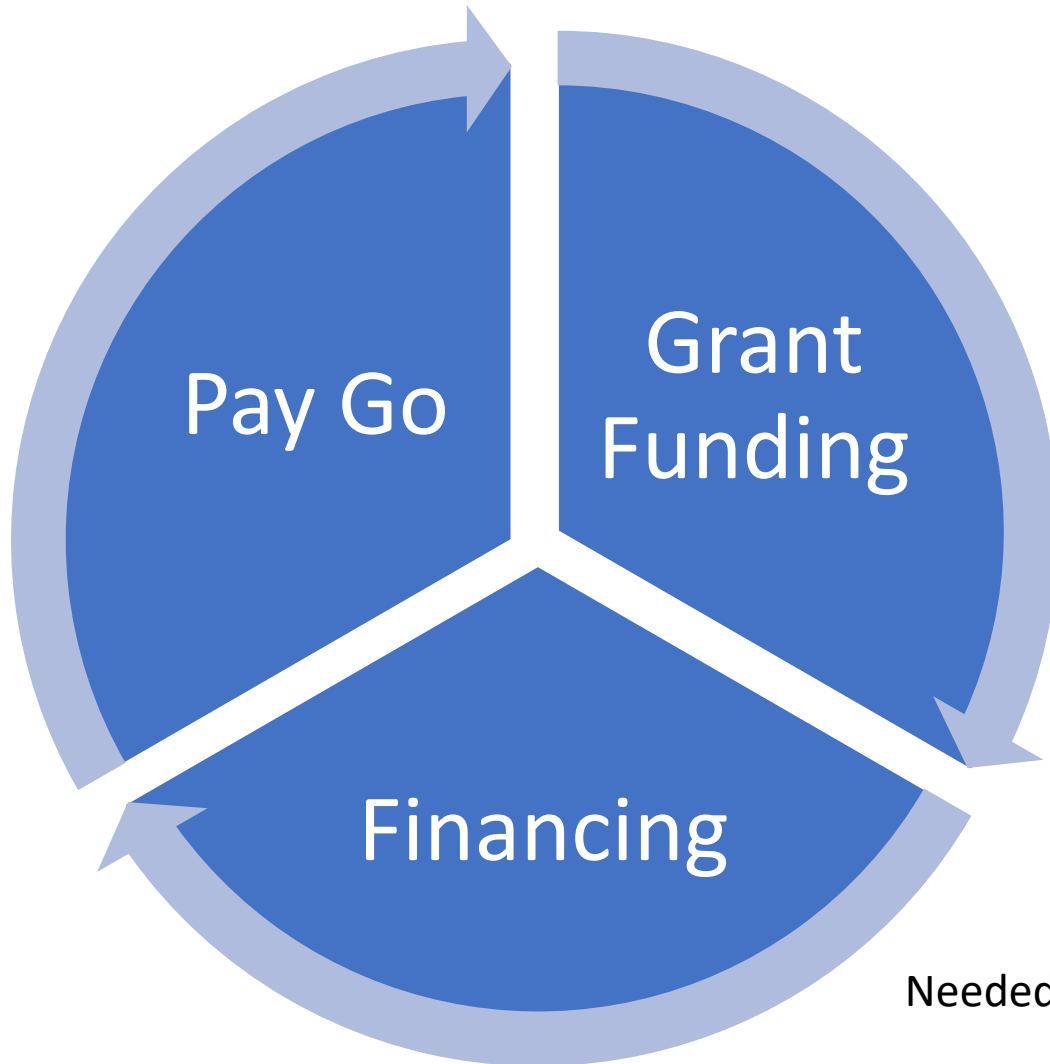
- Phase 1 = \$2.015M
 - Water main replacements
 - Valve and meter replacements
 - Well rehab work
- Phase 2 = \$1.946M
 - Water main replacements
- Phase 3 = \$5.34M
 - Water main replacements
 - Well Rehabs
 - AMI Metering System Upgrade
- TOTAL = \$9.3M

Consider combining phases 1 and 2 for economies of scale benefits from delivering larger projects.
Total Funding Request = \$3.961M (2022 dollars)

CIP funding strategy will drive future water rate policy.



Common Utility – Long Term Funding Strategy



The long-term utility funding strategy will be unique for each utility and be a function of system needs, infrastructure risk, and market timing.

December 9, 2022 Board Meeting:

Review FY22-23 Water CIP Plan

Support Cost-Effective CIP Funding Strategy

Pursue grants & low interest loans where needed

Needed for phase 1 and 2 CIP priority projects.



DID CIP Implementation Plan – Funding Strategy



Lowest Cost Financing In Rising Interest Rate Environment

- DWSRF has the cheapest financing available (still)
 - Construction Application can fund 100% of project costs (planning/design/construction/administration)
 - 30-Year Term Financing/full loan payments begin 1 year after construction
 - 3-Year Construction Period from Loan Agreement Execution
- Structure Applications based on DWSRF funding criteria and priority
- Application submittal to Funding Agreement execution = 18-24 months
- Categorically Exempt projects a big plus (R&R) – CEQA Plus Required
- DWSRF will provide DID with the most CIP budget flexibility



Drinking Water State Revolving Fund Program

- Finalize DWSRF application funding request
 - Decision on final funding request – scope/amount of CIP improvements to include
 - Approval of project cost estimate for final funding request
 - Commitment to 3-Year Construction Period from Loan Agreement Execution
- Approve submittal of DWSRF Construction Application
- Prepare DWSRF Construction Application
- Approve DWSRF authorizing resolution
- Submit DWSRF application to State for processing



Drinking Water State Revolving Fund Program

- DWSRF Construction Funding Application <<< Preferred Option
 - General Package
 - Financial Package
 - Environmental Package
 - Technical Package
- Environmental approval with Application submittal
 - Categorically Exempt projects a big plus (R&R) – CEQA Plus Required
- Technical package requires 90% design and Engineer's Report
- Takes 18-24 months from Application submittal to Funding Agreement execution



Drinking Water State Revolving Fund Program

DID Water CIP Project - Phase 1 and 2 Projects						
DWSRF General Package - Estimated Final Project Capital Costs & Funding Summary						
% Total	Cost Classification	Total Project Costs	Other Financing	Requested Financing	Comments	Avg. 20-Year CIP Approach
1.75%	A. Facilities Planning-w/funding	\$70,000	\$0	\$70,000	DWSRF Appl/CEQA	\$100,000
13.75%	B. Facilities Design-100%	\$550,000	\$0	\$550,000	Efficient Design	\$785,714
70.00%	C. Construction-Distribution Network	\$2,800,000	\$0	\$2,800,000	1 Large CIP Project	\$4,000,000
3.50%	C. Construction Management	\$140,000	\$0	\$140,000	Streamlined CM	\$200,000
0.00%	D. Value Engineering	\$0	\$0	\$0		\$0
1.00%	E. Administration-funding/reporting	\$40,000	\$0	\$40,000	DWSRF Reporting	\$57,143
10.00%	G. Contingency	\$400,000	\$0	\$400,000	Lower end contingency	\$571,429
0.00%	H. Pre-purchase Materials/Equip.	\$0	\$0	\$0		\$0
0.00%	I. Land and Right-of-Way	\$0	\$0	\$0		\$0
0.00%	J. Other	\$0	\$0	\$0		\$0
100.00%	K. Total Project Costs	\$4,000,000	\$0	\$4,000,000	\$0	\$5,714,286

Includes: Main replacements, well improvements, and meter upgrades.

For DWSRF construction application DID would need to fund the planning and design costs upfront then get reimbursed upon DWSRF funding approval.



Drinking Water State Revolving Fund Program

Durham Irrigation District – DWSRF Funding Program

Water System CIP Project - Phase 1 and 2 Projects

PROJECT IMPLEMENTATION SCHEDULE - With DWSRF Funding

Water CIP Task (DWSRF Funding)	CY2023				CY2024				CY2025 - 1st Year Construction				CY2026 - 2nd Year Construction				CY2027 - 3rd Year Construction			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
DID Water CIP Planning																				
DID Budget Approval - w/CIP Plan																				
Project Design/CEQA Approval																				
DWSRF Construction Application					Submittal															
DWSRF Funding Approval Process									Agr. Execution											
Construction - Bid/Award																				
Construction																				
Construction Management																				
Ongoing Start-up & Testing																				
Project Closeout																				x
DWSRF Reimbursement Processing									x	x	x	x	x	x	x	x	x	x	x	x
DWSRF Reporting/Updates									x	x	x	x	x	x	x	x	x	x	x	x
Project Budget Allocation-\$4.0M																				

DWSRF Project Budget \$4.0M - includes planning, design and construction costs and assumes some economies of scale for larger project scale.

DWSRF will reimburse for 100% of DID Project costs (including planning, design and construction costs).

LSCE/DID would prepare 100% design documents to expedite DWSRF Construction Application review and approval process; 90% design documents required for funding approval.

Project budget assumes CEQA Mitigated Neg Dec for entire Project; explore CEQA exemption approach due to the fact that the project will replace existing facilities with the same purpose, function and capacity.

DID DWSRF Construction Application planning and design upfront costs reimbursable upon DWSRF funding approval.



Drinking Water State Revolving Fund Program

- DWSRF Planning Funding Application <<< **Plan B (\$620,000)**
 - General Package
 - Financial Package
 - Environmental Package
 - Technical Package
- Environmental approval with Application submittal
 - Categorically Exempt projects a big plus (R&R) – CEQA Plus Required
- Technical package requires 90% design and Engineer's Report
- Takes 6-9 months from Application submittal to Funding Agreement execution

For projects who do not have final plans/specs and Environmental documentation completed.
Five-year low interest loan option to fund project planning and design costs only.
Construction application follow.



Drinking Water State Revolving Fund Program

Board DWSRF Options: Plan A Construction Application vs Plan B Planning Application

<u>DWSRF Funding Option</u>	<u>FY23-24</u>	<u>FY24-25</u>	<u>FY25-26</u>
Planning Application Approach	\$ 20,000	\$0	\$25,000 (for Construction Appl.)
Construction Application Approach	\$620,000	\$0	\$0

Planning Application approach requires two DWSRF Applications however reduces District cash flow budget impacts. Planning Application approach would add two additional years for project completion vs. Construction Application.



Next Steps

- Recommendations:
 - Approve DWSRF as preferred Water CIP funding mechanism
 - Approve DWSRF funding request amount = \$4M (adjust for inflation)
 - Approve scope of projects to fund through DWSRF – Phase 1 and 2 projects
 - Approve pursuit of DWSRF Planning or Construction Funding Application in 2023.
 - Update long term water funding strategies for FY23-24 budget process
 - Maintain on-going Board communications regarding progress



DID Board Meeting – Water CIP Planning and Implementation Item

DISCUSSION AND QUESTIONS?

