



SANTA ANA WATERSHED  
PROJECT AUTHORITY

# **Injury and Illness Prevention Plan Update**

PA 24 Committee

No. 4.B

Daniel Vasquez

Manager of Operations

December 5, 2023

# Recommendation

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That the PA 24 Committee approve the addition of the Silica Exposure Control Program to SAWPA's Injury and Illness Prevention Plan (IIPP).

# Injury and Illness Prevention Plan

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- On October 15, 2013, the SAWPA Commission adopted Resolution 2013-10 which established an Injury and Illness Prevention Plan.

# IIPP Programs

Programs in **Teal** are Brine Line Employee specific.

Programs in **Black** are SAWPA wide.

1	<b>ACCIDENT REPORTING</b>
2	Bloodborne Pathogens
3	Air Compressor and Compressed Air Safety
4	Confined Space Entry
5	Driver Safety
6	Ergonomics
7	Fall Protection
8	Hand and Portable Powered Tools
9	Hazard Communication
10	Hazardous Material Storage and Use
11	HAZWOPER
12	Hearing Conservation
13	Heat Stress
14	Hot Work
15	Ladder Safety
16	Line Location
17	Lock-out Tag-out
18	Machine Guarding
19	Outside Regulatory Agency Inspection
20	PPE
21	Respiratory Protection
22	Safety Orientation
23	Traffic Control and Flagger Safety
24	Trenching and Excavation Safety
25	Silica Exposure Control Program

# IIPP Updates

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- **IIPP is reviewed annually for new requirements.**
- **Program audits range from annually to every three (3) years depending on the program.**

# Silica Exposure Control Program

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Title 8 of the California Code of Regulations (T8CCR), section 5204 (Occupational Exposures to Respirable Crystalline Silica) requires a program that ensures that employees:

- Demonstrate knowledge concerning the health hazards of respirable crystalline silica.
- Understand the specific engineering controls, work practices, and respirators to be used in such cases where appropriate.

# Recommendation

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That the SAWPA Commission approve the addition of the Silica Exposure Control Program to SAWPA's Injury and Illness Prevention Plan (IIPP).

# Questions?

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SANTA ANA WATERSHED  
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# INLAND EMPIRE BRINE LINE MASTER PLAN

PA 24 Committee Meeting

Item No. 5.A

David Ruhl

Executive Manager of Engineering and Operations

December 5, 2023

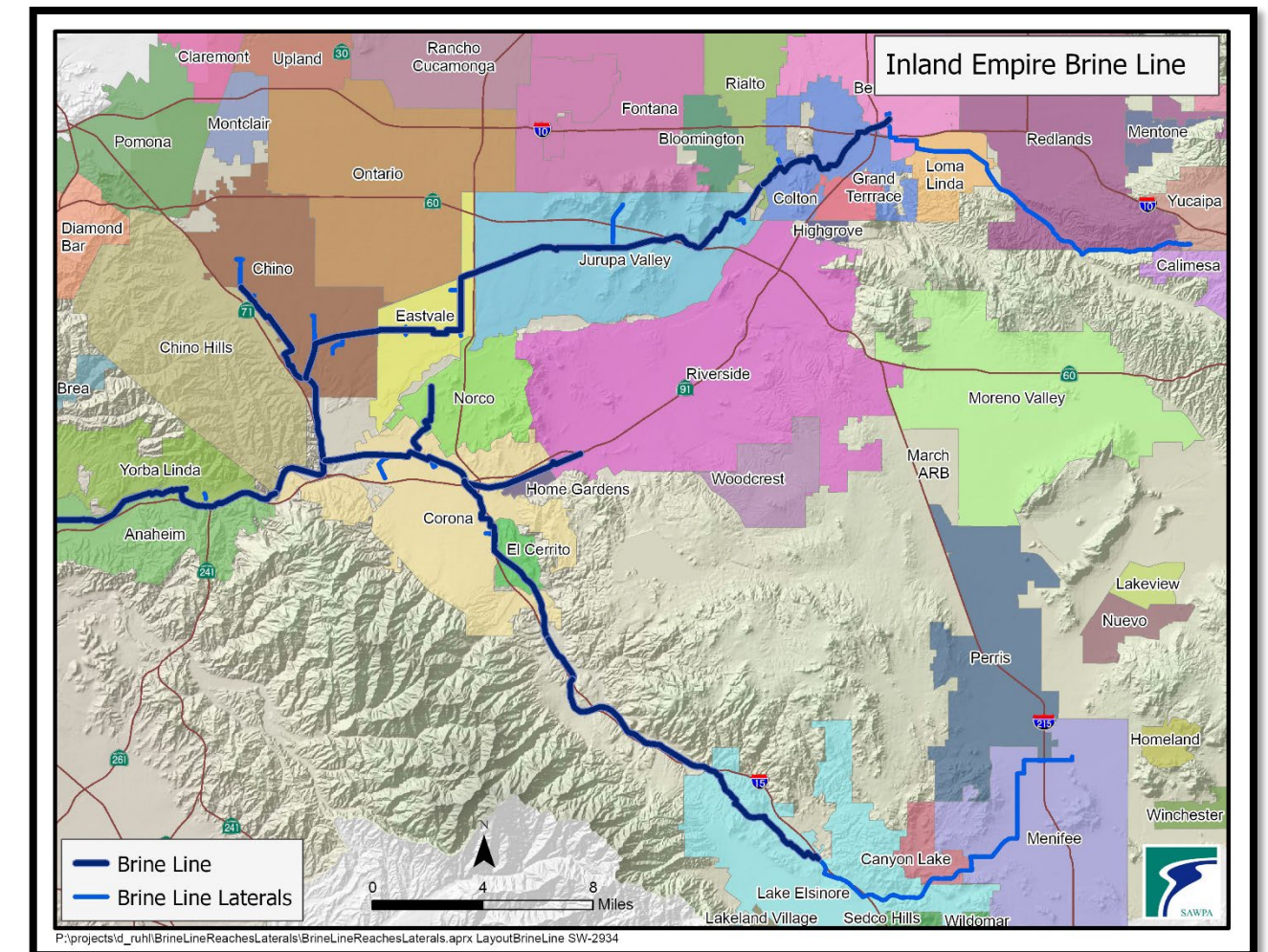
# Recommendation

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- Receive and file a status report on the Inland Empire Brine Line Master Plan

# Brine Line Master Plan

- Long-term planning document that addresses facility needs
- Manage and implement the growth and expansion of the Brine Line to best serve the watershed, our Member Agencies and current and future dischargers
- Benefits
  - Ability to make informed decisions
  - Focus resources and prioritize projects
  - Promote economic development
  - Maintain system reliability
  - Accommodate future growth
  - Meet future regulatory requirements



# Brine Line Master Plan - Scope of Work



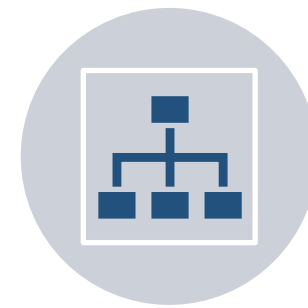
Update and calibrate the existing hydraulic Model



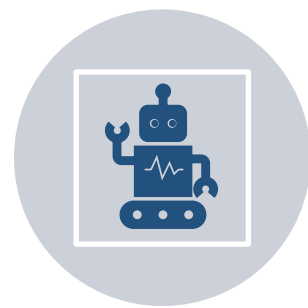
Market analysis, Member Agency and Stakeholder coordination, and future growth projections



Existing and Future Brine Line System Evaluation



Capacity management and long-term planning efforts

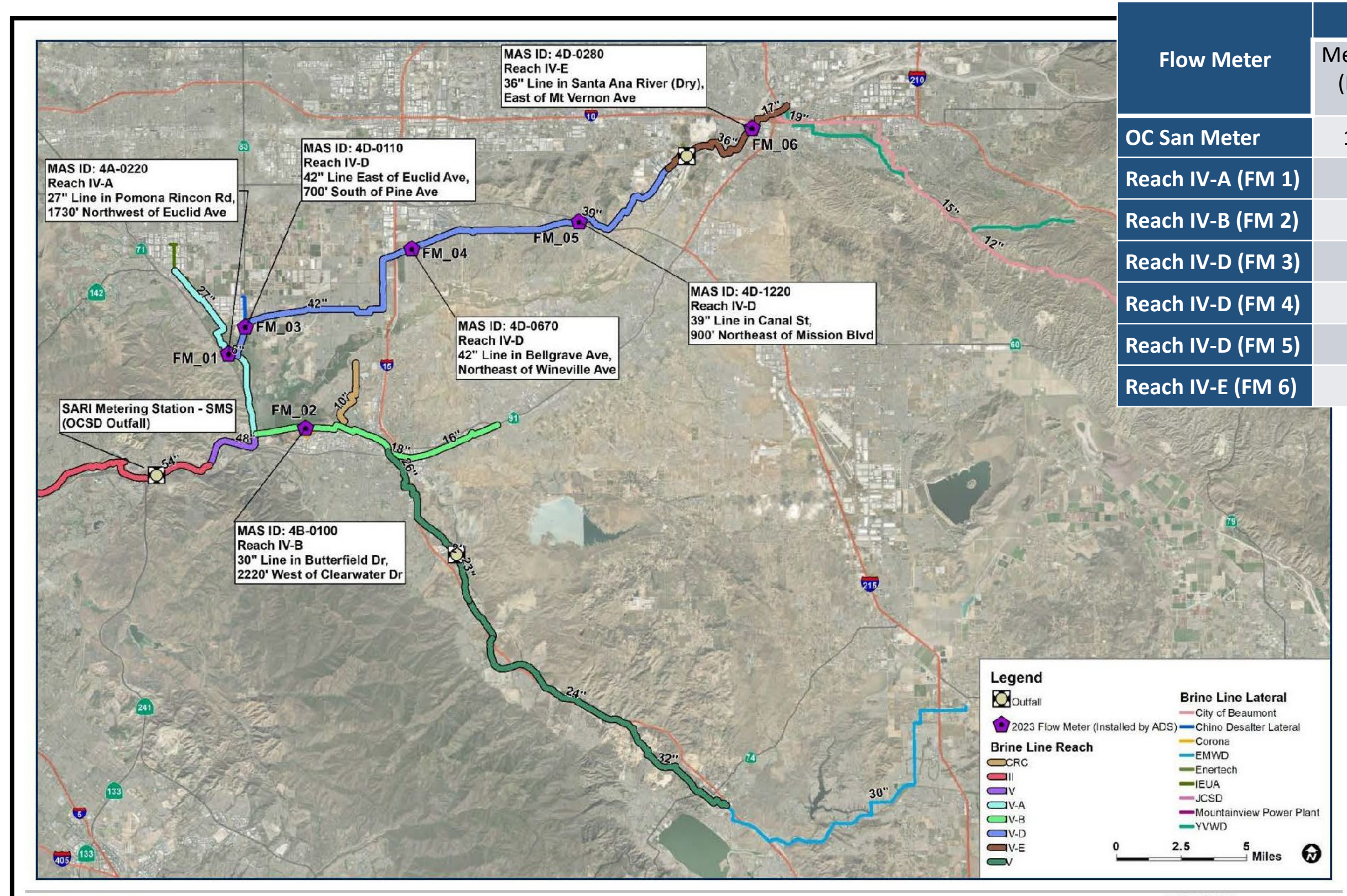


Multi-use benefits for the future

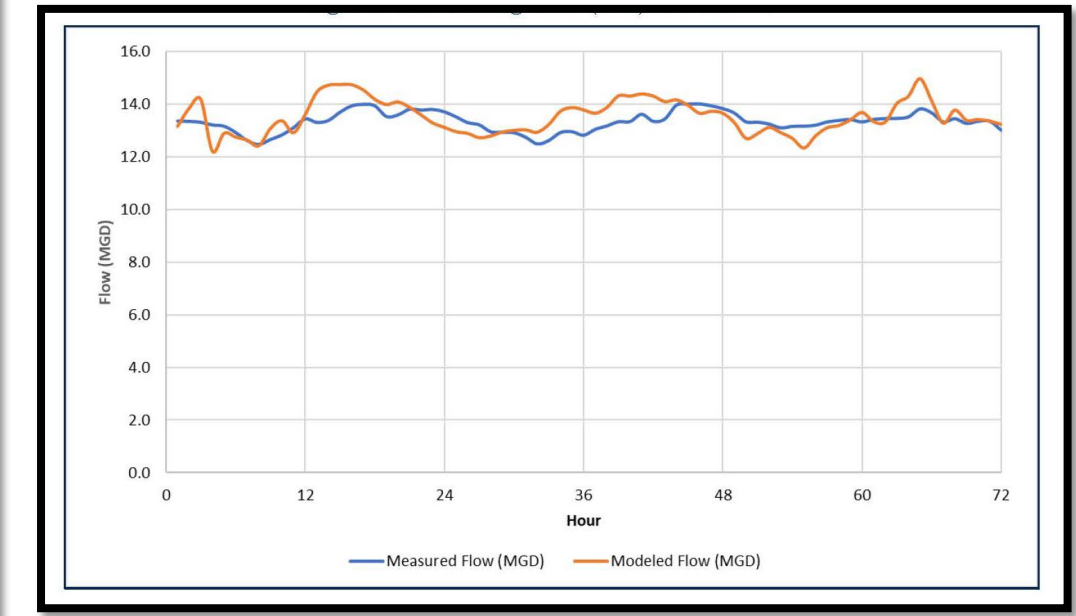


Policy considerations

# Update and Calibrate the Existing Hydraulic Model



Flow Meter	Average Flows			Peak Flows		
	Measured (MGD)	Modeled (MGD)	% Diff	Measured (MGD)	Modeled (MGD)	% Diff
OC San Meter	13.34	13.53	1.4	14.02	14.99	6.9
Reach IV-A (FM 1)	0.31	0.30	3.9	0.53	0.56	6.8
Reach IV-B (FM 2)	8.53	6.77	20.6	9.17	7.35	19.9
Reach IV-D (FM 3)	6.87	6.48	5.8	7.74	7.54	2.5
Reach IV-D (FM 4)	3.98	3.71	6.9	4.76	4.54	4.6
Reach IV-D (FM 5)	2.13	1.75	17.5	2.41	2.08	13.4
Reach IV-E (FM 6)	1.40	1.46	3.9	1.60	1.70	6.5



# Member Agency / Stakeholder Meetings

Date	Agency
<b>February 23, 2023</b>	<b>San Bernardino Valley Municipal Water District</b>
February 23, 2023	San Bernardino Municipal Water Department
February 23, 2023	City of Redlands
February 23, 2023	East Valley Water District
<b>March 8, 2023</b>	<b>Eastern Municipal Water District</b>
<b>March 16, 2023</b>	<b>Western Municipal Water District</b>
<b>March 30, 2023</b>	<b>Inland Empire Utilities Agency</b>
March 19, 2023	Chino Basin Desalter Authority
May 4, 2023	City of Corona
June 12, 2023	Elsinore Valley Municipal Water District
June 15, 2023	Jurupa Community Services District
June 15, 2023	Yucaipa Valley Water District
June 21, 2023	City of Colton
June 22, 2023	Riverside County Flood Control District
July 13, 2023	City of Beaumont
August 16, 2023	City of Chino
August 17, 2023	Temescal Valley Water District
August 17, 2023	City of Riverside
August 24, 2023	Rubidoux Community Services District



Industries that disposal of salty wastewater:

- Biotech Manufacturing
- Electronic Parts Manufacturers
- Medical Supply Manufacturing
- Computer Chip Manufacturers
- Commercial Laundries
- Food and Beverage Processing
- Groundwater desalters
- Ion Exchange Plants
- Power Plants
- Water Reclamation Facilities

# Market Analysis - Key information / concerns

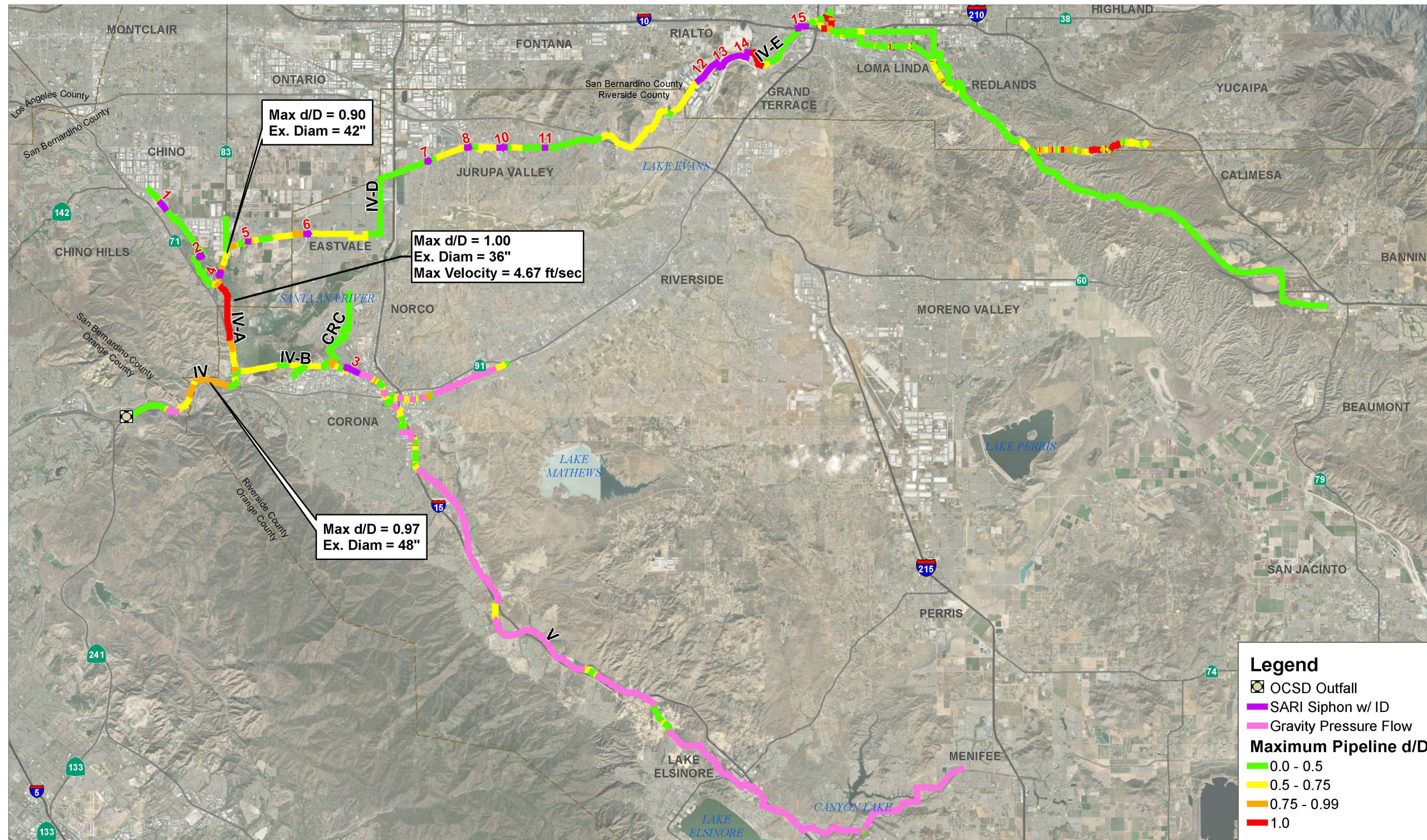
- Near term Treatment and Disposal Capacity needs
  - YVWD 0.5 MGD
  - EVMWD 0.8 MGD
- Current projects and studies – Brine Line disposal needs not defined
  - Regional Recycled Water Facilities Plan - Valley District, East Valley, City of San Bernardino and City of Redlands - Feasibility study late 2024
  - Chino Basin Program
  - Southern Riverside County Regional Brine Line
- Factors influencing Agency Brine Disposal Needs
  - Recycled Water / Ground Water Recharge Projects
  - Potential PFAS regulations
  - Brine Line Capacity
- DWF diversions to the Brine Line
- Is an intertie with IEUA's north system a feasible option for greater reliability and redundancy?

# Future Growth Projections

Flow Type	Current June 2023		Near – Term 2023 - 33		Long – Term 2033 - 58		Build – Out ➤ 2058	
	Value	Percentage	Value	Percentage	Value	Percentage	Value	Percentage
Potable Water Production	10.1	74%	11.6	62%	16.9	63%	18.3	60%
Wastewater Desalination	1.0	7%	4.5	24%	5.9	22%	6.3	21%
Industrial	1.7	12%	1.9	10%	2.3	9%	2.9	9%
Power Generation	0.5	4%	0.6	3%	.6	2%	0.7	2%
Stormwater	0.0	0%	0.0	0%	1.0	4%	2.0	7%
Domestic	0.3	2%	0.3	2%	0.3	1%	0.4	1%
<b>Total</b>	<b>13.5 MGD</b>		<b>18.8 MGD</b>		<b>27.0 MGD</b>		<b>30.5 MGD</b>	



# Existing and Future System Evaluation

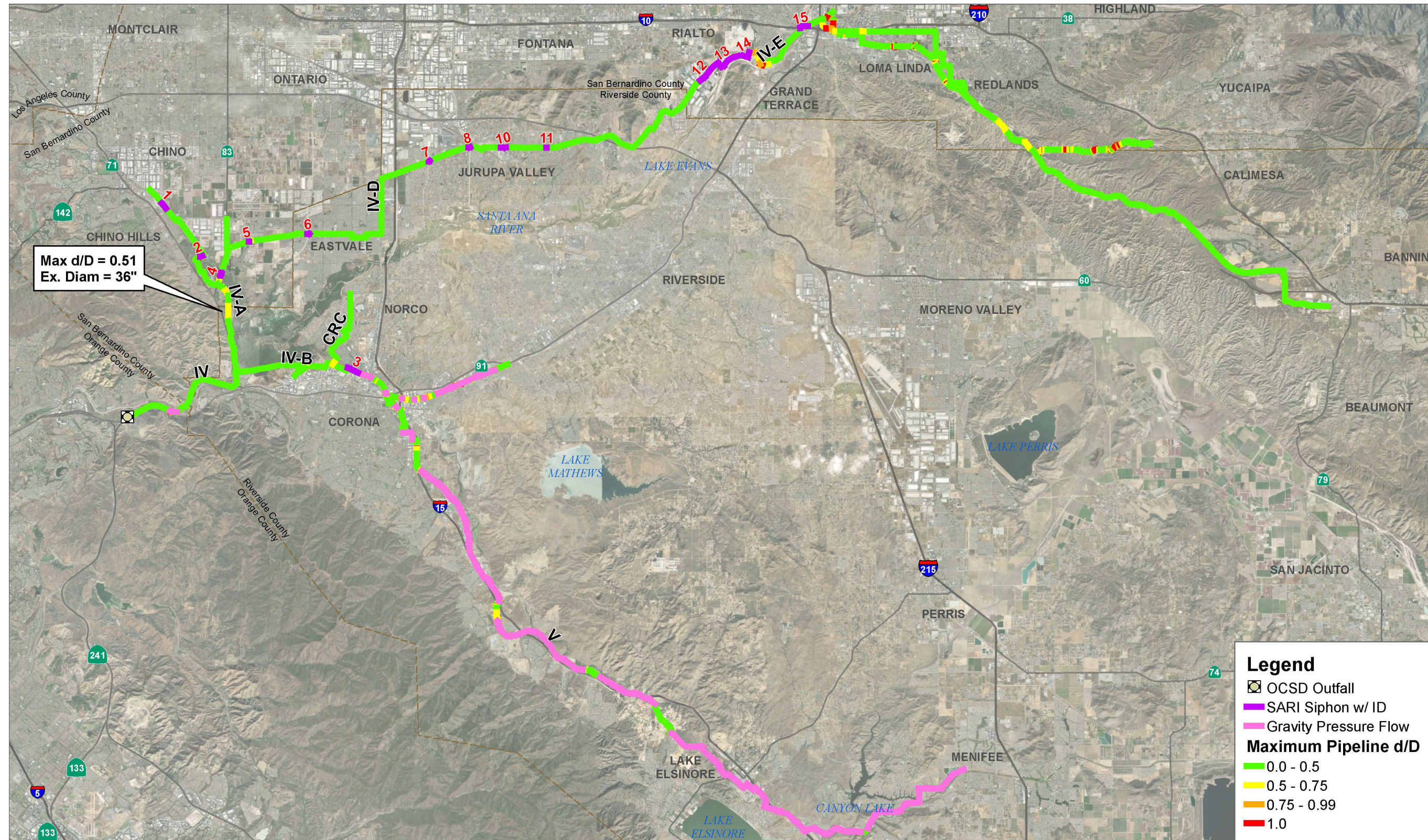


- Hydraulic Model
  - Current
  - Near – Term
  - Long – Term
  - Build – Out
  - Ownership

Agency	Pipeline Capacity (MGD)
SAWPA	0
CDA	3.670
EMWD	5.946
IEUA	4.130
VALLEY	7.738
Western	11.084
<b>Total</b>	<b>32.568</b>

- System Evaluation
  - Critical Infrastructure
  - System enhancements

# Existing and Future System Evaluation – June 2023



SOURCE

# Brine Line Master Plan

- Manage capacity (30 MGD System)
  - Storage
  - Brine concentration facilities
  - Other treatment opportunities
    - BOD/TSS
    - PFAS
- Multi – use benefits
  - In-line hydroelectric system as source of renewable energy
- Policy considerations
  - Lateral ownership
  - Capacity buy-back
  - How to pay for laterals, projects and system expansion



# Next Steps and Schedule

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- Master Plan update to PA – 24 December 5, 2023
- Policy Considerations (review with GMs) January 2024
- Draft Report February 2024
- Review with Member Agencies and Stakeholders February 2024
- PA - 24 Workshop March 5, 2024
- Incorporate comments March 2024
- Final Report PA – 24 April 2, 2024

Questions?