



# CIP & BOND PROJECTS

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## STATUS REPORT DECEMBER 17, 2008

### Main Pump Station Generator

- Delivery of the emergency generator by Peterson Power Systems, Inc., (supplier) is scheduled for December 12, 2008. A crane will be used to transfer the generator from the truck to the concrete base pad. Gardini Electric will connect the new generator to the new main breaker assembly soon after the generator is anchored in place. The generator was sized to operate two of the four station pumps and other station electrical demands such as the water quality testing, SCADA data collection/sending equipment and radio. Two pumps are sufficient to maintain water daily demand during continuous operation.
- Staff completed construction of the generator's concrete pad with the installation of conduits needed to connect the generator to the Main Pump Station building.
- Installation of the station's new electrical main panel and breakers is complete. It replaces the existing panel/breaker assembly that could not be shut off. The new equipment improves operating staff's safety and includes the necessary transfer switches for the new emergency generator. The new panel/breakers were constructed on the east side of the station away from the existing panel (on the west side of the station) to ensure that the pumps would remain operational during construction. New overhead power connections were required to attach the new panel/breakers to the power grid. PG&E successfully completed their transfer and powered the new panel/breaker assembly without incident.



PG&E's  
work  
successfully  
completed.



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Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$225,000	\$47,863	21.3%	\$177,137

### Main Pump Station Booster Pump

The booster pump arrived on time. Its installation is awaiting the completion of the new electrical panel/breakers and the emergency generator. The booster pump is designed to provide water to the Crystal Springs Terrace Apartment Complex, served by the District, in the event the 3-mile main transmission pipe is damaged or has a scheduled repair.

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$50,000	\$29,831	59.7%	\$20,169

### Alternate Water Source Acquisition Project

For the past several years, staff has investigated alternate water sources including expanding the District's water rights on San Pedro Creek, obtaining groundwater from the Devil's Slide Tunnel and water desalination. While staff continues to pursue water sources from the San Pedro Creek and the Devil's Slide Tunnel these sources are proving to be less reliable and less plentiful than their development costs would demand.

Technological advances in both water desalination and wave energy, combined with a growing political will on the state and national level to promote these technologies, suggest that this is a great time for the District to take the initial steps towards studying these technologies for their potential and limitations.

To date the following steps have been taken to explore this possibility further:

- Staff obtained and read numerous reports, CEQA documents and the permits of working and proposed desalination facilities along the California Coast to learn from their experiences and look for common conditions.
- Staff has met with several engineering groups specializing in desalination.
  - Staff obtained a proposal from Kennedy/Jenks (K/J) to learn more about energy demands, space requirements, ocean water studies, and environmental issues specific to this District. K/J is providing



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expert advice for many desalination projects in California and Florida.

- o MWH Americas, Inc. invited Board Members and staff to tour the joint Santa Clara, EBMUD & SFPUC pilot desalination plant in Pittsburg.

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$85,000	\$0	0%	\$85,000

### 21” Transmission Main – Jump Nodule

More than a mile of the District’s essential transmission main is located directly above the San Andreas Fault in the San Francisco Public Utilities Commission watershed area along the west side of Skyline Blvd. south of San Bruno Avenue. Staff developed a “jump nodule” to connect to the transmission main that will allow staff to quickly attach temporary flexible piping above ground to “jump” sections of the transmission piping damaged during an earthquake. Environmental approval is needed to install the nodules. Staff to obtain approval after work on projects currently under construction has been completed.

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$75,000	\$0	0%	\$75,000

### Reina Del Mar/Vallemar Pipeline Replacement Project

Reina Del Mar is a multi-phase multi-year project to improve flow characteristics, access to storage and eliminate the low pressure zone in the Vallemar Valley. Phases I through IV are complete, additionally:

- Phase V – Construction of the new 12” pipeline on Reina Del Mar between Bonita and Angelita is complete.
- Phase VI – Construction of the temporary regulator at the Bonita/Reina Del Mar intersection is complete. The completed pipeline allows the existing piping north and west of the Amapola regulator to be connected to the high pressure zone. The temporary regulator will be removed once the side streets along Reina Del Mar can be connected to the new water piping and the existing low pressure piping can be taken out of service.



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- Phase VII – Construction of the new 12” pipeline on Reina Del Mar between the school and Winona is complete
- Phase VIII - Construction of the new 12” pipeline on Reina Del Mar between Winona and the temporary regulator at Bonita/Reina Del Mar is complete.
- Phase IX - Construction of the Nataqua Ave. Pipeline Replacement Project is complete.
- Phase X – Construction of a new 6” pipeline on Ramona north of Reina Del Mar - nearly 70% of the piping has already been installed. Work on this portion of the work is scheduled for completion by late December 2008.



Ramona Avenue pipeline being laid.

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$210,000	\$446,935	212.8%	\$(236,935)

### Oviedo Tank Regulator Station

The removal of the Oviedo Tank requires the installation of a regulator station that allows water to bypass the tank and provide water to the downstream pressure zone the tank once served. Staff devised a plan that would save the District nearly \$35,000. Since the District also needs a temporary regulator



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station to serve as part of the Phase VI improvements for the Reina Del Mar Pipeline Project, staff will use the Oviedo Station on Reina Del Mar and then move it to serve the Oviedo site after the Phase VI Reina Del Mar Station is no longer needed (November 2009).

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$45,000	\$19,181	42.6%	\$25,819

### Francisco Facility Improvements

The existing Francisco facility office building, mechanic's shop and warehouse do not meet minimum seismic structural requirements. The offices and shop must be demolished and rebuilt, but the warehouse can be retrofit. Staff is examining temporary and future solutions to the space requirements resulting from the demolition and retrofit of these structures. Possible solutions have included:

- The temporary relocation of the Francisco offices to on-site trailers;
- Leasing office spaces within the District;
- Constructing temporary warehouse structures at the Francisco facility;
- Temporarily relocating the warehouse and shop to new satellite facilities to be constructed at the San Pedro Corporation Yard Facility;
- Leasing warehouse spaces.

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$490,000	\$0	0%	\$490,000

## **ANNUAL PROGRAMS**

### Reservoir Site Paving

- Staff is working with Bragato Paving, Inc. to pave around the Vallemar Tank. Currently, the site drains toward the tank. The new paving will direct water away from the tank and improve maintenance for the area immediately surrounding the tank.

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$60,000	\$19,048	31.8%	\$40,952



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### Reservoir Fence Maintenance

- Staff oversaw the replacement of the chain link fencing and a new access gate at the San Pedro Corporation Yard.
- Staff also oversaw the raising of the west vehicle entrance gate at the Royce Tank site ahead of the paving of the entrance to the tank.

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$50,000	\$12,195	24.4%	\$37,805

### Annual Pipeline Project

During the Mid-Year Budget Review process, funds for this project will be transferred to fund the completed Nataqua Ave. Pipeline Replacement Project and the current Ramona Pipeline Replacement Project as described above in the Reina Del Mar/Vallemar Pipeline Replacement Project status report.

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$200,000	\$19,384	9.7%	\$180,616

### Easement Protection

This program is part of the District's Emergency Preparedness Program. Easement Clearing/Pipe Locating - A large portion of the District's distribution pipeline is located in open space away from roadways. Pipelines within open areas can be hard to locate during an emergency because vegetation (grasses, shrubs and trees) can obscure items that can normally be seen in streets such as meters, valves and blow-offs. The program locates pipelines, marks them and trims vegetation over pipelines to maintain emergency access and inspects the pipeline alignments for leaks. Projects include the following:

- Pre-winter work to clear access to the easements is complete.
- Staff obtained permits and trimmed trees at the Oviedo and Sheila Tank sites that were threatening the tanks.



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Trees thinned out at Oviedo Tank.

- Staff obtained permission and cleared the easements behind Oddstad School. Staff also cleared the Nelson Tank site of overgrowth and debris.



- Staff is currently working with the GGNRA to improve easement access through their properties.

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$65,000	\$30,020	46.2%	\$34,980



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### Meter Replacement Program

This program installs and/or updates meters and meter clocks (recording/reporting devices mounted on the top of the meters) in areas that would best improve customer service and the meter reading process. Work on meters and installing house pressure regulators in the Vallemar area is nearly complete. This work is being done in advance of Reina Del Mar Pipeline Project that eliminates the low pressure zone and improves fire flows in the area.

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$100,000	\$0	0%	\$100,000

### Fire Hydrant Replacement Program

Work to replace damaged hydrants and those in high visibility areas will restart as soon as work on the Reina Del Mar Pipeline Projects is complete.

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$65,000	\$0	0%	\$65,000

### Regulator Upgrades

- Staff did a great job completing work on the Palmetto Regulator Station north of McDonalds.
- Staff is currently designing a replacement and relocation of the regulator station at the corner of Linda Mar and Cabrillo Highway 1 (at the Valero Fuel Station). The regulator station will move east to a point in the right-of-way at the SamTrans Bus Station. The existing site is immediately adjacent to the Valero fuel pumps and difficult to access.
- Staff is also designing the replacement regulator in front of the Fire Station on Linda Mar Blvd.

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$100,000	\$42,787	42.8%	\$57,213

### Vehicles

- In November, staff purchased a refurbished military seven cubic-yard capacity dump truck. The purchase price and delivery cost for the



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- flatbed is \$26,000 representing a \$130,000 savings over a new vehicle.

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$160,000	\$132,974	83.1%	\$27,026

## PARTNERSHIP PROJECTS

### Recycled Water Project

This project constructs a pump station, three-mile long distribution system and a 400,000 gallon tank. Project design is proceeding as planned.

- Staff is recommending that the overall agreement between the District and the San Francisco Public Utilities Commission (SFPUC) to construct the Pacifica Recycled Water Project be adopted by the District Board of Directors at their December 2008 meeting. The SFPUC adopted the agreement in November 2008 but had made last minute changes unacceptable to the District. Fortunately, the SFPUC also allowed for minor modifications that would make the final agreement acceptable to both parties.
- The construction permitting process is along the critical path of items to be completed prior to start of construction. The team is in the process of obtaining permits from several agencies including the Coastal Commission, the Department of Fish and Wildlife, and Caltrans.
- Staff is currently preparing construction and permanent easement agreements for those sections of the recycled distribution system outside the city and state right-of-ways.

### *Non-State Revolving Fund Work*

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$16,000	\$0	0%	\$16,000

### *Non-State Revolving Fund Work – Legal Fees*

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$140,000	\$7,545	5.4%	\$132,455

### *SRF Funded Work - District's Contribution*

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$2,585,000	\$50,402	1.9%	\$2,534,598



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### Devil's Slide Tunnel Waterline Project

The Devil's Slide Tunnel Project requires water for the tunnel fire suppression system, fire hydrants, Caltrans' operation and maintenance building, drinking fountains, bathrooms and landscaping. To serve these needs the District will construct nearly 4.5 miles of 12" Ductile Iron Pipe looped water distribution system at an estimated cost of \$5.3 million for Caltrans.

- Piping has already been constructed and passed test requirements for the section within the southbound tunnel bridge.
- Piping from the valley below the bridge to the south abutment of the bridge is also complete.
- CEQA documentation/permits for the Shamrock Ranch Piping portion of the project are underway.
- Design work for the remaining pipeline within Shamrock Ranch and along Highway 1 is underway.

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$16,000	\$0	0%	\$16,000

### I-280 Tunnel Piping Replacement Project

The City and County of San Francisco Sheriff's Office turned down the District's request to enter into an agreement to jointly replace their badly deteriorated 10" piping and the District's badly deteriorated 21" Transmission Main. Staff has already purchased the tunnel piping and intends to start construction in mid-2009.

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$220,000	\$51,838	23.6%	\$168,162

### Tree Tops Apartments Pipeline Relocation Project

Staff is working on an agreement with the owners of the Tree Tops Apartment Complex (southwest corner of Skyline Blvd. and Sharp Park Rd.) to relocate the District's existing 21" transmission main easement on their property. Construction was tentatively scheduled for September 2008 but is now scheduled for April 2009 to meet Developer funding needs.

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$100,000	\$3,615	3.6%	\$96,385

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## BOND FUNDED PROJECTS

### Christen Hill Tank

Staff developed a conceptual plan in response to the poor condition of the Christen Hill Tank and its close proximity to the San Andreas Fault. The plan removes the existing 3.5 million gallon (MG) tank and replaces it with a new seismically resistant 1.5 MG tank. Pressure requirements exacerbated by the newly constructed homes surrounding the tank require that the base elevation of the tank be raised by approximately thirty (30') feet. The project would also construct a new 2.5 MG tank on the west side of the San Andreas Fault along with nearly 6,000' of new transmission piping required to supply both of the proposed tanks. Public outreach and the environmental CEQA process will begin within the next few months.

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$2,400,000	\$370	0.01%	\$2,399,630

### Royce Tank Repairs and Site Improvements –

The 3.5 MG tank and pump station improvements are on-line and in service. Staff is working towards completing the remaining site work, such as grading, electrical and lighting improvements.

- Paving was installed around the new tank to drain water away from its base.

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$80,000	\$50,848	63.6%	\$29,152

### Gypsy Hill Tank Repairs and Site Improvements–

- The 3.5 MG tank is on-line and in service. Staff completed its construction of a building for the radio, SCADA controls and sensor equipment.



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- Staff is installing conduit for the radio, SCADA controls and sensor equipment to support Gypsy Hill Tank Operations.
- Staff is also planting trees along the north and west sides of the site to capture moisture, provide erosion control and screen the site from surrounding residents.
- Later this year staff will work to complete the remaining site work, such as grading and lighting improvements.

Installing conduit at Gypsy Hill Tank Site.



New Cypress trees installed at Gypsy Hill Tank site.



Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$150,000	\$92,590	61.7%	\$57,410



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### Nelson Tank Replacement

Staff intends to remove this badly deteriorated tank and replace it with a larger tank at a better location as part of the Christen Hill Tank Replacement Project.

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$240,000	\$0	0%	\$240,000

### Park Pacifica Tank Repairs and Site Improvements

Staff completed its scouring and disinfection of the tank prior to putting it back in service in September. The scouring removed rust and failed coating material built up inside the tank. Staff is current awaiting structural engineering analysis of the condition of the tank. It appears that the tank can be seismically retrofit, but an economic analysis will be conducted to determine if its retrofit or replacement is most cost effective.

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$1,100,000	\$32,021	2.9%	\$1,067,979

### San Pedro Valley Corporation Yard Improvements

This project would construct a warehouse, permanent materials storage, pipe rack, and a Vac Con tank holding area. Staff is reviewing the draft Initial Study/Mitigated Negative Declaration prepared by RBF Consultants. The environmental CEQA documents are needed for the approval and subsequent construction of the proposed site improvements.

Budget	Year to Date Spent	Percent Spent	Balance Remaining
\$465,000	\$32,510	7.0%	\$432,490

## **WATER CONSERVATION PROGRAM**

### Public Outreach

- In October District's FOGFEST parade entry featured the new flatbed truck with plush toy water droplets being handed out to the crowd. The event was a great way to reconnect with our community, customers and friends.
- Staff operated a water conservation booth during the FOGFEST to promote water conservation tips and devices. Staff also suggested that



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visitors to the booth check out the District's website for more tips and messages.

- Staff attended water conservation conferences, seminars, BAWSCA meetings and the Association of California Water Agencies (ACWA) Fall Conference to learn about local and statewide water conservation programs and how they might be applied to the District.

### Green Business Certification Program

Staff is working with the City of Pacifica to implement a Green Business Certification Program. Once the program is up and running, the District will audit interested businesses and provide a list of water conservation measures to be installed or made. A business receives the green certification once the measures are implemented.