



AGENDA

July 23, 2019

PUBLIC UTILITIES COMMISSION MEETING
7:00 p.m.
Council Chambers
311 Vernon Street
Roseville, California

THE CITY OF ROSEVILLE WELCOMES YOUR PARTICIPATION

If an agenda item is open to public comment, such public comment shall be addressed to the chair of the meeting.

Public Comment - Speakers have three minutes under Public Comment to speak on issues that are not listed on the agenda and are within the City's jurisdiction. The Brown Act does not permit any action or discussion on items not listed on the agenda.

Consent Calendar - If applicable, the Consent Calendar consists of routine items that may be approved by one motion. Any person can remove an item from the Consent Calendar to be discussed separately.

Agenda Items - Speakers have five minutes to address items that are listed on the agenda.

Americans with Disabilities Act - Notify the City Clerk or Secretary at least 72 hours in advance if special assistance is required to participate in a meeting including the need of auxiliary aids or services.

Audio/Visual Presentations - If making a presentation regarding an agenda item, audio/visual materials must be submitted to the City Clerk or Secretary at least 72 hours in advance.

Roseville City Clerk 311 Vernon Street, Roseville, CA 916-774-5200 TDD 916-774-5220

1. **CALL TO ORDER**
2. **ROLL CALL**
3. **PLEDGE OF ALLEGIANCE**
4. **PUBLIC COMMENTS**
5. **APPROVAL OF JUNE 25, 2019, MINUTES**
 - 5.1. APPROVAL OF JUNE 25, 2019 MINUTES
6. **REQUESTS/PRESENTATIONS**

6.1. ENVIRONMENTAL UTILITIES MONTHLY UPDATE

Report by Environmental Utilities Acting Water Utility Manager Sean Bigley summarizing monthly status of Environmental Utilities activities, for information.

6.2. ENVIRONMENTAL UTILITIES GROUNDWATER PROGRAM OVERVIEW

Presentation by Acting Water Utility Manager Sean Bigley and Acting Principal Engineer Trevor Joseph providing an overview of Roseville's Groundwater Program, for information.

6.3. ROSEVILLE ELECTRIC UTILITY UPDATE

Report by Electric Utility Director Michelle Bertolino summarizing monthly status of Electric Utility issues, for information.

6.4. ROSEVILLE ELECTRIC ENERGY IMBALANCE MARKET (EIM) OVERVIEW

Presentation by Power Supply and Portfolio Administrator Bill Forsythe providing an overview of Roseville Electric's Energy Imbalance Market, for information.

7. BOARD MEMBER / COMMISSIONER / STAFF REPORT

8. ADJOURNMENT



PUBLIC UTILITIES COMMISSION COMMUNICATION

Title: APPROVAL OF JUNE 25, 2019 MINUTES

Contact:

Meeting Date: 7/23/2019

Item #: 5.1.

ATTACHMENTS:

Description

PUC Draft June 25, 2019 Meeting Minutes



MINUTES

June 25, 2019

PUBLIC UTILITIES COMMISSION MEETING

7:00 p.m.
Council Chambers
311 Vernon Street
Roseville, CA

1. CALL TO ORDER

2. ROLL CALL

Present: Cannon, Granger, Sedwick, Speight, Vertido, Viele
Absent: Hildebrand

3. PLEDGE OF ALLEGIANCE

Commissioner Sedwick led the Pledge of Allegiance.

4. PUBLIC COMMENTS

No public comments received.

5. MINUTES

5.1. APPROVAL OF MAY 28, 2019, MINUTES

Motion by Debra Sedwick, seconded by John Speight, Approve Motion. The Motion Passed.

Roll call vote: Ayes: Cannon, Granger, Sedwick, Speight, Vertido, Viele

Absent: Hildebrand

6. REQUESTS/PRESENTATIONS

6.1. ENVIRONMENTAL UTILITIES MONTHLY UPDATE

Report by Environmental Utilities Assistant Director Dale Olson summarizing

monthly status of Environmental Utilities activities, for information.

For information only, no action required.

6.2. ROSEVILLE ELECTRIC UTILITY UPDATE

Report by Electric Utility Director Michelle Bertolino summarizing monthly status of Electric Utility issues, for information.

For information only, no action required.

6.3. ELECTRIC CUSTOMER PROGRAMS OVERVIEW

Presentation by Electric Customer Solutions Supervisor David Bradford, summarizing the Electric Utility Customer Programs, for information.

For information only, no action required.

6.4. 2018 ANNUAL ELECTRIC UTILITY RELIABILITY OVERVIEW

Presentation by Power Engineer Ozro "OJ" Corulli, summarizing the 2018 Annual Electric Utility Reliability Results, for information.

For information only, no action required.

7. BOARD MEMBER / COMMISSIONER / STAFF REPORT

Chair Vertido acknowledged Commissioner Hildebrand's term as a Public Utilities Commissioner had been fulfilled and thanked her for her service.

8. ADJOURNMENT

Motion by Blandon Granger, seconded by John Speight, Approve Motion. The Motion Passed.

Roll call vote: Ayes: Cannon, Granger, Sedwick, Speight, Vertido, Viele

Absent: Hildebrand

John Vertido
Chairman

Pamela Walsh
Recording Secretary



PUBLIC UTILITIES COMMISSION COMMUNICATION

Title: ENVIRONMENTAL UTILITIES MONTHLY UPDATE
Contact:

Meeting Date: 7/23/2019
Item #: 6.1.



PUBLIC UTILITIES COMMISSION COMMUNICATION

Title: ENVIRONMENTAL UTILITIES GROUNDWATER PROGRAM OVERVIEW
Contact:

Meeting Date: 7/23/2019
Item #: 6.2.

ATTACHMENTS:

Description

RPUC Groundwater Program Overview



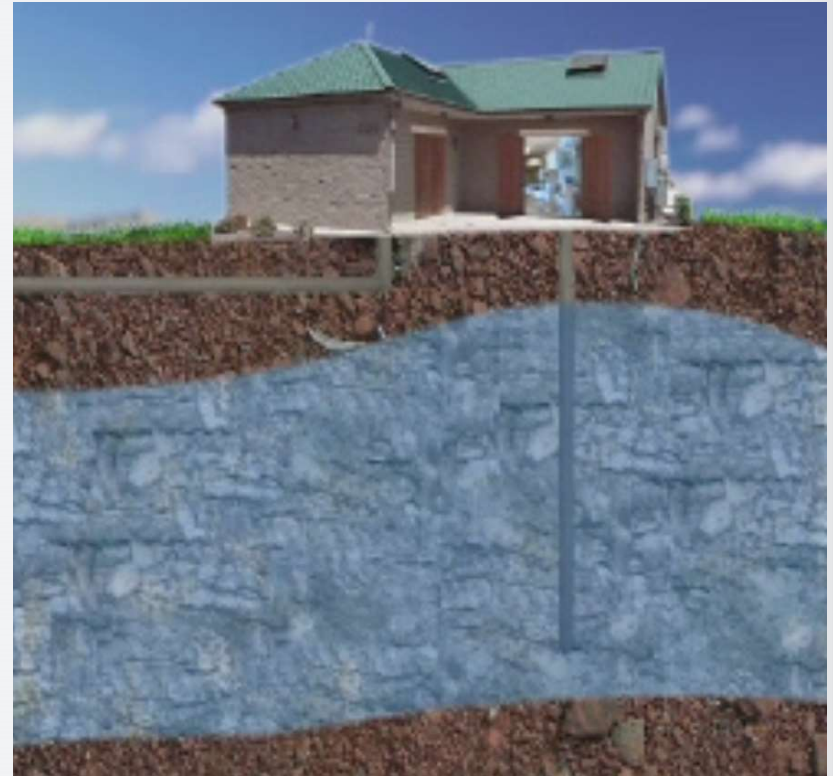
Environmental Utilities – Groundwater Program Overview

Public Utilities Commission

July 23, 2019

Agenda

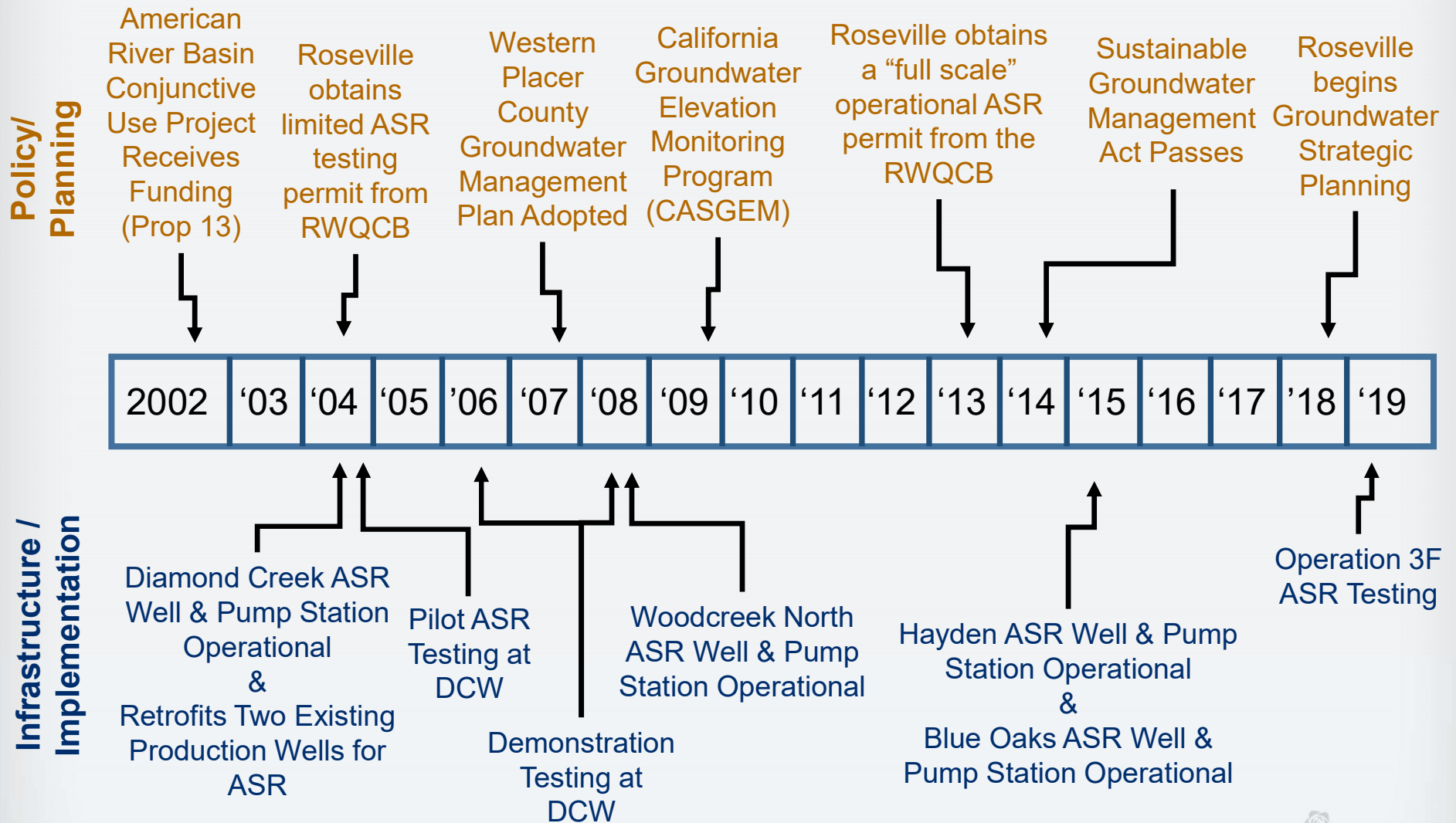
- Background
 - A Brief History
 - Roseville's Groundwater Program
- Current Activities
 - Operation 3(f) Testing
 - Groundwater Strategic Plan (GwSP)
 - Proposed SMUD Transfer
- Regional and State Participation
 - Sustainable Groundwater Management Act (SGMA)
 - Sacramento Regional Water Bank
- Next Steps



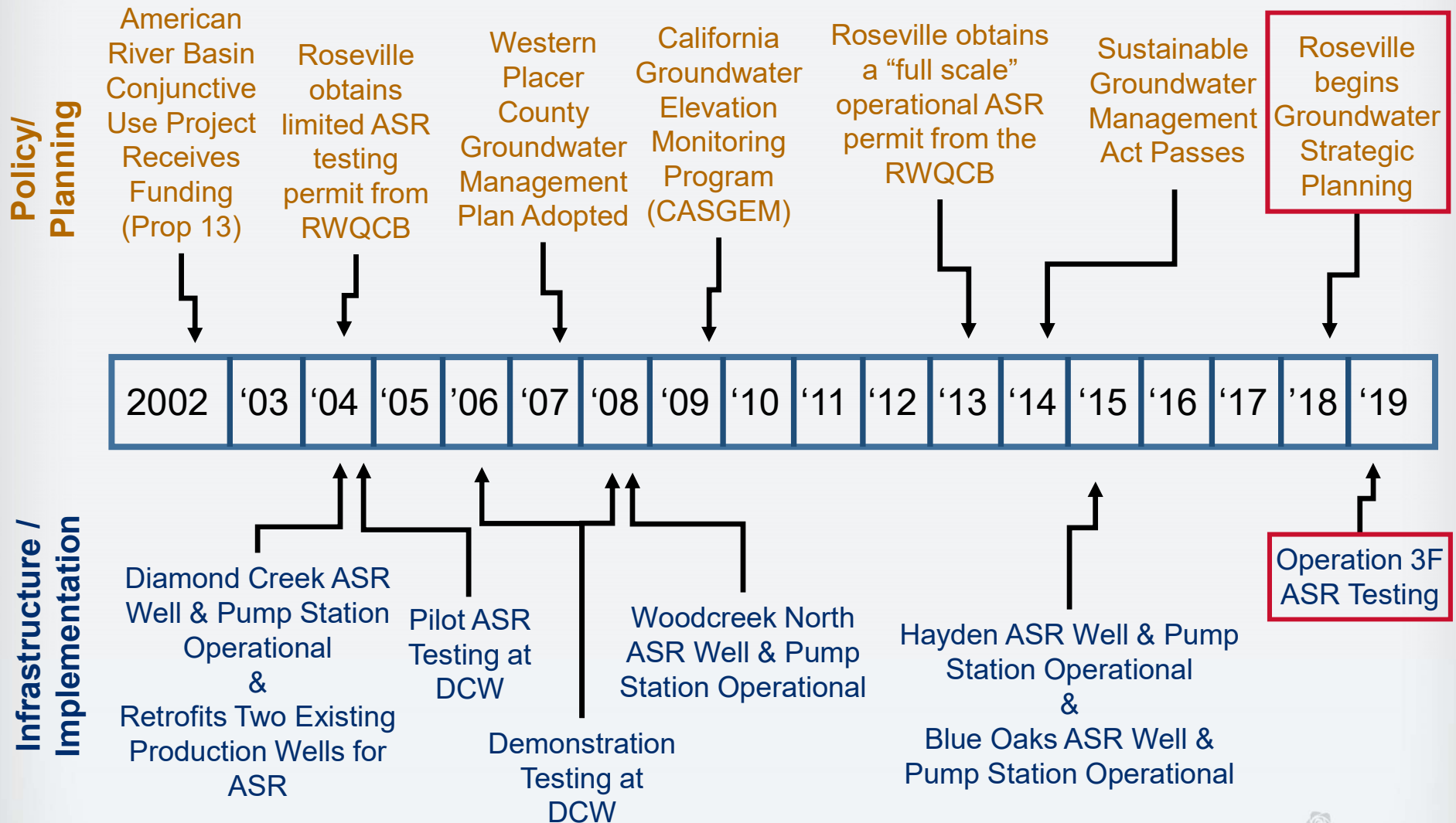
Background

A Brief History & Roseville's Groundwater Program

A Brief History - Timeline



A Brief History - Timeline



Groundwater Program

Past, Present, Future

Phase 1 2000 - 2017

- Initial ASR well constructed (Diamond Creek)
- Pilot and Demonstration Testing
- Limited testing and long term permits established with RWQCB

Phase 2 2017 - 2019

- Public introduction to ASR
- Maintenance and operation plan established
- Operational testing conducted
 - Article 3 (f)
 - SMUD transfer
- Hydrogeologist on staff
- Standard Operating Procedures (SOPs) developed
- Water quality framework developed
- ASR permit reporting
- Groundwater Strategic Plan developed

Phase 3 2020

Phase 4 2021 - 2022

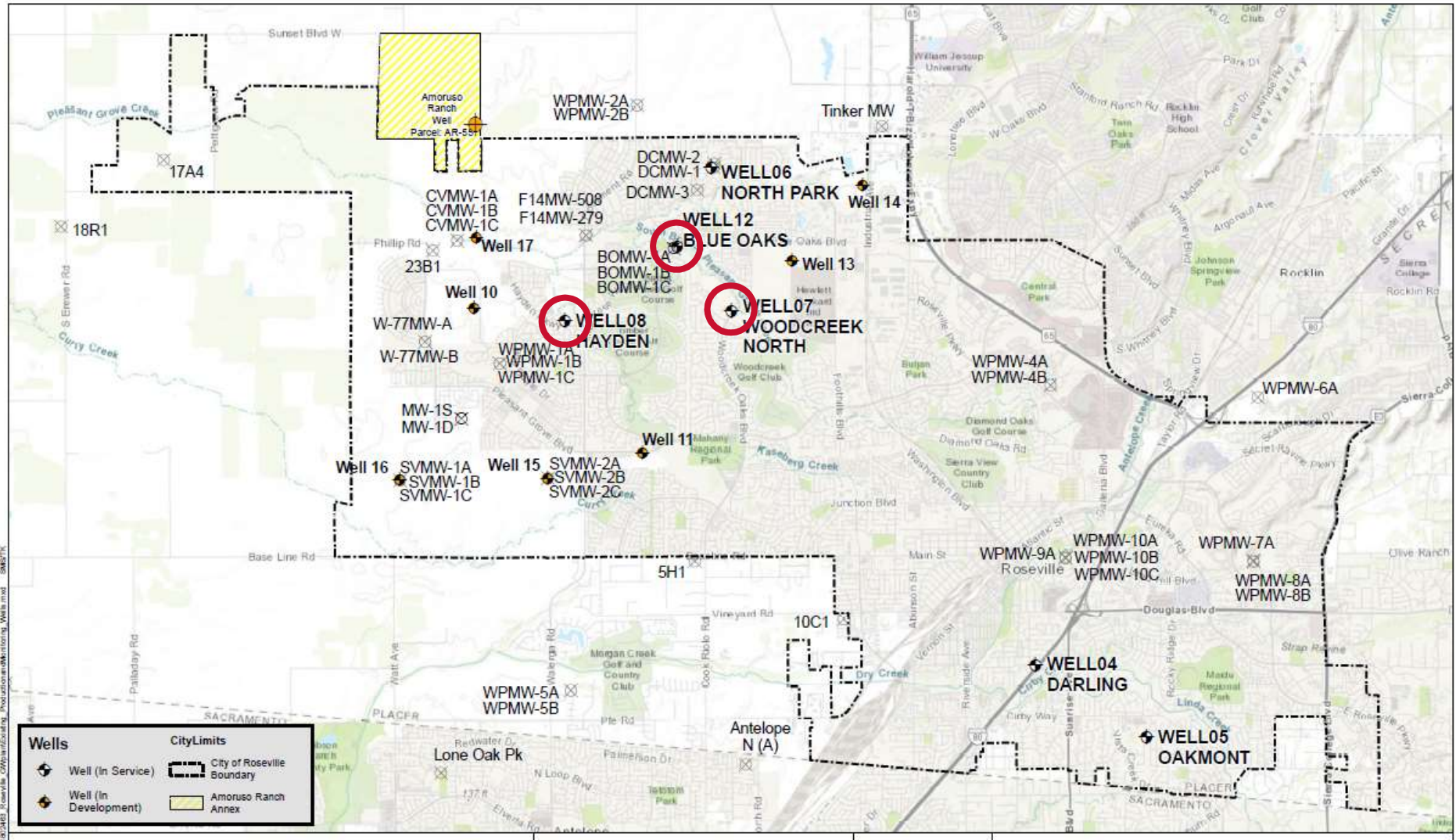
Where we've been

Where we're going

Current Activities

Operation 3(f) Testing

Operation 3(f) – Well Locations

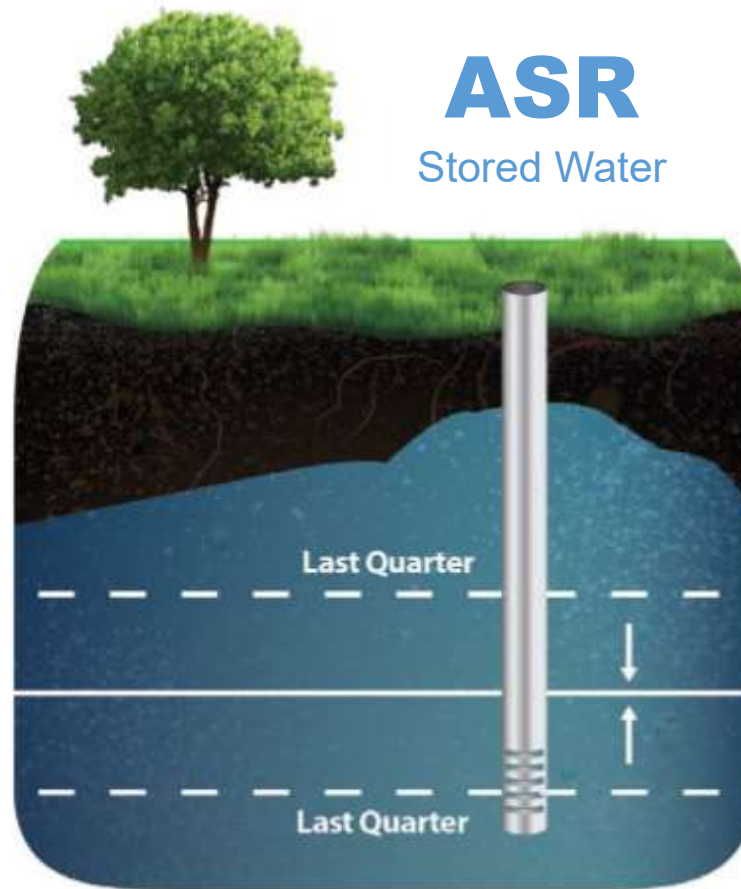


Groundwater Storage (2019) – Total Volumes Recharged, in Storage, & Recovered



Approx.
952 Acre Feet

Recharged since
Feb 20, 2019



**Total: Approx. 940 Acre Feet
in Storage**

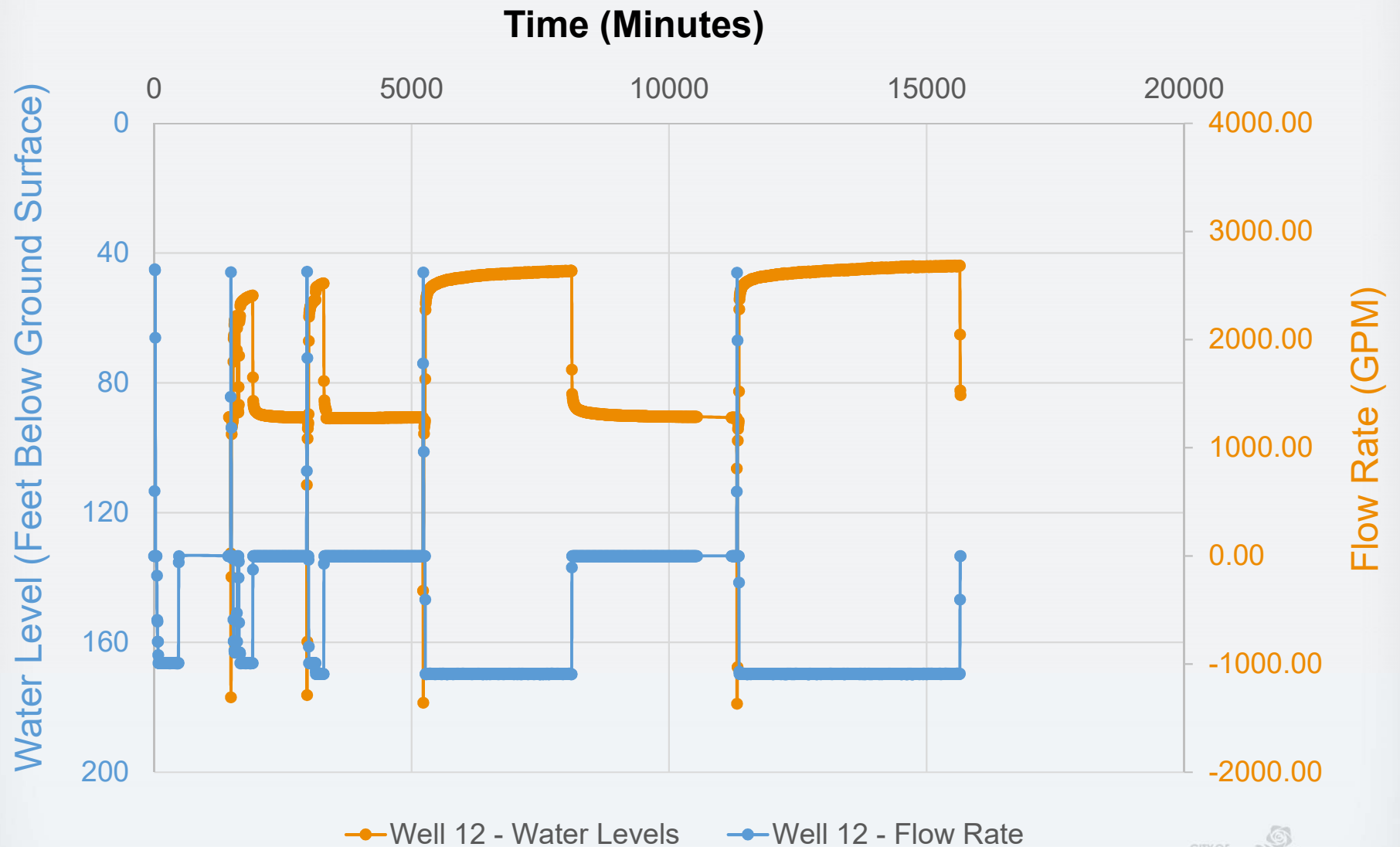


Approx.
12 Acre Feet

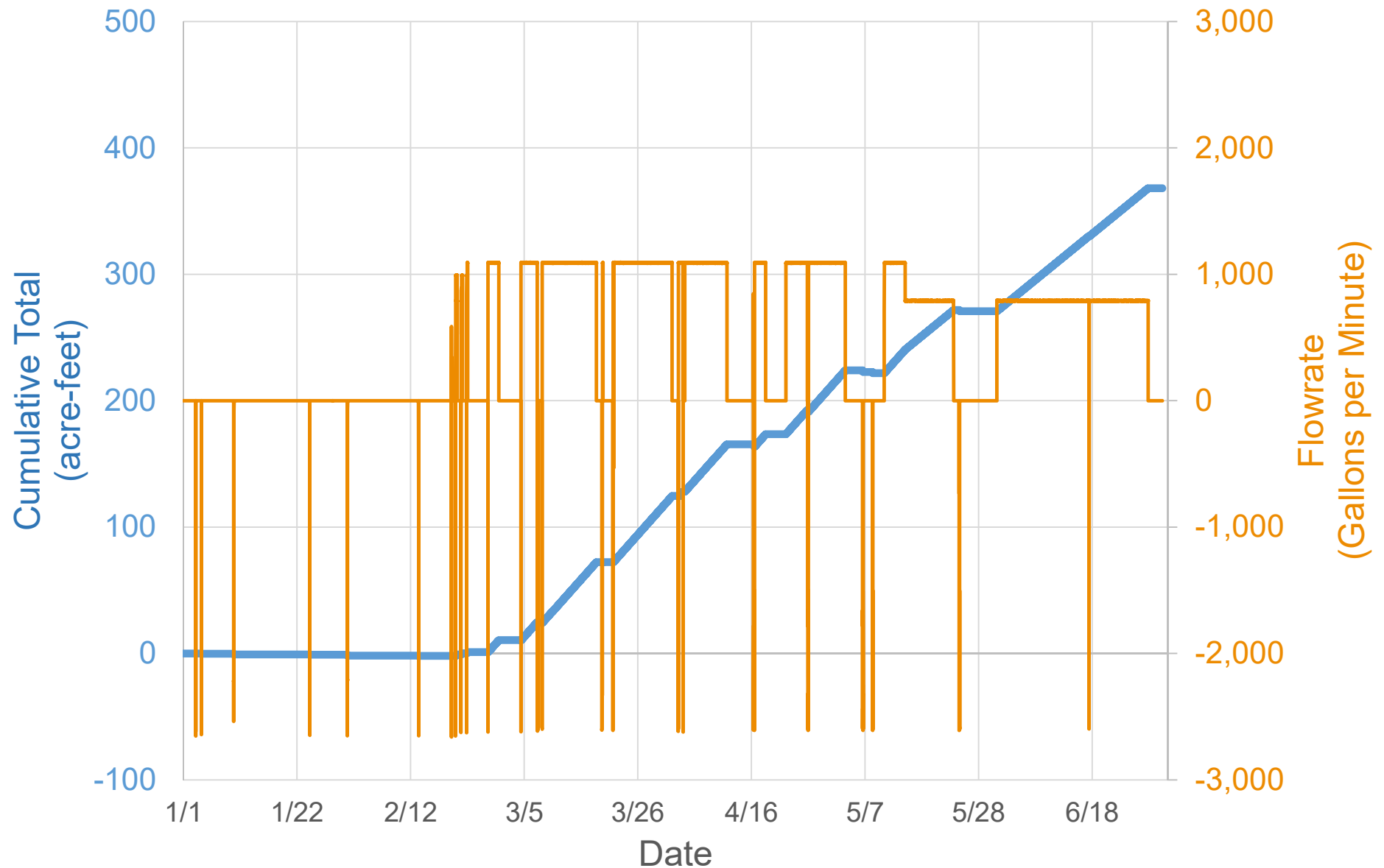
Recovered to storm water
system for ASR well
maintenance since
Feb 20, 2019

Note: Groundwater will be
served again to the distribution
system per the Operations Plan

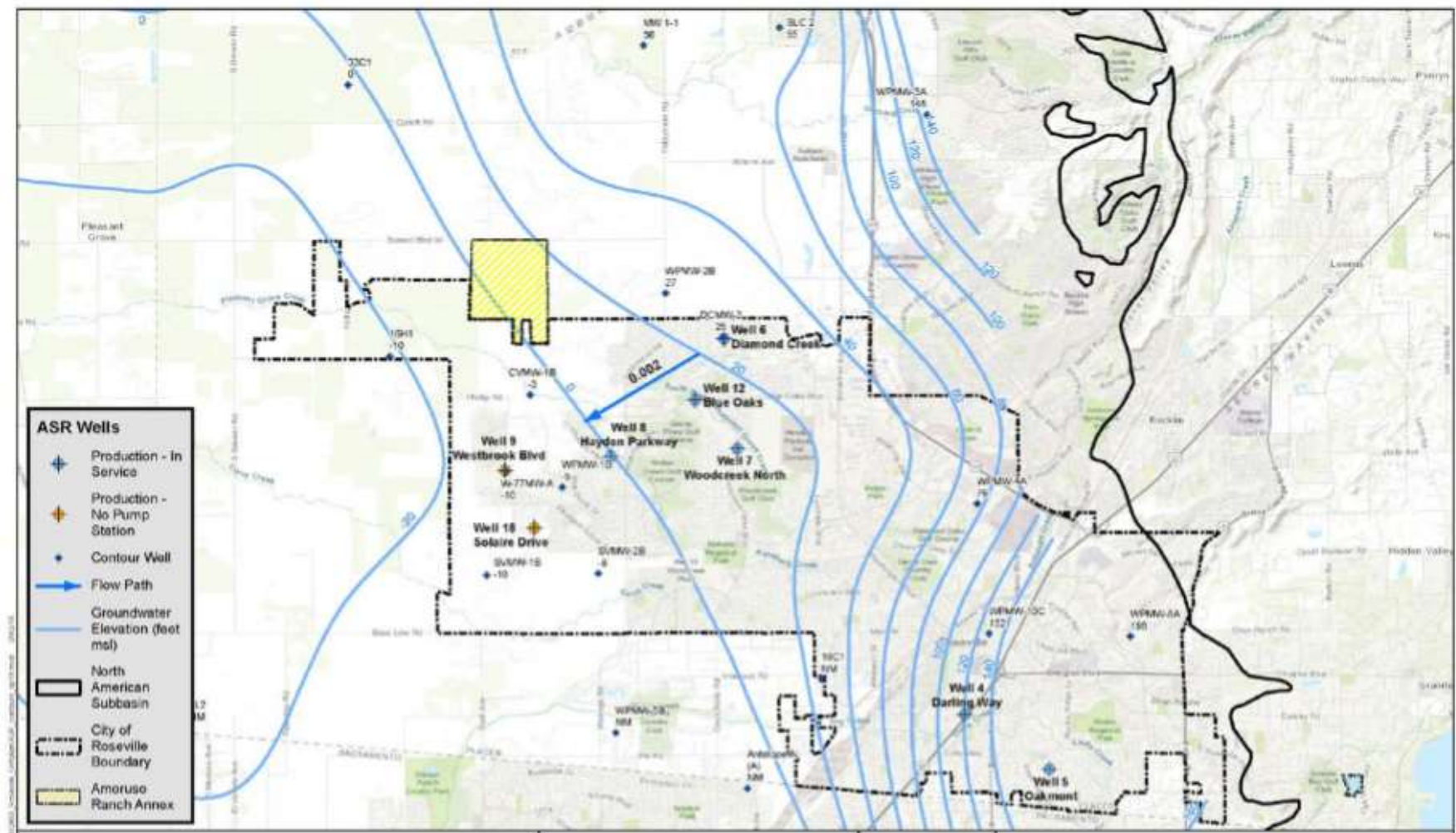
Current Activities – Operation 3F



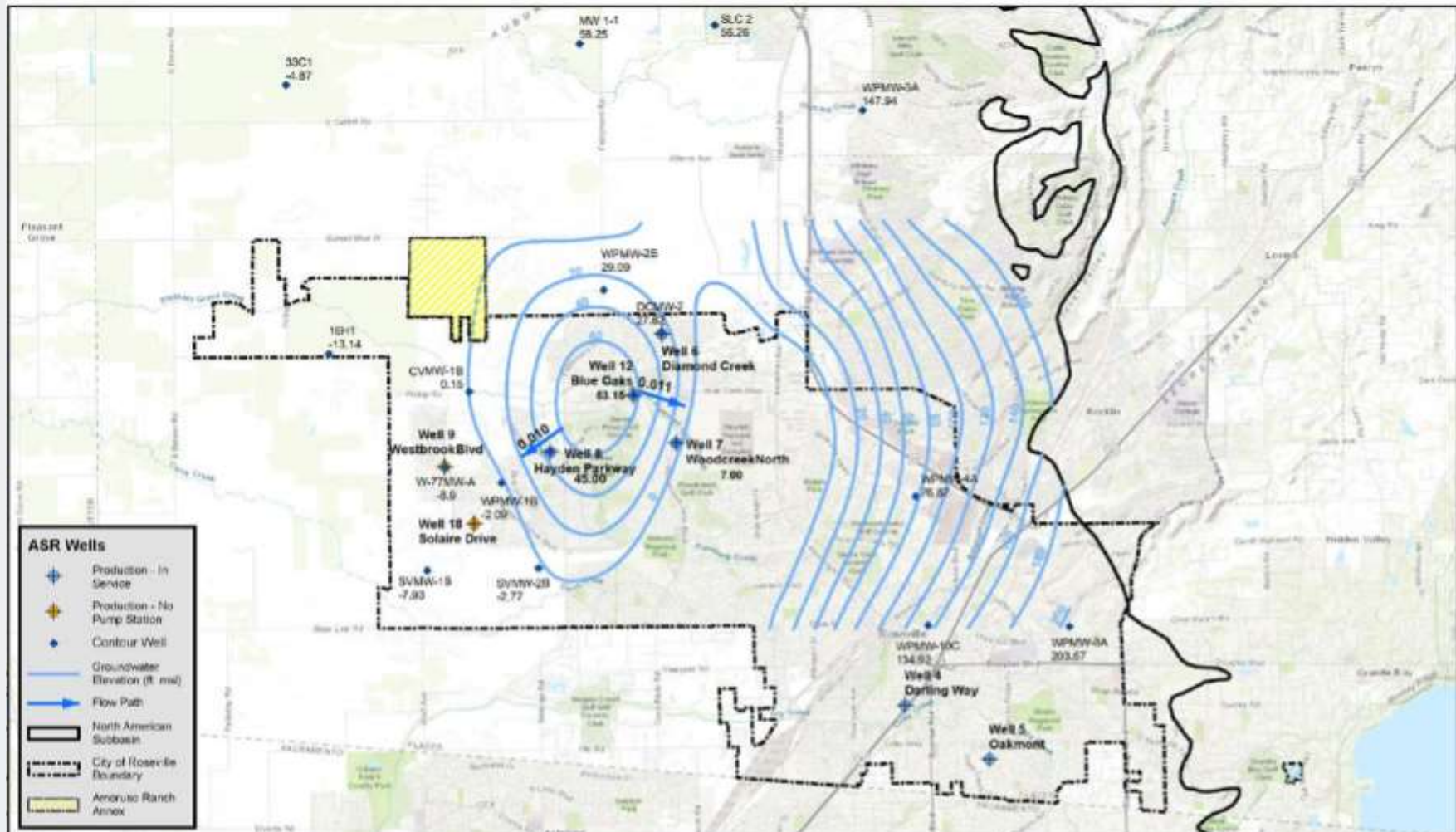
Well 12 - Flowrate & Cumulative Total



Current Activities – Operation 3F



Current Activities – Operation 3F



Current Activities

Groundwater Strategic Plan (GwSP)

GwSP Content

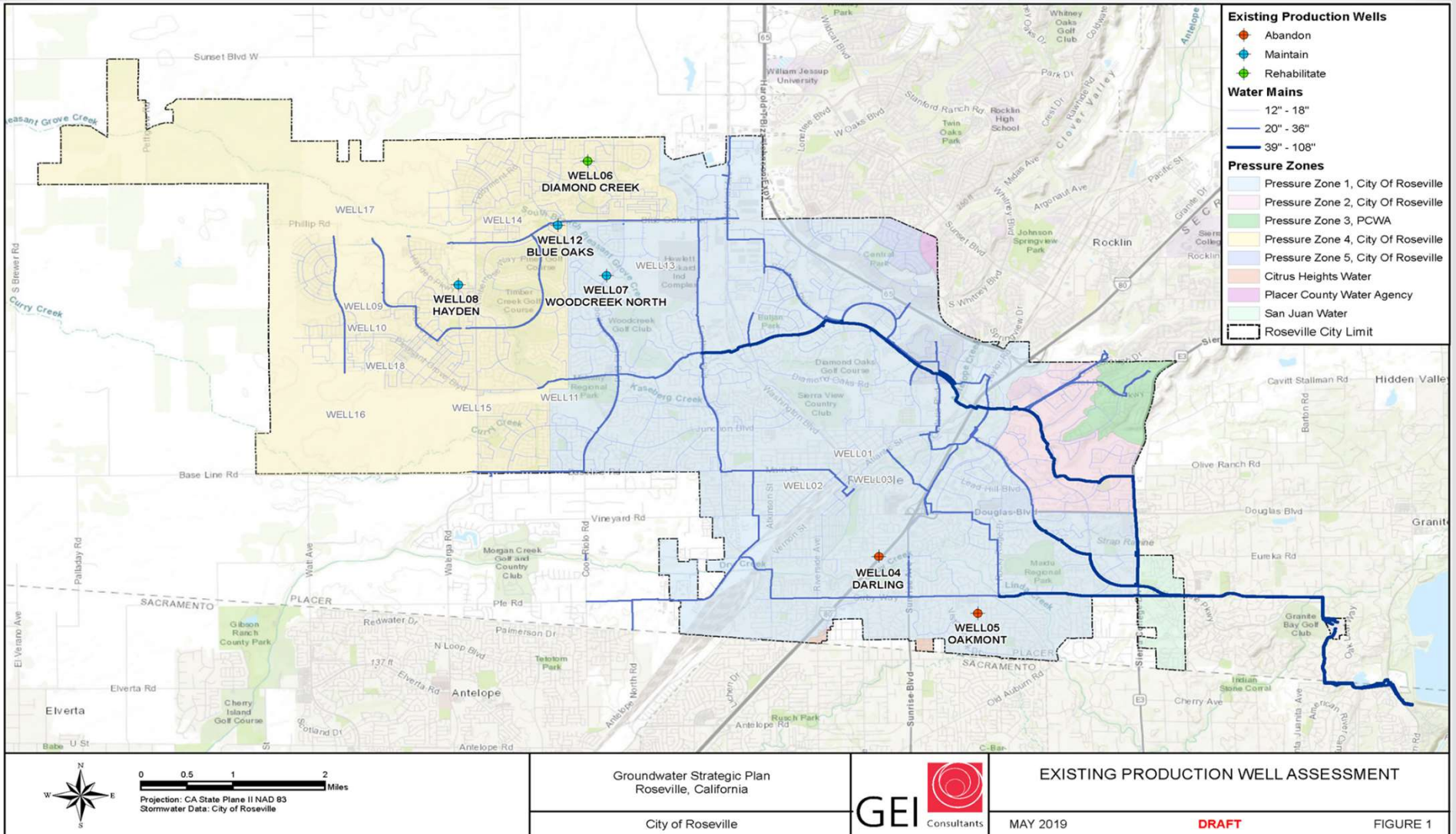
- TM#1: Data Compilation and Review
- TM#2: Evaluation of Water Supply Sources and Demand
- TM#3: Groundwater Recharge Evaluation
- TM#4: Infrastructure Evaluation and Well Sitting Plan
- Final Report: Roseville Groundwater Strategic Plan

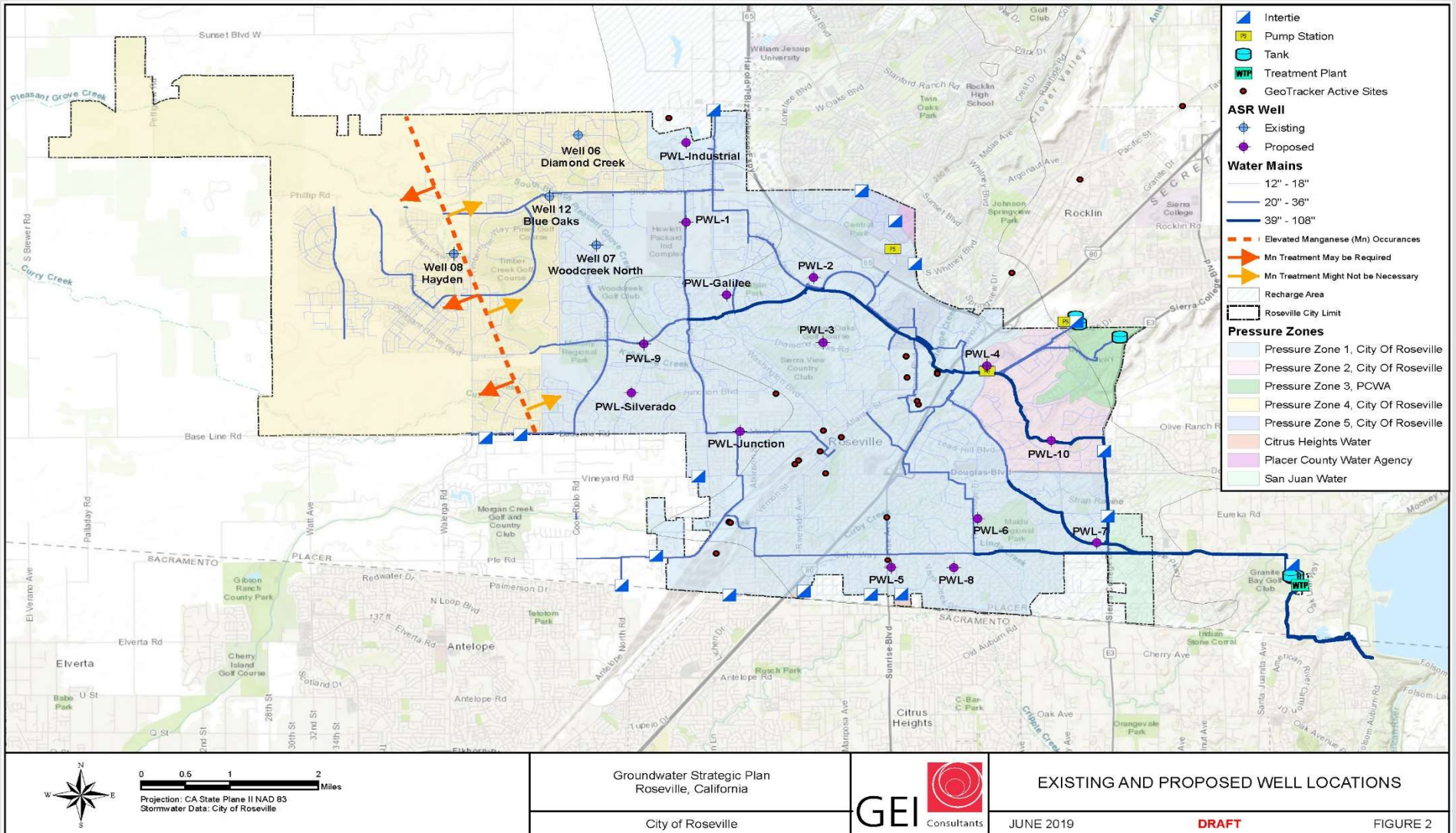


GwSP - Emergency Water Supply



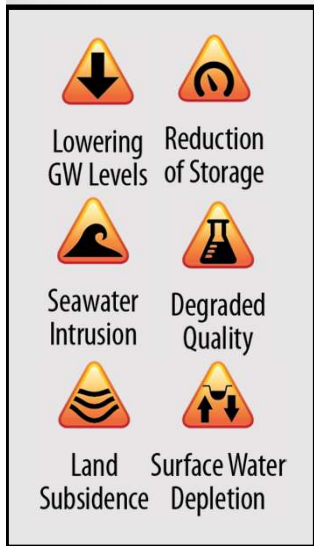
		2015	2020	2025	2030	2035	2040
Demand ¹	GPM	17,361	21,930	23,076	24,491	25,862	26,957
needed	from existing 6 wells (gpm)	11,058	11,058	11,058	11,058	11,058	11,058
	total	4	8	9	10	11	12





Regional and State Participation
Sustainable Groundwater Management Act
(SGMA) &
Sacramento Regional Water Bank

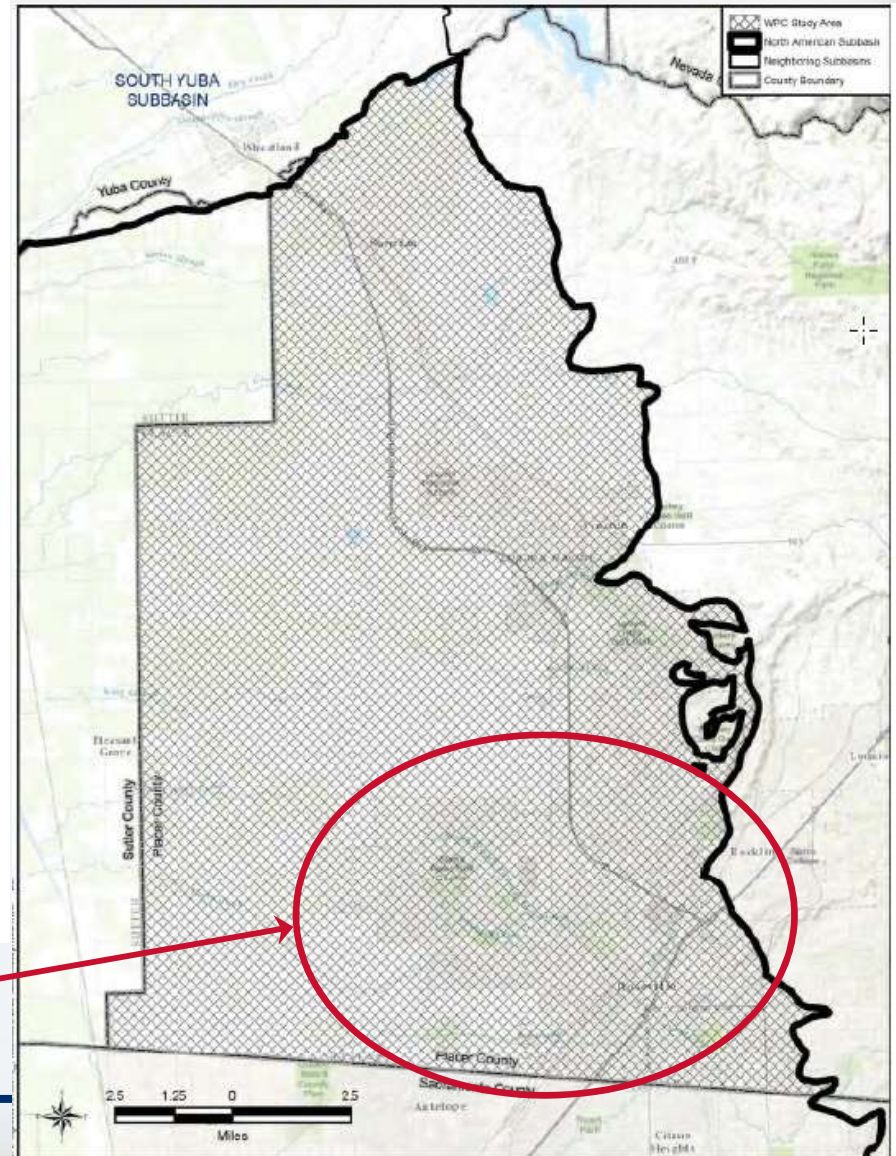
Sustainable Groundwater Management Act (SGMA) & Western Placer Groundwater Sustainability Agency (GSA)



North American Groundwater Subbasin



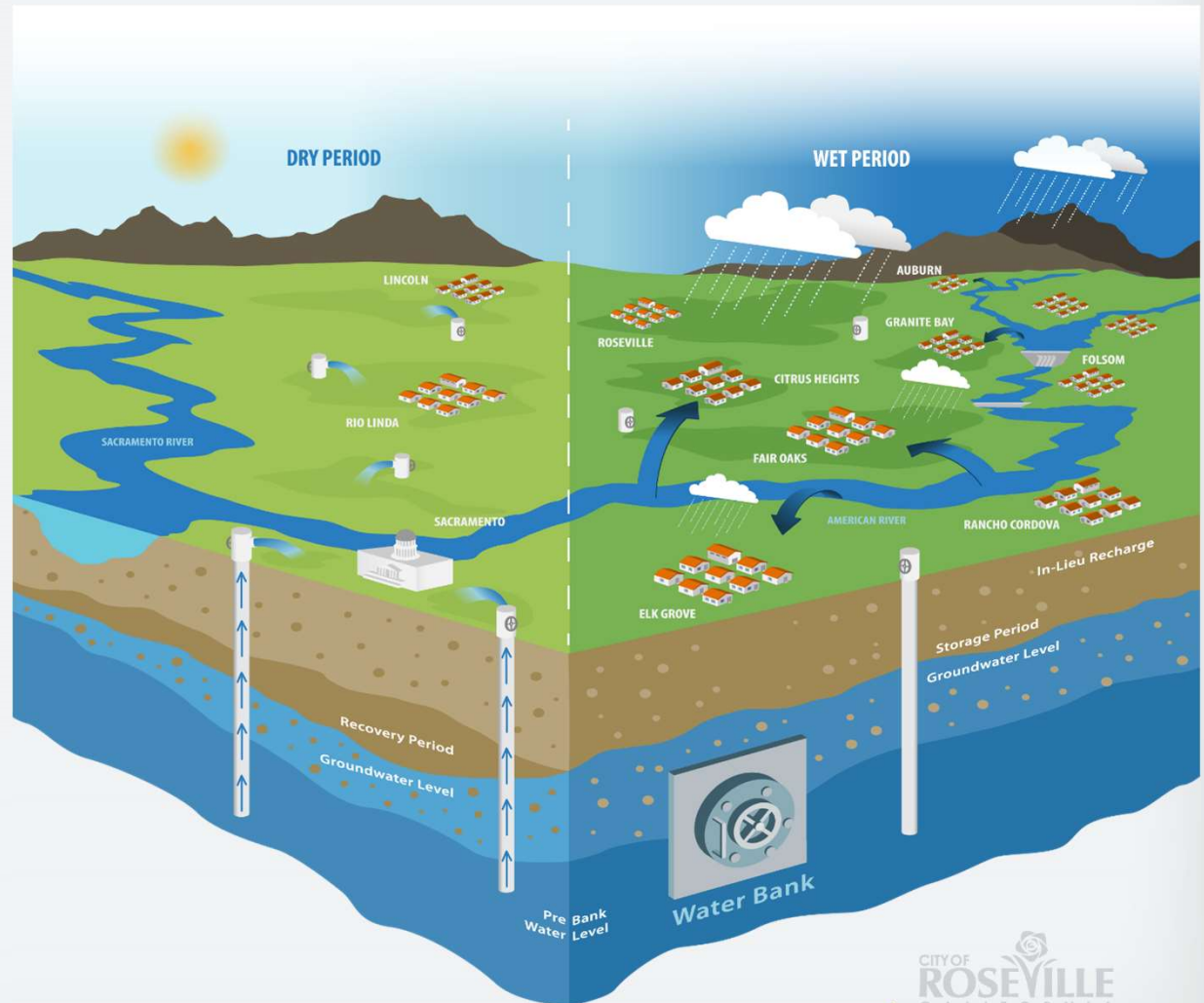
City of Roseville





SACRAMENTO REGIONAL WATER BANK

A Sustainable Storage and Recovery Program



Groundwater Program – Next Steps

Groundwater Program

Past, Present, Future

Phase 1 2000 - 2017

- Initial ASR well constructed (Diamond Creek)
- Pilot and Demonstration Testing
- Limited testing and long term permits established with RWQCB

Phase 2 2017 - 2019

- Public introduction to ASR
- Maintenance and operation plan established
- Operational testing conducted
 - Article 3 (f)
 - SMUD transfer
- Hydrogeologist on staff
- Standard Operating Procedures (SOPs) developed
- Water quality framework developed
- ASR permit reporting
- Groundwater Strategic Plan developed

Phase 3 2020

- Groundwater Program developed and structure established
- Sacramento Regional Groundwater Bank developed
 - Regional conjunctive use
 - Governance
 - Financing
 - U.S. Bureau of Reclamation engagement
- Groundwater Strategic Plan implemented
 - Additional ASR well infrastructure and operations
 - Development of transfer capability reporting

Phase 4 2021 - 2022

- Fully actualized Roseville Groundwater Program
- Operational Regional Groundwater Bank
- Groundwater transfers
- Participation in a Sustainable Groundwater Management Act compliant Groundwater Sustainability Plan

Where we've been

Where we're going

Groundwater Program

Past, Present, Future

Phase 3 2020

- Groundwater Program developed and structure established
- Sacramento Regional Groundwater Bank developed
 - Regional conjunctive use
 - Governance
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Phase 4 2021 - 2022

- Fully actualized Roseville Groundwater Program
- Operational Regional Groundwater Bank
- Groundwater transfers
- Participation in a Sustainable Groundwater Management Act compliant Groundwater Sustainability Plan

Where we're going



Questions/ Comments

- Sean Bigley
 - sbigley@roseville.ca.us
 - (916) 774 – 5513

- Trevor Joseph
 - tjoseph@roseville.ca.us
 - (916) 746 - 1708



PUBLIC UTILITIES COMMISSION COMMUNICATION

Title: ROSEVILLE ELECTRIC UTILITY UPDATE
Contact:

Meeting Date: 7/23/2019
Item #: 6.3.



PUBLIC UTILITIES COMMISSION COMMUNICATION

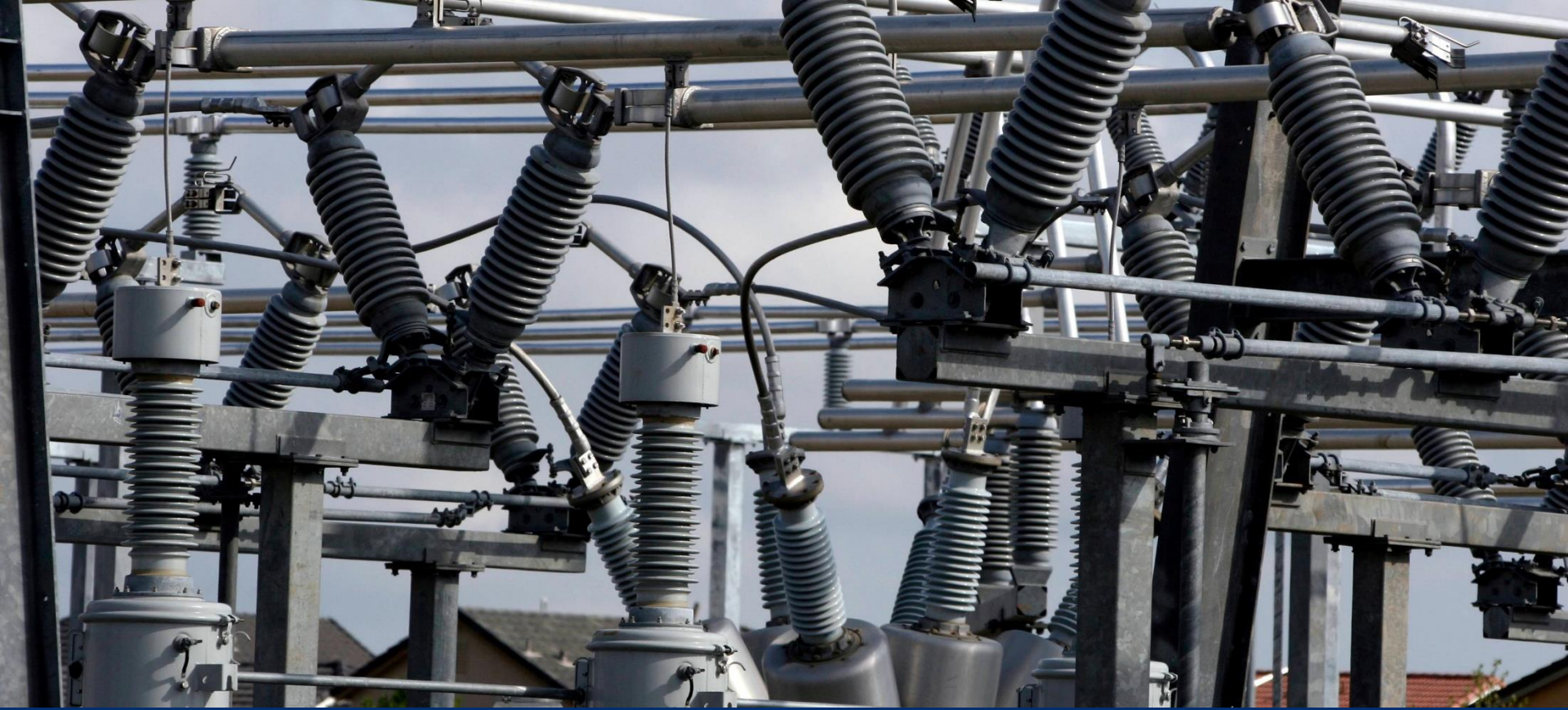
Title: ROSEVILLE ELECTRIC ENERGY IMBALANCE MARKET (EIM) OVERVIEW
Contact:

Meeting Date: 7/23/2019
Item #: 6.4.

ATTACHMENTS:

Description

RPUC EIM Update2019



Energy Imbalance Market

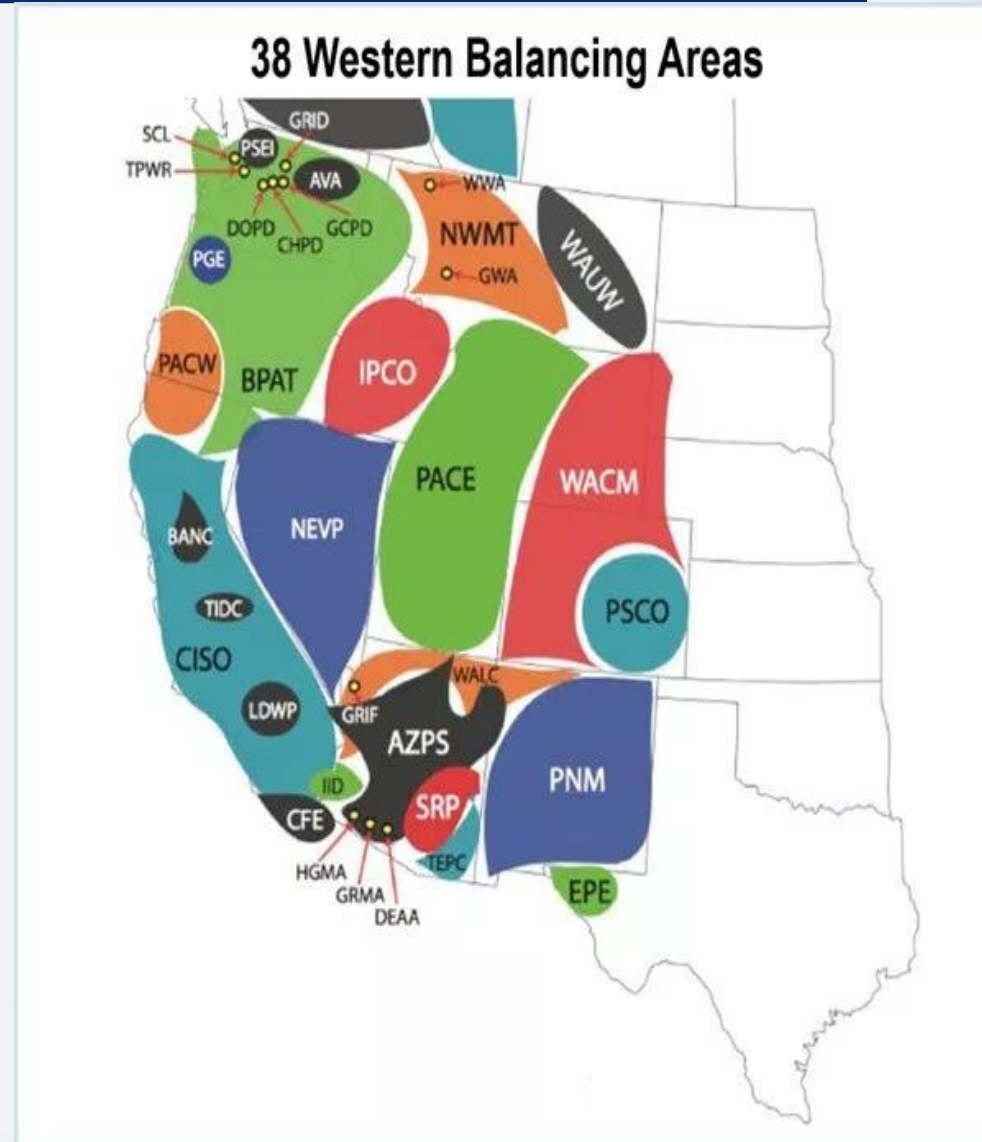
Bill Forsythe, Power Supply and Portfolio
Administrator

Energy Imbalance Market Overview

- Western energy market background
- What is the EIM?
- Why might Roseville participate?
- Process and next steps

Western Energy Markets

- Balancing Authorities (BAs) balance supply & demand
- Roseville in BANC
 - Modesto, SMUD, Redding, Shasta, Trinity, WAPA
- CAISO covers most of the state
- Two types of markets:
 - Automated (CAISO)
 - Bilateral (others)



California Challenges

- Lots of intermittent renewables
- Need to constantly balance
- Too much solar at mid-day

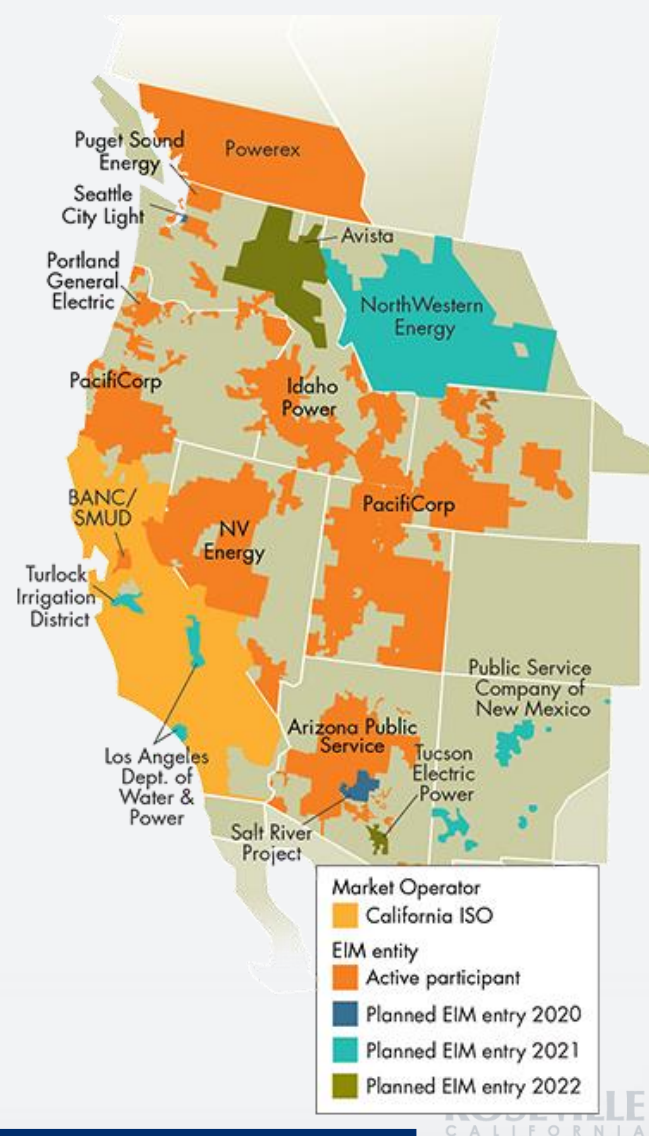


CAISO Solution

- Broader geographic diversity
 - More generators to balance
 - More load to take mid-day solar
 - More time zones
- Shorter term market
 - 5 minutes vs. 1 hour

What is the “Energy Imbalance Market”?

- CAISO sponsored market for other BAs
- Short term (5 minute) automated market
- Optimizes available generation using free transmission
- 9 current participants; 8 more coming
- SMUD joined in April 2019
- Other BANC members (incl. Roseville) exploring

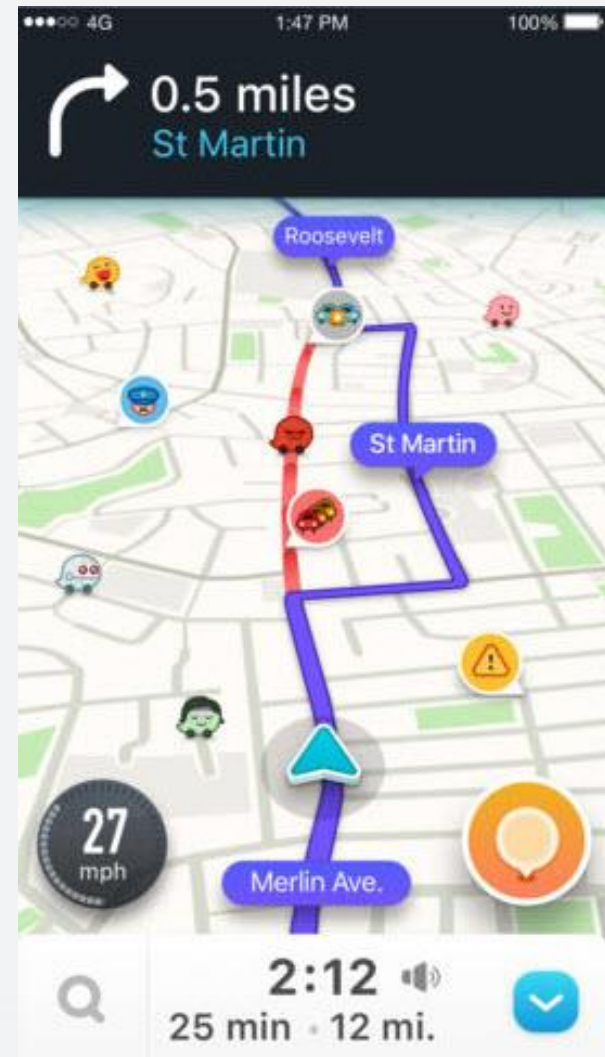


Why Participate in EIM?

- More efficient
- Lower costs
- Provides flexibility to balance our own renewables
- Preserves access to trading partners

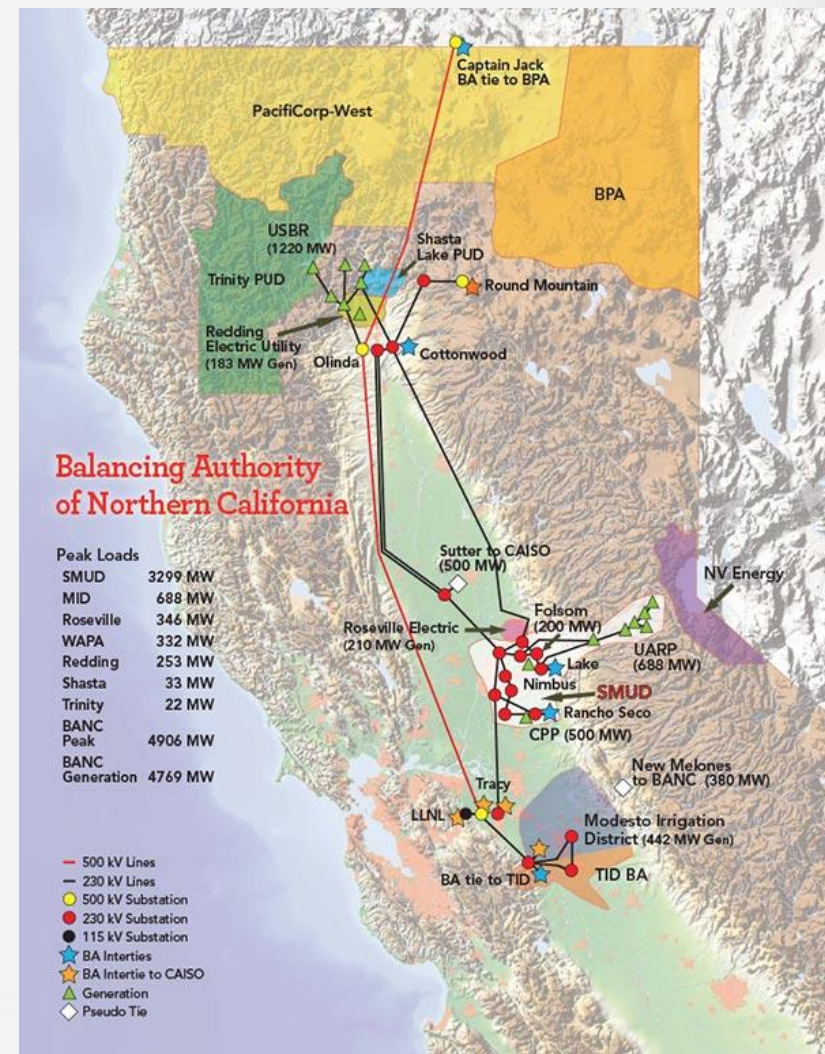
EIM Lowers Cost

- When EIM price is low:
 - Pull energy from EIM
- When EIM price is high:
 - Push energy to EIM
- *EIM is like a mapping app, you get the “fastest route”*



BANC EIM Efforts

- Two-phased approach
- Phase 1 – SMUD joined April 2019
- Phase 2 – Roseville and others:
 - Decision Aug 2019
 - Go-live Apr 2021



Questions?

