



**WATER
AGENCY**

Sites Reservoir Project Workshop #2

Zone 7 Board Meeting
August 19, 2026

Acronyms and Initialisms

AF	Acre-Feet	SBA	South Bay Aqueduct
AFY	Acre-Feet per Year	SOD	South of Delta
COLCS	Chain of Lakes Conveyance System	SWRCB	State Water Resources Control Board
CWA	Clean Water Agency	TAF	Thousand Acre-Feet
FCWCD	Flood Control and Water Conservation District	UWMP	Urban Water Management Plan
JPA	Joint Powers Authority	WD	Water District
MWC	Mutual Water Company	WTP	Water Treatment Plant
PP	Pumping Plant		

Project Supports Strategic Plan

GOAL B

Reliable Water Supply
and Infrastructure

Provide customers
with reliable water
supply and
infrastructure.

5

Develop a diversified water supply plan
and implement supported projects and
programs

Discussion Outline

- Project Overview
- Project Location
- Facilities and Operations
- Ongoing Evaluation of Benefits and Obligations
- Summary
- Questions

Project Overview

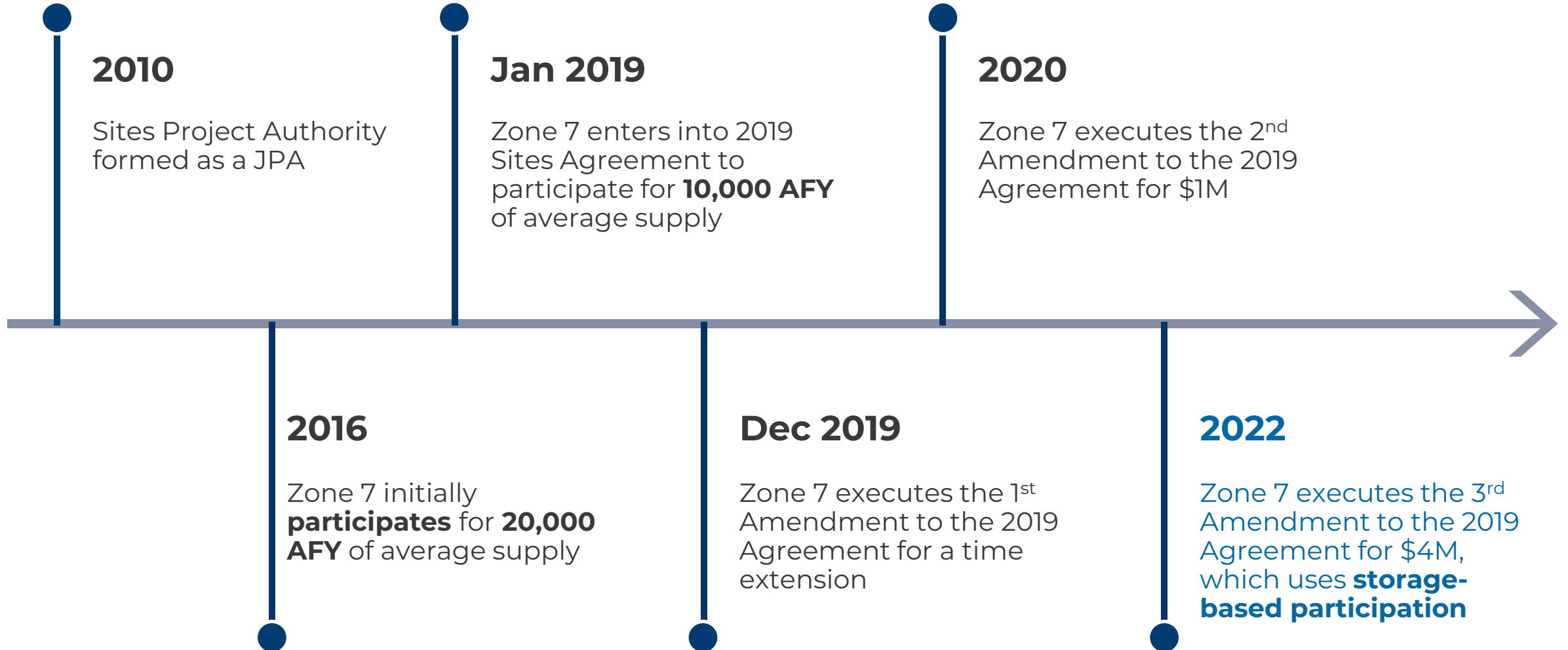


What is Sites?

- 1.5 million AF of new water storage
- 2nd largest off-stream reservoir in CA
- Captures excess flows from the Sacramento River
- Participation from local agencies, State, and Federal agencies
- Currently fully subscribed with a waitlist
- Target to become fully operational by 2034



Zone 7's Participation



Why is Zone 7 Participating in Sites?



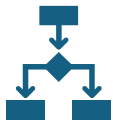
Increase supply reliability to address climate change and drought resilience



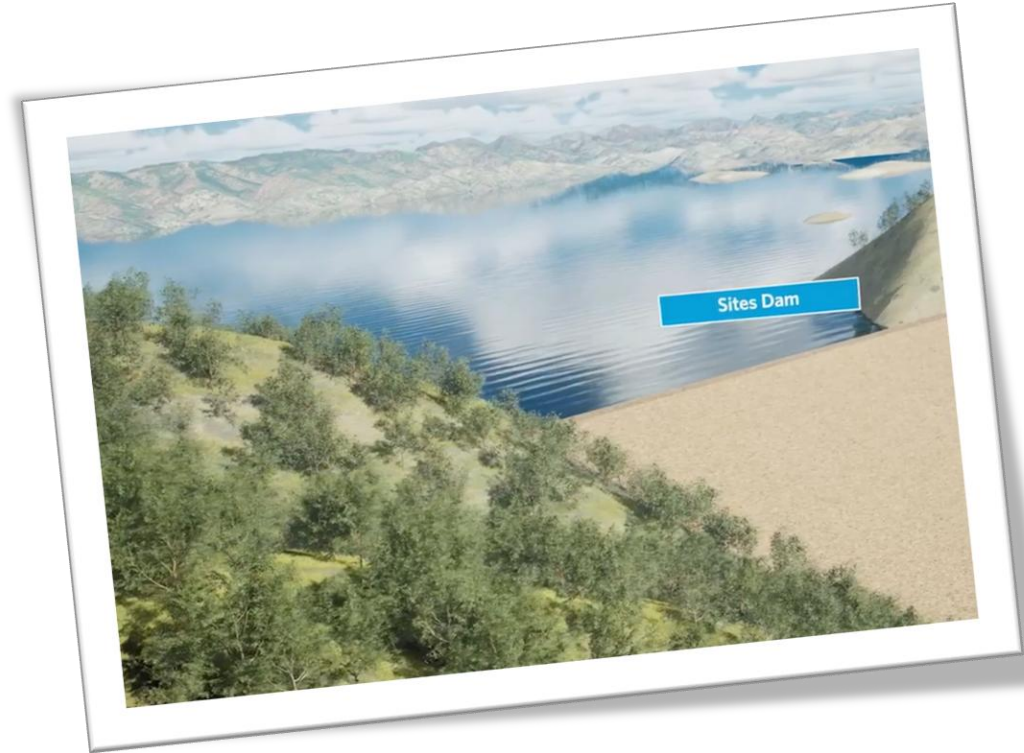
Supplement supply to meet build-out demand



Obtain new water rights



Diversify Zone 7's water supply portfolio



Project Participants

Sacramento Valley

City of American Canyon
Colusa County
Colusa County Water District
Cortina Water District
Davis Water District
Dunnigan Water District
Glenn County
Glenn-Colusa Irrigation District
LaGrande Water District
Placer County Water Agency
Reclamation District 108
City of Roseville
Sacramento County Water Agency
City of Sacramento
Tehama-Colusa Canal Authority
Westside Water District
Western Canal Water District
Zone 3, Colusa County FCWCD

Bay Area

Santa Clara Valley Water District
Zone 7 Water Agency

San Joaquin Valley

Wheeler Ridge-Maricopa Water Storage District
Rosedale-Rio Bravo Water Storage District

Southern California

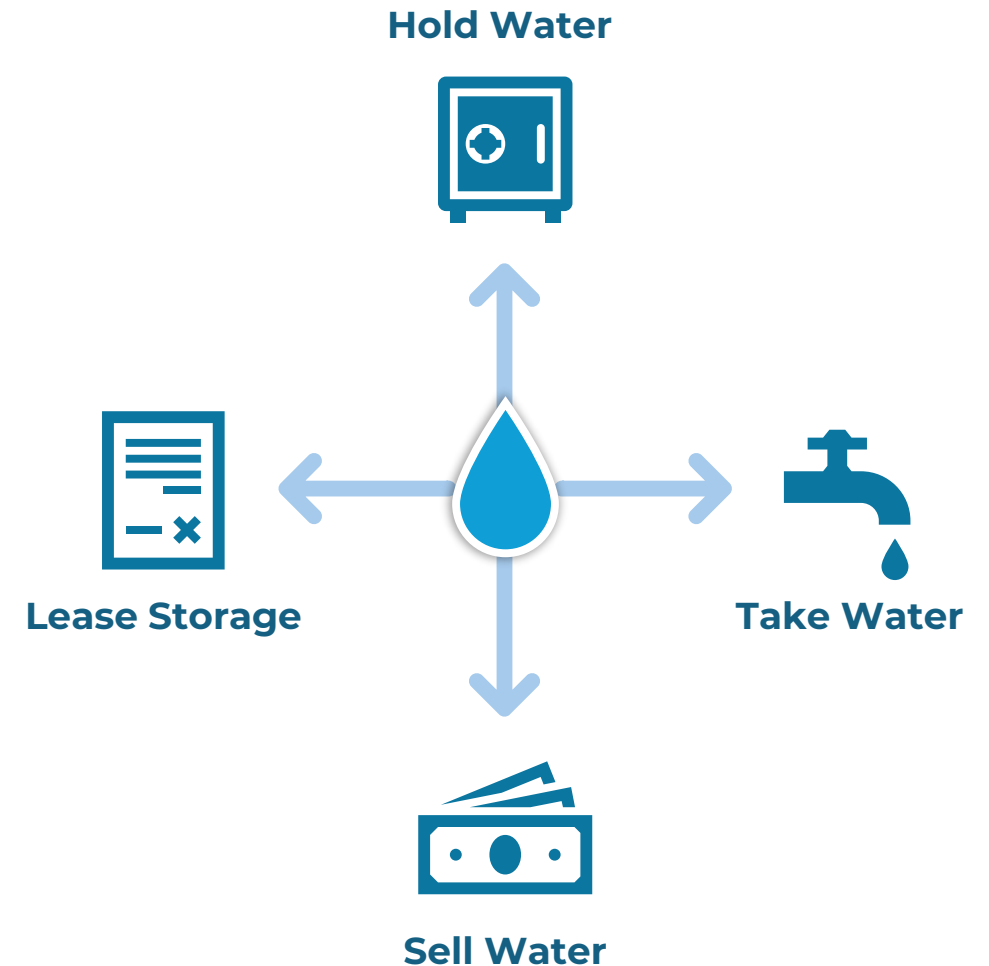
Antelope Valley – East Kern Water Agency
Coachella Valley Water District
Desert Water Agency
Irvine Ranch Water District
Metropolitan Water District
San Bernardino Valley Municipal Water District
San Geronio Pass Water Agency
Santa Clarita Valley Water Agency

Waiting List

Cal-Am Sacramento
City of Fairfield
City of Napa
City of Mountain Home
Dudley Ridge WD
Eastern Municipal WD
Glenn County
La Cumbre MWC
Madera County
Pacific Resources MWC
Palmdale WD
Santa Clara Valley WD
Western Municipal WD
Westlands WD
Woodland Davis

How Does Sites Work?

- Sites is off-stream, designed to capture water in wet periods
- Participants receive:
 - Share of storage space and proportional share of Sites water diverted into reservoir
- Participants manage their own storage space
 - Flexibility with storing, leasing, and selling water



Key Deliverables for Investor Commitment

#	Key Deliverables	Description
1	Operating Agreements & Facility Use Agreements	Agreements facility partners, State, and Federal agencies on how Project will operate
2	Permits	Required for construction
3	Water Rights	Affects the water supply benefits
4	Program Baseline Report	Updated cost and benefits analysis
5	JPA Agreement and Bylaws	Establishes JPA governance
6	Benefits & Obligations Contract	Agreement with Participants for commitment (50-year financial commitment)
7	Public Benefits Agreements	Agreement with State for providing public benefits
8	Federal Partnership Agreement	Agreement for Federal commitment to the Project

Project Location



Where is Sites?

(1 of 4)

- **Zone 7's service area, shown in blue, is south of the Delta**
- The State Water Project conveys water to Zone 7 across the Delta
- Sites Reservoir is off-stream of the Sacramento River and upstream of the Feather River
- Sites will move water between the reservoir and Sacramento River using existing canals and some new facilities
- Sites deliveries will utilize the state and federal pumps to serve water south of the Delta.



Where is Sites?

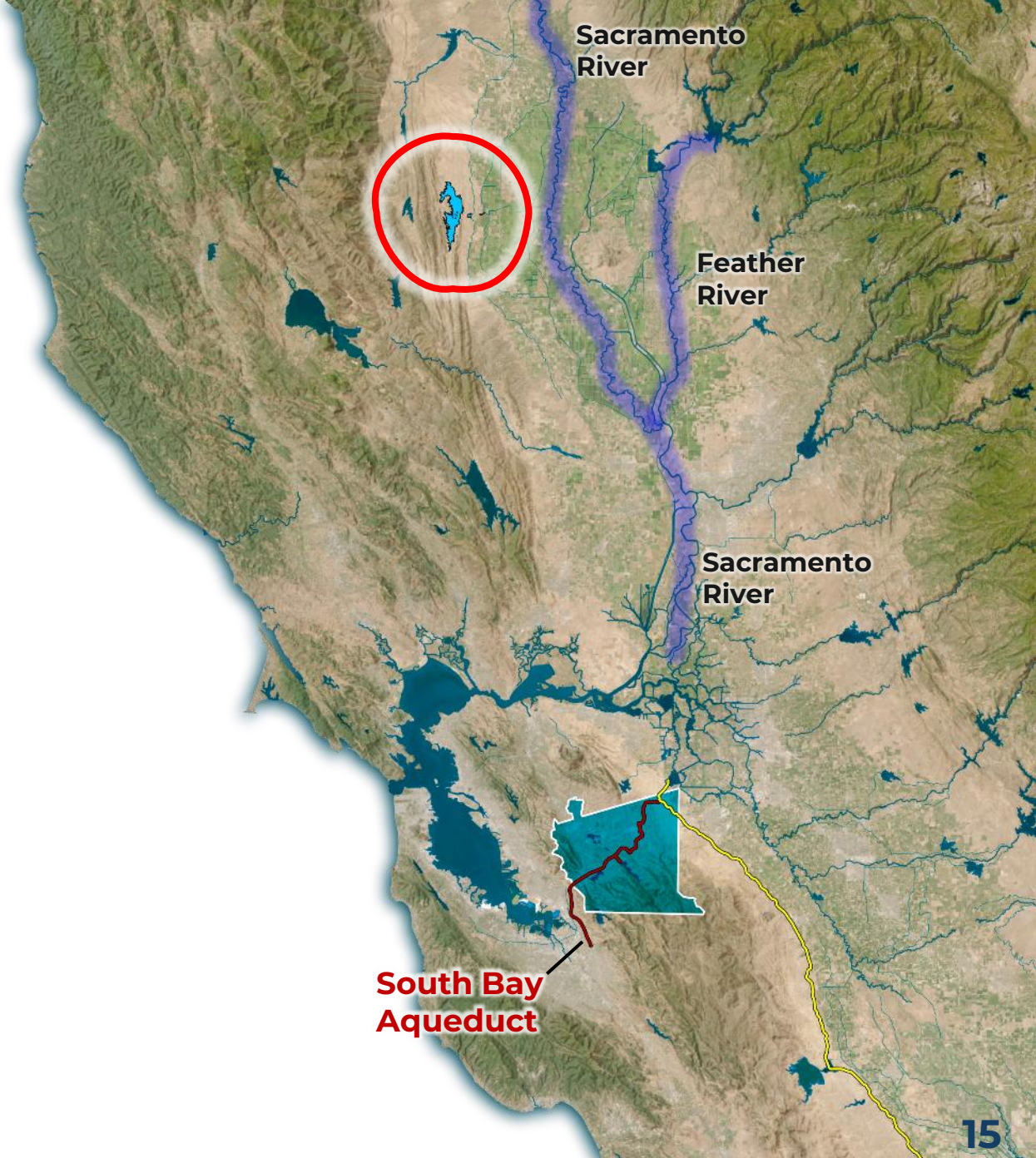
(2 of 4)

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Where is Sites? (3 of 4)

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Where is Sites? (4 of 4)

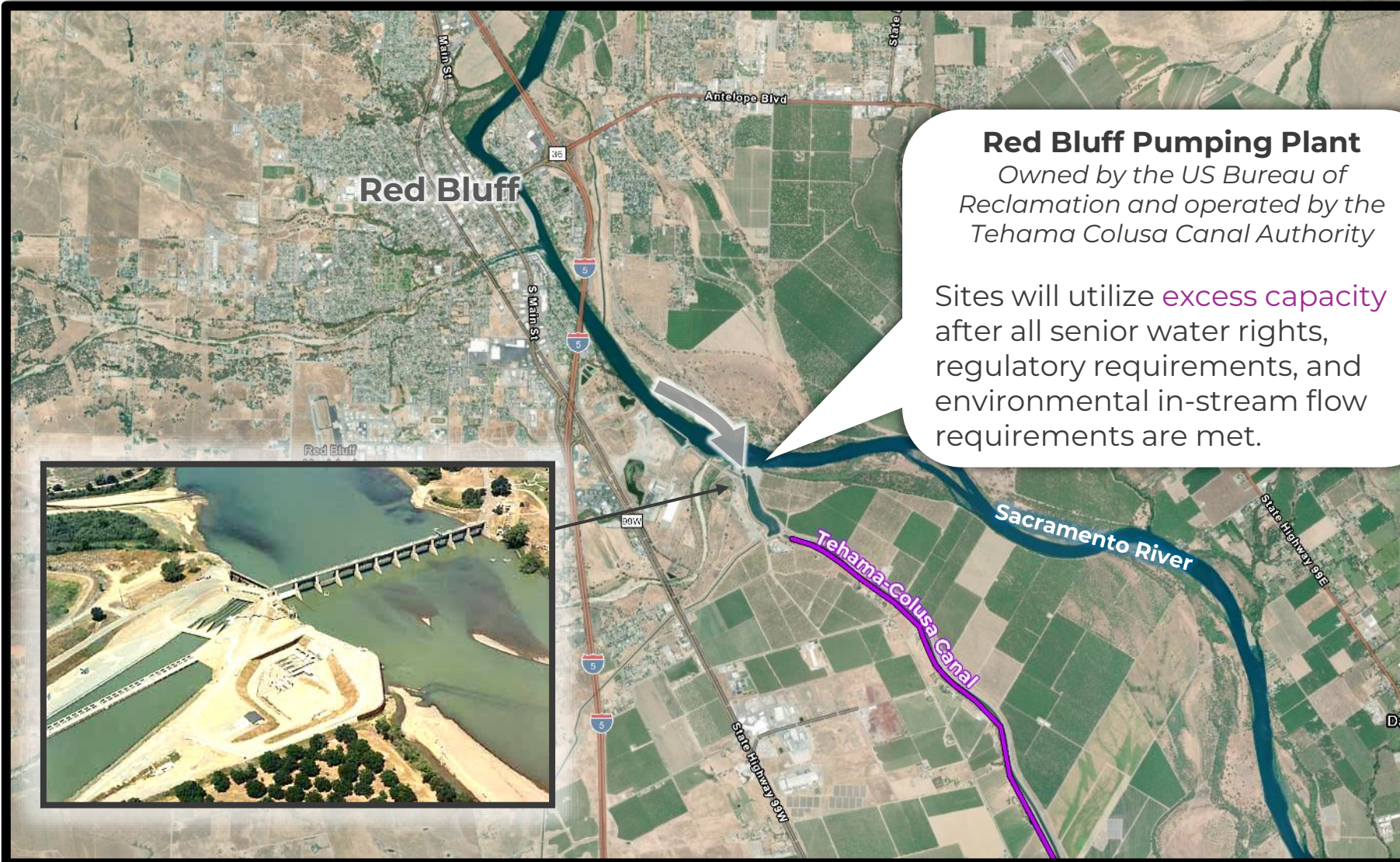
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Facilities and Operations

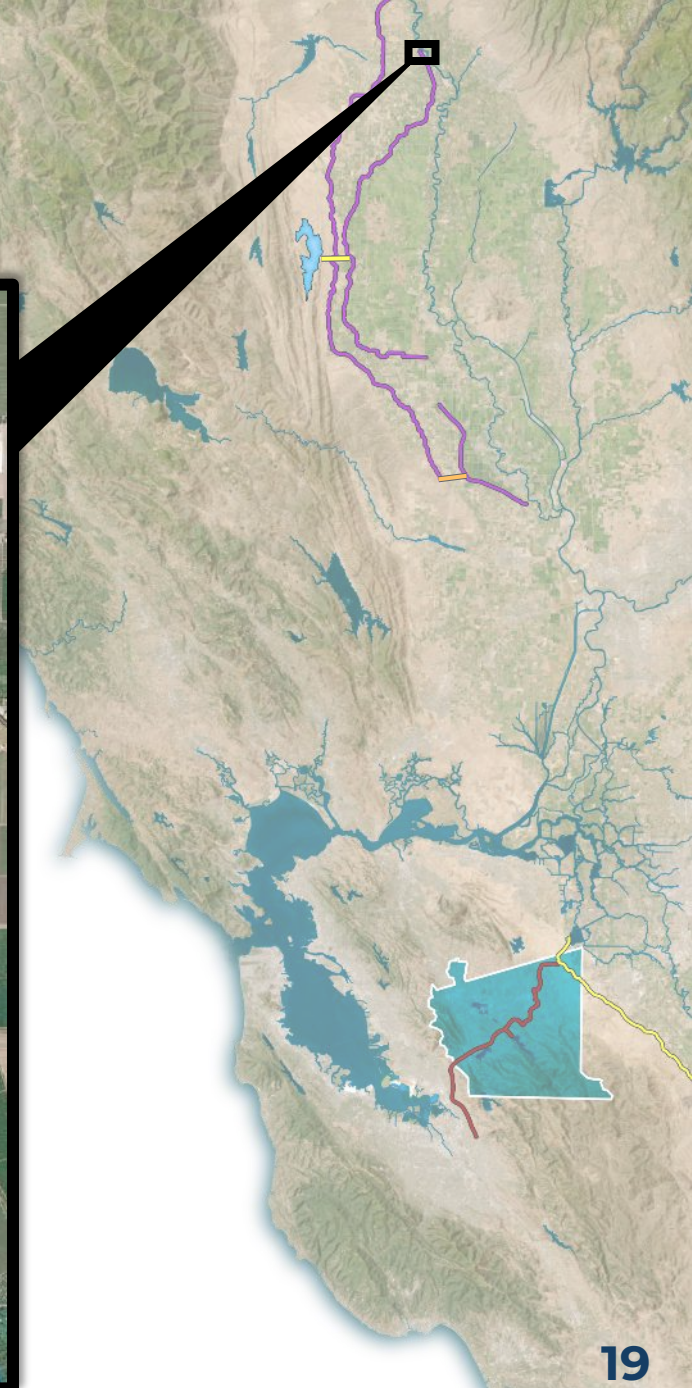
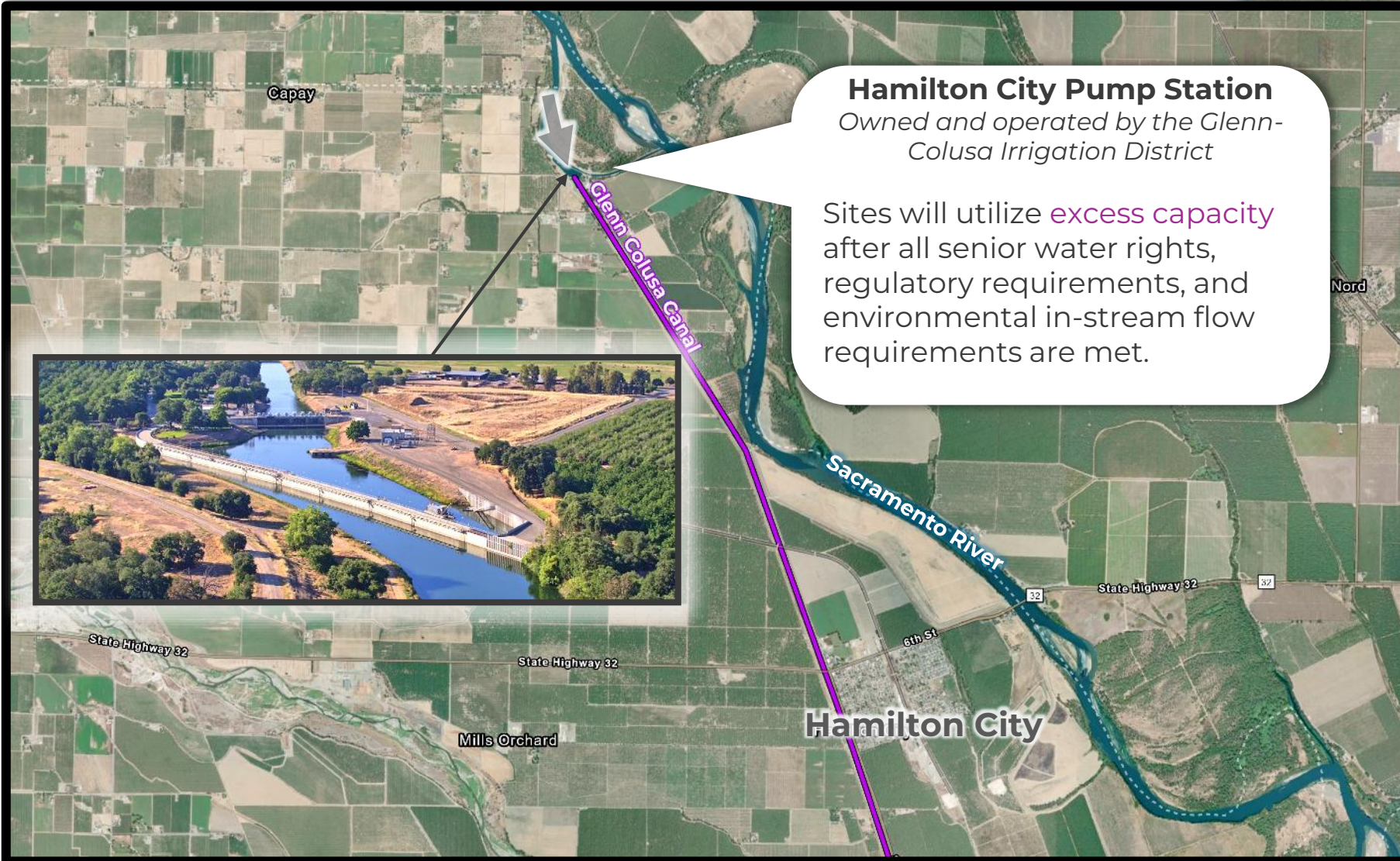


Sites Reservoir Diversion to Tehama-Colusa Canal



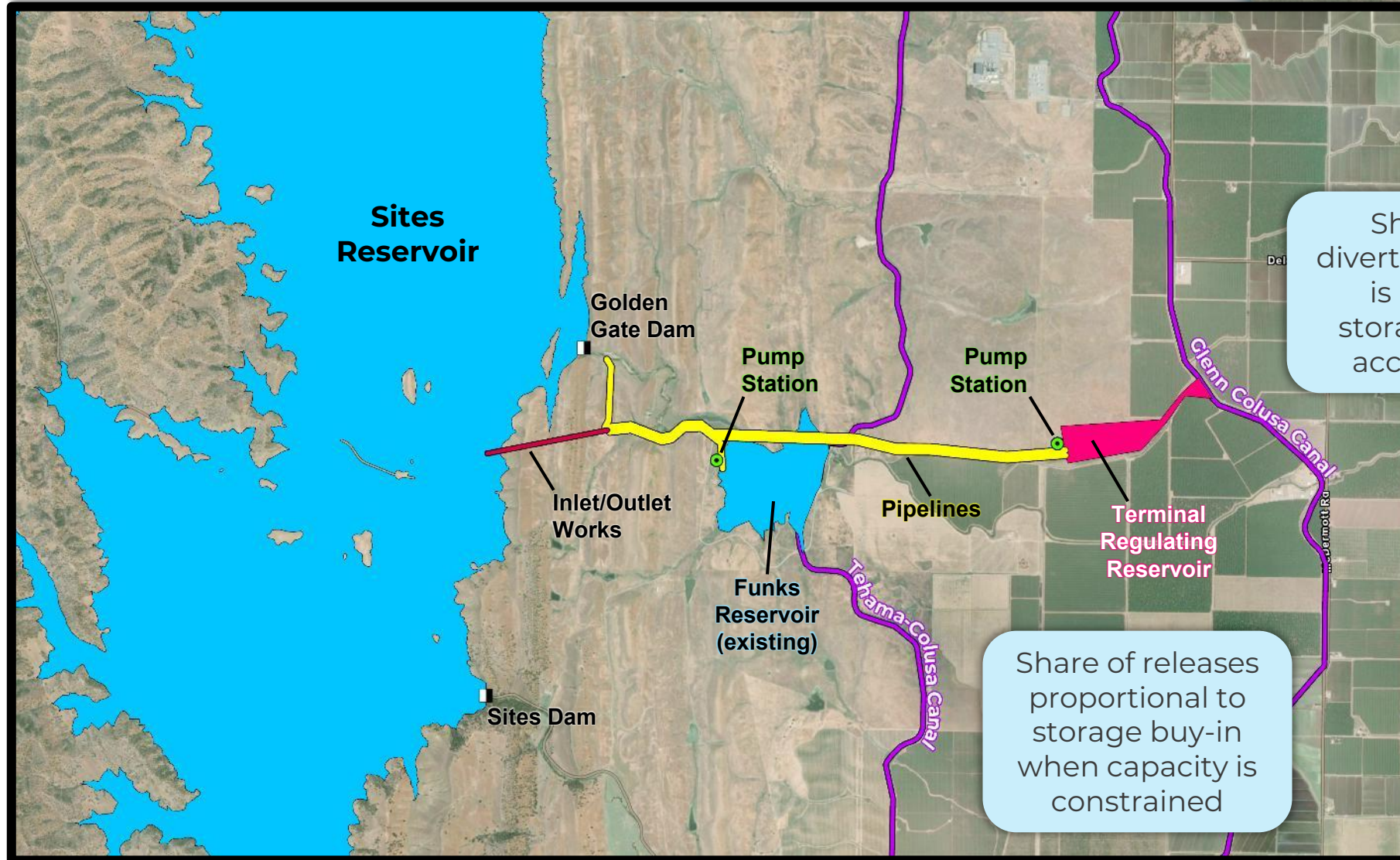
Sites Reservoir

Diversion to Glenn Colusa Canal



Sites Reservoir

Diversion to Storage and Releases

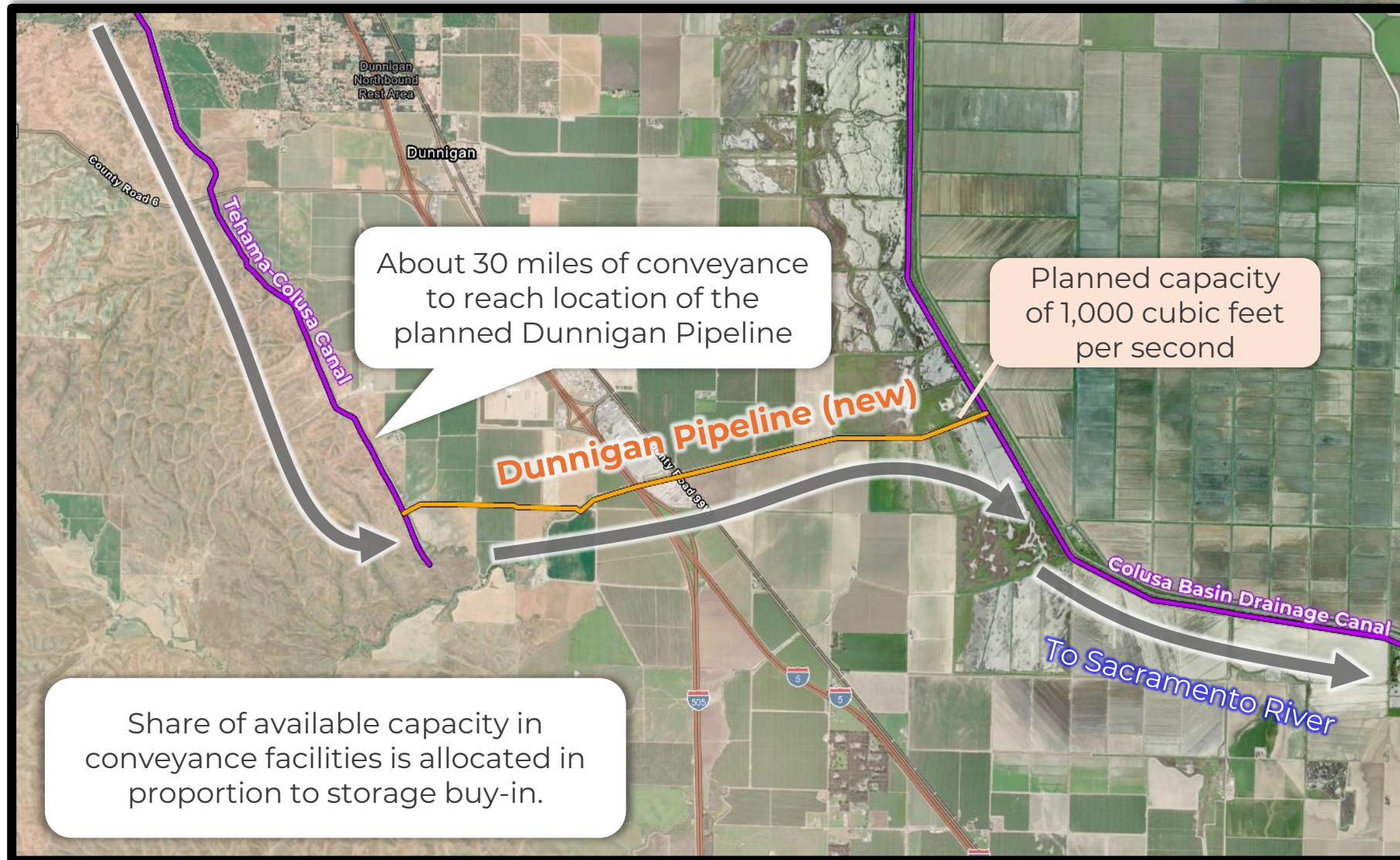


Share of water diverted into reservoir is a function of storage buy-in and account balance.

Share of releases proportional to storage buy-in when capacity is constrained

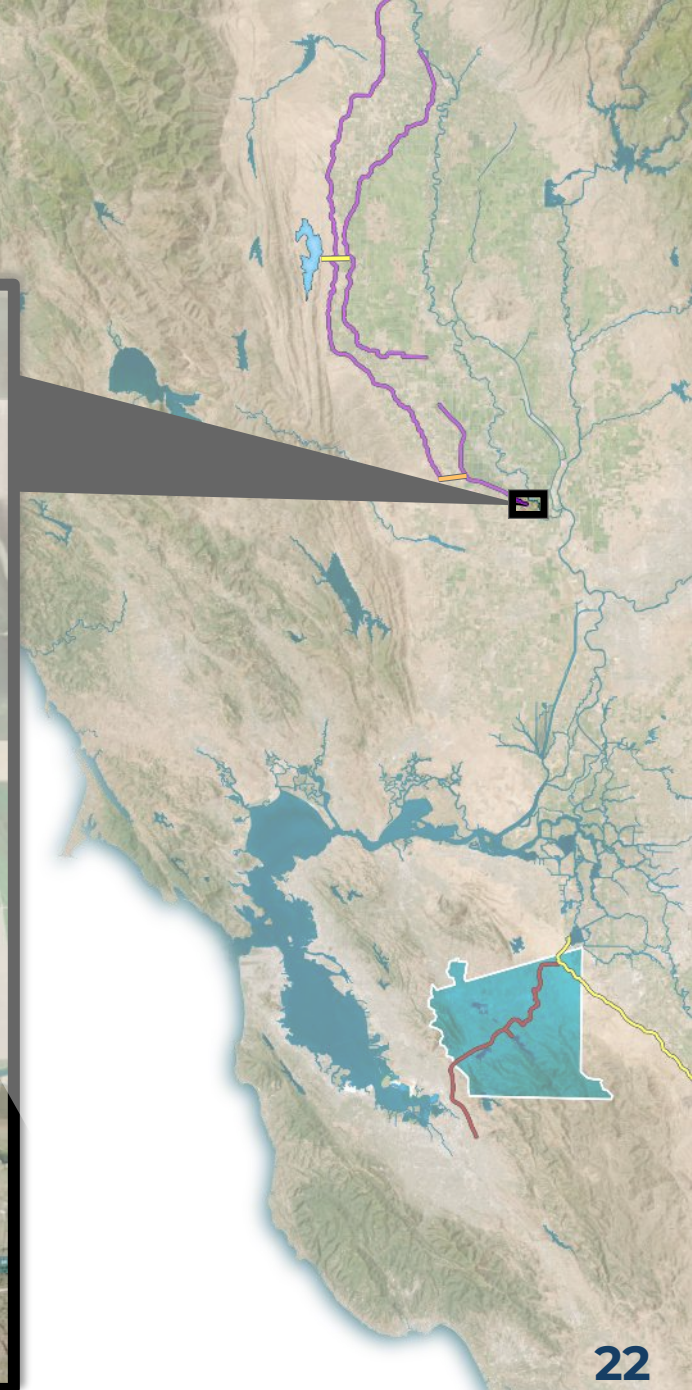
Sites Reservoir

Delivery Pathway: Dunnigan Pipeline

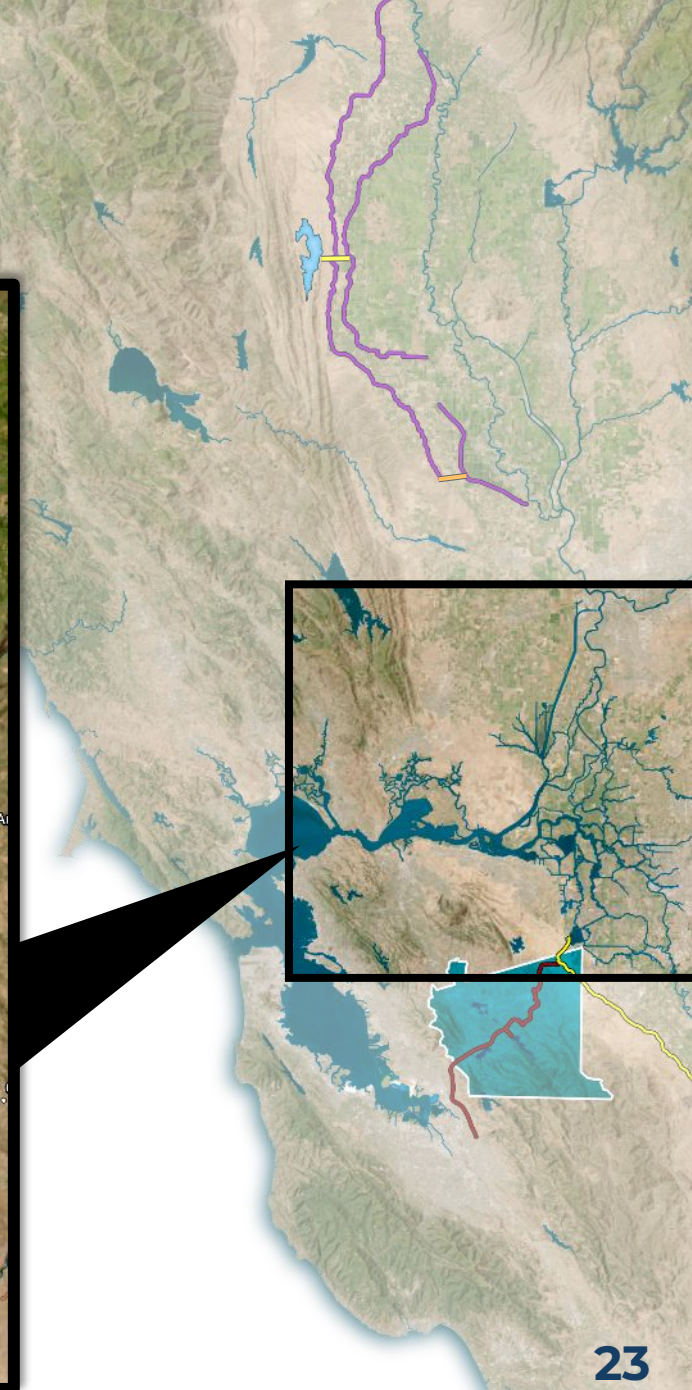
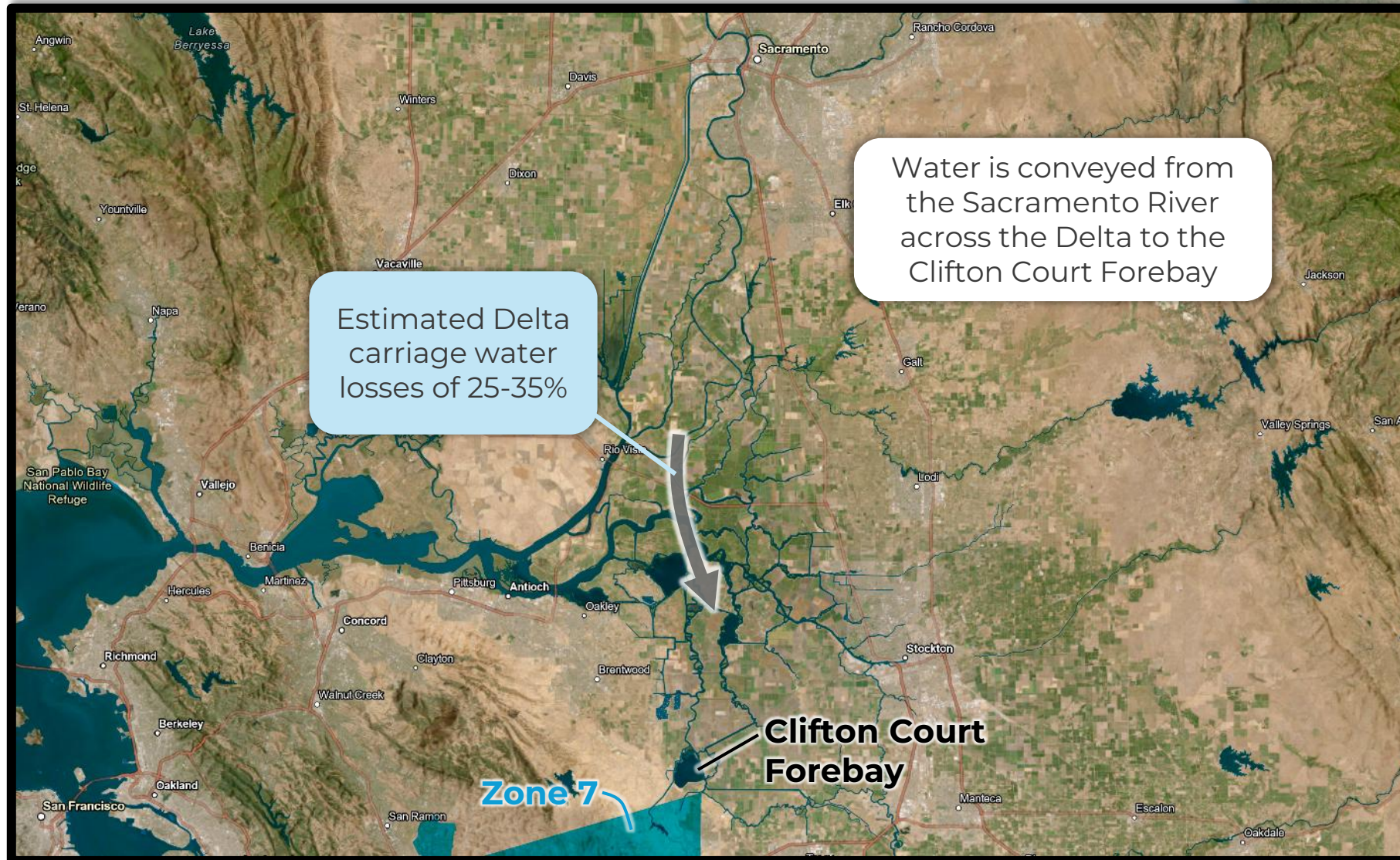


Sites Reservoir

Delivery Pathway: Knights Landing



Delivery Pathway: The Delta



The map illustrates the water flow path of the San Joaquin Hills Water Project. A black line represents the main transmission pipeline, starting from Clifton Court in the northeast, passing through Banks PP and South Bay PP, and ending at the Patterson Pass WTP. A red line represents the South Bay Aqueduct (SBA), which branches off from the main pipeline near South Bay PP and flows south towards Lake del Valle. Key locations labeled include Clifton Court, Banks PP, South Bay PP, Patterson Pass WTP, Del Valle WTP, Lake del Valle, and the SBA. Major highways (Interstates 580, 680, 5, 205) and cities (Dublin, Livermore, Tracy, Midway, Verona) are also shown for context. A text box in the bottom right corner explains the function of the pumping plants: Banks PP moves water from Clifton Court to Bethany Reservoir, and South Bay PP moves water into the SBA.

Clifton Court

Banks PP

South Bay PP

Bethany Reservoir

Patterson Pass WTP

Del Valle WTP

Lake del Valle

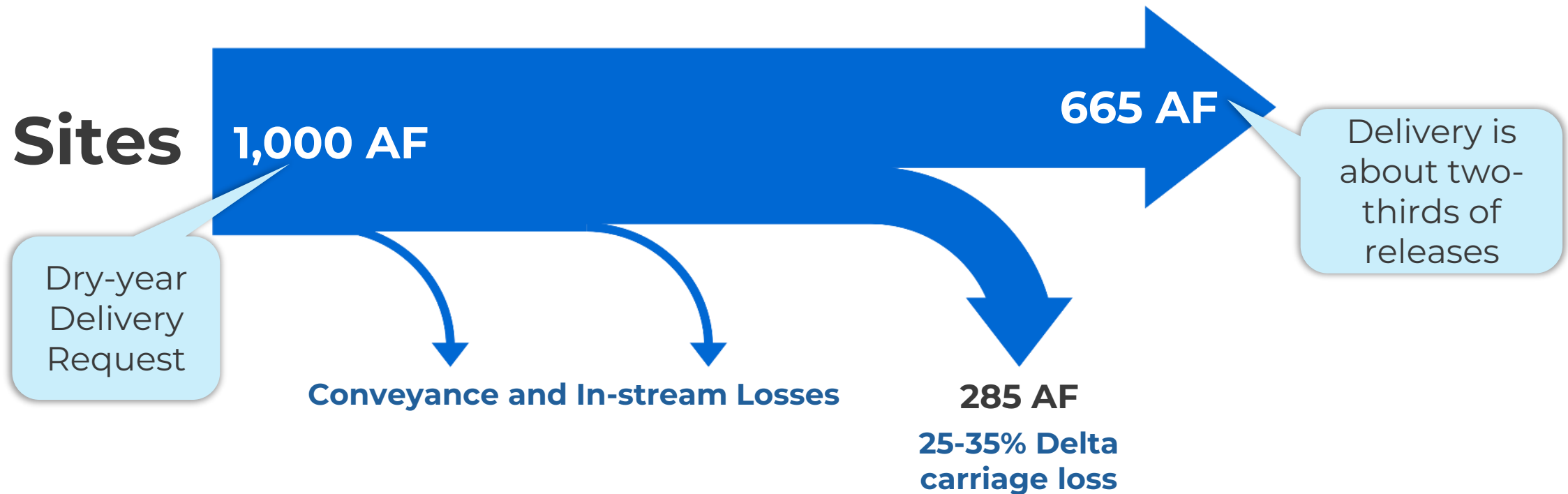
SBA

Banks PP moves water from Clifton Court to Bethany Reservoir, and South Bay PP moves water into the SBA.

Conveyance Losses for Deliveries

Losses occur in canals, the Sacramento River, and the Delta

- Net loss from release may range from 25-35%, depending on hydrology, timing of deliveries, and other factors.



Ongoing Evaluation of Benefits and Obligations



Ongoing Evaluations

Sites Authority

Zone 7

Water Right: Assess project impacts



Finalize Zone 7's yield estimate

Agreements: Finalize operational impacts



Evaluate implications of agreement, i.e., final water right, North/South alignment, and conveyance losses

Yield estimates: Confirm for SOD participants



Optimize operations with local storage

Conveyance plan for Put and Take

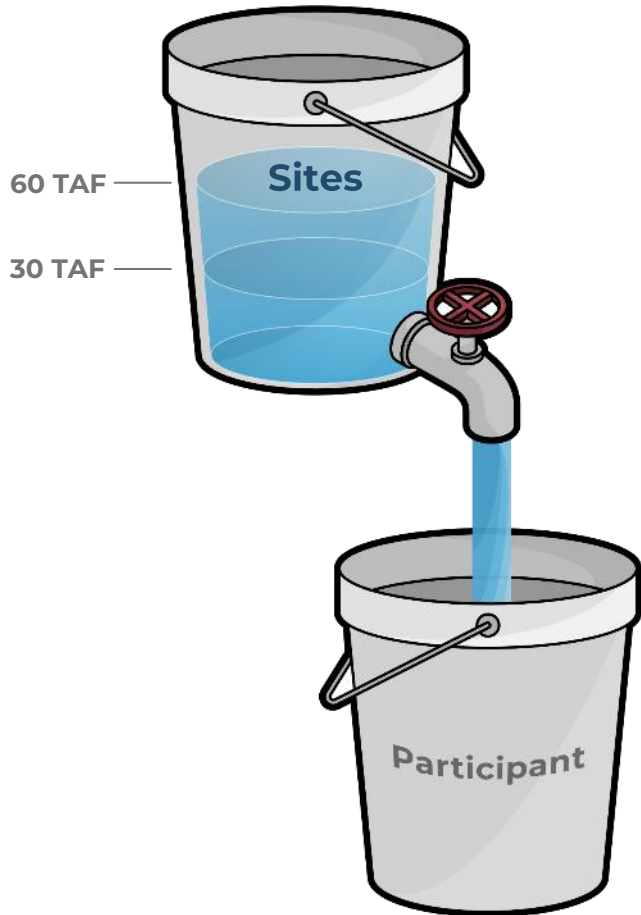


Assess potential fill/delivery opportunities, operational constraints, and financial considerations



Basic Operational Principle

Hold Water in Storage Until Dry Years



- **Fill the Storage:** **2-4** years per decade have substantial fill, with modest/ minimal in other years
- **Hold in the Reservoir:** About **4-6** years per decade
- **Take Delivery:** Substantial releases **1-3** years per decade (focus on dry years), and low/zero in other years

Estimated Sites Yield for Zone 7

- From latest JPA Modeling, Adjusted for Estimated Final Water Right
- Includes Carriage Losses

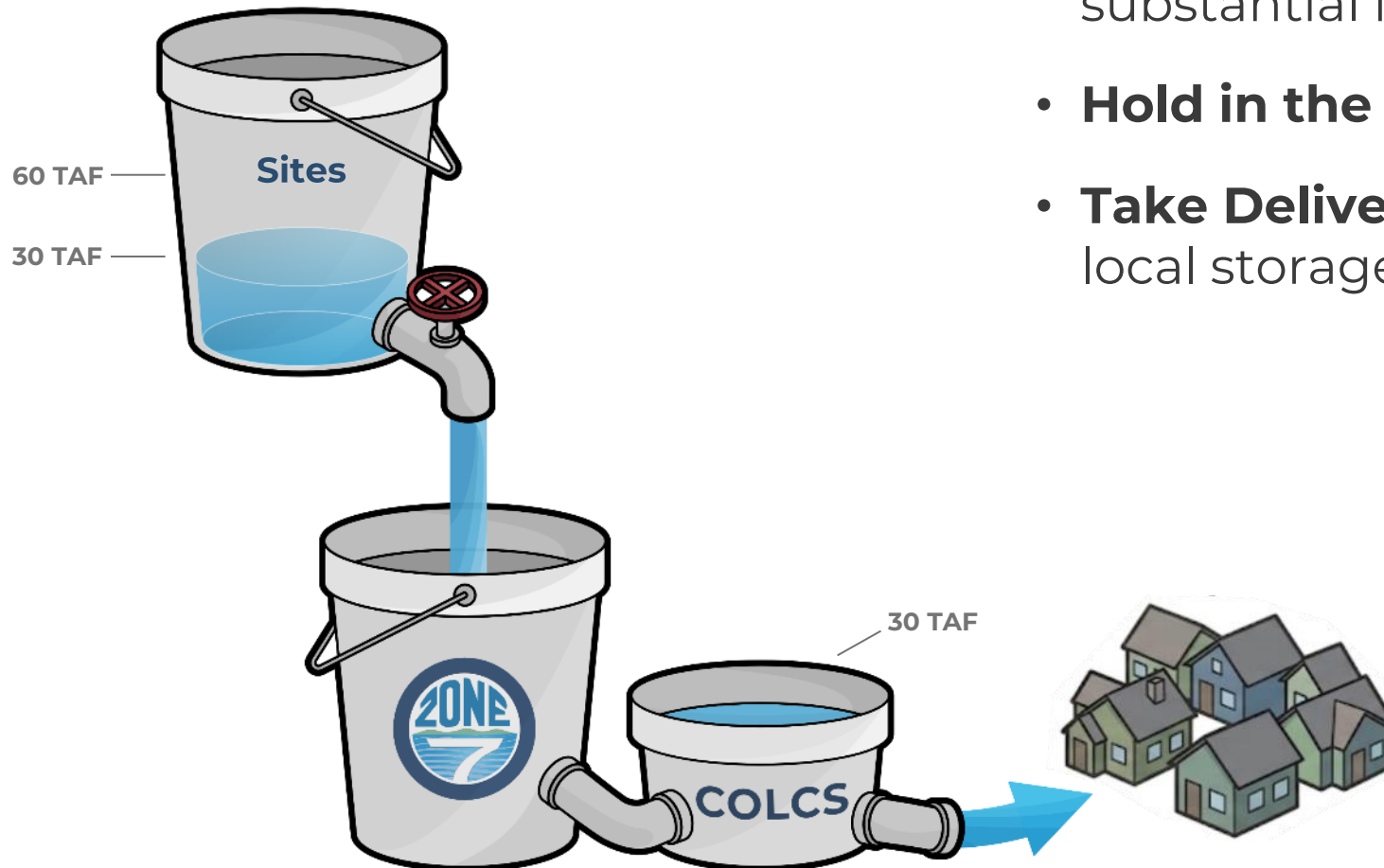
Sites Project by Itself

	Storage Participation	
	62,340 AF	30,000 AF
Average Annual Yield	5,000 AF	2,500 AF
Average for Dry and Critical Years	9,600 AF	4,800 AF

Note: Table lists average modeled yield, which is variable from year to year.

Zone 7 Opportunity

Maximize Delivery to Local Storage to Increase Yield



- **Fill the Storage:** 2-4 years per decade have substantial fill, with modest/ minimal in other years
- **Hold in the Reservoir:** as little and short as possible
- **Take Delivery:** 3-6 years per decade to move to local storage

COLCS Opportunity

- Conjunctive operations
- Increase frequency of water deliveries from Sites

Estimated Sites Yield for Zone 7

- From latest JPA Modeling, Adjusted for Estimated Final Water Right
- Includes Carriage Losses

Sites Project Alone and With COLCS (+20% synergy)

	ALONE		With COLCS	
	62,340 AF	30,000 AF	62,340 AF	30,000 AF
Average Annual Yield	5,000 AF	2,500 AF	6,000 AF	3,000 AF
Average for Dry and Critical Years	9,600 AF	4,800 AF	no data	no data

Note: Table lists average modeled yield, which is variable from year to year. Estimated yield with COLCS is based on previous iterations of JPA modeling which evaluated alternative operational schemes for Sites, finding that more frequent deliveries could increase total yield by up to 20%. Note that this is a proxy, and Zone 7's specific operations with COLCS may achieve different results.

Consideration of Benefits and Challenges

Benefits

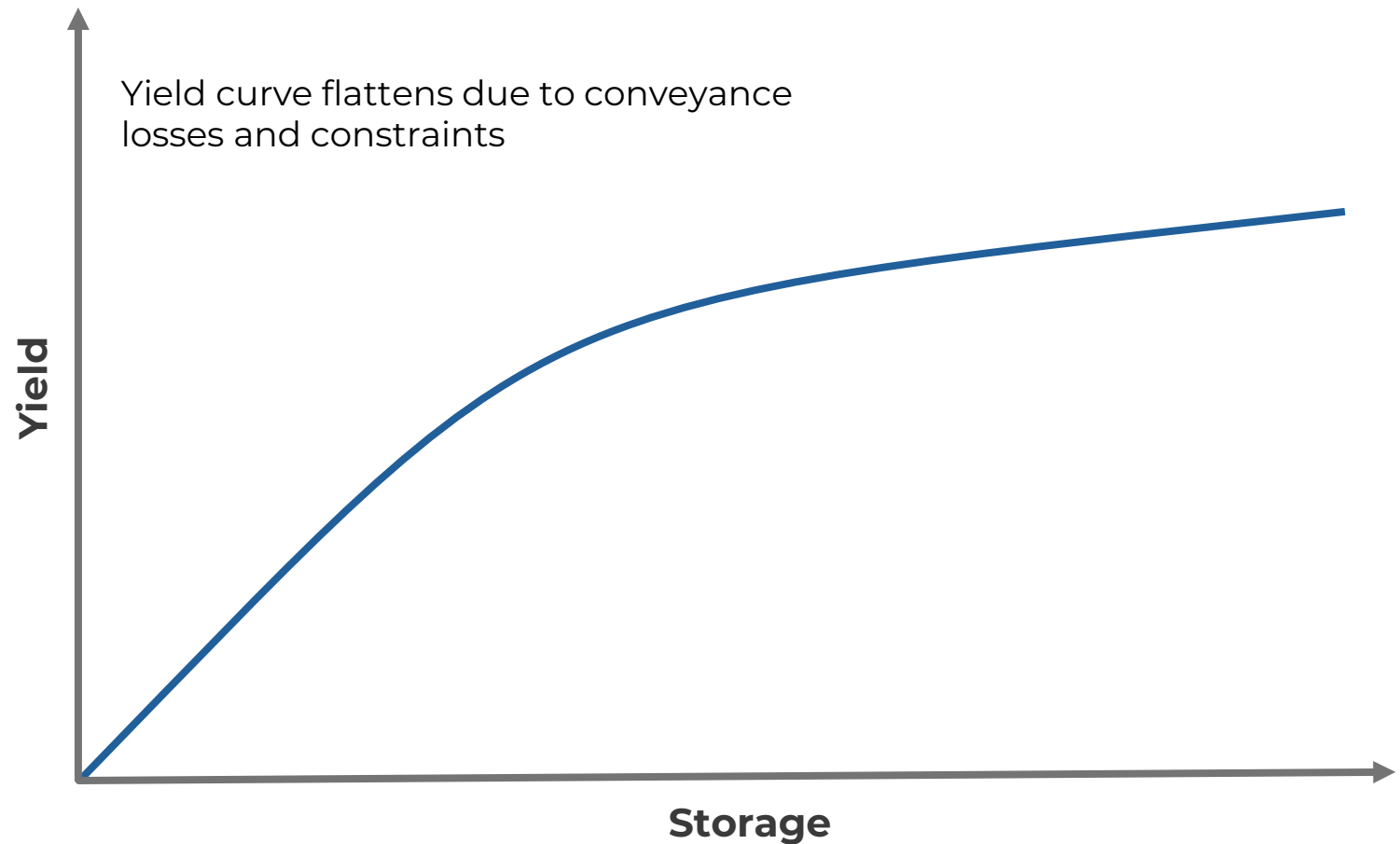
- New water right (uncommon)
- Dry year supply source
- Portfolio diversification
- Participation is a storage and conveyance entitlement
- Opportunity for operational synergy with local storage

Challenges

- Fill requires excess flows and upstream conveyance
- Delivery constraints: export capacity, downstream facilities, transfer window, and water rights
- Delivery affected by conveyance losses: in-stream and across Delta
- Conveyance dependent on Delta and SWP

Zone 7 Conceptual Relationship between Storage and Delivery

- Reservoir is 1.5 million AF; 763,000 AF for SOD
- Average SOD deliveries ~61,000 AFY after conveyance losses
- When SOD storage is full, average of 9 years to turn over SOD storage



Note: Modeling of available conveyance capacity including potential delivery and unit cost calculation is currently underway.

Storage Allocation Financing Comparison

As of August 2026

Cost Metric	Storage Participation	
	62,340 AF	30,000 AF
Total Debt Service (2029-2074) *	\$1.11B	\$553M
Average Annual Debt Service When Operational (2034-2068) *	\$27M	\$14M

* Costs are in escalated dollars. 50-year commitment with debt service payments are over 46 years.

Summary



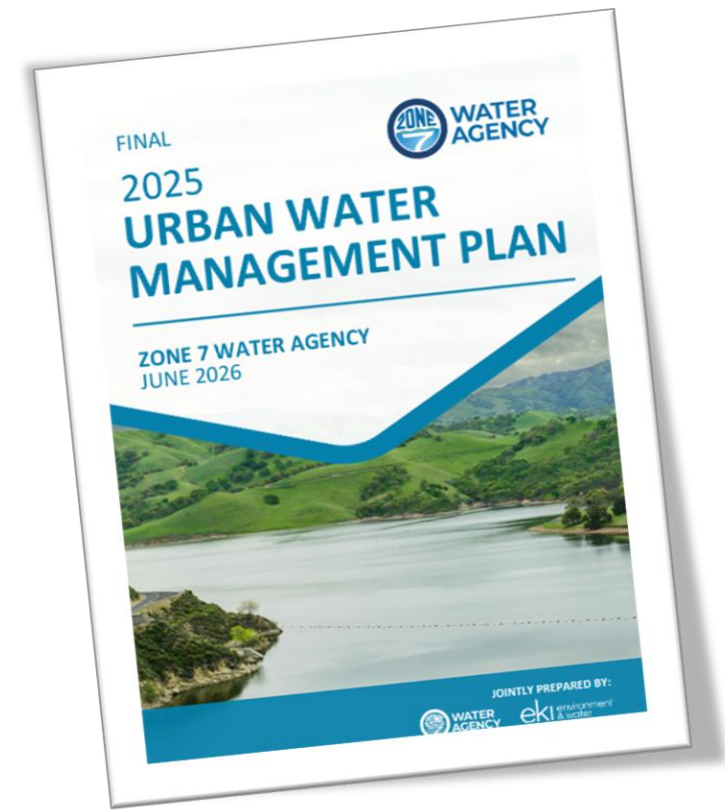
UWMP Findings

Current Demand

- No shortages for normal and single-dry years
- No shortages for 5-year droughts

Buildout Demand (2045) – 51 TAF

- Includes COLCS (30 TAF) and Sites (30 TAF)
- No shortages for up to 4 years of drought
- In 5th year of drought, shortage of 10-20% (up to 10,000 AF)
 - Diversify supply portfolio to address potential shortages
 - Consider options, such as: Chain of Lakes expansion, Kern Banks, conservation, transfers, DCP



Storage Comparison: 60,000 AF vs. 30,000 AF

	Storage Participation	
	62,340 AF	30,000 AF
Investment Costs	\$1.11B	\$553M
Risk Factors	Higher	Lower
Evaporation Loss	Higher	Lower
Maximizing Filling Opportunities	Less Frequent	More Frequent
Alignment with UWMP	Potential Excess	Sufficient

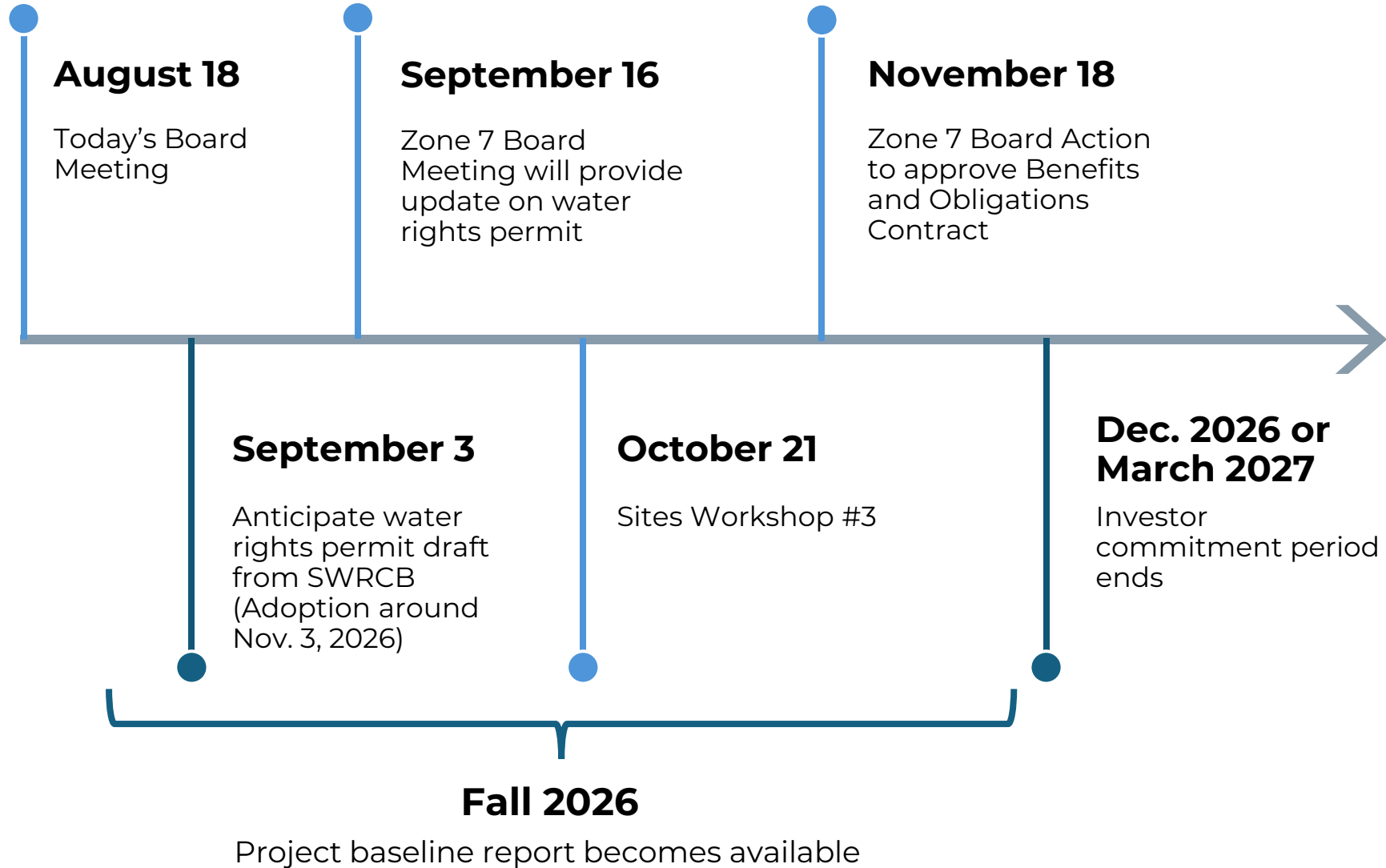


Staff Recommendations

- Participate at 30,000 AF in alignment with UWMP
- Maintain active participation in the planning process
- Stay current on available information and data
- Continue evaluating the project
- Make the final recommendation to the Board



Project Schedule and Next Steps





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Questions?