

Staff Report

TO: Board of Directors

FROM: Gabe Aronow, P.E. Director of Engineering

DATE: April 8, 2026

SUBJECT: Workshop – Elizabeth George to Lake Wildwood Pipeline Project

ENGINEERING

RECOMMENDATION:

Participate in a workshop discussion on the Elizabeth George to Lake Wildwood Pipeline Project (EGLAWIWO or BEP) and provide direction.

BACKGROUND:

The existing Lake Wildwood Water treatment plant, serving the Lake Wildwood and Penn Valley communities, is at the end of its useful life and needs to be replaced. In 2019, the Board of Directors directed staff to develop pipeline alternatives to deliver treated water from the Elizabeth George system and retain part of the existing treatment plant for backup. Alternatives were developed, and a Mitigated Negative Declaration was approved for the “E. George to Lake Wildwood Backbone Extension Pipeline” Project. The plan was to construct the pipeline over multiple years. The project stopped due to cost, and in 2024, direction was given to staff to proceed with plans for a Lake Wildwood Treatment Plant upgrade rather than a new water supply pipeline. In 2025, a feasibility study for the treatment plant was completed, resulting in higher-than-anticipated costs. A new pipeline cost was also developed in 2025. The new treatment plant and pipeline are now closer in cost than previously estimated, and when considered with annual operation and maintenance expenses, the preferred project may be the pipeline alternative.

To limit impacts on the current rate study, solutions to the Lake Wildwood water supply problem were deferred to 2031, and, in the interim, to address potential failures at the existing treatment plant, an annual budget of \$250,000 was included in the 2026 CIP plan. However, potential cost savings may be captured by expediting either project by avoiding temporary treatment plant improvements and capitalizing on a planned Nevada County paving project, which could avoid having paving costs borne by a pipeline project. The intent of this workshop is to discuss the two alternatives and receive feedback.

BUDGETARY IMPACT:

There is a \$250,000 CIP allowance to address treatment plant deficiencies and support pipeline development through easements, property procurement, and geotechnical support related to pipeline design. However, it was presented and approved by the Board in 2025 only as a treatment plant budget. If the Board directs continued development of the pipeline project, this budget needs to be reallocated with \$200,000 designated for treatment plant repairs and \$50,000 toward pipeline development, or to either project as needed.

The plan, as proposed by staff, is, unless directed otherwise, to design and bid the pipeline alternative to help determine the actual costs for this water supply option. If affordable, the Board may elect to proceed with implementation of the pipeline project. If unaffordable, the Board can direct a return to the treatment plant upgrade option or provide an alternative direction.

The total pipeline cost is estimated to be approximately \$35 million, and approximately \$6 million could be eligible for capacity funds.

Attachments (1)

- Elizabeth George to Lake Wildwood Pipeline Project Presentation

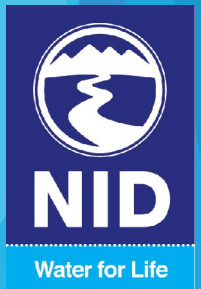
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LAKE WILDWOOD TREATMENT PLANT
IMPROVEMENT PROJECT

OR

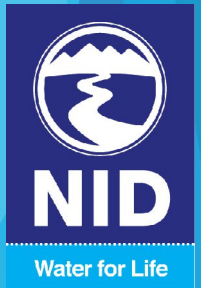
ELIZABETH GEORGE TO LAKE WILDWOOD
PIPELINE PROJECT

WORKSHOP



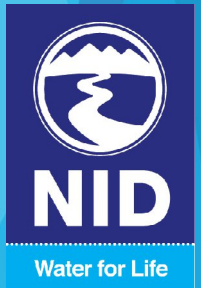
WORKSHOP AGENDA

- ▶ Background
- ▶ LWW Water Treatment Plant
- ▶ Elizabeth George to Lake Wildwood Pipeline Project
- ▶ Costs
- ▶ Next steps



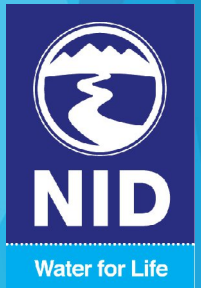
BACKGROUND

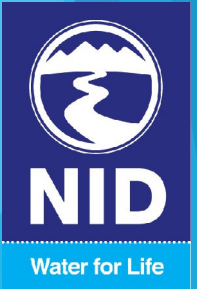
- ▶ WTP Source Water - Deer Creek, Newtown Canal
- ▶ LWW Water Treatment Plant - Initially built in 1968
- ▶ 2 treatment plants (clarifiers & sand filtration)
- ▶ Plant A built in 1968 - 58 years old
- ▶ Plant B built in 1986 - 40 years old
- ▶ Each plant provides 2 Mgal/d - 4 Mgal/d total
- ▶ Capacity needed 3+/- Mgal/d



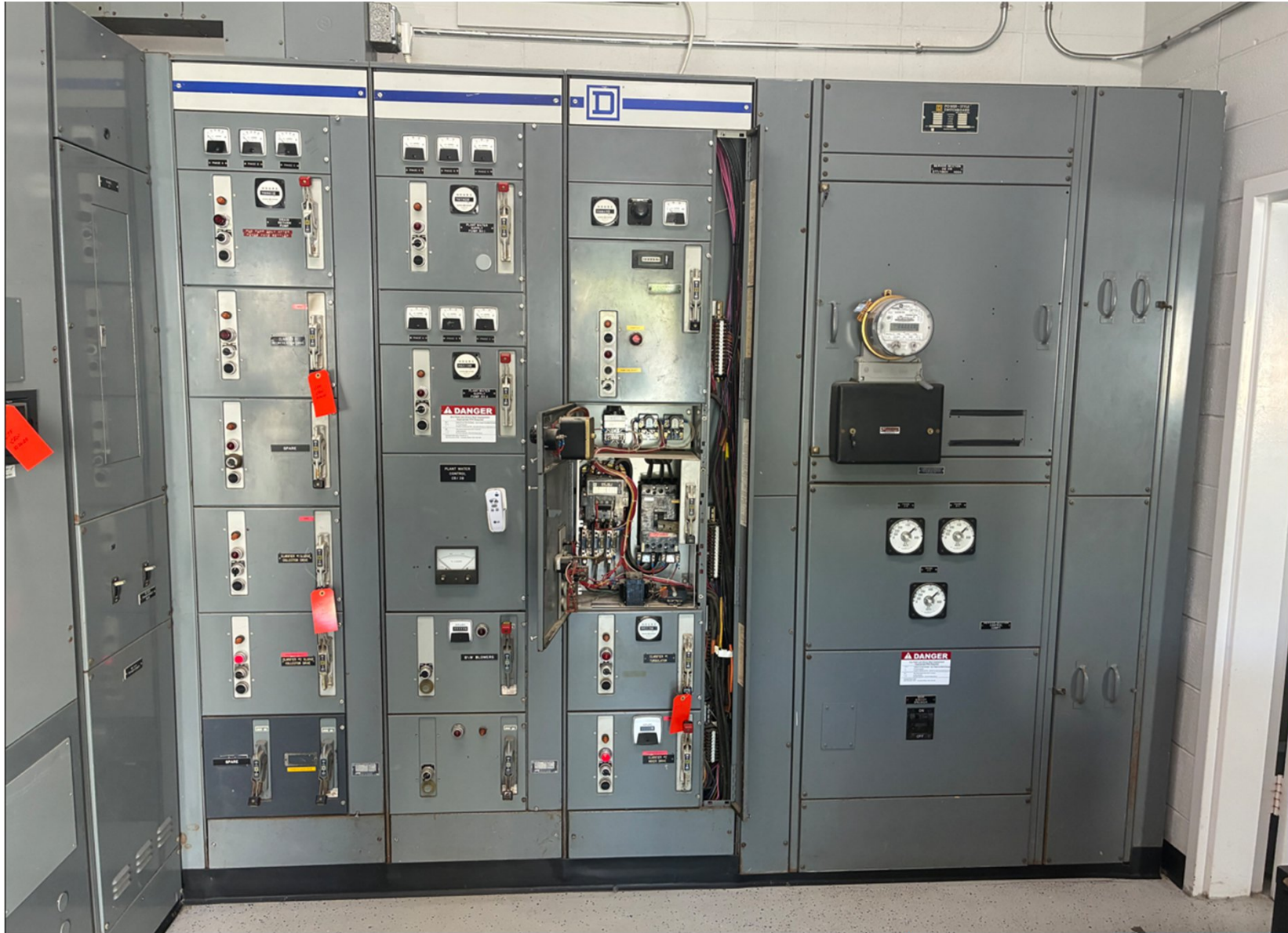
LAKE WILDWOOD WATER TREATMENT PLANT

- ▶ Both plants are at the end of their useful life
 - ▶ Significant corrosion on metallic surfaces
 - ▶ Mechanical equipment failing and custom
 - ▶ Electrical conduit and wire seized together
 - ▶ MCC dated, unserviceable
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- ▶ Deer Creek Diversion at capacity and in poor condition



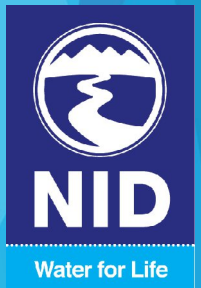






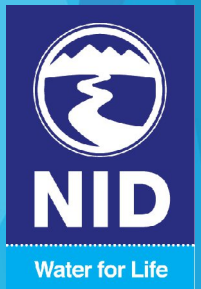
LAKE WILDWOOD WATER TREATMENT PLANT

- ▶ **CONDITION - MULTIPLE POTENTIAL FAILURE POINTS**
 - ▶ Structural, mechanical, electrical
 - ▶ Back-up electrical may include cables on grade or new trenching
 - ▶ Current clarifier project:
 - ▶ Evaluating new gear box
 - ▶ Evaluating new tie-rods and turn-buckles
 - ▶ Evaluating new coating system

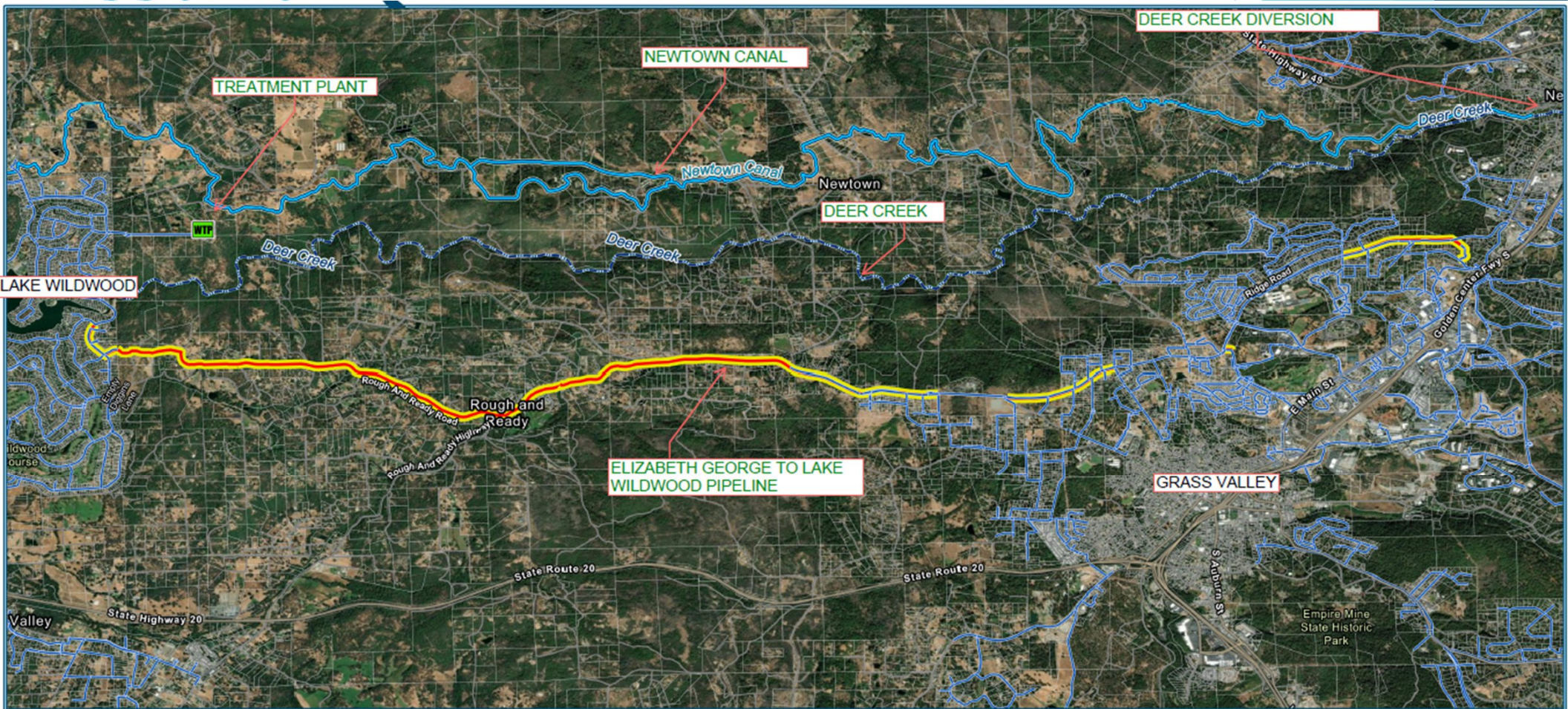


ELIZABETH GEORGE TO LAKE WILDWOOD PIPELINE PROJECT

- ▶ 7.5 miles
- ▶ 20-inch and 16-inch pipe
- ▶ 7 pressure reducing stations
- ▶ Supplemental chlorination at LWW
- ▶ Hydrants along alignment
- ▶ Service capacity along alignment



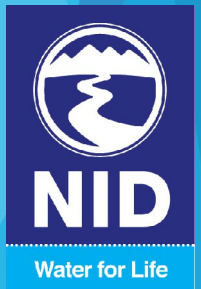
ELIZABETH GEORGE TO LAKE WILDWOOD PIPELINE



ELIZABETH GEORGE TO LAKE WILDWOOD PIPELINE AND WTP PROJECT COST

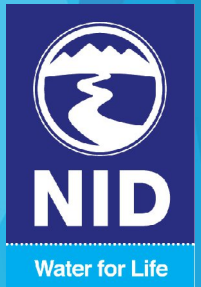
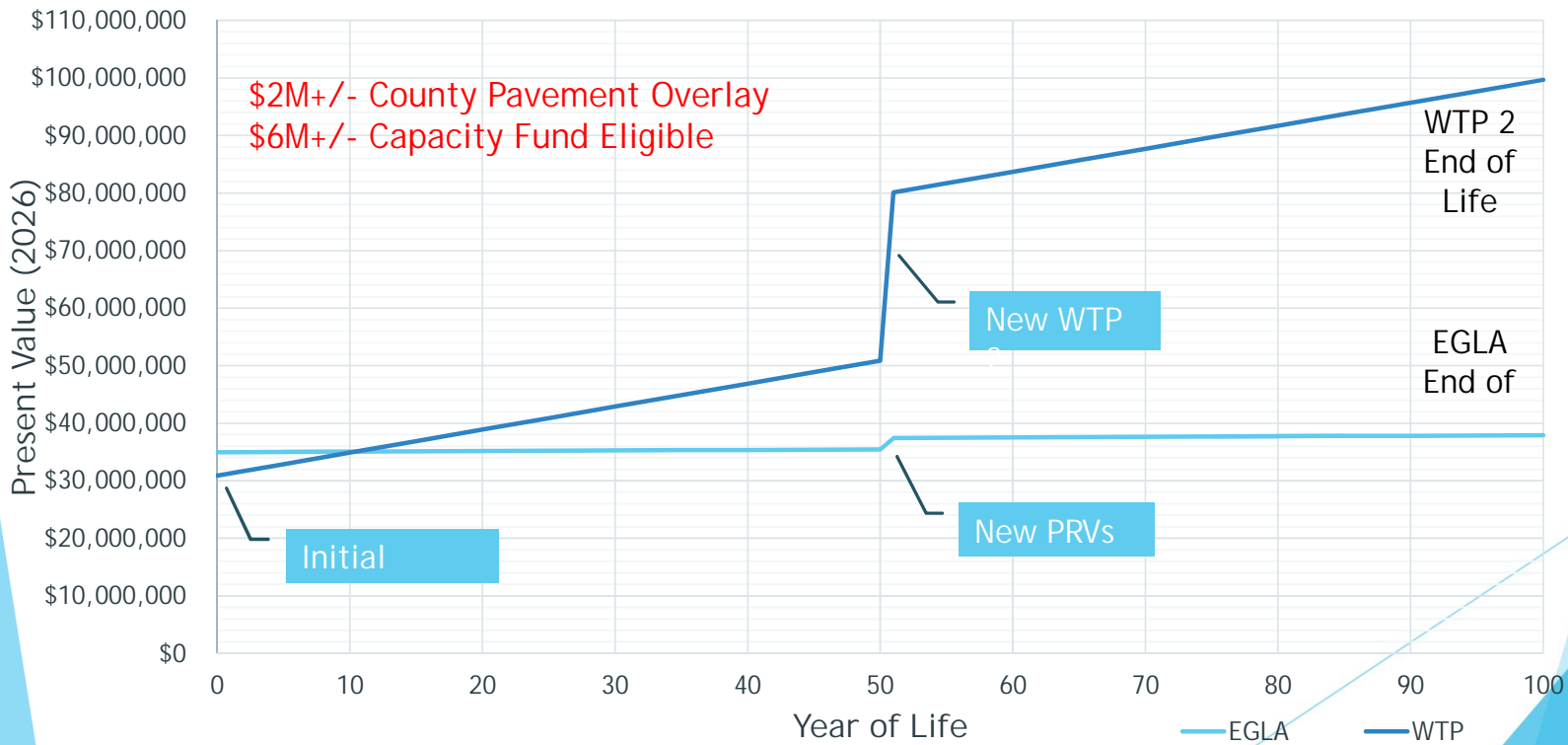
	<u>EGLAWIWO (a)</u>	<u>WTP</u>
Pipe/WTP	\$31,000,000	\$29,000,000
Deer Creek Diversion		\$1,800,000
Personeni		\$300,000
Pressure Reducing Stations	\$3,900,000	
Total Capital	\$35,000,000	\$31,000,000
Annual O&M	\$10,000	\$400,000
100 Year O&M Present Worth	\$1,000,000	\$40,000,000
100 Year Total Present Worth	\$38,000,000	\$100,000,000

funds are considered.



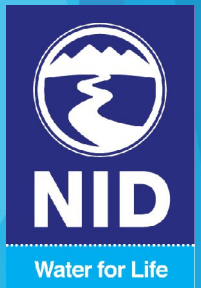
ELIZABETH GEORGE TO LAKE WILDWOOD PIPELINE AND WTP PROJECT COST

Present Value of EG to LWW Pipeline & WTP by Year of Life



LAKE WILDWOOD WATER SUPPLY SUMMARY

- ▶ New plant feasibility study and costs completed in 2025
- ▶ Pipeline costs based on recent bid data
- ▶ Improvements postponed to 2031 to support rate study
- ▶ \$200,000/year budgeted for emergency WTP repairs
- ▶ \$50,000/year assigned to pipeline option development
- ▶ Factors:
 - ▶ Existing WTP improvements will be a throw away investment
 - ▶ Almost \$2M could be saved by expediting the pipeline (County plans to overlay roads in 2028)
 - ▶



BOARD OF DIRECTORS DIRECTION AND NEXT STEPS

- ▶ 2026 Lake Wildwood \$250,000 budget presented as one WTP project budget. Request direction to use \$50,000 of that towards pipeline development - easements/property.
- ▶ Request direction to expedite pipeline design and County coordination to capture pavement savings.
- ▶ Propose to bid the pipeline to “know” what it really cost.
- ▶ Bring pipeline costs to the Board for approval, or if too high, return to the treatment plant design and bid that.

