

TO: FACILITIES AND WATER
RESOURCES COMMITTEE

FROM: MARIO IGLESIAS
GENERAL MANAGER

DATE: SEPTEMBER 14, 2018

AGENDA ITEM
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SEPTEMBER 21, 2018

EUREKA WELL DRILLING PROJECT DISCUSSION ON PROJECT DEVELOPMENT

ITEM

Review and discuss project development. [RECOMMEND RECEIVE REPORT AND PROVIDE DIRECTION TO STAFF AS NEEDED]

BACKGROUND

The District has a groundwater well located near the intersection of Willow Road and Highway 1, the Eureka Well. The Eureka Well was drilled in 1974 and utilized by the District until August 2016, when the well casing collapsed and the well was taken off-line. After investigating the options of lining or repairing the collapsed well casing, it was determined that a replacement well would need to be drilled, as the extent of the failure in the existing well could not be overcome.

The budget estimated for replacing the Eureka Well is \$1,000,000 dollars. Of this, \$600,000 will fund the drilling work and \$400,000 will fund the mechanical and site work. The entire project will take about one year to complete, depending upon the conditions that are encountered. If necessary, the District could consider drilling, but not equipping the well, if funding is directed towards a project deemed more critical, as the Nipomo Supplemental Water Project has been able to meet customer demands.

Drilling a replacement well requires the District to develop a plan for managing a significant amount of development water. Millions of gallons of water are used to drill and develop a groundwater well and disposal of this development water is critical in planning a project. The District can plan on hauling the water off-site or leasing neighboring properties to dispose of the water. Hauling water can be problematic, as there needs to be a recipient accepting the water and a fleet of water tenders to make the transfer. Spray fields or land base disposal is generally less expensive than hauling water off-site.

The District is negotiating with a neighboring landowner, but will not be able to secure a lease for the property until an appraiser assesses the property and provides the District with a formal assessment. Mr. Todd Murphy of Schenberger, Taylor, McCormick & Jecker, Inc. has been contracted to provide such an assessment report. The District expects an appraisal of the property to be completed by Mr. Murphy sometime in the middle of October.

The property being assessed for District use as a spray field is generally leased as farmland and, as such, is leased on an annual basis. The District will need to lease the parcel for at least one year. The growing season dictates the timing for entering into a one-year lease agreement. The end of the growing season is September. Leasing the site any earlier in the

summer months exposes the District to the cost of purchasing the produce being grown on the site. This was the District's experience with the Joshua Road Pump Station project, wherein the District had to compensate the farmer for lost product.

By putting off drilling activities until fall, it puts well development activities at risk of slipping into the winter months. Depending upon the weather and ground saturation, the ground could limit the contractor's ability to dispose of the water through the spray field. This could mean well development would be put on hold for several months until February or March.

In conclusion, well drilling can be difficult in the best of circumstances. There are a host of problems that can disrupt schedules. The District benefits by providing the well driller a 1-year window of opportunity to work through these problems. In particular, having an agreement for disposal of development water from August to September of the following year assures the District has minimized the potential for renegotiating with the property owner due to some unforeseeable problem, be it contractor or governmental agency.

Putting the Eureka Well project on the District's schedule to begin in July 2019 would maximize the window of opportunity for utilizing the parcel needed for spray disposal of the development water. The risk in waiting another year is the District may need the well if another District well fails during the peak demand periods of the year. The District has experience managing this condition, as the well was off-line through the summer of 2017. At no time was the District's water capacity an issue in meeting customer demand.

FISCAL IMPACT

The Eureka Well project is funded in the current fiscal year from the Water Funded Replacement #805 fund.

STRATEGIC GOAL

Goal 1. WATER SUPPLIES. Actively plan to provide reliable water supply of sufficient quality and quantity to serve both current customers and those in the long-term future.

Goal 5. OPERATIONS. Maintain a proactive program to ensure readiness of systems and cost-effectiveness of operations.

RECOMMENDATION

Staff recommends your committee review, discuss details of the Eureka Well project development, and prepare any recommendation for the District's Board of Directors as you determine to be necessary.

TO: FACILITIES AND WATER
RESOURCES COMMITTEE

REVIEWED: MARIO IGLESIAS
GENERAL MANAGER



FROM: PETER V. SEVCIK, P.E.
DIRECTOR OF
ENGINEERING & OPERATIONS

DATE: SEPTEMBER 19, 2018

AGENDA ITEM

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SEPTEMBER 21, 2018

SOUTHLAND WWTF PROJECT SHIFT ODOR CONTROL – SLUDGE DRYING BEDS

ITEM

Review and discuss proposal to install two additional hoop-houses over existing sludge drying beds at the Southland Wastewater Treatment Facility (“Southland WWTF”). [RECOMMEND RECEIVE REPORT AND PROVIDE DIRECTION TO STAFF AS NEEDED]

BACKGROUND

In March 2018, the San Luis Obispo County Air Pollution Control District (“APCD”) issued a Notice of Violation to the District in regards to nuisance odors leaving the boundaries of the Southland WWTF. The APCD and Nipomo Community Services District (“NCSD”) reached a mutual settlement agreement in May 2018 that included installation of at least one hoop-house over a sludge drying bed at the Southland WWTF.

The District has successfully completed the purchase and installation of one hoop-house at the Southland WWTF at a cost of \$50,000. The covered sludge drying bed has a capacity to store 4 to 5 weeks of sludge on average. Staff must anticipate when to start filling the covered sludge drying bed based on the weather. If we experience a “normal” rainy season, the holding capacity of the one covered drying bed will be exceeded, and sludge will need to be diverted to an uncovered drying bed. The investigation into the March 2018 odor complaint suggests that water sitting on top of the sludge for an extended length of time can reactivate odor causing organisms and contribute to plant odor complaints.

District staff has not experienced a rain event since the installation of the one hoop-house, so no observations or conclusions have been made regarding the effectiveness of the structure to reduce odor complaints. Therefore, the effectiveness of the new structure for keeping rainwater out of the drying bed has not been definitively determined. Both ends of the structure are open, so an amount of rain is expected to enter the drying bed. However, with only one drying bed covered and with the potential for having a “normal” rainy season, the District anticipates the need for at least one other covered drying bed during the winter season. The third drying bed hoop-house would extend the District’s covered holding capacity to a sufficient level to meet an extended winter such as the 2017 winter.

Preparation of bid documents for the installation of 2 additional hoop-houses is currently underway. Staff anticipates to seek Board authorization to bid the project at the October 10, 2018 Board meeting.

FISCAL IMPACT

A storage building for parts and equipment storage at the Southland WWTF is budgeted at \$150,000 for this fiscal year in the Wastewater Funded Capital Improvement Fund #710. Staff is proposing to use these funds for the hoop-house construction, approximately \$100,000 for the two hoop-houses, and reschedule the storage building for next fiscal year.

STRATEGIC PLAN

Goal 2. FACILITIES THAT ARE RELIABLE, ENVIRONMENTALLY SENSIBLE AND EFFICIENT. Plan, provide for and maintain District facilities and other physical assets to achieve reliable, environmentally sensible, and efficient District operations.

Goal 5. OPERATIONS. Maintain a proactive program to ensure readiness of systems and cost-effectiveness of operations.

RECOMMENDATION

Staff recommends your committee review, discuss staff's proposal to shift project funding from the storage building to the hoop-houses, direct staff as needed, and prepare any recommendations it deems necessary to communicate with the District's Board of Directors.

TO: FACILITIES AND WATER
RESOURCES COMMITTEE

REVIEWED: MARIO IGLESIAS
GENERAL MANAGER



AGENDA ITEM

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SEPTEMBER 21, 2018

FROM: PETER V. SEVCIK, P.E.
DIRECTOR OF
ENGINEERING & OPERATIONS

DATE: SEPTEMBER 19, 2018

**NIPOMO SUPPLEMENT WATER PROJECT
PROJECT UPDATE AND REVIEW**

ITEM

Review and discuss Nipomo Supplemental Water Project, including Golden State Water Company and Woodlands Mutual Water Company Interconnects. [RECOMMEND RECEIVE REPORT AND PROVIDE DIRECTION TO STAFF AS NEEDED]

BACKGROUND

The Nipomo Supplemental Water Project (Project) delivers water purchased by the District from the City of Santa Maria and allows the District to reduce pumping from existing wells to reduce the potential for seawater intrusion on the Nipomo Mesa. The Project also increases the reliability of the District water supply by providing an additional source other than groundwater. The Project is consistent with the settlement agreement and the judgment related to the groundwater adjudication of the Santa Maria Groundwater Basin. Construction of the project is phased to manage the high capital cost of the project as well as track with the phased water delivery schedule.

JOSHUA ROAD PUMP STATION PUMP #4 IMPROVEMENTS

The current Project phasing plan includes the installation of a fourth pump at the Joshua Road Pump Station in FY 2018/2019. The installation of a fourth pump at the Joshua Road Pump Station will allow the District to provide redundancy and operational reliability for supplemental water deliveries up to 1000 AFY.

At the May 9, 2018 Board meeting, the Board authorized a Task Order with MKN for final design of the Pump #4 Improvements. MKN will prepare the construction documents necessary for bidding the project for construction. MKN will also assist the District with the bid phase of the project. The final design phase is tentatively scheduled to be completed in October 2018.

INTERCONNECTS WITH GOLDEN STATE WATER COMPANY AND WOODLANDS MUTUAL WATER COMPANY

The allocation of Project costs, as well as the distribution and use of Nipomo Supplemental Water, is governed by the *Nipomo Supplemental Water Project Supplemental Water Management and Groundwater Replenishment Agreement*, an agreement between the District, Golden State Water Company (GSWC) and Woodlands Mutual Water Company (WMWC). At present, the District is offsetting its groundwater pumping with supplemental water. Before the

District can deliver supplemental water to GSWC and WMWC, the existing GSWC interconnect at Primavera and the existing WMWC interconnect at Via Concha need to be improved to provide fully functional points of interconnection.

In addition, a new interconnect at the end of the District's water system on Lyn Road needs to be constructed in order to provide water delivery to GSWC Cypress Ridge (GSWCCR). This interconnect will have limited delivery capability until pipeline improvements are made to the District's water system in the Summit Station vicinity.

At the September 12, 2018 Board meeting, the Board authorized a Task Order with MKN for final design of the interconnect project. MKN will prepare the construction documents necessary for bidding the project for construction as well as assist the District in securing County of San Luis Obispo encroachment permits and PG&E electric service at each of the interconnect sites. MKN will also assist the District with the bid phase of the project. The final design phase is tentatively scheduled to be completed in January 2019.

NIPOMO AREA PIPELINE IMPROVEMENTS

A key component to increasing Project delivery capacity is the construction of a 12 inch diameter waterline from the intersection of Southland and Orchard to the intersection of Tefft and South Oakglen.

At the September 12, 2018 Board meeting, the Board authorized a Task Order with AECOM for final design of the Nipomo Area Pipeline Improvements. AECOM will prepare the construction documents necessary for bidding the project for construction. AECOM will also assist the District with the bid phase of the project.

Preparation of updated bid documents will assist the District in competing for grant funding for the project as well as position the District strategically to accelerate completion of the project if drought conditions continue to persist.

FISCAL IMPACT

The District's 2018/2019 Budget includes \$930,000 for the Supplemental Water Project Purveyor Interconnects and Joshua Road Pump Station Pump #4 Improvements.

Project costs are to be shared with GSWC and WMWC in accordance with the provisions of the *Nipomo Supplemental Water Project Supplemental Water Management and Groundwater Replenishment Agreement*.

STRATEGIC GOAL

Goal 1 – WATER SUPPLY – Actively plan to provide reliable water supply of sufficient quality and quantity to serve both current customers and those in the long-term future.

Goal 2. FACILITIES THAT ARE RELIABLE, ENVIRONMENTALLY SENSIBLE AND EFFICIENT. Plan, provide for and maintain District facilities and other physical assets to achieve reliable, environmentally sensible, and efficient District operations.

RECOMMENDATION

Staff recommends your committee review, discuss details of the Nipomo Supplemental Water Project, and prepare any recommendation for the District's Board of Directors as you determine to be necessary.

ATTACHMENTS

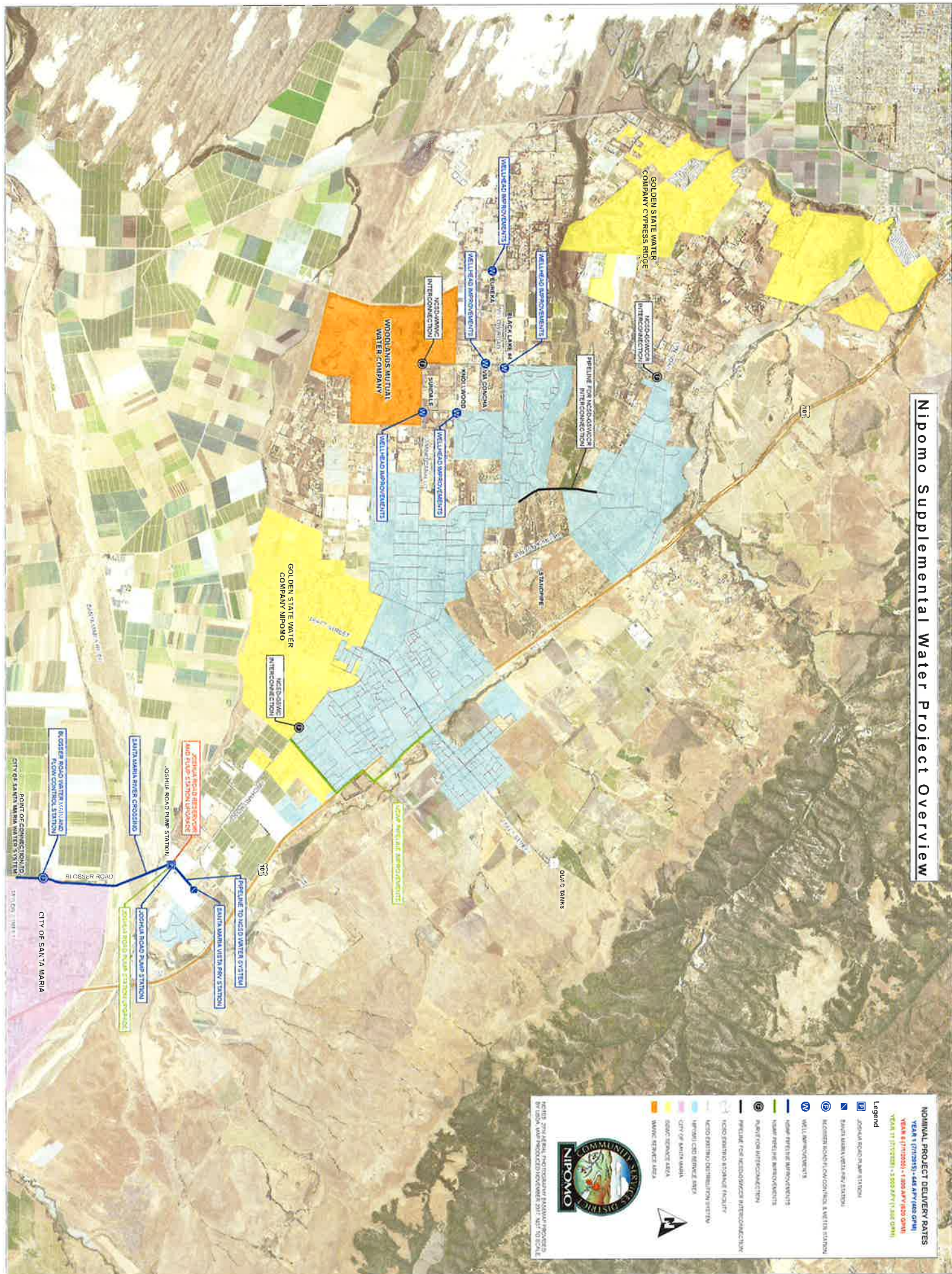
- A. Supplemental Water Project Map Overview
- B. Supplemental Water Project Completion Plan Overview

SEPTEMBER 21, 2018

ITEM 4

ATTACHMENT A

Nipomo Supplemental Water Project Overview



COMMUNITY WATER DISTRICT
NIPOMO

NOMINAL PROJECT DELIVERY RATES
 YEAR 1 (2019) - \$5.5 PM/ACU/GAL
 YEAR 2 (2020) - \$5.00 PM/ACU/GAL
 YEAR 3 (2021) - \$5.00 PM/ACU/GAL

<ul style="list-style-type: none"> ⊞ JOSHUA RENO PUMP STATION ⊞ SANTA MARIA WATER PUMP STATION 	<ul style="list-style-type: none"> ⊞ MCKENZIE NORTH LOW CONDUIT & WATER STATION 	<ul style="list-style-type: none"> ⊞ WELL IMPROVEMENTS ⊞ NEW WATER MAINS IMPROVEMENTS ⊞ NEW FIRE LINE IMPROVEMENTS ⊞ PUMP FOR INTERCONNECTION 	<ul style="list-style-type: none"> ⊞ PRELIM FOR MCKENZIE INTERCONNECTION ⊞ MCKENZIE BOUNDARY FACILITY ⊞ MCKENZIE DISTRIBUTION SYSTEM ⊞ NIPOMO C&O BURNER RISE ⊞ CITY OF SANTA MARIA ⊞ SDAC SERVICE AREA ⊞ WATER SERVICE AREA 	
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NOTES: 2019 & 2020 DELIVERY RATES INCLUDE \$2.00/ACU/PM/ACU/PM/ACU FOR THE 2019 & 2020 DELIVERY RATES. THESE RATES WILL BE ADJUSTED TO REFLECT 2021 DELIVERY RATES.

SEPTEMBER 21, 2018

ITEM 4

ATTACHMENT B



NIPOMO COMMUNITY SERVICES DISTRICT

148 SOUTH WILSON STREET
 POST OFFICE BOX 326
 NIPOMO, CA 93444 - 0326
 (805) 929-1133 FAX (805) 929-1932
 Web site address www.ncsd.ca.gov

MEMORANDUM

TO: MARIO IGLESIAS, GENERAL MANAGER
 FROM: PETER V. SEVCIK, P.E., DIRECTOR OF ENGINEERING & OPERATIONS
 DATE: AUGUST 30, 2018
 RE: SUPPLEMENTAL WATER PROJECT COMPLETION PLAN OVERVIEW

SCOPE OF WORK – Work involves the design and construction of seven projects to complete the Nipomo Supplemental Water Project and provide capability to delivery supplemental water in accordance with the District’s Wholesale Water Supply Agreement with the City of Santa Maria, the District’s Supplemental Water Management and Replenishment Agreement with Golden State Water Company and Woodlands Mutual Water Company, and the Court Judgement that provides for the long-term management of the groundwater basin on the Nipomo Mesa. All costs shown are in 2017 dollars.

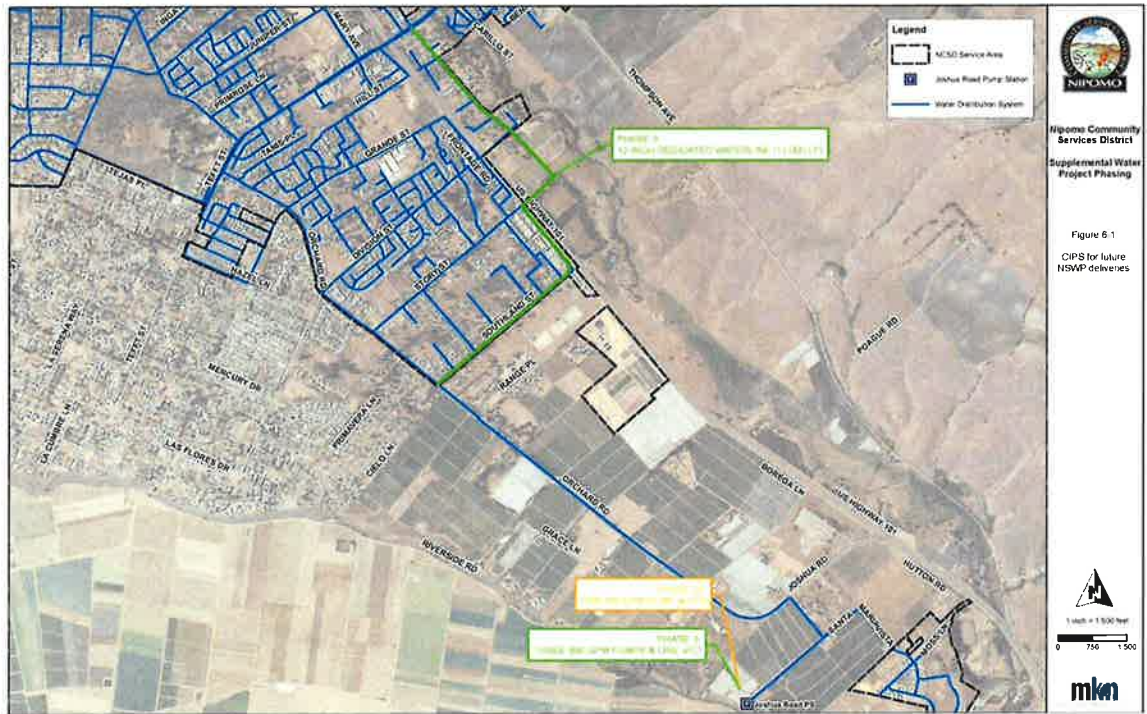
Project Description	FY 18-19	FY 22-23	FY 23-24	Total
GSWC Interconnect at Orchard & Primavera (1)	\$210,000	\$0	\$0	\$210,000
WMWC Interconnect at Camino Caballo & Via Concha (1)	\$210,000	\$0	\$0	\$210,000
GSWCCR Interconnect at Lyn Road & District Boundary (1)	\$210,000	\$0	\$0	\$210,000
Pomeroy Water Line from Augusta Drive to Aden Way (2)	\$0	\$ 180,000	\$1,270,000	\$1,450,000
Orchard/Southland to Tefft/Oakglen Water Line (3)	\$0	\$ 450,000	\$3,050,000	\$3,500,000
Joshua Road Pump Station 1 New Pump (4)	\$300,000	\$0	\$0	\$300,000
Joshua Road Pump Station 2 Replacement Pumps (5)	\$0	\$0	\$400,000	\$400,000
TOTAL	\$930,000	\$ 630,000	\$4,720,000	\$6,280,000

- (1) Flow control station with meter and flow control valve installed in vault along with SCADA control panel and radio tower.
- (2) 4600 linear feet of 12 inch diameter water line and related appurtenances. Design in FY 22-23 and construct in FY 23-24.
- (3) Phase 3 – 12,000 linear feet of 12 inch diameter waterline and related appurtenances from Orchard/Southland, along Southland to South Frontage, along South Frontage to Story, under 101 at Story, continuing along to Bermuda to South Oakglen, along South Oakglen to Tefft. Design in FY 22-23 and construct in FY 23-24.
- (4) Phase 2B – 1 new 800 gpm pump and 1 VFD.
- (5) Phase 3 - 2 new 800 gpm pumps to replace 400 gpm pumps.

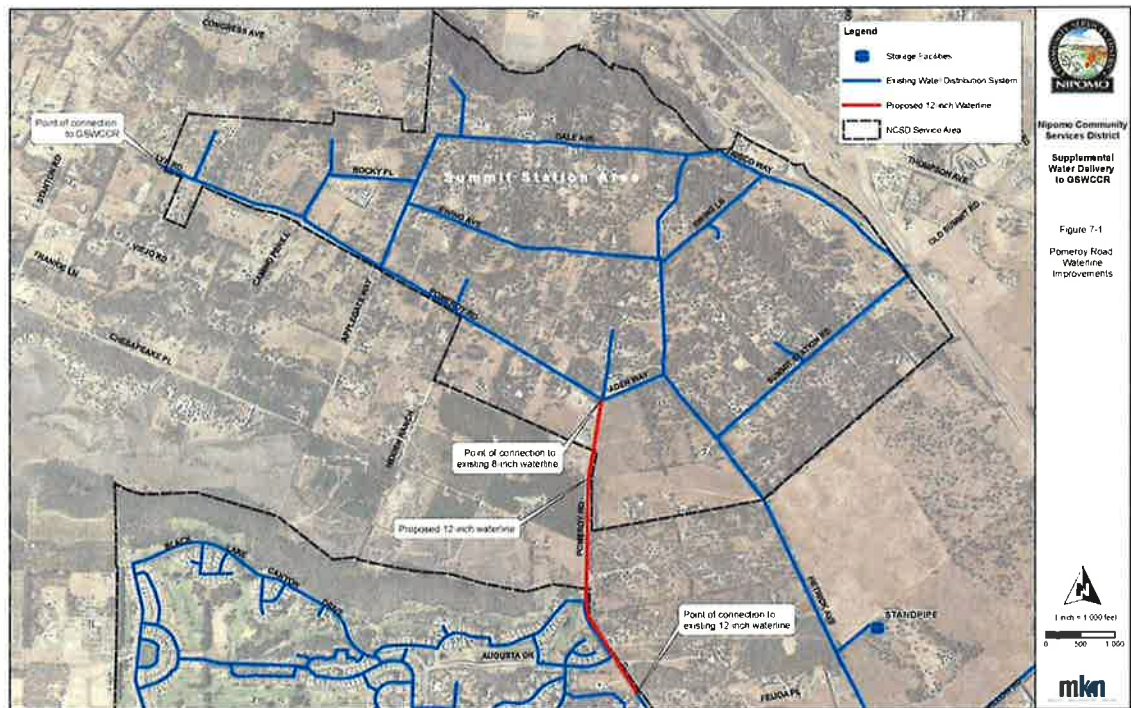
SUPPLEMENTAL WATER PROJECT COMPLETION PLAN OVERVIEW

August 30, 2018

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12 INCH WATERLINE FROM ORCHARD/SOUTHLAND TO TEFFT/SOUTH OAKGLEN



12 INCH WATERLINE IN POMEROY FROM AUGUSTA TO ADEN