



Date: January 17, 2023
To: Lilly T. Simmering, Deputy County Executive Officer
From: James Treadaway, P.E. & S.E., Director of OC Public Works (OCPW)
Subject: 2022 OCPW Accomplishments

The following is a list of notable accomplishments for OCPW for 2022 (January--December). Also included is a comprehensive list of accomplishments spanning all OCPW service areas for the year.

Delivering Major Projects

County Administration North (CAN)

- Completed construction of the County's new energy-efficient administrative building (250,000 sq. ft.), County Board Hearing Room, and adjacent public parking lot.

Bond Fire Burn Area Emergency Debris Removal Project

- Completed an emergency debris removal project in Silverado Canyon following a series of major mud and debris flows in the Bond Fire burn area in late 2021/early 2022.

Large Mammal Exhibit at the OC Zoo (on behalf of OC Parks)

- Completed construction of the new 2-acre large mammal exhibit that features decorative concrete structures, waterfall feature, and an animal-only bridge to allow large cats to pass above zoo visitors.

Multipurpose Rehabilitation Center (on behalf of OC Probation)

- Completed construction of indoor recreation, education, and visitation center to support Juvenile Hall programs.

Capital Improvement Project (CIP) Approval

- Received Board of Supervisors' approval of CIP valued at \$1.24 billion for flood capital and maintenance, road capital and maintenance, external road projects, bikeways, and OC Parks and OC Public Library projects.

Department Initiatives

"A" Grades for Beach Water Quality

- Received A grades from Heal the Bay for water quality at 96% of Orange County's 115 monitored beaches during summer dry weather and 86% during winter dry weather. Orange County beaches earned 19 spots on the "Honor Roll", more than any other county.

Enhancing Safety

Dedicated Focus on Department Safety

- Established the department's first Safety and Risk Manager position to help deliver unified oversight of OCPW's safety operations and protocols. This critical position will establish increased safety coordination and consistency across the department's 10 service areas.

OVERALL ACCOMPLISHMENTS (Comprehensive List)

OC Construction

\$201.5 million: Value of projects for which we managed construction and materials testing:

- Incorporated Local Assistance Procedures Manual processes for federally funded projects in the Design and Construction Phases of the Project Delivery Manual.
- Incorporated the updated Construction Management Manual in the Construction Phase of the Project Delivery Manual.
- Updated the Construction-Specific Code of Safe Practices (Health & Safety Plan Section 2 Supplement to OCPW's Code of Safe Practices).
- Performed approximately 4,000 materials tests in support of OCPW's Capital Improvement Program (CIP) and Maintenance Improvement Program (MIP), Development Services, and customer agency projects.
- Provided materials testing services to the City of Santa Ana and City of Costa Mesa.
- Completed 32 MIP projects totaling \$15.6 million.
- Maintained a Pavement Condition Index (PCI) rating of 80.
- Conducted pavement maintenance in the unincorporated areas of South Anaheim Island, Ladera Ranch, Brea, East Tustin, Hidden Ranch, Redhill, and Lemon Heights.
- Completed an emergency sediment removal project in Silverado Canyon following major debris flows in the Bond Fire burn area in late 2021/early 2022.

Awarded design phase services contracts for the following projects:

- OC Loop Segments O, P, & Q Bikeway (\$5,487,343)
- Los Patrones Parkway Extension (\$2,163,771)
- East Garden Grove-Wintersburg Channel Bridges (\$256,000)
- Dana Point Harbor Rockfall Mitigation (OC Parks \$700,000)

Awarded construction contracts for and started construction on the following projects:

- Mile Square Regional Park Golf Course to Park Conversion Phase I (OC Parks \$11,375,132)
- Laguna Canyon Channel Replacement (\$9,737,779)
- Santa Ana Gardens Channel Bikeway Extension (\$4,178,000)
- Loma Ridge Road Widening (County Emergency Operations Center access road) (\$3,377,469)
- Traffic Management Center Fiber Optic Expansion (\$2,446,243)
- William Mason Regional Park Front Entry Roadway Redesign & Repair (OC Parks \$1,216,489)
- Olive Heights Sidewalk Gap Closure, Orange (\$372,281)
- Kellogg Drive Sidewalk Gap Closure, Yorba Linda (\$161,422)
- ADA Upgrades Midway City (\$262,521)
- O'Neill Regional Park Amphitheater (OC Parks \$293,950)

Completed construction of the following projects:

- OC Loop Bikeway, Segment H, Yorba Linda and Anaheim (\$2,586,955)
- Midway City ADA Upgrades (\$235,060)
- Kellogg Drive Sidewalk Gap Closure, Yorba Linda (\$153,526)
- Baja Panorama Pavement Rehabilitation, North Tustin (\$89,375)
- O'Neill Regional Park Amphitheater (OC Parks \$301,373)

Completed parking lot projects for customer agencies:

- OC Public Libraries Administrative Headquarters Parking Lot (OCPL \$38,009)
- Old Court House Parking Lot (OC Parks \$64,922)
- Carbon Canyon Regional Park (OC Parks \$1,454,211)
- Rancho Santa Margarita Library (OCPL \$15,393)
- Walnut Street Parking Lot Stall Expansion (SSA \$38,063)
- Intake Release Center Parking Lot Seal Coat (OCSD \$44,286)
- Multipurpose Rehabilitation Center (OC Juvenile Hall) Parking Lot Restriping (OCSD \$44,038)

OC Development Services

- Maintained continuous, uninterrupted permitting service to customers throughout the COVID-19 pandemic with permit activity consistent with 2021 numbers, including:
 - **3,200:** Planning reviews
 - **7,000:** Plan check reviews
 - **12,000:** Issued permits and revisions
 - **20,000:** Customer portal inquiries and requested changes
 - **51,200:** Building inspections
 - **\$332,000,000:** Total valuation of building construction permits
 - **\$21,200,000:** Fees collected on issued permits
- Played critical role in completion of major projects:
 - County Administration North: 400 Civic Center-New 6 story County building
 - Casa Paloma: Affordable 71 unit apartment community, 4 story modular building
 - County Juvenile Hall Multipurpose Rehabilitation Center: 26,000 sq. ft. building
- Land Management System (LMS): Completed enhancements for inspection services back-office users resulting in enhanced online services related to inspection requests status and certificates of use and occupancy. Completed enhancements for permit package management, including mass editing/bulk updating.
- Completed updates to the County’s General Plan Land Use Element and Zoning Code to establish adequate residential development capacity to meet the County’s Regional Housing Needs Assessment (RHNA) allocation.
- Completed adoption of the 2022 California Building Code.
- Updated Street and Storm Drain Checklists for the Ranch and General Communities.
- Processed 11 Final Maps and 10 Vesting Tentative Maps for approval of the Ranch Plan planned community.

OC Environmental Resources

OC AGRICULTURAL COMMISSIONER / SEALER OF WEIGHTS AND MEASURES

- **\$930,515:** Amount expected to be received from the State’s Unclaimed Gas Tax Fund due to meeting the five-year average maintenance of effort (MOE) in resource allocation to support Orange County’s local agricultural industry and for the protection of residents and the environment from the use of pesticides.

Weights and Measures

- **10,437** of the 20,059 retail motor fuel devices in the county inspected at 316 gasoline stations.
- **1,621** of the 4,561 registered retail locations in the county inspected to verify consumers pay the advertised or posted price.

- The Weights and Measures section working collaboratively with District Attorney Offices from Sonoma, San Diego, and Marin and with Weights and Measures Offices from Alameda, Contra Costa, Imperial, Marin, Napa, Orange, Sacramento, San Diego, San Luis Obispo, Santa Barbara, Santa Clara, Santa Cruz, San Diego, Shasta, Sonoma, Stanislaus, and Ventura counties successfully settled a case and placed a permanent injunction against Target Corporation for overcharging consumers and making false or misleading statements with regards to the price of an item. The total settlement was for \$5,373,618.81. The settlement will be used to support consumer protection programs and to pay for the incurred cost of all agencies involved.

Pesticide Use Enforcement

- **2,974:** Pesticide use safety inspections conducted on various types of firms, including pest control businesses, identifying 368 safety violations.
- **98:** Pesticide related investigations conducted in response to complaints of pesticide misuse or pesticide human exposures.
- Collaborated with the Structural Pest Control Board and industry partners to propose Assembly Bill 2452 which extends the Structural Fumigation Enforcement Program (SFEP) until January 1, 2024. The SFEP program helps collect approximately \$136,000 from industry to help fund additional inspection activities at the County level to increase oversight and safety of the 17,000 structural fumigations each year.

Integrated Pest Management and Fire Hazard Reduction Weed Abatement Program

- **Over \$62,000:** Grant awarded from the CA Department of Food and Agriculture for control of emergent noxious weeds that could pose a risk to sensitive habitats.
- **1.4 million square feet (75 parcels):** Area of private and County-owned property serviced using weed abatement activities to reduce the risk of property loss caused by wildfires.
- **Over 230 miles:** Residential roadways in unincorporated county areas where OCPW eliminated the application of herbicides and implemented a weed steaming program.
- Exceeded all National Pollution Discharge Elimination System permit related water quality testing as part of an Aquatic Pesticide Application Plan administered by State and Regional Water Quality Control Boards.

Agricultural Services

- **Over 45,348:** Incoming plant shipments from other states and countries inspected at shipping distribution centers and plant nurseries in the county. Inspectors issued 202 Notice of Rejections and intercepted 86 pests of economic importance, helping protect our agricultural industry and natural environment.
- **Over 543:** Plant shipments inspected and certified by Orange County Agricultural Certifying Officers (ACO) for commodities exported through the United States and to other Countries ensuring that the plant shipments and plant products originating from Orange County were free from exotic pests and diseases.

OC WATERSHEDS

OC Countywide Compliance Program

- **OC Mitigation Program:** California Department of Fish and Wildlife provided sign-off of OC Public Works' Peters Canyon Wash (PCW) Mitigation Project on August 23, 2022, and the US Fish and Wildlife Service provided sign-off on December 16, 2022.
 - The PCW mitigation is a 14.96-acre riparian habitat enhancement project to mitigate impacts resulting from implementation of and ongoing maintenance associated with the 2012 San Diego Creek O&M Manual for Reach 2 (Campus Drive upstream to 405 Freeway).
 - The site is known to support 10 territories of the federal and state-listed endangered Least Bell's Vireo.
 - The Mitigation Program will now initiate the long-term [in perpetuity] management phase of this site.

- **OC Green Infrastructure:** Completed the initial phase of a project evaluating County-owned facilities for green infrastructure retrofit opportunities.
 - This effort began with an inventory of 140 facilities utilizing a combination of geospatial data, modeling tools, and site visits. Prioritization metrics were developed that considered multiple benefit categories including water quality, flood control, water supply, economics, and funding opportunities.
 - The final list identified the highest ranked projects in each Supervisorial District.
 - These projects will move on to the next phase, development of conceptual design plans during 2023.
- **OC NPDES Compliance:** (Data is based on regulatory reporting requirements from the 2021--2022 fiscal year).
 - Conducted stormwater inspections at 67 municipal facilities, 10 industrial facilities, and 20 commercial facilities. Responded to and/or forwarded 212 water quality complaints/notifications.
 - Three spill response incidents impacting OCFCD right-of-way in 2022 required large-scale, multi-agency responses including: US EPA, CA DFW Oil Spill Prevention and Response Unit, OC HCA HazMat Response Team, as well as multiple city public works departments.
 - Issued stormwater enforcement to 10 responsible parties within the County and/or OCFCD's jurisdiction.
 - Removed 10,581 pounds of trash from OCFCD facilities before it reached the ocean through the OCPW's Adopt A Channel Program.

Integrated Regional Water Management

- **Integrated Regional Water Management (IRWM) Implementation Grant Program Funding:** A stakeholder-driven review and prioritization of multi-benefit water resource projects for both North/Central and South OC IRWM groups resulted in two Proposition 1 Grant applications totaling over \$10 million in expected grant funds for projects in Orange County.
- **Aliso Creek Watershed Project Collaboration & Stream Rehabilitation:** The South OC IRWM led by County staff held two stakeholder meetings in May and June 2022, engaging 46 and 26 water agencies, non-profit, groundwater, wastewater, municipal, transportation agency, and resource agency staff, respectively.
- Significant progress was made after these working meetings on developing conceptual models for three target reaches and a master planning concept for the 5--6 miles of Aliso Creek from the Coastal Treatment Plant to Pacific Park Drive.

OC Stormwater Program

- **"A" Grades for Beach Water Quality:** Received A grades from Heal the Bay for water quality at 96% of Orange County's 115 monitored beaches during summer dry weather and 86% during winter dry weather. Orange County beaches earned 19 spots on the "Honor Roll", more than any other county.
- **Outreach Campaign Received Award:** The H2OC team (public education and outreach brand of the OC Stormwater Program) received an award for Outstanding Public Education and Outreach Program from the California Stormwater Quality Association for the "Tricks to Trash Cans" campaign to reduce trash accumulation around skate parks and engage youth in pollution prevention.
- **Monitoring and Reporting Program Elements Completed:** Required elements were successfully completed for each core NPDES and TMDL compliance program.
- **Santa Ana Regional MS4 Permit Renewal and Comment Submittal:** The Orange County Stormwater Program, along with other municipal permittees from North Orange County, San Bernardino County, and Riverside

County (the Tri-County Group), has been engaging with the Santa Ana Water Board on the Staff Working Proposal for the next MS4 permit. The Tri-County Group organized a series of facilitated meeting and workshops throughout 2022 to discuss new permit provisions that will impact the permittees. A comprehensive written comments package was successfully compiled and submitted to the Santa Ana Water Board in October 2022.

- **Newport Bay Fecal Coliform TMDL, Basin Plan Amendment for the Shellfish Harvesting (SHEL) Beneficial Use:** County staff, in coordination with the Newport Bay TMDL Funding Partners, worked with the Santa Ana Water Board on a Basin Plan Amendment to revise the schedule for attaining SHEL beneficial use in Newport Bay. The amendment was heard by both the Santa Ana Water Board and the State Water Resources Control Board, and ultimately approved in November 2022. This amendment extends the attainment date from December 2022 to December 2030 and will facilitate key studies and assessment of the regulatory issues in the intervening eight-year period.
- **Newport Bay Fecal Coliform TMDL, Source Investigation Study Design Implementation:** In February 2022, the Newport TMDL Funding Partners received approval to implement the Source Investigation Study Design for sources of fecal contamination in the Newport Bay watershed. This has led to County implementation of an extensive dry and wet weather field monitoring program that was completed in December 2022. The Source Investigation Final Report for this program will be prepared by February 7, 2023 to summarize the finding of the study and inform development of the Pollution Prevention Plan to mitigate and eliminate fecal sources.
- **Workforce Development:** To address the need for a larger trained workforce to meet increasing maintenance demands, the OC Stormwater Program helped facilitate the launch of a green stormwater infrastructure (GSI) training program within Orange County Conservation Corps.
- **Collaboration with Orange County Transportation Authority (OCTA):** OCTA invested in the development of a planning module within the OC Stormwater Tools platform, to support project planning and application for funding of regional stormwater capture/treatment projects through Tier 2 of the OC GO Environmental Cleanup Program.
- **Co-hosted H2O for HOAs Event:** The H2OC team partnered with Moulton Niguel Water District to organize and host the 2022 H2O for HOAs event held at the Crown Valley Community Center in Laguna Niguel on October 11, 2022.

Water Quality Improvement Plan (South Orange County)

- **Regional Watershed Project Planning:** A project planning team was formed, and multiple meetings and workshops were held to initiate the planning of regional multi-benefit watershed projects. As a result, a stormwater capture project providing benefit to a disadvantaged community in San Juan Capistrano is one of four projects the South OC Integrated Regional Water Management group is submitting for Prop 1 Round 2 funding.
- **Smart Watershed Network Project with Moulton Niguel Water District Completed:** Funded by a Future Supply Actions grant from the Metropolitan Water District of Southern California; this partnership project will inform the planning of stormwater runoff capture projects within Moulton Niguel Water District's service area.
- **Stream Change Analysis Completed Using Aerial Imagery:** Utilizing high resolution LiDAR (light detection and ranging) data, a change analysis was performed comparing stream conditions from 2016 to 2021, to evaluate the effectiveness of strategies being implemented to control stream alteration.

OC Facilities Design & Construction Management

John Wayne Airport Facility Improvements

- Rental Car Reconfiguration - Completed packages 1, 2, & 3 (\$12M)

- Terminal Roof Expansion Joint Replacement - Completed in November 2022 (\$600k)
- New On-Call Airport Architectural-Engineering Services - BOS approved on 12/20 (\$26M)
- Terminal Curtain Wall Modification - Completed in November 2022 (\$6.7M)
- Airfield Lighting & Signage Improvements - Completed in February 2022 (\$5.8M)
- Airfield Lighting Control System Data Relocation - Completed in November 2022 (\$100k)
- Completed Baggage Handling System Replacement Study in December 2022
- Completed JWA Capital Project SFP in September 2022
- Completed Initial Draft JWA CIP in December 2022
- West SIDA Gate Relocation - Completed in May 2022 (\$630k)
- Perimeter Fence Security Enhancement - Completed phases 1 and 3 in December 2022 (\$525k)
- Completed Power Generation & Distribution System Indexing in September 2022
- Completed Airport Power Generation & Distribution assessment in November 2022
- Completed Terminal Plumbing Assessment in November 2022
- Completed Terminal Grease Interceptor Assessment & Replacement Study in November 2022
- Completed Terminal Concessions Utility Assessment, Survey, & Improvement Study in December 2022

County Facilities Design and Construction

- County Administration North Building: Completion July 2022 (\$201M).
- Probation Multipurpose Rehabilitation Center (MRC) facility: Completion November 2022 (\$25M).
- OC Zoo Large Mammal Exhibit: Completion April 2022 (\$12M).
- Probation Youth Transition Center (YTC): Programming/Design Criteria phase began August 2022 (\$70M project cost estimate).
- County Hall of Administration Site Redevelopment: Demolition phase began September 2022 (\$17M).
- Public Library Projects: Completed renovations including ADA upgrades to San Juan Capistrano and Brea Libraries and initiated design services for Dana Point, Aliso Viejo, and Los Alamitos/Rossmoor Libraries.
- Orangewood Children and Family Center/Social Services Agency: Completed replacements of air conditioning and roofing and design of the kitchen refrigeration and ADA upgrades project.
- Health Care Agency (HCA) Campus at El Toro: Completed the Request for Qualifications (RFQ) and Request for Proposals (RFP) and selected the Design Build vendor and awarded project for \$78M. Project will include 68,000 SF office space and laboratory.
- OC Data Center: Completed installation of new interior HVAC units and installation of a new roof on the facility.
- OC Sheriff's Department/Brad Gates Building: Completed Phase 3 replacement of air condition mixing boxes (\$1.1M); replacement of domestic water booster pump systems; and replacement of the fire life safety system.
- Osborne Building/District Attorney's Office: Completed replacement of the domestic water booster pump systems.
- County's Veteran Cemetery in Gypsum Canyon: Completed the conceptual design phase, initial CEQA documents and submitted subdivision map with grading plans to the City of Anaheim. Construction of the 100 ft. flagpole was completed and dedicated to the Veterans on November 30, 2022. California State Legislature has approved the Gypsum Canyon site for the evaluation as a CAL VET cemetery.
- County Operations Center (COC) Building B - 2nd Floor Rehabilitation: Completed infrastructure replacements and interior improvements to the 2nd floor for the Veterans Service Office; Office of Aging; OCCS Administration; and Workforce and Economic Development (\$4M Rehab).
- Department Project Delivery Manual - Updated and added new additions to the manual and continuous product development.
- New On-Call Architectural-Engineering (AE) Services: Initiated replacement contracts for various professional service disciplines.
- Completed 95 facility maintenance projects totaling approximately \$5M, including:
 - Carbon Canyon Regional Park: Renovation of 4 tennis courts
 - Probation: Juvenile Hall hardening (security) enhancements
 - Multiple flooring and path of travel safety repairs

- o Multiple post water damage building rehabilitations

OC Facilities Maintenance & Central Utility Facility (CUF)

Central Utility Facility (CUF):

- Heat Recovery Steam Generator Economizers Replacement Project: Completed the removal and installation of the new Economizers at the CUF facility.
- Steam Line Replacement Project for Jail and Intake Release: Project awarded the Construction Manager at Risk (CMAR) contract to West Coast Air; Constructability review in progress.
- Gas Compressors Replacement Project: Contract Task Order (CTO) was issued and design in progress.
- CUF Phase I Indexing completed for migration of legacy computerized maintenance management system (CMMS) to the AiM asset management platform.
- Generated approximately 37,763 megawatt hours (MWH) of electricity; 339,543 metric million British Thermal Units (MMBtu) of thermal energy.

AiM / Computerized Maintenance Management System (CMMS)

- Launched new AiM asset management platform, an enterprise business solution that contains a database of usable square footage and capital asset information throughout all County facilities.
- System includes a newly refreshed space planning module which incorporates digital floorplans to manage office and common space utilization. The Space Management team is also developing a concept for incorporating asset tracking in 3D building models.
- Cost Tracking: All labor and materials costs for Facilities Maintenance are now being managed in the new system, and the team has a full year of data to gauge system effectiveness. Significant process was made on the development of interfaces which will link County financial databases (e.g. CAPS+) with AiM. These will make cost and invoicing transaction summaries available in near real-time.
- Work Management: Facilitates Maintenance now receives all work through AiM, where it is scheduled to technicians for completion. A large portfolio of Preventive Maintenance (PM) was established, and the team is also using the scheduling tool to allocate work orders to the trade staff.

Facilities Staffing Reorganizing for Enhance Efficiency and Collaboration

- Onboarded 51 JWA Facilities Maintenance positions into the OCPW Facilities Maintenance organizational structure.
- The Portfolio Management Team (PMT) relocated to the CAS Building early in 2022 to foster a closer level of teamwork with Procurement, Budget, and OCPW stakeholders.
- A Staff Specialist position was reallocated to CUF to streamline their procurement processes.

Facilities Management and Support

- Provided technical and management support of the combined OCPW/JWA administrative operations, including shared contract adjustments and CMMS development.
- Transitioned to electronic invoicing (invoices and goods receipts are now entered directly into AiM – paperless). They are then submitted to Auditor-Controller electronically.
- Supported move-in and setup of operations at the new County Administration North (CAN) Building, as well as the move-out and demolition preparation for Hall of Administration (HOA).
- Completed a renewed Facility Maintenance Capital Asset Inventory with the cooperation of Quality Control & Compliance.
- Provided support for 2022 mid-term election, including standby generator support at County Operations Center.
- 11,893: Work orders processed in 2022:

- o OCPW: 1,154
- o Social Services Agency: 725
- o Health Care Agency: 2,000
- o Probation: 2,142

- OC Community Resources: 1,395
- Miscellaneous: 4,477

OC Fleet Services

- Facility Needs Assessment (FNA) for Operational Efficiency: Produced data and metrics for an assessment of the entire fleet, including three maintenance facilities, resulting in recommendations regarding program square footage, required service bays, ancillary support space, site access, and vehicle storage for vehicle intake and decommissioning activities.
 - Data to be used by County's CEO Real Estate to find a suitable site for the prescribed program
 - Data to be basis for bidding the Architect-Engineer services for the design and build phase of project

OC Infrastructure Programs

Legislative

- In coordination with CSAC, requested, supported, and obtained final Governor approval of AB1932 to allow counties to continue to use the Construction Manager at Risk (CMAR) delivery method through January 1, 2029.

Administrative

- Responded to 104 Public Records Request through the Counties Next Request system (January--December).

Traffic Studies and Investigations

- Completed 169 investigation requests and issued 57 work orders to implement traffic improvements.
- Reviewed and provided comments to traffic studies or related documents for six (6) non-County lead projects.
- Hosted three (3) Traffic Committee meetings and obtained BOS approval for four (4) traffic-related items.
- Created OC Traffic Committee By-laws using the updated BCC bylaw template, which was later adopted by our Board.

Traffic Design and Signal Operations

- Awarded construction contract for Traffic Management Center Fiber Optic Expansion Project for Cow Camp Road, Crown Valley Parkway, O'Neill Drive, Gilbert Street, and Oso Parkway.
- Completed design of Traffic Management Center Fiber Optic Expansion Project for Chiquita Canyon Road.
- Enhanced functionality of Traffic Management Center (TMC) for vendor access to our TMC Network for critical support of TMC Centracs system: Backup of System Configuration, Centracs Monitoring, Server Monitoring, Database Monitoring.
- Collaborated with Orange County Transportation Authority and other local agencies on four (4) Regional Traffic Signal Synchronization Projects: Katella Avenue Corridor, Orangethorpe Avenue/Esperanza Road Corridor, First Street/Bolsa Avenue Corridor, and Crown Valley Parkway Corridor.
- Completed design of traffic signal improvements at Antonio Parkway at Crown Valley Parkway.
- Maintained over 120 traffic signals and other traffic control devices.
- Completed design of 17 striping plans for pavement maintenance projects.
- Completed 15 Traffic Index Requests for Construction's Materials Lab.
- Completed seven (7) Radar Speed Trailer Deployments.

Road Fees

- Processed 49 city remittances resulting in approximately \$929K in collected Road Fee Revenue.
- Enhanced city remittance application allowing the City of Lake Forest to report on collected Foothill Circulation Phasing Plan (FCPP) fees while retaining them per terms of the Management Agreement.
- Launched a new Developer Remittance Application on April 12, 2022 and received our first remittance from the Irvine Company.

- Provided a Road Fee determination within our Land Management System (LMS) on approximately 362 building permits and collected approximately \$7.2M in Road Fees and South County Roadway Improvement Program (SCRIP) credits via those permits.
- Provided 66 SCRIP and 81 non-SCRIP fee calculation forms to builders.
- Coordinated with Accounting, Cashiering, and Management on the issuance of \$7.6M in SCRIP credits to the Ranch (RMV) for their funding contributions to projects within South Orange County.
- Assisted CEO Public Finance in the preparation of the new Communities Facilities District 2021-1 and processed incoming reimbursement requests amounting to \$34M.

Capital Improvement Program (CIP) / Operational Budgets & Other

- Created, extended, and closed approximately 387 job codes for CIP and operational use along with 27 SB1 maintenance improvement specific job codes. Also implemented a new job code suffix system to capture pre-construction and construction charges separately for pavement maintenance projects.
- Processed 50 budget change requests within eBuilder and via email to modify project budgets.
- Prepared and internally distributed a package of CIP Policies & Procedures explaining eight separate CIP budgeting processes.
- Cleaned up the dynamic CIP by removing over 57 completed/outdated projects and pivot tables and assisted in the preparation of a new CIP template for asset work components.
- Added additional helpful links to the Service Area SharePoint site such as the ASR Search Engine and Regulatory Permit Request Form, which now has over 5,450 page views since the unit launched it in September 2021.
- Reviewed approximately 30 Notices of Expirations and assisted with the process to extend, renew or close the related Master Agreements. Also, coordinated with Procurement to prepare a new Flood On-Call slate with an anticipated February 2022 Board Date.
- Assisted OCPW Procurement with the closure of operational and capital improvement encumbrances resulting in over \$9.1M being returned to their related funds.
- Obtained Board Approval of the 7-Year Capital Improvement Program (CIP) and State acceptance of the FY 22--23 SB1 Project List and FY 21--22 SB1 Expenditure Report.
- Held eight cross-trainings on a variety of skills for the team to better learn the unit's overall responsibilities and related daily tasks.

Project Development and Grants

- OC Loop Bikeway, Segments P and Q; secured \$45.9M in construction grant funding to construct 1.6 miles of bikeway improvements that will close this gap in the 66-mile OC Loop network.
- Orange County Floodplain Management Plan; secured \$975,000 in grant funding for development of the Orange County Floodplain Management Plan (OCFMP). The OCFMP will evaluate flooding hazards and develop prioritized mitigation strategies to minimize the impacts of flooding within Orange County.
- Completed Project Programming Reports for the following transportation projects:
 - Antonio Parkway and Crown Valley Parkway Intersection Improvements
 - Traffic Signal Upgrades- Esperanza Road at Fairlynn Boulevard
 - Trabuco Canyon Bridge Replacement
 - Bridge Inventory Management and Maintenance Program that prioritizes bridge repair activities for County-owned bridges.

Engineering

Project Design

- Completed Plans, Specifications, & Estimates (PS&E) for:
 - In-house design for the Loma Ridge Road Reconstruction Project
 - In-house design for the Crawford Canyon Park and Sidewalk Extension Project
 - In-house design for the Antonio Parkway/Crown Valley Improvements

- 65% in-house design for Peters Canyon Bikeway Project (cancelled by OC Parks)
- Eleven Flood Channel related Maintenance Improvement Projects
- Three Road related Maintenance Improvement Projects

Programs and Initiatives

- Completed updates to the 2nd Edition of the Orange County Flood Control District Design Manual.
- Feasibility Considerations for Reconstruction of Earthen Channels: Created a new guidance document for use and reference by engineers when evaluating and considering the viability of restoring existing earthen channels in-kind versus repair and reconstruction using alternate materials.
- Sheet Pile Maintenance Manual: Created a new guidance document relative to the maintenance of flood control channels constructed using steel sheet piles.
- Utility Manual: Updated the Utility Process Manual.
- Improved the Regulatory Permits Request Process: Developed an online request form available through the Infrastructure Programs SharePoint site.
- Improved the Utility Assistance Request Process: Developed an online request form available through the online “Box” platform.
- Road Index/County Maintained Mileage Report: Updated and received BOS approval of the certification of roadways in the County system, which is used to determine State provided road funding.

Santa Ana River Project (SARP)

- Completed local sponsor obligations for Santa Ana River Project including implementation of utility mitigation requirements due to the expansion of the Prado Basin for the following utility agencies: City of Chino, City of Corona, IEUA, and JCSD. Excluding SCE, completed 95% of the utility mitigation requirements for the other remaining agencies (SAWPA, City of Norco, and City of Eastvale).
- Completed the LiDAR survey to determine SCE facilities within the Prado Basin that require mitigation/relocation including 6 Transmission Lines, 3 Subtransmission Lines, and 14 Distribution Lines.
- Completed the prior rights analysis of 100% of the parcels related to SCE Transmission and Subtransmission Lines and 95% of the parcels related to SCE Distribution Lines. The results of the analyses indicate that SCE will be responsible for the majority (if not all) of the costs for relocations of its facilities that will be impacted by the Prado Basin expansion. This would result in potential project savings in the amount of \$108M.
- Coordinated with the Corps of Engineers (Chicago District) to develop a 95% complete Design Documentation Report (DDR) for the Santiago Creek Project which includes the passive reservoir alternative.
- Completed the review of the 60% design for the Prado Spillway which includes an arced labyrinth control structure.
- Completed the inspections and finalized the O&M manuals for the completed Prado Dikes (Adobe, CIW, Sewage Treatment, Housing, and Auxiliary Dikes) and Reach 9 levees (Phases 2B, 3, 4, and 5A). These inspections and related repairs by the Corps of Engineers ensures that these SARP features would be in a satisfactory and acceptable conditions prior to turnover to OCFCD.
- Acquired 99 out of 113 (87%) properties within Prado Basin for the Prado Dam spillway project. The value of these acquisitions is approximately \$200M.
- Provided support in the construction of the SARP features including River Road Dike, Alcoa Dike Phase 2, and Norco Bluffs projects. These construction projects are currently 50% completed.

Floodplain Management & Hydrology

- Completed the Carbon Creek (B01) Facility Study: This is a hydraulically complex regional flood control system that runs from Coyote Creek (in the City of Los Alamitos) to Anaheim.
- Completed all OCFCD dams Emergency Action Plans (10) and obtained approval from CalOES for each dam classified as Extreme High Hazard or High Hazard.
- Completed the Post Bond Fire Assessment/Study to determine vulnerabilities and mitigation for debris flows within the watersheds.
- Completed Community Rating System (flood risk rating) recertification prior to the 2022--2023 rainy season.

Flood Agreements

- Provided supporting fiscal documentation to Financial Services/Budget staff for implementation of the PCA (10/6/20) as amended and LCA (1/12/21) as amended, which combined are anticipated to provide CORPS funding to OCFCD of approximately \$600 million in contributions towards the acquisition of property relating to the Prado Dam Improvement Project.
- Prepared and participated in substantive review of 15 Agenda Staff Reports that concern OCFCD facilities, land, or operations. Assisted County Counsel and CEO Real Estate in preparing supporting documentation which led to our Board of Supervisors' successful adoption of four Resolutions of Necessity and over 5 closed session settlement agreements for the Prado Dam Improvement Project, and processed OC Expeditor requisitions needed to implement each related Board order.
- Prepared authorization memoranda and supporting documentation for 10 agreements to be executed on behalf of the Orange County Flood Control District (OCFCD) under authority held by OC Public Works Director or CEO Real Estate Officer, as delegated by our Board of Supervisors, which increased efficiency and productivity in processing payments and relocation benefits required for completion of the Prado Dam Project and generation of revenue for OCFCD.
- Initiated and processed over 361 OC Expeditor requests related to the implementation of Flood Program operations, agreements, or projects, including those to the State Treasurer's Office for eminent domain cases and to outside counsel and appraisers for services required for the Santa Ana River Mainstem, Prado Dam project.
- Led review of SARFPA Bylaws, Joint Powers Agreement, and historical records with respect to applicability of CEO updated Boards, Commissions and Committees directives on SARFPA, conducted legal research and drafting efforts for preparation of proposed SARFPA Bylaw edits that were approved as to form by County Counsel.
- Reviewed and commented on over 40 encroachment permit submittals and email inquiries regarding requests to use OCFCD-owned property.
- Aided in resolution and close-out of Lewis Channel Maintenance Agreement with Caltrans for OCFCD to perform certain maintenance activities for \$16,500/year; receipt of \$191,482 from the City of Irvine for acquisition of property rights for their Venta Spur pedestrian bridge, and over \$2.8M in Bipartisan Budget Act of 2018 (BBA) refunds from the US Corps of Engineers through submittal of eight BBA submittal packages this calendar year.
- Coordinated and negotiated agreements with the City of Santa Ana for its Fairview Avenue Bridge improvement project, City of Irvine for its Venta Spur pedestrian bridge, OC Sanitation District for its replacement of the Edinger Pump Station, and City of Orange for its PFAS improvements project. Provided substantive review for finalizations of real property transfers and agreements with the City of Laguna Beach lead by OC Parks for South Laguna beaches and by OC Public Works/Project Management for Laguna Canyon improvements, and review of an Agreement between the County of Orange and the California Department of Parks and Recreation, Division of Boating and Waterways for County of Orange contribution toward the Surfside-Sunset Beach Nourishment Project, Stage 13 construction.
- Prepared the Agreement between the County of Orange and the City of Fullerton (MA 080-22011920) and its related Resolution adopted by our Board of Supervisors which enabled \$1M to be paid to the city for the Orangethorpe Improvement Project (08/09/22).
- Coordinated and negotiated a Betterment Agreement with the Riverside County Regional Park and Open Space District, approved by our Board of Supervisors (10/04/22).
- Maintained Flood Program Agreements Database as a SharePoint application accessible to all County staff that currently stores 600 historical OCFCD agreements, which Flood Agreements staff will maintain and administer as a repository for OCFCD documents, executed by our Board or under delegated authority. Working with O&M, CEO IT on utilization of a new Flood Encroachment clearance step in the LMS permit process.
- Negotiation of the SR-91 Cooperative Agreement between OCFCD and OCTA to accommodate this OCTA/Caltrans project collaborative project and aptly address impacts to OCFCD; negotiation and preparation of ASR with CEO Real Estate and COCO to take to our Board for approval of a highway easement deed template acceptable to Caltrans, which will aide close-out of highway improvement projects (e.g., SR22, I-405, and SR91).
- Researched records, prepared letters and other documentation that has assisted in the finalization key OCPW collaborative efforts on infrastructure projects: e.g., Santa Ana-Delhi Diversion Project readiness for acceptance by OCFCD, Prado Dam Project settlement of possession and relocation claims, and OCFCD acquisition of flood control easement dedications from OCTA under railroad lines at San Juan Creek and Peters Canyon.

OC Operations & Maintenance

- Removed and disposed of approximately 163,000 cubic yards of trash, debris, and sediment from County roads, catch basins, flood control channels, and debris booms.
- Processed approximately 4,550 customer service requests via myOCservices.
- Removed approximately 31,900 cubic yards of accumulated sediment from the Foothill Basins (Round Canyon Basin, Hicks Canyon Basin, East Hicks Canyon Basin, and Agua Chinon Basin).
- Removed approximately 63,000 cubic yards of deposited sand from the Talbert Channel (9,000 CY) and Santa Ana River Channel (54,000 CY) ocean outlets.
- Completed repairs to 14 OCFCD facilities as part of the Department's Maintenance Improvement Program (MIP).
- Completed annual road shoulder grading in the Canyon areas and re-installed sandbags for storm preparation.
- Provided support to County District 3 in developing and applying for Natural Resources Conservation Service funding for emergency sediment removal project in Silverado Canyon following debris flows in 2021/early 2022.
- Installed 376 new street sweeping signs in Rossmoor per the new street sweeping schedule proposed by Rossmoor Community Services District (RCSD).
- Removed nearly 1.15 million square feet of graffiti from flood control channels and road right-of-way.
- Trimmed approximately 8,920 trees.
- Repaired approximately 32,311 square feet of sidewalk.
- Cleaned 2,500 catch basins twice or more times (total 5,900 cleanings).
- Cleaned and trimmed approximately 86 miles of flood control channels.
- Repaired approximately 7,300 linear feet of fencing and installed 2,115 feet of new security fencing along channels.
- Department Operations Center successfully activated and responded to emergency rain event in November 2022, working in conjunction with EOC to address public right-of-way needs.
- Cleaned out 1,475 encampments from OCFCD right-of-way with support from OC Sheriff's Department Behavioral Health Bureau (BHB) and HCA.
- Achieved an annual rate of 96% for clearing encampments from OCFCD right-of-way within 30 days of identification.

OC Survey

Map Check & Right-of-Way Services

- **750:** Completed reviews of subdivisions, records of survey, and corner records
 - **2,013:** Corner record maps filed
 - **184:** Recorded records of surveys
 - **104:** Completed interrogatories (accident investigations to determine if County/unincorporated location)
 - **46:** Recorded parcel maps
 - **57:** Recorded tract maps
 - **15:** Filed lot line adjustments
 - **4:** Annexations
 - **15:** Certificate of Corrections
 - **171:** Address requests
-
- Prepared Prado Basin property legal descriptions and provided ongoing support to County Real Estate for the Santa Ana River Mainstem Project.
 - Prepared legal descriptions and exhibits for the following major projects:
 - Irvine Regional Park
 - Serrano Creek Park
 - Musick Facility
 - Los Alamitos Pump Station
 - Oso Creek Channel

- Craig Regional Park
- Irvine Mesa Road
- Irvine Lake
- Mile Square Park
- San Juan Creek Bridge

- Prepared acquisition packages for the following projects:
 - Borrego Canyon Channel
 - Newport Boulevard & Crawford Canyon Road
 - El Cajon Bikeway
 - Silverado Canyon Road Bridge
 - La Pata Equestrian Center
 - Coyote Creek Bikeway

- Reviewed legal descriptions and exhibits from private engineers and surveyors for the following projects:
 - Whiting Ranch; Portola Parkway
 - Cow Camp Road
 - Trabuco Canyon Road
 - Los Patrones Parkway
 - Prima Deshecha Landfill
 - Coyote Canyon Landfill
 - Laguna Canyon Road
 - Sunset Channel
 - Santa Ana River/Katella Avenue railroad crossing

- Performed title services and encumbrance mapping for the following:
 - John Wayne Airport
 - Santiago Creek
 - South Laguna Beach Parks
 - Brookhurst Street
 - Harbor Justice Center

Geospatial Services

- Created the department's "Project Portfolio Dashboard" to give a summarized view of OCPW projects that stakeholders can use to view project details, locations, attachments, and filter driven metrics and charts.
- Created and managed the web app for the County supervisorial redistricting process.
- Created the web app for the Point in Time homeless count.
- Lead the creation and management of the Orange County Data acquisition partnership for cost sharing of aerial imagery and associated data products among orange county cities, agencies, and utility providers.
- Created maps and applications for John Wayne Airport including planning applications, obstruction surfaces application, and indoor space planning application.
- Completed migration to the Box.com platform for efficient file storage and management.
- Research and development for use of LiDAR data on SCE power lines for Prado Basin project.
- Created a parcel GIS linkage with the AssetWorks CMMS system.
- Converted Right-of-Way maps into a digital automated process to create "smart" maps where pdf maps have links to vesting documents and other map pages.
- Developed web/mapping applications:

- Bond Fire emergency response mapping
- Flood Programs for a presentation to various cities within the county
- Toll road thoroughfare project and development fees for stakeholders
- Stenciling and striping web app for OCPW's Operations & Maintenance to manage maintenance schedules and identify areas of needed maintenance
- County Water Quality Improvement Plan web mapping in order to set priorities
- Public education/school outreach web application for "Where does your Stormwater Go?"
- Debris boom, outlet, and stockpile locations for efficient Operations & Maintenance access
- Newport coastal watershed drainage delineation
- CIP projects currently in construction
- OC Construction's Job Order Contracts (JOC) field staff to conveniently view project footprints and associated documents
- Enhanced road index web app to ensure data accuracy within the Maintstar database
- Enhanced Inspector Viewer application for flood and road maintenance
- Manage the Data Management System (DMS) for the South Orange County Watershed Management Area (SOCWMA) Integrated Regional Watershed Management (IRWM) plan.
 - DMS portion of the site represents the State-required provision of access to data sets associated with the IRWM plan, including project information, monitoring data and data associated with various planning documents (e.g. OC SWRP and WQIP)
 - DMS provides public access to IRWM plan information, provides opportunities to interact with documents and resources, and provides the mechanism for establishment and maintenance of the IRWM plan project list

Field Services

- **19:** Internal/external business units serviced
- **Over 400:** Monuments preserved during construction (critical component of property infrastructure)
- **297:** Survey requests serviced (41% increase)
- **70:** Topographic mapping projects completed
- **40:** Boundary mapping projects completed
- **17:** Construction projects serviced for layout and verification
- **4:** Buildings modeled based on as-built conditions
- Oversight of most surveying services performed by consultants.
- Responsible for much of the automation around survey and design CAD/BIM activities.
- Expanded services to include BIM Modeling and survey grade reality capture for planning, design, construction, and operations.
- Provided field survey services for major infrastructure projects:
 - Musick Jail Facility
 - OC Health Care Agency's Irvine Campus
 - East Garden Grove-Wintersburg Channel Improvement Project
 - Huntington Beach Channel/Talbert Channel Sheet Piles Repair Project
 - OC Loop Bikeway Project, Segments O, P, & Q
 - Rockfall protection sites
 - Laguna Beach parcels
 - Silverado Canyon emergency debris removal project in Bond Fire burn area

Administrative Services

PUBLIC AND EMPLOYEE COMMUNICATIONS

Public Inquiries and Education Materials

- Produced a State of the Department book covering 2019--2021, highlighting OCPW's service areas, major projects, department services, innovative technology initiatives, and accomplishments.
https://ocpublicworks.com/sites/ocpw/files/2022-08/OCPW_SOTD_2019-2021_FINAL_o8o822.pdf
- Created OCPW infrastructure and facilities overview video for presentation at the Digital Twin Consortium conference in Texas (virtual modeling technology).
- Processed over 1,000 public inquiries received through the OCPW website for coordination with department service areas for response and needed actions.

Public Information Materials and Events for Infrastructure Projects

- Produced and distributed thousands of public notification materials and created social media announcements for over 35 projects and key initiatives, including:

Road and Bikeway Projects

- OC Loop Bikeway Project, Segments O, P, and Q
- Active Transportation Plan community workshops
- Newland Street-Hazard Avenue Traffic Signal Upgrade Project
- North Tustin Americans with Disabilities Act (ADA) Curb Ramp Upgrades Project
- Midway City ADA Curb Ramp Upgrades Project
- Crawford Canyon Road Sidewalk Extension Project
- Unincorporated Anaheim Streets Resurfacing Project
- Katella Avenue Resurfacing Project (Anaheim)
- East Tustin Remedial Street Repairs / Surface Treatment Project
- Santiago Canyon Road Bridge Replacement Project
- Modjeska Canyon Road Bridge Replacement (Retrofit) Project

Flood Control Projects

- East Garden Grove-Wintersburg Channel Improvements Project
- Huntington Beach Channel/Talbert Channel Sheet Pile Repair Project (including public meeting)
- Santa Ana River Outlet Annual Maintenance Project
- Talbert Channel Outlet Maintenance Project
- Laguna Canyon Channel Replacement Project
- Santa Ana Gardens Channel Improvement Project
- Walnut Canyon Channel Improvement Project
- Kempton Channel Improvement Project
- Richfield Channel Improvement Project

County Facilities

- County Administration North Building construction alerts and ribbon cutting event coordination
- OC Probation's Multipurpose Rehabilitation Center project fact sheet (OC Facilities Design and Construction Management project)

Public Records

- **2,006:** Public Records Act (PRA) requests processed, a 40 percent increase from 2021
- **1,573:** Records received and processed for storage at the County Records Center

Board of Supervisors Meeting Support

- **140:** Agenda Staff Reports submitted for public Board of Supervisors Meetings

Public Updates through the News Media

- Provided responses to and/or participated in interviews with television, print, and online news media regarding:
 - Mud and debris flow events in Bond Fire burn area of Silverado Canyon
 - Oil sheen at Talbert Channel sheet pile repair project site
 - Brea Boulevard corridor improvement project
 - Los Patrones Parkway extension project
 - Antonio Parkway roadway improvement project in the Las Flores area of south Orange County
 - Update on addressing large sinkhole at private storm drain in La Habra
 - Electric vehicles within the County's fleet

Key Initiatives Support

- Promoted the 2022 H2O for HOAs, a multi-agency water education initiative for homeowner associations.
- Produced new design for Flood Programs' "Stay Out! Stay Alive!" brochure to educate the public about flood safety.
- Updated Flood Programs' "Be Flood Ready!" print brochure with text and link to updated web page that allows visitors to translate content into Chinese, Korean, Spanish, and Vietnamese.
- Enhanced information access for non-English speaking populations by enabling instant translation support on OCPW's website and adding translation support information for Chinese, Korean, Spanish, and Vietnamese on public notices.
- Designed new building and service directory for OC Civic Center area map signs to assist the public with accessing County services.

Website / Social Media

- Produced and posted 5-part series about OCPW flood safety programs and FEMA's Community Rating System requirements.
- Perform ongoing website page updates for key projects and announcements to effectively inform the public.
- Produced and posted daily social media posts highlighting OCPW's services areas during National Public Works Week.
- Increased number of OCPW's social media followers who receive announcements regarding projects, events, services, and emergency response efforts:
 - Facebook: 4,181 to 4,279 followers
 - Twitter: 4,220 to 4,308 followers
 - Instagram: 1,152 to 1,476 followers

Training and Safety

- Produced five new e-learning courses for staff to build skillsets through the Eureka training system.
- Processed 226 Educational Professional Reimbursement Program to encourage and support staff completing additional education and training.
- Launched an "OCPW Connection" new employee training course to transition new team members into the department (107 participants since the start of the program).

PROCUREMENT SERVICES

Purchase Requisitions

- Completed 3,752 purchase requisitions for projects and services, up more than 15 percent from 2021 (3,210).

cc: Distribution