

**Utilities Department Monthly Report
February 2011**

MONTHLY REPORTING

Utilities Administration Division

- Finalized plans for additional payment location at City Offices, 1700 N. Grand Avenue. Sarah Garcia and Julie Silva will be the cashiers. We are hopeful this will make it convenient for customers as well as inter-office deposits which must be made on a daily basis.
- Will be sending all Utilities divisions instructions and deadlines on the preparation of justification sheets for the 2011/2012 FY Budget by the 10th of March. First draft due by May 31, 2011.
- We will also be working on scheduling the annual warehouse inventory.
- Accounting staff continues the everyday tasks of monitoring the budgets for the six divisions within the utilities department as well as assisting in the monitoring of the expenditures, submission of requisitions and payment requests for the numerous special projects within the Utility Divisions.

Utilities Services Division

Customer Service Section

- Refunding yearly deposits.
- Changing sanitation rates and made an insert for the bills.
- Made a form explaining gas with a breakdown of each charge to hand out to customers so that they will be more informed.
- Managing time to work on billing issues to better serve customers.

Meter Reader Section

- Re-reads 226
- Line Locates 114
- Work Orders 312
- Read in/outs 17
- Cut out-non pay 59
- Read gas meters only on Cycles 8, 9, 10 due to cold weather – 2/8/11, 2/9/11, 2/10/11
- Found tools on South Pacific and Castle Drive
- Cross training on meter readers routes complete and all meter reader will be rotated to a different route quarterly

Waste Water Division

- National Pollutant Discharge Elimination System Permit (discharge monitoring report) for month of February 2011 completed and reported to E.P.A. and N.M.E.D. Surface Water Bureau.
- Attended meeting with Emergency Management on February 27, 2011 to view Waste Water Treatment Facility for seismic study grant with New Mexico Tech.
- Thirty seven calls for service responded to for the Month of February 2011 including afterhours.
- 46.24 million gallons of water treated and discharged to outfall 001 Gallinas River for month of February 2011.
- Zero (0) gallons discharged for re-use to Highlands golf course, Robertson fields and city parks for Month of February 2011.
- Maintenance of 25,013 feet of sewer lines in the month of February 2011 throughout City including maintenance of problem lines that are done on a monthly basis and service calls.
- Attended weekly scheduled manager/supervisor meetings at Utility Directors office.
- Two new sewer tap permits issued for February 2011.
- Attended Gallinas River effluent reuse water line crossing bid opening on February 3, 2011.
- Received compliance inspection report on February 14, 2011 regarding compliance inspection on January 27, 2011 of waste water facility on its SWPPP (Storm Water Pollution Prevention Plan) that was submitted to EPA on 10/20/10 with Notice of Intent/application approval by EPA on January 28, 2011. Response letter regarding findings/corrective measures stated that this will be accomplished by April 1, 2011. Quotes for the necessary BMP (best management practices) materials such as roll over curbing on the East side roadway of the facility, silt fence, wattles, and oil/sedimentation socks to be completed by March 7, 2011.

ACCOMPLISHMENTS

- Replacement of 280 feet of six inch Vitrified Clay Pipe with eight inch PVC pipe, 1 man-hole installation and renewed four sewer service taps on the 300 block of Bernalillo Street.

CHALLENGES

- Obtaining the necessary funding for corrective equipment/measures for solids handling issues at the treatment facility.
- Uncovering of the sanitary sewer manhole lids Mills Ave. from Eighth Street to Hot Springs Blvd. that were covered over by the Mills Ave. overlay project. These manholes will need to be exposed for maintenance purposes of the sewer mains and for liability issues should a blockage occur on any of these sewer mains. Raising these manholes to grade of road by the correct method is time/manpower and budgetary intensive. Alternative methods such as the sloping that was done on the Alamo Street project will be looked into.

Gas Division

- Field evaluations were completed for seven (7) gas employees to meet operation qualifications.
- Church St. project: Replaced 545 feet of 2" PVC gas line with 2" PE gas line.
- Five meter guards were built to protect as meters for customers requesting guards.

Solid Waste Division

- 136 roll out carts were delivered on 1/25/11. 85 roll outs in stock.
- ASD builders came in and installed new windows in our office building and painted the outside of the building. The job is scheduled to finish the week of March 7, 2011 and the slide out drawer at our customer window still needs to be installed.
- We are in the process of ordering the front loader/commercial truck and side loader/residential truck and are reviewing the specs on the two trucks.
- Ed's Recycling out of Clovis, NM is scheduled March 4, 2011 to bail and ship out the white goods, their goal is to have it all done by March 7, 2011.
- Construction on the Improvements for the Transfer Station will be starting the week of March 14, 2011 and there will be a ground breaking ceremony.

Water Division

Water Conservation Section

Water Conservation Programs	Inventory	Distributed For month	Distributed Year to Date
Low Flow kits	300	4	768
Rain Barrels	150	1	150
High Efficiency Toilets Rebates		3	70
High Efficiency Toilet	10	0	10

- Changed to Stage II watering September 24, 2010
- Attended utility meeting to give water / snow pack update
- Converting water standpipe to digital control
- Reviewing packet on commercial and institutional water audits
- Working on water shortage action plan
- Worked on gathering information for water model
- Coverage for supervisor from February 4, 2011 to February 9, 2011

Distribution Section

- Water Distribution Construction Crew Moreno 12 in. Effluent Project phase 1 Twelve street and Lincoln Ave. down on river walk 980 feet . Start date February 24, 2011 end date estimated date February 11,2011 Have installed 380 feet as of March 4, 2011. 25 percent of project Complete.
- Water Distribution Construction Crew Moreno 12 in. Effluent Project phase (2) two. Moreno Street from Las Escuelas to South Gonzales 680 feet installed 460. Project 75 percent finished project to be complete by March 26, 2011.
- Water Distribution Construction Crews tied in the existing 10 inch effluent line to the new 12 inch effluent on Twelve Street and Lincoln Completed.
- Water Distribution Maintenance Crew replaced 3 old ¾ inch angel valves on water meter cans.
- Fixed three water leaks. 1) 8 inch water main 601 Sabino St. 2) Loudon and Porter street. 2" air relief valve cracked. 3) Housing up at Loudon 8 inch water main break.
- Water Distribution Maintenance Crew started to transfer services on alley on Railroad Ave. 31 services need to be transferred from old 2 inch line to the new 8 inch line. 2 have been transferred.
- Replaced side walk cuts made by the water Department
- Water Crews were out checking on frozen meters that were called in by customer service.
- Replaced 3 Broken water meter can lids.

ACCOMPLISHMENTS

- Laid out 840 feet of 12 inch C900 effluent pipe.
- Installed one 12 inch effluent isolation valve
- Installed one 6 inch effluent isolation valve off the 12 inch tee. 6 inch valve is for future effluent line extension to the West Las Vegas Schools of Moreno St.

CHALLENGES

- Install new 12" C900 Effluent Water main From 12th street up Moreno street to Rodriguez Park on Grant street.
- North water loop from North Grand Ave. to Mills Ave.
- Two owners from Mobile Home Parks requesting to individual meter their Parks

Water Treatment Plant

- Meeting with Tom Knowlten from WHP on 3/23/2011 on what material where and how to perform leak survey pressure testing raw water lines. Information needed for measuring water loss before water is treated at water treatment plant.
- Calibrations of turbidity units at filters and finished water for monitoring and staying in compliance with safe drinking water act.
- Collected Water samples for Total Organic Compounds Raw and Finished Water samples for Trihalomethanes and Haloacetic Acids also Microbiological samples.

- Due to cold temperatures and decrease in tank level at cabin site utilities down town was notified for possible water leaks 2/8/2011.

OPERATION STATUS- 2/28/2011

Surface Water Diversion

Approved Diversion: 2754.27 AF

YTD Diversion: 411.661 AF

Remaining Balance: 2342.61 AF

Ground Water Pumping

YTD Taylor Wells #4: 75.123 AF

Combined Storage (Storrie, Bradner, Peterson)

Total Storage: 1022.64 AF

Amount in Storage: 808.035 AF

Available Storage Space: 214.605 AF

Percent Full: 79%

Total Water stored in Storrie Lake (included City water and Storrie water)

Amount in Storage: 9500 AF

IMPROVEMENT PLANS

Utilities Administration Improvement Plan

PROJECT/CONCERN	IMPROVEMENT PLAN	PROGRESS
Develop Utility Rates based on cost of service Methodology	Hire a firm to perform rate study to ensure adequate funding for utility Operations and Capital improve.	Solid Waste Rates Implemented. Waiting on Water PER alternatives / Costs to complete other rate studies.
Staffing/Cross- Training in Utility Department	Fill Vacant positions to have a full staff. Cross train staff in different areas to ensure coverage of all positions	Presently we are training a new inventory clerk
Some Service & Material Agreements not current.	Develop R. F. P.'s	On Going
Improve Critical Spare Parts Inventory	Work with Purchasing Officer to identify spare parts needed	The Purchasing Officer is currently working with supervisors to improve the critical spare parts inventory. This will be on going
Complete inventory of chemicals and MSDS Sheets	Work with Purchasing Officer to complete inventory MSDS Sheets	Work assignment given on 01/15/2010 deadline is 03/01/2010
Asset Management Plan	Work with the four Divisions to establish a committee to work with and implement the Asset Management Plan	Work assignment given Nov. 2010 Deadline 6/30/11

Customer Service Improvement Plan

PROJECT/CONCERN	IMPROVEMENT PLAN	PROGRESS
Cross Training	Cross training customer service clerk to do bank drafts.	Explaining the 5 steps for doing bank draft. Has to be very accurate.

CROSS TRAINING	Have two customer service clerks 80% trained in consumption billing.	Last steps to complete cross training.
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Meter Reader Improvement Plans

PROJECT/CONCERN	IMPROVEMENT PLAN	PROGRESS
Old Water Meters (5/8")	Change out 600 1989 and older water meters	93 exchanges this mo. 180 left to complete project.

Waste Water Improvement Plans

PROJECT/CONCERN	IMPROVEMENT PLAN	PROGRESS
Install effluent reuse lines	Expand reuse system to Rodriquez Park.	Water Distribution Dept. will complete Plaza Park project by end of April 2011
Air handling issues at WWTP for aeration basins	Work with engineers on constructive solutions to this issue.	Waiting for quotes to finalize review of their responses.
Cinder Road, sewer and effluent lines	Install new 15" sewer collection pipe to be able to lift moratorium. Engineering and Design is 100% complete. pipe and materials ordered utilizing \$200,000 WTB Grant and \$50,000 loan. Updated uniform funding application re-submitted to water trust board for the sewer main for the requested amount of \$750,000.	12" reuse pipe has been ordered on site at WWTP, valves and other materials ordered will be on site at WWTP by 2-17-11. 300 feet of 15" sewer main onsite to install on one crossing on cinder as not to impede with county project. Waiting on County approval of permit.
Solids handling issues at WWTP for aerobic digestors	Work with engineers on constructive solutions to this problem.	waiting for quotes to finalize review of their responses.
Camp Luna sewer line replacements are needed due certain undersized lines	Lines in certain areas are undersized and over capacitated.	Seeking Easement Access

West side sewer line replacements	Replace undersized and over capacitated sewer mains	I.C.I.P./ Updated uniform funding application re - submitted to Environment Department for sewer main upgrades in the requested amount of \$2,750,000 on February 24, 2011
Romero street sewer line replacement project.	Replace 300 feet of six inch VCP pipe with 8" PVC pipe along with sewer service taps.	Line was closed circuit televised and found to be in bad shape. Plan to replace by mid April.

Gas Improvement Plans

PROJECT/CONCERN	IMPROVEMENT PLAN	PROGRESS
Old PVC gas line that needs to be replaced.	Replace old line with new line and relocate gas services.	110 Gas meters have been relocated. Need 7 meters to complete the project.
Residential meter replacement project	Replacing 1989 and older gas meters with new R275 gas meters.	389 total meters replaced 200 meters. Need 189 meters to complete the project.

Solid Waste Improvement Plans

PROJECT/CONCERN	IMPROVEMENT PLAN	PROGRESS
Damaged Containers	Replace damaged roll-out containers.	Delivering containers as they come in

Water Conservation Improvement Plans

PROJECT/CONCERN	IMPROVEMENT PLAN	PROGRESS
Conservation Ordinance Violators	Monitor watering, car washing, etc.	On-going

Water Distribution Improvement Plans

PROJECT/CONCERN	IMPROVEMENT PLAN	PROGRESS
Distribution System modeling & mapping	Hire engineering firm to perform modeling and mapping. Obtain information from Molzen	Draft model is scheduled to be ready April 2011
Reuse water (Effluent) line extension	Extend the effluent reuse water to Plaza Park. Phase 1 River walk 980ft. installed 380 ft. 25 percent Complete	Started on 2/24/2011 Estimated date Complete 3/11/2011
Distribution System Line Replacement	Replace leaky, small diameter, aged or add lines to loop system	PER Engineering Analysis, Ongoing Scheduling
Distribution System Leak Detection Program	Work with OSE under grant to develop program. Results used to prioritize replacements.	Have detected 5 leaks. Training completed.
Reuse Water (Effluent) Line Extension	Extend the effluent reuse Water to Plaza Park. Phase 2 Moreno st. From Escuelas to South Gonzales. 680 ft. Installed 460 ft. 75 percent Complete.	Started On 1/10/2011 Estimated date complete 3/24/2011

Water Supply Improvement Plans

PROJECT/CONCERN	IMPROVEMENT PLAN	PROGRESS
Replace PLC at RAW Water Building	For flow control at cabin site tank and chemical pump feed rate for treated water	Alpha Southwest is in the process of ordering and programming
Structural repair of Filter Building on Northeast side	Provide structural repairs	Doug from Molson is reviewing recommendations

CAPITAL PROJECTS

Waste Water Capital Project

PROJECT	STATUS	START DATE	COMPLETION DATE
Working with Engineer and Community Development Staff for emergency CDBG Grant for sludge centrifuge.	Grant request submitted- ICIP and budget 2011. Awaiting approval from DFA.		July 26, 2010 Open
Camp Luna- replace under sized sewer mains.	Need to work with county and residents for access do to encroachment on easements.		September 30, 2010 Open
Installation of 280 ' of 8" PVC sewer pipe- 1 manhole and renewed 4 sewer service taps on the 300 block of Bernallio Street.	Has been scheduled for third week of February.		February 21, 2011 COMPLETED on February 25, 2011.
Air handling issues at WWTP for aeration processes- sludge handling issues and covering of entrance works.	Going out for quotes from engineering firms		December 14, 2010 open
NPDES NM0028827 renewal	Assigned task order to Souder Miller and Associates engineering for preparation and completion of this permit.		September 23, 2010 Application completed and sent to EPA for review on January 22, 2011. Still under review at EPA.
Reclaimed water pipe and material bid for Cinder Road Project	Permits delivered to county public works supervisor on February 24, 2011 for their signature.		January 2011 March 2011/ awaiting approval

			so that we may install reuse lines and sewer main on the walking path crossings.
Industrial Storm Water Pollution Prevention Plan for WWTP.	Assigned task order to Molzen-Corbin engineering for preparation and completion of this EPA mandated Plan.	SWPP completed and NOI sent to EPA for approval- received response from EPA for more Info. on 12-29-10.	Received NOI approval on January 28, 2011. Coverage to begin on 2-27-11 after 30 day waiting period.
State police building KFUN	Final cost from contractor in for review by Molzen Corbin to move forward with finalizing the needed extension agreements. Need final DOT easements .	City wants 12" sewer and water lines installed for this project for future expansion of city utilities. City to pay the difference in pipe costs from 8" to 12".	OPEN
Service truck For waste water department with utility bed and crane.	State contract was renewed till the end of May 2011. This equipment is budgeted for this fiscal year.	Will be getting the final state contract costs for this truck	May 2011

Gas Capital Projects

PROJECT COMPLETION	STATUS	START DATE	
Moreland St 2'' gas line replacement.	Replaced 384 ft of 2'' p.v.c with p.e. we still need 480ft and 14 services	7/13/09	4/30/10 est.

Solid Waste Capital Projects

PROJECT COMPLETION	STATUS	START DATE	
Camp Luna landfill ground water monitoring by Souder, Miller & Associates	In progress	01/06/10	03/08/10
Transfer Station Facility repairs/equipment purchase	Budget Planning	03/2011	07/2011

Water Distribution Capital Projects

PROJECT COMPLETION	STATUS	START DATE	
12 Inch Effluent Water Moreno project Phase 1	The new 12 in Effluent water Pipe phase one 980 feet. 25 per	2/24/2011	3/11/2011 complete
Meter Replacement	Started on 2'' water meters from 1989 to 1990 38 meters still need to be replaced (17 , 2'' meters replaced ytd)	12/1/2009	On going
12 inch Effluent Water Moreno phase 2	The new 12in Effluent water pipe Phase two 680. 75 percent complete		
Cinder Road Effluent water	Install 12 inch Effluent water main 8641 feet from Mills ave. up Cinder Road.	1/1/2011	Need county permit
Moreno St. 12 inch Effluent line to Rodriguez Park	Hook up Plaza P ark and Rodriquez Park to Effluent water	1/1/2011	4/30/2011 Estimated for Plaza

Water Supply Capital Projects

PROJECT
COMPLETION

STATUS

START DATE

PROJECT COMPLETION	STATUS	START DATE	
Peterson Dam Leaks	Under Souder Miller Consulting		
<p>Distribution System – High Trihalomethanes. Problem is system wide and is the result of elevated summer TOC, increased temperature, low demand, inadequate system looping, and lack of periodic flushing.</p>	<p>Completed map and profile. It has been determined that this is a system wide problem. Efforts are in progress to modify disinfection practices and optimize Alum feed rates to minimize the problem. Distribution is in the process of identifying broken valves and eliminating dead ends. Operations will seek engineering solutions/recommendations for alternative disinfection/treatment at the water treatment facility pending PER completion.</p>		

Project Updates from Engineers

Souder, Miller & Associates

The following Task Orders are currently on-going, pending approval or have been completed

- **On-Going Task Orders (Contract 1981-09)**

- 1. Peterson Pump Back Project (TO3)**

- **Planning Phase:** all work has been completed on this phase.
- **Design phase:** SMA submitted 100% plans and specs on 11/29/11
- **PNM Service Application:** Application was submitted to PNM on 12/29/11. PNM is preparing service contract for the City's review. Contract and cost for extending PNM power to pump back site will be submitted to City on 3/15/11.
- **Construction Phase:** Not started yet, pending 404 permit approval. SMA will prepare bid phase and construction observation amendment for construction phase
- **ACOE 404 Permit:** SMA met to discuss mitigation options with Tim Dodge, Ken Garcia and other city staff. The options we'd moved forward on as per Ben Ortega's approval were determined by Tim Dodge and Ken Garcia to not be viable due to likely future development of the areas delineated for preservation. At the direction of Ken Garcia, SMA is to determine another set of alternatives for presentation to city staff and city council. Specific areas that were discussed include the upper reach of the Gallinas (above the areas previously discussed) and wetlands area near City Hall. SMA is in the process of preparing a task order for approval by the City to complete this work.

- 2. Landfill Monitoring (TO5)**

- Work completed for 2010

- 3. Las Vegas Preliminary Engineering Report (TO6)**

- Prepare agenda for 3/09/11 coordination meeting
- Prepare updated schedule for the 3/09/11 coordination meeting
- Prepare meeting minutes of 3/09/11 coordination meeting
- Prepare public flyer/notice for 3/24/11 final public meeting
- Prepare presentation for final public meeting
- On 4/15/11, the consultants will submit their preliminary engineering reports to SMA and the City. SMA will then begin a review of all preliminary engineering reports and incorporate them into a composite

preliminary engineering report to be presented to the City and other agencies review on 6/20/11.

4. **NPDES Renewal Permit (TO7)**
 - NPDES Permit Renewal efforts was completed in January 2010
5. **Corrective Measures and Closure Preliminary Design (TO8)**
 - Design: SMA is currently preparing the preliminary grading and drainage design. The design will be completed April 30, 2011.
6. **Groundwater and Methane Monitoring (TO9)**
 - SMA has scheduled the first groundwater and methane monitoring event for the week of March 1st and possible the week of March 7, 2011 depending on field staff schedule.

Molzen-Corbin & Associates

The following Task Orders are currently on-going, pending approval or have been completed:

A. On-Going Task Orders

1. Taylor Well No. 2 (No. 3)

- The general scope of work is to drill a replacement well and place Well No. 2 back into service.
- The 60% design was submitted to the City on September 17, 2010.
- The 90% design was submitted to the City and NMED on November 11, 2010
- City and NMED-DWB provided final comments.
- NMED-CPB provided review comments on February 8, 2011.
- Molzen Corbin will submit final design to City and NMED by March 8, 2011.
- Construction Phase Services, Construction Observation (Surface Features) and Construction Observation (Well) to be provided later
- The project has been recommended for WTB funding

2. Water System Hydraulic Model (No. 4)

- The existing water model is approximately 90% complete
- We have met with City staff on several occasions to discuss the progress of the model and to receive City input.
- We met with City staff on January 26, 2010 and we requested current PRV settings and static pressure readings on eight (8) fire hydrants. We also discussed the improvements have been identified to date.
- City provided current PRV settings and static pressure readings on eight (8) fire hydrants on February 12, 2011.
- Molzen Corbin is currently calibrating the model.
- The date for the submittal of a draft model is scheduled for April 2011.

3. Finished Water PER (No. 5)

Water Treatment Plant

The existing water treatment plant is being evaluated for existing operational issues that need to be addressed as well as long-term improvements.

The existing operational issues are well known, but are being further defined and clarified in this PER so the City can obtain funding for the improvements. These improvements are not “alternatives” – they are improvements that must be made in order for the City to continue to operate the treatment plant.

It is anticipated the recommendations regarding the WTP in the PER will be as follows:

Priority 1 Improvements:

- Reduce TTHMs and HAA5 to safely meet drinking water standards and improve taste and odor problems:
 - Add an oxidation process upstream of the pretreatment facility such as ozone, ultraviolet light, and/or hydrogen peroxide to reduce the organic precursors of disinfection byproducts
 - Install a building cover over the pretreatment facility to minimize algae growth in the basin
- Improve operation and maintenance of plant:
 - Install roof over the existing alum storage and containment tanks located adjacent to the Raw Water Pump Station to protect them from sun and rain.
 - Reroof the filter building to protect the equipment inside the building from water damage.
 - Repair cracks in masonry walls of the filter building to seal the building from outside drafts and protect the masonry from further damage.
 - Add three additional outlet drains in the concrete sludge lagoon to reduce the amount of sediment that clings to the slope of the lagoon.
 - Add raw water pipe to feed into the top of Bradner Reservoir to improve water quality by reducing stagnant zones in the reservoir that now exist with a single inlet/outlet pipe in the bottom.

Priority 2 Improvements:

- Facility modifications to increase capacity assuming current source water

Priority 3 Improvements:

- Facility modifications to address variations in surface water quality

Finished Water Distribution System

The finished water distribution system consists of the waterlines throughout the City of Las Vegas. Similar to the Water Treatment Plant, the improvements required to the distribution system will not be presented as alternatives, but rather as a prioritized list of what the City must do in order to address known issues with the existing distribution system. The list is comprised based on results of the water model of the system as well as input from operators.

Work on the water model continues, with calibration of the model expected within the next 45 days. The calibration of the model will require coordination with water system staff to provide pressure readings at specific locations throughout the City. As discussed at the last PER meeting, Molzen Corbin will coordinate directly with water staff.

The improvements anticipated to be recommended are as follows (prioritization to be included):

- Upsize lines based on results of the water model
- Looping of dead end lines

- Addressing lines that need replaced based on input from City staff
- Leak detection (on-going of existing program and possible recommendation for additional leak detection)

Finished Water Storage

The engineering analysis, which uses peak day demand and population projections for the planning period of the project, indicates that no additional storage will be required to meet 2050 storage requirements.

Although the City is aware of the need to inspect and rehabilitate the existing tanks, this need must be identified in the PER both so the City can obtain funding for the improvements and in the interest of producing a complete finished water PER that addresses all known issues with the finished water system.

Anticipated Recommendations:

- Inspection and rehabilitation of existing storage tanks

Effluent Reuse

The effluent reuse evaluation has been on-going and has included the evaluation of many concepts for usage of effluent. Essentially, in order for an effluent reuse option to be beneficial to the City, the reuse must either replace a current potable use or result in an exchange with a current user(s) of potable water who is willing to use effluent rather than existing potable water.

The final report regarding the quantity of effluent available for reuse throughout the study period was issued January 19, 2011. Therefore, we can now begin more in-depth evaluations of the feasible alternatives.

The evaluation matrix created to help the City evaluate the effluent reuse options will be presented at the public hearing and in the PER to outline the many effluent reuse options that were considered during the evaluation.

One additional option that Molzen Corbin is currently studying is the option of obtaining a second NPDES permit to discharge effluent upstream from the existing discharge location, but downstream of the City's diversion from the Gallinas River. The thought is this would possibly allow the City to divert more water from the Gallinas since the downstream users would have water to divert from the river that is currently not available with the City's existing diversion and discharge locations. It is essentially a "water swap" with the acequias that would allow the acequias to continue to divert from the Gallinas. We are researching the feasibility of this option, including conversations with the New Mexico Environment Department.

Based on input from the City staff and others, the anticipated recommendations will include the following short term and long term improvements:

Short Term:

- Expand existing system to irrigate more City parks and ball fields.

- Construct facilities to get the effluent from Cinder Road up to and back down from Camp Luna.
 - Allows for expanded reuse to maximize what is available on a daily basis and minimizes the reliance on the pumping equipment at the WWTP.
 - Would result in discharge of entire 0.6 MGD in winter.

Long Term:

- Pump excess reuse to Storrie Lake (waiting for City-coordinated meeting with Storrie Lake Board of Directors to determine if it will be recommended). Cost for water quality analyses that would define characteristics, including basic pharmaceuticals, is very high and is not approved by the City.
- Pump excess reuse to McAllister Lake. Based on a meeting with the City and State Game and Fish on February 24, 2011, the State expressed some interest in using this water at the lake in exchange for the City's use of NM Game and Fish shares of Storrie Lake project water.
- Discharge effluent upstream of existing discharge location to provide water in river for users downstream of City's Gallinas diversion location (evaluation underway)

Groundwater Evaluation

The preliminary groundwater report was received on January 20, 2011, and therefore Molzen Corbin's evaluation has just begun. The PER will focus on how to incorporate the new ground water recommendations from Daniel B Stephen's report into the existing water system, including physical improvements to get the water into town and treatment required for any of the new sources of water.

e have identified additional information that will be required from Daniel B. Stephens and Mustafa D. Chudnoff Consulting in order to complete our evaluation, and are coordinating with them to obtain that information. Since none of our recommendations are "stand alone" – they supplement Daniel B. Stephen's recommendations – we will not be making any recommendations at the upcoming public hearing regarding groundwater.

4. Storrie Lake Conveyance System Report (No. 6a and 6c)

- We met with City Staff on September 14, 2010 to discuss the conveyance system and to review draft material prepared for a Public Scoping Meeting.
- Based on City Staff recommendations at the September 14, 2010 meeting a meeting was held with Robert Quintana and members of the Storrie Lake Users Association on October 13, 2010.
- It was decided in this meeting to revise the scope of work
- Three alternatives were evaluated; (1) new gravity pipe to replace open channel, (2) pump-assisted system to convey low flows by gravity and higher flows with pump, (3) concrete lining of channel.
- Cost for Alternative 1 was \$9.7M, Alternative 2 was eliminated due to large horsepower requirement, and Alternative 3 cost \$15.2M.
- City is setting up meeting with Storrie Lake Users Association to review report.

5. Cinder Road Sewer System Improvements (No. 7)

- The scope of work is to extend a 15” sewer line along Cinder Road and through the memorial Middle School to Old National Road and extend a 12” effluent line from Mills Ave. to El Camino Road.
- The 15” sewer line is intended to eliminate the over load condition of the existing sewer line that was identified in Task Order No. 1.
- The 12” effluent line is intended to initially irrigate the middle school and baseball fields across the street and eventually be extended to Camp Luna and potentially Storrie Lake.
- The final design was submitted to the City and NMED on April 6, 2010.
- NMED approved the plans and specifications on April 21, 2010.
- The sewer portion of the project is on hold pending funding.
- The City received WTB funds to purchase the materials and install the effluent line portion of the project.
- The City requested that Molzen Corbin proceed with identifying the property needed for the booster pump building and tank on Cinder Road.
- We met with the City and two potential property owners to begin the discussion.
- The easement required for the 15” gravity sewer through the Memorial Middle School also needs to be secured.
- Molzen Corbin prepared the Utility Permits for San Miguel County to install the utilities that cross the new bike path and submitted them to the City on February 22, 2011. The City to submit them to the County upon review and approval.

6. KFUN/State Police Station Water and Sewer Extension (No. 8)

- The State is construction a new State Police Building east of the Interstate and south of the University exit.
- We assisted the City with evaluating the proposed design of the extension of the City water and sewer lines to service the building and future development east of the interstate.
- We are currently assisting the City with a Line Extension Agreement.
- We received the contractors bid information to determine the cost the City will pay for increasing the pipe sizes.
- We are waiting on approval/permit from the NMDOT to complete the line extension agreement

7. Rodriguez Park Effluent Re-use (No. 9)

- The preliminary design was submitted to the City on September 27, 2010.
- The final design was submitted to the City and NMED-CPB on December 23, 2011.
- We have received and addressed the City comments.
- We received comments from NMED on February 15, 2011.
- We will submit final design to the City and NMED by March 8, 2011.
- The project has been recommended for WTB funding

8. Storrie Lake Inlet Piping Crossing Repairs (No. 14)

- The preliminary plans were submitted to the City on September 27, 2010
- Received COE and NMED approval for crossing the river
- Final design submitted to City on November 30, 2010
- Pre-bid conference was held on December 29, 2010

- Bid opening was held on January 12, 2011.
- The City approved the Notice of Award.
- The pre-construction conference could be held as soon as March 8, 2011 if Molzen Corbin receives the contractor's bonds and insurance in sufficient time to assemble the contractor documents.

9. Gallinas River Effluent Line Crossing (No. 20)

- The scope of this project consists of the construction of new 12" DIP effluent line encased in concrete across the Gallinas River at Moreno Street. The crossing will be done by trenching across the river as approved by the Corp of Engineers and the State Historic Preservation Office.
- The project was advertised on January 19, 2011
- The bid opening was held on February 2, 2011
- The Notice of Award was approval by the City.
- The pre-construction conference could be held as soon as March 8, 2011 if Molzen Corbin receives the contractor's bonds and insurance in sufficient time to assemble the contractor documents.

B. Pending Task Orders

1. Taylor Well No. 5 (No. 16)

- The City would like to place this well back into service
- City requested Task Order on November 2, 2011
- Molzen Corbin performed site visit to prepare scope of work on November 2, 2011
- Molzen Corbin provided Task Order to City on December 7, 2010
- We understand that the City will use the funds for Taylor Well No. 2 for this project if the WTB funds Well No. 2.

2. North Grand Avenue Waterline Improvements (No. 17)

- City would like to loop four dead end lines in the vicinity of City Hall and the Hospital
- These lines will be identified in the water model for improvement
- Molzen Corbin provided Task Order to City on December 7, 2010

3. Luna Tank and Cabin Site Tanks (No. 18)

- The scope of this project consists of the draining, cleaning, repainting and possible structural improvements to the 2.5 million gallon Luna Tank and the 5.0 million gallon Cabin Site Tank. Modify yard piping at the Luna Tank to allow the existing booster pump building to be removed from service. The existing high service pump (red pump) will remain in service.

- We recommend the following tasks be performed by the City during the preliminary design phase:
 1. Test for lead base paint on both tanks (inside and outside)
 2. Inspect interior of both tanks to determine the following:
 - a. Quantity and type of debris.
 - b. The extent of structural improvements that may be needed
 - c. The condition of the cathodic protection system
 3. Isolate the Cabin Site Tank and perform a trial water system operation using the clear well pumps at the Water Treatment Plant to simulate the daytime and nighttime operation for two days.
- Molzen Corbin provided Task Order to City on December 7, 2010
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4. Cover over the WTP Pretreatment Facility (No. 19)

- The scope of work consists of the construction of a metal structure cover over the existing pre-treatment facility at the Water Treatment Plant.
- The purpose of the project is to reduce the amount of sunlight to the water surface
- The cover will be a pre-manufactured cover mounted to the top of the existing walls
- The west and south walls will be screened to reduce evening sunlight and improve security

5. Storrie Lake Conveyance System Environmental Information Document (No. 6c)

- At the request of the City we requested a second proposal from an environmental firm.
- We submitted the proposal to the City for review on September 14, 2010 for review and approval.
- City decided not to implement the public participation and Environmental Assessment on the Storrie Lake Conveyance System

6. Septage Management Technical Assistance (No. 12)

- A public meeting held on June 29, 2010.
- Molzen Corbin provided a Task Order on July 1, 2010.

7. WWTP Air Piping Modifications (No. 13)

- Molzen Corbin provided the City with a Task Order on June 22, 2010.

C. Completed Task Orders

1. Old National Road Sewer Evaluation (No. 1)
2. West Las Vegas Middle School Sewer Evaluation (No. 2)
3. Storrie Lake Conveyance System Aerial Photography (No. 6b)
4. Camp Luna Elevated Tank Painting (No. 10)
5. SWPPP at WWTP (No. 15)