

Santa Ana River Habitat Survey Update

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November 4, 2025

Purpose of Presentation



Provide background on the Santa Ana Sucker Conservation Team and the annual Santa Ana Sucker Habitat Survey, and present preliminary findings from the 2025 survey, marking the 20th year of this long-standing monitoring event.

Special thanks to Orange County Water District, San Bernardo Valley Municipal Water District, Colton Police Department, Riverside County Regional Park & Open-Space District, and U.S. Fish and Wildlife Service for this partnership.











About the Santa Ana Sucker Conservation Team



The Conservation Team reflects the involvement and active participation of over 20 agencies and non-profit organizations throughout the Santa Ana River Watershed who have worked together since 1998 to help conduct the following activities:

- Habitat protection and restoration projects and programs;
- Education and public outreach initiatives;
- Surveys to monitor fish status, and assessments of habitat conditions; and
- Research to increase the understanding of fish distribution in the watershed.



Team Members:







City of Arts & Innovation

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About the Santa Ana Sucker



- The Santa Ana sucker is primarily a bottom feeder. Various research on the species found:
 - "Suckers primarily feed by scraping algae from hard substrates."
- Spawning can also take place over cobble and gravel. According to research from the early 2000s:
 - "Spawning occurs in areas with gravel substrates at a moderate depth, but close to areas of deeper water or aquatic vegetation that serve as refugia."

Santa Ana Sucker and its Habitat



Credit: Brett Mills



Benefits of Habitat Surveys

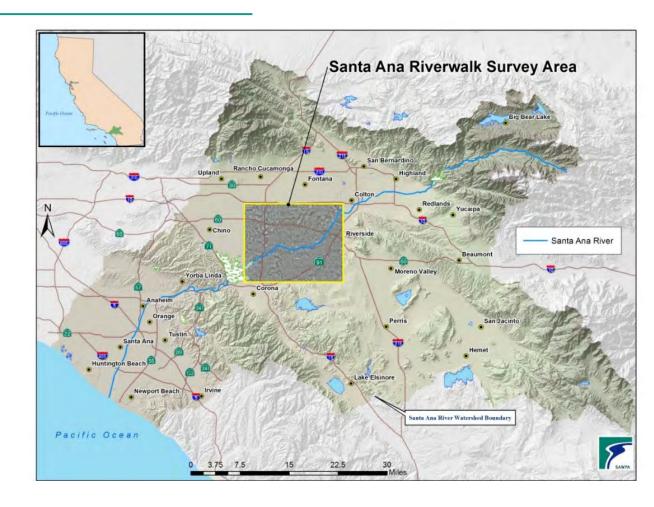
- Watershed stakeholders such as water agencies use the data to plan the location and scope of habitat and mitigation projects,
 - As well as to gage if projects are having the intended effect
- Watershed stakeholders use it for their region-wide habitat planning
 - Such as the SBVMWD-led Upper Santa Ana River Watershed Habitat Conservation Plan
- The data is also a helpful gage on how much beneficial habitat there is in the Santa Ana River Mainstem (not including tributaries such as Anza Creek) for the Santa Ana sucker.





Survey Location

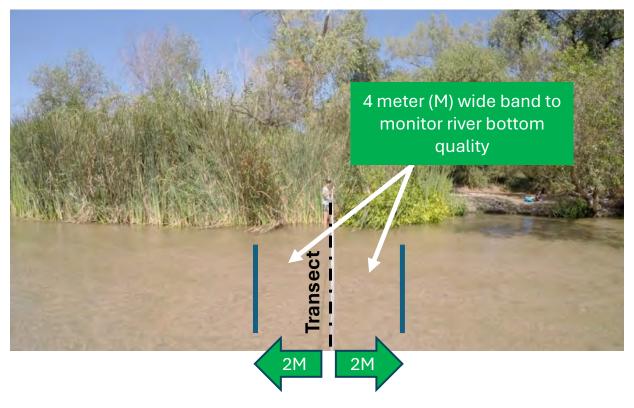
- Since 2006, Riverwalk data has been collected during the fall at approximately the same geolocated points each year, with each point labeled with a designating number: 1 through 116.
- This location was chosen because the River is perennially flowing here (i.e. downstream of Publicly Owned Treatment Works discharge points and rising groundwater).



River Bottom Measurements

At each field point a transect line is drawn from bank to bank.

To identify the area to monitor, a 4-meter-wide band is centered at the transect.



The area within the band is then surveyed by visually identifying what type of material makes up the river bottom (by %):

- Mud/Silt
- Sand
- Gravel
- Cobble
- Boulder

River Bottom Analysis

- For information sharing purposes, the quality of the stream bottom (substrate) is generalized in in the following three categories:
- For example, if the sum of gravel, cobble and boulder is 29% (and the remaining 71% is sand, and/or mud) the Riverwalk transect will receive a poor rating.
- This data is summarized in the Riverwalk Atlas (currently draft). The purpose of the Atlas is to share results of the Riverwalk in an easy-to-understand format for experts and the general public.

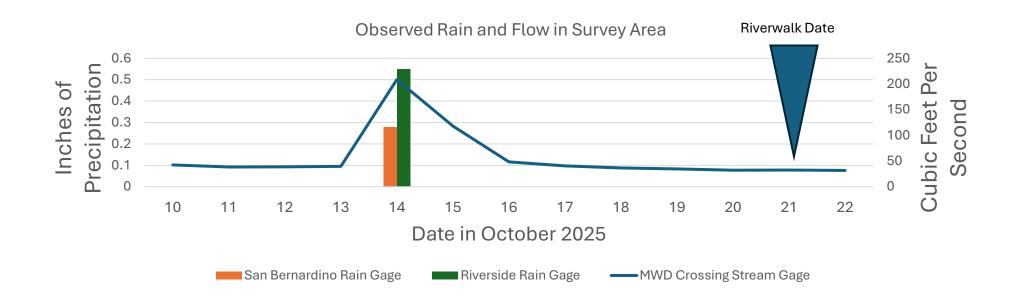
Riverwalk Rating Categories	Formula for Rating	Rating Threshold
Poor	Sum of gravel,	≤30%
Marginal	cobble and boulder	>30% to <65%
Good		≥65%

Timing of Data Collection

A minor storm on October 14 (less than 1 inch precipitation) prompted a short delay. The survey was rescheduled from October 16 to October 21 to allow river conditions to stabilize.



Credit: Press Enterprise

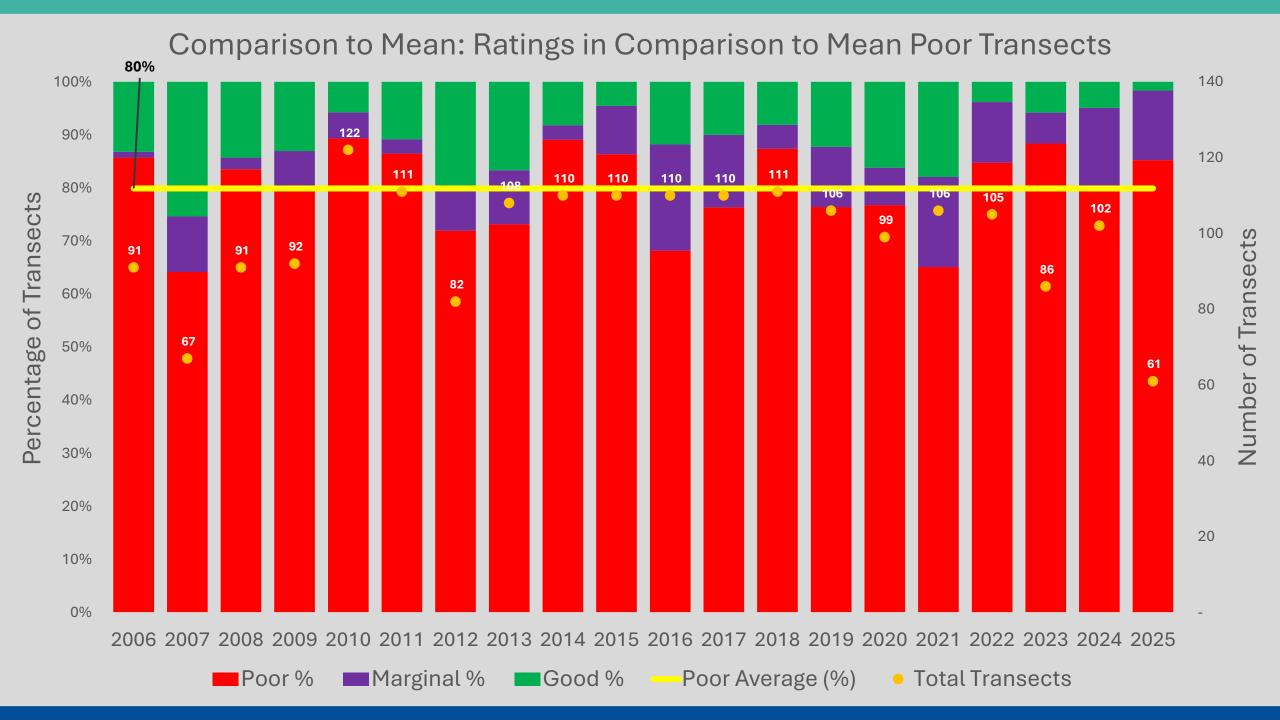


Observations from 2025

- Turbidity was an issue within that 7-day window (October 14 to October 21). Especially for the lower parts of the survey area near River Road.
- 61 sites were able to be surveyed (on average 99 transects are surveyed).
 - 26 sites were not surveyed due to a levee construction project.
 - 14 sites not surveyed due to high flows/turbidity.

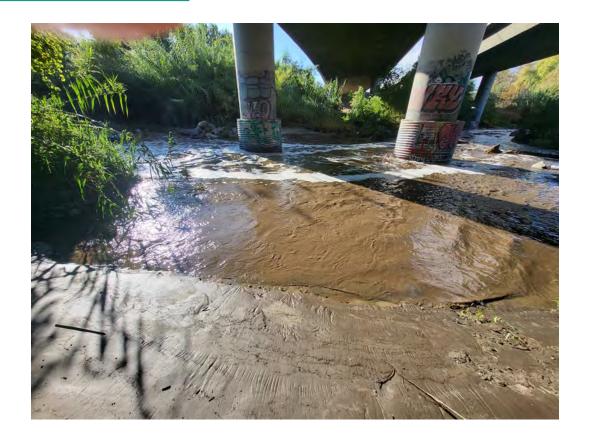
Riverwalk Rating	Amount in 2025	Formula for Rating	Rating Threshold
Poor	52	Sum of	≤30%
Marginal	8	gravel, cobble and boulder	>30% to <65%
Good	1	30010101	≥65%

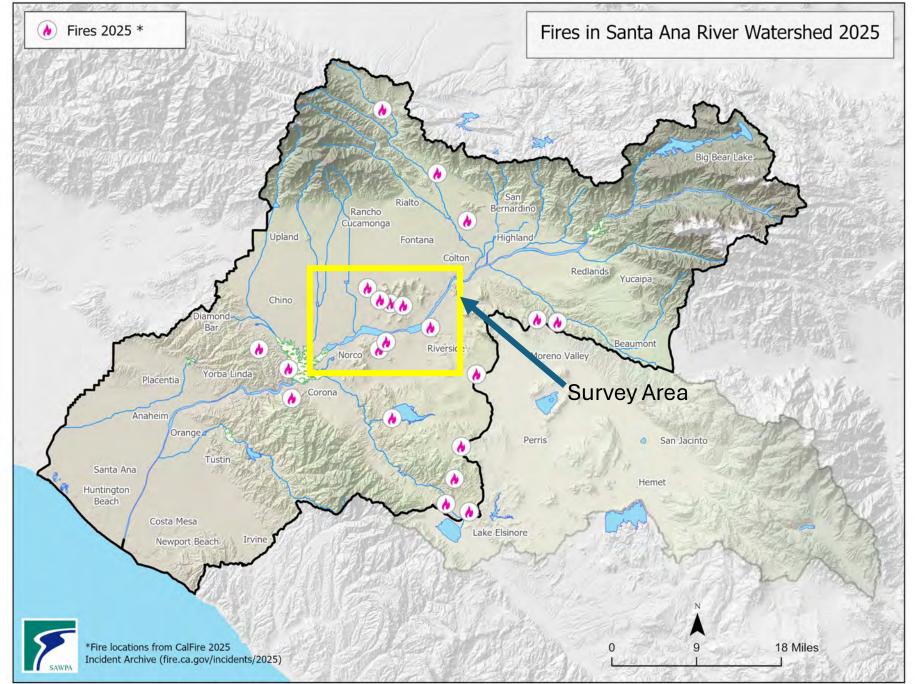
Total: 61



Natural Factors That Increase Turbidity

- Runoff caused by precipitation and/or severe weather.
- Disruption of bottom sediments (resuspension) due to water turbulence from windstorms or rain events.
- Bottom-feeding animals moving sediments around.
- Small floating organisms suspended in the water column (plankton, algae, cyanobacteria).
- Dead organic matter in the water column.
- Wood ash from wildfires that reaches surface water.
- Spring snowmelt and precipitation.



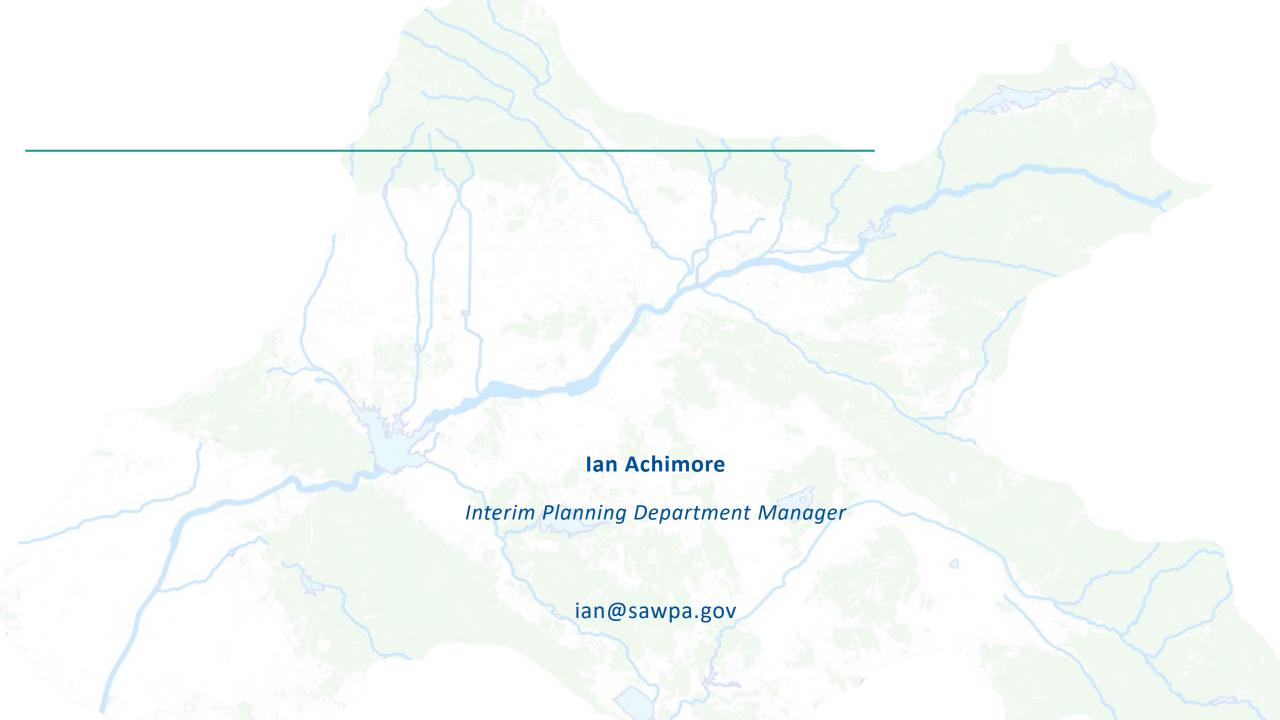




Next Steps

- Discuss results with Sucker Team.
- Investigate differences in turbidity across the survey area with photos and data.
- Coordinate closely with Flood Control on their levee construction project.
- Coordinate with Sucker Team on possible Winter Riverwalk for January or February 2026.
- Update Riverwalk Report and post data on SAWPA website.







Karen Williams, General Manager

November 4, 2025

Background

- Commission authorized Ralph Andersen & associates to conduct a Classification and Compensation Study on February 6, 2024.
- Purpose: Evaluate job classifications and compensation across comparable agencies.
- Initial survey pool: 12 agencies identified based on labor market and organizational criteria.

Member Agency Collaboration

- Input received from General Managers and HR staff
- Consensus to refine comparison pool for better alignment with SAWPA's size, staffing, and JPA structure.



Refining the Survey Pool

- Proposed for Removal (larger, less comparable):
 - City of Riverside, Riverside County, IRWD, EMWD, IEUA
- Proposed for Addition (similar JPAs):
 - Big Bear Area RWA, Water Facilities Authority, Encina Wastewater Authority, South Orange Coast WA, San Elijo JPA, Sweetwater Authority.

Member Agency Feedback

- HR staff emphasized access to work papers and job descriptions for accuracy.
- Strong support for aligning study with Strategic Plan to ensure future-focused outcomes.

Recommendation

- Temporarily pause the study until the Strategic Plan is completed.
- Aligns classification and compensation recommendations with organizational goals.
- Promotes precision and long-term sustainability.

Interim Approach

- No delay for urgent needs: GM may make temporary salary adjustments if necessary.
- Based on the addition of the JPAs, most salaries are not out of alignment with market.
- Benefit comparisons need greater focus.
- Ongoing collaboration with member agency HR professionals.

Next Steps

- Complete Strategic Plan (Spring/Summer 2026).
- Resume Classification & Compensation Study with updated context and focus on benefit comparison.
- Present final study results to the Commission.

