



North Coast County Water District

CIP & BOND PROJECTS

Cashback Bonus for Partner **STATUS REPORT JUNE 16, 2010**

San Pedro Creek Water Rights Utilization

- The San Pedro Filter Plant Rehabilitation Project, among other things, installed a filter system that filters the creek water for non-potable uses. The project's completion has allowed staff to save potable water and retain the District's Water Rights within the creek.
- A conceptual design for the in-situ repair of the piping between the existing intake structure and the San Pedro Filter Plant intake piping has been prepared. Staff has contacted several vendors/contractors to aid in the preparation of plans, specifications and estimates (PS&E) for a project planned in the next Fiscal Year.

| Budget | Year to Date Spent | Percent Spent | Balance Remaining |
|---------|--------------------|---------------|-------------------|
| \$5,000 | \$0 | 0% | \$5,000 |

Water Desalination – Water Treatment Feasibility Study

- Staff has developed a conceptual design that incorporates the experiences gained by other agencies. The conceptual design will be integrated into a technical paper being prepared to facilitate preliminary discussions with other agencies and determine their interest in purchasing water or perhaps partnering to construct a facility.

| Budget | Year to Date Spent | Percent Spent | Balance Remaining |
|---------|--------------------|---------------|-------------------|
| \$3,000 | \$2,402 | 80% | \$598 |

Alternate Energy Project

- Staff applied to the Federal Department of Interior, Bureau of Reclamation for the study and construction of in-pipe hydroelectric power generation (HPG). The HPG would be installed within the District's existing piping system to take advantage of the high pressures created between the water tanks located at the top of hills and the point of delivery to customers living within the District's valleys. Currently, altitude valves and regulators dissipate these existing pressures (energy)



North Coast County Water District

CIP & BOND PROJECTS

from the pipelines before high pressures in these pipelines can cause damage to water heaters and home piping.

- Staff is also looking into solar and wind energy designs that are unobtrusive and don't result in bird kills.

| Budget | Year to Date Spent | Percent Spent | Balance Remaining |
|---------|--------------------|---------------|-------------------|
| \$2,000 | \$2,000 | 100% | \$0 |

Reina Del Mar/Vallemar Pipeline Replacement Project

The Reina Del Mar Pipeline Replacement Project is a multi-phase multi-year project to improve pressures and flow characteristics, access to water storage, and eliminate the low pressure zone in the Vallemar Valley.

- Phase VIII work attaches the new high pressure waterline located on the north side of Reina Del Mar to the existing piping on side streets and water service connections along the south side of Reina Del Mar. Staff is currently replacing the hydrant on Ramona which completes all work in this phase.
- Phase IX work removes the temporary regulator installed on Reina Del Mar and Minerva. The temporary regulator was installed at the beginning of the project to maintain pressures on the old low pressure waterline while the construction of the new waterline was taking place.
- Future Phases will connect existing piping on Hillside, Lauren, Juanita and Ursula to the high pressure piping and will complete the project work.

| Budget | Year to Date Spent | Percent Spent | Balance Remaining |
|-----------|--------------------|---------------|-------------------|
| \$100,000 | \$55,803 | 55.8% | \$44,197 |

Annual Pipeline Project

- T-4 Transmission Main Replacement Project. This is a joint project with the San Francisco Recreation and Parks Department (SFRPD) to replace approximately 1,800' of existing pipe within the lead-contaminated Sharp Park Rifle Range. The SFRPD is hopeful that work on this project will start in late Summer 2010 once they obtain a Fish & Wildlife Permit for their soil remediation project.



North Coast County Water District

CIP & BOND PROJECTS

- Tree Tops Apartment Bypass Piping Project: AIMCO, the owners of the Tree Tops Apartment, has been contacted regarding relocating the District's 21" Transmission Main from an alignment within the existing property and in close proximity to existing structures in order to relocate the main to its perimeters along Sharp Park Rd. and Skyline Blvd. If easements are granted then construction begins in Fiscal Year 2010/2011.

| Budget | Year to Date Spent | Percent Spent | Balance Remaining |
|-----------|--------------------|---------------|-------------------|
| \$150,000 | \$33,459 | 22.3% | \$116,541 |

21" Transmission Main Emergency Piping Nodules

- Staff is planning the installation of a nodule at the end of this fiscal year. The nodule installation will be the second of 15 needed to prepare for upcoming earthquakes on the San Andreas Fault. More than a mile of the District's essential transmission main is located directly above the San Andreas Fault. The "jump nodules" will be placed at about 500' intervals to allow staff to quickly attach temporary flexible piping above ground to "jump" sections of the transmission piping damaged during an earthquake.
- By January 2010 staff had replaced all of the air release valves (ARV) along the 21" transmission main within the watershed area. Only two ARV's remain along the remaining three miles of 21" main that need to be replaced.

| Budget | Year to Date Spent | Percent Spent | Balance Remaining |
|----------|--------------------|---------------|-------------------|
| \$40,000 | \$8,378 | 20.9% | \$31,622 |

ANNUAL PROGRAMS

Reservoir Site Paving

- Staff oversaw the application of slurry seal over the existing pavement at Hickey, Sharp Park and Tapis tank sites. The slurry seal is an asphaltic emulsion applied every five to seven years to preserve the condition of the initial paving as part of a Pavement Management System.



North Coast County Water District

CIP & BOND PROJECTS



(L) Sharp Park Tank Site



(R) Tapis Tank Site

- This year an asphalt pad for two 20- foot long steel storage containers at the Gypsy Tank site was completed. Paving work adjacent to the Royce Tank is also complete.
- The area surrounding the Main Pump Station was also paved to improve site access and reduce site maintenance.

| Budget | Year to Date Spent | Percent Spent | Balance Remaining |
|----------|--------------------|---------------|-------------------|
| \$60,000 | \$14,791 | 24.7% | \$45,209 |

Reservoir Fence Maintenance

- Work on this project started with a replacement fence at Christen Hill Tank Site as part of the Tank Replacement Project (See Bond Funded Projects).
- The damaged concrete fence at the Skyline Intertie site was repaired and paid for by the responsible motorist's insurance carrier.

| Budget | Year to Date Spent | Percent Spent | Balance Remaining |
|--------|--------------------|---------------|-------------------|
|--------|--------------------|---------------|-------------------|



North Coast County Water District

CIP & BOND PROJECTS

| | | | |
|----------|----------|-------|----------|
| \$25,000 | \$13,139 | 52.6% | \$11,861 |
|----------|----------|-------|----------|

Easement Protection

This program is part of the District's Emergency Preparedness Program because it provides access to important existing piping for monitoring and repairing leaks.

- Staff completed its maintenance of the easement on Gypsy Hill between the District's tank site and Sharp Park Road.
- Staff is also working with the GGNRA to improve access to the District easements on Mori Ridge (east of State Highway 1), Cattle Ridge and Sweeney Ridge.
- Easement protection work begins in mid-June ahead of the Independence Day Holiday. The work not only maintains emergency access, but in many cases it also serves as a fire break to help protect the District's improvements.

| Budget | Year to Date Spent | Percent Spent | Balance Remaining |
|----------|--------------------|---------------|-------------------|
| \$50,000 | \$41,945 | 83.9% | \$8,055 |

Meter Replacement Program

This program installs and updates meters and meter clocks (recording/reporting devices mounted on the top of the meters).

- Staff conducted the meter replacement/rehabilitation work within Route 29 including Aspen and Park Mall.
- Work will continue during the remainder of this year at a much slower pace as major piping work has resumed with the start of nice weather.

| Budget | Year to Date Spent | Percent Spent | Balance Remaining |
|---------|--------------------|---------------|-------------------|
| \$5,000 | \$1,016 | 20.3% | \$3,984 |

Fire Hydrant Replacement Program

New hydrants were installed throughout the Fairmont area.

| Budget | Year to Date Spent | Percent Spent | Balance Remaining |
|--------|--------------------|---------------|-------------------|
|--------|--------------------|---------------|-------------------|



North Coast County Water District

CIP & BOND PROJECTS

| | | | |
|----------|---------|-------|----------|
| \$15,000 | \$3,846 | 25.6% | \$11,154 |
|----------|---------|-------|----------|

Regulator Upgrades

- Repair and replacement of the Zamora regulator and vault is complete. Staff reused an access panel from a previous regulator project to save money and improve vault access.
- Staff ordered and will install an on-site solar driven pump to remove ground water that regularly floods the Rockaway Regulator vault.

| Budget | Year to Date Spent | Percent Spent | Balance Remaining |
|----------|--------------------|---------------|-------------------|
| \$30,000 | \$33,828 | 112.8% | (\$3,828) |

Equipment Purchase Program

Staff purchased four attachments for the mini-excavator including the pavement/concrete breaker, vibrating compaction plate, compaction wheel and 12" auger.

| Budget | Year to Date Spent | Percent Spent | Balance Remaining |
|-----------|--------------------|---------------|-------------------|
| \$125,000 | \$60,041 | 48.0% | \$64,959 |

Geographic Information System

Staff is continuing the process of scanning existing maps into electronic format and entering map details into an Excel spreadsheet for later use in a database. Staff is already experiencing success in using the database system to retrieve plans and maps. The query process speeds the retrieval of available plans/maps and the electronic copy of the plans/maps allows staff to zoom in on the information they need immediately for an emergency response or a design question.

This project also starts the process of developing a Geographical Information System (GIS) for the District. When complete, the GIS will effectively manage and retrieve essential information such as project plans, as-built maps, photos, maintenance data, property/easement titles, meter location data and utility data for other utilities. The GIS ties together this data into a mapping system that simplifies its retrieval and improves analysis.

| Budget | Year to Date Spent | Percent Spent | Balance Remaining |
|----------|--------------------|---------------|-------------------|
| \$20,000 | \$4,591 | 22.9% | \$15,409 |



North Coast County Water District

CIP & BOND PROJECTS

BOND FUNDED PROJECTS

Nelson Tank Removal Project

The tank was removed by staff without incident. The wood from the tank has been stacked for drying and its eventual sale. Metal from the tank has been recycled. Staff is attempting to place the video on the NCCWD website.

| Budget | Year to Date Spent | Percent Spent | Balance Remaining |
|---------|--------------------|---------------|-------------------|
| \$5,000 | \$2,756 | 55.1% | \$2,244 |

San Pedro Corporation Yard Improvements

Staff completed a portion of the wall adjacent to the access roadway before rains created a project delay. The concrete block wall is being constructed with large concrete blocks very similar to childrens' LEGO game pieces. They can be stacked to form walls and then removed as necessary. The fence on the top of the wall leaned over towards the yard area during the last large storm and will be repaired with the temporary concrete block construction.

| Budget | Year to Date Spent | Percent Spent | Balance Remaining |
|-----------|--------------------|---------------|-------------------|
| \$100,000 | \$60,440 | 60.4% | \$39,560 |



North Coast County Water District

CIP & BOND PROJECTS





North Coast County Water District

CIP & BOND PROJECTS

(Picture 1) Jose Velazco behind the controls (Picture 2) Rolando Valdez and Brian McCarthy working on the concrete block wall (Picture 3) Partially completed concrete block wall

Christen Hill Tank Improvements – Tank Design

This project replaces the existing 3.5 million gallon tank with a new seismically-designed 3.8 million gallon tank.

- The required CEQA documentation has been prepared and certified.
- Plans Specifications and estimates have been completed and the project is currently accepting bids. Bid opening is scheduled for July 8, 2010.

| Budget | Year to Date Spent | Percent Spent | Balance Remaining |
|-----------|--------------------|---------------|-------------------|
| \$190,000 | \$130,598 | 68.7% | \$59,402 |

Christen Hill Tank Improvements – Tank Construction

- Staff completed the on-site piping modifications at Christen Hill Tank and at the adjacent Daly City Tank that were necessary prior to the removal of the tank. The work included the installation of a meter assembly connection between the District's system and Daly City's tank. It also included the installation of three separate valve sets to isolate and redirect water currently connecting the Christen Hill Tank to NCCWD and Westborough Water District piping.
- Preparatory electrical work such as SCADA connections to the adjacent Daly City Tank and procedures for the planned disconnects of the SCADA/electrical at Christen Hill Tank are complete.
- The existing tank was satisfactorily removed. Staff is attempting to place the video on the NCCWD website.
- Staff removed the pea gravel and concrete ring wall around the base of the tank and found a 50" deep layer of contaminated soil. Soil testing results should be available by mid-June. The contamination is likely diesel and the staff will dispose of it as required by law.

| Budget | Year to Date Spent | Percent Spent | Balance Remaining |
|-----------|--------------------|---------------|-------------------|
| \$910,000 | \$141,175 | 15.5% | \$768,825 |



North Coast County Water District

CIP & BOND PROJECTS



(L) Chris Regnart, Project Manager, behind the controls; (R) Christen Hill Tank Site

Christen Hill Tank Improvements – Regan Pump Station Modifications

Staff completed the installation of the booster pumps and connective piping and electrical improvements. The three-pump booster system will help maintain pressures and fire flows within the pressure zone served by the Regan Pump Station and Christen Hill Tank during the 1 ½ year period that the tank will be off-line for its removal and replacement.

| Budget | Year to Date Spent | Percent Spent | Balance Remaining |
|-----------|--------------------|---------------|-------------------|
| \$105,000 | \$96,197 | 91.6% | \$8,803 |

Christen Hill Tank Project - Milagra Piping Modifications

This project is one of many innovative projects designed by staff. It solves a pressure problem along the 21” transmission main by essentially constructing a stand pipe instead of a new pressure vessel or water tank. Staff is replacing the existing 16” piping at the site with 36” diameter piping that was recycled from the Filter Plant. Improvements at the Filter Plant constructed by staff earlier this year made the old 36” chlorine contact piping system obsolete. Rather than abandon the 36” piping in place, staff learned how to disconnect the piping and moved it to the Milagra Site. Staff videotaped the process for disconnecting the piping and has already shared the process with another



North Coast County Water District

CIP & BOND PROJECTS

District. The Milagra site has sufficient ground elevation differences to install most of the stand pipe below ground to achieve the pressure changes needed for the 21” transmission main. A side benefit from this project is several interconnections between site piping that would allow staff to drain Christen Hill Tank very quickly. The ability to drain the tank will help during an emergency or during normal operations when there is a necessity to turnover the tank’s water.

| Budget | Year to Date Spent | Percent Spent | Balance Remaining |
|-----------|--------------------|---------------|-------------------|
| \$150,000 | \$28,046 | 18.7% | \$121,954 |

Francisco Facility

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 existing warehouse can be retrofit.

For the purpose of meeting CEQA requirements, the Francisco and San Pedro Corporation Yard projects were combined because the seismic retrofit of the Francisco Facility can’t occur without providing a location for relocation of the mechanic’s shop and warehouse operations.

- The Draft Initial Study/Mitigated Negative Declaration was prepared for the combined project and reviewed by the City of Pacifica and District staff. The City has been involved in the process, even though the District is the lead agency, because the City Planning Commission will have oversight of the project’s buildings.
- Staff is currently incorporating comments made by the City's Planning Department and City's legal counsel into the draft CEQA documents before starting the circulation and public review process.

| Budget | Year to Date Spent | Percent Spent | Balance Remaining |
|--------|--------------------|---------------|-------------------|
| \$0 | \$0 | 0% | \$0 |

GENERAL PROJECTS

PARTNERSHIP PROJECTS



North Coast County Water District

CIP & BOND PROJECTS

Recycled Water Project

This project, to construct a pump station, three miles of distribution system and a 400,000 gallon tank is designed to replace potable water uses with recycled water. The project is estimated to save nearly 50 million gallons of potable water each year.

- A requirement of obtaining the \$2,200,000 in funding from the ARRA (Stimulus) Grant is the execution by the Board of Directors of the U.S. Department of the Interior Bureau of Reclamation Assistance Agreement. The Agreement was before the Board for action at their April 21, 2010 meeting. As a project partner and prompted by the Assistance Agreement requirement, the SFPUC agreed to reaffirm their commitment to the project. We are meeting with SFPUC staff to jump start this project and finalize the steps required to put the project out for bid.
- Staff is continuing their efforts to complete the State Revolving Fund Loan (SRF) and ARRA application process.
- Project plans and technical specifications are complete and ready for bidding, however, the bid documents will need to be modified to meet State Revolving Fund Loan (SRF) and ARRA requirements once the application process is complete.

| Budget | Year to Date Spent | Percent Spent | Balance Remaining |
|-----------|--------------------|---------------|-------------------|
| \$130,000 | \$51,254 | 39.4% | \$78,746 |

Devil's Slide Tunnel Waterline Project

The Devil's Slide Tunnel Project requires water for the tunnel fire suppression system, fire hydrants, Caltrans' operations 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 for Caltrans. Caltrans is paying all costs for this project. So far:

- Piping has already been constructed within the southbound tunnel bridge and has passed pressure test requirements.
- Piping from the valley below the bridge to the south abutment of the bridge is also complete.



North Coast County Water District

CIP & BOND PROJECTS

- The project IS/MND for the East and West Alignments was prepared and has completed the review period without public comment. The Board of Directors adopted the Initial Study/Mitigated Negative Declaration for the NCCWD Water Transmission Pipeline Project and authorized filing the Notice of Determination at their December 16, 2009 Board Meeting.
- Design work for the remaining pipeline within Shamrock Ranch and along Highway 1 is also underway.

Sample Stations

Staff is in the process of installing the last of the fourteen sample stations needed for the water quality sampling of the District's distribution system. The stations are being constructed at strategic locations throughout the District to develop a true representative sample of the water quality at any given time. The stations replace water sampling from private hose bibs.

LEAK REPORT

Leaks that occurred during this last month are listed on the Leak Report form with a map of the leaks that have occurred since 2002 attached to it.

Scenes from leak at 1311-1331 Terra Nova Blvd.





North Coast County Water District

CIP & BOND PROJECTS

