

“A CANAL RUNS THROUGH IT”

Sustainability of the Anderson-Cottonwood Irrigation District

2025/2026 Shasta County Grand Jury

June 11, 2026

SUMMARY

The Anderson-Cottonwood Irrigation District (ACID) canal is familiar to many Shasta County residents. Along with the Sacramento River, an interstate highway and a railroad, the canal can only be crossed and viewed at limited locations. But where does it start? Where does it end? What is its purpose? What is its value and cost? How is ACID managed?

The Shasta County Grand Jury has previously investigated ACID, with reports issued in 2004/2005 and 2023/2024. This grand jury elected to once again investigate the district after a cursory review of ACID’s annual financial report showed expenditures outpacing revenue in nine of the previous 10 years. Will the canal prove to be viable and sustainable in the foreseeable future?

GLOSSARY

ACID (Anderson-Cottonwood Irrigation District): Provides water from the Sacramento River to customers within parts of Shasta and Tehama counties.

Aqueduct: Artificial channel to transport water.

BOR (Bureau of Reclamation): The United States Department of the Interior agency that manages water and power in 17 western states.

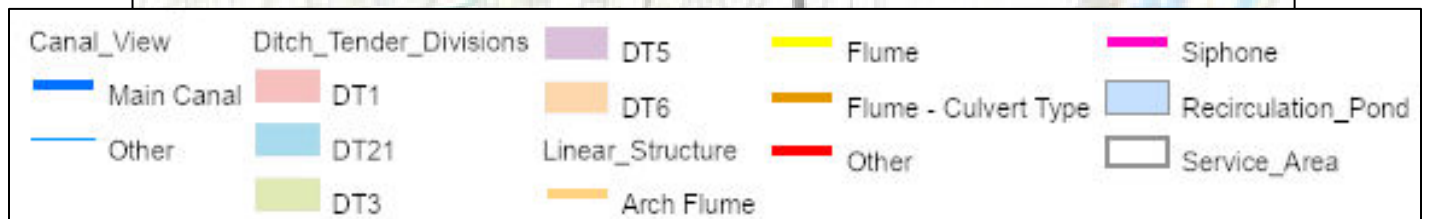
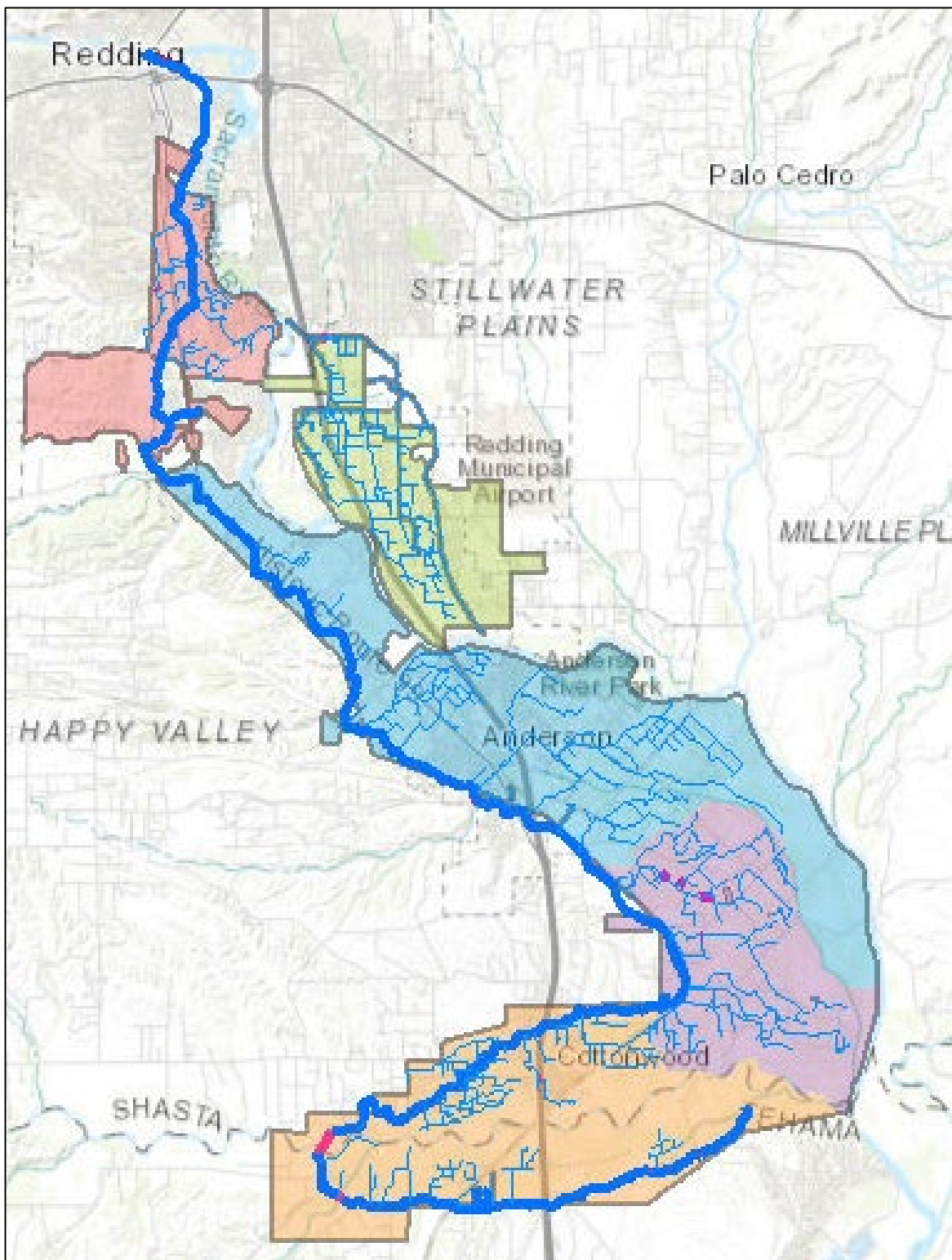
CVP (Central Valley Project): Water management system bringing water from the north to the south in California.

Customer Type:

Agricultural: includes but is not restricted to the irrigation of crops, the watering of livestock, incidental domestic use including related landscape irrigation, and underground water replenishment.

Municipal/Industrial: includes but is not limited to the watering of landscape or pasture for animals (e.g., horses which are kept for personal enjoyment) or water delivered to land holdings operated in units of less than 5 acres.

Wildlife Habitat: Boating, fishing and habitat protection.



Enterprise Special Districts: Agencies that run much like business enterprises and provide specific benefits to their customers. They are primarily funded by fees paid by service recipients.

FEMA (Federal Emergency Management Agency): A federal agency aiming to help people before, during and after disasters.

Introverted Siphon: A hydraulic structure used to carry water beneath an obstacle.

Irrigation Lateral (or *Lateral*): A permanent channel, either open ditch or pipeline, designed to convey water from a main canal or supply source to one or more irrigated properties.

LAFCO (Local Agency Formation Commission): An independent regulatory commission operating in each of California's 58 counties, established by the state legislature to manage the boundaries of cities and special districts.

P&P (Provost & Pritchard Consulting Group): External engineering firm hired by ACID.

Shasta and Tehama County Groundwater Basin: a major aquifer system in Shasta County supporting significant domestic, public supply, and agricultural water use.

BACKGROUND

ACID is an independent special district which has historically provided irrigation services to Southern Central Shasta County for agriculture purposes since 1917. In 2004/2005 the grand jury report focused on water rights, delivery system flaws, budgetary challenges, the relationship between ACID and the public, and the importance of the board following the Brown Act. Leveraging water rights to the natural Sacramento River flow established prior to 1914, ACID diverts water into the main canal at the Redding Caldwell Park diversion dam. For six months out of the year, from April until October, gravity moves the water south along the 35-mile canal for irrigation throughout the district.

ACID's sphere of influence covers roughly 80,813 acres serving customers from Anderson, Redding, and Shasta Lake, as well as the surrounding rural areas. The 2023/2024 grand jury report found that, despite the parameters of ACID's sphere of influence, only a few ACID customers remain north of the Bonnyview area. The customer base has evolved throughout the century in which the district has been active, with a marked transition away from agricultural use to municipal or industrial use (i.e. subdivision landscaping, schools, and cemeteries).

The map depicts ACID's sphere of influence including irrigation laterals (terminating in Cottonwood), and adjacent land. Approximately four miles south of the Caldwell Park diversion dam, an ACID pump station supplies water to district lateral customers in Churn Creek bottom. The 2023/2024 grand jury report found that 75% of water deliveries were localized to the lower 40% of main canal service areas located to the south of Anderson. Additional benefits of the canal include the roughly 3,000 acres of riparian vegetation and contribution to the Shasta and Tehama County Groundwater Basin by system leakage or deep percolation.

ACID is comprised of five geographical divisions, each of which is represented by an elected volunteer. These five elected volunteers serve as the board of directors who govern ACID by overseeing staff operations, advocating for constituents, and acting as liaisons to local government water agencies. Monthly board meetings are scheduled in accordance with California open meeting laws and where updates are given by the General Manager, Operations Manager, and Finance Manager. The board approves the annual budget and monitors expenditures throughout the year.

METHODOLOGY

The investigation was conducted over several months and included:

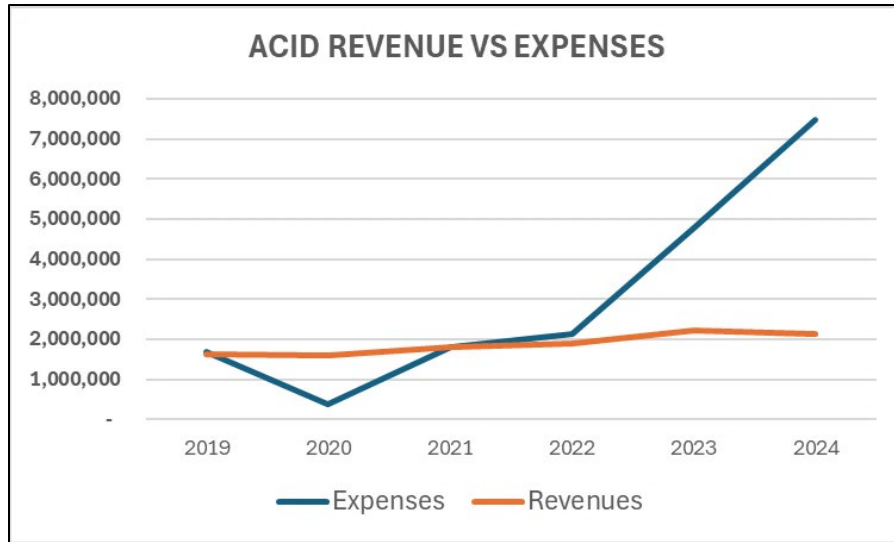
1. Review of:
 - a. ACID website
 - b. ACID Independent Audit Reports 2022-2024
 - c. ACID Grant Applications 2021-2025
 - d. ACID Monthly Board Agendas, Packets, and Minutes
 - e. ACID Minutes of the 12/6/2024 Special Board Meeting
 - f. BOR Central Valley Project Contract
 - g. Shasta LAFCO Municipal Service Review and Sphere of Influence Update 2023
 - h. ACID Customer List 2025
 - i. Engineering and Contractor consultation reports
 - j. Previous Grand Jury Reports 2004/2005; 2023/2024
 - k. ACID division maps
2. In addition:
 - a. ACID monthly Board of Directors Meetings were attended
 - b. Knowledgeable authorities were interviewed
 - c. Thirty miles of the canal were walked and infrastructure photographed

The facts resulting from the research were confirmed via cross-referencing of documentation and witness testimony. The facts are the basis of the grand jury's findings and led to the recommendations.

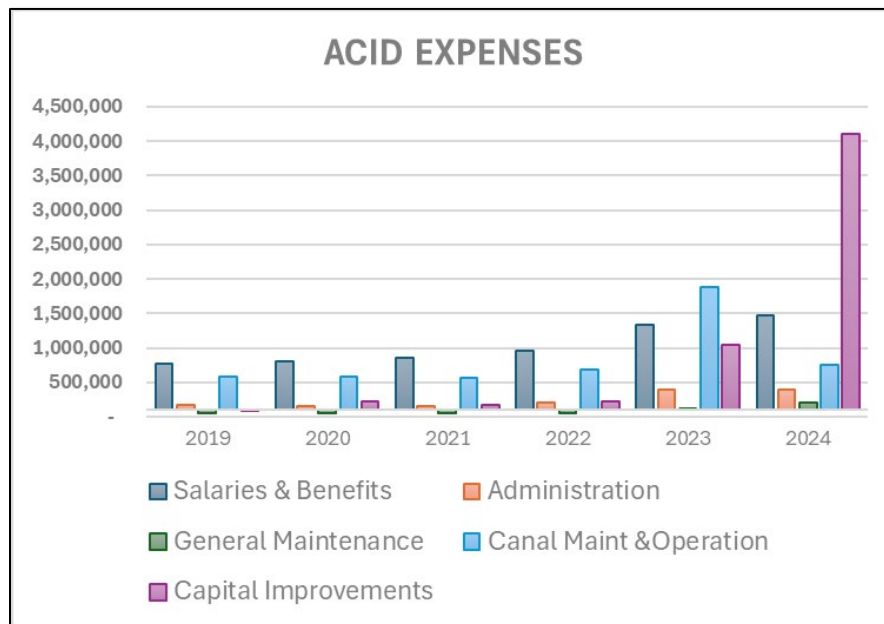
DISCUSSION

This grand jury report seeks to answer questions including *Will the canal prove to be viable and sustainable in the foreseeable future?* The investigation found that, while some progress has been made in terms of canal operations and maintenance over the 20+ years since the initial ACID grand jury report, the lack of structured, written procedures negatively impacts the district's financial and infrastructure health.

Financial Sustainability



ACID is facing significant challenges regarding its long-term financial sustainability. There is a clear need to increase revenue and reduce the expenses for routine and deferred maintenance of the aging infrastructure. Closing the gap between income and expenses might include:



- Correctly sorting customers into categories defined by BOR
- Generating new opportunities for funding by targeting new categories and marketing service to prospective customers
- Creating a long-term strategic plan for routine maintenance
- Addressing deferred maintenance
- Implementing a written schedule for ongoing inspection and canal maintenance

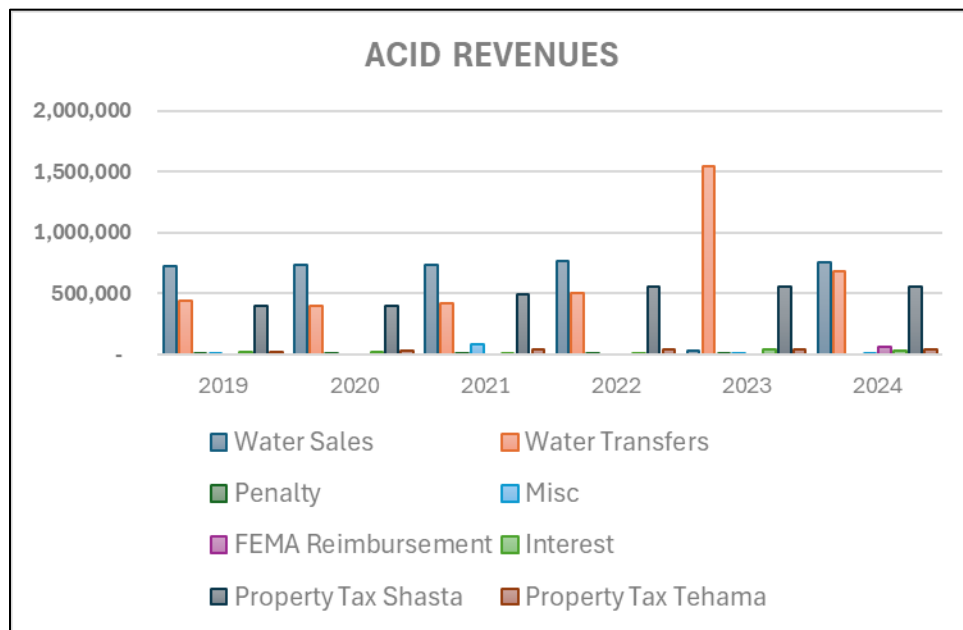
- Developing a schedule for capital improvements and modernization of infrastructure

ACID was authorized as an Enterprise Special District by LAFCO and was set up to primarily be funded by fees paid by service recipients. However, the income provided by these fees has not been sufficient to cover the annual expenses. The district has seen a continuing increase in annual expenses, with an average increase of 6.5% from 2019 to 2022, followed by a sharp 97% rise in expenses the next year.

ACID receives additional revenue from:

- Out-of-district water transfers
- Special district property tax from Shasta and Tehama counties
- Interest and principal from the one-time sale of water rights in 2022
- Water Efficiency, Habitat Restoration, Fish Habitat and Planning Grants
- FEMA reimbursement
- Penalties

In 2022 California experienced a severe drought. To conserve water, the BOR reduced that year’s annual water allocation for ACID by 82%. The ACID board made the decision to cancel the 2022 irrigation season and chose to sell the remaining water rights for \$7.5 million. While the decision was difficult for water customers, it gave ACID a financial lifeline by covering



expenditures outpacing revenue. However, this represents a diminishing return as the lump sum is drawn down.

The grand jury is interested in ACID grant applications from 2021-2026. The grand jury requested information concerning the status of the \$13,332,483 of accepted and pending grants. ACID has not communicated that information.

Reducing Maintenance Expenses

ACID's infrastructure was constructed more than a century ago. While these systems were engineered to serve agricultural communities, the age and complexity of the infrastructure now require a more proactive approach to maintenance and risk management. Establishing a formal written inspection and maintenance schedule is a critical step toward operational reliability, public safety, and financial sustainability.

The district includes a large and complex network consisting of:

- A diversion dam
- Over 30 miles of main canal, approximately 90% earthen
- A pump station
- Six inverted siphons
- Three aqueducts, including one exceeding 1,200 feet in length
- Multiple crossings beneath a freeway, state highway, and several major roadways

Planned maintenance is significantly more cost-effective than emergency repairs. A formal schedule allows the district to prioritize repairs based on risk conditions, plan capital improvements strategically, spread costs over multiple budget cycles, and help avoid expensive emergency repairs. This approach improves financial predictability and responsible use of district resources.

A formal Inspection and Maintenance Schedule would also allow for early detection of structural issues: canal erosion, structural deterioration, seepage, sediment accumulation, concrete cracking, joint failure, and mechanical wear in pump stations, enabling staff to prioritize work. Early detection enables inexpensive repairs before damage progresses to catastrophic failures.

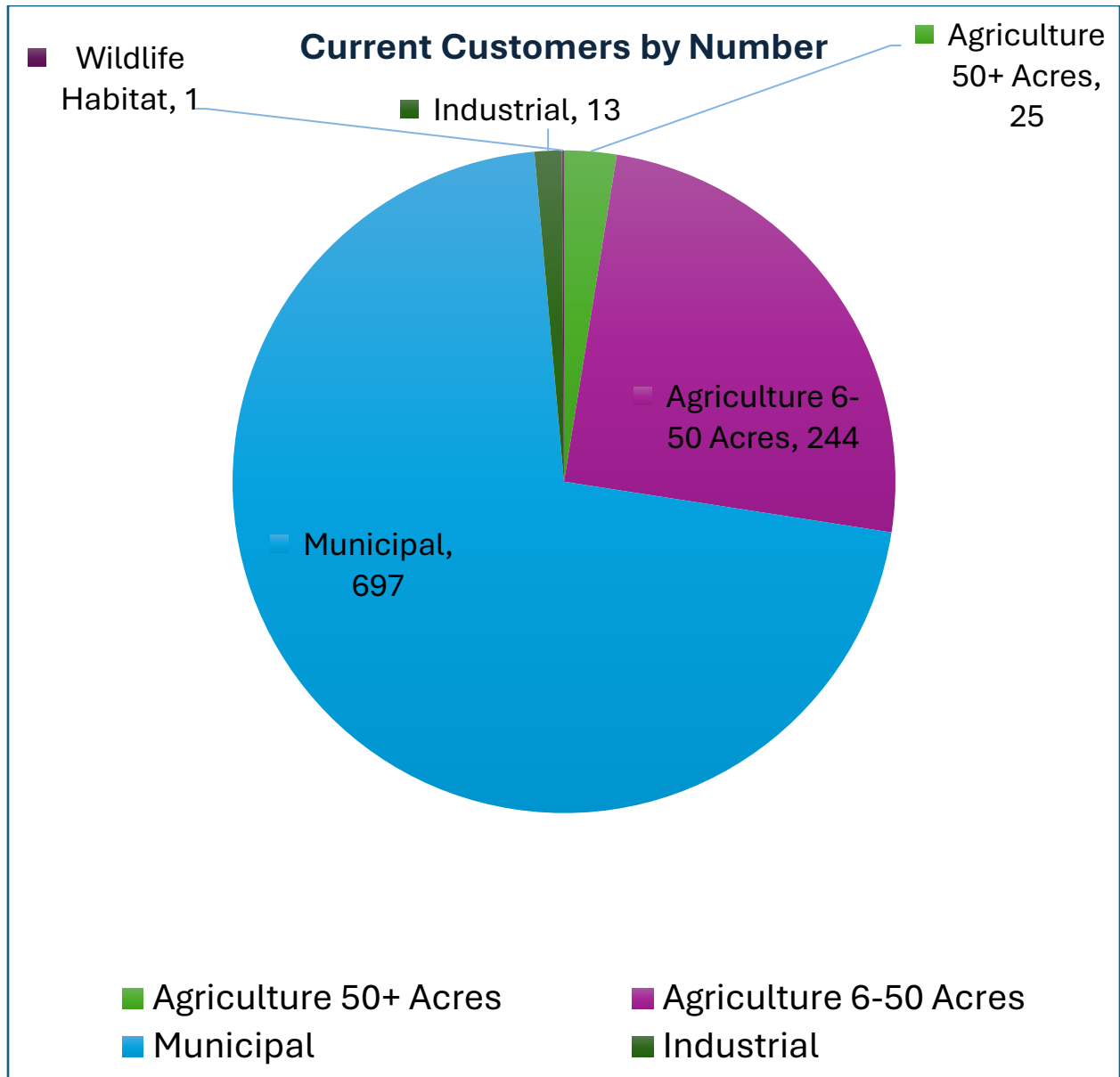
Proper Identification of Existing Customers

ACID serves a diverse mix of agriculture, municipal, industrial, and wildlife habitat users in their customer base. The total district acreage primarily serves agriculture, with 25 large agriculture customers operating properties greater than 50 acres, collectively accounting for 3,421 acres of irrigated land. In addition, 244 agricultural customers manage mid-sized parcels ranging from 6 to 50 acres representing another 3,306 acres within the district. These agricultural operations form the backbone of the district's water demand and illustrate the continued importance of irrigated farming to the region's economy and land use.

Complementing the agricultural sector, the district also serves a significant number of smaller municipal and specialized customers. A total of 697 municipal customers operates on parcels of

5 acres or less, together covering 1,787 acres and representing the largest group by number of accounts. The district also supplies water to 13 industrial customers with various parcel sizes totaling 84 acres, supporting local commercial and industrial activity. In addition, the district serves one wildlife habitat customer encompassing 233 acres, demonstrating the district's role in supporting environmental stewardship and habitat preservation alongside agriculture and community water needs.

Current Customer Composition



Customer Type	Number of Customers	Total Acreage	Percent of Customers
Agricultural	269	6,727	27.4%
Municipal	697	1,787	71.1%
Industrial	13	84	1.3%
Wildlife Habitat	1	233	0.1%
TOTAL	980	8,831	100%

Although historically viewed as an agricultural district, over 70% of customers are municipal users by count. Currently ACID lumps all users together as simply ‘agricultural users’ and charges all customers the same rate based on the acreage to be irrigated. The BOR contract recognizes there are multiple types of users, and that the pattern of water use is shifting from purely agricultural to various other types of users. The grand jury recommends that ACID recategorize customers into agricultural, wildlife habitat, industrial and municipal. This would also allow for ACID to market and seek to expand its customers base to new customers who are not strictly agricultural.

Flood Management and Preparedness



Canal crossing Olney Creek normal operations; December 2025 flood

In December 2025 the North State experienced what has been labeled a “once-in-a-50-year storm event.” Rainwater overwhelmed some drainage systems and prompted emergency responses across California. In Redding, police and fire crews conducted about 60 water-related rescues during the peak of the storm. Shasta County Sheriff Michael L. Johnson declared a State of Emergency due to flooding across numerous Shasta County communities.

This recent experience reminds us that in our communities we are reliant on our water transport infrastructure to help provide drainage for flood water management. The ACID canal plays an

important role in providing some of this management through numerous surface water drains that empty directly into the canal.

ACID is liable for any of its own infrastructure failures that might affect adjacent properties. The grand jury found instances where municipal and other inputs are directed into the canal, some without the knowledge of ACID staff or users. Identifying all inputs is essential to a comprehensive flood management and preparedness plan. Having policies and procedures in place to address any needed flood water diversion and flow adjustments as well as a flood risk communication plan to directly communicate with residents located adjacent to the canal is vital.

FINDINGS

- F1. ACID has operated at a deficit for nine out of the previous ten years.
- F2. ACID is in the process of addressing approximately four years of deferred maintenance.
- F3. ACID inaccurately categorizes a 100% agricultural customer base.
- F4. ACID lacks any formal flood management and preparedness plan for the canal.

RECOMMENDATIONS

- R1. Implement a written plan to decrease expenditures and increase revenue by April 2027.
- R2. Implement a written schedule for ongoing inspection and canal maintenance by April 2027.
- R3. Develop a written schedule for capital improvements and modernization of infrastructure by April 2027.
- R4. Recategorize customers into agricultural, wildlife habitat, industrial, and municipal by April 2027.
- R5. Target new categories and market service to prospective customers by October 2027.
- R6. Implement a written district flood management and preparedness plan and provide training for staff, customer base, and any other impacted parties by April 2028.

REQUEST FOR RESPONSE

Pursuant to Penal Code §933 & §933.05, the grand jury requests responses as follows:

From the following governing bodies within 90 days:

- ACID Board of Directors as to F1, F2, F3, and F4 within 90 days.
- ACID Board of Directors as to R1, R2, R3, R4, R5, and R6 within 90 days.

BIBLIOGRAPHY

Interviews

- Leadership staff, ACID

Documents

- Diversion Schedule indicating contracted total to be diverted, submitted to the Bureau of Reclamation 2021-2025
- Monthly operating schedules 2021-2025
- Anderson-Cottonwood Irrigation District Water Conservation Plan 2024-2025
- Map of ACID Divisions
- Maintenance Spreadsheet 2026
- Minutes from board meetings
- Customer list with acreage
- Surface Water Delivery Measurements 2021-2025
- Record of Grant Applications 2021-2025
- LAFCO ACID Approved Plan
- ACID annual audit reports 2021-2024
- Bureau of Reclamation Contract
- Provost & Pritchard reports
- Sheriff news release 12/22/2025, KRCTV
- Resolution of the Shasta Local Agency Formation Commission Adopting the Municipal Service Review & Sphere of Influence Update of the Anderson Cottonwood Irrigation District (06/2023)

Reports issued by the Grand Jury do not identify individuals interviewed. Penal Code §929 requires that reports of the Grand Jury not contain the name of any person or facts leading to the identity of any person who provides information to the Grand Jury.