



# S A W P A

SANTA ANA WATERSHED PROJECT AUTHORITY  
11615 Sterling Avenue, Riverside, California 92503 • (951) 354-4220

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<ul style="list-style-type: none"> <li>• Meeting ID: 882 6180 1261</li> </ul>	<ul style="list-style-type: none"> <li>• Meeting ID: 882 6180 1261</li> </ul>

This meeting will be conducted in person at the address listed above. As a convenience to the public, members of the public may also participate virtually using one of the options set forth above. Any member of the public may listen to the meeting or make comments to the Committee using the call-in number or Zoom link above. However, in the event there is a disruption of service which prevents the Authority from broadcasting the meeting to members of the public, the meeting will not be postponed or rescheduled but will continue without remote participation. The remote participation option is provided as a convenience to the public and is not required. Members of the public are welcome to attend the meeting in-person.

## REGULAR MEETING OF THE PROJECT AGREEMENT 24 COMMITTEE

Inland Empire Brine Line

**TUESDAY, JULY 2, 2024 – 10:00 A.M.**  
(or immediately following the 9:30 a.m. SAWPA Commission meeting)

### Committee Members

<b>Eastern Municipal Water District</b>	<b>Inland Empire Utilities Agency</b>
Joe Mouawad, General Manager	Director Jasmin A. Hall
Director David J. Slawson (Alt)	Shivaji Deshmukh, General Manager (Alt)
<b>San Bernardino Valley Municipal Water District</b>	<b>Western Municipal Water District</b>
Director T. Milford Harrison, Chair	Director Mike Gardner, Vice Chair
Director Gil Botello (Alt)	Craig Miller, General Manager (Alt)

## AGENDA

1. **CALL TO ORDER | PLEDGE OF ALLEGIANCE** (T. Milford Harrison, Chair)

2. **ROLL CALL**

3. **PUBLIC COMMENTS**

Members of the public may address the Committee on items within the jurisdiction of the Committee; however, no action may be taken on an item not appearing on the agenda unless the action is otherwise authorized by Government Code §54954.2(b).

Members of the public may make comments in-person or electronically for the Committee's consideration by sending them to [publiccomment@sawpa.gov](mailto:publiccomment@sawpa.gov) with the subject line "Public Comment". Submit your electronic comments by 5:00 p.m. on Monday, July 1, 2024. All public comments will be provided to the Chair and may be read into the record or compiled as part of the record. Individuals have a limit of three (3) minutes to make comments and will have the opportunity when called upon by the Committee.

4. **ITEMS TO BE ADDED OR DELETED**

Pursuant to Government Code §54954.2(b), items may be added on which there is a need to take immediate action and the need for action came to the attention of the Santa Ana Watershed Project Authority subsequent to the posting of the agenda.

**5. CONSENT CALENDAR**

All matters listed on the Consent Calendar are considered routine and non-controversial and will be acted upon by the Committee by one motion as listed below.

- A. **APPROVAL OF MEETING MINUTES: JUNE 4, 2024**.....5  
**Recommendation:** Approve as posted.

**6. COMMITTEE DISCUSSION/ACTION ITEMS**

- A. **INLAND EMPIRE BRINE LINE REACH IV CONDITION ASSESSMENT STATUS UPDATE (PA24#2024.14)**.....9  
**Presenter:** Daniel Vasquez  
**Recommendation:** Receive and file.

- B. **INLAND EMPIRE BRINE LINE REACH IV-D CONDITION ASSESSMENT STATUS UPDATE (PA24#2024.15)**.....23  
**Presenter:** David Ruhl  
**Recommendation:** Receive and file.

**7. INFORMATIONAL REPORTS**

**Recommendation:** Receive for information.

- A. **BRINE LINE FINANCIAL REPORT – APRIL 2024** .....35  
**Presenter:** Karen Williams

- B. **GENERAL MANAGER REPORT**  
**Presenter:** Jeff Mosher

- C. **COMMITTEE MEMBERS COMMENTS**

- D. **CHAIR’S COMMENTS/REPORT**

**8. COMMITTEE MEMBER REQUESTS FOR FUTURE AGENDA ITEMS**

**9. CLOSED SESSION**

There were no Closed Session items anticipated at the time of the posting of this agenda.

**10. ADJOURNMENT**

**PLEASE NOTE:**

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Clerk of the Board at (951) 354-4220. Notification at least 48 hours prior to the meeting will enable staff to make reasonable arrangements to ensure accessibility to this meeting.

Materials related to an item on this agenda submitted to the Committee after distribution of the agenda packet are available for public inspection during normal business hours at the SAWPA office, 11615 Sterling Avenue, Riverside, and available at [www.sawpa.org](http://www.sawpa.org), subject to staff’s ability to post documents prior to the meeting.

**Declaration of Posting**

I, Sara Villa, Clerk of the Board of the Santa Ana Watershed Project Authority declare that on June 27, 2024, a copy of this agenda has been uploaded to the SAWPA website at [www.sawpa.gov](http://www.sawpa.gov) and posted at SAWPA’s office, 11615 Sterling Avenue, Riverside, California.

**2024 Project Agreement 24 Committee Regular Meetings**

Inland Empire Brine Line  
 First Tuesday of Every Month

(Note: All meetings begin at 10:00 a.m., or immediately following the 9:30 a.m. SAWPA Commission meeting, whichever is earlier, unless otherwise noticed, and are held at SAWPA.)

<b>January</b> 1/2/24 <del>Regular Committee Meeting</del> [cancelled]	<b>February</b> 2/6/24 Regular Committee Meeting
<b>March</b> 3/5/24 Regular Committee Meeting	<b>April</b> 4/2/24 Regular Committee Meeting
<b>May</b> 5/7/24 <del>Regular Committee Meeting</del> [cancelled] 5/14/24 Special Committee Meeting	<b>June</b> 6/4/24 Regular Committee Meeting
<b>July</b> 7/2/24 Regular Committee Meeting	<b>August</b> 8/6/24 Regular Committee Meeting
<b>September</b> 9/3/24 Regular Committee Meeting	<b>October</b> 10/1/24 Regular Committee Meeting
<b>November</b> 11/5/24 Regular Committee Meeting	<b>December</b> 12/3/24 Regular Committee Meeting

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**PROJECT AGREEMENT 24 COMMITTEE**  
Inland Empire Brine Line  
**REGULAR MEETING MINUTES**  
June 4, 2024

**COMMITTEE MEMBERS PRESENT**

T. Milford Harrison, Chair, San Bernardino Valley Municipal Water District Governing Board  
Mike Gardner, Vice Chair, Western Municipal Water District Governing Board  
Joe Mouawad, Eastern Municipal Water District General Manager  
Jasmin A. Hall, Inland Empire Utilities Agency Governing Board

**COMMITTEE MEMBERS ABSENT**

None

**ALTERNATE COMMITTEE MEMBERS PRESENT [Non-Voting]**

Gil Botello, San Bernardino Valley Municipal Water District Governing Board

**STAFF PRESENT**

Karen Williams, David Ruhl, Dean Unger, John Leete, Sara Villa, Shavonne Turner, Daniel Vasquez, Melissa Bustamonte

**OTHERS PRESENT**

Andrew D. Turner, Lagerlof, LLP; Derek Kawaii, Western Municipal Water District

**1. CALL TO ORDER | PLEDGE OF ALLEGIANCE**

The Regular Meeting of the PA 24 Committee was called to order at 10:18 a.m. by Chair T. Milford Harrison on behalf of the Santa Ana Watershed Project Authority, 11615 Sterling Avenue, Riverside, California.

**2. ROLL CALL**

**3. PUBLIC COMMENTS**

There were no public comments; there were no public comments received via email.

**4. ITEMS TO BE ADDED OR DELETED**

There were no added or deleted items.

**5. CONSENT CALENDAR**

**A. APPROVAL OF MEETING MINUTES: MAY 14, 2024**

Recommendation: Approve as posted.

**MOVED**, to approve the Consent Calendar as posted.

Result:	<b>Adopted by Roll Call Vote</b>
Motion/Second:	Gardner/Mouawad
Ayes:	Gardner, Hall, Harrison, Mouawad
Nays:	None
Abstentions:	None
Absent:	None

**6. COMMITTEE DISCUSSION/ACTION ITEMS**

**A. INLAND EMPIRE BRINE LINE SERVICE CONTRACTS AND SSMP AUDIT (PA24#2024.12)**

Daniel Vasquez provided a presentation titled Brine Line Service Contracts and SSMP 2024 Audit, contained in the agenda packet on pages 11-21. On March 2024, the Project Agreement 24 (PA 24) Committee authorized staff to issue Request for Proposals (RFP) for the following Inland Empire Brine Line Service contracts; Brine Line Flow Meter Calibration Services, On-Call Line Cleaning Services, On-Call CCTV Services, and the Brine Line SSMP Audit.

Mr. Vasquez noted that the on-call services are only compensated for work performed. The proposals received were reviewed and scored by SAWPA staff, and the determination of award was based on cost, qualifications, technological approach, and completeness of proposal.

Two (2) proposals were received for Brine Line Flow Meter Calibration Services from Golden Meter Services and PE Instruments. PE Instruments was selected based on proposal score. The Cost Proposal provided by PE Instruments is for a total of \$19,950 and is within the General Manager’s expenditure authority. Both the On-Call Line Cleaning RFP and On-Call CCTV Services RFP received two (2) qualified proposals. Innerline Engineering was selected for an award for both based on the score evaluation performed by staff. Two (2) proposals were received for Brine Line SSMP 2024 Audit RFP. Staff reviewed and evaluated each proposal and have selected Dudek to perform the 2024 audit. The cost proposal provided by Dudek is for a total of \$28,220 and is within the General Manager’s expenditure authority. Below is a summary of the proposals received for each service contract containing the cost and evaluation score.

Service Contract	Vendor	Cost	Evaluation Score Total
Brine Line Flow Meter Calibration Services	Golden Meter Service Inc.	\$10,950	15.4
	<b>PE Instruments</b>	<b>\$19,950</b>	<b>18.3</b>
On-Call Line Cleaning Services	Performance Pipe	\$429,640	11.8
	<b>Innerline</b>	<b>\$ 316,700</b>	<b>12.0</b>
On-Call CCTV Services	Performance Pipe	\$185,250	15.9
	<b>Innerline</b>	<b>\$102,530</b>	<b>18.0</b>
Brine Line SSMP 2024 Audit	Atkins	\$92,920.00	16.2
	<b>Dudek</b>	<b>\$28,220</b>	<b>19.2</b>

Committee member Mouawad asked how the current expenditure amounts compare to previous years. Mr. Vasquez noted that the On-Call CCTV services previously were \$99,000 versus now it is \$102,530, due to increase of labor fees. The On-Call Line Cleaning services previously were \$240,000 versus now \$316,700, due to the increase of water tank trucks fees. It was questioned the reasoning for the significant difference between the two proposals received for the Brine Line SSMP Audit. Mr. Vasquez noted that it was due to the Project Management hours and fees, Atkins anticipated having doubled the number of hours of services for project management.

**MOVED**, that the PA 24 Committee authorize the General Manager to:

1. Issue a General Services Agreement and Task Order INN240-07 to Innerline Engineering for On-Call CCTV for a period of two (2) years for the amount not-to-exceed \$102,530.00; and
2. Issue Task Order INN240-06 to Innerline Engineering for Pipeline Cleaning Services for a period of two (2) years for an amount not-to-exceed \$316,700.00.

Result:	<b>Adopted by Roll Call Vote</b>
Motion/Second:	Gardner/Mouawad
Ayes:	Gardner, Hall, Harrison, Mouawad
Nays:	None
Abstentions:	None
Absent:	None

**B. INLAND EMPIRE BRINE LINE DISCHARGER LEASE AGREEMENT (PA24#2024.13)**

David Ruhl provided a presentation titled Inland Empire Brine Line Discharger Lease Agreement, contained in the agenda packet on pages 43-50. The Lease Capacity Pool allows existing and potential customers to lease Brine Line capacity rights without the financial burden of purchasing the capacity right. Currently, one (1) MGD of pipeline and treatment and disposal capacity right is valued at approximately \$11.2 Million. SAWPA Member Agencies participate in the Lease Capacity Pool by contributing capacity that is not currently used.

The PA 24 Committee approved the Capacity Utilization Program in April 2021. Through the Capacity Utilization Program, 0.5 MGD of unused capacity right in the Brine Line was added to the Lease Capacity Pool and available to existing and potential customers. Currently, 3.013 MGD of pipeline capacity right and 1.52 MGD of treatment and disposal capacity right have been contributed to the Lease Capacity Pool from Western Municipal Water District (WMWD), Inland Empire Utilities Agency (IEUA) and SAWPA with two (2) discharger leases with Rialto Bioenergy Facility (RBF) and Eastern Municipal Water District (EMWD).

Mr. Ruhl noted that the City of Beaumont owns and operates the City of Beaumont Wastewater Treatment Plant. In 2020, Beaumont installed reverse osmosis (RO) treatment of a portion of its tertiary treated effluent to comply with Basin Plan objectives set by the Santa Ana Regional Water Quality Control Board for the Beaumont and San Timoteo Groundwater Management Zones. The City of Beaumont owns 0.55 MGD of Brine Line Pipeline and Treatment and Disposal Capacity rights (Capacity) and has requested from SAWPA to lease 0.03 MGD of Brine Line Capacity in order to maximize their desalting efforts. Sufficient capacity is available in the Lease Capacity Pool to provide the requested lease amount to the City of Beaumont. The Lease Discharger Agreement's effective date is July 1, 2024, with a 4-year term renewal. The City of Beaumont will pay SAWPA a monthly lease charge of \$2,399.88. There was no discussion.

**MOVED**, to authorize the General Manager to execute a Discharger Lease Agreement with the City of Beaumont (Beaumont) to lease 0.03 million gallons per day (MGD) of Brine Line pipeline capacity right and treatment and disposal capacity right at a wastewater strength of 100 mg/l Biological Oxygen Demand (BOD) and 100 mg/l Total Suspended Solids (TSS) from the Lease Capacity Pool for a period of four (4) years.

Result:	<b>Adopted by Roll Call Vote</b>
Motion/Second:	Hall/Gardner
Ayes:	Gardner, Hall, Harrison, Mouawad
Nays:	None
Abstentions:	None
Absent:	None

**7. INFORMATIONAL REPORTS**

Recommendation: Receive and file the following oral/written reports/updates.

- A. **BRINE LINE FINANCIAL REPORT – MARCH 2024**
- B. **FINANCIAL REPORT FOR THE THIRD QUARTER ENDING MARCH 31, 2024**
- C. **GENERAL MANAGER REPORT**  
There were no General Manager comments.
- D. **COMMITTEE MEMBERS COMMENTS**  
There were no Committee Member comments.
- E. **CHAIR’S COMMENTS/REPORT**  
There were no comments/reports from the Chair.

**8. COMMITTEE MEMBER REQUESTS FOR FUTURE AGENDA ITEMS**

There were no requests for future Agenda items.

Chair Harrison recessed the meeting at 10:42 a.m. for Closed Session.

**9. CLOSED SESSION**

- A. **CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION – PURSUANT TO GOVERNMENT CODE SECTION 54956.9(d)(1)**  
*In Re Rialto Bioenergy Facility, LLC*  
U.S. Bankruptcy Court for the Southern District of California  
Case No.: 23-01467-CL11

**10. CLOSED SESSION REPORT**

Chair Harrison resumed Open Session at 10:58 a.m. and Legal Counsel, Andy Turner announced that the PA 24 Committee received a report from SAWPA staff and Counsel; no action was taken on Agenda Item No. 9.A.

**11. ADJOURNMENT**

There being no further business for review, Committee Chair T. Milford Harrison adjourned the Regular meeting at 10:59 a.m.

**Approved at a Regular Meeting of the Project Agreement 24 Committee on July 2, 2024.**

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T. Milford Harrison, Chair

Attest:

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Sara Villa, Clerk of the Board



## PA 24 COMMITTEE MEMORANDUM NO. 2024.14

**DATE:** July 2, 2024  
**TO:** PA 24 Committee  
**SUBJECT:** Inland Empire Brine Line Reach IV Condition Assessment Status Update  
**PREPARED BY:** Daniel Vasquez, Manager of Operations

### RECOMMENDATION

Receive and file.

### BACKGROUND

In February 2023, the PA 24 Committee authorized Woodard & Curran (W&C) to perform a condition assessment on Reach IV. This condition assessment was identified as being necessary in a 2021 Criticality Assessment performed by Dudek.

In February 2024, W&C prepared and implemented their Field Investigation Plan for Reach IV. The work included manned-entry inspections at three (3) maintenance access structures, and CCTV of approximately 11,123 feet of pipe. A summary of the findings are as follows:

#### Condition Assessment Findings:

- Reach IV pipeline shows intact liner and no signs of significant degradation.
- Small buildup of debris in the pipe invert along various sections.
- Minor discoloration and bubbling at a small number of joints.
- The consultant utilizes a condition rating index to provide consistent reporting of corrosion damage. The condition rating index is on a scale of 1 – 5, with a Level 1 rating indicating little or no damage and Level 5 rating indicating severe damage with imminent failure. Overall, the consultant rated the pipe at condition Level 1 throughout the pipe and at the manned-entry locations.

### DISCUSSION

The findings conclude that all three manned-entry locations to be in good condition with intact linings. The overall pipe condition was found to be consistent with the manned-entry locations with an estimated remaining useful life of 20 years with the following recommendations:

**Near Term:** No pipe renewal actions are recommended for the near term.

**Mid-Term:** Reinspect with CCTV and man-entry inspections within 10 years. Physical testing and further CCTV in 10 years will allow for understanding the rate of deterioration and further refine estimated remaining useful life.

**Long-Term:** Due to the unlikelihood of structural rehabilitation within the next 20 years, Long-Term action plans are contingent on any refinements made on estimated remaining useful life at the Mid-term reinspection.

#### Next Steps:

- Distribute Draft Report to Member Agency staff for review and comment.
- Present Final Report to PA 24 Committee.
- Develop plan for Mid-Term shutdown and associated work.

**RESOURCE IMPACTS**

Funds to cover the Condition Assessment and field investigations are included in the Fiscal Year 2023-24 Budget Fund No. 320-03 (Pipeline Replacement and Capital Investment Reserve) and Fund 240 (Brine Line Enterprise).

Attachments:

1. PowerPoint Presentation



# Reach IV Condition Assessment Status Update

PA 24 Committee  
Item No. 6.A  
Daniel Vasquez  
Manager of Operations  
July 2, 2024

# Recommendation

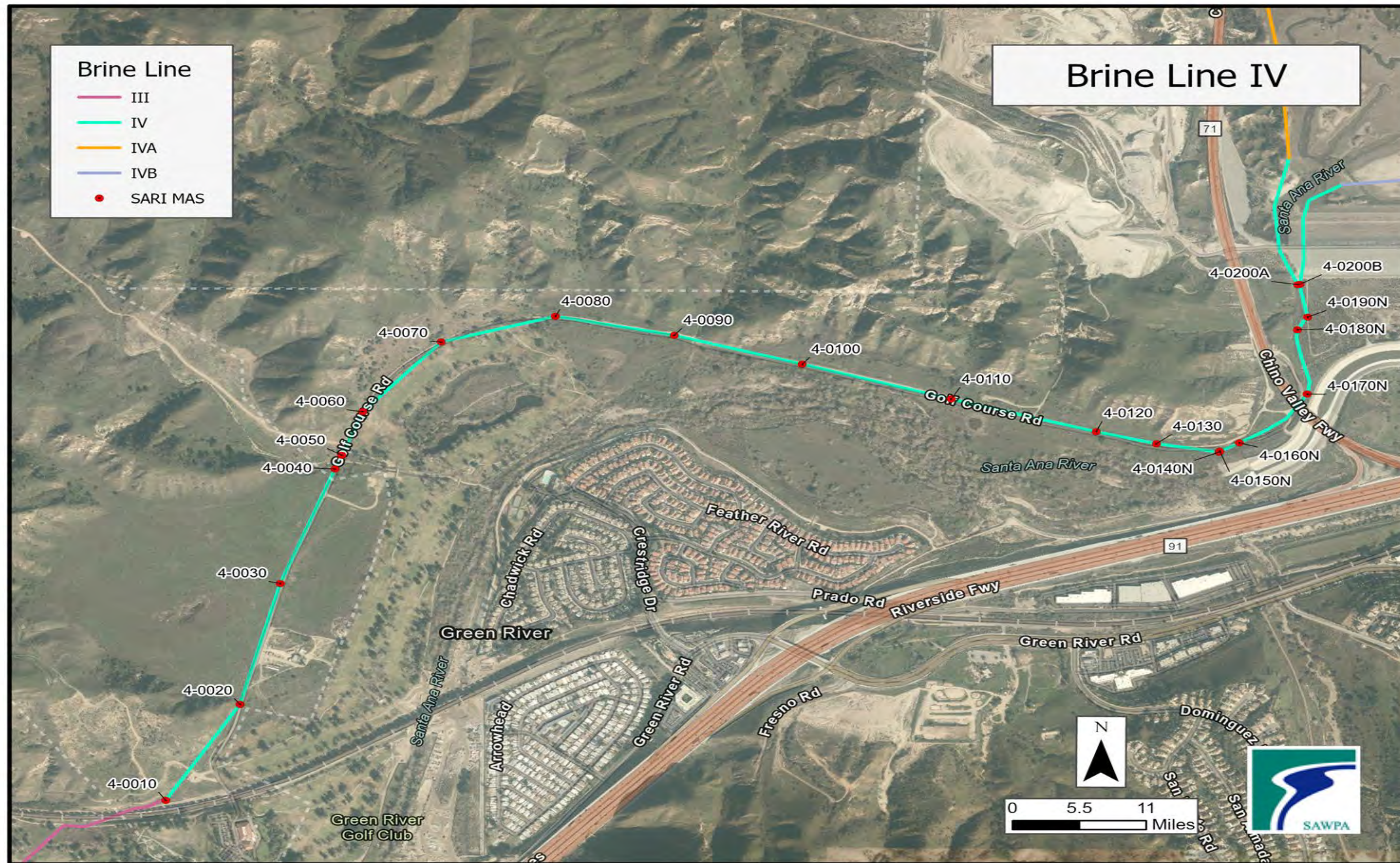
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- Receive and file an informational report on Reach IV Condition Assessment Draft Final Report Findings.

# Background

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- In February 2023, the PA 24 Committee authorized Woodard & Curran to perform condition assessments on Reach IV.
- This condition assessment was identified as being necessary in a 2021 Criticality Assessment performed by Dudek.



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# Reach IV Pipeline and Man-Entry Inspection Locations

# Testing Methods Used

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- Visual Assessments
- Concrete Sounding and Penetration Testing.
- Concrete Surface pH Testing
- Surface Penetrating Radar
- CCTV Inspections



Interior of MAS in good condition



Liner Termination at influent pipe good condition



Up to 1/4" of sediment observed on pipe walls






## Manhole Access Structures and Pipeline found to be in Good Condition



# Condition Assessment Conclusions

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- Reach IV pipeline shows intact liner and no signs of significant degradation.
- Small buildup of debris in the pipe invert along various sections.
- Minor discoloration and bubbling at a small number of joints.
- On a scale of 1-5, with a Level 1 rating indicating little or no damage and Level 5 rating indicating severe damage with imminent failure the consultant rated the pipe at condition Level 1.
- Estimated 20 years of remaining useful life.

Condition Rating	Description	Representative Photograph
Level 1	<p>Little or no damage to concrete</p> <ul style="list-style-type: none"> <li>▪ Hardness..... hard surface</li> <li>▪ Surface profile ..... smooth, apparently intact</li> <li>▪ Cracks ..... hairline width, minimal frequency</li> <li>▪ Spalling ..... none</li> <li>▪ Reinforcement ..... not exposed or damaged</li> </ul>	
Level 2	<p>Minor surface damage</p> <ul style="list-style-type: none"> <li>▪ Hardness..... soft surface layer to 1/8-inch depth</li> <li>▪ Surface profile ..... fine aggregate exposed</li> <li>▪ Cracks ..... hairline width, moderate frequency</li> <li>▪ Spalling ..... shallow spalling, minimal frequency</li> <li>▪ Reinforcement ..... not exposed or damaged</li> </ul>	
Level 3	<p>Moderate surface damage</p> <ul style="list-style-type: none"> <li>▪ Hardness..... soft surface layer to 1/4-inch depth</li> <li>▪ Surface profile ..... large aggregate exposed or protruding</li> <li>▪ Cracks ..... up to 1/32-inch width, moderate frequency</li> <li>▪ Spalling ..... shallow spalling, minimal frequency</li> <li>▪ Reinforcement ..... exposed; minor damage, minimal frequency</li> </ul>	
Level 4	<p>Loss of concrete mortar and damage to reinforcement</p> <ul style="list-style-type: none"> <li>▪ Hardness..... soft paste beyond 1/4-inch depth</li> <li>▪ Surface profile ..... large aggregate exposed, loose, or missing</li> <li>▪ Cracks ..... 1/8- to 1/4-inch width, moderate frequency</li> <li>▪ Spalling ..... deep spalling, moderate frequency</li> <li>▪ Reinforcement ..... exposed with damage, moderate frequency</li> </ul>	
Level 5	<p>Bulk loss of concrete and reinforcement</p> <ul style="list-style-type: none"> <li>▪ Hardness..... soft paste beyond 1-inch depth</li> <li>▪ Surface profile ..... large aggregate exposed, loose, or missing</li> <li>▪ Cracks ..... over 1/2-inch width, or narrower and frequent</li> <li>▪ Spalling ..... deep spalling, high frequency</li> <li>▪ Reinforcement ..... consumed; loss of structural integrity</li> </ul>	

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# Metal Condition Index Rating System

# Summary of Recommendations

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- **Near Term:** No pipe renewal actions are recommended due to pipeline condition found.
- **Mid-Term:** Reinspect pipe in 10 years to determine rate of deterioration and refine remaining useful life estimate.
- **Long-Term:** Due to the unlikelihood of structural failure within the next 20 years, Long-Term action plans are contingent of any refinements made at the Mid-Term Reinspection.

# Next Steps

- Distribute draft report to Member Agency staff for review and comment.
- Present Final Report to PA 24 Committee.
- Develop plan for Mid-Term shutdown and associated work.

# Questions?

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**Daniel Vasquez**  
**Manager of Operations**

Santa Ana Watershed Project Authority  
Office (951) 354-4220 | Cell (951) 941-7611  
dvasquez@sawpa.org  
sawpa.gov



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## PA 24 COMMITTEE MEMORANDUM NO. 2024.15

**DATE:** July 2, 2024

**TO:** Project Agreement 24 Committee  
(Inland Empire Brine Line)

**SUBJECT:** Inland Empire Brine Line Reach IV-D Condition Assessment Status Update

**PREPARED BY:** David Ruhl, Executive Manager of Engineering and Operations

### RECOMMENDATION

Receive and file.

### DISCUSSION

In September 2023, the PA 24 Committee authorized Woodard and Curran (W&C) to perform a condition assessment on Reach IV-D as recommended in the 2018 Reach IV-D Rehabilitation Work Plan and the 2019 update.

The condition assessment field investigation work was conducted over 30 hours beginning on February 27, 2024. To conduct the condition assessment a shutdown of the Reach IV-D and Reach IV-E dischargers was necessary. The shutdown commenced the day prior to allow sufficient time for the line to drain and nearly no flow at the work locations. Depending on each discharger's location on the Brine Line the shutdown for each individual discharger lasted between 13 – 58 hours. Work included the cleaning and CCTV of nearly seven (7) miles of the Brine Line and man-entry at seven (7) locations to conduct visual assessments and physical tests of the unlined and lined concrete surface. The field investigation tests and inspections were analyzed to assess the condition of the pipeline. The test results, findings and recommendations will be documented in the Final Report. A draft report is anticipated by the end of June 2024. The preliminary findings and recommendations are as follows:

#### Condition Assessment Preliminary Findings

Overall, the pipe segments and maintenance access structures appear to be in a similar condition as in 2018 and 2019. The unlined concrete surfaces below the liner termination point have moderately deteriorated, meaning the concrete has exposed aggregate. The man-entry and CCTV inspections did not positively identify any exposed rebar. The man-entry testing results indicated the lined concrete appeared to be well protected from the corrosive environment and in good condition.

#### Condition Assessment Preliminary Recommendations

Near-Term. Complete minor PVC T-Lock liner repair work and perform additional CCTV inspections with 1 to 2 years.

Mid-Term. Reinspect Reach IV-D in 5 to 10 years.

Long-Term. Based on the observed concrete deterioration that has occurred at the interface of the concrete and T-Lock liner along the pipeline, it is recommended that SAWPA plan on a phased approach to rehabilitation of Reach IV-D. The segments with the highest degree of deterioration based on the CCTV and man-entry condition assessments would be addressed in "Phase 1" with a timeline of 10 to 15 years (2034 to 2039). The remainder of the alignment

would be addressed in “Phase 2” with a timeline 20+ years. Cured-in-Place Pipe (CIPP) lining is the recommended rehabilitation method.

A summary of the preliminary recommendations described above are provided in the following table.

Summary of Condition Assessment Recommendations

Project	Anticipated Schedule	Project Recommendation	Order of Magnitude Cost
Near-Term	2 years	Man-entry inspections at two key locations, Clean and CCTV 1 pipe segment	\$90,000
Mid-Term	5 – 10 years	Clean and CCTV 7 miles of pipeline. Man-entry inspection at 7 locations. Refine useful life estimate.	\$900,000
Long-Term Phase 1	10 – 15 years	Rehabilitate 23,000 feet of Brine Line	\$28 Million (+/-) Subject to reevaluation.
Long-Term Phase 2	20+ years	Rehabilitate 12,000 feet of Brine Line	\$15 Million (+/-) Subject to reevaluation.

**Next Steps**

- Receive and review draft report from consultant.
- Distribute Draft Report to Member Agency staff for review and comment.
- Present Final Report to PA 24 Committee

**Reach IV-D Pipeline Background**

The Brine Line Reach IV-D was constructed in the early 1990’s and runs from the intersection with Reach IV-A in the City of Chino approximately 21 miles East, to the intersection with Reach IV-E in the City of Rialto. A portion (seven (7) miles) of Reach IV-D consists of T-lock lined 42-inch reinforced concrete pipe (RCP). The T-lock lining is a polyvinyl chloride (PVC) lining on the interior circumference of the pipe that provides a protective corrosion barrier between the flow and concrete pipe. The T-lock lining on this portion of the Brine Line was installed on the upper 270 degrees of the pipeline leaving the invert or bottom 90 degrees of the pipe unlined. Low flows during the initial years of operation placed the flow line below the termination of the T-lock liner and exposed the concrete to corrosion and uplifting of the T-lock liner.

In 2018, the SAWPA Commission authorized Woodard & Curran to conduct a condition assessment on Reach IV-D. The report recommendations included conducting additional field investigation in five (5) years to characterize the rate of deterioration and further refine the remaining useful life of the pipe (mid-term recommendation)

**RESOURCE IMPACTS**

Funds to cover the Condition Assessment and field investigations are included in the Fiscal Year 2023-24 Budget Fund No. 327 and Fund 240 (Brine Line Enterprise).

**Attachments:**

1. PowerPoint Presentation





SANTA ANA WATERSHED  
PROJECT AUTHORITY

# Inland Empire Brine Line Reach IV-D Condition Assessment

PA 24 Committee  
Item No. 6.B  
David Ruhl  
Executive Manager of Engineering and Operations  
July 2, 2024

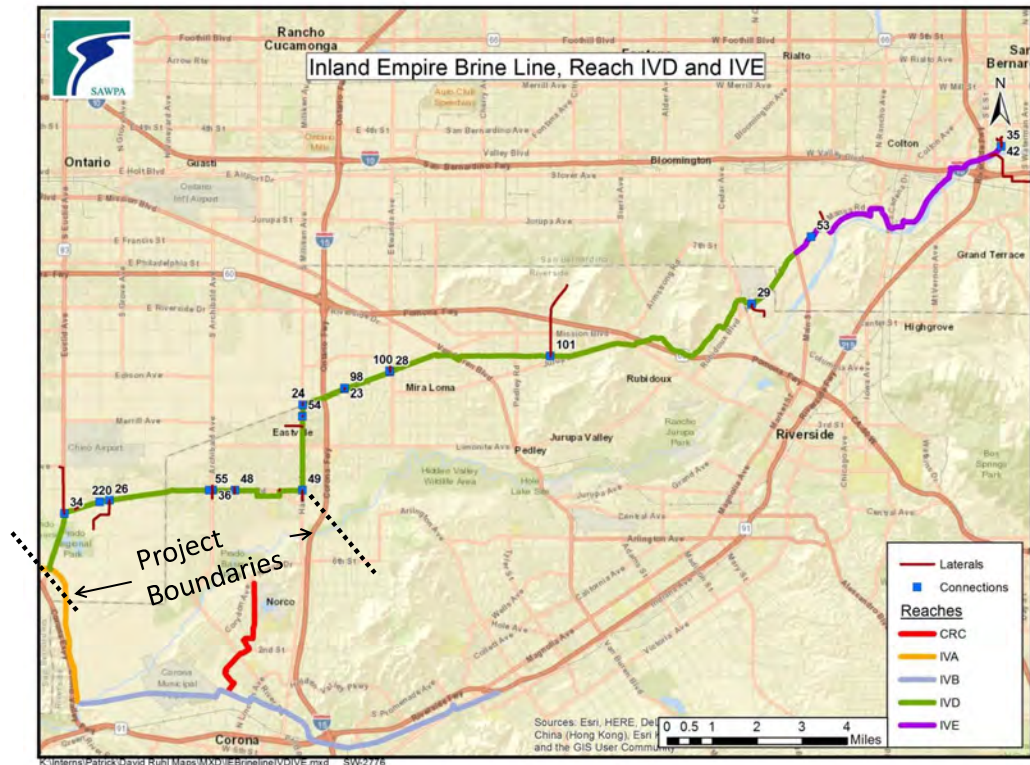
# Brine Line Reach IV-D Pipeline Corrosion

## Reach IV - D

- 21 Miles
- Built in mid 1990s
- Pipe size 36" – 48"
- Ave. Flow 5.5 MGD

## Project Boundaries

- 7 Miles
- 42" RCP with 270 degree T-  
Lock
- Within Cities of Chino and  
Eastvale



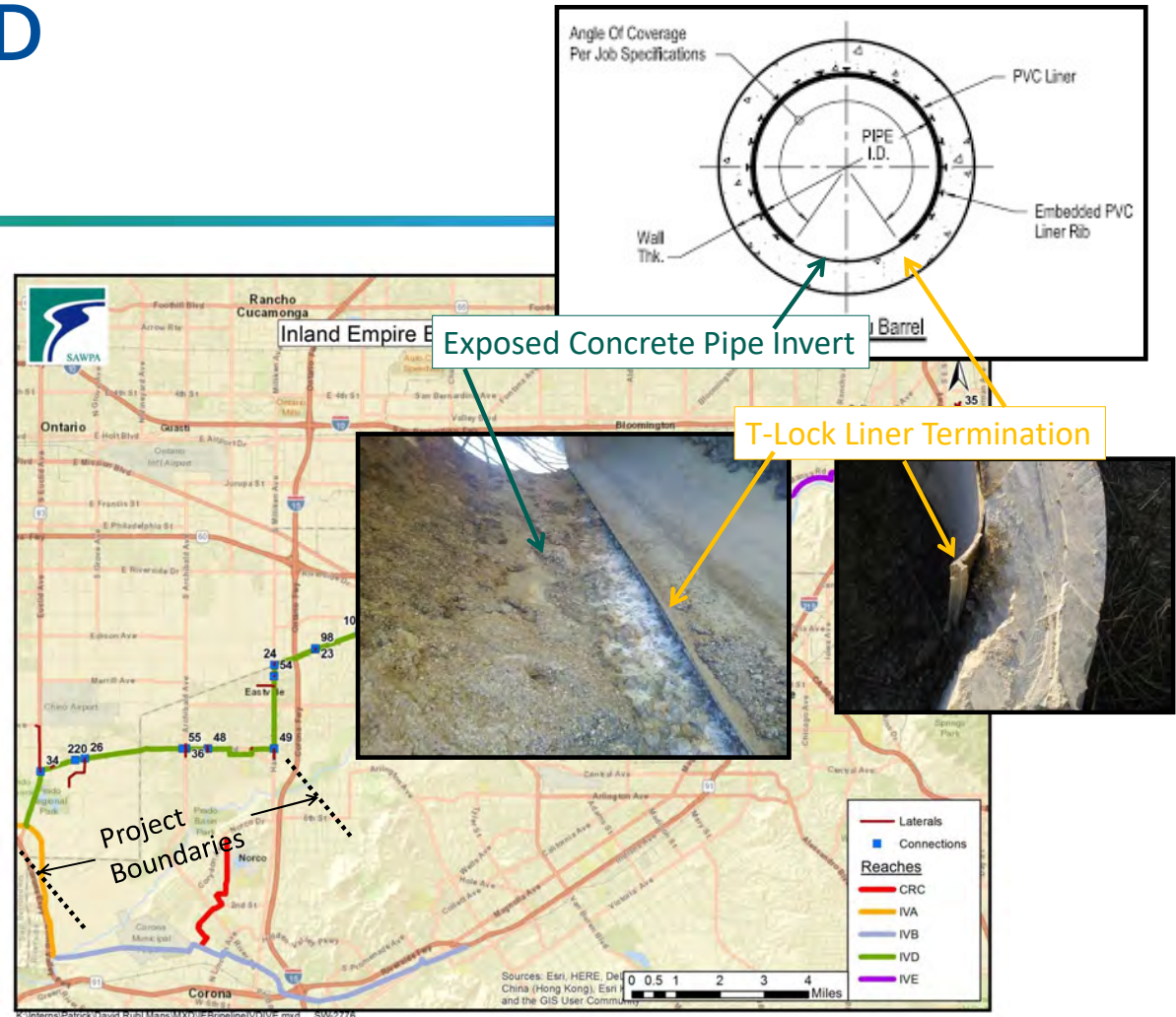
# Brine Line Reach IV-D Pipeline Corrosion

## Reach IV - D

- 21 Miles
- Built in mid 1990s
- Pipe size 36" – 48"
- Ave. Flow 5.5 MGD

## Project Boundaries

- 7 Miles
- 42" RCP with 270 degree T-Lock
- Within Cities of Chino and Eastvale



# Field Investigation



Dischargers shutdown beginning on February 26<sup>th</sup>



Condition assessment 30 hours beginning on February 27<sup>th</sup>



Line cleaning and CCTV



Manned entry at 7 locations to conduct visual assessment and physical tests



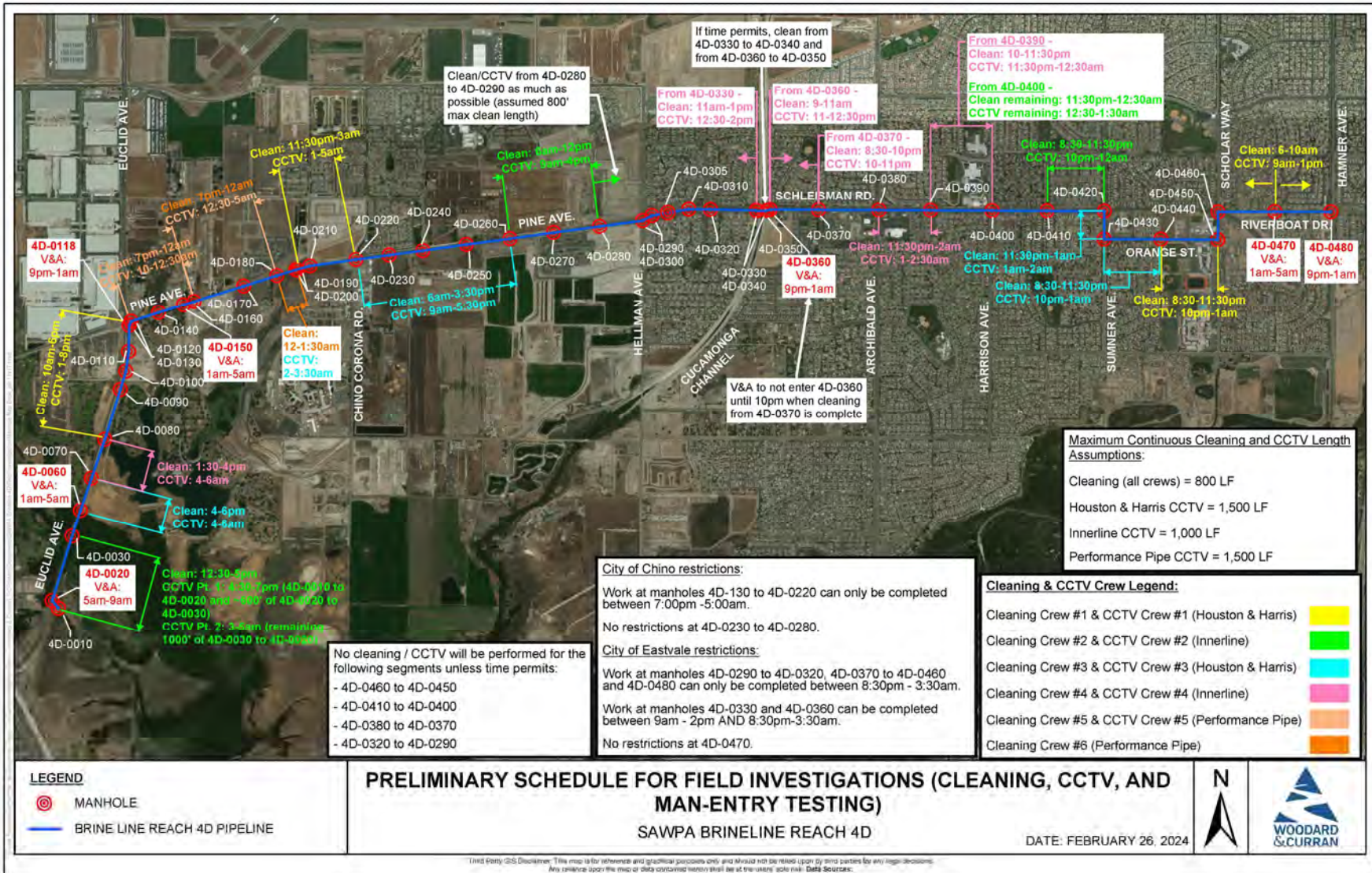
Draft report in June 2024



Figure 1: Behind the liner testing



Figure 2: Unlined concrete testing



# Preliminary Findings and Recommendations

Project	Anticipated Schedule	Project Recommendation	Order of Magnitude Cost
Near-Term	2 years	Man-entry inspections at two key locations, Clean and CCTV 1 pipe segment	\$90,000
Mid-Term	5 – 10 years	Clean and CCTV 7 miles of pipeline. Man-entry inspection at 7 locations. Refine useful life estimate.	\$900,000
Long-Term Phase 1	10 – 15 years	Rehabilitate 23,000 feet of Brine Line	\$28 Million (+/-) Subject to reevaluation
Long-Term Phase 2	20+ years	Rehabilitate 12,000 feet of Brine Line	\$15 Million (+/-) Subject to reevaluation



# Next Steps

- Receive and review draft report from Consultant
- Distribute draft report to Member Agency staff for review and comment
- Present final report to PA 24 Committee



# Recommendation

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Receive and file and information report on the Reach IV-D Condition Assessment.



# Questions?

# Thank You

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**Santa Ana Watershed Project Authority  
PA24 - Brine Line - Financial Report  
April 2024**

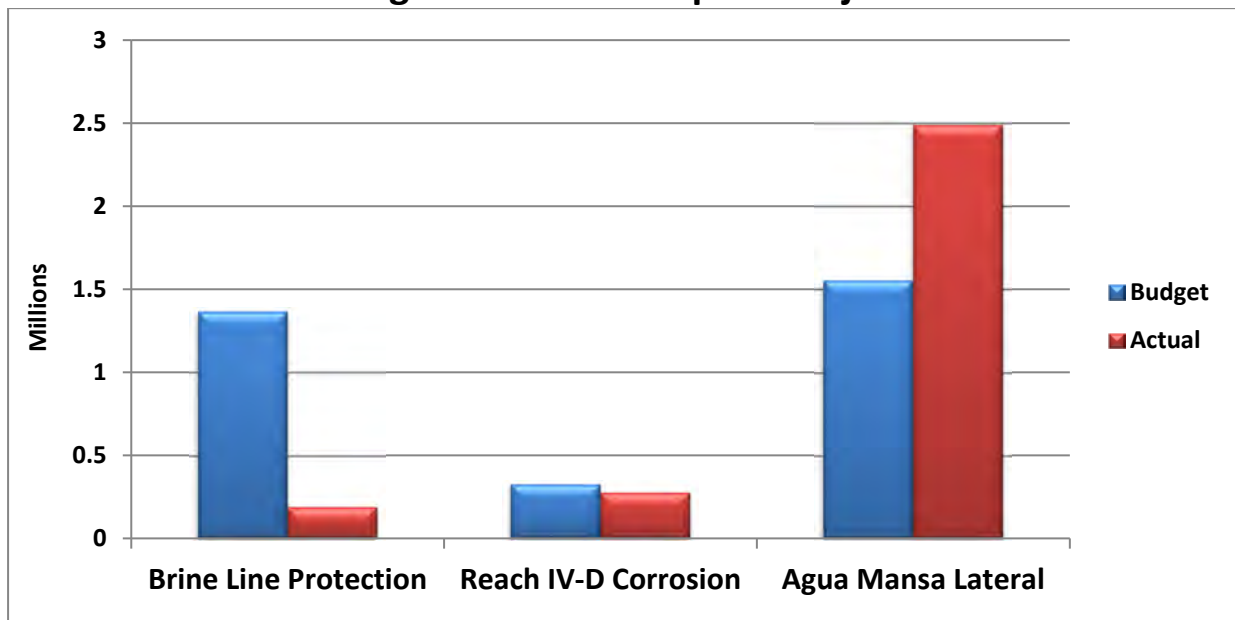
*Staff comments provided on the last page are an integral part of this report.*

<b>Overview</b>	This report highlights the Brine Line’s key financial indicators for the Fiscal Year-to-Date (FYTD) through April 2024 unless otherwise noted.
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**Brine Line - Capital Projects**

<b>Budget to Actual – Capital Projects</b>				 <b>Concern</b>
	<b>Annual Budget</b>	<b>FYTD Budget</b>	<b>FYTD Actual</b>	<b>Favorable (Unfavorable) Variance</b>
Brine Line Protection	\$ 1,639,115	\$1,365,929	\$190,290	\$1,175,639
Reach IV-D Corrosion	391,577	326,314	276,276	50,038
Agua Mansa Lateral	1,862,445	1,552,038	2,489,160	(937,122)
<b>Total Capital Costs</b>	<b>\$3,893,137</b>	<b>\$3,244,281</b>	<b>\$2,955,726</b>	<b>\$288,555</b>

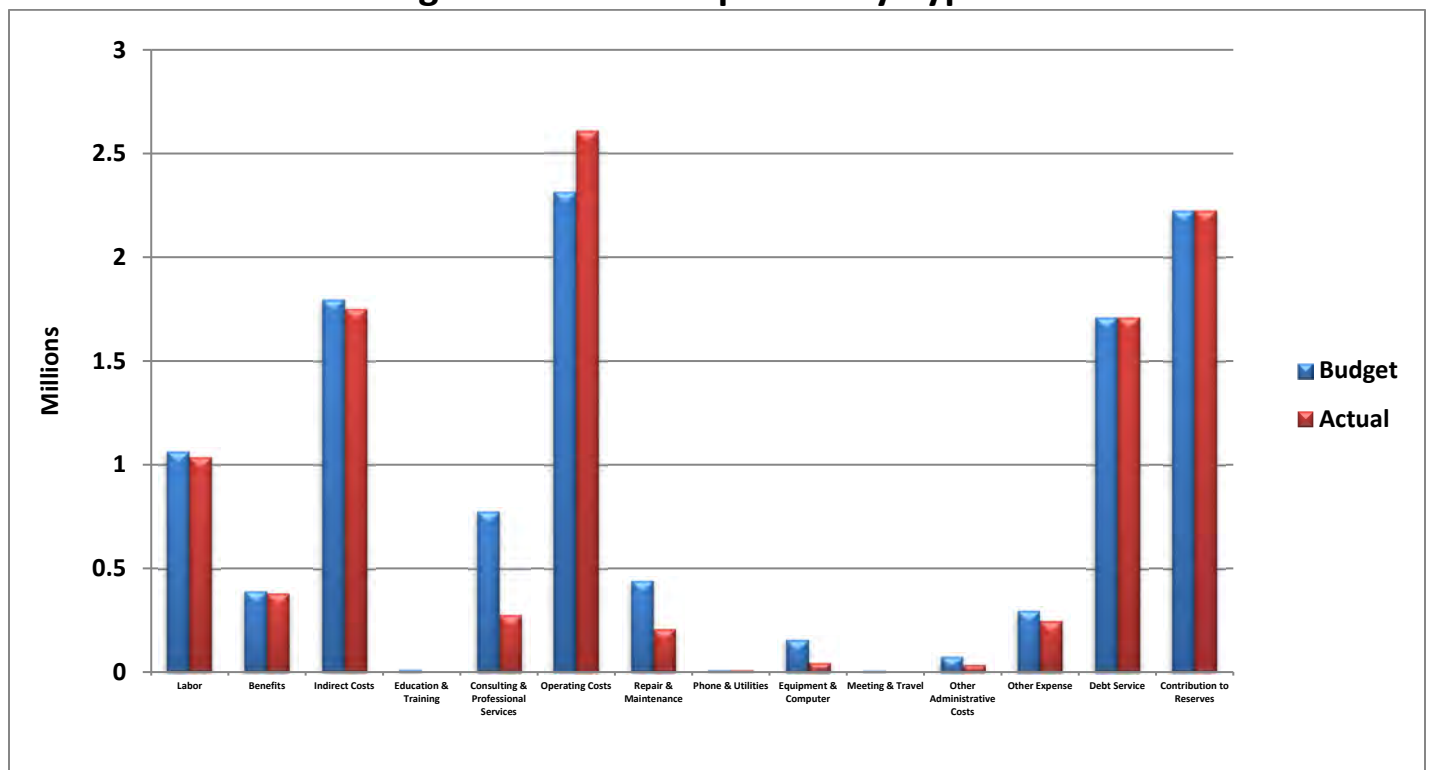
**Budget to Actual - Capital Projects**



## Brine Line – Operating

Budget to Actual - Expenses by Type				 Favorable
	Annual Budget	FYTD Budget	FYTD Actual	Favorable (Unfavorable) Variance
Labor	\$1,274,437	\$1,062,031	\$1,035,171	\$26,860
Benefits	467,548	389,623	379,908	9,715
Indirect Costs	2,155,749	1,796,459	1,751,510	44,949
Education & Training	14,500	12,083	-	12,083
Consulting & Prof Svcs	930,000	775,000	277,347	497,653
Operating Costs	2,776,349	2,313,624	2,607,778	(294,154)
Repair & Maintenance	525,080	437,567	210,132	227,435
Phone & Utilities	12,000	10,000	7,796	2,204
Equip & Computers	188,706	157,255	47,816	109,439
Meeting & Travel	7,000	5,833	541	5,292
Other Admin Costs	89,915	74,929	35,903	39,026
Other Expense	355,551	296,293	245,422	50,871
Debt Service	1,709,476	1,709,476	1,709,476	-
Contribution to Reserves	2,225,309	2,225,309	2,225,309	-
<b>Total</b>	<b>\$12,731,620</b>	<b>\$11,265,482</b>	<b>\$10,534,109</b>	<b>\$733,373</b>

### Budget to Actual - Expenses by Type



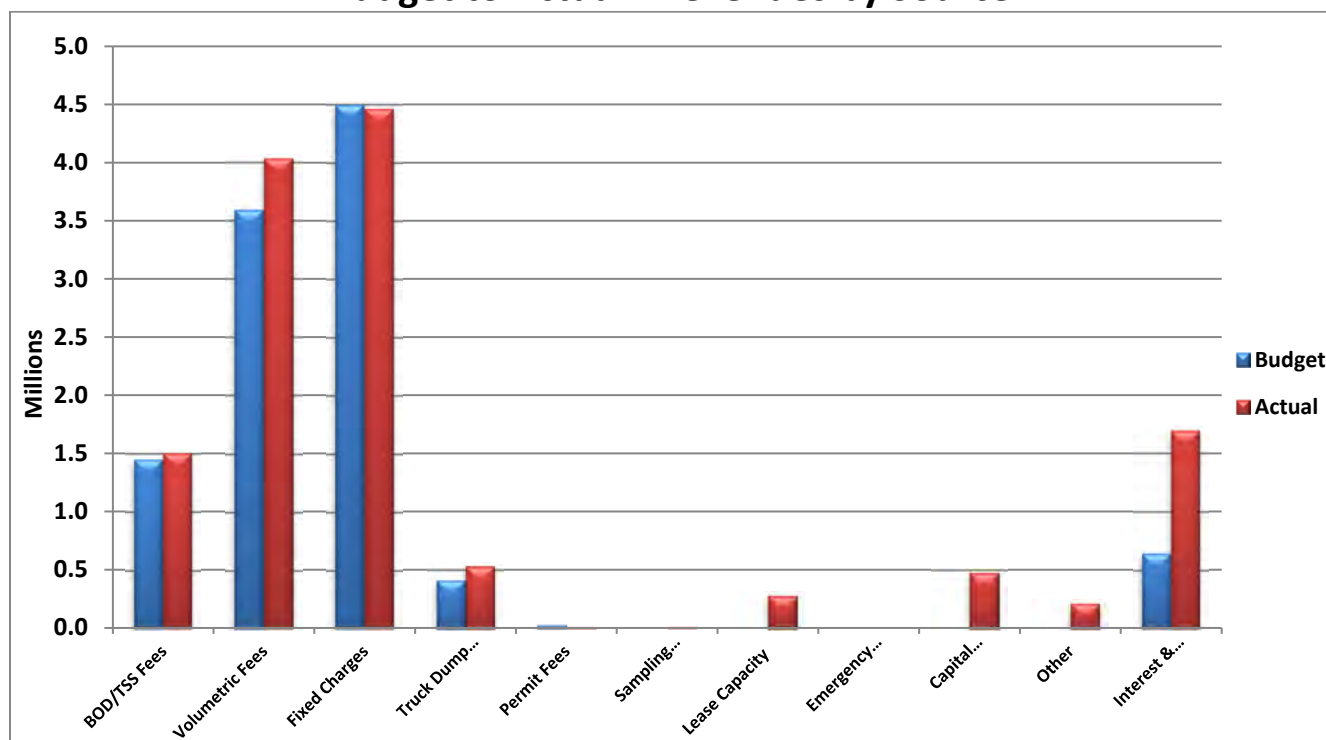
## Budget to Actual - Revenues by Source



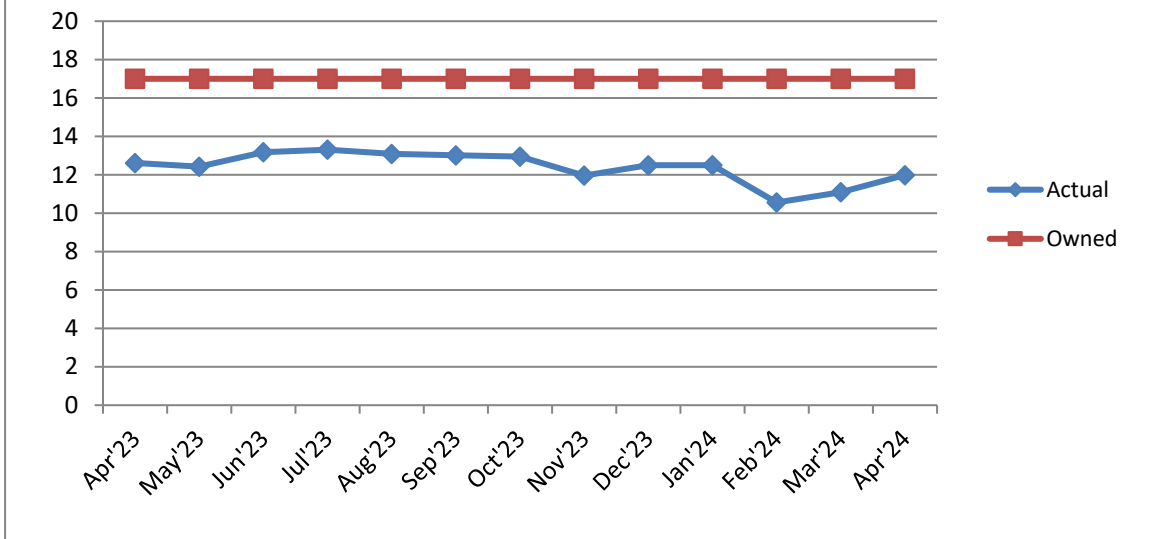
**Favorable**

	Annual Budget	FYTD Budget	FYTD Actual	Favorable (Unfavorable) Variance
BOD/TSS Fees	\$1,738,500	\$1,448,750	\$1,501,595	\$52,845
Volumetric Fees	4,308,095	3,590,079	4,032,264	442,185
Fixed Charges	5,396,025	4,496,688	4,462,925	(33,763)
Truck Dump Fees	492,400	410,333	527,706	117,373
Permit Fees	26,600	22,167	7,900	(14,267)
Sampling Surcharge	-	-	7,484	7,484
Lease Capacity Revenue	-	-	275,803	275,803
Emergency Discharge Fees	-	-	567	567
Use of Reserves	-	-	-	-
Capital Contributions	-	-	475,081	475,081
Other Revenue	-	-	212,217	212,217
Interest & Investments	770,000	641,667	1,691,811	1,050,144
<b>Total</b>	<b>\$12,731,620</b>	<b>\$10,609,684</b>	<b>\$13,195,353</b>	<b>\$2,585,669</b>

## Budget to Actual - Revenues by Source



### Average Daily Flow by Month

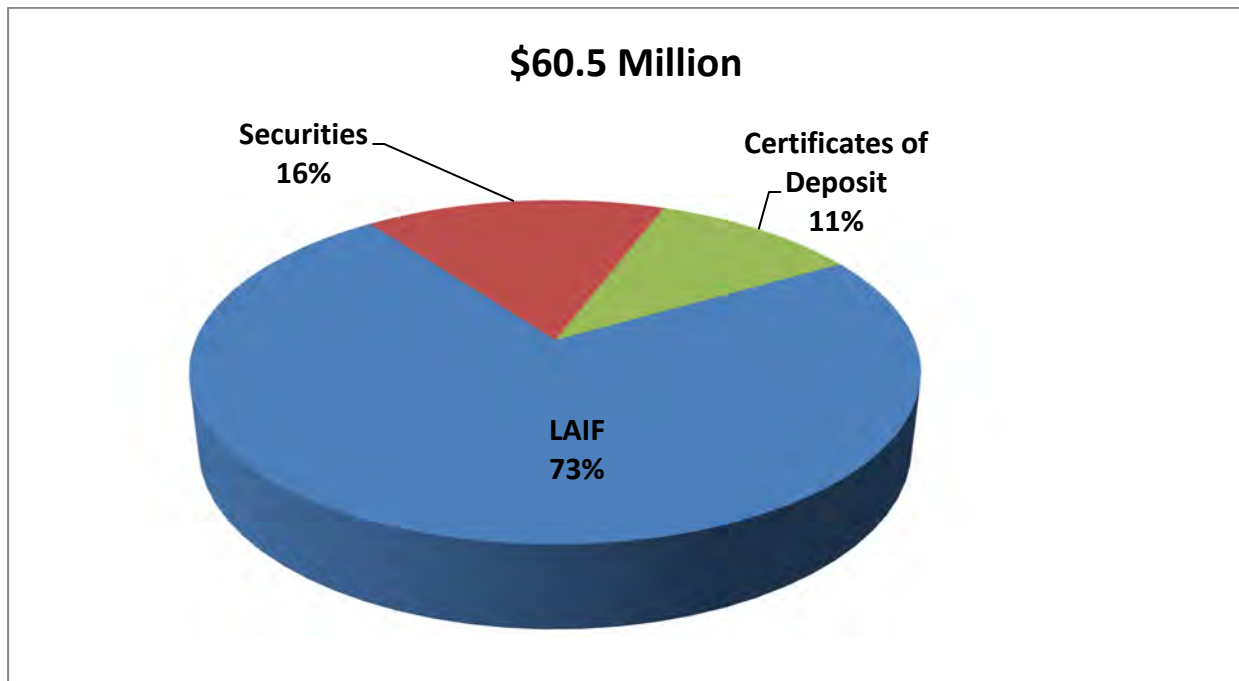


### Total Discharge by Agency (in million gallons)

Discharger	Jul'23	Aug'23	Sep'23	Oct'23	Nov'23	Dec'23	Total
Chino Desalter Authority	112.9255	98.9731	115.9900	100.2035	100.3549	122.5894	651.0364
Eastern Municipal Water District	118.6649	113.3889	120.1618	103.9813	94.6151	119.3859	670.1979
Inland Empire Utilities Agency	14.0668	13.8985	13.1309	13.2450	13.5089	13.9267	81.7768
San Bernardino Valley MWD	45.5391	45.0113	43.0704	44.7854	44.5283	45.3451	268.2796
Western Municipal Water District	129.1791	128.7686	119.3664	109.8389	105.7687	107.9789	700.9006
SAWPA Adjustment	2.0000	2.5000	1.5000	0.0000	0.0000	0.0000	6.0000
Truck Discharge	3.3964	3.0670	3.0422	3.3005	2.9823	3.1076	18.8960
<b>Total</b>	<b>425.7718</b>	<b>405.6074</b>	<b>416.2617</b>	<b>375.3546</b>	<b>361.7582</b>	<b>412.3336</b>	<b>2,397.0873</b>

Discharger	Jan'24	Feb'24	Mar'24	Apr'24	May'24	Jun'24	Total
Chino Desalter Authority	100.8655	85.3453	99.1696	100.8362			1,037.2530
Eastern Municipal Water District	88.6661	81.6807	99.2079	96.1957			1,035.9483
Inland Empire Utilities Agency	12.8018	12.8128	14.1122	13.3698			134.8734
San Bernardino Valley MWD	43.6713	37.5042	42.9846	38.3572			430.7969
Western Municipal Water District	113.9276	91.4526	98.6692	102.7898			1,107.7398
SAWPA Adjustment	0.0000	0.0000	0.0000	0.0000			6.0000
Truck Discharge	3.1975	2.9483	3.3836	3.3080			31.7334
<b>Total</b>	<b>363.1298</b>	<b>311.7439</b>	<b>357.5271</b>	<b>354.8567</b>			<b>3,784.3448</b>





## Total Cash & Investments



## Reserve Fund Balance

	Amount
Debt Retirement	\$2,979,538
Pipeline Replacement & Capital Investment	33,560,659
OC San Pipeline Rehabilitation	2,849,924
Pipeline Capacity Management	12,671,389
OC San Future Treatment & Disposal Capacity	1,940,031
Brine Line Operating	2,240,462
Brine Line Operating Cash	4,295,641
<b>Total Reserves</b>	<b>\$60,537,644</b>

## Legend

		<u>Compared to Budget</u>
	Ahead or Favorable	Above +5% Favorable Revenue or Expense Variance
	On Track	+5% to -2% Variance
	Behind	-3% to -5% Variance
	Concern	Below -5% Variance

## Staff Comments

For this month's report, the item(s) explained below are either "behind", a "concern", or have changed significantly from the prior month.

Capital Projects are 8.9% below budget. It is expected that they will be on target by the end of the year.