



DPU ANNUAL REPORT: WASTEWATER

CLAY MOSELEY
DEPUTY UTILITY MANAGER,
GWS OPERATIONS

AT A GLANCE

- | | |
|-----------------------------|--------------------|
| • TOTAL SEWER MAIN | 120 MILES |
| • OLDER VCP (CLAY PIPE) | 60 MILES (51%) |
| • LIFT STATIONS (LS) | 26 |
| • CALLOUTS | 50 |
| • SYSTEM OVERFLOWS | 5 (LS & MAIN LINE) |
| • MAIN LINE BLOCKAGES | 11 |
| • DELIVERY LINE BLOCKAGES | 28 |
| • LIFT STATION MALFUNCTIONS | 8 |

ACCOMPLISHMENTS & SYSTEM IMPROVEMENTS (PT 1)

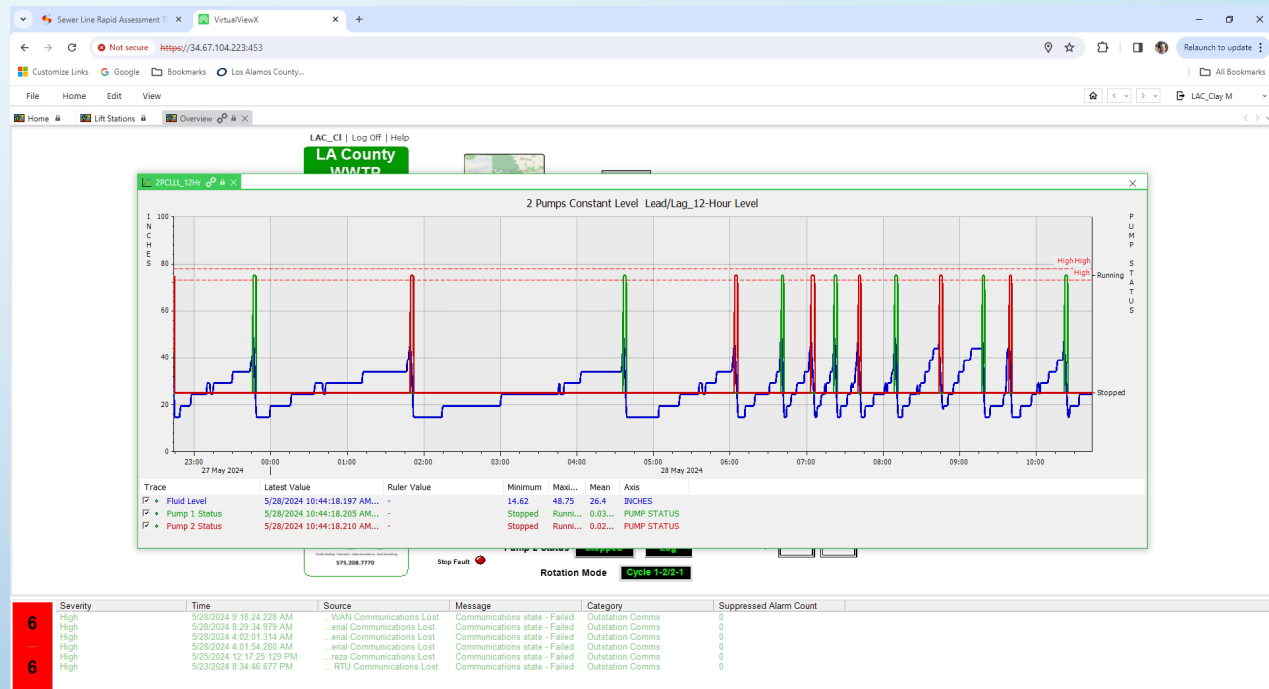
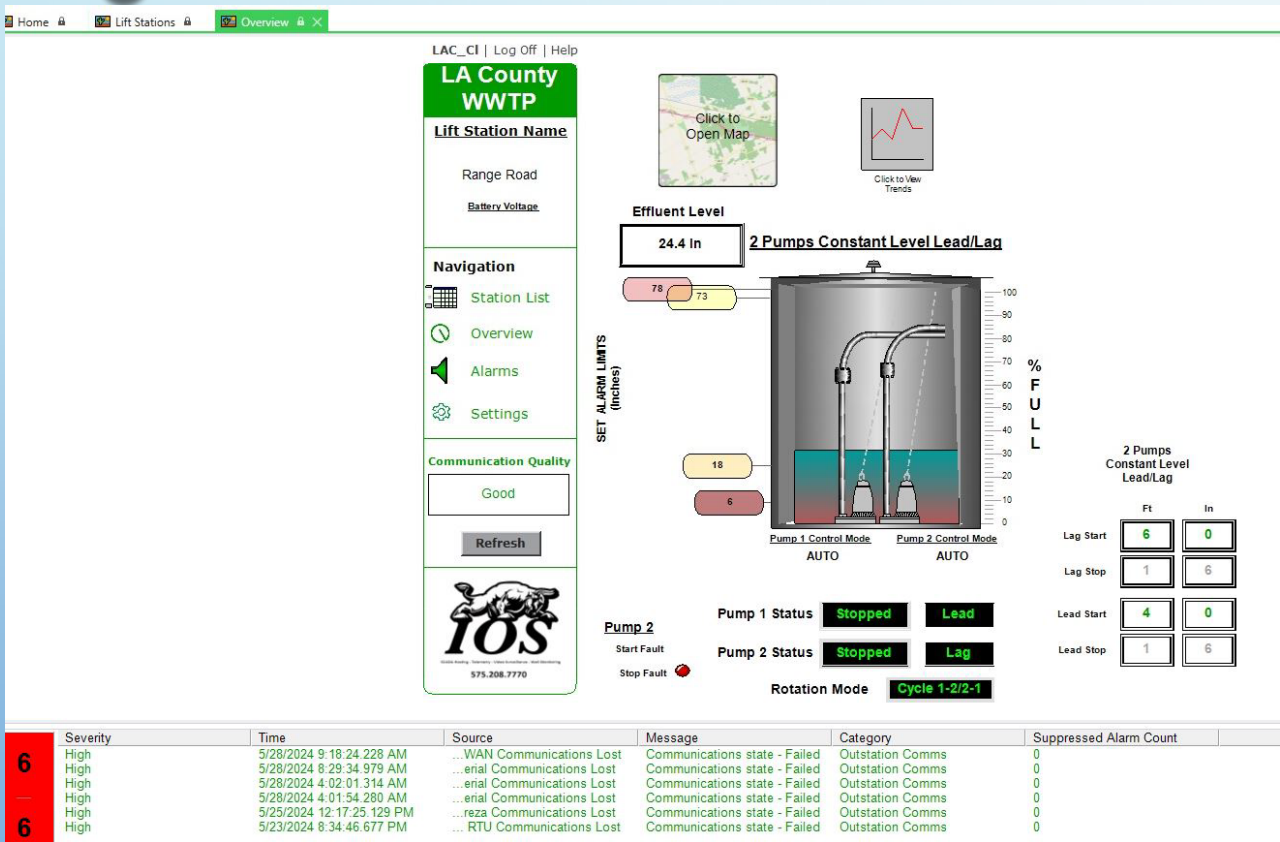
- NEAR COMPLETION OF WHITE ROCK WATER RESOURCE RECLAMATION FACILITY (WR WRRF) – PUT INTO SERVICE ON MAY 14, 2024 (MINUS SOLIDS HANDLING)
- NEAR COMPLETION OF LOS ALAMOS WASTEWATER TREATMENT PLANT (LA WWTP) FILTRATION SYSTEM
- REPLACEMENT OF WASH-WATER PUMPS AND MOTOR CONTROLS – SAVES TENS OF THOUSANDS OF GALLONS OF WATER PER DAY
- BUILT NEW COVERS OVER THE GRIT CHAMBER AT THE LA WWTP TO REDUCE HUMIDITY/STEAM BEING PULLED INTO THE HVAC SYSTEM IN THE HEADWORKS BUILDING
- DEVELOPED BACKUP POWER CONNECTION AND PROTOCOL AT THE BLOWER ROOM TO KEEP THE AERATION BASINS ONLINE DURING POWER OUTAGES
- REPLACED/REBUILT SOME OF THE MCC BUCKETS AT THE LA WWTP DUE TO SOME MOTOR START FAILURES
- CONTINUED TO MEET THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT AT THE WR PLANT DURING MOST OF THE YEAR – IMPROVEMENT OVER PREVIOUS YEARS
- ACQUIRED NEW SONIC PIPE CONDITION ASSESSMENT TOOL – SEWER LINE RAPID ASSESSMENT TOOL (SL RAT) TO INSPECT PIPES MORE QUICKLY
- ELIMINATED RIDGE PARK LIFT STATION – JUST IN TIME, AS IT WAS FAILING AND IN NEED OF MAJOR UPGRADES
- 43RD ST/URBAN - NORTH COMMUNITY LINE REROUTE

ACCOMPLISHMENTS & SYSTEM IMPROVEMENTS (PT 2)

- INITIATED LIFT STATION UPGRADE PROJECT
- NEW CREWS ACCOMPLISHED MAINLINE MAINTENANCE FLUSHING SCHEDULE
- TRANSITION TO SOLID-STATE CONTROLS AND SCADA AT RANGE ROAD LIFT STATION (SEE GRAPHIC)
- BEGAN TRANSITION TO IGNITION CONTROLS SOFTWARE AT LA WWTP, FOLLOWING THE INTEGRATION PROCESS AT THE WR WRRF – A MAJOR IMPROVEMENT AND TIMELY SINCE THE OLD ALLEN BRADLEY “FACTORYTALK” SOFTWARE WAS OUTMODED AND IN NEED OF MAJOR UPGRADES
- NEW STAFF – TRAINING AND CERTIFICATIONS
- DEVELOPMENT OF WASTE WATER COLLECTIONS (WWC) STANDARD OPERATING PROCEDURES (SOPS) – ENVIRONMENTAL PROTECTION AGENCY (EPA) COMPLIANCE REQUIREMENT
- NEW GWS STAFF IS FULLY TRAINED ON ALL WWC EQUIPMENT AND RESPONSE PROCEDURES
- NEW WWT STAFF IS DEVELOPING QUICKLY ON PLANT OPERATIONS AND PROCEDURES
- TWO OF THE NEWER OPERATORS HAVE BEEN TRAINING IN LABORATORY AND REPORTING PROCEDURES AND ARE BECOMING QUITE PROFICIENT

LIFT STATION SCADA

RANGE ROAD LIFT STATION EXAMPLE



SL-RAT

SEWER LINE RAPID ASSESSMENT TOOL



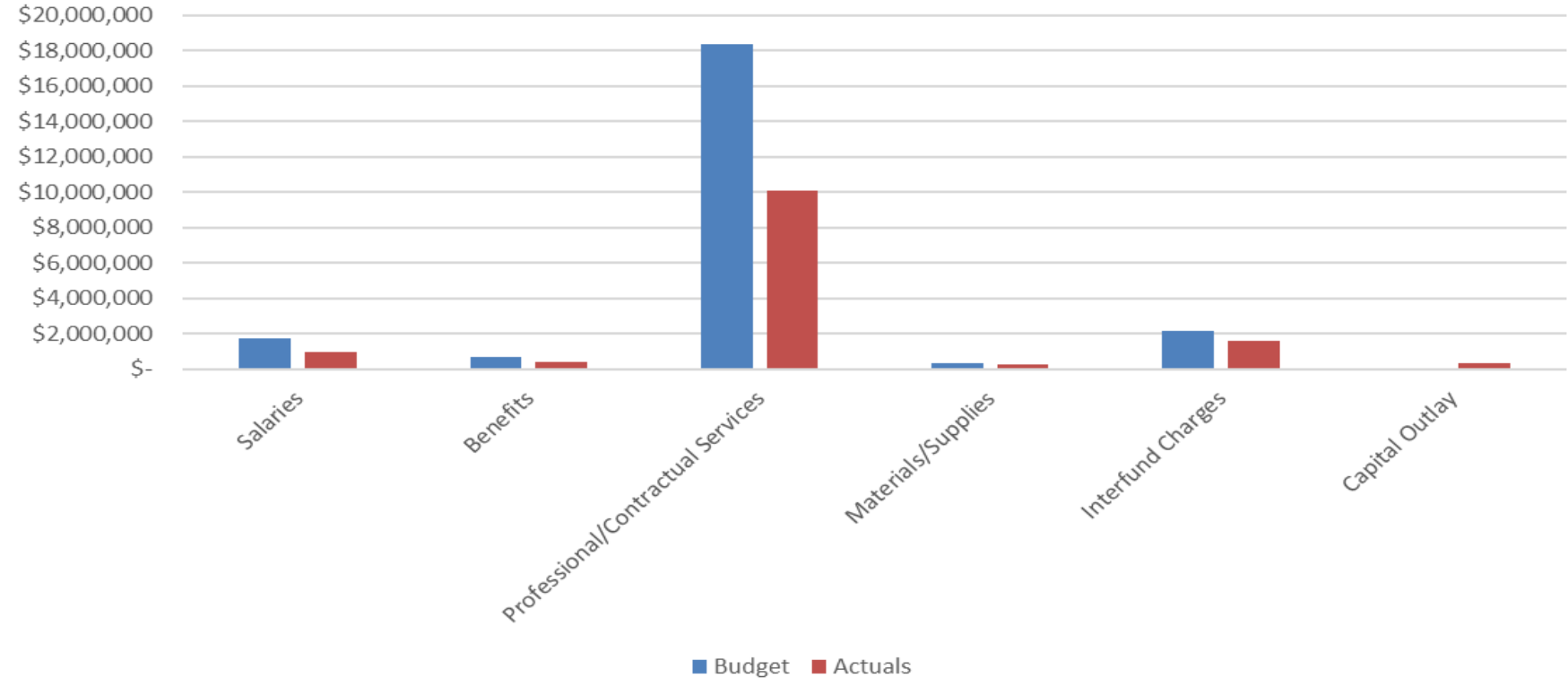
CHALLENGES & STAFF IMPACTS

- OVERUSE OF THE VACTOR TRUCKS – GWS HAS TWO, BUT THEY ARE SO HEAVILY USED AND ONE OR BOTH IS ALWAYS OUT OF COMMISSION
- STAFF RESOURCES – WATER LINE BREAKS ARE CREW INTENSIVE AND REQUIRE A VACTOR UNIT
- MUCH OF THE GWS AND WWT STAFF IS NEW, SO THERE IS MUCH TO LEARN
- AGING INFRASTRUCTURE – CLAY PIPES THAT ALLOW ROOT INTRUSION
- PROBLEMATIC INFRASTRUCTURE – OLDER NON-STANDARD INSTALLATIONS IN BACKYARDS, ETC.
- FLUSHABLE WIPES – PROLIFERATION OF THESE MATERIALS CAUSING CLOGS AND BACKUPS
- LIFT STATION MAINTENANCE AND COMPONENT GLITCHES AND FAILURES – DIFFICULT TO IMPOSSIBLE TO PREDICT
- NEW TECHNOLOGY AND CHANGES IN OPERATING PROCEDURES
- TRAINING
- SAFETY

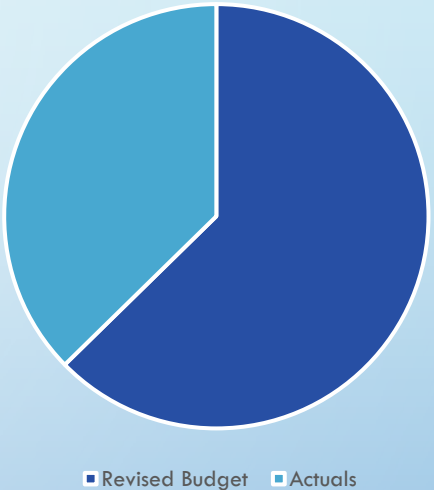


WW FUND BUDGET

FY2024 Category WW Budget Vs Actuals



FY2024 Budget Vs Actuals



OPERATING EXPENSES	FY 2022 Actual	FY2023 Actual	FY2024 Original	FY2024 Actual*	FY2024 Remaining	Remaining %
Supervision, Misc Direct Admin	\$ 358,457.75	\$ 432,264.24	\$ 459,514.00	\$ 330,235.23	\$ 134,651.15	29%
Wastewater Collection	\$ 265,018.18	\$ 227,760.16	\$ 499,135.00	\$ 216,041.49	\$ 269,932.32	52%
Lift Stations	\$ 279,422.79	\$ 278,607.68	\$ 420,152.00	\$ 176,697.82	\$ 297,206.64	52%
Wastewater Treatment	\$ 1,476,068.79	\$ 1,629,110.63	\$ 1,939,135.00	\$ 1,408,293.38	\$ 443,911.97	22%
Interdepartmental Charges	\$ 656,062.00	\$ 718,681.00	\$ 1,129,735.00	\$ 962,537.75	\$ 167,197.25	15%
Eng. Cust Svc. MR and Admin	\$ 852,681.15	\$ 928,135.65	\$ 731,864.00	\$ 746,998.53	\$ (15,134.53)	-2%
Debt Service	\$ 750,881.04	\$ 840,784.27	\$ 765,034.00	\$ 658,721.25	\$ 106,312.75	14%
TOTAL OPERATING EXPENSES	\$ 4,638,591.70	\$ 5,055,343.63	\$ 5,944,569.00	\$ 4,499,525.45	\$ 1,404,077.55	23%
OPERATING INCOME (LOSS)	\$ 1,296,214.92	\$ 1,329,222.77	\$ 865,395.00	\$ 1,200,959.75	\$ (294,598.75)	-50%

STRATEGIC PLANNING

- CONTINUE TO INVEST IN WORKFORCE - GWS AND WWT STAFF
- ENGAGED AND WELL-TRAINED WORKFORCE IS CRITICAL TO THE WW COLLECTIONS (GWS) AND TREATMENT (WWT) DIVISIONS
- DEVELOP & UPDATE WORKFLOW SOP TO ALWAYS HAVE AN ACHIEVEMENT BENCHMARK
- CROSS-TRAIN STAFF ON ALL WORKFLOWS
- WW COLLECTIONS IS VERY EQUIPMENT INTENSIVE – ENSURE EQUIPMENT IS WELL-MAINTAINED AND ROTATED/REPLACED BEFORE CRITICAL FAILURES OCCUR, I.E. THE VACTOR EQUIPMENT
- DPU WILL NEED TO ADDRESS THE ISSUES WITH LAC-FLEET BECAUSE THE VACTOR IS ESSENTIAL TO SITUATIONAL RESPONSE
- LIFT STATIONS NEED CONSTANT ATTENTION. NEED TO DEVELOP “DEEPER” SOPS TO CATCH CRITICAL PROBLEMS BEFORE THEY OCCUR, I.E. PUMP MOTOR & ELECTRICAL TESTING, PANEL COMPONENT TESTING, DETAILED PUMP INSPECTIONS, REGULARLY SCHEDULED COMPONENT REPLACEMENTS
- ASSESS FEASIBILITY/CRITICALITY OF REPLACING “SERVICE MAIN” (MULTI-SERVICE LINES)
- ASSESS FEASIBILITY/CRITICALITY OF REPLACING/LINING OLD VCP MAINS SUSCEPTIBLE TO ROOT INTRUSION
- CONTINUE ASSET MANAGEMENT PROGRAM – VERY CRITICAL PROCESS

WHITE ROCK WATER RESOURCE RECLAMATION FACILITY (WRRF)





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