TO:

**BOARD OF DIRECTORS** 

FROM:

BRUCE BUEL BORY

DATE:

**OCTOBER 6, 2006** 

AGENDA ITEM E-7 OCT. 11, 2006

#### REVIEW WATER ALLOCATION POLICY & TRACKING PROTOCOL

#### ITEM

Review allocation Policy and water allocation tracking protocol and provide direction to staff re potential amendments (Provide Direction to Staff).

#### **BACKGROUND**

Your Honorable Board on September 27, 2006 placed this item on this agenda so that you could discuss various issues regarding the current allocation policy for projects within the District (attached) and tracking protocol and initiate a process for considering revisions to the current policy. Also attached is a copy of the June 14, 2004 Board Letter describing the basis for adopting restrictions on issuing Intent to Serve Letters, the Sept. 14, 2005 Board Letter re Commercial Limitations, the October 26, 2005 Board Letter re Commercial Limitations, the Water Allocation Tracking Sheet for WY 2005-06, and the Water Allocation Tracking Sheet for WY 2006-07.

Following is an overview of the issues discussed by the Board on September 27, 2006 and a summary of staff's efforts to respond:

- ANNUAL ALLOCATION LIMIT (District Code Section 3.05.040) Your Honorable Board reviewed the basis for calculation of the current 51 acre feet per year limit for projects in the District and discussed using a "production based" calculation of the limit instead of the historic "demand based" calculation. Staff has met with Bob Beeby of SAIC to discuss the current status of groundwater within the Nipomo Mesa Management Area (NMMA) and Bob Beeby has agreed to produce two technical memorandums for presentation to the Board. The first technical memorandum regarding the volume and accessibility of NMMA Groundwater is scheduled for presentation to the Board at this meeting. A second technical memorandum regarding the likely timing for potential damage to the NMMA Groundwater Basin as a function of pumping is scheduled for presentation to the Board at your Honorable Board's October 25, 2006 Board Meeting.
- USE GROUP LIMITATIONS ON FUTURE RESIDENTIAL UNITS (District Code Section 3.05.030) Your Honorable Board reviewed the acre feet per year total demand limitations for each new residential unit in each of the designated use groups and discussed updating the limitations based on actual data and revising the tracking protocol in the tracking summary to reflect any such edits. Staff has initiated an effort to identify and define actual demand for new uses and will present its research to your Honorable Board at your October 25, 2006 Board Meeting. It should be noted, however, that the County's recent adoption of new water conservation standards will effect the consumption behavior of future residences. It should also be noted that there is no mechanism currently to require developers to certify that their construction will comply with the limitations. District Legal Counsel has also expressed a concern that changing the limitations may have an effect on the calculation of Capacity Charges.

#### 10/11/06 Agenda Item E-7 (Continued)

TRACKING AND/OR LIMITING FUTURE NON-RESIDENTIAL DEMAND – Your Honorable Board discussed the absence of tracking and/or limitations on future non-residential units. Staff has researched the rationale for not including Commercial Projects within the allocation limit but needs direction from the Board regarding options to either track or include Commercial Projects within a revised allocation limit. It should be noted that there exists a wide variety of non-commercial uses, the prediction of use per unit of non-residential is difficult, and the County's recent adoption of new water conservation standards will effect the consumption behavior of future non-residential development.

#### RECOMMENDATION

It is recommended that your Honorable Board receive the initial presentation on groundwater volume, discuss the issues set forth above, provide policy direction to staff regarding research to be completed by October 25, 2006, and continue this item until your October 25, 2006 Board Meeting.

#### **ATTACHMENTS**

- ALLOCATION POLICY
- JUNE 14, 2004 BOARD LETTER RE INTENT TO SERVE RESTRICTIONS
- SEPT. 14, 2005 BOARD LETTER RE COMMERCIAL LIMITATIONS
- OCT. 26, 2005 BOARD LETTER RE COMMERCIAL LIMITATIONS
- WY 2005-06 ALLOCATION SUMMARY
- WY 2006-07 ALLOCATION SUMMARY

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# AN ORDINANCE OF THE NIPOMO COMMUNITY SERVICES DISTRICT ADOPTING RULES AND REGULATIONS FOR ALLOCATING INTENT-TO-SERVE LETTERS FOR PROJECTS WITHIN THE DISTRICT BOUNDARY CHAPTER 3.05 OF THE DISTRICT CODE

WHEREAS, it is essential for the protection of the health, welfare, and safety of the residents of the Nipomo Community Services District ("District"), and the public benefit of the State of California ("State"), that the groundwater resources of the Nipomo Mesa be conserved; and

WHEREAS, all of the current water supply requirements for the District are met by the use of groundwater; and

WHEREAS, the District is a party to a groundwater litigation matter,
Santa Maria Valley Water Conservation District v. City of Santa Maria, etc. et al.,
Case No. CV 770214 ("Groundwater Litigation"). Until the Groundwater
Litigation is resolved or settled the District's ability to rely on groundwater from
the Santa Maria Groundwater Basin cannot be quantified; and

WHEREAS, the District's Urban Water Management Plan acknowledges that the District's future water supply will be dependent on the Court's decision on the adjudication of the Santa Maria Groundwater Basin with the possibility of the District having to curtail its pumpage from the Nipomo Sub-Area of the Santa Maria Groundwater Basin; and

WHEREAS, S.S. Papadopoulos and Associates, Inc. has prepared a report titled *Nipomo Mesa Groundwater Resource Capacity Study, San Luis Obispo, California* for the San Luis Obispo County Board of Supervisors (said Report and referenced documents are incorporated herein by this reference). Said Report included the following opinions and findings:

- 1. That groundwater pumping in the Nipomo Mesa area is in excess of the dependable yield. Since current and projected pumping beneath Nipomo Mesa exceeds inflow (natural recharge plus subsurface inflow), the Nipomo Mesa portion of the Santa Maria Groundwater Basin is currently in overdraft and projections of future demand indicate increasing overdraft.
- DWR's findings for groundwater beneath the Nipomo Mesa Area are consistent with the County's Resource Management System Water Supply Criterion, Level of Severity III - existing demand equals or exceeds the dependable supply.

## AN ORDINANCE OF THE NIPOMO COMMUNITY SERVICES DISTRICT ADOPTING RULES AND REGULATIONS FOR ALLOCATING INTENT-TO-SERVE LETTERS FOR PROJECTS WITHIN THE DISTRICT BOUNDARY CHAPTER 3.05 OF THE DISTRICT CODE

- 3. Although, existing and projected future water demand at Nipomo Mesa exceeds sustainable groundwater supply based on local water balance analyses, associated potential impact such as seawater intrusion of the aquifer system is not an imminent threat. Hydraulic analyses indicate that a time lag of many decades is likely before heavy groundwater pumping a few miles from the coast results in evidence of seawater intrusion near the coastline.
- 4. Analysis of historical rainfall data indicate a 30% likelihood that another 10-year period will occur within the next 100 years with annual rainfall nearly 2 inches below average. This would result in major declines in groundwater levels in the Santa Maria River Valley and Nipomo Mesa accompanied by reduced production capability from many wells, increased energy costs for pumping, and increased risk of seawater intrusion of the aquifers near the coastal margin.
- Management response to these findings could include increased use of recycled water, increased importation of supplemental water, implementation of additional conservation measures, and appropriate limits on development; and

WHEREAS, the San Luis Obispo County Department of Planning and Building's 2004 Resource Capacity Study for the Water Supply in the Nipomo Mesa Area recommends a Level of Severity III (existing demand equals or exceeds dependable supply) be certified for the Nipomo Mesa Area and that measures be implemented to lessen adverse impacts of future development (said Study and referenced documents are incorporated herein by reference); and

WHEREAS, SAIC, the District's groundwater expert, has testified to Phase III of the above referenced Groundwater Adjudication that the Nipomo Mesa Area is in overdraft (said testimony and exhibits are incorporated herein by this reference); and

WHEREAS, the County of San Luis Obispo has adopted a "Growth Management Ordinance" (Title 26 of the County Code) that imposes a 2.3 percent growth limitation for non-exempt projects for the Nipomo Mesa area (said Title 26 and implementing Ordinance and supporting studies, including the supporting CEQA analysis are incorporated herein by this reference). The stated

AN ORDINANCE OF THE NIPOMO COMMUNITY SERVICES DISTRICT ADOPTING RULES AND REGULATIONS FOR ALLOCATING INTENT-TO-SERVE LETTERS FOR PROJECTS WITHIN THE DISTRICT BOUNDARY CHAPTER 3.05 OF THE DISTRICT CODE

purpose of Title 26 is to establish regulations to protect and promote the public health, safety and welfare including:

- To establish an annual rate of growth that is consistent with the ability of community resources to support the growth, as established by the Resource Management System (RMS) of the County General Plan;
- To establish a system for allocating the number of residential construction permits to be allowed each year by the annual growth rate set by the County Board of Supervisors; and
- To minimize adverse effects on the public resulting from a rate of growth which will adversely affect the resources necessary to support existing and proposed new development as envisioned by the County General Plan; and

WHEREAS, it is essential for conservation purposes, and for the protection of groundwater resources, that the District adopt procedures allocating water service.; and

WHEREAS, the District Board of Directors, at a public meeting, on June 16, 2004, considered a Staff Report, and public testimony regarding potential actions to implement restrictions on water service within the District boundary; and

WHEREAS, on September 7, 2004, the District Board of Directors conducted a public hearing, considered the Staff Report and public testimony on the proposed Ordinance (Chapter 3.05 to the District Code); and

WHEREAS, on September 29, 2004, the District Board of Directors conducted a Public Hearing, considered the Staff Report and public testimony on the proposed Ordinance (Chapter 3.05 to the District Code) and continued the Public Hearing; and

WHEREAS, on October 13, 2004, the District Board of Directors, at a continued Public Hearing, took the following actions in considering the adoption of this Ordinance:

A. Considered the facts and analysis as presented in the Staff Report prepared for the adoption of this Ordinance;

## AN ORDINANCE OF THE NIPOMO COMMUNITY SERVICES DISTRICT ADOPTING RULES AND REGULATIONS FOR ALLOCATING INTENT-TO-SERVE LETTERS FOR PROJECTS WITHIN THE DISTRICT BOUNDARY CHAPTER 3.05 OF THE DISTRICT CODE

- B. Conducted a public hearing to obtain public testimony on the proposed Ordinance;
- C. Considered the contents of an environmental initial study and adopted a negative declaration status for the Ordinance.

WHEREAS, in adopting this Ordinance, the District does not intend to limit other authorized means of managing, protecting and conserving the groundwater basin, and intends to work cooperatively with other agencies to implement joint groundwater management practices; and

**WHEREAS**, based on the Staff Report, Staff presentation, and public comment, the District Board of Directors finds:

- A. That it is the purpose and intent in adopting this Ordinance includes those purposes found in Section 3.05.010 of the Ordinance;
- B. Adopting and allocating Intent-to-Serve Letters for water service, based on resource quantities, will provide greater assurance that there will be adequate groundwater to meet present and future needs of District residents;
- C. That imposing a 2.3 percent cap on water allocation to non-exempt projects provides a logical, consistent approach to water allocation;
- D. That adopting this Chapter 3.05 will conserve the water supply for the greater public benefit, with particular regards to domestic use, sanitation and fire protection.
- E. That the hearing adopting this Ordinance has been appropriately noticed as required by law.

**NOW, THEREFORE BE IT ORDAINED**, by the Board of Directors of the District as follows:

#### Section 1. Adoption of Chapter 3.05 to the District Code

Chapter 3.05 to the District Code, attached hereto as Exhibit "A", is hereby incorporated herein by reference and adopted by the Board of Directors of the Nipomo Community Services District.

#### Section 2. Incorporation of Recitals

The recitals to this Ordinance are true and correct, support the

## AN ORDINANCE OF THE NIPOMO COMMUNITY SERVICES DISTRICT ADOPTING RULES AND REGULATIONS FOR ALLOCATING INTENT-TO-SERVE LETTERS FOR PROJECTS WITHIN THE DISTRICT BOUNDARY CHAPTER 3.05 OF THE DISTRICT CODE

implementation of conservation measures and procedures adopted by this Ordinance and are incorporated herein by this reference.

#### Section 3. Severability

If any section, subsection, sentence, clause or phrase of this Ordinance is for any reason held to be unconstitutional, ineffective or in any manner in conflict with the laws of the United States, or the State of California, such decision shall not affect the validity of the remaining portions of this Ordinance. The Governing Board of the District hereby declares that it would have passed this Ordinance and each section, subsection, sentence, clause and phrase thereof, irrespective of the fact that any one or more sections, subsection, sentence, clause or phrase be declared unconstitutional, ineffective, or in any manner in conflict with the laws of the United States or the State of California.

#### Section 4. Effect of headings in Ordinance

Title, division, part, chapter, article, and section headings contained herein do not in any manner affect the scope, meaning, or intent of the provisions of this Ordinance.

#### Section 5. Inconsistency

To the extent that the terms of provision of this Ordinance may be inconsistent or in conflict with the terms or conditions of any prior District Ordinance(s), Motions, Resolutions, Rules, or Regulations or any County Ordinance(s), Motions, Resolutions, Rules, or Regulations adopted by the District, governing the same subject matter thereof, then such inconsistent and conflicting provisions of prior Ordinances, Motions, Resolutions, Rules, and Regulations are hereby repealed.

#### Section 6. Effective Date

This Ordinance shall take effect immediately upon its adoption. Before the expiration of fifteen (15) days after passage it shall be posted in three (3) public places with the names of the members voting for and against the Ordinance and shall remain posted thereafter for at least one (1) week. The Ordinance shall be published once with the names of the members of the Board of Directors voting for and against the Ordinance in the <u>Five Cities Times Press</u> Recorder.

#### AN ORDINANCE OF THE NIPOMO COMMUNITY SERVICES DISTRICT ADOPTING RULES AND REGULATIONS FOR ALLOCATING INTENT-TO-SERVE LETTERS FOR PROJECTS WITHIN THE DISTRICT BOUNDARY **CHAPTER 3.05 OF THE DISTRICT CODE**

On motion of Board Member Vierheilig, seconded by Board Member Trotter, and on the following roll call vote, to wit:

AYES:

Directors Vierheilig, Trotter, Winn

NOES:

Directors Wirsing and Blair

ABSENT:

None

The foregoing Ordinance was passed and adopted this 13th day of October, 2004.

President of the Board of Directors Nipomo Community Services District

ATTEST:

APPROVED AS TO FORM:

District Legal Counsel

Secretary to the Board

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#### NIPOMO COMMUNITY SERVICES DISTRICT

#### **EXHIBIT "A"**

## CHAPTER 3.05 OF THE DISTRICT CODE WATER SERVICE LIMITATIONS

#### 3.05.010 Purpose.

The purposes of this Chapter include the following:

- A. To promote public health and safety and to avoid water shortage emergencies by establishing a maximum annual water allocation for residential water service within the District boundaries.
- B. To promote conservation by establishing goals for the maximum beneficial use of water by residential category.
- C. To allocate water service by categories to avoid a particular category from being excluded from participation and receiving water service.
- D. To establish a maximum allocation for any one project during an allocation year, so as to allow greater opportunity for all projects in a category to participate and to receive water service.
- E. To avoid speculation by requiring applicants to diligently process their projects consistent with the rules and regulations of the County of San Luis Obispo.
- F. To grant a priority for the provision of available resources to proposed housing developments which help meet the County of San Luis Obispo's share of regional housing need for lower income households as identified in the Housing Element adopted by the San Luis Obispo County Board of Supervisors.
- G. To provide flexibility by allowing the Board to consider redistributing allocations at the end of the second (2<sup>nd</sup>) quarter and in the middle of the fourth (4<sup>th</sup>) quarter of each allocation year.

#### 3.05.020 Definitions.

- A. AFY means acre feet per year.
- B. Allocation Year means October 1<sup>st</sup> through September 30<sup>th</sup> of each calendar year.

- C. Lower income housing means lower income housing as identified in the Housing Element of the San Luis Obispo County General Plan, as amended from time to time.
- D. Multi-family dwelling unit means a building or portion thereof designed and used as a residence for three or more families living independently of each other under a common roof, including apartment houses, apartment hotels and flats, but not including automobile courts, or boardinghouses.
- E. Two family dwelling unit (duplex) means a building with a common roof containing not more than two kitchens, designed and/or used to house not more than two families living independently of each other.
- F. Single family dwelling unit means a building designed for or used to house not more than one family.
- G. **Secondary dwelling units** means an attached or detached secondary residential dwelling unit on the same parcel as an existing single-family (primary) dwelling. A secondary unit provides for complete independent living facilities for one or more persons.

#### 3.05.030. Limitations on Water Use.

The following total demand limitations, including landscaping, are established for the following uses:

- O.18 AFY per Multi-Family Dwelling Unit;
- B. 0.3 AFY per Dwelling Unit for duplexes and Secondary Dwellings;
- C. 0.3 AFY per Single Family Dwelling Unit located on a parcel size of four thousand five hundred (4,500) square feet or less;
- D. Subject to subsection C, above 0.45 AFY per Single Family Dwelling Unit located on a parcel size between four thousand five hundred (4,500) and ten thousand (10,000) square feet.;
- E. 0.55 AFY per Single Family Dwelling Unit located on a parcel size that exceeds ten thousand (10,000) square feet.

#### 3.05.040 Water Allocation per Allocation Year.

- A. Fifty-one (51) acre feet per allocation year is allocated to non-exempt projects on a first come first served basis as follows:
  - 1. Category 1: A total of thirty-five (35) AFY, including landscaping, is reserved for:
    - a. For Single Family Dwelling Units; and

- b. Two Family Dwelling Units (duplexes).
- Category 2: A total of eleven (11) AFY, including landscaping, is reserved for Multi-Family Dwelling Units.
- Category 3: A total of five (5) AFY is reserved for Secondary Dwelling Units and local agency maintained landscaping projects.
- B. During the end of the second (2<sup>nd</sup>) quarter and in the middle of the fourth (4<sup>th</sup>) quarter of each allocation year the unused allotments for Categories referenced in Section A, above, may be re-allocated by the Board of Directors to other Categories referenced in Section A, above.
- C. Notwithstanding subparagraph B, above, the District shall reserve 3.3 AFY for proposed housing developments which help meet the County of San Luis Obispo's share of regional housing needs for lower income housing as identified in the Housing Element adopted by the San Luis Obispo County Board of Supervisor's. Said reservation shall be applied only to Category 1 and Category 2 projects referenced in Subparagraph A, above. Further, said reservation may only be re-allocated during the fourth (4<sup>th</sup>) quarter of each allocation year.

#### 3.05.050 Water Demand Certifications Required.

- A. Will Serve Letters: All applications for Will Serve Letters for Single Family Dwelling Units on existing parcels and for Secondary Dwelling Units require an engineer's or architect's certification that:
- 1. Low use landscape irrigation systems will be installed to irrigate landscaping; and
- 2. The Maximum total water demand, including landscaping does not:
- a. For Single Family Dwelling Units exceed the limitations established in Section 3.05.030, above for single family dwelling units;
- b. For Secondary Dwelling Units exceed a total water demand of 0.8 AFY for both the secondary and the primary dwelling units.
- B. Intent to Serve Letters: All applications for Intent to Serve Letters require a registered engineer's or architect's certification that:
  - 1. That low use landscape irrigation systems will be installed to irrigate landscaping; and

 That the design maximum total water demand, including landscaping, does not exceed the limitations on water use established in 3.05.030, above.

### 3.05.060 Application for Intent-to-Serve Letters, Will-Serve Letters and Termination

The following procedures, are in addition to other District Rules and Regulations relating to Intent-to-Serve Letters and Will-Serve Letters, and shall apply to all applications for Intent-to-Serve Letters and Will-Serve Letters approved by the District:

- A. Application shall be made on District's Application for Intent-to-Serve Letter or Will-Serve Letter form. In order to be considered for an Intent-to-Serve Letter or Will-Serve Letter applications shall contain a verification that applicant has submitted the proposed project for initial review to the County Planning and Building Department.
- B. Intent-to-Serve Letters shall automatically terminate on the first to occur:
  - Failure of the applicant to provide District with written verification that County application for the project has been deemed complete within two hundred forty (240) calendar days of the date the Intent-to-Serve Letter is issued; or
  - 2. Two (2) years. However, applicant shall be entitled to a one year extension upon proof of reasonable due diligence in processing the project.

#### 3.05.70 Exempt Projects.

The following projects are exempt from the requirements of Section 3.05.040:

- A. Commercial Projects that submit a landscape plan consistent with best management practices, including that low use landscape irrigation systems will be installed.
  - B. Projects with existing Intent-to-Serve Letters that have not expired.
  - C. Projects with existing Will-Serve Letters.

- D. Remodels, and changes of use (i.e. commercial to residential) where the resulting water demand does not exceed the requirements of Section 3.05.030, above.
- E. Projects that require annexation and are supported by supplemental water pursuant to the District's Annexation Policy as amended from time to time.

#### 3.05.080 Mixed Use Projects.

Projects that include both commercial and dwelling units (mixed use) will only be approved if the dwelling units associated with the project meet the Dwelling Unit Standard set forth in Section 3.05.030 (A), above.

#### 3.05.090 Limitation on Secondary Units

In addition to the other requirements contained in this Chapter, applications for water service to secondary units will only be accepted that include an engineer's or architect's certification that the total water demand for the secondary unit and the primary dwelling unit will not exceed 0.8 AFY. Applications for secondary units will be allocated Will-Serve Letters under 3.05.040 (A)(3), above.

#### 3.05.100 Limitations on Allocations

- A. Only one (1) request for an Intent-to-Serve Letter will be considered for any one (1) project or parcel. The District will not allocate more than twenty percent (20%) of the allocations referenced in 3.05.040 (A) (1) (2) or (3) to a project during any one allocation year.
- B. A maximum of fifty percent (50%) of the annual water allocation for each successive allocation year may be reserved for projects requiring phasing of water commitments.

#### 3.05.110. Waiting List

- A. The General Manager shall maintain a waiting list for the issuance of Intent-to-Serve Letters.
- B. Only applicants who have submitted a completed Intent to Serve/Will Serve application shall be placed on the waiting list and/or considered for approval.

#### 3.05.120 Transfer of Allocations

Allocations provided in the District's Intent-to-Serve Letter shall run with the land and cannot be transferred to other parcels.

#### 3.05.130 Implementing Procedures

The General Manager is hereby authorized to develop and implement procedures for allocating Intent to Serve Letters and Will Serve Letters consistent with this Chapter and its purposes and intent.

#### 3.05.140 Annual Review

- A. During the fourth quarter of each allocation year, the District Board of Directors shall hold a public hearing to:
  - Evaluate the water allocation formulas contained in this Ordinance;
     and
  - · To evaluate the water allotment for ensuing year.
- B. The Board of Directors reserves the right, at any time, to evaluate, amend or modify this Ordinance.

#### 3.05.150 Re-evaluation

The District Board of Directors will re-evaluate Chapter 3.05 concurrently with any final agreement that obligates the parties for the delivery of supplemental water.

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#### REPORT

TO:

**BOARD OF DIRECTORS** 

NIPOMO COMMUNITY SERVICES DISTRICT

RE:

**BOARD DIRECTION** 

RESTRICTIONS ON ISSUING INTENT-TO-SERVE LETTERS

FOR WATER SERVICE

FROM:

DOUG JONES, DISTRICT GENERAL MANAGER

JIM GARING, DISTRICT CONSULTING ENGINEER

JON SEITZ, DISTRICT LEGAL COUNSEL

DATE:

**JUNE 14, 2004** 

#### Introduction:

At the District Board of Director's meeting of June 9, 2004, Staff was directed to present to the Board of Directors the District's options in restricting the issuance of Will Serve Letters.

#### Conclusions:

The District has the authority to limit new water service based on findings:

- That current District infrastructure ("Capital Facilities") are not able to provide new service without inverse impacts on existing customers; or
- 2. That the water supply will not meet demand.

This Report reaches the following conclusions:

- The District's current and planned Capital Facilities are adequate to provide water service at build-out within the current District boundaries.
- 2. That the water supply can be considered suspect and it may be prudent to adopt limitations on issuing Will-Serve Letters.

#### Background:

The Nipomo Community Services District (District) is a California Community Service District organized pursuant to Government Code Section 61000 et. seq. The District, pursuant to Government Code Section 61600 (a) and its Rules and Regulations serves potable water to approximately 3,600 connections in the unincorporated area of San Luis Obispo County.

The District operates two (2) independent water systems known as the Black Lake Division (580 connections) and the Town Division (3,000 connections). Both Divisions have independent wells, distribution and water storage systems. The two systems are connected by an intertie. The Sundale Well, that supplies water to the Town Division, was partially financed by the Black Lake Division to provide for emergency/backup water source for Black Lake.

Because the Black Lake Water Division is or near build-out, and except for water conservation programs that would be applied to both Divisions, this analysis primarily focuses on Will-Serve and Intent to Serve Letters related to the Town Division. Staff anticipates only a limited number of additional Will-Serve Letters for potential customers within the Black Lake Division.

#### TOWN DIVISION WATER DEMAND

#### **Current Demand:**

The District currently pumps approximately 2,203 AFY to serve approximately 3000 connections within the Town Division. The average Town Division connection consumes approximately .7 AFY (acre feet per year) District wide (includes parks, schools, residential, etc.).

There are approximately 557 unexercised "Will-Serve Letters". Staff estimates that 336 of these Will-Serve Letters are for single family residential units that will consume approximately .55 AFY per unit or 184.8 AFY cumulatively. Staff estimates that approximately 121 Will-Serve Letters are for multi-family units that will consume .2 AFY per unit or 24.2 AFY cumulatively.

There are approximately 261 unexercised Intent to Serve Letters (Intent to Serve Letters have a 2 year life cycle). Staff estimates that approximately 131 of these Intent to Serve Letters are for single family residential units that will consume approximately .55 AFY per unit or 71 AFY cumulatively. Staff estimates approximately 131 of these Intent to Serve Letters are for multi-family units that will consume approximately .2 AFY per unit or 26.2 AFY cumulatively.

The total water demand for unexercised commitments represents an additional water consumption demand of 307 AFY. Therefore, the total existing current consumption demand for the Town Division is estimated at 2,510 AFY (2,203 + 307).

#### <u>Current Demand Adjusted for Water Conservation:</u>

On June 9, 2004, the Board of Directors began the process of initiating a water conservation to reduce current average water demand at the meter by fifteen percent (15%). The Board has tentatively approved an ordinance that would require water conservation measures on new Intent to Serve Letters and

mandatory retrofitting on new construction. Staff anticipates presenting the new tiered water rate structure to the Board prior to the end of summer. Recalculating the above numbers to reflect water conservation is as follows:

Current consumption – Unexercised commitments – 2, 203 AFY x .85 = 1,873 AFY 307 AFY x .85 = 261 AFY

Total -

2.510 AFY

2,134 AFY

### Additional Demand for Build-out, Under Existing Zoning, Within the District Boundaries:

Annexations require supplemental water with the caveat that annexations that overlie the HSA must pay eighty percent (80%) of the supplemental water costs and can commence construction upon annexation.

Staff estimates that there are 220 parcels within the Town Division that have not received water commitments from the District (either Intent to Serve Letters or Will-Serve Letters). Because of actual zoning and actual development requests, the water demand to serve these parcels cannot be precisely ascertained. Staff estimates that the vacant parcels within the District, and potential increases in densities in existing parcels (secondary units, lot splits, etc.), represent a total demand of 880 additional connections requiring 484 AFY of new water consumption demand (880 x .55 = 484 AFY). Assuming water conservation at a fifteen percent (15%) reduction in water demand the water demand would equate to 411 AFY (484 x .85 = 411 AFY).

As the Board is aware the County is considering an LUO Amendment to increase densities within the Summit Station area. The Environmental Impact Report ("EIR") estimates an additional water demand of 111 AFY to serve build-out under the proposed LUO Amendment.

Therefore, assuming water conservation at fifteen percent (15%), 522 AFY (411+111 = 522 AFY) is the additional water demand for future Will-Serve Letters for the Town Division to reach build-out within existing District boundaries.

#### Town Division Total Demand at Build-out::

Based on 15% water conservation Staff estimates the total water demand for the Town Division at build-out to be 2,656 AFY (2,134 + 411 + 111= 2,656 AFY).

#### TOWN DIVISION WATER SOURCE

#### Santa Maria Groundwater Basin:

The Town Division presently has six (6) wells that pump from the Nipomo Mesa portion of the Greater Santa Maria Groundwater Basin.

#### Nipomo Valley Basin:

The District presently has three water production wells on the east side of Highway 101 that are outside of the Greater Santa Maria Groundwater Basin and is commonly known as the Nipomo Valley Basin.

#### Supplemental Water:

The District is currently negotiating with the City of Santa Maria for a supplemental water supply up to 2,500 + acre feet. Assuming the Board moves forward with an Agreement, under the best case scenario the District could anticipate delivery of this water within 3.5 years.

#### TOWN DIVISION CAPITAL WATER SYSTEM RELIABILITY

#### Santa Maria Groundwater Basin:

The six (6) District wells that pump from the Nipomo Mesa portion of the Santa Maria Groundwater Basin have the capacity of producing 4,100 AFY at eighty percent (80%) capacity. The Sundale Well that has the capacity of 1,000 AFY also serves as emergency back up supply to the Black Lake Division.

These wells are drilled into the deeper portion of the Santa Maria Groundwater Basin and have not been historically affected by single dry year or multi dry year periods. The District's Sundale Well has the natural gas engine, which is fully automated to operate during power outages. The District has standby generators to put other wells on line, if necessary, during prolonged power outages within the community.

#### Nipomo Valley Basin:

The water aquifers in this area are commonly referred to as "fractured rock formations" and are not fully analyzed. Therefore, the reliability of using well production from the Nipomo Valley Basin as a long-term municipal water supply is unknown. Further, some Board members have expressed some concern as to the quality of the water pumped from the Nipomo Valley Basin.

The location and pumping capacity of each of the Nipomo Valley Basin wells are summarized as follows:

Location	Capacity/Conservative
Hermreck Well	300 AFY
Savage Well	100 AFY
Church Well	200 AFY
	600 AFY

The Church Well was recently rebuilt during fiscal year 2002/2003 and has been pumping 200 AFY (prorated over the last six (6) months). The District Board has approved the reconstruction of the Hermreck Well during fiscal year 2004/2005.

#### Town Division Water Storage Systems:

Presently the District has the capacity to store four (4) million gallons of water in its storage reservoirs to serve the Town Division. The District has budgeted a new one (1) million gallon storage tank to be ideally located in the Rimrock Area.

#### Conclusion:

The existing and planned District Capital Facilities (wells and storage) are sufficient to meet the additional 522 acre feet required for build-out.

#### EXISTING TOWN DIVISION WATER SUPPLY RELIABILITY

This report estimates that the District will require an additional 522 AFY (assuming 15% water conservation) to meet build-out within existing District boundaries. This water demand equates to approximately 1000 residential units at .55 AFY and/or represents 400 multi-family units (400 x .2 = 80 AFY) plus 800 residential units at .55 AFY. It is this additional demand of 522 AFY that would be subject to Will-Serve limitations.

This segment of the Report analyzes reliability of water aquifers (Santa Maria Groundwater Basin and the Nipomo Valley Basin) to supply water for this demand.

#### Santa Maria Groundwater Basin:

As the Board is aware, the Santa Maria Groundwater Basin is the subject of an existing adjudication. The Court has recently concluded Phase 3 wherein the Superior Court made the following findings:

- The Santa Maria Groundwater Basin is a single basin without subbasins.
- The Santa Maria Groundwater Basin is not in overdraft.

 Although, there may be some adverse physical impairments related to groundwater pumping to the Nipomo area of the Greater Santa Maria Groundwater Basin, those impairments (cones of depression) do not justify a finding of basin-wide overdraft.

Further, the Court is considering the appointment of a referee to provide the Court with sufficient information and/or studies for the Court to determine "safe yield".

During future phases, the Court will determine:

- Entitlement to salvaged water (Twitchell Reservoir)
- Entitlement to return flows from State water
- Safe yield
- Management

The County of San Luis Obispo retained S.S. Papadopulos & Associates, Inc. to analyze various water reports and studies relating to the Nipomo Mesa area (the Papadopulos Report was not available to the Superior Court).

The Papadopulos Report reaches a different conclusion than the Phase 3 decision of the Superior Court. The Papadopulos Report makes the following findings:

- That groundwater pumping in the Nipomo Mesa area is in excess of the dependable yield. Since current and projected pumping beneath Nipomo Mesa exceeds inflow (natural recharge plus subsurface inflow), the Nipomo Mesa portion of the Santa Maria Groundwater Basin is currently in overdraft and projections of future demand indicate increasing overdraft.
- DWR's findings for groundwater beneath the Nipomo Mesa Area are consistent with the County's Resource Management System Water Supply Criterion, Level of Severity III—existing demand equals or exceeds the dependable supply.
- 3. Although, existing and projected future water demand at Nipomo Mesa exceeds sustainable groundwater supply based on local water balance analyses, associated potential impact such as seawater intrusion of the aquifer system is not an imminent threat. Hydraulic analyses indicate that a time lag of many decades is likely before heavy groundwater pumping a few miles from the coast results in evidence of seawater intrusion near the coastline.

- 4. Analysis of historical rainfall data indicate a 30% likelihood that another 10-year period will occur within the next 100 years with annual rainfall nearly 2 inches below average. This would result in major declines in groundwater levels in the Santa Maria River Valley and Nipomo Mesa accompanied by reduced production capability from many wells, increased energy costs for pumping, and increased risk of seawater intrusion of the aquifers near the coastal margin.
- Management response to these findings could include increased use of recycled water, increased importation of supplemental water, implementation of additional conservation measures, and appropriate limits on development.

The SAIC Report that was generated to support the District's position in the Groundwater Adjudication reaches similar conclusions as the Papadopulos Report.

#### Nipomo Valley Basin:

The longterm sustainability of the District's three (3) wells located in the Nipomo Valley Basin, as noted above, is uncertain. Staff estimates that it will take, as long as, eighteen (18) months to get a firm handle on the dependable production of the Hermreck Well.

#### CONCLUSIONS AND OPTIONS

- Based on the Superior Court rendering a Phase 3 decision of no overdraft, with the Court yet to determine "safe yield" and with the Papadopulos Report finding that there is a likely time lag of at least a decade prior to the groundwater basin suffering physical impacts (seawater intrusion) from overpumping, it appears to be premature to enact a strict moratorium denying future Will-Serve Letters within the District.
- 2. Consistent with the Papadopulos Report recommending that limitations be placed on development, it may be prudent to place limitations on Will-Serve Letters pending:
  - The Superior Court's determination of safe yield and management; and/or
  - The District determination of true production capacity of the Nipomo Valley Basin Wells (principally the Hermrick Well); and/or
  - The District entering into an agreement for the delivery of supplemental water.

For example, the County Growth Control Ordinance limits growth on a Mesa wide basis to 2.3 % per year. If the 2.3% is applied to new water service within the District the following scenarios can be considered:

- A. 2.3 % x 2,203 AFY (current production) would equal a yearly allocation of 51 AFY.
- B. 2.3 % x 2,510 AFY (current production + unexercised service commitments) would create a yearly allocation of 58 AFY.
- C. 2.3 % x 2, 134 AFY (groundwater production + unexercised service commitments assuming 15% water conservation) would equal a yearly service allocation of 49 AFY.

If the Board concludes that it is in the District's best interest to develop a plan for Will-Serve Letters then Staff would recommend the Board choose one of the above scenario (or other scenarios) and then:

- Form an Ad Hoc Committee consisting of two (2) Board members to return to the Board with a recommendation for allocating the Will-Serve Letters between residential and multi-family units and the procedures for developing a waiting list; and
- Direct Staff to delay processing Will-Serve Letters until the application methodology is resolved.
- iii. Direct the District Consulting Engineer to meet with SAIC to determine whether or not there are diagnostic tools available to more accurately predict when seawater intrusion could occur under various scenarios.
- 3. Amend or modify options.

#### **GLOSSARY**

<u>Groundwater Overdraft</u>: the condition of a groundwater basin in which the amount of water withdrawn by pumping exceeds the amount of water that recharges the basin over a period of years during which water supply conditions approximate average conditions.

<u>Safe Yield</u>: the amount of groundwater that can be continuously withdrawn from a basin without adverse impact.

[Definitions taken from Papadopulos Study]

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#### MEMORANDUM 1 of 2

TO:

BOARD OF DIRECTORS

NIPOMO COMMUNITY SERVICES DISTRICT

RE:

DELIVERY OF WATER SERVICE WITHIN THE

DISTRICT BOUNDARIES

FROM:

JON S. SEITZ, DISTRICT LEGAL COUNSEL

DATE:

February 26, 2002 (Republished)

ATTACHMENTS:

CALIFORNIA CODE OF REGULATIONS TITLE 22

#### I. INTRODUCTION

The Nipomo Community Services District (District) is a California Community Service District organized pursuant to Government Code Section 61000 et. seq. The District, pursuant to Government Code Section 61600 (a) and its Rules and Regulations serves potable water to approximately 9,000 customers (approximately 3,400 connections) in the unincorporated area of San Luis Obispo County. At buildout, the San Luis Obispo County South Area General Plan estimates that the District will provide water service to 14,000 customers (approximately 5,000 connections).

The District relies solely on the groundwater basin for its source of water. This groundwater basin is customarily referred to as the Nipomo Hydrologic Subarea of the Santa Maria Groundwater Basin (herein "the Nipomo HSA").

#### II. ISSUES TO BE ADDRESSED

- District's duty to provide water to its residents;
- 2. Permitting new service connections; and

- (b) To ascertain this, first determine the total capacity of the existing source by procedures prescribed in Section 64563 and determine the total storage volume of the existing distribution reservoirs. Then determine the needed source capacity and the needed storage volume by procedures prescribed in Section 64564. The total available source capacity shall not be less than the needed source capacity.
- (c) The requirements of this section shall apply to an entire public water system and to each pressure zone within a public water system.
- (1) Requirements for an entire public water system shall be determined from the total source capacity, total storage volume and the total number of service connections.
- (2) Requirements for a particular pressure zone shall be determined from the total water supply available from the water sources and interzonal transfers directly supplying the zone, from the total storage volume within the zone and from the number of service connections within the zone.

#### Section 646566 states in relevant part:

- s 22-64566. System Pressure.
- (a) Changes in distribution systems shall be designed to maintain an operating pressure at all service connections of <u>not less than 20 pounds per square inch</u> gauge (psig) (140 kiloPascals gauge (kPag)) under the following demand conditions:
- (1) User maximum hour demand.
- (2) User average day demand plus design fire flow.
- (b) In a public water system supplying users at widely varying elevations, a water supplier may furnish a service to a user which does not comply with (a) if the user is fully advised of the conditions under which minimum service may be expected and the user's agreement is secured in writing. This waiver shall be applicable only to individual service connections.
- (c) Water mains shall be designed to have at least five psig (35 kPag) pressure throughout any buried length of the main except when the main is removed from service for repairs or maintenance. This requirement shall not apply to short lengths of water main near reservoir inlets and outlets provided:
- (1) The water main is on premises owned, leased or controlled by the water supplier; or
- (2) The prior review and written approval of the Department is obtained.

In the case of Residents for Adequate Water et al., v. Redwood Valley California Water District, (1995) 34 Cal App.4<sup>th</sup> 1801, the California Courts had the opportunity to apply the Title 22 requirements to a County water District that continued to permit new service connections to be added to its water system when the District did not possess a water source capacity sufficient to supply the needs of its users under maximum demand conditions as required by Title 22. The California Appellate court did not hesitate to uphold the trial court's order prohibiting further connections finding that:

"The California Waterworks Standards-the administrative regulations promulgated pursuant to the Safe Drinking Water Act-specifically provide that sufficient water shall be available from water sources and distribution reservoirs to supply adequately, dependably and safely the total requirements of all users under maximum demand conditions before agreement is made to permit additional service connections to a system. (Cal. Code Regs., tit. 22, § 64562, subd. (a); see Cal. Code Regs., tit. 22, ch. 16.) A new service connection may be added to a distribution system only if the water system will comply with section 64562 after the new service connection is added. (Cal. Code Regs., tit. 22, § 64568. These statutes and regulations clearly impose an obligation on the district to determine whether an adequate water supply exists to serve existing needs before new service connections may be added and prohibit new service connections if these state requirements are not met."

#### 3. RULES AND REGULATIONS

Special Districts only have the powers that are given to it by statute (<u>City of Downey</u> supra). The powers of a Community Services District are found in Government Code Section 61600. The District currently provides the following services that are authorized under Government Code Section 61600:

- (a) To supply its inhabitants with water for domestic use, irrigation, sanitation, industrial use, fire protection and recreation pursuant to Government Code Section 61600 (a).
- (b) The collection, treatment, disposal of sewage, waste and storm water of the District and its inhabitants pursuant to Government Code Section 61600 (b).
- (c) Street lighting pursuant to Government Code Section 61600 (f).

The District powers do not include the broad legislative and executive powers over zoning and land use (<u>City of Downey</u> supra). Zoning and land use authority within the District is delegated to the County of San Luis Obispo: (Government Code Section 65100).

The District may establish, by ordinance, "reasonable rules and regulations"

- governing the use of District facilities and property including imposing reasonable charges for the use thereof (Government Code Sections 61621.5), and
- (2) to establish fees, rates, and charges (Government Code Section 61621).

The phrase "reasonable rules and regulations" is analyzed on three levels

- (1) The District must follow statutory guidelines in establishing the ordinances. For example, rate setting regulations generally require hearings and studies.
- (2) The rules and regulations must comply with the Substantive Due Process Doctrine found in the U.S. Constitution Amendment 14 and the California Constitution Article 1 Section 7. The Substantive Due Process Doctrine

- prohibits the District from taking action which is arbitrary or unreasonably deprives a person of life, liberty or property.
- (3) The rules and regulations must not violate the equal protection clause of the United States Constitution Amendment 14 and the California Constitution Article 1 Section 7. The Equal Protection doctrine requires the District to treat similarly situated persons in a like manner.

The District pursuant to Government Code Section 61621.5 and 61621 and other relevant Code Sections has established rules and regulations relating to conditions of service, billing, connections and rates and charges (see Nipomo Community Service District Code).

The District may pursuant to Government Code Section 61621, Title 22 of the California Code of Regulations, and based on studies of its current water commitments (current will-serve letters and intent-to- serve letters) and its water resource capacity adopt further reasonable rules and regulations\* relating to future water connections.

\*See Memorandum addressing Water Shortages

End of memo

T:\U\C\M\NCSD\Water Service Opinion \memo121200

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#### **MEMORANDUM**

2 of 2

TO:

DOUG JONES, GENERAL MANAGER

NIPOMO COMMUNITY SERVICES DISTRICT BOARD OF

**DIRECTORS** 

RE:

ADDRESSING WATER SHORTAGES

FROM:

JON S. SEITZ, DISTRICT LEGAL COUNSEL

DATE:

September 28, 2006

At the District's Board meeting of February 20, 2002, I was directed to review and present to the District Board of Directors the District's options in addressing water shortages.

#### BACKGROUND

By way of background, the Board has discussed the limitations of approving new water connections under the authority of §64568 of Title 22 of the California Administrative Codes. That memorandum is included in the Staff Report.

#### DISTRICT'S OPTIONS IN ADDRESSING WATER SHORTAGES

The exception to the general rule that the District must provide water upon request, under reasonable rules and regulations, occurs when the District has declared a water shortage emergency pursuant to Water Code §350. Which provides as follows:

"The governing body of a distributor of a public water supply, whether publicly or privately owned and including a mutual water company, may declare a water shortage emergency condition to prevail within the area served by such distributor whenever it finds and determines that the

ordinary demands and requirements of water consumers cannot be satisfied without depleting the water supply of the distributor to the extent that there would be insufficient water for human consumption, sanitation, and fire protection." (Emphasis added)

Absent an immediate interruption in service by a water system failure, the Water Shortage Emergency Declaration may only be adopted after the District has conducted a duly noticed public hearing that provides the District's customers with an opportunity to be heard and to protest that declaration. (Water Code §351 and 352.)

§353 of the Water Code addresses regulations and restrictions that the District must adopt if a Declaration of a Water Shortage Emergency is approved and provides in relevant part:

"When the governing body has so determined and declared the existence of an emergency condition of water shortage within its service area, it **shall** thereupon adopt such regulations and restrictions on the delivery of water and the consumption within said area of water supplied for public use as will in the sound discretion of such governing body conserve the water supply for the greatest public benefit with particular regard to domestic use, sanitation, and fire protection." (Emphasis added).

The phrase "Conserve The Water Supply" implies that the District is empowered to maintain appropriate reserves of water to maintain future needs and that it need not run out of water before taking conservation measures. (See <a href="Swanson v. Marine Municipal Water District">Swanson v. Marine Municipal Water District</a>. App. First District. 1976) 128 Cal Reporter 485.

Further §354 of the Water Code provides the District with authority to establish priorities for water that is not necessary to supply water for domestic use, sanitation and fire protection. §354 states:

"After allocating and setting aside the amount of water which in the opinion of the governing body will be necessary to supply water needed for domestic use, sanitation, and fire protection, the regulations may establish priorities in the use of water for other purposes and provide for the allocation, distribution, and delivery of water for such other purposes, without discrimination between consumers using water for the same purpose or purposes."

Water Code §355 identifies the duration of the regulations and restrictions:

"The regulations and restrictions shall thereafter be and remain in full force and effect during the period of the emergency and until the supply of water available for distribution within such area has been replenished or augmented."

Water Code §356 provides for discontinuance of service for violation of the District's rules and regulations and provides:

"The regulations and restrictions may include the right to deny applications for new or additional service connections, and provision for their enforcement by discontinuing service to consumers willfully violating the regulations and restrictions."

And lastly, Water Code §358 provides the standard that the Board of Directors must meet when making findings under Government Code §350 (Supra) and provides as follows:

"Nothing in this chapter shall be construed to prohibit or prevent review by any court of competent jurisdiction of any finding or determination by a governing board of the existence of an emergency or of regulations or restrictions adopted by such board, pursuant to this chapter, on the ground that any such action is fraudulent, arbitrary, or capricious."

END OF MEMO

TO:

**BOARD OF DIRECTORS** 

FROM:

MICHAEL LeBRUN

DATE:

SEPTEMBER 14, 2005

AGENDA ITEM E-4 SEPTEMBER 14, 2005

#### REVIEW WATER ALLOCATION ORDINANCE

#### ITEM

Review allocation ordinance, consider options for revision, direct staff.

#### BACKGROUND

The District adopted Ordinance 2004-100 on October 13, 2004. The Ordinance established a limit and procedure for water service allocation for residential development. The October 13, 2004, Board letter outlining the adopted ordinance is attached for reference.

The allocation system attempts to balance the additional burden to the groundwater table caused by new development with the need to approve development that will support the District's aggressive program to acquire supplemental water -- regulating the amount of conjunctive pumping, if you will. The District's current rate structure is based on an estimate of 80-90 new connections annually to offset the cost of supplemental water infrastructure.

The annual allocation of water service is based on a growth rate adjusted volume of the District's pumping total. The County defined 2.3% growth rate applied to the then District annual pumping volume of 2220 acre-feet (AF), resulted in an annual allocation limit of 51 AF. The annual allocation is further broken down by residential building type (multi-family, single family, secondary dwelling) with sub-categories for single family homes based on lot size. Each category receives a portion of the overall allocation. Finally, a limitation of allocation to any single project is included to allow for fair dispersion of water allocation across classes and projects.

In addition to allocation of resources, the allocation ordinance defines Limitations on Water Use for the various residential unit classes and requires developers (engineer or architect) certify the water limitations will be met by design. The limitation criteria are also used as a basis for allocation of water per dwelling type.

The Allocation Ordinance does not cover commercial projects. The growth ordinance which provided the original basis (2.3%) for allocation applied only to residential development. Furthermore, staff has been unable to develop a scheme for allocating water to commercial development in that water demands of commercial property vary widely depending on the type of business. It is generally assumed a community's commercial needs grow to meet the demands of its residents and therefore conservative metered allocation of water resources for residential needs should provide the moderation of commercial water demand increases needed to protect water resource.

During the past year staff tracked allocations and provided regular updates to your Honorable Board. A current allocation accounting is attached for reference. Water allocations for the year are well below the overall and category limits. Since the District's overall production rates vary with annual precipitation patterns, it is not possible to measure the impact of the allocation ordinance on the past year's pumping totals. Additionally, the majority of allocation in the past year went to projects that are not yet completed and occupied.

The following changes to the allocation Ordinance may be considered:

- Reducing the overall limit (51 AF) to reflect the County's recent reduction in the area growth cap
  from 2.3% to 1.8%. This would reduce the overall allocation to 40 AF. Category limits would be
  adjusted accordingly. For comparison, had this reduction been in place last year, the overall and
  category limits would not have been reached.
- 2. Changing the basis for the amount of water allocated to from theoretical conservation based values to actual use values experienced within the District. The requirement for a project to certify low water use design standards (Water Demand Certification) would remain. This change would protect the District from over-allocating resources in the event low water designs do not result in low water use. Basing allocation on actual use in the District is reasonable since water rates are widely understood to control average water use and new customers will have the same rates as current customers. Pursuing this line of thought, staff did a general review of current use patterns and found the current allocation for single-family homes on smaller lots and multifamily home is reasonable. However, larger lots (1 acre and greater in size), appear to use considerably more water, on average, than we currently allocate. In an interesting note, as lot sizes increase above 2.5 acres, average water use tends to decrease. Increasing the single family residential allocation categories to include homes on .5 1 acre, 1-2.5 acre, and >2.5 acre, would likely better predict actual water demands. A reasonable allocation may be:

< 4,500 sq. ft.*	4,500 - 10,000 sq. ft.*	10,000 sq.ft5 ac.	.5 acre – acre	acre - 2.5 acre	> 2.5 acre
.3 AFY*	.45 AFY*	.55 AFY*	.7 AFY	1.0 AFY	.8 AFY

<sup>\*</sup> No change from current.

Staff estimates this change could be implemented with a minor overall impact to the number of dwelling units allowed under the allocation system. The reason being, the majority of residential allocation is made to homes on ½ acre or less.

In addition to these two changes, the District, through the Urban Water Management Plan Update process and basin management process needs to define a limit to total allocation, against which all water allocation needs to be measured. That is, what is our total delivery capability and how much is available for allocation? With the District's right to pump groundwater currently undefined, this number remains elusive. In the meantime, staff will maintain a record of allocation to both residential and commercial development for the purpose of estimating total water commitments (current customers and service commitments).

#### RECOMMENDATION

Consider staff report, provide direction.

#### **ATTACHMENTS**

October 13, 2004 Board Letter Allocation accounting TO:

**BOARD OF DIRECTORS** 

FROM:

MICHAEL LeBRUN

DATE:

OCTOBER 26, 2005

E-5
OCTOBER 26, 2005

#### REVIEW WATER ALLOCATION ORDINANCE

#### ITEM

Review allocation ordinance, consider options for revision, direct staff.

#### **BACKGROUND**

The District adopted Ordinance 2004-100 on October 13, 2004. The Ordinance established a limit and procedure for water service allocation for residential development.

At the regular meeting of September 14, 2005, your Honorable Board reviewed the Districts current allocation ordinance and asked staff to do additional research into motel and hotel water demand factor, commercial to residential water usage in the District, and provide any additional information available on commercial development demands.

Staff was further directed to:

- Maintain the current allocation level at 51 acre-feet per year while including Motel/Hotel and assisted living units under this allocation limit.
- Increase the number of single family home classifications to include three new categories for larger (>.5 acre) home sites which are shown to use, on average, higher quantities of water than previously allocated.

To date, staff has made some progress on these tasks. Attached you will find commercial water and sewer demand numbers that were developed by Boyle Engineering as part of the District's Water and Sewer Master plan update performed in 2002. Additionally, staff is providing a comparison of the District's current residential versus commercial water demands and a(attached).

#### RECOMMENDATION

Consider staff report, provide direction.

#### **ATTACHMENTS**

Final 2004/2005 water year allocation accounting District commercial versus residential demand numbers Table 2, Water and Sewer Master Plan Update Recommendations from Commercial sub-committee.

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#### Nipomo Community Services District Water Allocation Accounting Summary

Water Year 2005-2006													
													بحج ونصب ينبينها إغرفها وجروه مورف بمصور فنسها إذ
								1 - 11 - 12 - 1					
	NUMBER C	OF LIMITE			-	-	LACOF FEE	TOTALL	OTED WAT	ro.		_	Notes:
	NUMBER	IF UNITS		-		-	ACRE-FEE	OF ALL	DIED WAT	ER	_		Notes:
	5FR 710	SFR 45.10	SFR	A SIDUP	ust	Low	SERIOUS	gEC .	ant.	LOW	Total	Tally	
Project							32.5	5	10.2	3.3		51	Low 1 pulls from SRF/DUP and MF, Proportionally, Approved 4/9/05
APN 092-083-009/010 - PHASED (year 2 of 4)	1				- 11		0.0	0.0	(2.0)	0.0	(2.0)	49.0	Phased, 4- years, Board approved 5/25/05
092-130-019, Hill Street - Phased (year 2 of 2)			21				(6.3)	0.0	0.0	0.0	(6.3)	42.7	Phased, 2- years, Board approved on 5/11/05
APN 092-572-046, 852 PRIMROSE	3					-	(1.7)	0.0	0.0	0.0	(1.7)	41.1	Issued by GM on 10/24/05
APN 091-311-010, Haanpaa	3			3			(1.7)	(0.9)	0.0	0.0	(2.6)	38.5	BOD approved 10/26/05
APN 092-130-043, GRANDE, PEARSON, Phased 1/3		-			11	4	0.0	0.0	(2.0)	(0.7)	(2.7)	35.8	BOD approved 10/26/05
APN 090-135-006, W. TEFFT, SPENSER				-	3		0.0	0.0	(0.5)	0.0	(0.5)	35.3	8OD approved 11/28/05
APN 092-138-013, 759 JUNIPER	1			-1			(0.6)	(0.3)	0.0	0.0	(0.9)	34.4	GM approved 2/15/06
APN 090-143-005/007, Sparks/Dana			4				(0.6)	0.0	0.0	0.0	(1.2)	33.2	Re-issued ITS by BOD, 2/22/06
APN 092-130-071, FEDERER	2	1					(1.6)	0.0	0,0	0.0	(1.6)	31.7	Re-issued ITS by BOD, 3/08/06
APN 091-283-057, RITCHIE	2						(1.1)	0.0	0.0	0.0	(1.1)	30.6	Issued by GM on 03/27/06
APN 092-141-028, KRICHEVSKY	3						(1.7)	0.0	0.0	0.0	(1.7)	28.9	Issued by GM on 04/26/06
APN 092-241-022, WALKER	1						(0.6)	0.0	0.0	0.0	(0.6)	28,4	Issued by GM on 04/27/06
APN 092-130-044 ROOSEVELT apts. Phased 1/4					11	4	0.0	0.0	(2.0)	(0.7)	(2.7)	25.7	BOD Approved 5/10/06
Tract 2855, Mid State Properties			3				(0.9)	0.0	0.0	0.0	(0.9)	24.8	Issued by GM on 05/23/06
APN 092-261-007, Orie Johnson					3		0.0	0.0	(0.5)	0.0	(0.5)	24.3	Issued by GM on 6/20/06
APN 092-531-005, Chris Candini	1						(0.6)	0.0	0.0	0.0	(0.6)	23.7	Issued by GM on 6/22/06
Totals	15	1	28	4	39	4	(17.7)	(1.2)	(7.0)	(1.4)	(27.3)	- 8	
				Perce	ent of annua	al allotment:	54.5%	24.0%	68.4%	43.6%	53.6%		
Phasing Limit Check (Max 50% of annual allocation or	25.5 AF)				1								
Phased allocation =	8.3			11		Updated:	10/6/06						
				Pe	rcent Water	-Year over:	100.0%						
			0		1	-		-					
Abbreviations:  SFR = single family residence  SEC = secondary dwelling (a.k.a, Gra	nny Unit)												
DUP = Duplex													
MF = multi-family development (e.g. m	nutiple dwelli	ng units shari	ng a com	mon roof)									

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#### Nipomo Community Services District Water Allocation Accounting Summary

Water Year 2006-2007														
	-		-		-	-	-		-		-	-		
				-		1	100	_			-			
	Dwelling u	nits per cate	egory		-	-	Water allot	ment (acre-	eet)				Notes:	
		SFR 4.5 -		SEC	MF	Low I	SFR/DUP!		MF.	Low I	Total	Tally		
Project	13						32.5	5	10.2	3.3	-0	51	Low I (low income) pulls from SFR/DUP and	MF, proportional to their allotment.
APN 092-083-009/010 - PHASED (year 3 of 4)					11	1	0.0	0.0	(2.0)	0.0	(2.0)	49.0	Board approved 5/25/5	
APN 092-130-043, GRANDE-PHASE (year 2 of 3)				100	11	1	4 0.0	0.0	(2.0)		(2.0)	46.3	BOD approved 10/26/05	
APN 092-130-044 ROOSEVELT apts, Phased 2/4					1		4 0.0	0.0	(2.0)	(0.7)	(2.7)	43.6	BOD Proposed 5/10/06	
							0,0	0.0	0.0	0.0	0.0	43.6		
				-	11111		0.0	0.0	0.0	0.0	0.0	43.6		
		25000		12/200			0.0	0.0	0.0	0.0	0.0	43.6		
							0.0	0.0	0.0	0.0	0.0	43.6		
							0.0	0.0	0.0	0.0	0.0	43.6		
							0.0	0.0	0.0	0.0	0.0	43.6		
		100						-	-					
Totals	0	1	0 0	0	33	3	8 0.0	0.0	(5.9)	(1.4)	(7,4)			
		1								- Consti				
Abbreviation	ons defined:											-		
		SFR = sing	gle famil	y residence		Lance of the same								
		SEC = sec				Unit)								
		DUP = Du		1		1		-		_				
				developmen	t (e.g. mutis	ole dwellin	g units sharing	a common	roof)					
		Low I = Lo	w incom	e housing in	accordance	ce with Co	unty housing o	definition.	-					
		7-12-11	1			1								
Phasing Limit Check (Max 50% of annual allocation	or 25.5 AF													
Phased allocation =	7.4											-		

TO:

**BOARD OF DIRECTORS** 

FROM:

BRUCE BUEL BY

DATE:

OCT. 6, 2006

AGENDA ITEM F OCT. 11, 2006

#### MANAGER'S REPORT

#### ITEM

Standing report to your Honorable Board
Period covered by this report Sept. 20, 2006 through October 6, 2006

#### **DISTRICT BUSINESS**

#### **Administrative**

There was one qualified bid for purchase of the surplused Dump Truck. The Guadalupe Cemetary District bid \$2,255. Staff will complete the transaction by the Board Meeting.

Staff expects to wholesale the remaining two vehicles for which there were no bids.

#### Safety Program

No injury reports during the period – Staff has initiated implementation of the Safety Program reviewed by your Honorable Board at the September 27, 2006 Meeting.

#### **Project Activity**

Oral Summary to be provided at Board Meeting.

#### **Field Activity**

No Report

#### **Conservation Program Activities**

Please see attached article on Creek Clean-up Event.

#### RECOMMENDATION

Staff seeks direction and input from your Honorable Board.

#### **ATTACHMENTS**

Article on Creek Clean Up Event

T:\BOARD MATTERS\BOARD MEETINGS\BOARD LETTER\BOARD LETTER 2006\MANAGERS REPORT061011.DOC

OCTOBER

WEDNESDAY

www.timespressrecorder.com

WEDNESDAY, OCTOBER 4, 2006

## Volunteers clear South County creeks

JOSH PETRAY

Staff Writer

pelray@linespressrecorder.com

Pounds of garbage scavenged from South County creeks during the annual San Luis Obispo County Creek Day now will not wash downstream into the Pacific Ocean.

Courtesy of an estimated 100 volunteers, cresks in Nipomo, Arroyo Grande and Pismo got their annual fall

Garbage was collected in Arroyo Grande and Pismo creeks just in time for winter rains, which might otherwise wash the garbage downstream and into the ocean officials said.

Representatives of Central Coast Salmon Enhancement noted the creeks also serve as vital habitat for the mi-

A full spenack of beer, auto parts and potentially toxic human waste were found in Pismo and Arroyo Grande creeks, said Stephnie Wald, watershed projects coordinator for Central Coast Salmon Enhancement.

"The most noteworthy items, unforinnately, were things like human waste." Wald said. There are some homeless folks that live in the creek correct and use the creek as a bathroom."

At the annual Nipomo Creek Day, this year organized for the first time by Nipomo Community Services District, volunteers cleaning Nipomo Creek, Black Lake Canyon and Olde Towne areas filled a "brimming 40-





A goat watches as volunteer Teresa Cruise picks up trash in a Nipomo creekbed, above, during San Luis Obispo County Creek Day. At left, Madonna Dunbar, left, of Nipomo Community Services District shows volunteer Clyde Cruise a creek location targeted for cleanup.

TPR photos by Phil Klein

vard, construction-sized Dumpster," NCSD conservation specialist Madonna Dunbar said.

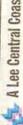
"Some of it came from the creek, some of it came from illegal dumping on the edges of the creek and around town," she said of the trash.

Notable items found in Nipomo included kitchen appliances and a 5foot-tall Bugs Bunny stuffed animal, "which probably won the strangest

trash prize," she said.

Weight benches, weight machines, sewing machines and a 60-inch television were also found.

"Hopefully it will prevent the material from going into the ocean and degrading water quality," Wald said of the cleanup. "We're helping to keep water quality high, as high as we can, in our nearshore environment."



TO:

**BOARD OF DIRECTORS** 

FROM:

BRUCE BUEL 13

DATE:

OCT. 6, 2006

AGENDA ITEM G-1

OCT. 11, 2006

#### COMMITTEE REPORTS

#### ITEM

Receive Minutes from September 20, 2006, Waterline Intertie Project Design & Construction Committee Meeting (adopt draft minutes).

#### **BACKGROUND**

Attached is a set of draft minutes from the 9/20/06 Project Design & Construction Committee Meeting. Chairman Trotter, Director Eby, or staff can respond to questions and receive comments from the Board regarding the meeting or the draft minutes.

#### RECOMMENDATION

It is recommended that your Honorable Board edit the draft minutes as appropriate and, adopt a final set of minutes.

#### **ATTACHMENTS**

Draft Minutes

T:\BOARD MATTERS\BOARD MEETINGS\BOARD LETTER\BOARD LETTER 2006\COMMITTEE REPORTS 061011.DOC



#### 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.nipomocsd.com

# MINUTES OF THE 9/20/06 MEETING OF THE WATERLINE INTERTIE PROJECT DESIGN & CONSTRUCTION COMMITTEE

#### 1. CALL TO ORDER, ROLL CALL AND FLAG SALUTE

Chairman Trotter called the Special Meeting to order at 2pm in the NCSD Board Chambers. Both Chairman Trotter and Director Eby were in attendance along with staff member Bruce Buel, Boyle representative Mike Nunley, and two members of the public. Chairman Trotter described the purpose and format of the meeting.

#### 2. REVIEW OPTIONS TO RESOLVE WATER QUALITY INCOMPATIBILITIES

Mike Nunley described three options for reconciling the chloramine disinfection used by the City of Santa Maria and the hypo-chloride disinfection used by NCSD and commented on the advantages and disadvantages of the three methods. Chairman Trotter asked if Boyle would comment on the political fallout of the choices. Bruce Buel indicated that Boyle's Pre-Design Report would describe the advantages and disadvantages of the three options but it was up to the Board to interpret the political feasibility of each option. Director Eby asked if the No Treatment Option was unacceptable. Mike Nunley responded that the water quality research currently underway would indicate whether it was feasible to either de-chloraminate or mix disinfectant systems without generating high levels of disinfection by-products (DBP). Director Eby then asked if it was possible to remove the DBPs. Mike Nunley indicated that technology existed to remove DBPs but that those techniques were usually more expensive than avoiding the formation of the DBPs. Director Eby then proposed that Boyle use a set of matrices of costs and schedule results for various reaches of the proposed project for the various combination of routing, disinfection technology, and capacity. Mike Nunley indicated that Boyle would use such an approach. Bill Nelson complemented the Committee and the District for the thought and time they were devoting to evaluation of the project and suggested that the District integrate water quality sampling into the District's SCADA system.

#### 3. REVIEW RESEARCH ON MAIN ROUTING, LINE DIAMETER AND TANK SIZING

Mike Nunley reviewed the research done to date and summarized the routing alignments that had emerged from their evaluation to date. Chairman Trotter

#### MINUTES OF THE 9/20/06 MEETING OF THE

### WATERLINE INTERTIE PROJECT DESIGN & CONSTRUCTION COMMITTEE Page 2 of 2

commented on the interactive variables connecting the routing selection with delivery options. Director Eby asked that Boyle provide a description in the Pre-Design Report regarding the trade-offs between capital cost and flexibility in selecting either one tank or two tanks for storage. Director Eby also asked Boyle to provide the District with options for mitigation the aesthetic impacts of the storage tank(s); to evaluate at least one intermediate pipe size between the 14/16" and the 24" diameter; and to evaluate the usefulness of the existing 12" main in Orchard Road from Joshua to Southland. Bill Nelson commented on the tradeoffs between capital cost and maintenance cost in regards to pipeline sizing and the potential for the City of Santa Maria to supply more than 3,000 acre feet annually to the Nipomo Mesa. Homer Fox asked why NCSD was studying the possibility of transporting more than 3,000 acre feet per year and what was the optimal size pipe to transport 6,300 acre feet per year.

#### 4. REVIEW STAFF EFFORTS RE WATERLINE INTERTIE PROJECT DEVELOPMENT

Bruce Buel distributed the attached memo and the attached proposal from Carollo Engineers to the City of Santa Maria and commented on potential issues related to the pick up point for taking City water and the cost of doing the modeling envisioned by the City. Mike Nunley observed that the Scope of Work and the cost proposed in the Carollo proposal were reasonable in light of the information needed by both parties to construct a mutually acceptable project. Bruce Buel indicated that he had a meeting with the City to discuss the memo and proposal and that he planned to bring the Carollo Proposal to the NCSD Board on October 11, 2006 for consideration. Chairman Trotter expressed a concern that the issues described in the memo could result in additional cost and delay for the project. Director Eby indicated that NCSD should not be required to pay for the City "getting well"; that some of the elements of the proposal should have been done before the City signed the MOU; and that an analysis needs to be done regarding who should pay for what parts of the study and for what parts of the plumbing. Director Eby requested that staff consult with District Legal Counsel regarding these concerns. Homer Fox inquired as to the obligation of the District to indemnify the City for project liability.

#### 5. SET NEXT COMMITTEE MEETING

Bruce Buel requested that the Committee meet again after the Board receives the Pre-Design Study on November 1, 2006 but before the November 8, 2006 Board Meeting. The Committee agreed by consensus to meet at 2pm on Monday November 6, 2006. There was no public comment on this item.

#### ADJOURNMENT

Chairman Cliff Trotter thanked the public for participating and adjourned the meeting at 3:17 p.m.

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Route	

#### Memorandum

To:

Bruce Nybo - Principal Engineer - City of Santa Maria

From:

Donnell Wilcox

Date:

September 15, 2006 WO#:

Subject:

Water Delivery to Nipomo CSD

I have read the Memo dated Sept 15, 2006 from Mike Nunley and Josh Reynolds concerning the water supply to the Nipomo CSD (District) and would like to offer the following comments.

- 1. Point of Connection (POC) should not be at one of the City's 10-inch water mains. It should be a dedicated pipe extending off the Blosser Transmission Main for the reasons noted in a, b and c:
  - a.) Without having done an analysis or know the layout of the 10-inch pipe system in the new developments at Blosser and Atlantic Place, intuitively, it seems that there would be pressure drops within the 10-inch system that may adversely affect residents in the area. This is especially true at the higher flow rates. For example, for demand Scenario 1C, the requested demand at 6:00 AM is 3,634 gallons per minute (gpm). This is at or near the peak demand hour for the City. For the 6,300 afy Scenario 2C, the maximum flow is 7,632 gpm at peak hour, and for Scenario 2B, it is 11,705 gpm during the night hours. If the pressure has to be boosted, a site for a pump station would have to be located. It is not recommended to try to locate this potential pump station near residents. If the station is located outside the residential area, but "upstream" of it, the pressure could exceed the rated pressure of the existing piping system. If the station is "downstream" of the residential area, residents would probably experience pressures too low at times.
  - b.) The pressure drop in Item a) may not be realized with a looped system, but would certainly be significant if there were a break in one of the 10-inch pipes causing that section to be shut down for repairs. This would most certainly be cause to shut off water to the District during the repair period.
  - c.) The Assumptions paragraph of the Memo states that the actual method of flow shutdown or reduction to the District will be addressed during the design phase. This should be addressed up front because this will involve a structure. In order to deliver a constant or variable flow, a flow control facility with a flow meter, a control valve and shut off valves inside a buried or above ground structure would be necessary. Instrumentation with communication to the City's SCADA for remote control would be an integral part of the facility. A programmable logic controller (PLC) would control the normal flow to meet the daily demand pattern. Other features would include a driveway and security such as fencing. This will not be a small structure, i.e., not be a small pre-cast box, and should not be located in a residential area. Land acquisition would be necessary if the City doesn't own land at the POC. Depending on the sizes of valves and meter and type of control valve, the overall facility could easily run in the hundreds of thousands of dollars, which doesn't include land acquisition. The City would also be required to maintain the facility, which would increase traffic through the residential area.

- 2. It is assumed that that the information generated from the requested modeling would be used for preliminary decisions between the District and Boyle and would not be used for contractual purposes or decisions made between the District and the City. These preliminary analyses would be used to define formal analyses that would be used for such purposes. Boyle's requested (preliminary) modeling includes analyzing a 3,000 afy delivery at Year 2008 and 6,300 afy at Year 2013. To fully characterize the system for the formal decision process between the District and City, the recommended scenarios would include:
  - a.) Peak day base at Current, 5-Year, 10-Year and Build Out without District demand, but including updated City demands based on water usage records of the past 3 years and current and projected land use and construction time frame. This establishes conditions within the City not attributable to the District and aids in apportioning any costs to the District for additional upgrades necessary to deliver the water.
  - b.) Peak day plus 3,000 afy to the District for conditions defined after preliminary modeling (such as Scenario 1C) for 5-Year, 10-Year and Build Out.
  - c.) Peak day plus 6,300 afy to the District for conditions defined after preliminary modeling (such as Scenario 2C) for 5-Year, 10-Year and Build Out.
  - d.) Fire flow analyses. (See Item 3 below concerning this).

This effort involves a large number of model runs. Possibly models for the 10-Year condition could be removed. The 5-Year condition is Year 2011, which is close to Year 2013 requested for the 6,300 afy scenario. The 10-Year condition would only be necessary if it appears that the City would incur capital costs for system upgrades due to water delivery to the District between the 5-Year condition and Build Out.

3. As stated in Item 1c above, Boyle states that the method of shut down or flow reduction in case of an emergency will be determined during design. Although this wouldn't be a part of the distribution system modeling, a pre-design report that outlines how flow control will be accomplished should be prepared by Boyle now or at least in parallel with the formal distribution system analyses. To meet the demand patterns given in the Memo, a flow control facility will be required. A facility that is remotely controlled as described in 1c can eliminate or minimize the impact on the distribution system by stopping water delivery to the District during a major fire event or other emergency. Immediately upon notification of a fire event or other emergency where system pressure is affected, Utilities Department personnel can remotely close the flow control valve. The flow control valve cannot be completely automated for an emergency because each event will have different impacts. Thus, communication between the Fire Department and the Utilities Department will be crucial. Given this with the underlying assumption that the control valve will be immediately closed (over a several minute period to prevent surge) to stop delivery to the District, fire flow analyses may not be necessary. Before making this determination, Boyle should complete the flow control facility pre-design report and make a recommendation on how flow reduction or stoppage will occur.

#### MEMORANDUM

TO:

Bruce Nybo, PE - City of Santa Maria

September 15, 2006

FROM:

Mike Nunley, PE

Josh Reynolds, PE

SUBJECT:

NIPOMO CSD WATERLINE INTERTIE PROJECT

HYDRAULIC ANALYSIS

It is assumed these model runs will be performed by Carollo using the City of Santa Maria's water model. The District will use the information obtained from the model runs in the hydraulic analysis of the proposed project alternatives.

#### **Delivery Scenarios**

Six (6) scenarios were established based on the quantity of water being delivered to the District. The two annual delivery quantities being considered are 3,000-AFY (Scenarios 1A, 1B, and 1C) and a

potential future allocation of 6,300-AFY (Scenarios 2A, 2B, and 2C). Each scenario varies according to the rate of delivery.

<u>Scenario 1A – Steady State</u>. The City would deliver 3,000-afy at a rate of 1,860-gpm.

Scenario 1B – Off-peak Delivery. The City would deliver the full 3,000-afy in an 8-hour period beginning at 9:00 pm (21:00) and extending until 5:00 am. The water would be delivered at a steady 5,580-gpm.

Scenario 1C – Varying Delivery. The City would deliver water to the District in response to District system demands. The proposed flow curve for a 3,000-afy delivery rate is shown in Table 1. Peak flow for this scenario is 3,634-gpm.

<u>Scenario 2A – Steady State.</u> The City would deliver 6,300-afy at a rate of 3,905-gpm.

Scenario 2B – Off-peak Delivery. The City would deliver 6,300-afy in an 8-hour period at night. The water would be delivered at a rate of 11,705-gpm.

<u>Scenario 2C – Varying Delivery</u>. The City would deliver water to the District at a variable rate. The

Time Demand (gpm) Scenario 1C Scenario 2											
Time	Scenario 1C 3,000-afy	Scenario 2C 6,300-afy									
0:00	1,636	3,436									
1:00	1,546	3,247									
2:00	1,731	3,636									
3:00	1,924	4,041									
4:00	2,138	4,490									
5:00	2,672	5,612									
6:00	3,634	7,632									
7:00	3,206	6,733									
8:00	2,565	5,387									
9:00	2,013	4,228									
10:00	1,798	3,776									
11:00	1,573	3,304									
12:00	1,440	3,024									
13:00	1,477	3,102									
14:00	1,407	2,955									
15:00	1,419	2,980									
16:00	1,347	2,829									
17:00	1,463	3,073									
18:00	1,579	3,316									
19:00	1,695	3,560									
20:00	1,856	3,898									
21:00	1,625	3,413									
22:00	1,521	3,195									
23:00	1,384	2,907									
Average Flow	1,860	3,907									
Total Daily Flow	2,678,400	5,626,440									

Memorandum To: Donn Wilcox, PE

Page 2

proposed flow curve is shown in Table 1. Peak flow for this scenario is 7,632-gpm.

#### Assumptions

The model runs should consider the following set of assumptions.

System Improvements. For the 3,000-afy scenario, models should be run with all master plan improvements in place that are planned to be installed and operational by the year 2008. For the 6,300-afy scenario model runs should show planned improvements anticipated to be in place by the year 2013.

<u>Point of Connection</u>. The demands should be applied as point loads in the City's water model. The point of connection (POC) will be at the far northwest of the City's system at Blosser and Atlantic. The District's water system is being evaluated separately by Boyle Engineering. Assume a dedicated main extension for the Waterline Intertie Project is not needed. The District will draw water from the existing system of 10-in mains in the area.

<u>Fire Flow.</u> Fire flow conditions should not be included in this analysis. The District will be able to sustain a short duration outage in the event that the City needs to respond to an emergency. Automated shut down (or significant reduction) of flow during City emergencies will be considered during the design phase.

#### Reporting Information

The District is seeking feedback on the pressure variations which can be anticipated at the POC to aid in establishing pump capacities, tank elevations, and pipeline diameter. The City will likely need additional information to evaluate impacts on their system.

#### CITY OF SANTA MARIA WATER MODEL UPDATE TO INCORPORATE WATER DELIVERY TO THE NIPOMO COMMUNITY SERVICES DISTRICT

#### SCOPE OF WORK

#### BACKGROUND AND PURPOSE

Carollo Engineers (CONSULTANT) prepared the Utility Plan Update, Water and Sewer Section, for the City of Santa Maria (CITY) in May 2002. The water system was analyzed based on the Water Atlas and new development plans and was modeled using H20Net Analyzer Version 6 by MWHSoft. Peak day extended period simulations for Present, 5-Year, 10-Year and Build-Out conditions were conducted. The Nipomo Community Services District (NCSD) would like to supplement its water supply with up to 3,000 acre feet per year beginning in approximately 2009 with the potential to increase this amount to 6,300 acre feet per year in the future. The CITY wants to study the feasibility of delivering these volumes to NCSD at the north end of Blosser Road. The delivery to NCSD will be based on criteria outlined by Boyle Engineering. Time frames will include Present, 5-Year, 10-Year and Build Out.

#### SCOPE OF WORK

#### Task 1 - Land Use

CONSULTANT will review current planned land uses and development time frames with the CITY'S Community Development Department. The Land Use and Planning Map will be updated and modified as necessary to reflect the new land uses. acreages and development time frames.

#### Task 2 - Flow Factors

CONSULTANT will analyze monthly water billing summaries for the categories of Single Family Residential, Multi-Family Residential, Commercial/Institutional, Industrial and Other, estimated per capita water usage rates for various residential types (single family, multi-family, condominiums, senior) and household densities for each residential zone to develop average annual and peak day water flow factors. Billing data, estimated per capita water usage rates and housing projections and density will be supplied by the CITY.

#### Task 3 - Operational Assessment

CONSULTANT will review the operations of the water system with City personnel including the State Water delivery, well production and reservoir management. This includes flow and pressure variations at the State Water Turnout and the Blending and Disinfection Facility, locations of consumer complaints, i.e., low pressures, and historical pressure data at monitoring locations around the City.

1

September 18, 2006

#### Task 4 - Modeling

CONSULTANT will run Present, 5-Year, 10-Year and Build Out scenarios. The Present model will be used for calibration. Models for 5-Year, 10-Year and Build Out with and without the delivery to NCSD will be run for comparison to determine impacts within the distribution system attributable to the NCSD delivery. Fire-flow analyses will also be run. The updated model prepared by Boyle Engineering that incorporates new development in the northwest portion of the City will be used as the base model. Demands will be updated based on the revised unit flow factors. The models results will include the age of water within the distribution system with and without the NCSD delivery. CONSULTANT will determine the impacts within the distribution system and determine the required upgrades for each time frame.

#### Task 5 - Cost Estimates

CONSULTANT will develop planning level cost estimates for any City upgrades required for the 5-Year, 10-Year and Build Out time frames based on today's dollars.

#### Task 6 - Report

CONSULTANT will prepare a draft report of the findings. Upon receipt of comments from the CITY, CONSULTANT will make accepted revisions in a final report.

#### Task 7 - Meetings

CONSULTANT will attend two meetings. One meeting will be with the Community Development Department. The second meeting will be with CITY staff, NCSD and Boyle Engineering to present the preliminary findings.

#### Task 8 - On-Call Services

CONSULTANT will be available to review additional information as necessary concerning the implementation of the delivery of water to NCSD. CONSULTANT will attend two meetings as needed.

#### Task 9 - Deliverables

Draft Report - 5 copies including revised Land Use and Planning Map Final Report - 10 copies including revised Land Use and Planning Map

### CITY OF SANTA MARIA WATER MODEL UPDATE TO INCORPORATE DELIVERY TO NIPOMO COMMUNITY SERVICES DISTRICT

WORK ELEMENT	Wood	Wilcox	Engineer I	CADD	WP	Other Direct Costs	Total
Task 1- Land Use		10		16		\$ 221	\$ 3,781
Task 2 - Flow Factors (including Model update)		24	16			\$ 340	\$ 6,500
Task 3 - Operational Assessment		8				\$ 68	\$ 1,508
Task 4 - Modeling		24	80			\$ 884	\$ 14,404
Task 5 - Cost Estimates		8				\$ 68	\$ 1,508
Task 6 - Report	2	8	8	2	8	\$ 238	\$ 3,864
Task 7 - Meetings	16	16				\$ 2,834	\$ 9,154
TASK SUBTOTAL	18	98	104	18	8		\$ 40,719
RATE	\$ 215	\$ 180	\$ 115	\$ 110	\$ 77		
TASKS 1 THROUGH 7 TOTAL	\$ 3,870	\$ 17,640	\$ 11,960	\$ 1,980	\$ 616	\$ 4,653	\$ 40,719
Task 8 - On-Call Services	16	40				\$ 3,598	\$ 14,238
RATE	\$ 215	\$ 180	\$ 115	\$ 110	\$ 77		
TASK 8 TOTAL	\$ 3,440	\$ 7,200	\$ 141	\$ 4:	\$ -	\$ 3,598	\$ 14,238
ALL TASKS TOTAL	\$ 7,310	\$ 24,840	\$ 11,960	\$ 1,980	\$ 616	\$ 8,251	\$ 54,957

TRAVEL - Tasks 1 t				
Airfare	\$	560		
# Trips Wood		1	\$	560
#Trips Wilcox		2	\$	1,120
Car Rental	\$	80		
# Rentals			\$	160
Food	\$	75		
#	***		\$	150
Parking	\$	18		
#	7.0		\$	72
Hotel allowance				500
			\$	2,562
TRAVEL - Tasks 8 Airfare # Trips Wood # Trips Wilcox	\$	560 2 2	\$ \$	1,120 1,120
Car Rental	\$	80		
# Rentals		2	\$	160
Food	\$	75		
# Meals		2	\$	150
Parking	\$	18		
# Times		4	\$	72
Hotel allowance				500
			\$	3,122