

TO: BOARD OF DIRECTORS
FROM: BRUCE BUEL *BB*
DATE: JULY 17, 2009



WIP AND SOUTHLAND UPGRADE PROJECT UPDATE

ITEM

Mike Nunley of AECOM Engineering re Waterline Intertie Project Update and Southland WWTF Upgrade Project [NO ACTION REQUESTED].

BACKGROUND

Mike Nunley is scheduled to summarize the attached reports.

RECOMMENDATION

Staff recommends that your Honorable Board receive the presentations and ask questions as appropriate.

ATTACHMENTS

- June Monthly Reports

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AECOM
1194 Pacific Street, Suite 100
San Luis Obispo CA 93401
T 805.542.9840 F 805.542.9990 www.aecom.com

Memorandum

Date: July 15, 2009
To: Bruce Buel, General Manager – Nipomo Community Services District
From: Michael K. Nunley, PE
Subject: Waterline Intertie Project – Design Phase Status Report

Distribution: Josh Reynolds, PE
Cesar Romero, PE
Peter Sevcik, PE
Eileen Shields
Jim Froelicher
Jon Hanlon, PE

The Project Team has completed the following work items this month:

1. AECOM is working closely with Padre to complete permit applications and prepare submittals to Army Corps of Engineers and Santa Barbara County Flood Control and Water Conservation District for technical review.
2. AECOM has integrated the District staff's comments into the Draft Narrative Report and produced a draft final copy for review. Once review is complete, AECOM will deliver 100 copies to the District.
3. AECOM submitted the 60% design plans and specifications for Bid Package #3 – Blosser Road Water Main and Flow Meter. Copies were delivered to the District, the peer reviewers, and the construction management team.
4. Potholing was performed by MGE to supplement subsurface utility investigations in Nipomo. AECOM is collecting information this week and will integrate it into the design.

Schedule

The Project Schedule is attached.

Budget Status

As shown on the attached Design Budget and Invoice Summary, our fee earned matches the amount expended. This indicates we are on budget as of this date.

Yours Sincerely



Michael K. Nunley, PE

Enclosures: Design Budget and Invoice Summary; Project Budget Summary; and Project Schedule

Project Budget Summary

7/3/2009

Engineering Services for NCSD - SWP Design

Nipomo CSD

	Total Budget	Amount Previously Invoiced	Current Invoice Amount	% of Budget Earned to date	% of Work Complete
Task Group 1 - Concept Design Report	\$426,361.00	\$426,361.00	\$0.00	100%	100%
Task Group 2 - Permitting	\$30,607.00	\$27,164.82	\$465.00	90%	90%
Task Group 3 - Construction Documents	\$350,691.00	\$182,678.92	\$82,110.28	76%	76%
Task Group 4 - Project Management	\$43,520.00	\$31,679.63	\$3,373.50	81%	81%
Task Group 5 - Assistance During Bids	\$48,942.00	\$0.00	\$0.00	0%	0%
Task Group 6 - Office Engineering During Construction (5 Bid Packages)	\$175,837.00	\$0.00	\$0.00	0%	0%
Total	\$1,075,958.00	\$667,884.37	\$85,948.78	70%	70%

	Amount Previously Invoiced	Current Invoice Amount	Total Permitting Fees to date
Permitting Fees	\$1,572.91	\$0.00	\$1,572.91

Waterline Intertie Project

Opinion of Probable Project Costs from Concept Design Report (April 2009)

Table 8.1 – Opinion of Probable Project Costs

Item	Description	Budgeted Amount May 2008 Preliminary Engineering Memo.	Updated Amount 22-Apr-09 Concept Design Report
1	Mobilization	\$580,000	\$607,000
2	Blosser Extension (18-in)	\$1,247,000	\$1,129,000 -
3	Pump Station No. 1 turnout & meter (Blosser Rd)	\$61,000	\$158,000
4	River Crossing (24-in HDD & levee jack & bore)	\$6,135,000	\$5,462,500
5	24-in Pipeline to Joshua	\$656,000	\$400,000
6	Reservoir (0.5-MG)	\$1,361,000	\$1,365,000
7	Pump Station No. 2	\$603,000	\$1,572,500
8	Pressure Regulators (200 homes)	\$30,000	--
9	Pressure Reducing Valve Stations	\$18,000	\$243,000
10	Chloramination (Joshua & 5 wellheads)	\$707,000	\$739,500
11	Upgrade Southland to 12-in	\$799,500 (1)	\$849,000 (7)
12	Upgrade Frontage to 12-in	\$1,101,300 (1)	\$957,000 (7)
13	Upgrade Orchard to 12-in	\$509,000	\$1,103,500 (8)
14	Upgrade Division to 10-in between Allegre and Meridian (6)	\$53,000	--
15	Oakglen Avenue 12-in main (5)	--	\$457,000
16	Darby Lane 12-in main (5)	--	\$153,000
17	HWY 101 Bore & Jack (5)	--	\$241,000
18	Isolation Valves (5)	--	\$12,000
19	Pump Station All Weather Access Road	--	\$128,000
	Construction Subtotal	\$13,860,800	\$15,577,000
20	Contingency	\$3,643,000	\$3,115,400 (10)
	Construction Subtotal + Contingency	\$17,503,800	\$18,692,400
21	Property Allowance	<i>not included</i> (4)	\$500,000 (4)
22	Design-Phase Engineering		
	Original Agreement (July 2008)		\$744,993
	Budget Revision 1 - Pressure Reduction		\$132,798
	Budget Revision 2 - Biological Survey for HDD		\$4,050
	Budget Revision 3 - Modeling for GSW/Woodlands Turnouts		\$8,380
	Budget Revision 4 - Additional Survey Services		\$9,900
23	Office Engineering during construction		\$175,837
24	Estimated Construction Management (3)	\$2,428,000 (2)	\$1,507,170 (9)
25	Permitting Fees To Date	--	\$1,573
26	Non-Final Design Funds Spent To Date	<i>not included</i>	\$1,402,879 (11)
27	Estimated Other Costs (Assessment, etc)	<i>not included</i>	\$415,420 (11)
	PROJECT TOTAL (Rounded to 1000)	\$19,932,000	\$23,596,000

Waterline Intertie Project

Opinion of Probable Project Costs from Concept Design Report (April 2009)

Table 8.1 (continued)**Table 8.1 Notes:**

ENR CCI: March 2008 = 8109; March 2009 = 8534

- (1) Costs are from the December 2007 Water and Sewer Master Plan (Cannon).
 - (2) Engineering and Construction Management were originally presented as a "lump sum" amount
 - (3) Includes material testing, construction staking, and environmental monitoring
 - (4) Estimate only. Item not included in previous construction cost opinions, but was added to the Concept Design Report to provide a complete assessment of anticipated project costs.
 - (5) These work items were added to relieve high pressures on Mesa as an alternative to service pressure regulating valves (See Tech Memo 9). One PRV station at Maria Vista was required initially. Four are recommended for revised project. This was design Budget Revision #1.
 - (6) Based on review of record drawings, this pipeline is already a 10-in main
 - (7) Initial estimate incorporated Master Plan project costs. Revised estimate includes higher unit costs to reflect paving 1 traffic lane, per County standards
 - (8) Updated unit costs include higher costs to reflect paving 1 traffic lane, per County standards
 - (9) To be provided by CM team - Has not been revised to reflect additional work for construction management of Oakglen, Darby, and Orchard extensions.
 - (10) Contingency was modified to 20% which is more appropriate for 30% design phase.
 - (11) Provided by District staff.
- not included* = Item was not included in previous construction cost opinions, but was added into the Concept Design Report to provide a complete assessment of anticipated project costs.

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Memorandum

Date: July 15, 2009
To: Bruce Buel, General Manager – Nipomo Community Services District
From: Michael K. Nunley, PE
Subject: Southland WWTF Upgrade Project – Design Phase Status Report

Distribution: Josh Reynolds, PE
Peter Sevcik, PE
Jon Hanlon, PE
Eileen Shields
Jim Froelicher
Kirk Gonzalez, PE

The Project Team has completed the following work items this month:

1. Fugro provided a plan for boring locations at the Southland WWTF. Stakes were placed on July 6th and USA was called for utility markings.
2. GTA performed field work for base map on July 9th and 10th.
3. Supplemental influent monitoring was started in May and results for the first month were received in June.

Schedule

The Project Schedule is attached. The Design Phase is on schedule.

Budget Status

The Invoice Summary is attached. The Invoice Summary indicates an amount invoiced which is consistent with the work completed to date. The project cost opinion has not been updated since the January 2009 Master Plan, but the summary table is included and will be updated with the 30% design submittal.

Yours Sincerely



Michael K. Nunley, PE

Enclosures: Project Schedule
Invoice Summary
Project Budget Summary

Project Budget Summary

7/3/2009

Engineering Services for NCSD - Southland WWTF Upgrade

Nipomo CSD

	Total Budget	Amount Previously Invoiced	Current Invoice Amount	% of Budget Earned to date	% of Work Complete
Task Group 1 - Concept Design Phase	\$188,622.00	\$13,504.05	\$21,139.65	18%	18%
Task Group 2 - Construction Documents	\$478,948.00	\$0.00	\$0.00	0%	0%
Task Group 3 - Project Management	\$68,787.00	\$3,946.05	\$3,167.10	10%	10%
Task Group 4 - Assistance During Bid	\$39,539.00	\$0.00	\$0.00	0%	0%
Task Group 5 - Office Engineering Services	\$147,198.00	\$0.00	\$0.00	0%	0%
Total	\$923,094.00	\$17,450.10	\$24,306.75	5%	5%

Item	Description	Budgeted Amount Jan 2009 Master Plan	Updated Amount
1	Frontage Road sewer upgrade (street to influent pump station)	\$366,000 (4) (5)	\$366,000
2	Influent pump station upgrade	\$670,900	\$670,900
3	Influent screening system	\$327,400	\$327,400
4	Grit removal system	\$402,700	\$402,700
5	Phase I Biolac system	\$3,877,500	\$3,877,500
6	Phase I Sludge holding lagoons	\$67,700	\$67,700
7	Phase I Sludge drying beds	\$1,160,700	\$1,160,700
	Construction Subtotal	\$6,872,900	\$6,872,900
8	Contingency	\$2,061,870 (6)	\$2,061,870
9	Design-Phase Engineering	\$923,093	\$923,093
10	Construction Management	\$1,138,777 (7)	\$1,138,777
11	Environmental Mitigation	-- (8)	-- (8)
12	Environmental Monitoring	-- (8)	-- (8)
13	Permitting Fees	-- (8)	-- (8)
	PROJECT TOTAL (Rounded to 1000)	\$10,997,000	\$10,997,000

Notes:

- (1) ENR CCI: November 2008 = 8602
- (2) Costs are from the January 2009 Southland WWTF Master Plan.
- (3) Costs are escalated by 4 % per year to anticipated midpoint of construction (2011).
- (4) The Frontage Rd Sewer Upgrade project includes the sewer main from Division St. to the influent pump station. The portion between the street and the influent pump station is currently included in the Southland WWTF Upgrades project scope of work, but may be moved to the Waterline Intertie Project for expedited construction.
- (5) The cost for this portion of Frontage Rd was estimated by prorating the cost opinion for the Frontage Road Sewer Upgrade (based on linear footage) to arrive at the 2008 Construction Cost Opinion. A 4% per year escalation was used to arrive at the 2011 midpoint of construction cost opinion.
- (6) Contingency is estimated at 30% of construction subtotal.
- (7) To be updated by CM Team, assumed to be 30% of construction subtotal minus the engineering fee.
- (8) Costs to be developed with EIR process

TO: BOARD OF DIRECTORS
FROM: BRUCE BUEL
DATE: JULY 17, 2009



SUPERINTENDENT UPDATES

ITEM

NCSD District Superintendent Tina Grietens re June 2009 Utility Division Activities [NO ACTION REQUESTED].

BACKGROUND

Tina Grietens is scheduled to summarize the attached outlines.

RECOMMENDATION

Staff recommends that your Honorable Board receive the presentations and ask questions as appropriate.

ATTACHMENTS

- June 2009 Outline

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NIPOMO COMMUNITY

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LISA BOGNUDA, ASSISTANT GENERAL MANAGER
JON SEITZ, GENERAL COUNSEL

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(805) 929-1133 FAX (805) 929-1932 Website address: NCSD.CA.GOV

TO: BRUCE BUEL, GENERAL MANAGER
FROM: TINA GRIETENS, UTILITY SUPERINTENDENT TG
DATE: JULY 15, 2009
SUBJECT: UTILITY DIVISION UPDATE FOR JUNE 2009

- **Personnel**

Inspector /Maintenance Supervisor began employment June 22, 2009-introduction

- **Southland Wastewater Plant and Utility Yard**

Ripping and discing of Southland WWTP percolation ponds continued

Assisting with Biosolids removal and disposal project

CCC crew assisted in weed abatement at percolation ponds

Assisted Aecom with data collection for expansion

Sewer lines on Frontage Rd. jetted and videotaped in preparation for expansion

HVAC installed in laboratory building

- **Collection system**

Tejas Lift Station pumps rebuilt

- **Wells**

Sundale well back online

Assisting with well level monitoring

- **Distribution System**

Ventilation systems installed in Via Concha and Eureka well houses

Valve and hydrant exercising completed June 15th

- **Maintenance**

Weed abatement continues

Air-vac and water sample stations rebuilt/replaced

Preventive maintenance plan paper implementation continues, updating forms

- **Safety**

Conducted training 6/9 regarding Lead Acid Battery Maintenance

- **Compliance**

Organizing triennial lead and copper sampling scheduled for June/July

Monitored laboratory results, prepared compliance reports for WWTPs

- **Other**

Attended California Rural Water Association Groundwater Regulations conference 6/26/09 in SLO

Two operators attended Underground Service Alert (Utility Locating) Training in June

TO: BOARD OF DIRECTORS
FROM: BRUCE BUEL
DATE: JULY 17, 2009



MONTHLY WATER CONSERVATION COORDINATOR UPDATE

ITEM

NCS District WCC Celeste Whitlow re June 2009 Outreach Activities [NO ACTION REQUESTED].

BACKGROUND

Celeste Whitlow is scheduled to summarize the attached outline.

RECOMMENDATION

Staff recommends that your Honorable Board receive the presentations and ask questions as appropriate.

ATTACHMENTS

- District June 2009 Outreach Activities Outline

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NIPOMO COMMUNITY SERVICES DISTRICT

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Web site address www.ncsd.com

MEMORANDUM

TO: BRUCE BUEL, GENERAL MANAGER
FROM: CELESTE WHITLOW, WATER CONSERVATION COORDINATOR *cw*
DATE: JULY 22, 2009
RE: ITEM – C3: WATER CONSERVATION ACTIVITIES UPDATE

Newsletters, Mailings, Advertising

- Conservation News (Issue 3, 2009).
- Monthly billing inserts.
- Design, printing and submission of ad materials for events and Water Conservation Program.
- Starting up weekly water conservation Adobe Press ads.
- NEW: Advertisements, post-cards, application form, and other information for the rebate program for high-efficiency clothes washers.
- Prepared and sent for mailing "Recycling and Reuse Guide for Nipomo Residents – 2009."
- Updated website.

WC Program Implementation

- Re-launch of Smart Rebate for High-Efficiency Clothes Washer Rebate Program.
- Newsletters, mailings, advertising.
- Water Audit Program, residential.
- Water audits for selected homeowner's associations.
- Starting design of turf-replacement program.
- Research on weather-based irrigation controllers.
- Scheduling of installation of weather-based smart controller for Vista Verde HOA.

District Landscape

- Awaiting quote from GLM Landscaping for mulch placement on District landscape.

Other

- Evaluation of impact of including in MFR water-consumption an MFR's associated landscape meter's recorded consumption. See attached "One MFR Development's Residential and Landscape Water Use Combined to Find GPCD."
- Set up new office space.

ATTACHMENT:

"One MFR Development's Residential and Landscape Water Use Combined to Find GPCD."



**ONE MFR DEVELOPMENT's RESIDENTIAL AND LANDSCAPE WATER USE
COMBINED TO FIND GPCD**

Customer ID: GSF0003
Mtr Size: 1.5"
Apts: 60

MFR: Multi-family residences(s)
SFR: Single-family residence(s)
GPCD: Gallons per capita per day

GOAL OF STUDY: It is generally accepted that the GPCD for MFR is about half of the GPCD for SFR. Figures for MFR usage submitted to the DWR on an annual basis, from which the State of California obtains its statistics, does not include the water used in the common area of the MFR development. Therefore, the goal was to combine the water usage for one MFR development, residential and common-area/landscape, to see the difference in GPCD when the total water consumption for the MFR development is used for figuring the GPCD.

FINDINGS:

1. The GPCD for both residential and landscape meters combined is 18.7 gallons more than the GPCD for residential alone.
2. The percent-difference between "residential and landscape meters" combined and "only residential" is 18.4%.

VERY TENTATIVE AND LIMITED KIND-OF CONCLUSIONS:

1. The DWR's method of reporting MFR water consumption (residential metered water only) may not be producing an accurate measurement of the total water used by residents of a MFR site.
2. Using this inaccurate method of defining GPCD for MFR may be underestimating the impact of MFR housing on water supply.
3. Even with the combination of "residential" and "landscape" metered water for this MFR, the average-per-residence of .33 AF/2008 is about half of the average-per-residence for SFR, which matches the general assumption of a MFR residence using about one-half of the water used by a SFR residence. Even so, the amount of water used by this MFR is still 18.7% less when only the "residential" metered water is reported, a significant under-reporting.

ERRATA:

Consumption figures are in units unless otherwise indicated.

- Only 2008 was calculated because it is the last full year of data on water consumption.
- Only one MFR account was studied because of the difficulty obtaining data from NCSD's billing program. Once the ConserveTrack software program is up

LANDSCAPE METER: TOTAL UNITS BILLED PER BI-MONTHLY BILLING PERIOD, YEAR

		January	March	May	July	September	November	JAN-DEC
Total	2008	581.0	194.0	884.0	806.0	789.0	612.0	5874.0
Avg/Resid.	2008	9.7	3.2	14.7	13.4	13.2	10.2	97.9

RESIDENTIAL METER: TOTAL UNITS BILLED PER BI-MONTHLY BILLING PERIOD, YEAR								
		January	March	May	July	September	November	JAN-DEC
Total	2008	1102.0	868.0	997.0	1140.0	1078.0	1042.0	8235.0
Avg/Resi.	2008	18.4	14.5	16.6	19.0	18.0	17.4	103.8
GPCD:								82.7

COMBINED LANDSCAPE AND RESIDENTIAL METERS: UNITS BILLED IN 2008									
		January	March	May	July	September	November	Units/Yr	AcreFeet/Yr
Residential	2008	1102.0	868.0	997.0	1140.0	1078.0	1042.0	8235.0	18.90
Landscape	2008	581.0	194.0	884.0	806.0	789.0	612.0	5874.0	13.48
TOTAL	2008	1683.0	1062.0	1881.0	1946.0	1867.0	1654.0	14109.0	32.39
AVG/RESID.	2008	28.1	17.7	31.4	32.4	31.1	27.6	235.2	0.54
GPCD:								141.7	0.33

COMPARING GPCD: RESIDENTIAL ONLY vs. COMBINED RESIDENTIAL, LANDSCAPE			
Residential & Landscape	2008	101.4	(A)
Residential	2008	82.7	(B)
	Difference	18.7	(C)
	%Difference	18.4%	(D)

FORMULAE:

GPCD: (Units of water) / 365 / 60 / 3.4 x 748

Difference: A - B = C

%Difference: (A/B)/A = D

Celeste Whitlow

Celeste Whitlow, Conservation Specialist
Nipomo Community Services District