

NIPOMO COMMUNITY SERVICES DISTRICT

MONDAY, MAY 19, 2008

1:00 P. M.

SPECIAL MEETING NOTICE & AGENDA SUPPLEMENTAL WATER PROJECT DESIGN & CONSTRUCTION COMMITTEE

COMMITTEE MEMBERS

ED EBY, CHAIR
CLIFFORD TROTTER, MEMBER

PRINCIPAL STAFF


BRUCE BUEL, GENERAL MANAGER
LISA BOGNUDA, ASSIST. GENERAL MANAGER
DONNA JOHNSON, BOARD SECRETARY
JON SEITZ, GENERAL COUNSEL
PETER SEVCIK, DISTRICT ENGINEER

MEETING LOCATION

**District Board Room
148 S. Wilson Street
Nipomo, California**

1. **CALL TO ORDER, ROLL CALL AND FLAG SALUTE**
ACTION RECOMMENDED: None
2. **REVIEW STATUS OF WATERLINE INTERTIE PROJECT (WIP)**
ACTION RECOMMENDED: Forward Recommendations to Board
3. **REVIEW DRAFT WIP PROJECT DESCRIPTION FOR EIR**
ACTION RECOMMENDED: Forward Recommendation to Board
4. **DISCUSS PROCESS FOR SELECTION OF WIP DESIGN TEAM**
ACTION RECOMMENDED: Forward Recommendations to Board
5. **RECEIVE STAFF UPDATE ON DESALINATION TECHNOLOGY**
ACTION RECOMMENDED: No Action Requested
6. **SET NEXT COMMITTEE MEETING**
ACTION RECOMMENDED: Set Time/Date for Next Committee Meeting
7. **ADJOURN**

**** End Special Meeting Notice ****

TO: COMMITTEE MEMBERS
FROM: BRUCE BUEL 
DATE: MAY 16, 2008



REVIEW WIP PROJECT DEVELOPMENT STATUS

ITEM

Review WIP Project Development Status [Forward Recommendations to Board].

BACKGROUND

The agreement with DWA for preparation of the WIP EIR has been executed.

Staff mailed out the Design Services RFP on May 13, 2008.

Staff is scheduled to summarize recent discussions with the City of Santa Maria regarding negotiation of a Final Agreement.

Boyle is scheduled to submit their Final Engineering Memorandum by the end of May.

Your Honorable Board, on January 9, 2008, increased Boyle's NTE expenditure limit to \$356,416 – providing for the funding to revise the WIP Preliminary Engineering Memorandum. During April Boyle spent \$23,831 (see attached invoice); increasing their project billing to \$304,849.

RECOMMENDATION

Staff recommends that the Committee receive the staff updates and provide feedback.

ATTACHMENTS

- April Boyle Invoice

T:\BOARD MATTERS\BOARD MEETINGS\BOARD LETTER\BOARD LETTER 2008\SWP COMMITTEE\080519\ITEM2.DOC



Engineering Excellence Since 1942

Employee Owned

60 Years of Engineering Excellence
1194 Pacific Street, Suite 204
San Luis Obispo CA 93401
Phone: 805-542-9840
Fax: 805-542-9990

April 29, 2008
Project No: 19996.12
Invoice No: 055381

Nipomo Community Services District
148 South Wilson Street
P.O. Box 326
Nipomo, CA 93444

Nipomo Waterline Intertie Project
Professional Services from March 29, 2008 to April 25, 2008

Professional Personnel

	Hours	Rate	Amount	
Principal	28.00	185.00	5,180.00	
Senior Engineer I	62.75	135.00	8,471.25	
Associate Engineer	.25	115.00	28.75	
Assistant II	.25	100.00	25.00	
Assistant I	61.50	100.00	6,150.00	
CADD Operator	10.75	95.00	1,021.25	
Sr. Secretary I	3.00	72.00	216.00	
Totals	166.50		21,092.25	
Total Labor				21,092.25

Consultants

Garing Taylor & Associates			956.01	
Total Consultants		1.1 times	956.01	1,051.61

General Project Expenses

General Project Expenses	8.00% of 21,092.25		1,687.38	
Total General Project Expenses			1,687.38	1,687.38

Total this Invoice \$23,831.24

	Current	Prior	Total	Received	A/R Balance
Billings to Date	23,831.24	281,017.71	304,848.95	281,017.71	23,831.24

RECEIVED
MAY 29 2008
NIPOMO COMMUNITY SERVICES DISTRICT

TO: COMMITTEE MEMBERS
FROM: BRUCE BUEL *BB*
DATE: MAY 16, 2008



REVIEW DRAFT WIP PROJECT DESCRIPTION FOR EIR

ITEM

Review Draft WIP Project Description for EIR [Forward Recommendations to Board].

BACKGROUND

Attached is a draft WIP Project Description from DWA.

RECOMMENDATION

Staff recommends that the Committee review and edit the attached Project Description.

ATTACHMENTS

- Draft Project Description

T:\BOARD MATTERS\BOARD MEETINGS\BOARD LETTER\BOARD LETTER 2008\SWP COMMITTEE\080519\ITEM3.DOC

III. PROJECT DESCRIPTION

A. PROJECT BACKGROUND

The Nipomo Community Services District (NCSD or the District) was formed in 1965 and currently provides water, wastewater, lighting and solid waste disposal services to approximately 12,000 residents of the Nipomo area. The Nipomo Community Services District is a California Community Services District organized pursuant to Government Code Sections 61000 et. seq. The NCSD's service area overlies the southern portion of the Nipomo area within the unincorporated portion of San Luis Obispo County. Pursuant to the Government Code, the NCSD provides water to its residents, similar to a municipal water district. The Nipomo Community Services District's authority does not include legislative or executive powers over zoning or land use. (Further details concerning the legislative authority of the Nipomo Community Services District can be found in Section V.A. Land Use). The District currently relies primarily upon groundwater from the Nipomo Mesa Management Area (formerly known as the Nipomo Mesa Groundwater Subbasin) of the Santa Maria Groundwater Basin for water supply.

Over the past several years, a number of groundwater studies have been conducted in the Nipomo Mesa area in order to assess the status of groundwater resources in the area. These analyses include: 1) Water Resources of the Arroyo Grande – Nipomo Mesa Area in 2002, prepared by the California Department of Water Resources (DWR), dated October 25, 2002; 2) Water and Wastewater Impacts Analyses for both the Summit Station Area Land Use Ordinance Amendment and the Woodlands EIR, prepared by Cleath & Associates, both dated 2003; (3) Nipomo Mesa Groundwater Resource Capacity Study prepared by the firm of S.S. Papadopoulos & Associates, Inc. and; (4) "Water Supply in the Nipomo Mesa Area, August, 2004", a Resource Capacity Study prepared by the County of San Luis Obispo, Department of Planning and Building in 2004.

The above referenced studies contained varying conclusions concerning the status of groundwater supplies in the Nipomo Mesa Management Area. The Cleath Reports concluded that a groundwater overdraft condition does not exist in the Nipomo Mesa Sub-Area but a water deficit does exist within the area and this deficit is compensated by inflows from other portions of the Santa Maria Groundwater Basin. The 2002 Department of Water Resources Report concluded that overdraft of the Santa Maria Groundwater Basin is not likely through the year 2020 but indicates that projected water demands significantly exceed the dependable safe yield of groundwater in the Nipomo Mesa Sub-Area. The 2004 Papadopoulos Report concluded that the Nipomo Mesa Sub-Basin is currently in overdraft and that the greater Santa Maria Groundwater Basin is in steady decline. The County's 2004 Resource Capacity Study indicated that in order to maintain sustainability of the Nipomo Mesa groundwater supply, total extractions would have to be stabilized at 6,000 acre-feet per year (as first indicated in the Department of Water Resources Report) and that sustainability can be achieved through a combination of conservation and water supply augmentation.

Since 1997, the entire Santa Maria Groundwater Basin, including the Nipomo Mesa Groundwater Management Area, has been the subject of ongoing adjudication based upon a lawsuit initiated by the Santa Maria Valley Water Conservation District against the City of Santa Maria and other water purveyors in the groundwater basin. When the lawsuit was first initiated, the issue was whether or not the City of Santa Maria had the right to claim ownership of percolated effluent resulting from the use of imported water in the basin. Subsequently, the lawsuit has broadened to address groundwater management of the entire Santa Maria Groundwater Basin. A preliminary ruling by the Court concluded that the overall Santa Maria Groundwater Basin is not currently in an overdraft condition but recognized the need for active management of the existing hydrologic sub-areas.

On August 3, 2005, the Court approved a Settlement Stipulation for the case which divides the Santa Maria Groundwater Basin into three separate management sub-areas; the Northern Cities Management Area, the Nipomo Mesa Management Area and the Santa Maria Valley Management Area (see Figure ___, Santa Maria Groundwater Basin). The Settlement Stipulation contained specific provisions with regard to groundwater rights, groundwater monitoring programs and development of plans and programs to respond to potential water shortage conditions. Within the Settlement Stipulation and Judgment, the Nipomo Community Services District is required to purchase supplemental water for delivery to the Nipomo Mesa Management Area.

In 2004, the San Luis Obispo Local Agency Formation Commission (LAFCO) completed a Sphere of Influence Update and Municipal Services Review for the Nipomo Community Services District (pursuant to the Cortese/Knox/Hertzberg Local Government Reorganization Act of 2000) as well as a Program Environmental Impact Report (EIR) for that project. The EIR evaluated the impacts of expanding the Sphere of Influence to include eight study areas (5,000 acres) adjacent to the Nipomo Community Services District. As a result of the Sphere of Influence Update and their analysis of available services and resources, LAFCO required that prior to the approval of any annexation to the NCS D, the District shall implement a water conservation program that decreases water use by 15 percent based upon per connection water consumption and update its Urban Water Management Plan (UWMP) to demonstrate the need to provide additional water to serve the expanded Sphere of Influence area. LAFCO required that prior to the approval of any annexation, the District must complete negotiations for a supplemental water source outside the Nipomo Mesa Management Area.

In December, 2005, the Nipomo Community Services District completed their Urban Water Management Plan 2005 Update. This update was intended to provide a viable tool for the NCS D's long-term water use planning and to comply with requirements of the California Urban Water Management Act which requires that all urban water suppliers prepare and adopt an urban water management plan every five years. The NCS D Urban Water Management Plan 2005 Update contains background on past and current water demands for different sectors of the Nipomo Community Services District. It provides data on water deliveries in the year 2000 and estimates of total water demand in 2005, based upon the following land use sectors: single family residential, multi-family

residential and all other non-residential uses designated as “commercial”. Estimates of future demand within the Urban Management Plan 2005 Update contained various assumptions regarding land uses and growth rates within the Nipomo area. As indicated therein, projected water demands for 2025 range from 4,030 acre-feet per year (assuming an Existing County Land Use designation scenario and a 2.3 percent growth rate) to 5,750 acre-feet per year (assuming a high density land use assumption and a 7.8 percent growth rate). Future water demands were compared to projected water supplies during a normal water year, a single dry year and multiple dry years. Within a single dry year, no differences in conditions from the normal supply year are anticipated. Additional irrigation demands within this scenario are expected to be compensated by water conservation. Within multiple dry years, irrigation uses would be limited and additional water conservation measures would be required.

In response to these concerns regarding the availability of groundwater supplies in combination with the legislative requirements and judicial directives noted above, the Nipomo Community Services District entered into a Memorandum of Understanding with the City of Santa Maria for the purchase of approximately 3,000 acre-feet per year with deliveries of water to NCS D not to exceed a maximum of 250 acre-feet per month. The water will be a mix of both City groundwater and State Water Project water that is delivered to the City. According to the District, this acquisition of additional water supply is intended to augment current groundwater inventories with the goals of increasing the reliability and diversity of water supplies and balancing groundwater levels in the Nipomo Mesa Management Area. The Settlement Agreement divides approximately 3,000 acre-feet per year between Nipomo Community Services District and other water purveyors who overlie the Nipomo Mesa Management Area, including the Woodlands, Golden State (formerly Southern California) Water Company and Rural Water Company. A copy of the Memorandum of Understanding is included within Technical Appendix C of this EIR.

In 2005, the Nipomo Community Services District prepared a Feasibility Study which evaluated several alternative methods for extension of a waterline from the City of Santa Maria across the Santa Maria River to connect to existing water transmission facilities within the NCS D. This study provided the basis for selection of three alternatives for extending a waterline from the City of Santa Maria. At that time, the proposed project involved the adoption of one of three alternative methods for the extension of the water supply pipeline across the Santa Maria River: a) attaching the pipeline to the existing Highway 101 bridge or b) two routes for horizontal directional drilling and underground burial of the pipeline beneath the riverbed.

In 2005, the Nipomo Community Services District initiated preparation of a Draft and Final Environmental Impact Report which addressed the potential impacts of these three proposed methods for extension of a water supply pipeline. A Draft Environmental Impact Report dated May, 2006 for that project was prepared, reviewed and circulated for public and agency review and comment during the months of May and June of 2006. Subsequent to circulation of that document, several revisions and/or additions to the project design were recommended. These revisions included the reduction in water

storage, additional NCSD water distribution system improvements, resolution of water quality issues and phased project development. In addition, an expanded number of project alternatives were also evaluated including the investigation of the viability of desalinization and direct use of State Water Project water. In December, 2006, the NCSD Board of Directors suspended further work on the EIR until project costs could be evaluated and project design issues resolved.

Since that time, several additional studies and field surveys have been prepared by NCSD in order to further evaluate and refine the design of the waterline intertie project. This information includes the Preliminary Engineering Memorandum, prepared by Boyle Engineering, dated November, 2006; Evaluation of Supplemental Water Alternatives – Technical Memorandum No. 1, prepared by Boyle Engineering dated June 2007; Evaluation of Desalinization as a Source of Supplemental Water - Technical Memorandum No. 2, prepared by Boyle Engineering dated September 28, 2007; Evaluation of Supplemental Water Alternatives - Technical Memorandum No. 3, prepared by Boyle Engineering dated November 30, 2007; California Red-Legged Frog Survey Results, prepared by Padre Associates dated April 12, 2007; Recent Biological Field Survey Results from Padre Associates dated March, 2008 and Preliminary Engineering Memorandum for the proposed project dated April, 2008 prepared by Boyle Engineering.

In addition, the NCSD recently updated their Water Master Plan (December, 2007) in which the District water model was updated and recommendations for improvements to the District water distribution system were made. This analysis provided the basis for the currently proposed revised project design which includes, but is not limited to, revised pipeline sizes and routes, relocated pump stations, resized and relocated water storage tanks, an additional water storage reservoir, upgraded water distribution facilities, phased development of the proposed project and possible alternative methods for water treatment.

In April, 2008, the NCSD Board of Directors authorized preparation of this Draft and Final Environmental Impact Report pursuant to the requirements set forth in the California Environmental Quality Act (Public Resources Code 21000 et. seq.) and the State CEQA Guidelines which will address the environmental impacts of the currently proposed project.

B. PROJECT OBJECTIVES

The basic objective of the proposed Nipomo Community Services District Waterline Intertie Project is to construct a pipeline connection from the City of Santa Maria water distribution system across the Santa Maria River to the existing water distribution system within the Nipomo Community Services District. In so doing, the proposed project will also achieve the following objectives:

1. Slow the depletion of the above-sea-level groundwater in storage beneath the Nipomo Mesa Groundwater Management Area (NMMA) of the Santa Maria Groundwater Basin to reduce the potential for sea water intrusion by using supplemental water consistent with the settlement agreement and the judgment related to the groundwater adjudication. Since projections have shown that sea water intrusion could occur in 12-14 years with no new development, and under 8 years in a "dry years" scenario, the nearest-term project completion is essential. The conservative goal of this project is to provide at least 2,000 AFY of supplemental water to the NMMA by 2013.
2. Comply with the 2005 groundwater adjudication settlement stipulation and judgment that dictates the need for active management of the NMMA.
3. Assist in stabilizing the groundwater levels in the NMMA by reducing pumping in the NMMA.
4. Augment current water supplies available to the Nipomo Community Services District by a phased delivery of supplemental water. Phase I will supply approximately 2,000 AFY by pipeline from Santa Maria following Phase I construction completion. Phase II will supply up to an additional 1,000 AFY by pipeline from Santa Maria (a cumulative total of 3,000 AFY). A third phase (Phase III), if implemented, would supply up to an additional 3,200 AFY (a cumulative total of 6,200 AFY) by pipeline from Santa Maria.
5. Augment current water supplies available to the Woodlands and other water purveyors on the Mesa (Golden State and Rural Water) by 1,000 afy.
6. Increase the reliability of District water supply by providing a diversity of water sources. Avoid the potential use of supplemental water return flows from the District, the Woodlands and the other purveyors, being used to support the water requirements of new development.
7. Comply with Local Agency Formation Commission (LAFCO) conditions for securing supplemental water prior to annexation of lands now within the District's Sphere of Influence. This supplemental water for annexations shall be in addition to the 3,000 AFY developed by Phases I and II.

8. Avoid multiple waterline crossings of the Santa Maria River and associated environmental impacts, by constructing a single pipeline capable of transporting sufficient water for potential NMMA growth consistent with the South County Area Plan (Inland) of San Luis Obispo County's General Plan. The pipeline diameter crossing the Santa Maria River would accommodate a 6,200 AFY capacity.
9. Slow the depletion of the above-sea-level groundwater in storage beneath the NMMA by:
 - A. Providing supplemental water for new development within the current service area of the District and the Mesa's other water purveyors (Golden State and Rural Water) consistent with the South County Area Plan (Inland);
 - B. Facilitating supplemental water delivery for new development within the District's Sphere of Influence consistent with the South County Area Plan (Inland) and the conditions in LAFCO's 2004 Sphere of Influence Update;
 - C. Providing the basis for the assessment of impact fees upon development outside the District's Sphere of Influence and the service areas of the Mesa's other water purveyors (Golden State and Rural Water).

These project objectives play an important role in this EIR in that these objectives provide the basis for judging the merits of the proposed project. These objectives also assist in the evaluation (and possible adoption or rejection) of alternatives to the proposed project (see Section VII. Alternatives to the Proposed Project).

C. PROJECT LOCATION

The Nipomo Community Services District encompasses approximately seven square miles southeast of the City of Arroyo Grande within the southern portion of San Luis Obispo County (see Figure 1, Regional Map). Approximately one-half mile south of the District boundary is the Santa Maria River with a width ranging between 2,000 to 3,000 feet at this location. The City of Santa Maria is located within Santa Barbara County on the south side of the Santa Maria River (see Figure 2, Vicinity Map and Figure 3, Aerial Photograph).

The proposed project extends from a proposed pipeline connection and pump station site near the intersection of West Taylor Street and North Blosser Road approximately one mile south of the Santa Maria River in the City of Santa Maria. A proposed pipeline extension will run north on Blosser Road to the Santa Maria River levee. At that point, a pipeline will be placed under the levee then directionally drilled beneath the Santa Maria River to a point on the Nipomo Mesa. A surface pipeline connection will then run to and along Orchard Road to the upgraded NCSD water distribution system on Orchard Road, Southland Street, Division Street and South Frontage Road.

FIGURE 1, REGIONAL MAP

FIGURE 2, VICINITY MAP

FIGURE 3, AERIAL PHOTOGRAPH

D. PROJECT CHARACTERISTICS

The proposed project consists of connecting to the City of Santa Maria water distribution system and construction of a waterline from Santa Maria to the Nipomo Community Services District water distribution system. The pipeline will be constructed beneath the Santa Maria River by horizontal directional drilling. A pump station(s) and water storage facilities will be constructed to boost the water pressure into the District system and provide water storage as necessary. Several water transmission facilities within the NCSD will be upgraded or replaced. A final element of the proposed project involves the conversion of District water supply wells to chloramination treatment in order to maintain acceptable water quality.

- ***Waterline Extension***

The proposed Nipomo Community Services District waterline extension originates at the northern end of the City of Santa Maria approximately 1,500 feet south of the intersection of West Taylor Street and North Blosser Road (see Figure 4, Pipeline Route and Project Facilities). At that point, a connection will be made to the City of Santa Maria water supply system via the existing Blosser Road Extension pipeline. Approximately 5,000 linear feet of 18-inch pipeline will be installed along the east side of Blosser Road using conventional open trench construction. At Atlantic Street, approximately 300 linear feet of 24-inch carrier pipe will be installed inside a 36-inch steel casing which will be placed under the Santa Maria levee at this location. This pipeline and protective casing will be installed under the levee using perpendicular jack-and-bore construction methods. Installation of the pipeline under the levee (instead of trenching up and over the levee) is the method of pipeline installation preferred by the Santa Barbara County Public Works Department.

Once the pipeline is constructed beneath the levee, approximately 600 linear feet of 24-inch pipeline will be installed in a north and northwest direction through open trench construction leading to the horizontal directional drilling site (see Figure 4, Pipeline Route and Project Facilities).

Horizontal directional drilling (HDD) will be utilized to install a 24-inch pipeline within a 36-inch steel casing utilizing underground trenchless technology approximately 2,450 linear feet in a northwest direction underneath the riverbed and surfacing on the Nipomo Mesa (see Figure 5, Horizontal Directional Drilling Cross-Section). By way of background, directional drilling is used to cross rivers, roads or other sensitive areas that require very limited impact to the environment or interruption of ongoing systems (such as traffic flow). A drilling rig is assembled at one end of the drilling operation and is oriented at a low angle. Once drilling reaches the desired depth, the drill path direction and depth are adjusted to traverse beneath the riverbed while also avoiding obstacles such as hard rock, existing pipelines, etc. A pipeline layout area is established on the opposite end of the underground drilling. The pipeline path is first drilled and is followed by the pulling of the pipeline back.

FIGURE 4, PIPELINE ROUTE AND PROJECT FACILITIES

FIGURE 5, HORIZONTAL DIRECTIONAL
DRILLING CROSS-SECTION

As indicated in Figure 4, Pipeline Route and Project Facilities, the proposed horizontal directional drilling process involves a drilling site located at the southern end of the underground pipeline segment and a pipeline laydown area located at the northern end of the underground pipeline segment on the Nipomo Mesa. The proposed drilling originates at the southern end of the route while pipes are laid out and assembled within the layout area at the northern end of the pipeline segment. Once the underground drilling reaches its destination, the pipeline is immediately pulled back in the opposite direction (see Figure 5, Horizontal Directional Drilling Cross-Section).

At this surface location on the Nipomo Mesa, approximately 2,500 linear feet of 24-inch waterline will be installed using open trench construction to the proposed Pump Station No. 2 and reservoir site adjacent to Joshua Street.

In order to increase the capacity of the water transmission system (from 3,000 to 6,200 acre-feet per year), two additional waterlines will be required in Phase III of project construction. An 18-inch parallel waterline or a replacement 24-inch waterline will be installed for approximately 5,000 linear feet along the eastern side of Blosser Road from the original point of connection to Atlantic Street. In addition, approximately 27,000 linear feet of 24-inch waterline will be installed to connect Pump Station No. 2 with the Quad Storage Tanks located approximately five miles to the east of the Pump Station No. 2 site.

- ***Required Infrastructure***

In addition to the pipeline facilities described above, the proposed waterline intertie will require provision of other infrastructure facilities including storage tanks, pump stations, valves and pipe fittings as well as metering, electrical and communications equipment. In order to provide adequate storage and accommodate anticipated waterline flows, a 0.5 million gallon underground water storage tanks will be constructed at one of three possible locations on the Nipomo Mesa (noted as Locations 1, 2 and 3 on Figure 4, Pipeline Route and Project Facilities.)

In order to insure adequate pumping pressures, a maximum of two pump stations may be constructed. Pump Station No. 1, if determined to be necessary, will be located at one of two locations, both of which are south of the Santa Maria River adjacent to Blosser Road. One potential location is approximately 600 feet south of the West Taylor Street/South Blosser Road intersection while the second possible site is located on the west side of Blosser Road at Atlantic Street (See Figure 4, Pipeline Route and Project Facilities.) During the initial project phase, a flow meter will be installed at the Pump Station No. 1 location. The need for construction of a pump station at this location will be evaluated during subsequent project phases (see "Project Phasing).

A second pump station, known as Pump Station No. 2, will be located on the north side of the river on the Nipomo Mesa adjacent to the underground water storage tank site in order to boost pressures necessary to transport water into the NCSD water distribution system. This pump station will be constructed during the first phase of project construction with the potential for the installation of additional pumps at a later phase. Each pump station will contain four 75 horsepower pumps to handle anticipated flow

rates and provide backup (standby) service. Pumps will be sized to accept water from the City of Santa Maria water system and boost pressure for transport or to enter the higher pressure NCS D water supply system. Pumps will be housed within an enclosed booster station structure measuring approximately 225 square feet (15 feet by 15 feet) and approximately ten feet in height. The structure will be designed to insure the quiet operation of pumping equipment and to fit architecturally with the surrounding area while also providing necessary security (see Figure 6, Typical Booster Station).

Additional infrastructure facilities include the installation of pressure reducing valves in approximately 200 homes in Area A (see Figure 7, NCS D System Improvements) as well as in the recently-constructed Maria Vista residential development.

- ***Upgraded NCS D Water Distribution System***

As a result of the importation of this supplemental water, several existing water transmission facilities within the Nipomo Community Services District must be upgraded. These pipelines, as shown on Figure 7, NCS D System Improvements, are listed below:

- 14,700 linear feet of 12-inch waterline along Southland Street and South Frontage Road.
- 5,000 linear feet of upgraded 12-inch waterline in Orchard Road between Southland Street and Division Street.
- 600 linear feet of upgraded 10-inch waterline in Division Street between Alegre Avenue and Meredith Avenue.

- ***Project Phasing***

The proposed project will be developed within three phases. Phase I involves development of project facilities adequate to provide an additional supplemental water supply totaling approximately 2,000 acre-feet per year. Phase II involves provision of additional facilities in order to provide an increase of 1,000 acre-feet per year to a total of 3,000 acre-feet per year. The final project phase will result in the development of the remaining project facilities which would provide an ultimate total of 6,200 acre-feet per year. Provided below is a listing of project facilities by phase. These facilities are illustrated on Figures 8, 9 and 10, Phase I, II and III, Project Facilities)

Phase I

- 1) Install 5,000 linear feet of 18-inch waterline along Blosser Road the connection to the City of Santa Maria water distribution system approximately 1,500 feet south of the intersection of West Taylor Street and North Blosser Road to Atlantic Street at the Santa Maria River levee.
- 2) Install 300 linear feet of 24-inch waterline within a 36-inch steel casing beneath the southern Santa Maria River levee using jack-and-bore construction methods.
- 3) Install 600 linear feet of 24-inch waterline from the Santa Maria levee to the horizontal directional drilling site within the riverbed.

FIGURE 6, TYPICAL BOOSTER STATION

FIGURE 7, NCSD SYSTEM IMPROVEMENTS

FIGURE 8, PHASE I PROJECT FACILITIES

FIGURE 9, PHASE II PROJECT FACILITIES

FIGURE 10, PHASE III PROJECT FACILITIES

- 4) Install 2,450 linear feet of 24-inch waterline within a 36-inch steel casing from the Santa Maria riverbed to the Nipomo Mesa using horizontal directional drilling.
- 5) Install 2,500 linear feet of 24-inch waterline from the horizontal directional drilling site (pipeline laydown area) on the Nipomo Mesa to Pump Station No. 2.
- 6) Install a flow meter at Pump Station No. 1 site.
- 7) Construct Pump Station No. 2 near Joshua Street on the Nipomo Mesa.
- 8) Construct 0.5 million gallon underground reservoir, if required, at one of three possible locations on the Nipomo Mesa.
- 9) Install pressure reduction valves in approximately 200 homes in Area A (see Figure 7, NCSD System Improvements) and in the Maria Vista residential subdivision.
- 10) Install 14,700 linear feet of 12-inch waterline along Southland Street east of Orchard Road and along South Frontage Road north to Tefft Street.
- 11) Install a chloramination boosting system at Pump Station No. 2 and convert District wells to chloramination treatment.

Phase II

- 1) Evaluate need for Pump Station No. 1 and, if necessary, construct.
- 2) Add pump at Pump Station No. 2.
- 3) Upgrade 5,000 linear feet of existing waterline in Orchard Road between Southland Street and Division Street to a 12-inch line.
- 4) Upgrade 600 linear feet of existing waterline in Division Street between Alegre Avenue and Meredith Avenue to a 10-inch line.

Phase III

- 1) Install 5,000 linear feet of either a parallel 18-inch waterline or a replacement 24-inch waterline along Blosser Road from the original point of pipeline connection south of West Taylor Street to Atlantic Street at the Santa Maria River levee.
- 2) Install 27,000 linear feet of 24-inch water main from Pump Station No. 2 to the Quad Storage Tanks.
- 3) Evaluate the need for Pump Station No. 1 and, if necessary, construct.
- 4) Install four 250 horsepower pumps at Pump Station No. 2.

- ***Water Quality***

The importation of water from the City of Santa Maria water system creates water quality compatibility issues. The Nipomo Community Services District employs chlorination water treatment in order to achieve compliance with drinking water standards and other water quality parameters. The City of Santa Maria utilizes chloramination to achieve these standards. Engineering analyses provided three potential water treatment alternatives, those being: 1) uncontrolled blending of City of Santa Maria and NCS D water; 2) converting City of Santa Maria water to chlorine treatment or 3) converting the NCS D water supply system to chloramine treatment. The third alternative was selected due to the fewest water quality impacts and a reduction in chlorine-related taste and odor not found in chloraminated water.

This change in water treatment, from chlorination to chloramination, will require the introduction of ammonia at District wells and increased chemical introduction capacity i.e. larger chlorine solution tanks and chemical feed pumps. Each well will also require online monitoring equipment to provide dosage control and a building to house two chemical solution tanks and four pumps for chemical introduction.

Maintaining a chloramine residual in the NCS D water supply will, according to the project engineer, result in the lowest potential for formation of disinfection by-products (DBP's) and the fewest water quality problems in the water distribution system. In addition, the District will see a reduction in customer complaints related to taste and odor.

- ***Right-of-Way Acquisition***

Prior to construction of the proposed waterline intertie, the Nipomo Community Services District will require authorization from landowners and other entities for access and long-term maintenance of proposed project facilities. The strip of land (approximately 1,000 feet long) between the Santa Maria River levee and the northern Santa Maria city limits falls within jurisdiction of the County of Santa Barbara. With proper permitting and notification, this area will be traversed by waterlines prior to crossing the river.

The proposed route for crossing the Santa Maria River will require contact with several private landowners in order to negotiate and secure required rights-of-way and construction easements. If securing these easements is not agreed to by the involved landowners, the District may require the use of eminent domain in order to obtain these easements.

Encroachment permits may be required for trenching of new pipelines along public roadways. This construction activity will necessitate a 30-foot wide trench for installation of new pipelines adjacent to or within public or private roadways.

Several existing easements traversing the Santa Maria River will require avoidance. An existing Conoco Phillips underground 10-inch oil pipeline runs beneath the Santa Maria River in the vicinity of the proposed 24-inch underground HDD waterline. Pacific Gas and Electric has two easements and Sempra Energy has two natural gas lines located to the east or upstream of the proposed 24-inch underground line (see Figure 11, Existing

Easements and Pipelines.) State law requires that a minimum distance be maintained between oil and water pipelines.

- *Future Water Needs*

The proposed importation of a maximum of 6,200 acre-feet of water per year is intended to accomplish several objectives. Approximately 3,000 acre-feet per year is estimated to be necessary to avoid further depletion and assist in balancing of groundwater levels of the Nipomo Mesa Groundwater Management Area. Approximately 2,000 acre-feet per year of this total will be used to augment water supplies available to the Nipomo Community Services District while the remaining 1,000 acre-feet per year will augment water supplies available to the Woodlands and other local water purveyors including Golden State (formerly Southern California) Water Company and Rural Water Company (see Figure 12, Nipomo Community Services District and Other Water Purveyors). An additional 3,200 acre-feet per year is estimated to be required to: 1) serve new development within the South County Planning Area (consistent with the South County Area Plan) that would otherwise be served by groundwater supplies from the Nipomo Mesa Groundwater Management Area (see Figure 13, Nipomo Community Services District, Sphere of Influence) and 2) provide the basis for the assessment of impact fees upon development outside the service area of the Mesa water purveyors as noted above (see Figure 14, Impact Fee Area). Based upon a factor of 0.6 acre-foot of water to serve one dwelling unit for one year and deducting 2,000 acre-feet for groundwater replenishment, these additional water supplies could ultimately serve as many as 7,000 new dwelling units. This total does not, however, assume that this water would serve existing customers or other new non-residential development.

FIGURE 11, EXISTING EASEMENTS AND PIPELINES

FIGURE 12, NIPOMO COMMUNITY SERVICES DISTRICT
OTHER WATER PURVEYORS

FIGURE 13, NIPOMO COMMUNITY SERVICES DISTRICT,
SPHERE OF INFLUENCE

FIGURE 14, IMPACT FEE AREA

E. REQUIRED PERMITS AND APPROVALS

The proposed Nipomo Community Services District Waterline Intertie involves a series of approvals and discretionary actions by the Nipomo Community Services District, as Lead Agency, and other involved regulatory agencies. The proposed project involves the following approvals by the Nipomo Community Services District:

1. Certification of the Final Environmental Impact Report for the proposed Nipomo Community Services District Waterline Intertie;
2. Approval of the Mitigation Monitoring Program for the Nipomo Community Services District Waterline Intertie;
3. Review and approval of detailed plans for pipelines, pump stations, storage facilities and other infrastructure for the proposed waterline intertie.

The proposed Nipomo Community Services District Waterline Intertie may also require the following approvals by other involved regulatory agencies including:

4. Section 404 Permits under the Clean Water Act from the U.S. Army Corps of Engineers, which regulates the discharge of dredged and/or fill material into the “waters of the United States;”
5. Public Resources Code Sections 1601-1603 Streambed Alteration Agreements from the State of California, Department of Fish and Game, which regulates all diversions, obstructions or changes in the natural flow or bed, channel or bank of any river, stream or lake which supports fish or wildlife;
6. A National Pollution Discharge Elimination System (NPDES) permit to comply with Section 401 of the Clean Water Act from the State Water Quality Control Board in the event that a Section 404 Permit from the U.S. Army Corps of Engineers is required;
7. A Section 401 Water Quality Certification and a General Permit for Storm Water Discharges Associated with Construction Activities from the Central Coast Regional Water Quality Control Board;
8. A Section 7 Consultation or Section 10(a) Permit from the United States Fish and Wildlife Service which allows the “taking” of an endangered species;
9. A Section 7 Permit from or informal consultation with the National Oceanographic and Atmospheric Administration (NOAA) which oversees fisheries management in waterways nationwide;
10. A new or amended Domestic Water Supply Permit from the State Department of Public Health (formerly the Department of Health Services) for the introduction of supplemental water into the Nipomo Community Services District system;
11. Easements across the Santa Maria River and possibly along the southern boundary of the river secured from landowners and other entities for right-of-way and construction;


12. An Authority to Construct issued by the San Luis Obispo County Air Pollution Control District and the Santa Barbara Air Pollution Control District in order to allow underground horizontal directional drilling and
13. Any necessary construction and/or encroachment permits from the County of San Luis Obispo, the City of Santa Maria or the County of Santa Barbara for equipment staging and construction operations.

F. PROJECT TIMING

Detailed design efforts for the proposed project facilities will begin upon certification of the Final Environmental Impact Report. The District will develop a map that delineates the precise route of the waterline intertie and the location of other required project facilities (pipelines, pump stations, water storage facilities, etc.) which will provide the basis for any required right-of-way or facilities acquisition.

Phase I project construction will commence with construction of facilities at the connection location and pipeline extension on the south (Santa Maria) side of the river and will require ___ to ___ months to complete. Directional drilling and installation of a pipeline under the Santa Maria River is estimated to require an additional six to eight weeks. Construction activities within the Santa Maria River area are expected to occur during the dry season (April 15 to November 15). Construction of the remaining Phase I project facilities on the north (Nipomo) side of the Santa Maria River is estimated to require ___ to ___ months to complete.

Construction of Phase II project facilities is estimated to require approximately ___ months to complete. Phase III project construction will require an additional ___ months to complete.

TO: COMMITTEE MEMBERS
FROM: BRUCE BUEL 
DATE: MAY 16, 2008



DISCUSS PROCESS FOR SELECTION OF WIP DESIGN TEAM

ITEM

Discuss process for selection of design team [Forward Recommendations to Board].

BACKGROUND

The RFP for design of the Waterline Intertie Project sets a deadline for submission of proposals for Tuesday June 10 with the expectation that the Board will select one firm for negotiation of an agreement at your June 25th Board Meeting. Staff expects to develop a short list of firms for interview and to conduct the interviews on Monday June 23rd.

RECOMMENDATION

Staff recommends that the Committee review the timeline set forth above and determine your interest in participating in the interviews.

ATTACHMENT

- None

T:\BOARD MATTERS\BOARD MEETINGS\BOARD LETTER\BOARD LETTER 2008\SWP COMMITTEE\080519\ITEM4.DOC

TO: COMMITTEE MEMBERS
FROM: BRUCE BUEL *BB*
DATE: MAY 16, 2008



RECEIVE STAFF UPDATE ON DESALINATION TECHNOLOGY

ITEM

Receive staff update on desalination technology [No Action Requested].

BACKGROUND

Peter Sevcik and Tina Grietens attended a workshop on desalination at the Spring AWWA conference in Los Angeles. Peter Sevcik will summarize the information from three of the AWWA presentations for the Committee at the Committee Meeting (materials from the conference are available for review at the office but they are copyrighted and can not be re-published).


RECOMMENDATION

Staff recommends that the Committee receive the presentation and ask questions.

ATTACHMENT

- None

T:\BOARD MATTERS\BOARD MEETINGS\BOARD LETTER\BOARD LETTER 2008\SWP COMMITTEE\080519\ITEM5.DOC

TO: COMMITTEE MEMBERS
FROM: BRUCE BUEL 
DATE: MAY 16, 2008



SET NEXT COMMITTEE MEETING

ITEM

Set next Committee meeting [Set Time/Date].

BACKGROUND

The Committee generally meets once per month on a Monday Afternoon.

Boyle is scheduled to submit their Final Engineering Memorandum at the end of May and staff expects to secure additional feedback from the City of Santa Maria by the end of May.

RECOMMENDATION

Staff recommends that the Committee determine if it wishes to participate in the interviews and if the committee should hold a separate meeting in June.

ATTACHMENTS

- None

T:\BOARD MATTERS\BOARD MEETINGS\BOARD LETTER\BOARD LETTER 2008\SWP COMMITTEE\080519\ITEM6.DOC