


TO: BOARD OF DIRECTORS
FROM: BRUCE BUEL 
DATE: APRIL 6, 2007

**AGENDA ITEM
E-1
APRIL 11, 2007**

AUTHORIZE RATE STUDIES

ITEM

Authorize execution of rate studies with the Reed Group to perform rate studies and amend FY06-07 budget [RECOMMEND ADOPTION].

BACKGROUND

Your Honorable Board previously directed staff to seek proposals from the Reed Group related to: (1.) Evaluating the equity implications of merging the Black Lake Water Fund with the Town Water Fund; (2.) Evaluating the impacts of the Black Lake WWTF Liner on Black Lake Sewer Rates for 2008, 2009 and 2010; and (3.) Evaluating the impacts of the Southland WWTF Upgrade on the Town Sewer User Rates and Capacity Fees for 2008, 2009 and 2010. Attached are the three draft scopes of work prepared by staff for these rate studies and the Proposal from the Reed Group responding to those respective scopes. As detailed in Mr. Reed's Proposal, the Reed Group is willing to prepare these studies on a time and material basis with a not to exceed expenditure limit of \$52,450 (\$16,500 for the Equity Study; \$14,700 for Black Lake Sewer; and \$21,250 for Town Sewer).

Staff expects that half of the work proposed will be completed by June 30, 2007. Therefore, staff proposes to fund half of the work in the FY06-07 Budget (\$8,250; \$7,350; and \$10,625 respectively) and half of the work in the FY07-08 Budget (\$8,250; \$7,350; and \$10,625).

RECOMMENDATION

Staff believes that the work proposed is necessary to address the respective requirements of the three projects and that the Reed Group is uniquely qualified to perform the work. Staff recommends that your Honorable Board authorize execution of an agreement with the Reed Group to perform the work detailed in the attached proposal on a time and materials basis with a not to exceed expenditure limit of \$52,450. Staff further recommends that your Honorable Board transfer \$8,250 from Black Lake Water Reserves to the Black Lake Operating Budget; \$7,350 from Black Lake Sewer Reserves to the Black Lake Sewer Operating Budget; and \$10,625 from Town Sewer Reserves to the Town Sewer Operating Budget to pay for the respective work to be done in FY06-07. Staff proposes to include the remainder of the required funding in the FY07-08 Budget.

ATTACHMENTS

- Staff's Initial Scopes of Work
- Reed Group Proposal

TOWN-BLACK LAKE WATER SYSTEM MERGER EQUITY EVALUATION

REQUEST FOR PROPOSAL

Nipomo Community Services District is requesting a proposal to conduct a study to determine the relative equity of merging the Black Lake Water System Division (Black Lake) into the Town Water System Division (Town). The intent of the study is to: (1). independently assess the merger to determine if the merger is fair to both divisions, and (2). if one division would be subsidizing the other in such a merger, to develop recommendations for eliminating this subsidy. This study will not address Black Lake Sewer Fund issues.

It is assumed that the FY07-08, FY08-09, and FY09-10 rates previously set for the Town Water System will not change as a result of this evaluation. It is further assumed that Black Lake Well #4 will be re-plumbed in order for the merger to proceed.

SCOPE OF WORK

A. STUDY ELEMENTS

1. Using audit and financial statements, determine the net book value of assets for both Divisions as of March 31, 2007;
2. Using audit and financial statements as of March 31, 2007, estimate the capital reserve position (Operations, Replacement, and Capital) of the Town Water Division;
3. Using audit and financial statements as of March 31, 2007, estimate the capital reserve position (Operations and Replacement) of the Black Lake Water Division;
4. Using current customer records, estimate the current number of customers for each Division including multiple family multipliers but excluding irrigation meters;
5. Divide the net book value of assets per division by the number of customers for each Division to determine the per capita net book value of assets for each Division.
6. Divide the current capital reserve of each Division by the number of customers for each Division to determine the per capita capital reserve for each Division.
7. Compare the per capita net book value of assets and the per capita capital reserve of the two Divisions.
8. If one Division has greater per capita totals than the other Division, determine the surcharge that would be necessary for the under funded Division assuming that the differential was paid by each customer in that Division over a period of one, two, five years and ten years.

B. SERVICES TO BE PROVIDED BY CONSULTANT

1. Meet with NCSD Staff to discuss assignment.
2. Compile and submit an Administrative Draft Report presenting the results of elements 1 through 7 above.
3. Edit the Administrative Draft Report to reflect changes requested by NCSD Staff.
4. Submit a Draft Report and present that Report at a NCSD Board Meeting.
5. Edit the Draft Report to reflect changes requested by the NCSD Board.
6. Compile and submit a Final Report.
7. Assist NCSD in preparing the Proposition 218 Notices and Findings.

C. SERVICES TO BE PROVIDED BY DISTRICT

1. Meet with consultant to discuss assignment.
2. Provide audit and financial statements to consultant.
3. Provide current customer counts for both Divisions.
4. Review and comment on Administrative Draft Report.
5. Review and comment on Draft Report.

D. PRODUCTS AND TIMING (ONE REPRODUCIBLE HARD COPY ORIGINAL AND ONE PDF/CD OF EACH)

1. Administrative Draft Report – Within four weeks of receiving Notice to Proceed and C2/C3 Information
2. Draft Report – Within three weeks of receiving comments on Admin Draft Report
3. Final Report – Within two weeks of receiving comments on Draft Report.

E. MEETINGS

1. Kick off meeting in Sacramento
2. Phone conference to discuss Administrative Draft
3. Presentation of Draft Report to NCSD Board in Nipomo
4. Participation in One Community Workshop

BLACK LAKE SEWER DIVISION YR2008-2010 RATE STUDY

REQUEST FOR PROPOSAL

Nipomo Community Services District is requesting a proposal to conduct a rate study for the Black Lake Sewer Division. The intent of the study is to project capital and operating expenditures over the next three calendar years and to propose rates that will fund the projected level of expenditure. The study is predicated on the assumption that the existing rate structure will not change, just the projected rates within that structure and the assumption that there will be no growth in the study period.

SCOPE OF WORK

A. STUDY ELEMENTS

1. Using the FY06-07 adopted budget, the draft FY07-08 Budget, the draft Water and Sewer Master Plan, and staff projections of capital and operating expenses for FY08-09, and FY09-10, develop a projection of capital, operating and total expenditures and reserve requirements for the Black Lake Sewer Division for calendar year 2008, calendar year 2009, and calendar year 2010;
2. Using current customer records, quantify the number of single family residential connections and multiple family residential connections;
3. Using current customer records, quantify the number of non-residential customers with each respective meter size;
4. Using the current customer records, quantify the volume of raw non-residential collection with low strength, medium strength and high strength discharge;
5. Develop revenue targets by year to satisfy the respective expenditure and reserve projections;
6. Propose Bi-Monthly rates for each single-family residential unit and each multiple-family residential unit for each year; Bi-Monthly rates for each Non-Residential Meter Size for each year; and Usage Rates per volume of each strength discharge for Non-Residential Users for each year.

B. SERVICES TO BE PROVIDED BY CONSULTANT

1. Meet with NCSD Staff to discuss assignment.
2. Compile and submit an Administrative Draft Report presenting the results of elements 1 through 6 above.
3. Edit the Administrative Draft Report to reflect changes requested by NCSD Staff.
4. Submit a Draft Report and present that Report at a NCSD Board Meeting.
5. Edit the Draft Report to reflect changes requested by the NCSD Board.
6. Compile and submit a Final Report.
7. Assist in preparing Proposition 218 Notices and Findings.

C. SERVICES TO BE PROVIDED BY DISTRICT

1. Meet with consultant to discuss assignment.
2. Provide documents referenced in scope elements A1 to consultant.
3. Provide current customer counts and flow information to consultant.
4. Review and comment on Administrative Draft Report.
5. Review and comment on Draft Report.

D. PRODUCTS AND TIMING (ONE REPRODUCIBLE HARD COPY ORIGINAL AND ONE PDF/CD OF EACH)

1. Administrative Draft Report – Within four weeks of receiving Notice to Proceed and C2/C3 Information
2. Draft Report – Within three weeks of receiving comments on Admin Draft Report
3. Final Report – Within two weeks of receiving comments on Draft Report.

E. MEETINGS

1. Kick off meeting in Sacramento
2. Phone conference to discuss Administrative Draft
3. Presentation of Draft Report to NCSD Board in Nipomo
4. Participation in one NCSD Community Workshop.

TOWN SEWER DIVISION YR2008-2010 RATE STUDY

REQUEST FOR PROPOSAL

Nipomo Community Services District is requesting a proposal to conduct a rate study for the Town Sewer Division. The intent of the study is to project capital and operating expenditures over the next three calendar years and to propose capacity charges and user fees that will fund the respective projected levels of expenditure. The study is predicated on the assumption that the existing user fee rate structure will not change, just the projected rates within that structure.

SCOPE OF WORK

A. STUDY ELEMENTS

1. Using the FY06-07 adopted budget, the draft FY07-08 Budget, the draft Water and Sewer Master Plan, the draft Southland WWTF Master Plan, and staff projections of capital and operating expenses for FY08-09, and FY09-10, develop a projection of capital, operating and total expenditures and Reserve Requirements for the Town Sewer Division for calendar year 2008, calendar year 2009, and calendar year 2010;
2. Using current customer records and the assumptions incorporated into the respective Master Plans, quantify the current number of single family residential connections and multiple family residential connections; and project the additional growth by year, and project the resulting customer count by year;
3. Using current customer records and the assumptions incorporated into the respective Master Plans, quantify the current number of non-residential customers with each respective meter size; project the additional growth per year; and project the resulting customer count by year;
4. Using the current customer records and the assumptions incorporated into the respective Master Plans, quantify the volume of raw non-residential collection with low strength, medium strength and high strength discharge; project the additional flows by strength category per year added by new growth; and project the resulting total flows by strength category per year;
5. Develop revenue targets by year to satisfy the respective capital expenditure, operating expenditure and reserve projections;
6. Develop a proposed division of the cost of capital improvements between existing customers and future customers;
7. Propose Capacity Charges per year for new growth sufficient to pay for new growth's share of the projected Capital Cost per year;

8. Evaluate the sensitivity of demand to the potential User Fees and develop an elasticity of demand adjustment to account for reduced demand resulting in the higher Bi-Monthly User Charges.
9. Propose Bi-Monthly User Charges for each single-family residential unit and each multiple-family residential unit for each year; Bi-Monthly User Charges for each Non-Residential Meter Size for each year; and Usage Rates per volume of each strength discharge for Non-Residential Users for each year.

B. SERVICES TO BE PROVIDED BY CONSULTANT

1. Meet with NCSO Staff to discuss assignment.
2. Compile and submit an Administrative Draft Report presenting the results of elements 1 through 9 above.
3. Edit the Administrative Draft Report to reflect changes requested by NCSO Staff.
4. Submit a Draft Report and present that Report at a NCSO Board Meeting.
5. Edit the Draft Report to reflect changes requested by the NCSO Board.
6. Compile and submit a Final Report.
7. Assist in preparing Proposition 218 Notices and Findings

C. SERVICES TO BE PROVIDED BY DISTRICT

1. Meet with consultant to discuss assignment.
2. Provide documents referenced in scope elements A1 to consultant.
3. Provide current customer counts and flow information to consultant.
4. Review and comment on Administrative Draft Report.
5. Review and comment on Draft Report.

D. PRODUCTS AND TIMING (ONE REPRODUCIBLE HARD COPY ORIGINAL AND ONE PDF/CD OF EACH)

1. Administrative Draft Report – Within four weeks of receiving Notice to Proceed and C2/C3 Information
2. Draft Report – Within three weeks of receiving comments on Admin Draft Report
3. Final Report – Within two weeks of receiving comments on Draft Report.

E. MEETINGS

1. Kick off meeting in Sacramento
2. Phone conference to discuss Administrative Draft
3. Presentation of Draft Report to NCSO Board in Nipomo
4. Participation in one NCSO Community Workshop



THE REED GROUP, INC.

March 29, 2007

Bruce Buel
Nipomo Community Services District
148 South Wilson Street
P. O. Box 326
Nipomo, CA 93444-0326

Subject: Proposals for Equity Evaluation and Rate Studies

Dear Bruce,

Recently you provided us with three Request for Proposals related to financial and rate setting studies to be performed for the Nipomo Community Services District. The Reed Group, Inc. is pleased to respond to your Request for Proposals, which address the following needs:

- Town-Black Lake Water System Merger Equity Evaluation
- Black Lake Sewer Division YR 2008-2010 Rate Study
- Town Sewer Division YR 2008-2010 Rate Study

We are prepared to assist the District with all three studies. We will perform each study in accordance with the scope of work outlined by the District, including study elements, services to be provided by consultant, products, timing, and meetings. Clarifications and minor modifications are outlined below for each of the three studies.

In order to reduce costs and improve the efficiency in performing the studies, it is recommended that the meetings required for each study be coordinated to coincide on the same day for all three studies. The exception may be that community meetings would be scheduled on different, but hopefully adjacent, days.

Town-Black Lake Water System Merger Equity Evaluation

We are prepared to conduct the Town-Black Lake Water System Merger Equity Evaluation with the following additional study elements added:

- Using proposed budgets for FY 07-08, capital improvement plans, and related financial information, prepare a consolidated financial plan for the merged water system and



identify water rate revenue needs through FY 09-10 (consistent with previous financial plans).

- Using the consolidated financial plan, as well as customer account and water use information to be provided by the District, propose water rates for a combined water system. The water rates would be consistent with the current water rate structures, and cover the period through FY 09-10. The equity surcharge, if any, would be in addition to the proposed water rates for ongoing operations and future capital needs.
- Attend and participate in a public hearing to adopt proposed water rates and surcharges.

Black Lake Sewer Division FY 2008-2010 Rate Study

We are prepared to conduct the Black Lake Sewer Division Rate Study with the following additional study element added:

- Attend and participate in a public hearing to adopt proposed sewer rates for Black Lake.

Town Sewer Division FY 2008-2010 Rate Study

We are prepared to conduct the Town Sewer Division Rate Study with the following additional study element added:

- Attend and participate in a public hearing to adopt proposed water rates and surcharges.

Proposed Project Schedules

We are prepared to perform the three studies within the timeframes you have outlined. As noted previously, we recommend the three studies progress in parallel and that meetings in Nipomo for all three studies occur on the same day. This would reduce costs to the District. Specifically, we envision the studies within the following timeline:

- Notice to proceed and kick-off meeting with Bruce Buel in Sacramento on May 14th
- Submit administrative draft reports – within 4 weeks of receiving Notice to Proceed and required information – Late June
- Submit draft reports – within 3 weeks of receiving comments on the administrative draft reports – Mid-July
- Present draft reports and recommendations to the NCSD Board – Late July



- Submit final reports - within two weeks of receiving comments on the draft reports - Early August
- District mails notices of public hearings in accordance with Proposition 218 - Mid August
- Participate in community meetings - Late August or early September
- Participate in rate hearings to adopt new rates - Early October
- Implement new rates - January 2008

Notices of public hearing must be mailed to affected customers at least 45 days of the public hearing. I recommend that the notices be mailed following submittal of final reports. Community meetings should be held during the 45-day period prior to the hearings. It would be desirable to hold all three community meetings within a 1 or 2 day period.

Estimated Cost for Each Study

Assuming the three studies can proceed in parallel, as outlined above, the estimated cost for each study, including expenses would be as summarized below. The total cost for all three studies is estimated at \$52,450.

▪ Town-Black Lake Merger Equity Evaluation	\$16,500
▪ Black Lake Sewer Rate Study	\$14,700
▪ Town Water Rate Study	\$21,250

As you know, our practice is to bill clients monthly for time and expenses incurred in the prior month. Our preference would be to perform all three studies for a not-to-exceed total of \$52,450. Invoices would be submitted with costs segregated for each study.

I look forward to working with you, the Board and other District staff during this engagement. Thank you for your continued confidence in The Reed Group, Inc.

Sincerely,

Robert Reed
The Reed Group, Inc.

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TO: BOARD OF DIRECTORS
FROM: BRUCE BUEL *BB*
DATE: APRIL 6, 2007

AGENDA ITEM
E-2
APRIL 11, 2007

REVIEW MASTER PLAN DEMAND PROJECTIONS

ITEM

Review Water and Sewer Master Plan demand projections and provide policy guidance [PROVIDE POLICY GUIDANCE].

BACKGROUND

Your Honorable Board has discussed water and sewer demand projections at your February 21, 2007; March 21, 2007; and March 28, 2007 Board Meetings. On February 21, 2007, you reviewed the attached tables presenting three scenarios for future water and sewer demand (Page 3 of the Cannon's Technical Memorandum #1) and your consensus was for staff to develop a fourth scenario with water demands greater than Cannon's Scenario 3 (average water demand of 10,000 AFY). Your Honorable Board further discussed these projections in regards to upgrading the Southland WWTF at your March 21, 2007 Workshop; received Cannon's attached revised water and sewer projections with Scenario 4 added; and heard from District Legal Counsel that state law limited the District's ability to plan for infrastructure development based on the build out of the adopted County Land Use Plans (Scenario 1). On March 28, 2007 your Honorable Board authorized Boyle to evaluate the implications of Scenario 4 in regards to future build out of the Southland WWTF, but also agreed that Scenario 4 would not be the proposed project for the immediate Southland WWTF upgrade.

Staff is requesting that your Honorable Board clarify the demand projection basis for development of future water and sewer infrastructure at this meeting so that Cannon can proceed with completion of the Water and Sewer Master Plan. Larry Kraemer and Mike Cannon of Cannon Associates are scheduled to describe the various scenarios and the resulting demand projections at this meeting. Staff has also invited Mike Nunley of Boyle Engineering to attend so that he can address issues involving the Southland WWTF Master Plan.

Staff further requests that to the extent your Honorable Board disagrees with the assumptions that Cannon used to construct Scenario 4, that you provide alternate assumptions so that Cannon can complete its evaluation of Scenario 4.

RECOMMENDATION

Staff believes that water facility development in the Water & Sewer Master Plan should be predicated on full build out of the current District and Sphere of Influence as set forth in the relevant County General Plan (Scenario 1). Staff further believes that the sewer facility development in both the Southland WWTF Master Plan and the Water & Sewer Master Plan should be predicated on full build out of the current sewer service area and the areas likely to be served by Southland WWTF as set forth in the relevant General Plan (Scenario 1). Although both Master Plans can comment on additional density and perform sensitivity analyses regarding the sizing of facilities for higher density scenarios (Scenarios 2, 3 and 4), staff recommends that the plumbing upgrades be primarily based on Scenario 1.

In regards to the definition of Scenario 4, staff requests that each Board Member list the assumptions that they propose to determine where growth would occur to result in a future water demand of 10,000 AFY.

ATTACHMENTS

- Page 3 of Cannon's 1/5/07 Technical Memorandum 1
- Presentation materials from 3/21/07 Workshop

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Water

**Table ES-3A: Summary of Water Demand Projections & Peaking Factors
(Based on Assumed Water Use Rates)**

	Annual Demand	Average Daily Demand	Maximum Daily Demand	Peak Hourly Demand
units	af/yr	MGD	MGD	MGD
<i>Peaking Factor</i>		(1 MGD = 1121 AFY)	1.70	3.78
2005 Conditions	2,989	2.67	4.50	10.08
2030 Scenario 1	4,960	4.42	7.51	16.71
2030 Scenario 2	5,170	4.61	7.84	17.43
2030 Scenario 3	5,970	5.33	9.06	20.15

**Table ES-3B: Summary of Water Demand Projections & Peaking Factors
(Based on Observed FY05-06 Water Use Rates)**

	Annual Demand	Average Daily Demand	Maximum Daily Demand	Peak Hourly Demand
units	af/yr	MGD	MGD	MGD
<i>Peaking Factor</i>		(1 MGD = 1121 AFY)	1.7	3.78
2005 Conditions	2,989	2.67	4.53	17.13
2030 Scenario 1	6,246	5.57	9.47	35.80
2030 Scenario 2	6,542	5.84	9.92	37.50
2030 Scenario 3	7,878	7.03	11.95	45.16

Sewer

**Table ES-4A: Summary of Sewer Flow Projections & Peaking Factors
(Based on Assumed Water Use Rates)**

Southland WWTP	Est. Average Annual Flow (AAF)	Est. Peak Dry Weather Flow (PDWF)	Est. Peak Wet Weather Flow (PWPF)
units	MGD	MGD	MGD
<i>Peaking Factor</i>		1.73	2.17
2005 Conditions	0.63	1.09	1.37
2030 Scenario 1	1.39	2.40	3.02
2030 Scenario 2	1.58	2.73	3.43
2030 Scenario 3	1.79	3.10	3.88

**Table ES-4B: Summary of Sewer Flow Projections & Peaking Factors
(Based on Observed FY05-06 Water Use Rates)**

Southland WWTP	Est. Average Annual Flow (AAF)	Est. Peak Dry Weather Flow (PDWF)	Est. Peak Wet Weather Flow (PWPF)
units	MGD	MGD	MGD
<i>Peaking Factor</i>		1.73	2.17
2005 Conditions	0.63	1.09	1.37
2030 Scenario 1	1.28	2.21	2.78
2030 Scenario 2	1.49	2.58	3.23
2030 Scenario 3	1.67	2.89	3.62

Table 3-11a: Estimated Average Annual Water Use in Year 2030 under High Density Land Use⁴

Scenario 8 - High Density Land Use 4 Assumption ⁽¹⁾⁽⁴⁾											
Land Use (units)	Water Duty Factor ⁽¹⁾ af/yr/ac	2005 Water Service Area ⁽¹⁾ ac	SOI- 1 ac	SOI- 2 ac	SOI- 3 ac	SOI- 4 ac	SOI- 7 ac	SOI- 8 ac	Total Area served ac	Estimated Water Use at Buildout af/yr	Estimated Water Use in Year 2030 - Limited by 2.3% Growth Rate ⁽²⁾ af/yr
Residential Land Uses											
REC	0.98	631					16		647	634	
RR	0.20	702	572				1,262	181	2,717	533	
RSF	2.10	698	256	132	187	1,378			2,651	5,567	
RS	0.98	1,611	14		84		28		1,737	1,702	
RL	0.10	0							0	0	
Blacklake ⁽¹⁾	1.04	510							510	530	
Canada Ranch SP	1.96		200						200	392	
Southland SP	0.98								0	0	6,905
RMF	3.75	160							160	600	600
Non-Residential Land Uses											
AG	0	0					45		45	0	0
OP	0.26	33							33	9	
CR	1.42	160	40						200	284	
CS	0.35	94				136			230	81	319
IND	0.67	0							0	0	0
OS	1.18	11			10	8			29	34	23
PF	0.59	38			5		24		67	40	30
MUC									0	0	
Total Use		4,648	1,082	132	286	1,522	1,375	181	9,226	10,406	7,877
In-Lieu NMMA Groundwater Recharge ⁽³⁾											600
Unaccounted System Losses (8%)											540
Total Demand											9,017

1: UWMP 2005 Update Appendix E

2: Residential Rates Observed FY05-06, Non-residential rates UWMP Table 15

3: UWMP 2005 Update Appendix Table 41

4: This scenario was added to the analysis to reflect the NCSD's Board's collective opinion from the February 21, 2007 Workshop that the more likely average annual water demand will be approximately 10,000 AF/yr. This was simulated by increasing the density in SOI Area 4 from 1,378 acres of Residential Suburban to 1,378 acres of Residential Single Family.

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Table 4.7a: Scenario 4 - Future Wastewater Production under High Density Land Use Assumption (based on Observed FY05-06 Water Use Rates)²

Land Use (units)	Total Area Served ac	Wastewater Production Rate MGD/ac	Estimated Wastewater Produced at Buildout MGD	percent built-out	Estimated Wastewater Production in Year 2030 - MGD
Residential Land Uses					
REC	5	0	0.000	72%	0.000
RR	0	0	0.000	72%	0.000
RSF	1,378	0.000924	2.434	72%	1.756
RS	455	0.00033	0.150	72%	0.108
RL	0	0	0.000	72%	0.000
RMF	166	0.002634	0.437	100%	0.437
Non-Residential Land Uses					
AG	0	0	0.000	100%	0.000
OP	31	0.000195	0.006	86%	0.005
CR	212	0.001064	0.226	86%	0.194
CS	141	0.000262	0.037	86%	0.032
IND (1)	12	0.000442	0.005	76%	0.004
OS	61	0	0.000	100%	0.000
PF	22	0.000442	0.010	76%	0.007
High School	76	0.000083	0.006	100%	0.006
Total Use	3,869		3.869		2.881

1: Wastewater production rate assumed equal to PF

2: This scenario was added to the analysis to reflect the NCSD's Board's collective opinion from the February 21, 2007 Workshop that the more likely Average Annual Water Demand will be approximately 10,000 AF/yr. This was simulated by increasing the density in SOI Area 4 from 1,378 acres of Residential Suburban to 1,378 acres of Residential Single Family. The resulting sewer load projections are reflected in this scenario.

**Table ES-4B: Summary of Sewer Flow Projections & Peaking Factors
(Based on Observed FY05-06 Water Use Rates)**

Southland WWTP	Est. Average Annual Flow (AAF)	Est. Peak Dry Weather Flow (PDWF)	Est. Peak Wet Weather Flow (PWWF)
units	MGD	MGD	MGD
<i>Peaking Factor</i>		1.73	2.17
2005 Conditions	0.63	1.09	1.37
2030 Scenario 1	1.28	2.21	2.78
2030 Scenario 2	1.49	2.58	3.23
2030 Scenario 3	1.67	2.89	3.62
2030 Scenario 4	1.85	3.26	4.00