Public Works Department

Monthly Status Report

Summary – February 2011

For the Month of February 2011		
Division	**Service Requests**	**Work Orders**
Administration	496	
Electrical	68	90
Environmental Services		31
Facilities	41	64
Fleet		138
Sewer	21	169
Signs & Markings	4	84
Storm Drain	4	25
Streets	24	29
Urban Forestry	14	19
Water	503	246
Grand Total	1,175	895

Service Request – Every time a request for Public Works services is made by phone call, written request, emailed request, or an actual one-on-one request to a PW employee, a **'Service Request'** is generated. This builds a computerized record of all requests made.

Work Order – A **'work order**' is created each time a work crew or individual is assigned a task as a result of either service requests, pre-planned maintenance projects, or by other situations as they arise. This produces a database of work accomplished and the time and materials it took to do the work.

Total for Calendar Year 2011 Through 02/28/2011	
Service Requests	Work Orders Complete
2,691	**1890**

With **1,175 Service Requests received**, Public Works crews handled **895 Work Orders** for the month of February. They included:

Operations & Maintenance

Administration:

- The administration team received 1,175 Service Requests; 496 of which were handled through the front desk, and the other 679 requests were distributed to the appropriate division. (see chart above)
    - 35 Backflow Notifications were mailed to responsible parties regarding testing requirements
    - 217 Underground Service Alert (USA's) requests processed
    - 168 Delinquent Water Shut-Off's
        - 160 Residential Accounts
        - 8 Commercial Accounts

Electrical:

- 21 Street Light Work Orders
    - 2 Asset Management Services
    - 1 Damaged/Exposed Wiring Work Order
    - 2 Inspections
    - 13 Street Light Services

        - 3 Vandalism Repairs
    - 17 Traffic Signal Repairs
        - Annual Loop Testing
        - Asset Management
        - Bi-Monthly Inspections
        - 2 Damaged/Missing Backplate Work Orders
        - 1 Installation/Upgrade
        - 1 Pedestrian Indicator Repair
        - 1 Power Loss Restorations
        - 4 Signal Repairs
        - 2 Pole Knockdown Repairs
        - 2 Timing Checks
    - 7 Facility Service Requests
    - 11 Park Facility Service Requests
    - 16 Water Pollution Control Facility Service Requests
    - 9 Well Site Services (Install/Upgrade, Testing, Data Retrieval, SCADA Modification)
    - Received/marked 217 Underground Service Alerts (USA's)

Environmental Services:

- 11 Green Waste Investigations
- 1 Storm System Investigation
- 19 Water Conservation Service Requests
    - 18 Metered Consumption Investigations
    - 1 Water Conservation Investigations

Facilities:

- 14 Repairs to City Hall
- 8 Repairs to Fire Stations 1, 2 &3
- 12 Repairs to the Library
- 15 Repairs to the Municipal Service Center
- 13 Repairs to the Police Department
- 2 Repairs to the Water Pollution Control Facility

Facilities has a backlog of 38 Service Requests

Fleet:

- 138 Work Order Repairs to 75 different units (vehicles, apparatus & equipment)

Sewer:

- 40 Sewer Cleanout Services
    - 9 Preventive Maintenance Services – Installation
    - 28 Reactive Maintenance Services – Installation
    - 2 Repairs
    - 1 Replacement
- 81 Gravity Main Services
    - 1 Blockage Clear Work Order
    - 1 Inspection
    - 54 Preventive Maintenance Service Utilizing the CCTV (Closed Circuit Television)
        - 1,333 Events

- 18,496 Linear Feet Inspected
    - 16 Preventive Maintenance service utilizing the HVVC (High Velocity Vacuum Truck)
        - 28,494 Linear Feet Cleaned
    - 3 Repairs
    - Root Control
    - Routine Inspection
    - Routine Maintenance
- 34 Sewer Lateral Services
    - 2 Service Location Requests
    - 10 Inspections
    - 16 Preventive Maintenance Services utilizing the CCTV
    - 1 Repair Services
    - 2 Lateral Line Replacements
    - 3 Sanitary Sewer Overflow Events
- 12 Manhole Services (flushing/repair/inspection)
- 1 Final Inspection
- Received/marked 217 Underground Service Alerts (USA's)

Signs & Markings:

- 16 Guide Sign Services
    - Street Sign Production
        - 2 Signs
    - 13 Routine Maintenance Services
        - 23 Signs
    - Surveying
- 5 Object Marker Services
    - 4 Routine Maintenance Services
        - 22 Markers
    - Installation
- 1 Raised Pavement Marker Service
- 57 Regulatory Sign Services
    - 2 Cleaning Services
        - 2 Signs
    - 2 Graffiti Services
        - 4 Signs
    - 2 Installation Services
        - 5 Signs
    - 43 Routine Maintenance Services
        - 129 Signs
    - 1 Knockdown Services
        - 2 Signs
    - Surveying
- 5 Warning Sign Services
    - 4 Routine Maintenance Services
    - 1 Survey

Storm Drain:

- 3 Gutter Services
    - Cleaning

        - 1 Illicit Discharge
    - 11 Inlet Point Services
        - 3 Illicit Discharges
        - 7 Rain Duty Services
        - 1 Inspection
    - 6 Lift Station Services
        - 2 Inspections
        - Debris Grates Cleaned
        - Alarm Response
        - Routine Maintenance
    - Open Channel Maintenance/Inspection
    - Culvert Inspection
    - Routine Maintenance

Streets:

- Road Edge Services
    - Curb & Gutter Spot Repair
        - 10 Square Feet
    - Weed Abatement
- Parking Lot Services
    - Pot Hole Patching
        - 17 Pot Holes Patched
    - Trash & Debris Clean-Up
- Sidewalk Path Services
    - Spot Repair
- 20 Road Services
    - Accident Clean-Up
    - Crack Sealing
        - 44,649 Linear Feet
    - Pot Hole Patching
        - 573 Pot Holes Patched
    - 2 Sink Hole Responses
    - 1 Spill Response
    - Surveying
    - Traffic Control
    - Trash & Debris Clean-Up

Urban Forestry:

- 4 Tree Abatements
- 4 Hazardous Situation Responses
- 2 Tree Pruning's
- 4 Trees Removed
- Right of Way Clearing
- Stump Grinding
- 1 Tree Rebate

Water:

- Produced 206,484,456 gallons of drinking water in February
- Received/marked 217 Underground Service Alerts (USA's)

- 1 Backflow Investigations
- 14 Control Valve Services (exercise, locate, repair, replace, water turn off/on)
- 3 Hydrant Services
    - 2 Maintenance Services
    - 1 Repair Service
- 53 Lateral Valve Services
    - 20 Leak Detection Services
    - 17 Locate Services
    - 8 Water On/Off Services (Finance, Contractor, Homeowner Request)
    - 4 Repair/Replace Service Valve Service
- 80 Meter Services
    - 39 Meter Investigations
    - 19 Meter Repairs
    - 11 Meter Maintenance Services
    - 1 Meter Replacement
    - 8 Meter Box Replacements
- 9 Pressurized Main Services
- 84 Production Well Services
    - 19 Inspections
    - 54 Maintenance Services
    - Sampling
    - No3 Monitoring
    - Disinfection Procedures
    - Security Services

Environmental Services

Solid waste/recycling:

- Monitored C&D debris recycling for 43 active project units. Opened 10 new projects and closed out 2, both of which met the 50% diversion requirement.
- Contracted for planning studies of the old Woodland landfill.

Green waste:

- Issued 200 green waste violation door hangers and 2 green waste letters/information packets.
- Conducted 12 code compliance follow-ups for illegal piles.
- Processed 3 compost bin rebates.

Water conservation:

- Provided on-site troubleshooting assistance at 19 residences with excessive metered water use/evidence of leaks.
- Coordinated planning for outdoor and indoor water conservation workshops.
- Worked with Utility Engineering on updating the Urban Water Management Plan.

Energy:

- Participated in Energy Upgrade California local coordination and in evaluation of potential property-assessed clean energy (PACE) programs for local implementation.

Water Pollution Control Facility

Laboratory

- Collected samples and performed over 300 process control and National Pollutant Discharge Elimination System (NPDES) permit compliance tests for the wastewater treatment plant.
- Collected monthly influent, effluent and receiving water monitoring samples; submitted to contract laboratories.
- Collected samples and performed 45 tests on treatment plant storage ponds.
- Collected/tested numerous additional samples and worked closely with Operations to troubleshoot and resolve issues with the UV disinfection system.
- Kept Regional Board staff up to date on our efforts to resolve issues with UV disinfection system.
- Conferred with contractor regarding WIMS data management system, reviewed database. WIMS implementation set for mid-April.
- Prepared monthly Discharge Monitoring Reports and electronic Self-Monitoring Reports; submitted to the Regional Water Quality Control Board (RWQCB).
- Collected samples and performed 150 regulatory compliance tests for potable water.

Pretreatment

- Inspections
    - Auto Related Businesses - 4
    - Food Service Business - 28
- Plan review for Building/CDD - 6
- Permit applications or permits - 6
- Public education & outreach visits - 9
- Call-outs for spills/illicit discharges - 2
- Reviewed 1 SIU self-monitoring reports
- Submitted Annual Pretreatment Report to RWQCB
- Development Review Committee meeting
- City GIS Training
- Monthly staff meeting/safety tailgate
- WPCF Safety Committee meting
- Yolo DA's office Environmental Task Force meeting
- Training: WEF/FEMA, Cal EPA, CPR

Utility Engineering

Utility Engineering Legend: **Bolded text** indicates new information

The initials enclosed in ( )'s denotes the lead PW staff on the project.

(DB) Doug Baxter, Principal Civil Engineer
(AO) Akin Okupe, Senior Civil Engineer
(MS) Mark Severeid,
(MC) Mark Cocke, Senior Civil Engineer
(CO) Clara Olmedo, Associate Civil Engineer

Project: Yolo Bypass/City Storm Flows (MC)

Status: The information was sent in for publication in the Federal Register on January 7, 2011. The expected publication date is expected to be in mid March, 2011. This will start the formal 90 day Appeal Process for the

PMR. After the appeal process is finished in mid June, 2011 assuming the mid March publication, the map will be finalized, publication in the Federal Register will be done, and the map will become effective 90 days after publication of the map in the Federal register.

What's Next*:* Waiting for publication of the PMR notification in the Federal Register. **Due to a clerical error in the initial notification in the Federal Register on February 16, 2011, the notification will need to be republished in the Federal Register before the formal appeal process can begin. The new notice is in the publication queue. This will cause a delay in the Effective Date of the new map.**

Project: Wastewater Treatment Plant/NPDES Permit (5 Year Renewal) (MS/DB)

Status: In February 2009 the final NPDES permit was issued by the RWQCB. The new permit requires the City of Woodland to move to an improved source water supply. It also requires significantly more testing and studies that will substantially increase operating costs. The California Sportfishing Protection Alliance (CSPA) has petitioned the adopted NPDES to the State Water Board and requested the State Water Board to hold the NPDES in abeyance for an unspecified period of time. The immediate impact on the permit is unclear at this time. But CSPA wants limits imposed on: Oil and Grease, and Settleable Solids. CSPA has also requested a complete rewrite of the NPDES permit. The State Water Board will hold a hearing to make a decision at some point in the future.

On April 12, 2010, Mayor Skip Davies, Councilmember Bill Marble, City Staff and City's permit writing consultant Dan Rich met with senior staff from the Regional Water Quality Control Board (RWQCB). The purpose of this City requested meeting was to verify that boron, salt and selenium final limits will be in our waste discharge permit, and that these limits will cause the City to move to an improved water quality supply or other substantially more expensive treatment processes. We discussed all the conceivable alternatives and why improving our water quality supply is the least costly viable option. RWQCB made it clear that boron, salt and selenium final limits will be in our permit. RWQCB also said that they would enforce these limits with fines to eliminate all incentives to delay moving forward and that fines could be as high as $10 per gallon per day of wastewater not in compliance (at current flows the fines would be up to $60,000,000 per day). Under our current permit each year we have to submit compliance reports on moving to an improved source water supply. If we delay for example 2 years and saved $11,000,000 in interest, the fines would exceed that amount to eliminate any incentive to delay implementation of salt reduction.

In July, staff met again with RWQCB staff to discuss the recent establishment of Selenium discharge limits and the process for requesting a 5 year Time Schedule Order (TSO) for compliance (to place

minimum mandatory fines in abeyance) since we're pursuing completion of the surface water project. RWQCB staff cited recent case decisions that now preclude them from issuing a 5 year TSO if the date for coming into compliance is over five years away. The city was told we could resubmit when we're within 5 years of compliance (or approx Jan 2011). Pending that point, Woodland will experience minimum mandatory fines of up to $12K per month. To date, the WPCF has 4 selenium violations and anticipates getting a Notice of Violation from the RWQCB soon. This will trigger the Mandatory Minimum Penalty stage of the violation process and will continue until the TSO is submitted and adopted by the RWQCB, in the August of 2011.

What's Next: The surface water project will continue to be pursued. Fiscal impacts of the permit will continue to be evaluated. Woodland staff met with the City Attorney to discuss options to the CSPA action. Staff advised the City attorney to meet with the Regional Board, to see if the Board would support a meeting with CSPA and the City. Regional Board said they will not support opening the NPDES discharge permit as a result of any agreements between the City and CSPA. So the City will wait and see if the State Water Board will agree to open the NPDES permit based on CSPA's petition at some later date. The hearing at the State Board could take up to two years before it's heard. Staff is looking into long-term planning options. Wastewater treatment long-term planning is underway.

The City of Woodland and the City of Davis evaluated the feasibility of combining treatment into a regional facility. The City of Davis is pursuing their own treatment facility. Both cities will continue to look for ways to work together when in the mutual interest of both cities. The City of Woodland will be updating the long-term facility plan for the Water Pollution Treatment Facility.

Project: Flood Protection (MC)

Status: The Final Cost Sharing Agreement was presented to the Central Valley Flood Protection Board meeting of February 25, 2011. Then the documents will be sent the Corps District HQ in San Francisco for review and signature.

What's Next: After Corps District HQ in San Francisco approval in **late May** the Feasibility Study can begin. **The Final 2011 budget has been approved but the final appropriation fund amount ($100,000 or $500,000) has not been released from Washington.** The initial study action will be to seek Corps approval of the hydrology developed for Cache Creek by FloodSafe Yolo. This will allow the Study to explore flood solutions that may involve modification of the Cache Creek Settling Basin.

Project: Storm Drainage Enterprise Operation (MC)

Status: The RCD is developing the plan for the East detention Pond and beginning a control program for management and eradication of invasive non native plants that have begun to occupy the site (tamarisk trees and pepper weed). The vegetation program in Storez Pond and around Fire Station 3 is proceeding well and greened up with the fall rains.

What's Next: The RCD has developed the site plan using native salt tolerant vegetation, and management of the existing vegetation. Native seed collection has been done and the adapted plant will be grown out over the winter. A draft plan for the East Detention Pond was received in December and is under review. A broad leaf weed control program will be started in March for Storez Pond.

Project: Surface Water Program (DB)

Status: The Woodland-Davis Clean Water Agency (Joint Powers Authority or JPA) is overseeing the Davis-Woodland Water Supply Project. Agency Board meeting times are currently held quarterly. Meeting locations alternate between the Woodland and Davis City Halls. The new project website at wdcwa.com contains the meeting agendas and any notices for variations in meeting schedules or locations. The Agency General Manager is Dr. Eric Mische. The current Agency focus includes pursuit of Federal and State supplemental funding opportunities, further analysis and development of innovative facility procurement options, and further development and implementation of community outreach and education opportunities.

Summer water purchase, land easements and use of the Sacramento River Intake agreements have been signed. On January 18 and 19th, the State held a hearing on our water rights. State staff has written a favorable report in support of our water right application.

What's Next: State Board has the water right application approval on the agenda for their next meeting scheduled for March 1, 2011. Focus is now on the Design-Build-Operate (DBO) "Request for Qualifications" process and clearing up land acquisition for the intake site and water treatment plant site. **Request for Qualifications submittal deadline is April 15, 2011 of which a selection process will narrow it down to 3 DBO teams who will then be invited to submit responses to a Request for Proposal.**

Project: Replace Elevated Storage Tank (DB/AO)

Status: The tank art work price came substantially higher than anticipated. It is very expensive to add art work painting after the initial paint has fully

cured and full remobilization is needed. The existing tank paint is a coating system specially designed to protect the steel structure. This protective paint system must not be damaged or compromised so as to protect the tank structure for decades. The preparation work for any painted art work must be carefully done and monitored to protect the protective coating. If art work is done, consulting services will be needed to write the specification, inspect the work and test the paint thickness to make sure the paint remains adequately thick to protect the steel. These consulting services will cost about $18,000. Only qualified and experienced painters will be allowed to do this art work. This is to make sure proper paint and application techniques are used, the existing coating system is not compromised, and for safety reasons. The paint and process is expensive. The January 2011 estimate from an appropriate painting specialists show cost (cost below includes the $18,000 noted above) at:

Only the City flag graphics on upper part of tank = $66,000
Only baseball numbers at the base of the tank = $47,400
Both City flag graphics and base numbers = $74,300

City staff has recommended not doing the supplemental paint work due to the potential for adverse impacts to the existing protective coating system, higher O&M costs, higher future costs of repainting, the very high initial costs, and overall budgetary implications.

What's Next: **The project is complete. This will be the final report on this project.**

Tank will be connected to the system once operational systems are in place to control pressures until SCADA system is operational in mid 2011. Tank is on line. Water levels are gradually being increased. This will be the last report on this project as it is on the March 1, 2011 Council Agenda for accepting this completed project.

Project: Supervisory Control and Data Acquisition (SCADA) (DB/AO)

Status: SCADA contract has been awarded to Auburn Constructors and work has commenced. Work should be completed by summer 2011. Ecologic Engineering Inc. is the construction management firm and did an independent review of the design. FCC license has been obtained**.** Work has proceeded very well and smoothly.

The SCADA system and water-meter radio systems are totally separate operating systems. The water-meter radio system collects data via radio signals from the individual water-meters, sends it to a central location where the data is compiled, and then forwarded to our finance department for inclusion in customer's water bills. SCADA, on the other hand, is used to coordinate the functional workings of the City water system; including the storage tank and all 18 of our wells.

SCADA:

1. Allows the wells to operate in a coordinated manner so as to keep the tank at a near full condition to improve water pressure throughout the day.
2. Continuously monitor nitrate levels in our pumped groundwater to assure that it meets regulatory water quality standards without fail.
3. Monitors wells for operational readiness and physical condition.
4. Allows for the most efficient wells to be operated most frequently reducing overall pumping costs.
5. Monitor security issues

What's New: Work began September 2010. System should be operational by **July** 2011.

Project: Replace Well 22 and Well 15 (CO/AO/DB)

Status: **This will be the final report for this project. Work is essentially complete and will be completed by the end of April 2011. All that remains is the installation of slats to the fence for Well 15 to improve its appearance in the park.**

Over the years numerous attempts were made to solve the serious but intermittent problem of the wells pumping sand which gets into the distribution system and household plumbing. New well sites have been selected and coordinated with Parks. The new site for well 22 is 100 feet north-north-west of existing well 22 and similar distance north of Well 15. Staff received a technical memo on each well's evaluation. Staff also received a work proposal from Brown and Caldwell. Both wells have been drilled. City staff met with representative of CDPH (California Department of Public Health) who have determined that the City may stay with the upper limit of 1600 for electrical conductivity. **Final CDPH clearance and approval has been obtained.**

What's Next: Both wells are functional now and water quality testing has been done to allowing them to go on line.

Project: Backup Power for Wells (CO)

Status: Additional backup generating power was needed to 3 wells. Staff received proposals and awarded contract to the lowest responsible bidder. Well 4's fixed base generator has been installed under the Beamer water pipeline and Well 4 rehab work contract.

What's Next: **Work is complete and this will be the final report for this work item.**

Project: Water Focus Study (DB)

Status: Hydraulic modeling has been done. The sections of the report dealing with the coordination of the use of wells and surface water supplies are being written. Likewise, the report has been amended to reflect the

expected 15% water conservation that should occur with the City being fully metered.

What's Next: Additional modeling is being done to determine best location of ground level tanks to blend surface water throughout the city. Water system calibration work was done in September 2010 which will allow the modeling to be more accurate.

Draft of study has been submitted to the City and City staff has commented on this document. Focus Study will be finalized once we get the results from a separate evaluation done on how best to blend and move the surface water throughout the City. This study may affect tank sizing and location. Modeling is also being done to determine the size and location of water transmission lines and tanks for the Surface Water Supply Project. This work is underway.

Project: Meter Implementation Phase 2 (DB/AO)

Status: City staff received grant funding to install meters on 10,000 houses in the City. Council awarded contract to Teichert Construction, notice to proceed was issued on September 17, 2009. A construction management firm has been selected to manage the project.

Phase 1 metering involved about 5,000 water users and this work was recently completed. It included putting automated meter reading (AMR) equipment on existing meters of businesses as well as homes built post 1991. Phase 1 work is essentially completed. Actual water consumption based billing began for Phase 1 meter users in December 2010.

Phase 2 metering is for installing meters plus AMR on all the remaining 10,000 properties. In addition to installing water meters, many water service lines from water mains will need to be replaced due to their poor condition. Funding is provided by federal stimulus fund of $14.8M (half low interest loan and half grant) plus $2.3M in City Water Enterprise Funds. Staff successfully worked with the State to allow City share to be used last and not first which is normal and was previously required. Project is 75% complete; staff attended training session with CDPH on claim reporting. Staff hopes to both completed the work and keep most of the cost within the federal stimulus fund so as to minimize the utilization of the $2.3M in City Water Enterprise Funds. Staff has completed the modification work that was needed on some of the older meter registers so more accurate data can be obtained to help homeowners with determining if they have leaks in their water plumbing system. By summer 2011 Phase 2 meters should be installed, except possibly for a few condominium and parks that may take a little bit longer.

What's Next: **Staff has been submitting quarterly report as indicated in the funding agreement to CDPH.** Staff is continuing to work with the State

to obtain grant/loan reimbursement funding checks for costs incurred for construction and staff time.

Project: Well #1 Replacement (CO)

Status: The new Yolo County Courthouse project will displace the existing location of Well #1. Construction of a new well to replace existing Well 1 will need to be completed prior to construction of the new courthouse that is scheduled to begin December 2011. The new site for the new well location has been selected to be in the northeast area of Freeman Park in an area of minimal impact to the area normally used by park visitors. West Yost has completed design for the well drilling. **The well that will replace Well #1 will be called Well #28.**

What's Next: **The work has been signed for making the utility connections in Court Street. The well drilling work- will go out for bid in April 2011. The above ground pump station is planned to be bid summer 2011 and Well #28 completed by April 2012.**

Project: First New Ground Level Tank and Booster Pump Station (AO/DB)

Status: The City has a deficit in water storage **of about 3 million gallons** and about 6,000 gallon per minute deficit in water pumping capacity. This project will significantly reduce these problems.

What's Next: Water modeling has been done to confirm the best location for the tank to address hydraulic deficiencies and to optimize the distribution of the higher quality water that will result from the surface water supply project. The project will be located at the west end of David Douglass Park. Letters went out to residences located within 300 feet of the tank site as well as those adjacent to the park to invite them to a public meeting. The meeting was held on March 16th at the Community Center. **Only one person showed up and he was supportive of the project. This project will go before the Parks Commission on April 25, 2011.** The CEQA process is underway.

Project: East Street to Pioneer 36" Water Main (MC/CO)

Status: City is coordinating with four Spring Lake area developers to install a 36" water main instead of constructing a 12 inch water main that was part their obligation to front their developments in order for the City to save money and to meet the needs of the surface water project. The contract has been signed for Brown and Caldwell to perform design services for pipeline.

What's Next: Brown and Caldwell is obtaining topography, planned improvements, and road/RW alignments for the proposed pipeline route to minimize changes to the other proposed infrastructure.