## **ENVIRONMENTAL FINANCIAL GROUP**

MEMORANDUM

Date: 30 March 2006

To: Rob Scott, Chair

From: Scott Harder

Subject: 2006-7 Rate Projection and Schedule

Environmental Financial Group (EFG) is pleased to present this memorandum which sets forth recommended revenue requirements and user charge options for the Crane Lake Water and Sanitary District (District) Western Service Area (WSA) wastewater collection and treatment system for fiscal years (FY) 2006 and 2007. The District's fiscal year is equivalent to the calendar year, that is, FY 2006 began on 1 January 2006. Included in this memorandum are a description of major assumptions, projected revenues and expenses for FY 2006 and 2007, several user rate schedule options, and a listing of advantages and disadvantages of each rate schedule option.

#### Introduction

This memorandum provides an update to the 2004 Financial Plan that provided a basis for District Ordinance No. 2, which established a system of WSA user charges. In September 2005, the District Board adopted an FY 2006 operating budget for the WSA system. In conformance with the revenue requirements of that budget, the Board is now considering adjustments to its 2004 system of user charges in order to collect revenue sufficient to recover anticipated operating expenses. It is critical that the Board adjust its user charges as soon as possible to avoid experiencing further operating deficits in FY 2006.

The rate analysis presented herein is based on budgeted FY 2006 operating revenues and expenses. Revenue requirements for FY 2007, presented here for projection purposes, will need to be re-evaluated as part of the District's normal budgeting process.

The scope of this assignment does not include an audit or review of 2005 year-end cash balances, revenue collections, or operating expenses. Further, this memorandum does not proffer any opinions as to the establishment of appropriate accounts and funds, conformance with standard accounting practices, or appropriateness of any operating expenses.

## **Assumptions**

The rate schedule options presented herein are based on the following assumptions:

- Total metered flow of 2,500,000 gallons in FY 2006. This is consistent with reported FY 2005 metered flows, which were significantly lower than flows assumed for the 2004 financial plan.
- A total of 125 equivalent domestic units (EDUs), equal to that established in the original 2004 financial plan.
- Total FY 2006 operating expenses of \$93,300 and FY 2007 operating expenses of \$95,800.
- Annual USDA loan payment of \$87,000, due 1 January 2007.
- A provision for future renewals and replacements of \$5,000.
- Fixed costs collected largely through a monthly Base Charge to ensure that adequate revenues are available on an ongoing basis.
- Variable costs collected largely through Volume Charges billed to each customer on the basis of metered flows measured at each grinder pump station.
- Excess Volume Charges (in some options) that recover variable costs for metered flows in excess of each customer's EDU assignment. One EDU is defined equal to 250 gallons per day or 7,500 gallons per month.
- No new hookups to the system.
- Maintaining existing customer EDU assignments until sufficient historical metered flow data is available.
- No significant revenue accruing from capacity reservation fees (CRFs) or other new source of revenue.
- No use of ad valorem (value-based) property tax levy revenue to subsidize WSA operations and loan repayment.
- Annual special assessment tax revenues of \$30,000.
- Expedited use of \$50,000 in pre-paid special assessments in FY 2006 and again in FY 2007 to offset the principal portion of annual USDA loan payments.

## CRANE LAKE WATER AND SANITARY DISTRICT Revenue Requirements from Rates FY 2005 to FY 2007

|   | 2005<br>Actual            | 2006<br>Budget                            | 2007<br>Projected                         |
|---|---------------------------|---|---|
| Operating Expenses Technical Services Routine Daily On-Site Emergency/Non-Routine                       | 47,500<br>9,700<br>13,000 | 43,000<br>15,500<br>5,000                 | 44,000<br>15,900<br>5,000                 |
| Utilities Electricity Generator Fuel Telephone  | 7,000<br>200<br>1,700     | 7,500<br>300<br>1,800                     | 7,700<br>300<br>1,900                     |
| Professional Services Legal Accounting Engineering Financial Clerical                                   | 1,100<br>1,500<br>3,600   | 2,000<br>1,200<br>1,500<br>1,500<br>3,000 | 2,000<br>1,400<br>1,500<br>1,500<br>3,000 |
| Supplies<br>Chemicals<br>Other  | 3,600<br>700              | 3,700<br>700                              | 3,700<br>700                              |
| Insurance<br>Biosolids Disposal<br>Miscellaneous  | 1,200<br>3,000<br>1,900   | 1,500<br>3,100<br>2,000                   | 2,000<br>3,200<br>2,000                   |
| Total Operating Expenses  | 95,700                    | 93,300                                    | 95,800                                    |
| Provision for Renewal and Replacement   | -                         | 5,000                                     | 5,000                                     |
| Debt Service  | 60,000                    | <u>87,000</u>                             | <u>87,000</u>                             |
| Gross Revenue Requirements  | 155,700                   | 185,300                                   | 187,800                                   |
| less Other Revenues<br>Inspection Fees<br>Special Assessments (Annual)<br>Special Assessments (PrePaid) | 30,000<br>6,000           | 30,000<br>50,000                          | 30,000<br>50,000                          |
| Net Revenue Requirements  | 119,700                   | 105,300                                   | 107,800                                   |

# CRANE LAKE WATER AND SANITARY DISTRICT 2006 User Charge Options

|   | Base<br>Charge,<br>\$/month | Volume Charge,<br>\$ per thousand<br>gallons | Excess Volume<br>Charge, \$ per<br>thousand gallons |
|---|-----------------------------|--|---|
| 1. 2005 Status Quo Rate Schedule Base Charge collects fixed costs, including debt service costs. Volume Charge collects variable costs.   | 50.00                       | 5.00   | -   |
| 2. 2005 Status Quo Rate Schedule with added Excess Volume Charge  | 50.00                       | 5.00   | 11.70   |
| Base Charge collects fixed costs, including debt service costs. Volume Charge collects variable costs. Excess Volume Charge collects some fixed and some variable costs for flows in excess of EDU assignments.                         |                             |  |   |
| 3. Existing EDU Assignments / Original Rate Schedule Adjusted to reflect increased 2006 costs and lower than planned flows. Base Charge collects fixed costs, including debt service costs. Volume Charge collects variable costs.      | 54.95                       | 9.15   | -   |
| 4. 2-Year Phasing: Original Rate Schedule Adjusted due to higher 2006 costs and lower than planned flows over a two year period. Base Charge collects fixed costs, including debt service costs. Volume Charge collects variable costs. | 52.48                       | 7.08   | Γ   |
| 5. Total cost per 1000 gallons Adjusted due to higher 2006 costs and lower than planned flows. Volume Charge collects all fixed and variable costs.   |                             | 42.12  |   |
| 6. Existing EDU Assignments / Base Charge Only Adjusted due to higher 2006 costs and lower than planned flows. Base Charge collects all fixed and variable costs.   | 70.20                       | -  | -   |
| 7. Existing EDU Assignments / Excess Volume Charge Adjusted due to increased 2006 costs and lower than planned flows. Base Charge collects fixed costs, including debt service costs. Volume Charges collect variable costs.            | 54.95                       | 7.35   | 11.94   |

#### Notes:

- 1 Options 1,2 and 4 do not address FY 2006 revenue requirements and are presented for comparison purposes only.
- 2 Options 3, 5, 6 and 7 are based on FY 2006 revenue requirements, but due to implementation mid-year, will not collect sufficient revenue to recover all expenses in that year. It is assume that some reserve funds would be used to address this shortfall.
- 3 If no prepaid special assessment reserves are used to pay principal on the USDA loan payment in FY 2006, the Base Charge would increase by an additional 61% to \$88.50 per month for Options 3 and 7, and to \$113.00 per month for Option 6, and the Volume Charge would increase by 47% to \$62.12 for Option 5. The Volume Charges and/or Excess Volume Charges for Options 3 and 7 would not change.
- 4 The Excess Volume Charge in Option 7 is based on 5% of the Base Charge plus 25% of the Volume Charge applied to an estimated 1 million gallons of flow discharged by customers exceeding their monthly EDU-assigned flow. EDU-assigned flow is equal to 7,500 gallons per EDU per month.

# 2006 User Charge Options: Advantages and Disadvantages

| No. | Description   | Advantages   | Disadvantages  |
|-----|---|--|--|
| 1&2 | No adjustments to reflect higher costs and lower flows  | No rate increases  | <ul> <li>Severe revenue shortfall</li> <li>Estimated \$57,000 shortfall in 2006</li> <li>Possible inappropriate use of pre-paid special assessment funds to pay operations</li> </ul>                              |
| 3   | Base Charge plus Volume Charge with adjustments to reflect higher 2006 costs and lower flows  | <ul> <li>Proportionate Increases to customers</li> <li>More emphasis on "pay as you flush"</li> <li>Conservation incentive</li> </ul>  | <ul> <li>Significantly higher Volume Charge due to lower than planned flows</li> <li>Volatility in revenue, which leads to risk</li> </ul>   |
| 4   | Base Charge plus Volume Charge with adjustments to reflect higher 2006 costs and lower flows  | <ul> <li>Proportionate Increases to customers</li> <li>More emphasis on "pay as you flush"</li> <li>Creates conservation incentive</li> </ul>  | Significantly higher Volume Charge due to lower than planned flows   |
| 5   | Volume Charge Only with adjustments to reflect higher costs and lower flows   | All costs recovered by Volume Charge   | <ul> <li>All "pay as you flush" component</li> <li>Monthly bill not based on EDU assignment</li> <li>Very unpredictable cash flows</li> </ul>  |
| 6   | Base Charge Only with adjustments to reflect higher costs and lower flows   | <ul> <li>Very predictable cash flows</li> <li>All costs recovered by Base Charge</li> </ul>  | <ul> <li>No "pay as you flush" component</li> <li>Monthly bill entirely based on EDU assignment, not actual flow</li> <li>Largest cost increase for low-volume users</li> <li>No conservation incentive</li> </ul> |
| 7   | Base Charge, Volume Charge and Excess Volume Charge affecting flows in excess of EDU assignments with adjustments to reflect higher costs and lower flows | <ul> <li>Very large emphasis on "pay as you flush"</li> <li>Excess Volume Charge targets those customers that are now discharging excessive flows, in excess of their EDU assignments.</li> <li>Excess Volume Charge recovers costs that would have otherwise been paid by Base Charge, improving fairness</li> <li>Lowest cost option for low-volume customers</li> </ul> | Revenue highly dependent on metered flows, and volume of "excess" volume flows from customers     Revenue significantly more volatile, risky   |

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