

# Inland Empire Brine Line Storm Watch – January 2017

SAWPA Commission

Item 5.A

February 7, 2017

# Storm Watch January 2017

Recommendation to Commission:

- Receive and file

# Storm Watch January 2017

## Highlights

No significant impacts to Brine Line

Mostly local flooding,

Emergency discharges from WRCRWA and WWRF

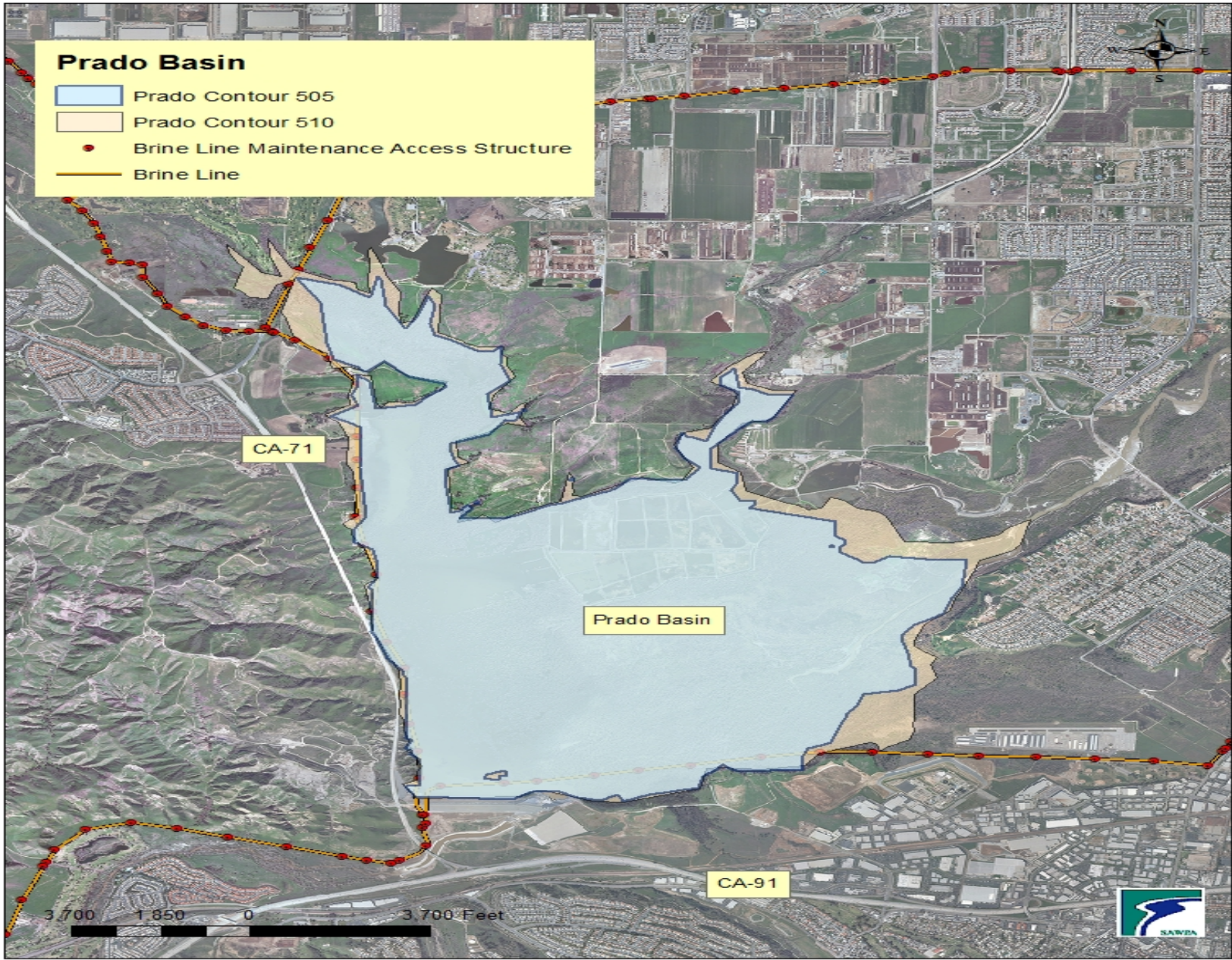
Temescal and Arlington Desalters asked to stop discharging to the Brine Line for a short period to accommodate WRCRWA increased emergency flows.

OCSD activated high flow emergencies

Access road erosion on Reach 4

# Prado Basin

- Prado Contour 505
- Prado Contour 510
- Brine Line Maintenance Access Structure
- Brine Line







01/23/2017





01/23/2017 11:46



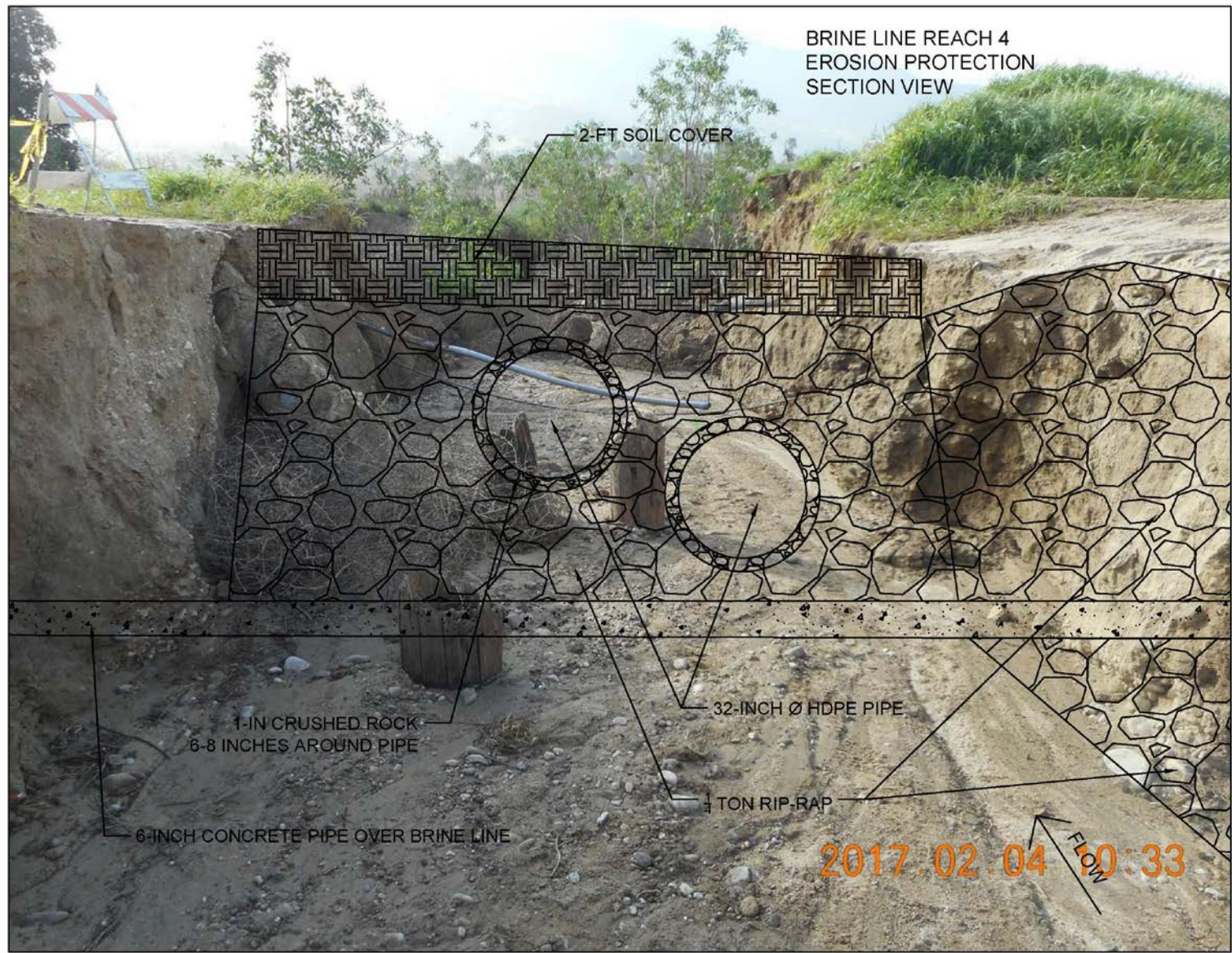






2017.01.30 11:15

BRINE LINE REACH 4  
EROSION PROTECTION  
SECTION VIEW



2-FT SOIL COVER

1-IN CRUSHED ROCK  
6-8 INCHES AROUND PIPE

32-INCH Ø HDPE PIPE

6-INCH CONCRETE PIPE OVER BRINE LINE

1/4 TON RIP-RAP

2017.02.04 10:33

FLOW

# Storm Watch January 2017

## Storm Watch - Preparation

Storm events outside of business hours presents additional challenges

Continued communication through cell phones

OCSD activated high flow emergencies

SAWPA established a 24-hour emergency phone number

Rotating on-call staff

Emergency response contractors

Emergency response by Member Agencies

Tools to monitor flows remotely and keep track of status of assets

# OCSD High Flow Emergency



## Code Blue

- Storm anticipated (> 1")



## Code Yellow

- Outfall > 30 MGD above normal; Plant #1 > 50 MGD above normal; Plant #2 > 75 MGD above normal



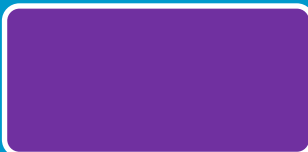
## Code Orange

- Collection system and Plants #1 & #2 increasing towards maximum



## Code Red

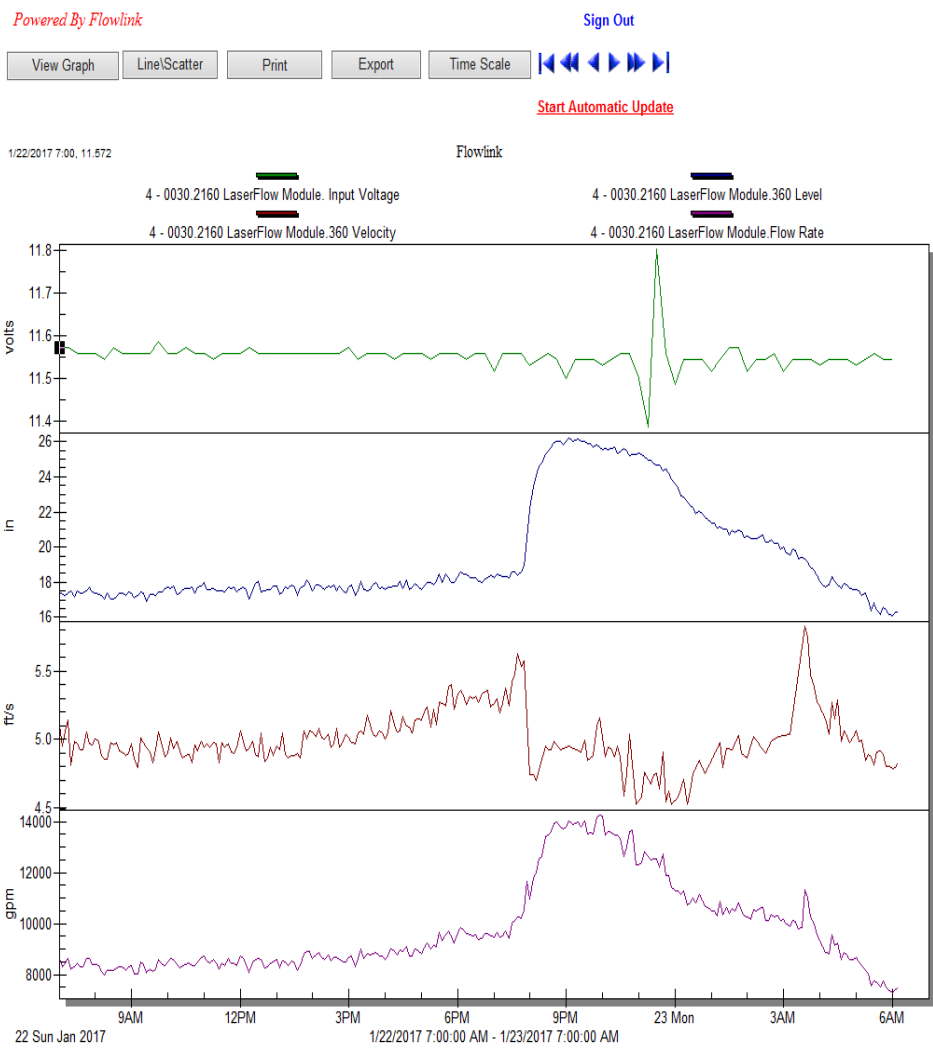
- Flow has exceeded maximum capacity



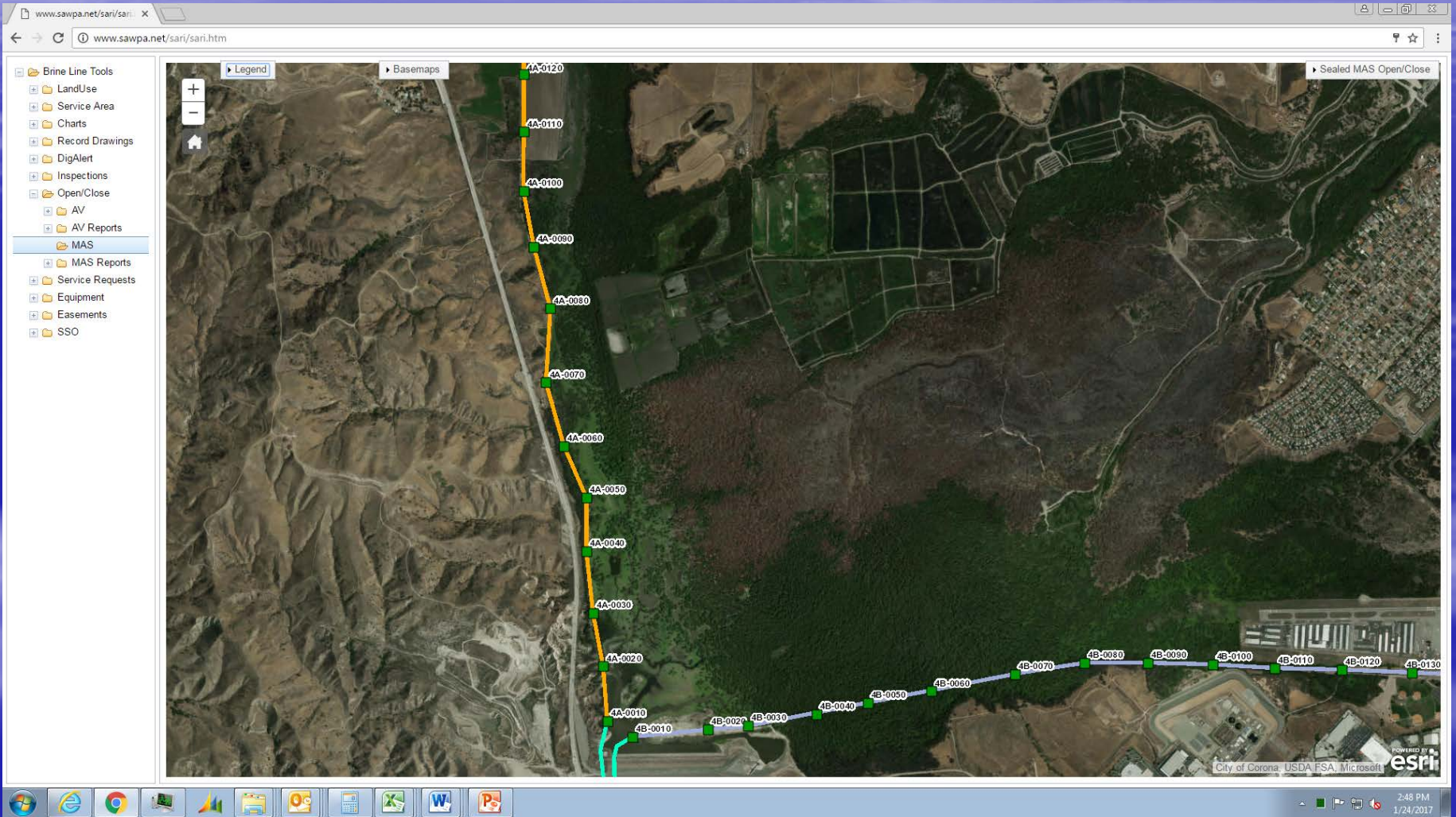
## Code Purple

- Flows decreasing; revert to normal operations

- Welcome to Flowlink**
- Sites
    - 2100 Series Site
      - 4 - 0030
        - 2160 LaserFlow Module
          - Input Voltage
          - 360 Level
          - 360 Velocity
          - 360 Ultrasonic Signal
          - Flow Rate
          - Total Flow
          - 360 Y-Axis
          - 360 Doppler Power
          - 360 Distance
          - 360 Air Temperature
          - 360 Case Temperature
          - 360 X-Axis
          - Diagnostic
    - 166.255.15.203
      - 4B-0100
      - 4D0070
      - ISMANAGER1
      - LENOVO1LPTOP
      - push test
      - PushTest
      - WAVNEW2K3



# Storm Watch January 2017





# Critical Success Factors

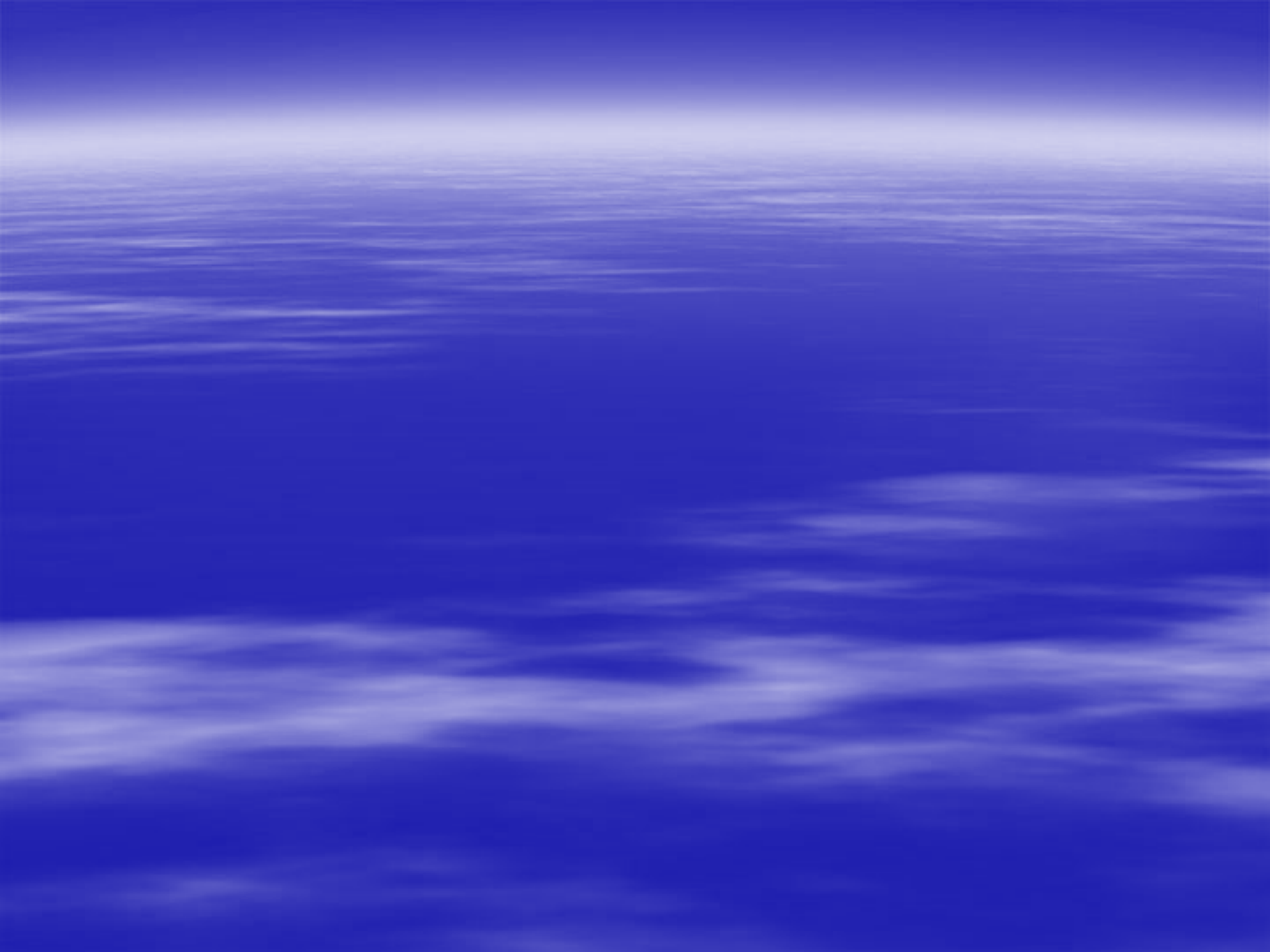
- 1. Minimize disruptions to customers.
- 5. Protect and preserve the useful life of the Brine Line assets through strategic maintenance, repair, and capital improvements.
- 8. Operate the Brine Line to: (1) protect the OCSD treatment plant and the environment from non-compliant dischargers, and (2) eliminate any uncontrolled pipeline releases.

# Storm Watch – January 2017

Recommendation to Commission:

- Receive and file

**QUESTIONS??**



# GIS Tools - DigAlert

The screenshot displays the DigAlert web application interface. On the left is a navigation menu with options like Brine Line Tools, LandUse, Service Area, Charts, Record Drawings, DigAlert, Mark, Find, ReOpen, Summary, Inspections, Open/Close, Service Requests, and Easements. The main area features a map of Southern California with various geographic features and a blue line representing a utility route. On the right, a panel titled 'UnMarked Tickets' contains a table of ticket information.

Priority	Type	ID	Ticket	Address	Date Rcvd	Work Date	Company
NORM	NEW	23261	<a href="#">A61681181</a>	569 BATEMAN CIR	06/16/2016 2:34 PM	06/20/2016 2:34 PM	HCI
RUSH	NEW	23270	<a href="#">A61690126</a>	15	06/17/2016 8:6 AM	06/17/2016 8:17 AM	D C DRILLING INC
NORM	NEW	23271	<a href="#">A61690185</a>	TEMESCAL CANYON RD	06/17/2016 8:6 AM	06/21/2016 8:30 AM	LGC GEO ENVIRONMENT INC.
NORM	NEW	23272	<a href="#">A61690188</a>	MAGNOLIA AVE	06/17/2016 8:27 AM	06/21/2016 8:27 AM	WESTERN MUNICIPAL WTR
NORM	NEW	23273	<a href="#">A61690332</a>	COMPTON AVE	06/17/2016 9:30 AM	06/22/2016 8:0 AM	JOHN GRIFFIN CONSTRUCTIO
NORM	NEW	23274	<a href="#">A61690339</a>	1646 ONTARIO AVE	06/17/2016 9:37 AM	06/21/2016 9:37 AM	SOILS ENGINEERING
NORM	NEW	23276	<a href="#">A61690399</a>	HAMNER AVE	06/17/2016 2:50 PM	06/22/2016 7:0 AM	WEKA, INC
NORM	NEW	23277	<a href="#">A61690942</a>	HAMNER AVE	06/17/2016 2:59 PM	06/22/2016 7:0 AM	WEKA, INC
NORM	NEW	23278	<a href="#">A61691109</a>	SUMNER AVE	06/17/2016 5:5 PM	06/22/2016 7:0 AM	DOUMIT COMMUNICATI

No Tickets: 11

# GIS Tools – MAS Inspections

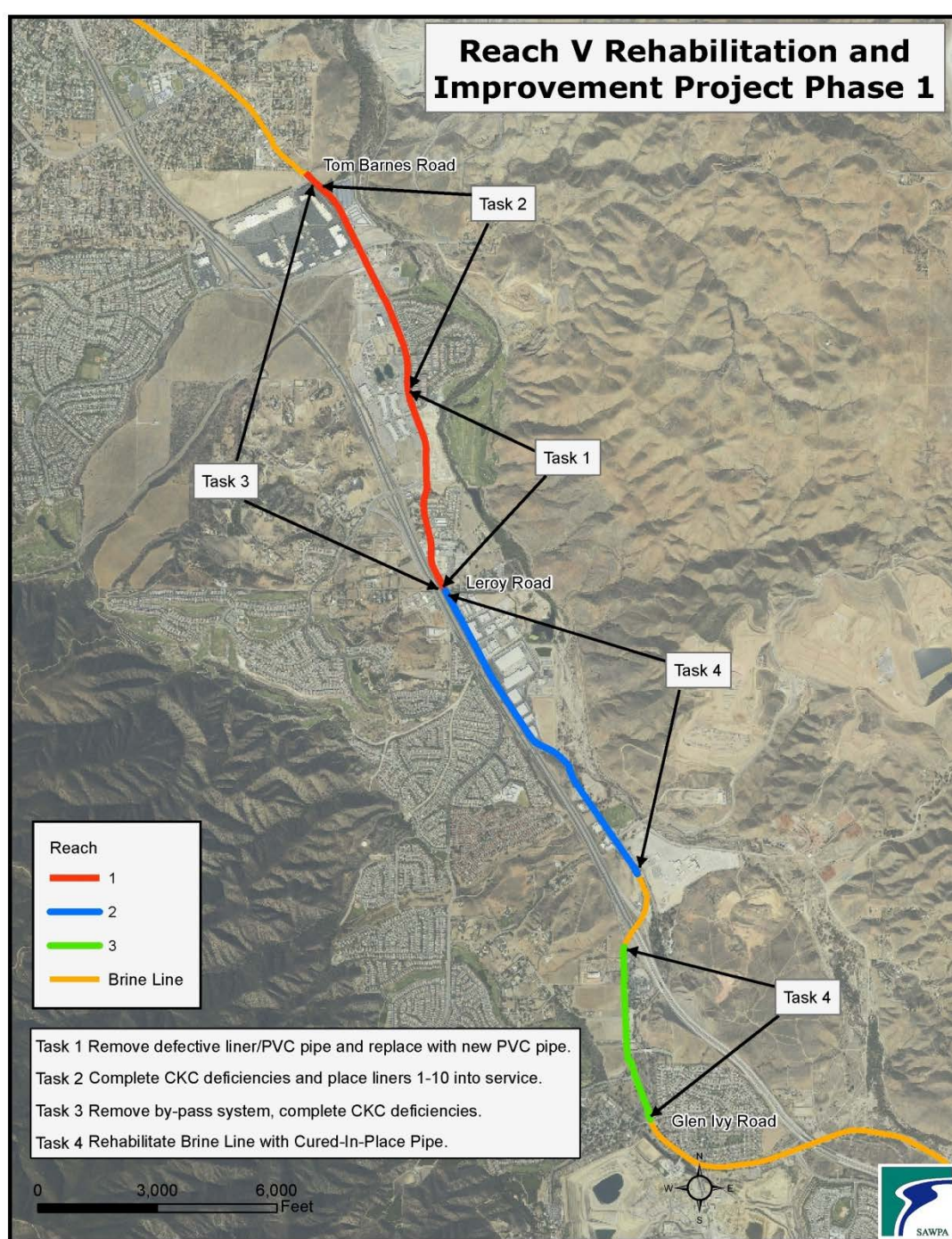
The screenshot displays a web-based GIS application. The browser address bar shows [www.sawpa.net/sari/sari.htm](http://www.sawpa.net/sari/sari.htm). The main map area shows a topographic view of the Corona and Chino Valley regions, with several colored lines representing inspection routes: a blue line, a green line, a red line, and a yellow line. The map includes labels for major roads like the Inland Valley Fwy, Fairroad Rd, and Riverside Fwy, as well as landmarks like the Corona Municipal Airport and various parks. On the left side, there is a 'Brine Line Tools' menu with options such as LandUse, Service Area, Charts, Record Drawings, DigAlert, Inspections, and MAS. The MAS section is expanded to show sub-options like MAS View, AV, BO, Reach, and Reach View. On the right side, a 'Find MAS' search panel is visible, showing a list of MAS IDs starting with '4A-0010'. The taskbar at the bottom shows various application icons and the system clock indicating 9:19 AM on 6/20/2016.

Inland Empire Brine Line  
Reach V Rehabilitation and  
Improvement Project – Phase 1

Item 5.B

February 7, 2017

# Reach V Rehabilitation and Improvement Project Phase 1















# Public Outreach

- Project Update Brochures
- Construction Hotline
- Construction E-mail address
- Posting to We R Temescal Valley Facebook Page
- Project Website

**SAWPA**

**INLAND EMPIRE BRINELINE**

## PIPELINE PROJECT UPDATE

► **WHAT'S NEW AND WHY**

The contractor upgrading the Brine Line, WEKA Inc. of Highland, CA, is operating work crews at full staffing, maximizing production and efficiency on the project. In addition, repaving a segment of Temescal Canyon Road in Corona is scheduled to start on Friday, 11/4, and continue into early next week.

► **WHAT IT MEANS TO YOU**

WEKA will replace the temporary asphalt on Temescal Canyon Road near Fashion Drive – restoring a smooth driving surface on a portion of the roadway disturbed by work on the Brine Line. Final resurfacing will follow later. Generally, construction may slow traffic between Tom Barnes Street and Leroy Drive, 9 AM to 5 PM.

► **PROCESS AND TIMELINE**

The project remains fast tracked, reducing inconvenience while ensuring high-caliber work on the pipeline. The upgrades in Corona may be finished as soon as the end of November, with other areas in Phase 1 completed in early 2017. Write to us at [construction@sawpa.org](mailto:construction@sawpa.org).

**Project Overview**

SAWPA is working to test, fortify and/or replace 5 miles of the Brine Line, an underground pipeline that conveys salty water from the Inland Empire to the Pacific Ocean. The brackish water comes from key sectors of the Inland economy, including power plants, manufacturers, and groundwater desalters that produce large volumes of drinking water.

The project calls for placing new pipes within older pipes which have lost their shape over time. With loss of shape comes increased risk of spills, and the upgrades follow a 2011 Brine Line leak that was remediated. Water from the Brine Line poses no health risk but, if left untreated, could damage the local environment.

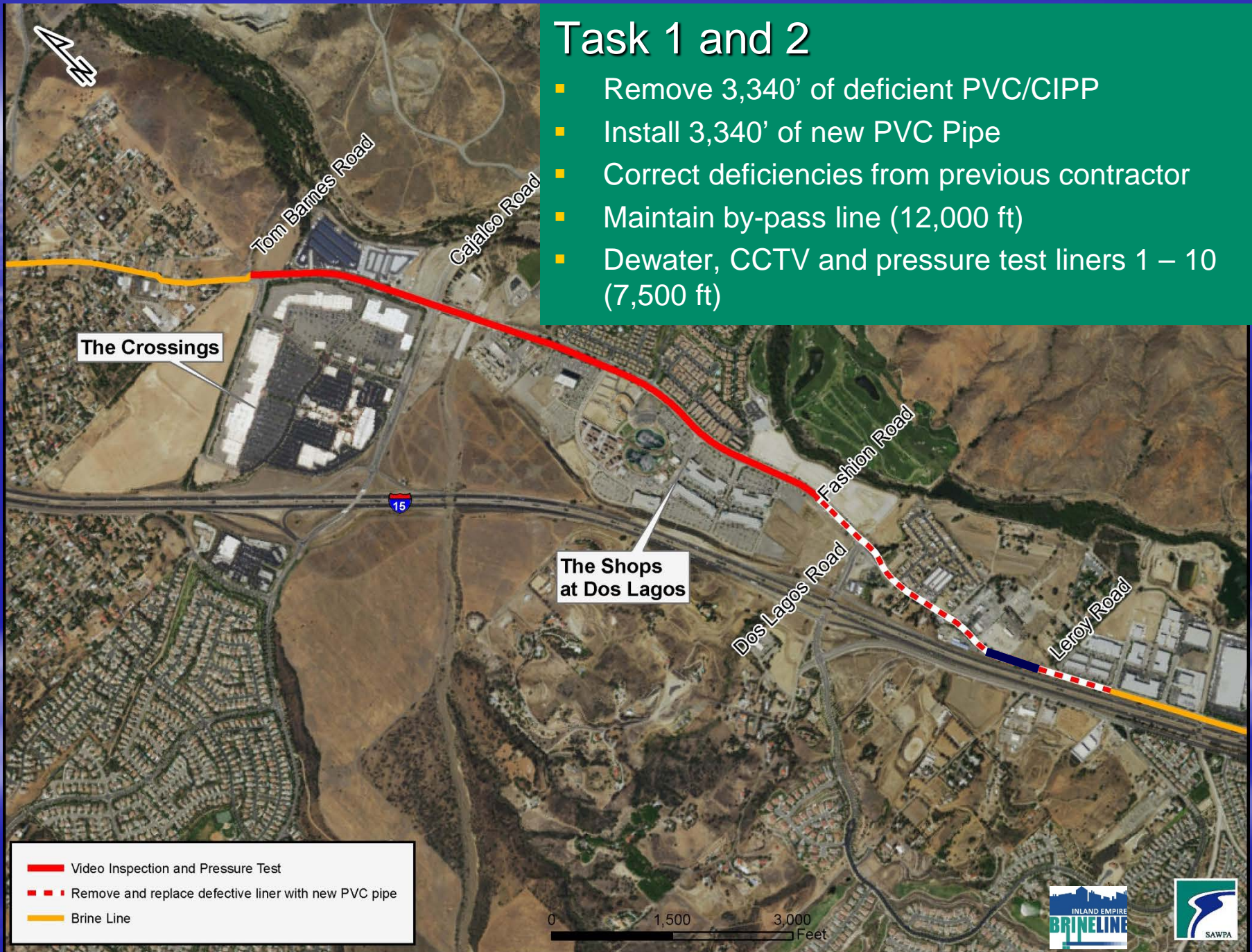
Santa Ana Watershed Project Authority  
Inland Empire Brine Line  
11615 Sterling Avenue  
Riverside, CA 92503

Tell us what you think.  
Hotline: 951.354.4250  
Email: [construction@sawpa.org](mailto:construction@sawpa.org)  
For updates: [www.sawpa.org/brineline](http://www.sawpa.org/brineline)

Questions?

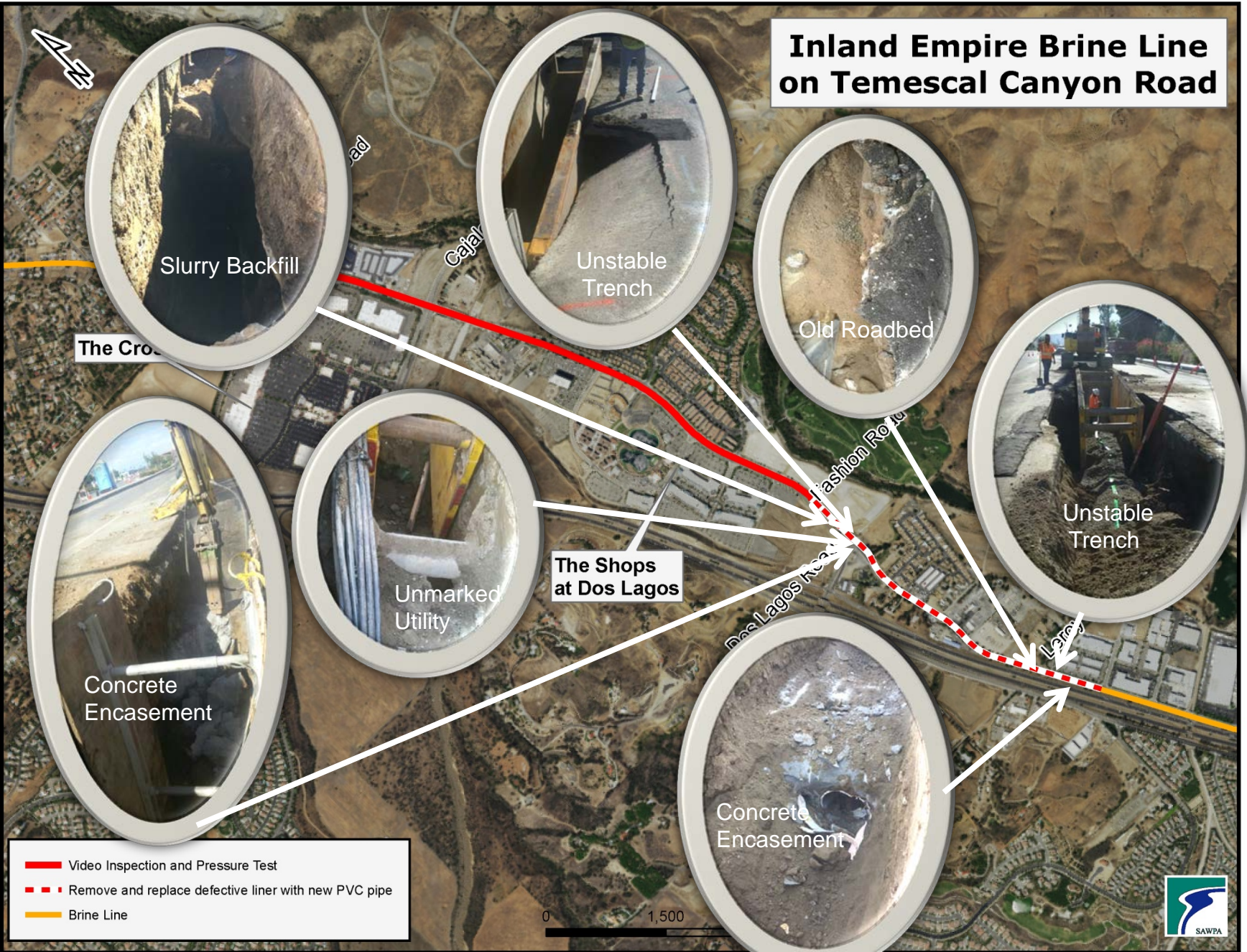
# Task 1 and 2

- Remove 3,340' of deficient PVC/CIPP
- Install 3,340' of new PVC Pipe
- Correct deficiencies from previous contractor
- Maintain by-pass line (12,000 ft)
- Dewater, CCTV and pressure test liners 1 – 10 (7,500 ft)

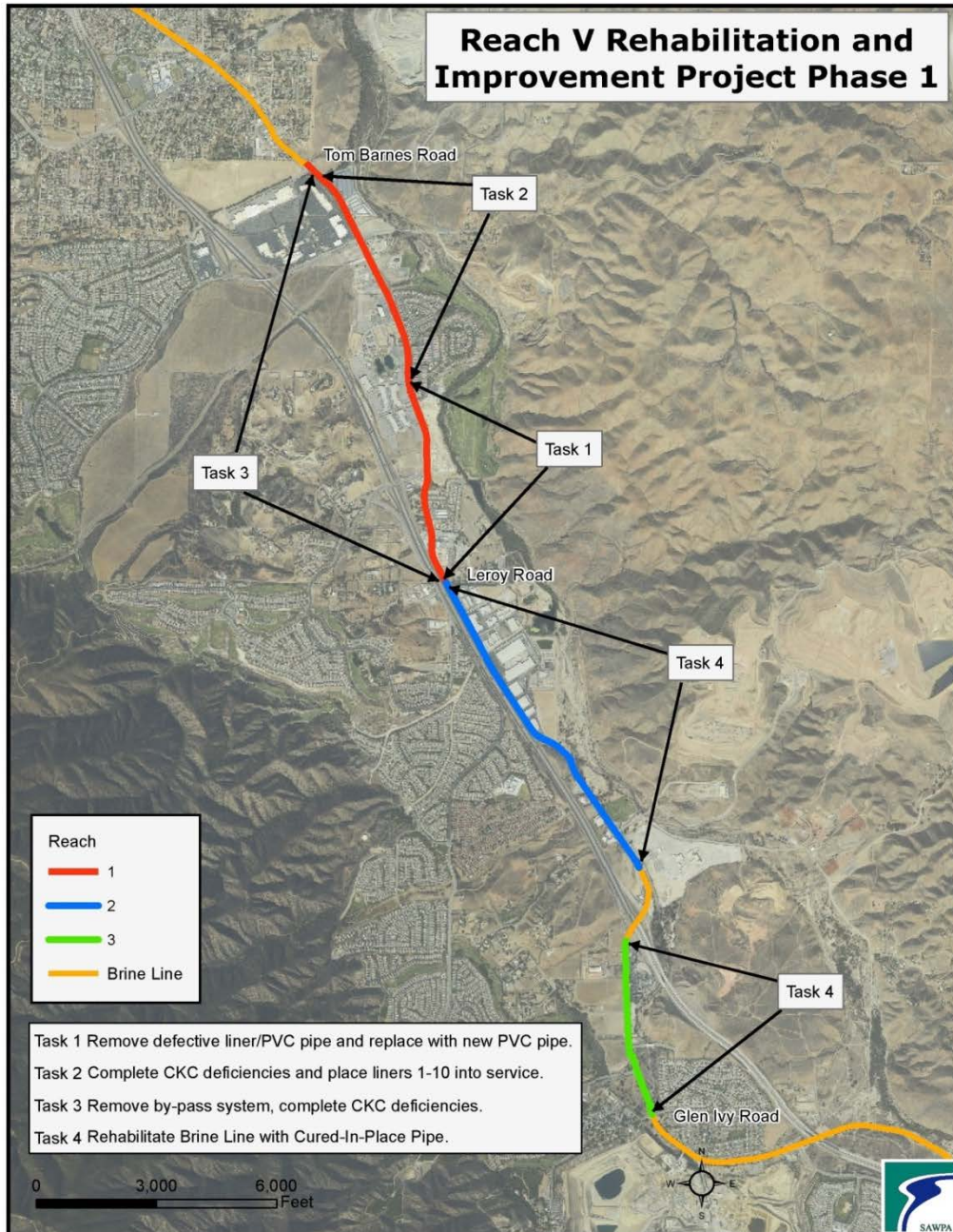




# Inland Empire Brine Line on Temescal Canyon Road



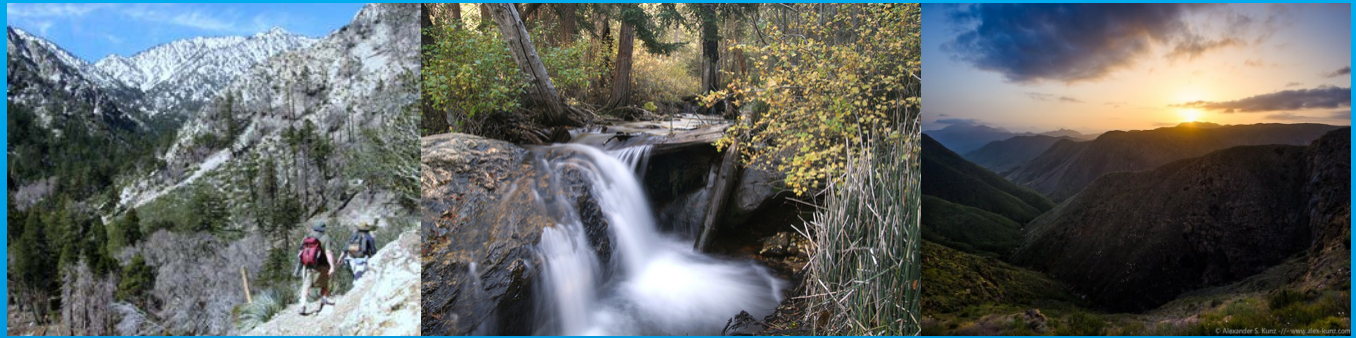
## Reach V Rehabilitation and Improvement Project Phase 1



## Task 4

### ■ Project Description

- Clean, CCTV, Laser Profile – 12,800 ft
- Repair upto 12, 800 ft of PVC pipe
- 9 New MAS structures
- 9 New Avs, and 9 New Blow-offs



# Forest First MOU

Commission Workshop  
Feb 7, 2017

FOREST  
FIRST

Ian Achimore  
SAWPA



# Critical Success Factors



- SAWPA has a strong reputation as a watershed-wide, knowledgeable, neutral and trusted **facilitator, leader, and administrator** of contracted activities.



- Goals, scope, costs, resources, timelines, and the contract term are **approved by the Commission** before executing an agreement to participate in a roundtable group.



- **Clear upfront criteria** and terms for completing or transitioning efforts that have been successfully established or completed.



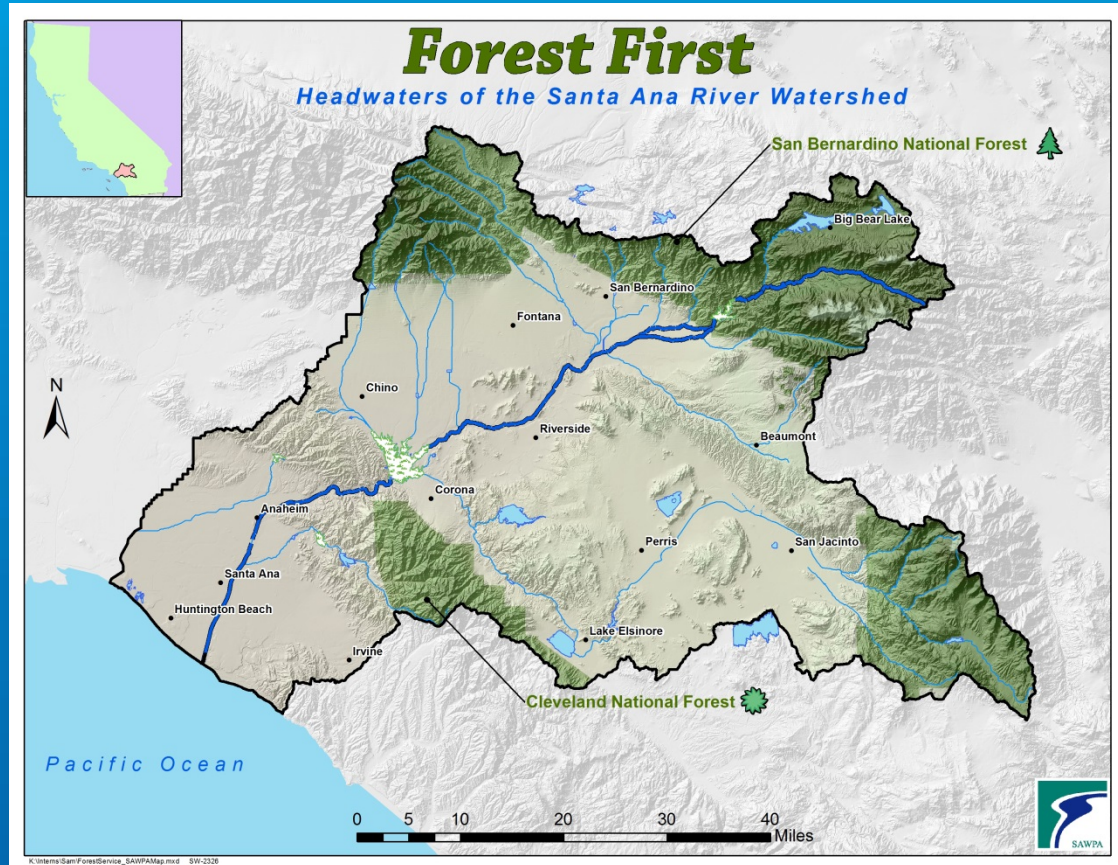
- Report and use results of roundtable's work, **leverage information** and involvement for the benefit of SAWPA, its members, and other stakeholders.



- Adequate professional staff and resources to effectively provide facilitation, management, administrative and **technical support to collaborative work efforts.**

# Background

- Approx. 30% of watershed managed by Forest Service
- Estimated that 90% of the annual precipitation falls on headwaters



FOREST  
FIRST

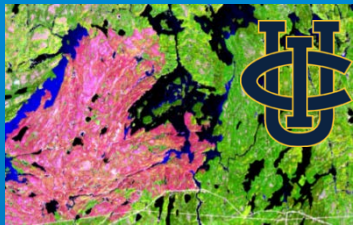


# 2011 & 2017 MOU Comparison

- Five Year Terms
- Similar Provisions on planning and coordination
- Both Cleveland and San Bernardino Forests
- 2011 MOU expired Dec 2016
- 2017 MOU would expire Jan 2022



# Actions Under 2011 MOU



- *Valuation of Benefits of Forest Management Practices in the Santa Ana Watershed (2012);*
- San Bernardino Forest's success in acquiring a \$1M Prop 84 Round 2 grant (2014);
- Acquiring the assistance of UC Irvine researcher Dr. Michael Goulden to evaluate the water supply benefit of Round 2 Project(2014);
- Coordinating with the San Bernardino Forest and the US Department of Agriculture to demonstrate the on-site conversion of woody debris to biomass (2015).

FOREST  
FIRST



# Benefits of MOU

- Brings water agencies to the table with Forest land managers who manage 30% of the watershed.
- Can facilitate projects that assist water agencies and flood control agencies in meeting their missions.
- Allows the Forests to apply for grant funding.
- Serves as an umbrella agreement giving not just SAWPA but the SAWPA member agencies an ability to partner with the National Forests.



# Actions for 2017 MOU

- Possible tasks to implement under MOU:
  - **Invasive plant** removal including tamarisk and grape (projects ongoing);
  - North Main Divide **Fuels Reduction** Project (currently implemented);
  - **Water quality monitoring** on water bodies listed by the Regional Board for impairments (ongoing);
  - Partnership studies and removal programs for the Shot Hole Borer **invasive beetle** (studies ongoing; removal programs to be determined);
  - **Public-private** funded forest management projects with downstream utilities funding forest management after downstream benefits are realized through monitoring (timeline to be determined);
  - OWOW Round 2 project and the related downstream **water benefits analysis** (2017-18);

FOREST  
F↑RST



# Recommendation

- It is recommended that the Commission authorize the General Manager to enter into a MOU with the Forest Service to plan and develop projects within the Santa Ana River Watershed.



