City of Longview

1525 Broadway
Longview, WA 98632
www.ci.longview.wa.us

Agenda

Public Works SubCommittee

Wednesday, February 21, 2024 | **5:00 PM** | **Public Works Conference Room, 1st Floor, City Hall**

1. **HYBRID MEETING DETAILS**

   24-00144 To join the webinar: https://us02web.zoom.us/j/85191031903
   Webinar ID: 851 9103 1903
   Or Telephone: (253) 215 8782 or (253) 205 0468

2. **CALL TO ORDER**

3. **APPROVAL OF MEETING NOTES**

4. **OLD BUSINESS**

5. **NEW BUSINESS**

   24-00145 Utilities Operations Overview - Water, Sewer, & Filter

   24-00146 Utility Projects - WSF current & upcoming

   24-00147 Dedicated Fill Line

   24-00148 Jackson, Mississippi Video discussion
   https://www.youtube.com/watch?v=xOdF7A1ry7E

   24-00149 What's next?

   - Field Trips?
   - Next Department?
   - Projects to review?

6. **PUBLIC COMMENT**

7. **ADJOURNMENT**

City of Longview

Agenda Summary

Utilities Operations Overview - Water, Sewer, & Filter

Attachments:
1. Water - Sewer - Filter Responsibilities
2. Utility flow chart 2-9-2024

Water

Water Distribution - Maintenance

This program provides for the maintenance and repair of the City's water mains and services.

A. Repair broken water mains – **215 Miles of Water Main**
B. Repair and/or replace water services, as necessary – **14,821 Water Services**
C. Replace fire hydrants, as necessary – **1814 Fire Hydrants**
D. Replace valves, as necessary – **4327 Water Main Valves**

Water Distribution - Metering

This program is to ensure the accuracy of recording water consumed for billing purposes.

A. Replace two-inch and smaller meters – **14,642 Meters**
B. Replace broken meter boxes
C. Test three-inch and larger meters – **77 Large Meters**
D. Replace, as necessary, three-inch and larger meters

Water Distribution - Operations

This program provides for operation and protection of the City's water distribution system. This includes pump station and reservoir operation, power costs, inspections and security, pump run-time and water demand data collection, valve and hydrant operation and maintenance, and water purchased from the regional water treatment plant for distribution.

A. Purchase water for distribution
B. Inspect reservoirs and security fencing – **10 Reservoirs**
C. Maintain reservoirs and security fencing
D. Inspect and maintain hydrants
E. Inspect and maintain valves
F. Flush water mains to maintain water quality
G. Inspect new mains; oversee chlorination/dechlorination
H. Inspect and maintain pump stations, pumps, motors and log equipment readings – **6 Pump Stations**
I. Perform fire flow tests
J. Locate water mains – **2500 Locates**
K. Test and repair City-owned backflow assemblies, as necessary

Water Distribution - Water Quality

This program performs regulatory water quality sampling, complaint investigation and water quality sampling, inspects for cross-connection hazards, and implements the cross-connection control program.

A. Review plans for potential cross-connections – **25 Inspected**
B. Inspect new backflow assembly installations – **93 Inspected**
C. Conduct hazard assessment surveys – **50 Assessments**
D. Collect and analyze bacteriological samples and chlorine residuals – **600 BAC T samples collected anually**
E. Maintain cross-connection control records – **1680 Backflow preventers currently**

Sewer

Wastewater Collection - Maintenance
This program provides for maintenance and repair the City's sewage collection system.

A. Repair sewer mains – **163 Miles of Sewer Main**
B. Repair and/or replace sewer manholes – **10 Manhole Repairs (Goal)**
C. Locate sewer mains – **2500 Locates**
D. Inspect and maintain records of pre-treatment systems and grease abatement systems – **200 Inspections**

Wastewater Collection – Operations
This program provides for operation and protection for the City's sewer distribution system. This includes pump stations.

A. Inspect and maintain sewer lift stations, log equipment readings, maintain structures and grounds – **46 Pump Stations**

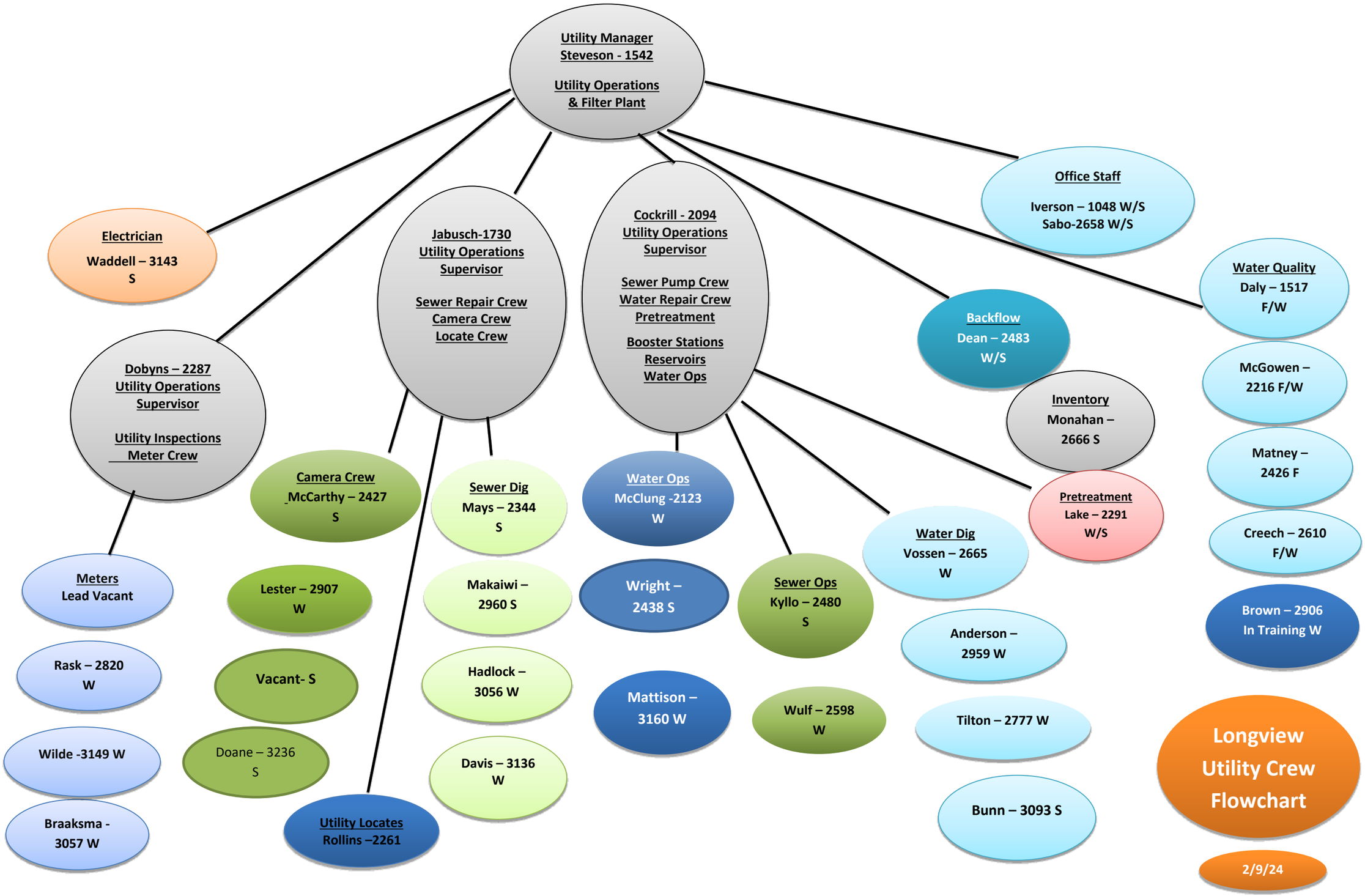
Wastewater Collection – Inspection
This program provides for video inspection and cleaning of the City's sewer distribution system.

A. Inspect sewer manholes – **50 Manholes Inspected (Goal)**
B. Sewer mains cleaned and inspected – **20 Miles / Year (Goal)**

Filter

Water Treatment
The Mint Farm Regional Water Treatment Plant monitors groundwater quality and operates continuously to provide potable water to customers in the Longview and Beacon Hill Water & Sewer District service areas (BHWSD).

A. Continually meet or exceed all water quality standards
B. Perform all State and federally-mandated water quality tests in a timely manner – **5000 W/Q tests performed each year**
C. Produce drinking water to meet the needs of the citizens of Longview and BHWSD


Utility Manager
Steveson - 1542
Utility Operations
& Filter Plant
Office Staff
Iverson – 1048 W/S
Sabo-2658 W/S
Water Quality
Daly – 1517
F/W
McGowen –
2216 F/W
Matney –
2426 F
Creech – 2610
F/W
Brown – 2906
In Training W
Electrician
Waddell – 3143
S
Dobyns – 2287
Utility Operations
Supervisor
Utility Inspections
Meter Crew
Jabusch-1730
Utility Operations
Supervisor
Sewer Repair Crew
Camera Crew
Locate Crew
Cockrill - 2094
Utility Operations
Supervisor
Sewer Pump Crew
Water Repair Crew
Pretreatment
Booster Stations
Reservoirs
Water Ops
Backflow
Dean – 2483
W/S
Inventory
Monahan –
2666 S
Pretreatment
Lake – 2291
W/S
Water Dig
Vossen – 2665
W
Anderson –
2959 W
Tilton – 2777 W
Bunn – 3093 S
Sewer Ops
Kyllo – 2480
S
Wulf – 2598
W
Camera Crew
McCarthy – 2427
S
Sewer Dig
Mays – 2344
S
Water Ops
McClung -2123
W
Wright –
2438 S
Mattison –
3160 W
Meters
Lead Vacant
Rask – 2820
W
Wilde -3149 W
Braaksma -
3057 W
Lester – 2907
W
Vacant- S
Doane – 3236
S
Makaiwi –
2960 S
Hadlock –
3056 W
Davis – 3136
W
Utility Locates
Rollins –2261
Longview
Utility Crew
Flowchart
2/9/24

Utility Projects - WSF current & upcoming

Attachments:
1. CIP Summary 2023_2024_WATER_SEWER_FILTER

Capital Improvement Program Summary: 2023/2024

Sewer Funds:

Project	Status	Budget
Pump Station Design/Construction	Maintenance CIP	$200,000.00
Ocean Beach #4 Pump Station Odor Control Filter/Tank Replacement	Maintenance CIP	$10,000.00
Public/Private Partnership	As Needed	$100,000.00
Local Improvement District Annual Program	As Needed	$200,000.00
Annual Main Replacements	Planning	$750,000.00
Mint Farm Sewer Pump Station Odor Control	Design	$105,000.00
Pump Station Rehabilltation - 4014 Oak Street	Design	$1,821,990.00
General Sewer Plan	Design	$200,000.00
Columbia Heights Sewer Main Replacement DESIGN ONLY	Design	$40,000.00
Pump Station Rehabilltation - 2600 42nd Avenue	Design\BID	$1,646,670.00
Annual Sewer Main Liners	Construction	$2,350,000.00
46th Avenue Reconstruction Sewer Main	Construction	$485,000.00
Pump Station Rehabilltation - 2626 38th Avenue	Substainial Completion	$134,340.00
Pump Station Rehabilltation - 2402 38nd Avenue	Substainial Completion	$1,772,000.00
CMD #2 Block 10, Sewer Main Replacement	Complete	$600,000.00
	Total	$10,415,000.00

Water Filter Plant Construction Funds:

Project	Status	Budget
Pump Rebuilds	Maintenance CIP	$150,000.00
Miscellaneous Capital Repairs	Maintenance CIP	$150,000.00
Additional Hypochlorite Tank	Planning	$200,000.00
Equipment Storage Building	Planning	$200,000.00
Supervisory Control and Data Acquisition PLC	Design	$300,000.00
	Total:	$1,000,000.00

Water Funds:

Project	Status	Budget
Local Improvement District Annual Program	As Needed	$200,000.00
Public/Private Partnership	As Needed	$100,000.00
Valve Replacements	Maintenance CIP	$60,000.00
Large Meter Replacements	Maintenance CIP	$280,000.00
PRV Station Installation	Maintenance CIP	$300,000.00
Supervisory Constrol and Data Acquisition (SCADA Upgrades)	Maintenance CIP	$50,000.00
Water Truck Fill Stations	Planning	$200,000.00
Reservoirs - Seismic Upgrades	Planning	$158,200.00
Dedicated Fill Line to Water Reservoir	Planning	$6,000,000.00
Madrona Avenue Water Main Replacements	Planning	$1,476,140.00
Mt Solo Water Main Replacement	Design	$1,216,000.00
Columbia Heights Water Main Replacement DESIGN ONLY	Design	$60,000.00
Fisher Lane Treatment Plant Demolition	Close-out	$1,200,000.00
46th Avenue Reconstruction Water Main Replacement	Construction	$603,580.00
Niemi & Trella Reservoir Mixer and Chemical Injection	Construction	$70,000.00
Main Reservoir #5 Roof and Sealing	Complete	$3,240,000.00
CMD #2 Block 10, Water Main Replacement	Complete	$260,000.00
Wildwood Water Break Pavement Repair	Complete	$35,500.00
Cascade Way Water Break Pavement Repair	Complete	$34,500.00
Clark Creek Master Water Pump Station	Complete	$300,000.00
Niemi Booser Pump Station Rebuild	On-Hold	$20,000.00
	Total:	$15,863,920.00

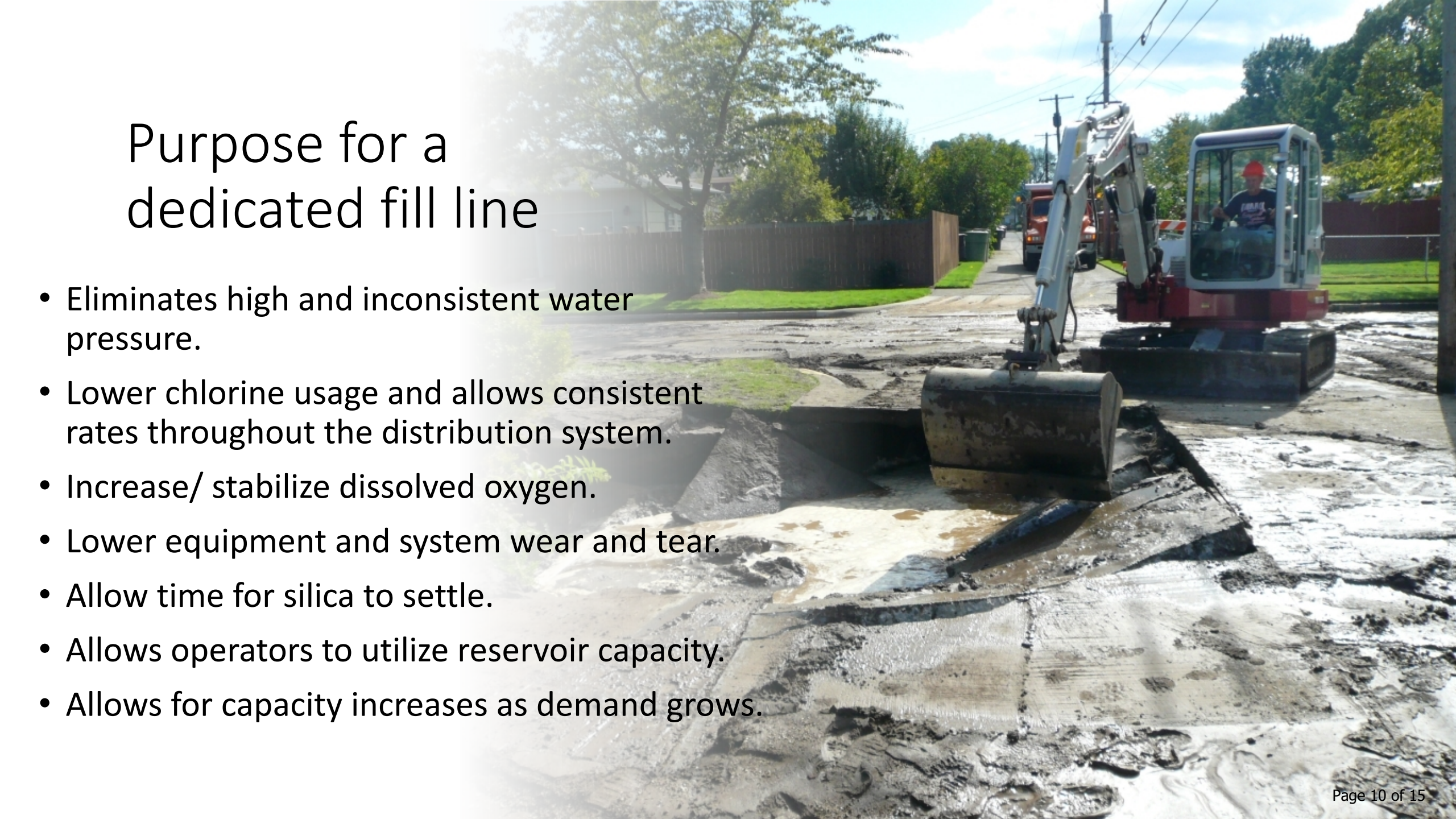
Dedicated Fill Line

Attachments:
1. Fill Line

Dedicate Fill Line

2021 to 2023

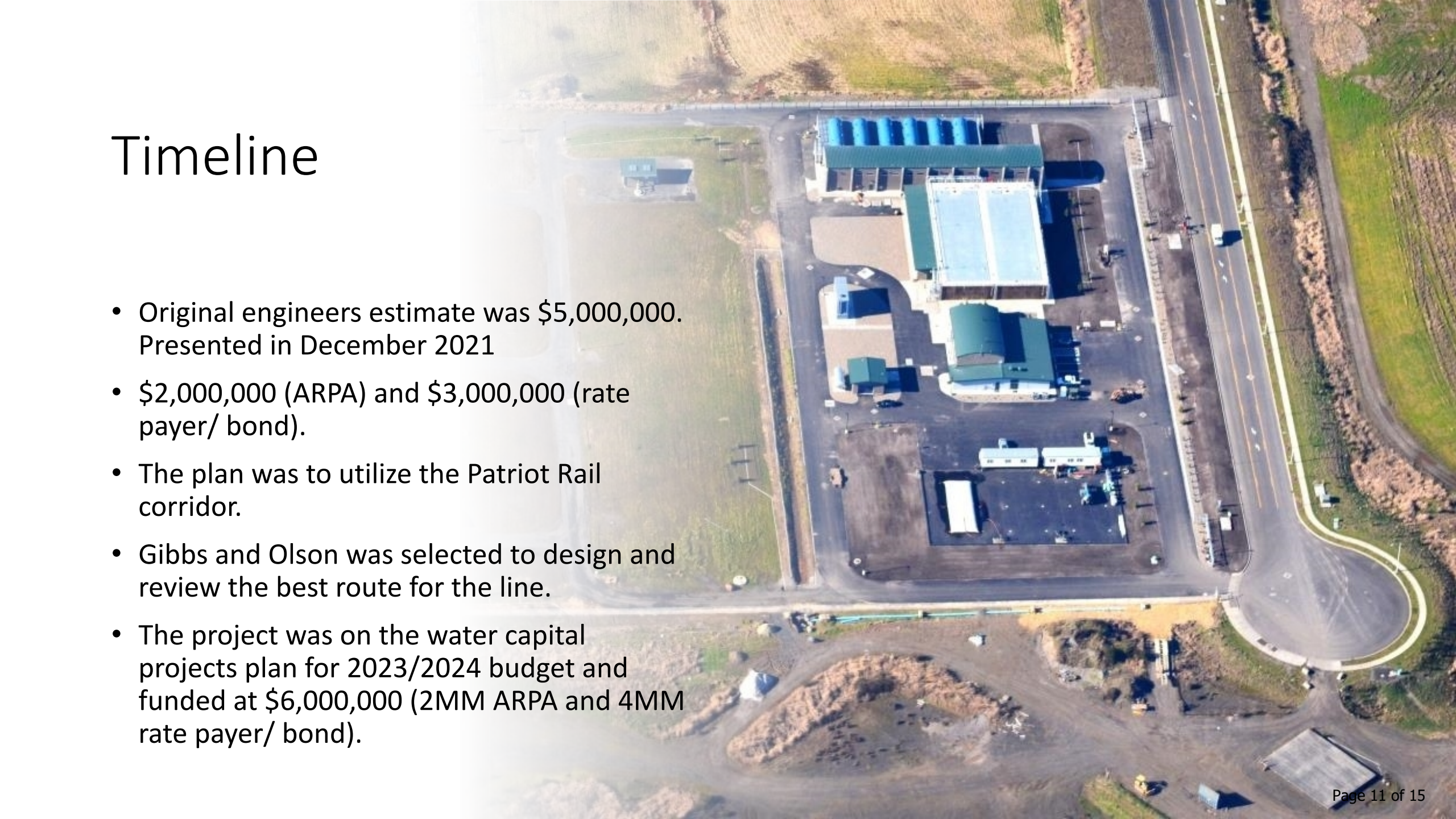
Purpose for a dedicated fill line

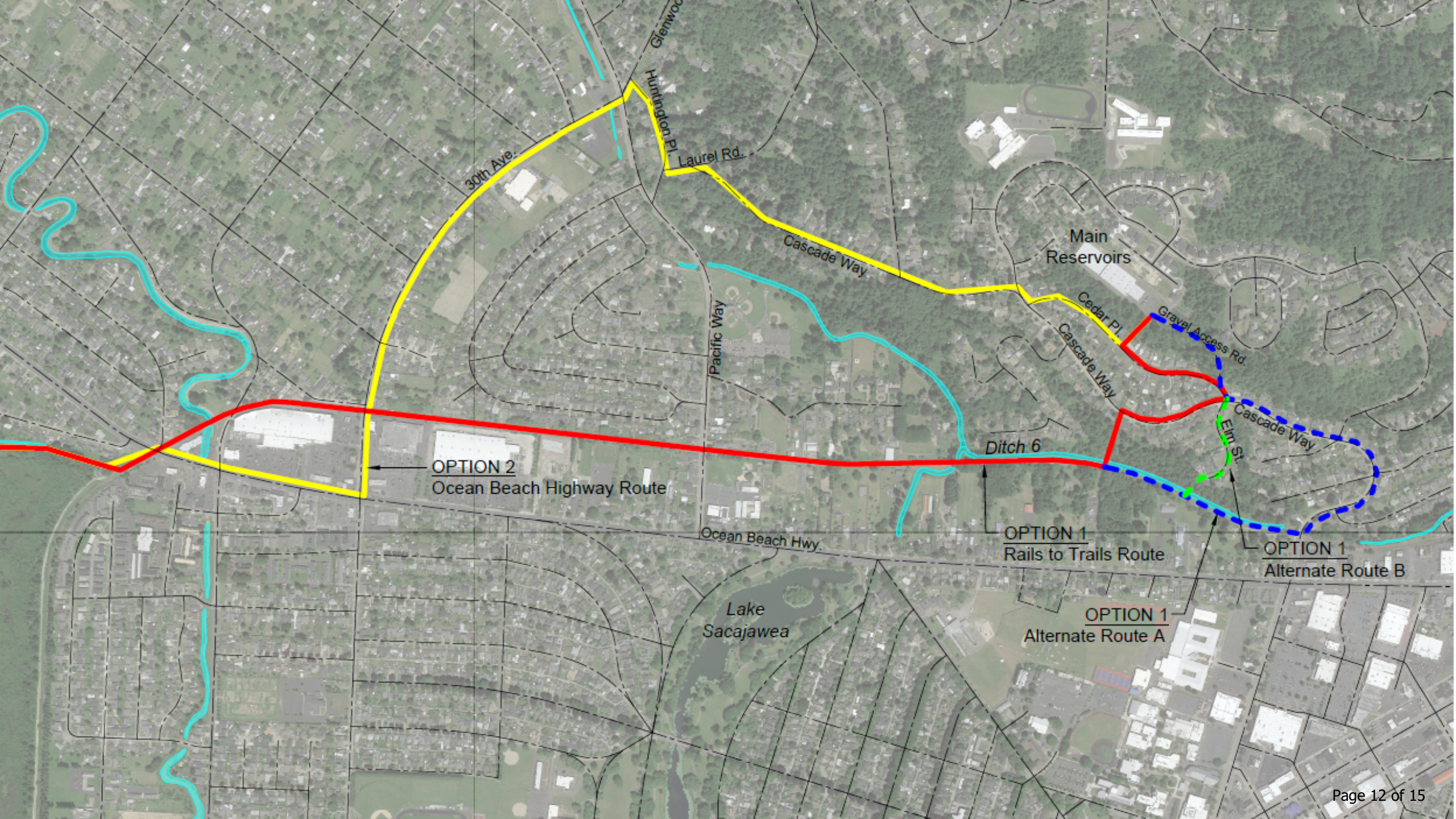


- Eliminates high and inconsistent water pressure.
- Lower chlorine usage and allows consistent rates throughout the distribution system.
- Increase/ stabilize dissolved oxygen.
- Lower equipment and system wear and tear.
- Allow time for silica to settle.
- Allows operators to utilize reservoir capacity.
- Allows for capacity increases as demand grows.

Timeline

- Original engineers estimate was $5,000,000. Presented in December 2021
- $2,000,000 (ARPA) and $3,000,000 (rate payer/ bond).
- The plan was to utilize the Patriot Rail corridor.
- Gibbs and Olson was selected to design and review the best route for the line.
- The project was on the water capital projects plan for 2023/2024 budget and funded at $6,000,000 (2MM ARPA and 4MM rate payer/ bond).




Glenwood
Huntington Pl.
Laurel Rd.
30th Ave.
Cascade Way
Main
Reservoirs
Cedar Pl.
Gravel Access Rd.
Cascade Way
Pacific Way
Elm St.
Cascade Way
Ditch 6
OPTION 2
Ocean Beach Highway Route
Ocean Beach Hwy.
OPTION 1
Rails to Trails Route
OPTION 1
Alternate Route B
Lake
Sacajawea
OPTION 1
Alternate Route A

Consultant Findings and Estimates.

- Gibbs And Olson provided the findings of the study in February of 2023.
- The routes reviewed were Cascade Way and the Patriot Rail Corridor.
- Cost estimated provided far exceeded original estimates.
- Option 1.Patriot Rail Route $39,127,000
- Option 2. Cascade Way Route $50,568,000
- Option 1 was recommended due to geologic concerns and cost.
- All options were beyond current budget.

Options?

Gibbs and Olson was asked to provide estimates for phases and alternatives.

Phase 1 main reservoir to rail corridor.

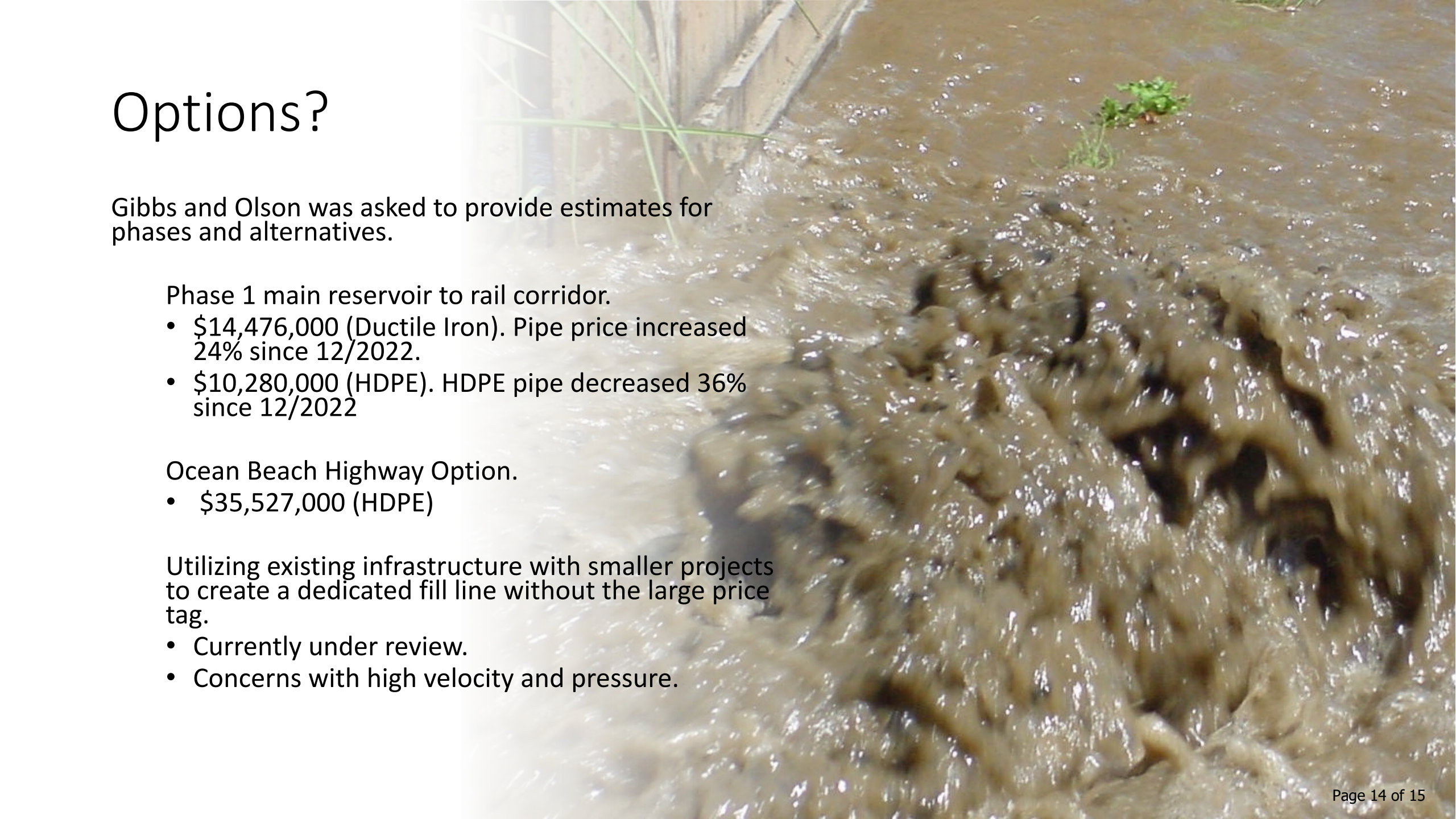
- $14,476,000 (Ductile Iron). Pipe price increased 24% since 12/2022.
- $10,280,000 (HDPE). HDPE pipe decreased 36% since 12/2022

Ocean Beach Highway Option.

- $35,527,000 (HDPE)

Utilizing existing infrastructure with smaller projects to create a dedicated fill line without the large price tag.

- Currently under review.
- Concerns with high velocity and pressure.



Questions?