TO: BOARD OF DIRECTORS

FROM: BRUCE BUEL

DATE: Sept. 7, 2007



## MANAGER'S REPORT

## ITEM

Standing report to your Honorable Board -- Period covered by this report August 15, 2007 through September 5, 2007

## DISTRICT BUSINESS

#### **Administrative**

Attached is the Waiver from District participation in the Stage 2 – Disinfection By-Products Testing Protocol - approved by the Department of Health Services. This Waiver recognizes that Phase I tests performed by NCSD indicate a very low level of risk for our groundwater to form the TTHM and HAA5 compounds of concern to the State. NCSD will continue to conduct the Phase tests at a reduced frequency, but we are not required to add the Phase 2 compounds.

Attached is an evaluation of the corrosion damage to Black Lake's 400 Gallon Water Storage Reservoir, which agrees with the "dive report" provided earlier (The reservoir needs work but its useful life can be extended). Also attached is a copy of this year's sludge judging report for the sludge in Blacklake's WWTF Ponds 1 and 2 showing a re-distribution and a decrease in the thickness of the bio-solids.

The Parks Citizen's Advisory Sub-Committee is scheduled to meet at 6:30pm on 9/19/07.

Maria Vista Estates has set a total of eight water meters.

Attached is the July's SWP Fiscal Report.

<u>Safety Program</u> No injury reports during the period.

#### **Project Activity**

Staff will provide a verbal projects update to the Board at the Board Meeting.

#### **Conservation Program Activities**

Staff has been working with the Conservation Committee on the Emergency Shortage Ordinance. The Ad Hoc Water Conservation Committee met on 6/11/07, 6/19/07, 7/24/07, 7/31/07, and 8/27/07. Another meeting is scheduled to meet again on Monday 9/10/07 to discuss the ordinance and the draft water conservation program. Staff has scheduled a conceptual review of the Emergency Water Supply Ordinance and the Water Conservation Program for September 26<sup>th</sup>.

#### RECOMMENDATION

Staff seeks direction and input from your Honorable Board.

#### ATTACHMENTS

- Copy of DOHS Phase 2 DBPR Waiver
- Corrosion Engineering Evaluation of Blacklake 400 Gallon Tank
- Blacklake WWTF Pond 1 and 2 Sludge Judging Memo
- Supplemental Water Project Fiscal Report for July

T:\BOARD MATTERS\BOARD MEETINGS)BOARD LETTER BOARD LETTER 2007 MANAGERS REPORT070912.DOC



State of California—Health and Human Services Agency California Department of Public Health



ARNOLD SCHWARZENEGGER Governor

August 22, 2007

## Nipomo Community Services District 148 South Wilson Street Nipomo, CA 93444

Attention: Mr. Dan Migliazzo Utility Supervisor

## RE: Stage-2 DBPR - IDSE 40/30 Certification

#### Dear Mr. Migliazzo;

The Department has reviewed your Stage-2 DBPR - IDSE 40/30 Certification request dated July 24, 2007. The Nipomo CSD is a Schedule 3 water system serving a population of about 12,000 and has an eligibility period beginning January 2005. Since the beginning of the eligibility period, the NCSD has collected annual TTHM & HAA5 samples at the maximum residence time site, based on a reduction granted by the Department. All the individual sample results in 2005 and 2006 met the 40 ug/l TTHM and 30 ug/l HAA5 criteria. The Department hereby grants the 40/30 Certification to the NCSD with no Stage-2 DBPR-IDSE requirements. The NCSD shall continue with the existing Stage -1 DBPR monitoring until Stage-2 DBPR compliance begins.

If there are any changes to sources and/or treatment which could increase the DBP formation potential or the NCSD fails to meet the 40/30 Certification criteria at all individual sample sites, the NCSD will need to conduct a full IDSE assessment for DBPR to establish compliance monitoring.

If you have any questions concerning this letter, please contact Mike Ali at this office at (805) 566-1326.

Sincerely,

Kurt Souza, P.E., Chief Southern California Region CDPH-DWFOB

cc: bcc: San Luis Obispo County Environmental Health District (2)

Monitoring Plans File

C	anne A s s o c l A		STATE HEALT	H SERVICES
	Date:	July 24, 2007	JUL 2	6 2007
	To: Company: Address:	STAGE 2 DBPR US EPA-IPMC PO Box 98 Dayton, OH 45401-0098	SANTA B	Rebekah Oulton, PE
	CC:	Kurt Souza DHS, SB District 1180 Eugenia PI., Suite 200 Carpinteria, CA 93013	CC:	Bruce Buel NCSD 148 South Wilson Street Nipomo, CA 93444
	Subject:	40/30 Certification	Project Number:	070422

Attached please find the signed 40/30 Certification Statement for the Nipomo Community Services District. Also attached are a copy of the TTHM and HAA5 sampling results for the referenced monitoring period.

If you have any questions or require any additional information, please contact me at 805-550-3500 or via email at *RebekahO@CannonAssoc.com*.

Copy of document found at www.NoNewWipTax.com

STAGE 2 DBPR US EPA-IPMC PO Box 98 Dayton, OH 45401-0098

#### **System Information**

PWS Name: Nipomo Community	]	PWS ID:	
Street Address: 148 South Wilson	]	Population Served: <u>12,000</u>	
City: Nipomo			
State: CA			
Zip: <u>93444</u>			
Source Water Type	⊠Ground	□Subpart H	
System Type:	⊠CWS	<b>DNTNCWS</b>	
Combined Distribution System:	□Wholesale	□Consecutive	⊠Neither
Contact Person			
Name: Bruce Buel		General Manage	r
Phone Number: 805-929-1133	Fax N	umber (if availab	ole): 805-929-1932
Email address (if available): bbuel	@nipomocsd.com	n	

#### **Certification**

I hereby certify that each individual Stage 1 DBPR compliance sample collected from <u>August</u> <u>2005</u> to <u>September 2006</u> was less than or equal to 0.040 mg/L for TTHM and 0.030 mg/L for HAA5. I understand that to be eligible, each individual sample must be equal to or below these values. I also certify that this PWS collected all required Stage 1 samples and did not have any Stage 1 monitoring violations during this time period.

Signature:

Date: 7/24/07

Stage 1 Disinfection Byproduct Compliance Da
----------------------------------------------

Sys No.	System Name	Freq	#	DBP		20	05		1Q-06	2Q-06	3Q-06	4Q-06	RAA
4010026	NIPOMO COMM SERVICES DIST	A	1	TTHMs (µg/L)	nr	nr	2	nr	nr	nr	nr	2	2
4010026	NIPOMO COMM SERVICES DIST	A	1	HAA5 (µg/L)	nr	nr	0	nr	nr	nr	nr	0	0

nr = not required RAA = running annual average 4

3



I.

# HARPER & ASSOCIATES ENGINEERING, INC. CONSULTING ENGINEERS

1240 E. Ontario Ave., Ste. 102-312 Corona, CA 92881-8671 Phone (951) 372-9196 Fax (909) 372-9198

# ENGINEER'S RÉPORT

PROJECT:	Inspection of a Welded Steel Water Storage Tank
STRUCTURE:	400,000 Gallon Welded Steel Water Storage Tank (Black Lake Water Storage Tank)
OWNER:	Nipomo Community Services District
LOCATION:	Nipomo, California
INSPECTION BY:	Andre Harper
REPORT DATE:	July 2007

## GENERAL INFORMATION

1.

2.

Contract Information

- This report is filed in response to a request by The Nipomo Community Services District for partial inspection and review of previous inpection of the interior and exterior surfaces of the 400,000 Gallon Black Lake Water Storage Tank. HAE's portion of the inspection was accomplished on July 10<sup>th</sup> 2007 by Mr. Andre Harper.
- Harper & Associates Engineering, Inc (HAE) was retained to accomplish field investigation of the reservoir to observe the exterior tank surfaces and interior surfaces visible from the roof hatch and center vent area. This report is filed with remedial repair/recoating recommendations. Photographs were taken to record conditions at the time of this evaluation and can be made available upon request.
- 3. This report is prepared solely on the basis of noted field investigation. Conclusions and recommendations are strictly those determined by Consultant to be consistent with the best and most experienced practice within the corrosion engineering profession.

## II. METHOD OF INVESTIGATION

### A. Exterior Surfaces

1.

2.

2.

- Investigation of exterior surfaces was accomplished by traversing the roof and perimeter of the tank from ground level.
- Photographs were taken of typical and specific areas to illustrate condition of surfaces.

#### B. Interior Surfaces

- 1. Investigation of underside of roof, support structure and vertical surfaces above top capacity level were visually inspected from the roof hatch, center vent area (through the screening) and by review a previous report prepared by others.
  - Light was supplied via high intensity portable lights and natural light from the hatch and vents.
- Photographs were taken of typical and specific areas to illustrate condition of surfaces.

#### III. OBSERVATIONS

1.

- A. Based upon the above reported investigation, the following observations were noted.
  - Exterior Surfaces
    - The exterior painted surfaces are in good condition with the exception of minor to moderate oxidation of the paint system and vertical streaks on the shell.
    - The center vent cover exhibits moderate to severe corrosion with perforations present at the outer circumference.

#### 2. Interior Roof Surfaces

a.

b.

c.

d.

3.

- The coating on the interior roof surfaces appears to be in poor condition with moderate to severe general corrosion on a majority of the roof plates and structural members:
- Severe corrosion is present at the rafter ends above the center support funnel.
  - Severe corrosion is present on the center vent structure including the vertical supports and the roof to vent transition.
    - The coating on the interior shell appears to be in poor condition based on the photos from the previous inspection by others.
- Interior Bottom Surfaces

The bottom surfaces could not be examined by HAE and appear to be covered with a heavy layer of silt as indicated by the previous inspection accomplished by others.

#### IV. CONCLUSIONS

1.

2.

A.

Based upon the above reported observations, the following conclusions are drawn.

Exterior Surfaces

a.

a. .

- Oxidation and fading of the alkyd paint system is not unusual for a paint system of this age.
- b. Vertical streaks on the shell are due to the moisture collecting on the roof which carries the dirt and debris over the knuckle plates and down the shell.
  - Moderate to severe corrosion and perforations on the center vent cover are due in part to the moist warm air constantly exhausting through the vent creating a very corrosive environment and the applicators often not taking the time to properly coat the underside of the vent cover.

#### Interior Surfaces

a.

b.

- The overall poor condition of the interior coating on the roof and shell surfaces appears to be due to the age of the coating system and possibly applying the coating too thin in areas where widespread general corrosion is present.
- Severe corrosion at the rafter ends and center vent structure is typically due to a combination of the applicators not taking the time to properly coat these hard to reach surfaces and the warm moist air exhausting through the vent creating a highly corrosive environment in this area.
  - The poor condition of the coating on the interior shell appears to be due to the age of the coating system which is approximately 24 years old. This particular coating system typically has a lifespan of 20-25 years and as can be seen in the previous report by others the coating system appears to be at the end of its lifespan.

#### . RECOMMENDATIONS

1.

- A. Based on the above noted observations, the following recommendations are offered.
  - Exterior Surfaces
    - The overall condition of the exterior surfaces is good and does

Harper & Associates Engineering, Inc. Hae files\Warranties\Nipomo 400k - 2007 3 Copy of document found at Www.NoNewWipTax.com

a.

not require any remedial work at this time. For aesthetic reasons the District may elect to pressure wash the exterior surfaces to remove the layer of dirt present.

#### Interior Surfaces

a.

b.

2.

The interior roof and shell coating should be completely removed, all surfaces should be abrasively blast cleaned to Near White Metal (SSPC-SP10) and a three coat epoxy coating system be applied to a minimum thickness of 15 mils.

The interior bottom surfaces could not be examined and therefore it is not known what condition these surfaces are in. However, if properly applied coal tar enamel coating will render a service life of 50-75 years. It may be possible to spot repair and overcoat the existing coal tar enamel coating system, but considering the small size of this tank HAE does not recommend this option as completely removing the coal tar enamel and replacing it with new enamel would not result in a significant increase in the cost.

Severe corrosion present at the rafter ends and center vent structure should be thoroughly examined after these areas are abrasive blast cleaned to determine if structural repairs of the rafters or center vent structure will be necessary.

#### VI. COST ESTIMATES

1.

A.

Based on current and previous projects of similar scope, preliminary cost estimates for work as noted in RECOMMENDATIONS, were calculated by using data from those projects.

#### Exterior Surfaces

No work is recommended at this time.

#### 2. Interior Surfaces

a.

b.

Ċ.

Abrasive blast cleaning of all interior surfaces to Near White metal (SSPC-SP10) and application of a three-coat epoxy coating system to a total dry film thickness of 15.0 mils on all surfaces above the bottom and 20 mils on the bottom surfaces will be in the cost range of \$57,000 to \$63,000, based on surfaces being classified as a non-hazardous materials/waste project.

If the District elects to replace the existing coal tar enamel on the bottom surfaces with new enamel rather than epoxy the above costs should not be significantly altered.

The costs for repairing any structural damage that may be present at the rafter ends and/or the center vent structure can be furnished when the scope of work has been defined after abrasive blasting has been accomplished.

- HAE has accomplished numerous evaluations of similar tanks with corrosion related structural damage and furnished the Owners with design criteria, plans, specifications and on-site inspection of the repair work
- HAE recommends that a coating inspector is present during the recoating work to ensure the work is accomplished per the specifications and the recommended repair procedures. Once the scope of work has been determined, HAE can provide a estimated cost for quality control inspection.

Respectfully submitted,

3.

HARPER & ASSOCIATES ENGINEERING, INC.

d.

Andre Harper

Project Engineer

Harper & Associates Engineering, Inc. Hae files\Warranties\Nipomo 400kpy2000cument found at 5ww.NoNewWipTax.com







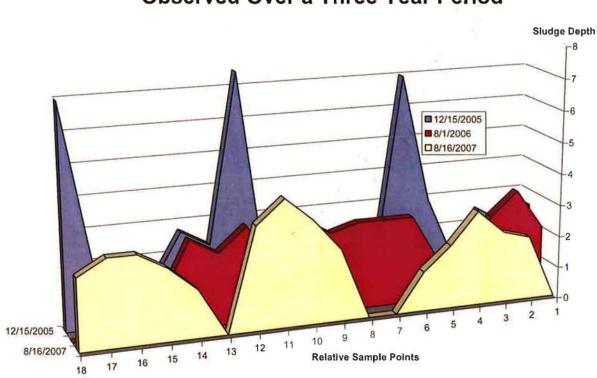
August 28, 2007

Mr. Dan Migliazzo Utility Supervisor Nipomo Community Services District 148 S. Wilson St P.O. Box 326 Nipomo, CA 93444

Re: Report on Sludge Judging Lagoons at Black Lake and Southland

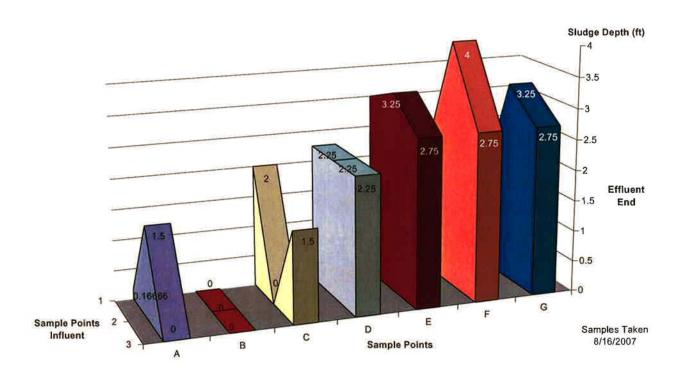
Dear Dan

Changing aerator positions at Black Lake Pond # 1 has helped remove over one foot of sludge resulting in estimated sludge removal savings of about \$20,000. Our recommendation is to continue your practice of repositioning aerators at Black Lake once each quarter.



# Black Lake Pond # 1 Sludge Blanket Profile Observed Over a Three Year Period

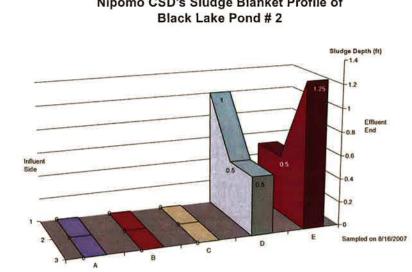
Sludge accumulated at the influent end of Black Lake Pond #1 is significantly reduced. As aerators are moved to the effluent end (not too close to the effluent pipe), sludge will begin to be removed from here as well.



Sludge Blanket Profile for Nipomo CSD's Black Lake Plant, Pond #1

Pond # 2 was de-sludged and minimal sludge is present as can be seen in the figure below:

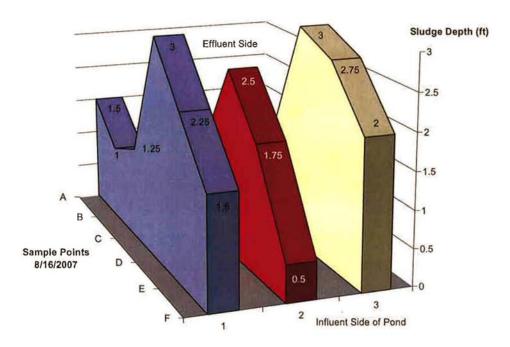
The de-sludging of the Black Lake Ponds, with aerator relocation has resulted in the pond system yielding good effluent quality.



Nipomo CSD's Sludge Blanket Profile of

Even with Primary Aeration Basin # 1 out of service for sludge removal, the remaining ponds running in series are producing a good quality effluent. The splashing aerators and mixers are doing their job at transferring oxygen to the system.

De-sludging Secondary Aeration Basin # 1 will further improve effluent quality and make nitrogen removal easier. It is widely accepted that sludge accumulation over 18 inches leads to algae bloom and BOD violations. Accumulated sludge is also a "sink" for accumulated nitrogen. Remove the sludge and remove the BOD, algae, and nitrogen in the effluent.



# Nipomo CSD's Sludge Blanket Profile for the Southland # 3 Pond

My recommendation is to give serious consideration to adding a bar screen and grit and trash removal system to your headworks. I was distressed to see all the floating plastic and trash in the system as I sludge judged your lagoons. This trash leads to faster sludge accumulation leading to volume reduction. Rags and fabrics also interfere with the operation of aeration equipment.

If nitrogen removal becomes an issue, please note that sludge removal will reduce nitrogen input into the system and will improve nitrogen removal in the system overall. There are also static nitrogen removal systems called fixed film systems that can be installed for very little money in the Secondary Aeration Basins.

Steve Harris Director of Wastewater Operations Please call me toll free with any questions. 1 (800) 961-1220 extension 224 Cell 1 (602) 920-4509

#### NIPOMO COMMUNITY SERVICES DISTRICT WATERLINE INTERTIE PROJECT MONTHLY REPORT TO THE BOARD OF DIRECTORS JULY 2007

	REVENUES FY 2007-2008 (1) Supplemental Water Capacity Fees Collected Interest Income (monthly & quarterly posting) Revenue Subtotal	MONTH OF JULY 9,552.00 12,080.54 21,632.54	FISCAL YEAR 7/1/2007 TO 6/30/2008 9,552.00 12,080.54 21,632.54
	EXPENDITURES FY 2007-2008 (2)		
	CONSULTANTS		
1590-A1	Feasibility Study (Cannon)	0.00	0.00
1590-A2	EIR Preparation (Wood & Assoc)	0.00	0.00
1590-A3	Estimate/Preliminary Schedule (Cannon)	0.00	0.00
1590-A4	Proposed Routes/Facilities (Cannon)	0.00	0.00
1590-A5	Prop 50 Grant Applicatin (Cannon)	0.00	0.00
1590-A6	Project Support (Cannon)	0.00	0.00
	LEGAL		0.00
1590-B1	Shipsey & Seitz	0.00	0.00
1590-B2	McDonough, Holland & Allen	0.00	0.00
1590-B3	Richards, Watson & Gershon	0.00	0.00
	LAND ACQUISITION		0.00
1590-C1	Tarvin & Associates	0.00	0.00
	FINANCIAL		0.00
1590-D1	Reed Group	0.00	0.00
	ENGINEERING		0.00
1590-E1	Preliminary Engineering Design (Boyle)	0.00	0.00
1590-E2	Water Modeling by Carollo (City of Santa Maria)	0.00	0.00
1590-E3	Alternative Water Supplies (Boyle)	0.00	0.00
	OTHER		0.00
1590-F1	FGL Environmental	0.00	0.00
1590-F2	Copy/Print	0.00	0.00
	SALARY AND BENEFITS (3)		0.00
1590-Z1	Wages-Capitalized	2,115.38	2,115.38
1590-Z2	Payroll Taxes-Capitalized	30.66	30.66
1590-Z3	Retirement-Capitalized	609.02	609.02
1590-Z4	Medical-Capitalized	203.51	203.51
1590-Z5	Dental/Vision-Capitalized	25.32	25.32
1590-Z6	Workers Compensation-Capitalized	16.88	16.88
	Expenditure Subtotal	3,000.77	3,000.77
	Net Revenues less Expenditures	18,631.77	18,631.77
	Beginning Fund Balance as of July 1, 2007		2,354,803.02
	Ending Fund Balance as of July 31, 2007		2,373,434.79

(1) See attached "Supplemental Water Fees Collected" Schedule for more detail.

(2) See attached "Supplemental Water Cost Summary" for more detail.

(3) Salary and Benefits of Project Manager are allocated among NCSD projects and capitalized as part of the cost of the project.

T:\\documents\projects\supplemental Water\Financial Reports\FY 6-30-08\monthly report to board.xls

#### NIPOMO COMMUNITY SERVICES DISTRICT SUPPLEMENTAL WATER COST SUMMARY

<u>A/C #</u>	DESCRIPTION	7/1/2004 TO 6/30/2005	7/1/2005 TO 6/30/2006	7/1/2006 TO 6/30/2007	7/1/2007 TO 6/30/2008	GRAND TOTAL
1645	Reservation Fee-City of Santa Maria	37,500.00	0.00	0.00	0.00	37,500.00
1590-A1 1590-A2 1590-A3 1590-A4 1590-A5 1590-A6	Feasibility Study (Cannon) EIR Preparation (Wood & Assoc) Est/Preliminary Schedule (Cannon) Proposed Routes/Facilities (Cannon) Prop 50 Grant Application (Cannon) Project Support (Cannon)	25,887.29 29,037.48 3,706.19 5,050.07 2,757.00 0.00	0.00 87,100.23 2,602.75 520.00 6,210.00 11,797.44	0.00 16,053.83 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	25,887.29 132,191.54 6,308.94 5,570.07 8,967.00 11,797.44
1590-B1 1590-B2 1590-B3 1590-C1	Shipsey & Seitz McDonough, Holland & Allen Richard, Watson & Gershon Tarvin Appraisal	0.00 0.00 0.00 0.00	23,095.55 34,177.28 9,472.38 0.00	17,564.25 15,871.65 27,954.81 16,170.00	0.00 0.00 0.00 0.00 0.00 0.00	40,659.80 50,048.93 37,427.19 16,170.00
1590-D1	Reed Group	0.00	2,809.85	0.00	0.00	2,809.85
1590-E1 1590-E2 1590-E3	Preliminary Engineering Design (Boyle) Water Modeling by Carollo (City of SM) Alternative Water Supplies (Boyle)	0.00 0.00 0.00	6,470.33 0.00 0.00	223,286.67 24,942.00 164,230.48	0.00 0.00 0.00 0.00	229,757.00 24,942.00 164,230,48
1590-F1 1590-F2	Lab Testing (FGL Environmental) Copy/Print	0.00 0.00	0.00 0.00	5,047.00 740.24	0.00 0.00 0.00	5,047.00 740.24
1590-Z1 1590-Z2 1590-Z3 1590-Z4 1590-Z5 1590-Z6	Wages-Capitalized Payroll Taxes-Capitalized Retirement-Capitalized Medical-Capitalized Dental/Vision-Capitalized Workers Compensation-Capitalized	0.00 0.00 0.00 0.00 0.00 0.00	29,076.92 587.22 8,418.08 2,861.36 0.00 260.35	35,884.51 587.42 10,344.53 3,367.02 247.90 341.83	2,115.38 30.66 609.02 203.51 25.32 16.88	67,076.81 1,205.30 19,371.63 6,431.89 273.22 619.06
		103,938.03	225,459.74	562,634.14	3,000.77	895,032.68

#### NIPOMO COMMUNITY SERVICES DISTRICT CERTIFICATES OF PARTICIPATION DEBT SERVICE SCHEDULE

	PRINCIPAL	INTEREST	TOTAL DEBT SERVICE	PRINCIPAL BALANCE 4,000,000.00
FY June 30, 2004	0.00	136,384.79	136,384.79	4,000,000.00
FY June 30, 2005	75,000.00	169,950.00	244,950.00	3,925,000.00
FY June 30, 2006	80,000.00	167,625.00	247,625.00	3,845,000.00
FY June 30, 2007	80,000.00	165,225.00	245,225.00	3,765,000.00
FY June 30, 2008	85,000.00	163,132.50	248,132.50	3,680,000.00

T:DOC\FINANCE\SUPP WATER\COST SUMMARY\_XLS

#### NIPOMO COMMUNITY SERVICES DISTRICT SUPPLEMENTAL WATER FEES COLLECTED

PROJECT	DEVELOPER	SUMMARY	DATE PAID	WATER SUPPLY PORTION	PIPELINE PORTION	SUPPLEMENTAL TOTAL
		FINAL FEES-BALANCE DUE TO FEE				6
2939	NEWDOLL	INCREASE 7/1/07	7/25/2007	6,699.92	828.08	7,528.00
		FINAL FEES-BALANCE DUE TO FEE				1
2595	BAUR	INCREASE 7/1/07	7/24/2007	1,801.36	222.64	2,024.00
		FISCAL YEAR 2007-2008	SUBTOTAL	8,501.28	1,050.72	9,552.00

GRAND TOTAL	1,154,798.51	142,377.74	1,297,176.25
CARRY FORWARD TOTALS FOR FY 04-05, FY 05-06 AND FY 06-07	1,146,297.23	141,327.02	1,287,624.25