

Updated November 2, 2015
Information Paper: District Cost-Saving Efficiencies

- **The District negotiated lease agreements for Cell Towers placed on two District properties with a combined payment to the District of \$67,468 per year.**
Each agreement includes an annual payment increase based on the CPI index.
- **By filling the temporary position of Water Conservation Supervisor by reassigning an existing, experienced staff person, the District is achieving a big cost savings.**
In response to the Drought Emergency declared by the State of California, the District Board authorized filling a temporary position titled Water Conservation Supervisor. The salary for this position is being covered via payments received under the temporarily-authorized Penalty Ordinance. After careful consideration, the filling of this position was met by the GM by appointing the existing Management Analyst. This appointment has been of major benefit to the District and the customers served, by having an existing employee--one who has been doing the conservation work for 9 years already and who knows the system, District and customer base, and who helped write both the Conservation Ordinance and the Penalty Ordinance--take the lead in temporarily running a more robust conservation effort. The District's Water Conservation Supervisor—with her extensive background and experience at the District--can answer conservation questions, most PR questions and most Budget questions. Once the Emergency period is over, the Conservation Supervisor can step back into her role as Management Analyst, seamlessly, and the other role is simply dissolved. No additional staff has been added. This is a significant cost savings for the District—and a terrific use of highly qualified staff to respond to the challenge of the Drought Emergency.
- **By jointly retaining a consultant with 23 other agencies, for the preparation of a state-mandated report, the District is realizing a cost savings.**
Every five years, all water providers in California are required by the State to prepare and submit an Urban Water Management Plan, describing that agency's water sources and reliability, both current and for the future. As a cost-saving measure, the District elected to have its Plan prepared with 23 other water providers by jointly retaining a consultant to prepare Plans for each agency. This scaled-up effort results in cost-saving efficiencies for all.
- **By utilizing in-house staff for part of the State-mandated report, the District will achieve additional cost savings.**
One of the elements required by the State as part of the Urban Water Management Plan is a "Communications Plan." The consultant retained to prepare the UWMP for the District provided a cost estimate of \$3,900 to prepare the Communications Plan for the District. As a cost-saving measure, the District will instead be preparing the Communications Plan with its own staff, led by the District's Public Information Manager.
- **Achieving full annexation to OCWD in 2013, the District has the right to pump more less-costly groundwater in place of higher-cost import water.**
In 2013, the District achieved full annexation to Orange County Water District (OCWD). This was a major accomplishment for the District, which can now fully utilize the Orange County groundwater basin as a water supply, and can currently meet 70% of its water needs with groundwater. This

water supply is significantly less costly than the District's other water supply, being import water from the Metropolitan Water District. This is a significant cost-saving measure for the District.

- **The District was successful in negotiating for sites for new water wells on OCWD property that will result in a new, highly-productive water supply for the District.**

In order for the District to fully access the groundwater basin, it must have a full complement of water wells. With annexation in 2013 and the right to draw more groundwater, the District needed more well sites and more wells. District staff investigated and pursued purchase of many sites in the westerly part of the District, which overlaid the groundwater basin. The efforts were unsuccessful. Thereafter, District staff initiated discussions with OCWD concerning potential sites in the vicinity of the OCWD recharge basins near the Santa Ana River. Ultimately, the District was successful in negotiating lease agreements for two well sites, now planned as District Well 21 and Well 22. Well 21 is in construction and is expected to be operational in 2016, and work will start soon on planning and design of Well 22. Obtaining these two well sites from OCWD is very beneficial to the District. The sites are very cost-beneficial to the District because: 1) there are limited potential sites overlying the groundwater basin and those otherwise available for purchase or lease would be very expensive; 2) the sites on OCWD property were obtained under favorable lease terms for a 50-year period; 3) the sites obtained are in close proximity to District pipelines; and 4) pump tests for Well 21 (and projected for the planned nearby Well 22) show that the new wells will be high producing, high quality wells. This is very beneficial for the District to meet its long-term water needs in a cost-effective manner.

- **Utilizing in-house staff, the District achieved the timely repair of a critical communications antenna, and saved considerable cost in the process.**

The District has a 30-ft tall communications antenna located at its Hidden Hills Reservoir in the easterly side of the District. The antenna is held in place by three guy-wires, each secured to a large concrete block in the ground. Early this year, on a routine inspection, staff found that one of the guy wires had broken free at its connection to the concrete block, due to metal corrosion. District staff from various departments met to evaluate the problem and potential solutions. It was determined that the failed anchor needed to be replaced and the other two needed to be modified to mitigate the corrosion problem. Rather than obtain bids and hire a contractor to make the repairs, District staff from Engineering and Operations elected to design the upgrades, perform construction of the new concrete anchor blocks, and have staff from the IT Department reset the guy-wires to the modified anchor blocks. Implementing these repairs and upgrades with District staff resulted in major cost savings for the District.

- **By entering into multi-year labor agreements, the District saves an estimated \$60,000 in fees.**

The District spent approximately \$31,000 for this year's labor negotiations. The meet-and-confer process was about 2 months in preparation and 4 months in actual time for meet and confer. The process resulted in a multi-year agreement with the Represented Employees. The District prefers to enter into multi-year contracts because the District saves money in legal fees associated with labor negotiations. Based on actual costs associated with labor negotiations since FY 2009/2010, the District spends on average \$30,000/year. A multi-year agreement results in approximately \$60,000 savings in legal fees for the District. Note that this \$60,000 savings **does not** include the salary savings for both the District's negotiating team (GM and HR Manager) and the District staff representing the Bargaining Unit involved in the process.

- **The District was successful in encouraging its Represented Labor Employees to retain its local representation resulting in cost-savings.**

Prior to the labor negotiations in early 2015, the District's Represented Employees were entertaining being represented by the International Brotherhood of Electrical Workers (IBEW). However, by vote, IBEW was not successful. Had IBEW been successful, the District's legal fees for labor negotiations would have skyrocketed. Labor negotiations would have dragged on, costing the District more in employee's time away from work. Thereafter, negotiations followed and the Represented Employees and the District entered into a multi-year contract, which ended the costly issue that would have resulted with representation by the IBEW.

- **District staff was proactive and successfully negotiated a lower cost for Water and Sewer Rate studies that saved the District an estimated \$100,000 and six-month's time.**

Management had planned to budget for a Water and Sewer Rate Study in FY 2015/16 and had received an authorization to proceed with the RFP-process to do so. District staff inquired on the cost that similar-size agencies had paid for recent rate studies performed for their agencies, which resulted on an average cost of \$75,000 per study type. The District was planning for both water and sewer rate studies. Due to the timing of the Declaration of Drought by the Governor and talks about further conservation restrictions, staff was given the OK by the General Manager to contact Raftelis Financial Consultants, Inc (RFC), who had performed the District's 2012 Water Rate Study and who had created the water financial model for the District's use. Timing was of the essence to get the rate study process started and to enter into a professional service agreement – going through the whole RFP process (mailing RFPs out, reviewing those received back, creating a short list and interviewing from the short list, etc.)-- would take months. District staff spoke with management staff at RFC, and was able to negotiate the preparation of both water and sewer rate studies for an amount not to exceed \$50,000. In negotiating this price, staff utilized the facts that RFC had performed the last water rate study and created a financial model for us – so therefore, they would just be updating the water financial model for future projected rates; and further, the creation of a sewer rate study would mimic the water rate model, and would be a relatively simple task. Thereafter, staff obtained a proposal-letter and a scope of work from RFC that the General Manager reviewed and later presented to the Board for approval. It is estimated that this proactive approach by staff saved the District an estimated \$100,000 and at least six months' time.

- **Rather than retaining an outside engineering consultant to prepare an update to its Water Master Plan, the District will use its own staff, which will save an estimated \$100,000.**

In 2005, the District completed an update to its Water Master Plan. The Master Plan was prepared by a consulting engineering firm at cost of \$90,000. The objective of the Master Plan was to identify capital improvement projects (CIPs) and District initiatives that will improve operational efficiency and maximize the utilization of lower-cost groundwater, with the Master Plan providing a "road map" for the future. In 2014, it was determined that a new update to the Water Master Plan was necessary to review current status and provide a new "road map" for the next ten years. In reviewing our current facilities and documents, it was determined that it would cost an estimated \$150,000 to \$200,000 to hire a consulting engineering firm to perform computer-based modeling of the expanded water system and to prepare a new master plan. As an alternative, after careful consideration, it was decided that this work could be performed by in-house staff from the Engineering, Operations, and Information Technology departments. For this effort, the District purchased new software that will allow the District's GIS-based water-system model to integrate with the District's computer-based SCADA system. The resulting product will make it possible to run real-time scenarios in pressure zones, with reservoirs, booster stations and pipelines to confirm adequacies or the need for improvements. It is estimated that the system modeling and following evaluation in the form of the new Master Plan will take a year or more to complete with District

staff. Preparing the Master Plan in-house has multiple benefits, including training staff to model the water system and become aware of how the facilities and zones interact, locating problem-areas and determining how they can be addressed (working across District departments), identifying recommended capital upgrades and restoration and rehabilitation projects, preparing cost estimates, and developing priority time-lines to address the needed work. Added to these benefits of performing this work internally, is the benefit of saving the District in the range of \$100,000 in the process.

- **The District recently completed an important disaster-preparedness project and saved an estimated \$50,000 by using in-house staff.**

In the event of a disaster—such as an earthquake, flood or fire—the District could potentially lose all of its historical and current records and billing files. The solution is to maintain all records in duplicate, with regular updates, in computer storage in an area far enough away to not be subject to the listed disasters. In response, District staff developed the Disaster Recovery Project. The project is the establishment of computer facilities in Nevada, at a facility providing the same such backup for a multitude of public and private entities, in a highly secure environment. District staff from the Information Technology (IT) Department conceived, designed and implemented the Disaster Recovery (DR) Project with minimal use of outside consultants. They did the research to determine the best course of action to implement the DR Project and relied mostly on their knowledge and the free feedback of hardware vendors to make this project work. They took advantage of the initial help provided by vendors to configure the hardware. There was little cost added from outside consultants in helping to advance this project. The network/communication design was done in house by senior IT staff. By doing this work in-house, it was not necessary to hire a network design engineering team, which may charge \$200/hr or more per person. In addition, District staff was able to save money on the cost of the fiber line going to the co-location site in Nevada by using the District's existing internet provider and thus using the existing Infrastructure. Thereafter, IT staff went to the co-location site and installed all the hardware without outsourcing that work. Had they decided to outsource the work, the cost would have been higher. Outsourcing of this work would otherwise cost in the range of \$160/hr. The Disaster Recovery Project is operational and provides the District fail-safe backup of its critical and daily operational records, for an estimated cost of \$100,000 for computer hardware and software. Doing the planning, design and installation with in-house staff saved the District an estimated \$50,000.

- **Utilizing in-house staff, the District saved considerable time and money in implementing the State-mandated penalty structure into the District's billing system.**

As part of the State of California's Emergency Drought Declaration, the State required that each retail water provider implement a penalty structure into its billing process. The purpose of the penalty was to further draw the attention of water users to the critical need for water-use reductions. The District was given a very short time to implement a penalty structure to the billing process. Because of the short time to implement the change and the difficulty of finding qualified and available outside specialists to perform this work, the IT Department elected to modify the billing software with in-house staff. Had the District chose to outsource this work, the cost would have been \$180/hr for customized programming. Because of staff's knowledge of the billing system and other internal software, they were able to achieve this task successfully by the deadline. Further, because of the Customer Service Manager's thorough understanding of our workflow and system and our System Analyst's knowledge of the back-end of the program, they were able to collectively develop, test and implement the penalties and successfully attach them to the

customer's bill. This saved the District money--and because of diligent testing by staff as well as their ownership of their work, ensured that there were no mistakes.

- **Operations Dept staff designed and built its own reservoir water-quality management system at Hidden Hills Reservoir, the first of its kind, saving the District over \$200,000.**

In 2010, the District placed into service the new two-million-gallon capacity Hidden Hills Reservoir at the northeasterly edge of the District. The reservoir was an important addition to the water system, providing gravity-fed water for daily needs, emergency needs, and fire-flow needs for the residents in the Hidden Hills area. Soon after the reservoir was placed into operation that summer, it was found that there were water quality issues that needed to be addressed. These issues included low demand in the reservoir service zone, leading to long turnover time for the water in storage, high water-age prior to getting to the reservoir, and warmer water temperatures. These issues were reduced by the installation of a reservoir mixing system, but issues remained with the gradual loss of disinfection residual in the reservoir water. An available solution, identified by staff, was to construct a system to boost the chloramine disinfectant by adding chlorine and ammonia at the reservoir. Commercially-available systems could be provided and installed at an estimated cost of \$200,000. However, Operations Department staff believed that a much simpler approach might be possible, and initiated a sampling, testing and trial program. This program proved successful, resulting in a District-installed system that improved and maintained water quality, at one-tenth the cost of a commercial system.

- **Engineering Dept staff negotiated with the City of Yorba Linda to allow for a smaller repaving area around the perimeter of a street excavation after the area was restored.**

This reduction in the amount of asphalt paving that is required to be cut, ground and repaved will save the District thousands of dollars each year.

- **Operations Dept recently initiated a Leak-Detection Program that is finding leaks that have not surfaced, and may have gone undetected for years, costing us thousands of dollars.**

Operations Department recently began the program where a staff person in the Leak Crew is dedicated full-time to monitoring for leaks. Efforts are currently concentrated on the west side, where the main lines and customer service lines are older. The staff person uses a system which monitors for the sound of running water. When a leak is indicated, and it is on the District's side of a water meter or along a water main, the Leak Crew Leader is notified and the leak is located and repaired. When the leak is noted as being on the customer side of the meter, the customer is notified, who can then address the repair to reduce their water bill and water loss. This is a new program started this year and is proving to be very successful and appreciated by customers.