



# SAN JOAQUIN COUNTY PUBLIC WORKS DEPARTMENT

Working For You

2022-2023 Annual Report





# **DIRECTOR'S MESSAGE**

On behalf of the more than 450 dedicated professionals that make up the San Joaquin County Public Works Department, it is my privilege to present our 2022-2023 Annual Report. Every resident, property owner, business, and visitor of San Joaquin County relies on Public Works each day for services that often go unnoticed. Whether it's ensuring clean drinking water, reducing flood risk, providing a safe and well-maintained roadway system, or providing reliable and economical garbage and recycling services - Public Works is working for you - rain or shine.

Our overall mission is to plan, design, construct, operate and maintain the County's public infrastructure, which includes the County's public roadway, water, wastewater, flood management, fleet, and solid waste disposal systems. We manage these important systems in an innovative and cost-effective manner to protect public health and welfare and to preserve the County's financial investments in these systems.

Over the past year, our Public Works team had its hands full managing many vital needs and challenges within our community, including responding to major storm events, improving water supply reliability, reducing flood risk, and enhancing traffic safety and mobility for our community, to name a few. This report is intended to provide an overview of key contributions to the community our Public Works team made this year. The following pages will give you a sense of the variety and importance of our accomplishments over the past fiscal year.

I am extremely proud of our outstanding Public Works team and am confident that our collective efforts will continue preserving and enhancing the quality of life for residents, businesses, and visitors in San Joaquin County. We look forward to continuing to provide exceptional customer service in the coming year and for many years to come.



Sincerely,

Fritz Buchman, Director

San Joaquin County Department of Public Works

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# MEET OUR EXECUTIVE TEAM



Fritz Buchman
Director



Alex Chetley
Deputy Director
Development



David Tolliver
Deputy Director
Operations



Najee Zarif
Deputy Director
Engineering



Kristi Rhea
Deputy Director
Administration

# **ABOUT PUBLIC WORKS**

The primary mission of the San Joaquin County Public Works Department is to enhance the community's quality of life by protecting its investment in the County's roadway, fleet, water, wastewater, flood control, utilities, drainage and solid waste disposal systems. All of this is done by a staff of over 450 employees, both in the field and in the office, and with an operating budget of about \$260 million.

Public Works is overseen by the Director and an Executive Team composed of four Deputy Directors. The Executive Team is responsible for overseeing 21 budgets in 18 divisions/units which are organized into four groups: Development, Operations, Engineering, and Administration.

#### **KEY RESPONSIBILITIES**

120

MILES OF UNDERGROUND FACILITIES

1,645
MILES OF ROADW.

1,120

FLEET VEHICLES/EQUIPMENT

265

**BRIDGES** 

420

MINOR STRUCTURES (SMALL BRIDGES)

100+

SPECIAL DISTRICTS

3

COUNTY-OWNED WASTE DISPOSAL & RECYCLING FACILITIES

323

MILES OF WATERWAYS / CHANNELS

#### **KEY OVERSIGHT AREAS**

- ► Public infrastructure planning, design, construction, and maintenance
- ► County vehicle and equipment maintenance
- ► County solid waste program management
- ► Water resources planning and flood management
- ► County Surveyor's office services
- ► Private development project review

# 2023 WINTER STORM RESPONSE

#### All Hands on Deck

We were ushered into 2023 by a tremendous series of storms over two and a half weeks, which brought wind and record amounts of rainfall that caused flooding, power outages, road closures, downed trees, and levee damage in numerous locations throughout the County. In response, our Public Works team leapt into action. Field crews and support staff were deployed 24 hours per day for several weeks, often in terrible weather conditions, to address a myriad of challenges brought on by the storms.

Our crews oversaw critical multi-million dollar infrastructure repairs involving reconstruction of roads, culvert crossings, and bridge embankments at seven locations. Repairs for a major bridge washout on MacArthur Road and a major roadway washout on Kasson Road with a total value of \$1.1 million were completed within four weeks.

Public Works provided a wide variety of assistance to the community during and after the storms, ranging from closing and opening roadways, clearing downed trees, keeping drains clear, repairing levee damage, addressing flooding issues, assessing damages, engaging repair contractors, keeping our street closure notification system updated in real time, providing timely and relevant social media posts, and a multitude of other actions to protect lives and property.

After the storms, Public Works staff held community meetings in various areas of the County to discuss the flood response, future flood risk reduction efforts and opportunities to evaluate future improvements to reduce flooding. Staff have also worked closely with landowners throughout 2023 to restore historical flow capacities in local creeks and streams by removing debris, which will help to further reduce flooding by keeping flows within the channels.

#### **PUBLIC WORKS 2023 STORM RESPONSE**

120+

ROADS CLOSED/REOPENED

FALLEN TREES CLEARED

INFRASTRUCTURE REPAIRS



Vernalis Road Repair



Arbor Mobile Home Park Flood Response



MacArthur Road Bridge Washout



Airport Way Bridge Repair

# **DEVELOPMENT SERVICES**

Development Services has four divisions: Public Services, Surveyor, Community Infrastructure Engineering and Water Resources.

#### 2022 - 2023 Development Services Accomplishments

- Received California Department of Water Resources approval for the Groundwater Sustainability Plan (GSP) for the Eastern San Joaquin Subbasin. The GSP lays out a strategy to achieve sustainable groundwater use for the subbasin by 2040. Secured \$7.6 million in state funding for projects identified in the GSP, including \$3.3 million to develop the County's Mokelumne River Water Rights application.
- In conjunction with the County's Delta team and the Delta Counties Coalition, successfully
  advocated against a legislative proposal by the Newsom administration to streamline the
  environmental approval process for the state's harmful and wasteful Delta Conveyance Project.
- Completed design and began construction on the \$3 million Trichloropropane (TCP) water treatment project in the Raymus Village Maintenance District.
- Received \$2.25 million in State funding for the Acampo Area Drainage Innovation Project to reduce flood risk in a disadvantaged community hit hard by the 2023 storms.



1,032

ENCROACHMENT PERMITS PROCESSED

431

SURVEYING DOCUMENTS REVIEWED AND APPROVED

1,393

TRANSPORTATION PERMITS ISSUED

258

DEVELOPMENT/PLANNING APPLICATIONS PROCESSED

21

CITY AND COUNTY SUBDIVISION MAPS TOTALING 2,155 LOTS REVIEWED AND APPROVED



San Joaquin County Delta Advocacy



TCP Water Treatment Project



Acampo Area Flood Improvements

# **DEVELOPMENT SERVICES**

#### 2022-2023 Development Services Accomplishments (continued)

- Continued support on the County's Airpark 599 development project, for which two buildings totaling more than 2 million square feet are under construction. Development Services staff have been coordinating closely with the County Administrator's Office, the Community Development Department and the developer on various technical reviews.
- Organized the 24th Annual Coastal Cleanup Day, where 300+ volunteers cleared over eight tons of trash and debris from local inland waterways across eight different sites.
- Completed construction on the \$12.3 million Upper Mormon Slough Erosion Repair project, which will reduce flood risk for the local community and State Highway 26.
- Received approval for nearly \$6 million in State drought relief grant funds that will help fund
  major water line replacement projects in the Lincoln Village and Colonial Heights Maintenance
  Districts. The funding will also be utilized to design and construct a replacement water system
  in the Morada Acres Maintenance District.



Mormon Slough Erosion Repair



Airpark 599 Development Project Technical Reviews



2022 Coastal Cleanup

# **DEVELOPMENT SERVICES**

#### **Grants and American Rescue Plan Act (ARPA) Funding**

#### **Grant Funding**

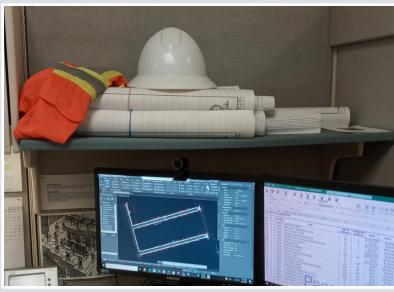
- ► Completed an agreement with DWR to secure **\$6.5 million** in grants for County, North San Joaquin Water Conservation District, and City of Stockton water projects.
- ➤ Secured \$850,000 in grant funding from the California Department of Water Resources to enhance flood preparedness and response functions during large storm events.

#### **ARPA Funding**

- ▶ **\$2.6 million** to develop additional remote monitoring and control systems for Public Works managed utility districts.
- ▶ \$2.1 million to fund wells, monitor groundwater levels and help understand groundwater/surface water interactions to further implement the Groundwater Sustainability Plan for the Eastern San Joaquin Subbasin.
- ▶ \$4.5 million for the Lincoln Village and Colonial Heights maintenance district water line replacement projects.
- ▶ \$750,000 for emergency power generators in three special districts to help ensure continuous operation of the water systems during power failures.
- ▶ \$200,000 for sewer improvements in the Pacific Gardens Sanitary District that will help improve sewer transmission reliability and avoid costly overflows due to system inundation.



**Emergency Power Generator Grant Funding** 



Engineering, Development and Survey Document Reviews

# **OPERATIONS**

Operations has five divisions: Road Maintenance, Fleet Services, Solid Waste, Channel Maintenance, and Utility Maintenance.

#### 2022 - 2023 Operations Accomplishments

- Upgraded 16 County-maintained traffic signal systems with a hydrogen-powered backup system, which allows for indefinite continued signal operation in the event of a power failure. This system will help ensure traffic safety during power outage events while allowing staff to respond to other priority concerns. The remaining 15 signal systems are scheduled to be completed during fiscal year 2023-2024.
- Fleet Services was recognized as having the 3rd Best Fleet in the nation by Government Fleet Magazine and American Public Works Association Leading Fleets. This recognition is due in part to Fleet's effective asset management strategy for replacing older, higher operating cost vehicles with newer, cleaner, and more efficient vehicles.
- Secured grants totaling \$70,000 to purchase hybrid/electric vehicles to reduce vehicle procurement costs, reduce vehicle fuel costs, and improve air quality by reducing tailpipe emissions.
- Planned an Off-Grid Solar Charger System project at San Joaquin General Hospital that will consist
  of five main parts: solar panels, charge controller, battery bank, off-grid invertor, and AC Level Two
  charging stations. The Solar EV Charger will provide for 40 vehicle charge sessions per day.



Traffic Signal Power Back Up System



San Joaquin County Road Improvements



- ▶ 1,200 miles of roadway striping painted
- ► 4,400 painted roadway legends updated
- ► 11,750 traffic signs maintained
- ▶ 130 miles of roadways crack-sealed
- ▶ 151 miles of roadways chip-sealed
- ► 3,820 trees maintained
- 6,063 square feet of sidewalk repaired
- 2,700 tons of illegally dumped debris removed from the road right-of-way
- ➤ 53 older, high-maintenance vehicles replaced



Fleet Services Division Nationally Recognized as 3rd Best Fleet

# **OPERATIONS**

- Began construction of a new landfill module at North County Landfill in May 2022 for a total anticipated expansion cost of \$6.6 million. The construction consists of the installation of a landfill liner, leachate collection and monitoring systems, and storm water drainage. The new module is anticipated to accommodate five to eight years of new waste inflow.
- Enhanced neighborhood safety and cleanliness by increasing the frequency of street sweeping from monthly to twice per month in residential neighborhoods.
- The Solid Waste team volunteered their time and skills to reuse, repurpose, and repair 83 discarded bicycles this year and donated them to the community to benefit youth in need. Recipient organizations this year include the Child Abuse Council, Mary Graham Hall, and various other non-profit and church groups.
- Served over 360,000 customers at the County's transfer station and landfills.
- Collected, recycled, and donated 25,000 gallons of paint to the community.
- Installed a replacement pump and motor at Well #2 of the Acampo Maintenance District to maintain potable water supply to the residents of Acampo.
- Provided safe, reliable, and economical utility services, 24 hours a day, 7 days a week, to customers in more than 100 districts located throughout the County's 1,448 square miles.

#### 2022-2023 OPERATIONS OVERSIGHT

30

WATER DISTRIBUTION SYSTEMS

52

WATER WELLS OPERATED

500,000

FEET OF SEWER LINES CLEANED.

475

SERVICE CALLS

9

SEWER COLLECTION SYSTEMS

3

SEWER TREATMENT PLANTS

5,997

WATER SERVICE CONNECTIONS

<u>5,431</u>

SEWER SERVICE CONNECTIONS

70

STORM DRAINAGE PUMPS



THOR Organic Waste Processing



Solid Waste Team's Repaired Bicycles



Acampo Well #2 Replacement Pump

# **ENGINEERING**

Engineering has four divisions: Transportation, Design, Bridge, and Field Engineering.

#### 2022 - 2023 Engineering Accomplishments

- Obtained Board of Supervisors approval of a Local Road Safety Plan that provides a collaborative and data-driven roadmap to improve roadway safety and prevent fatal and serious injury collisions on unincorporated San Joaquin County roadways.
- Completed repairs on the embankment for the westbound approach to the Howard Road Bridge over San Joaquin River. This bridge serves as direct access to Union Island and Roberts Island from Interstate 5.
- Completed construction of the \$4.9 million Pershing Avenue Improvements Project, which installed
  a two-way turn lane and over one mile of sidewalks and bicycle lanes between Lincoln Avenue
  and Thornton Road. These improvements will enhance traffic operations and safety for motorists,
  pedestrians, and bicyclists along this critical corridor.
- Completed construction of the \$1.8 million Wimer Road Bridge Project by replacing the existing aging bridge with a new two-lane concrete structure and realigning the approach roadway.
- Secured \$4.7 million in grant funds to support the creation of a master plan for pedestrian improvements on over 300 miles of roads, and engineering and construction of new active transportation infrastructure on Lower Sacramento Road and adjacent to Harrison Elementary School.
- Completed construction on the \$2.8 million Byron Road/Grant Line Road Roundabout west of Tracy in support of the Department's goal of eliminating fatal and severe injury collisions.
- Secured a \$2.5 million federal earmark for the Grant Line Road Realignment Project, the County's
  highest priority transportation project, which supports goods movement and economic development in
  the Tracy area.
- Awarded construction contracts for 21 capital improvement projects totaling \$19.4 million.



The Country Club Blvd. Complete Streets Corridor Plan will develop a community-based vision for active transportation improvements along Country Club Boulevard between Interstate 5 and Pershing Avenue. The Plan will focus on the implementation of complete streets to better integrate non-motorized users in the community and identify sustainable transportation improvements that support healthier lifestyle choices, promote a livable community that results in greater mobility for users of all ages and abilities, enhance safety, and increase access to employment opportunities.



Byron Road/Grant Line Road Roundabout



Country Club Blvd. Community Meeting



Pershing Avenue Improvements

# **ADMINISTRATION**

Administration has several functional areas: Strategic Initiatives, Fiscal, *Personnel, Geographic Information Systems (GIS) and Administration Support Services (document processing, records management).* 

#### 2022 – 2023 Administration Accomplishments

- Through the leadership of the County Administrator's Office, assisted with the County's SEE IT, REPORT IT, STOP IT illegal dumping campaign.
- Established the Public Works Academy staff development program consisting of monthly educational sessions that cover a variety of topics ranging from budget preparation to interviewing techniques.
- Established quarterly GIS user training classes to increase staff awareness of GIS technology and available tools.
- Completed pilots for Capital Improvement Program development and an Asset Management/ Work Order system that will inform the anticipated final launch of these efforts during the 2023-24 fiscal year.

# Report Illegal Dumping at: "My San Joaquin" App - OR - 209-468-4400 SSC SANJOAQUIN Grant Interest of the County of the County

San Joaquin County's Illegal Dumping Prevention Campaign





Presentation of Department's Strategic Initiatives

#### PUBLIC WORKS CONTACT INFORMATION



For immediate assistance from the Public Works Department, download the "My San Joaquin" App or visit www.sjgov.org/department/pwk/request.

Channel Maintenance	209-468-9698	Sidewalk Safety Repairs	209-468-3074
Engineering	209-468-3000	Solid Waste	209-468-3066
Fleet Services	209-468-3099	Storm Pump Problems	209-468-3090
Flood Control Benefit		Stormwater Illicit Dumping	209-468-3055
Assessment Information	209-468-9596	Street Light Repair	209-953-7618
Flood Zone Information	209-468-9596	Street Tree Safety Trimming	209-468-3074
Household Hazardous Waste Program	209-468-3066	Surveyor	209-468-3000
Improvement Plans	209-468-3023	Traffic Engineering	209-468-3035
Landfills - Hours & Acceptable Wastes	209-468-3066	Traffic Impact Mitigation Fees	209-468-3023
Main Switchboard	209-468-3000	Traffic Sign Repairs	209-468-3074
Pothole Repairs	209-468-3074	Used Oil Recycling Information	209-468-3066
Private Development Requirements	209-468-3023	Utilities Maintenance	209-468-3090
Public Improvement Requirements	209-468-3023	Water Account Status Information	209-468-3009
Real Property Information	209-953-7455	Water Mitigation Fees	209-468-3023
Road and Traffic Maintenance	209-468-3074	Water Quality, Leaks, Supply, & Wells	209-468-3090
Road Permit Inspection	209-468-3022	Water Resources	209-468-3000
Road Right-of-way Widths	209-468-3049	Water Service Connections	209-468-3009
Sanitary Sewer Problems	209-468-3090		









#### **PUBLIC WORKS DEPARTMENT**

**Working for YOU**