



Backbone Pipeline Update

BOARD OF DIRECTORS

8/7/2023

Discussion Topics



BACKGROUND



FEASIBILITY
STUDY



RECOMMENDED
PROJECT



COSTS



NEXT STEPS

Discussion Topics



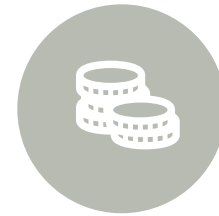
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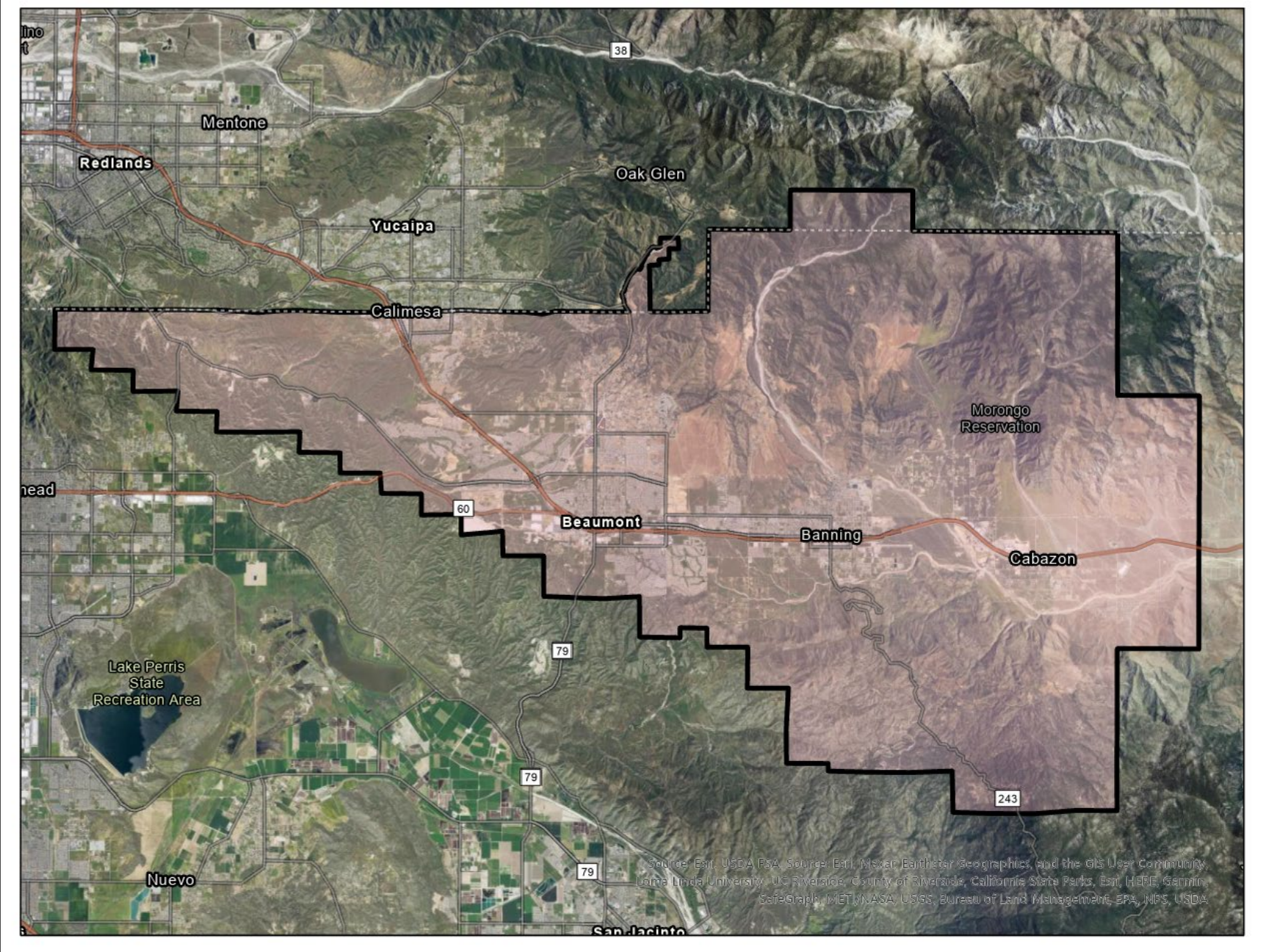


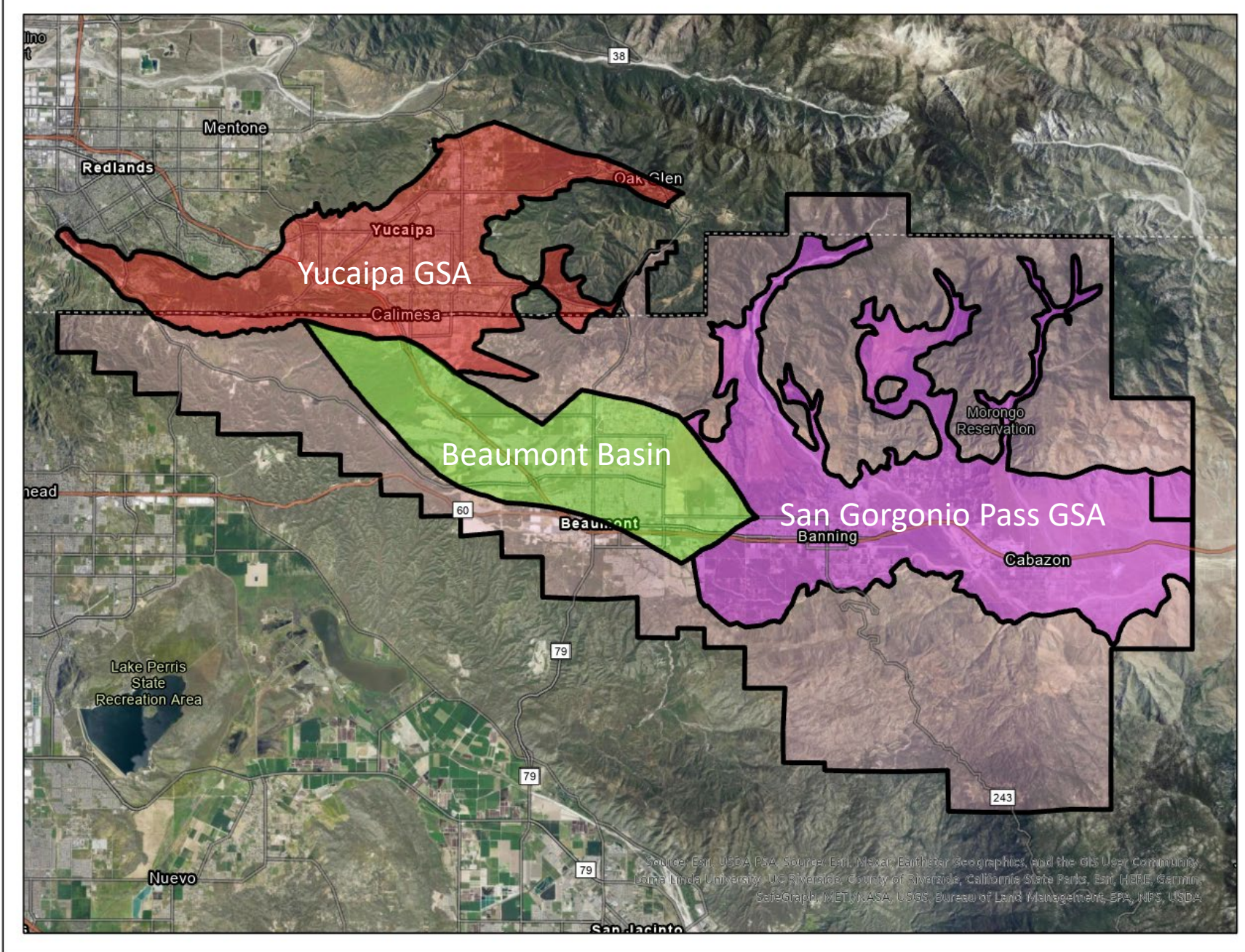
COSTS



NEXT STEPS







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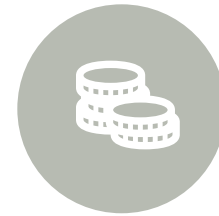
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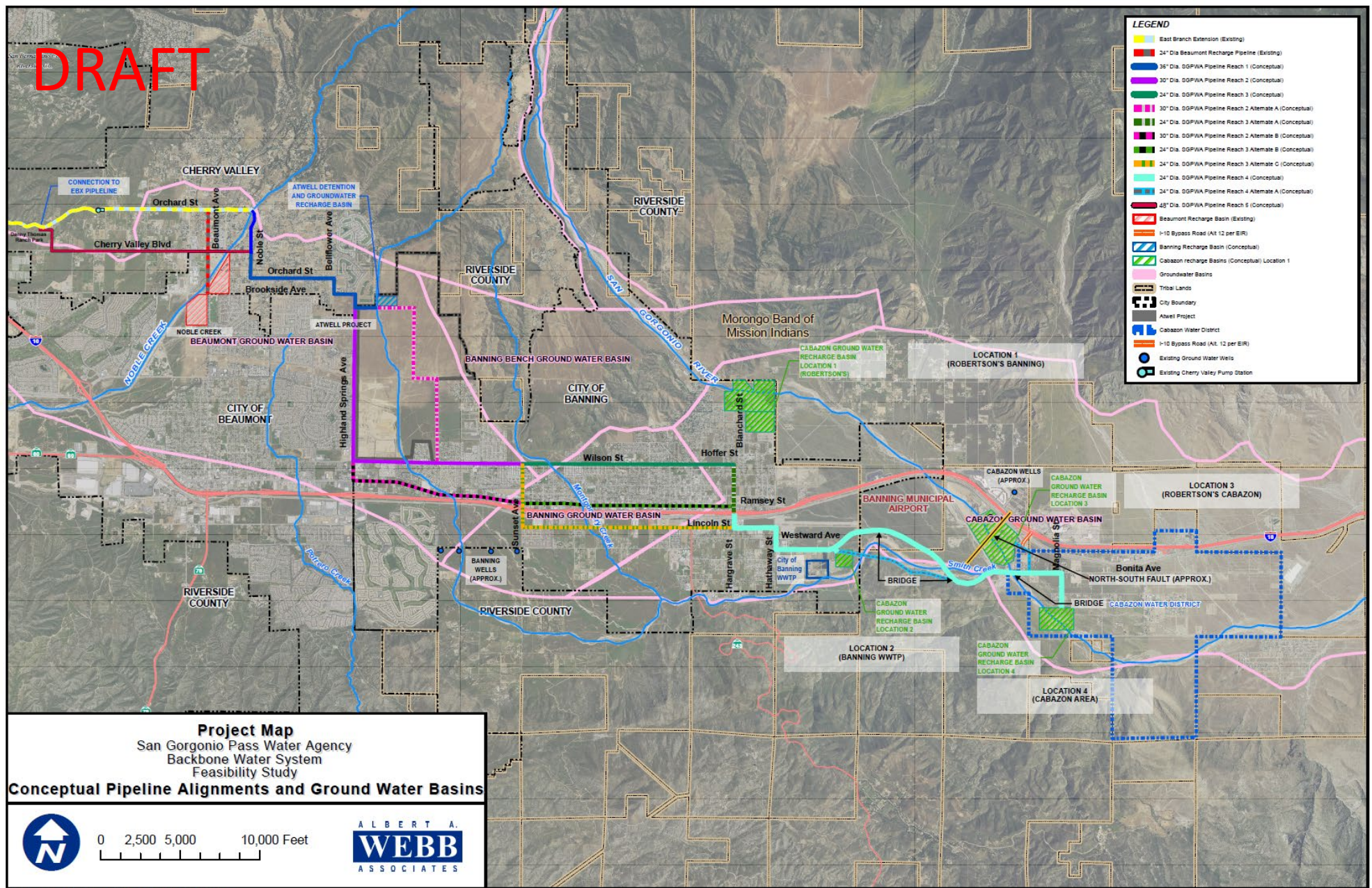


NEXT STEPS

SGPWA commissioned a backbone feasibility study that included:

- Groundwater modeling
- Water supply and demand assessment
- Recharge facility siting
- Pipeline alignment study
- Underground utility conflict evaluation
- Right of way and easement evaluation
- Hydraulic analyses
- Pipeline material and appurtenances evaluation
- Cherry Valley Pump Station bypass pipeline analysis
- Environmental constraints analyses
- Jurisdiction and permitting evaluation
- Cost estimations

DRAFT



- LEGEND**
- East Branch Extension (Existing)
 - 24" Dia Beaumont Recharge Pipeline (Existing)
 - 36" Dia. GSPWA Pipeline Reach 1 (Conceptual)
 - 30" Dia. GSPWA Pipeline Reach 2 (Conceptual)
 - 24" Dia. GSPWA Pipeline Reach 3 (Conceptual)
 - 30" Dia. GSPWA Pipeline Reach 2 Alternate A (Conceptual)
 - 24" Dia. GSPWA Pipeline Reach 3 Alternate A (Conceptual)
 - 30" Dia. GSPWA Pipeline Reach 2 Alternate B (Conceptual)
 - 24" Dia. GSPWA Pipeline Reach 3 Alternate B (Conceptual)
 - 24" Dia. GSPWA Pipeline Reach 3 Alternate C (Conceptual)
 - 24" Dia. GSPWA Pipeline Reach 4 (Conceptual)
 - 24" Dia. GSPWA Pipeline Reach 4 Alternate A (Conceptual)
 - 48" Dia. GSPWA Pipeline Reach 5 (Conceptual)
 - Beaumont Recharge Basin (Existing)
 - I-10 Bypass Road (Alt. 12 per EIR)
 - Banning Recharge Basin (Conceptual)
 - Cabazon recharge Basins (Conceptual) Location 1
 - Groundwater Basins
 - Tribal Lands
 - City Boundary
 - Atwell Project
 - Cabazon Water District
 - I-10 Bypass Road (Alt. 12 per EIR)
 - Existing Ground Water Wells
 - Existing Cherry Valley Pump Station

Project Map
San Gorgonio Pass Water Agency
Backbone Water System
Feasibility Study

Conceptual Pipeline Alignments and Ground Water Basins

0 2,500 5,000 10,000 Feet

ALBERT A. WEBB ASSOCIATES

Sources: Riverside Co. 2022 Aerial 2020

Discussion Topics



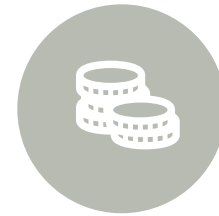
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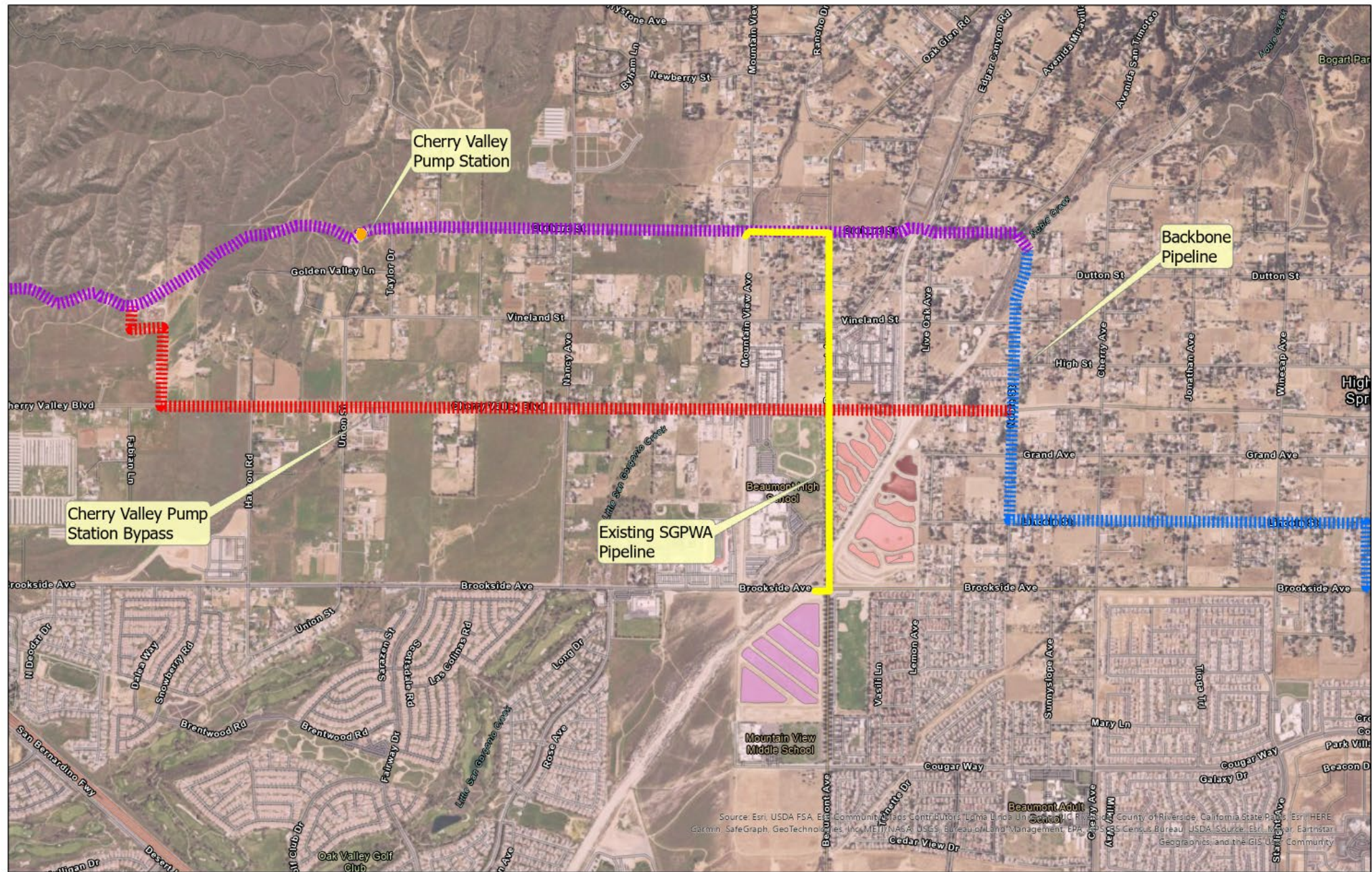
COSTS



NEXT STEPS

The recommended project includes:

- Recharge facility locations in north-east Beaumont, Banning, and Cabazon
- Backbone Pipeline alignment of approximately 17 miles of 48, 36, 30, and 24 inch diameter pipe
- The Cherry Valley Pump Station bypass
- Ultimate conveyance capacity up to 64 CFS

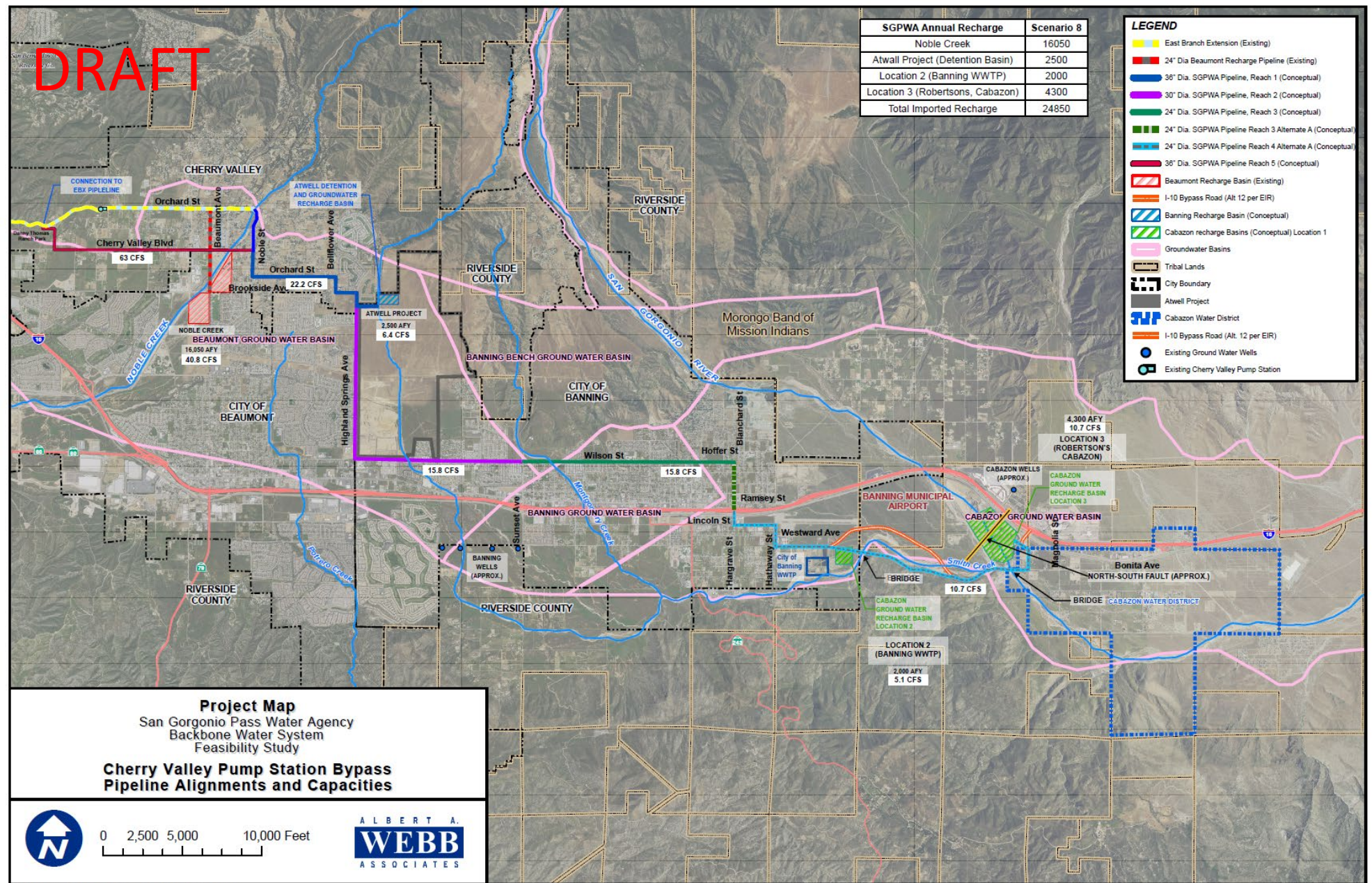


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SGPWA Annual Recharge	Scenario 8
Noble Creek	16050
Atwell Project (Detention Basin)	2500
Location 2 (Banning WWTP)	2000
Location 3 (Robertsons, Cabazon)	4300
Total Imported Recharge	24850


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- ▭ City Boundary
- ▭ Atwell Project
- ▭ Cabazon Water District
- ▭ I-10 Bypass Road (Alt. 12 per EIR)
- Existing Ground Water Wells
- ⊕ Existing Cherry Valley Pump Station



Project Map
San Geronio Pass Water Agency
Backbone Water System
Feasibility Study

**Cherry Valley Pump Station Bypass
Pipeline Alignments and Capacities**



0 2,500 5,000 10,000 Feet

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NEXT STEPS

The Backbone Pipeline would be constructed in phases

DRAFT Backbone Pipeline Construction Costs		
	Estimated Construction Cost	Total Estimated Project Cost
North-East Beaumont Recharge Basin Development	\$6,040,000	\$8,456,000
Banning Recharge Development	\$6,040,000	\$8,456,000
Cabazon Recharge Development	\$3,660,000	\$5,120,000
Backbone Pipeline Construction	\$71,197,500	\$99,680,000
CVPS Bypass Pipeline	\$19,010,000	\$26,100,000
Pressure Reducing Facilities	\$1,300,000	\$1,820,000
Ultimate Buildout Cost	\$107,247,500	\$149,632,000

Notes:

1. Total estimated project cost includes a 1.4 multiplier on the construction cost estimates in order to include construction costs, contingencies, design engineering, environmental, design and construction surveying, geotechnical services, contract administration, and field inspections
2. Cost estimates are Class 3 estimates (budget level) and would be in the range of -15% to +20%
3. Cost estimates assume a 10-year construction timeline

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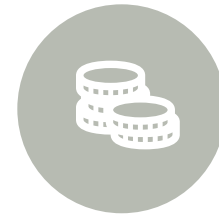
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NEXT STEPS

The next steps include

- Financial analysis
- Reaching out to participating Agencies
- Site acquisitions
- Crossings and alignment permitting
- Right of way acquisitions
- Geotechnical investigations
- Soil corrosivity evaluations
- Surveying
- Potholing and utility location confirmations
- Preliminary design phase
- Environmental document preparation
- Staffing needs evaluation

Questions?
