

# Wastewater Treatment Plant Upgrade Funding Strategies

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## Public Works Report December 13, 2007

### GOAL:

To develop funding options and strategies for the upgrade at the Wastewater Treatment Plant (WWTP) to Membrane Bio Reactor (MBR) treatment process.

### SUMMARY:

December 4 staff provided materials to the Governmental Services and Public Safety committee used at the funding strategy Public-Private Partnership meeting on November 20, 2007. Funding of the Wastewater Treatment Plant Upgrade Design and Construction is critical for the City to continue with this project.

The project design is moving forward on schedule. The question is whether the City will have sufficient cash flow in 2008 to make the \$172,500 payment on the Public Works Trust (PWTF) loan due June of 2008.

November 20, 2007 meeting included the City, Funding sources, engineers, and the developers with 18 people present.

### Possible Funding Sources:

#### USDA, Rural Development

- Up to \$8 million dollars over 40 years 4% interest
- Applications available anytime of year
- NEPA (National Environmental Protection Act), preliminary design completed and approved by DOE with financial strategy required for submittal
- May come with restrictions on use in the flood plain

#### Public Works Trust Fund (PWTF)

- State legislature will appropriate funding in 2009 legislative session
- Interest is 3% over 5 years unless converted to construction loan
- Construction funding not available until July 2009

#### Department of Ecology (DOE)

- State Revolving Fund Loan
- Construction loan application December 2008
- State funding appropriation July 2009

Piper, Jaffray, Co – Jane Towery, Bonding Information

- Discussed Local Improvement District (LID)
- Short-term Water/Sewer Revenue note at 3% interest
  - Bridge note to cover revenue short-fall between June 2008 and July 2009
  - Bridge note could be paid by developer contribution

Community Development Block Grant (CDBG)

- No CDBG representation at the meeting

The City needs to cover the cash flow shortages between June 2008 and July 2010 to keep the project moving forward.

Attachments:

- A. Minutes of the November 20, 2007 Public-Private Partnership meeting
- B. Cash Flow Spreadsheet

**Wastewater Treatment Plant Upgrade Funding Strategy**  
**November 20, 2007**  
**Meeting Notes**

**Goal:**

To develop funding options and strategies for the upgrade at the WWTP to MBR treatment process is the purpose of this meeting.

**Introductions:**

See attached for sign-in sheet

**Establishing Local Improvement Districts:**

Jane Towery with Piper Jaffrey discussed options for establishing a local improvement district (LID) limited to the property owners who are interested in extending sewer services to their properties.

Jane indicated that she is not aware of a limit on LIDs that excludes properties outside the City limits but inside the City's Urban Growth Area (UGA). The key is that LID must be based on a specific location that will benefit from the improvement.

Jane emphasized that LIDs should be affordable and based on appropriate ratios of expense and benefit.

There are two parts to an LID – interim financing where there are no assessment to the property and project completion (construction) where properties are assessed for the completed improvements.

The group discussed whether LIDs were required to be contiguous properties. The group discussion led to an understanding that LIDs cannot be assessed against undeveloped properties. They can be assessed against undeveloped properties but are not marketable in the public market.

At the conclusion of the discussion, it appeared that establishing an LID limited to the interested property owners to fund the waste water treatment plant expansion is not a feasible option. Other alternatives will need to be developed.

**Reports:**

Brown and Caldwell

Project design update –

- The project design is moving forward on schedule. The question is whether the City will have sufficient cash flow in 2008 to make the

# Wastewater Treatment Plant Upgrade Funding Strategy

November 20, 2007

## Meeting Notes

payments on the Public Works Trust Fund (PWTF) loan. The next loan payment is due in June of 2008.

WWTP cash flow annual needs –

- The \$1,000,000 PWTF loan secured for design will be depleted in or around June 2008.
- The City will need to secure additional funding to complete the design and prepare construction drawings and bid documents.
- The City anticipates securing state funding and grants for construction in mid-2009.
- The City anticipates a cash flow shortage between June 2008 and June 2010 (end of WWTP upgrade construction).

### Available Funding:

USDA, Rural Development - Darla O'Connor

- Up to \$8 million dollars over 40 years 4% interest
- Applications available anytime of year
- NEPA, preliminary design completed and approved by DOE and financial strategy required for submittal
- May come with restrictions on use in the flood plain

PWTF, - Terry Dale

- State legislature will appropriate funding in 2009 legislative session
- Interest is 3% over 5 years unless converted to construction loan
- Funding not available until after July 2009
- 

DOE, Ken Ziebart, Regional Engineer / Tammie McClure, Financial Manager

- State Revolving Fund Loan
- Construction loan application 12/08
- State funding appropriation 7/09

Piper, Jaffray & Co. - Jane Towery, Bonding Information

- See Discussion above on LID
- Short-term Water/Sewer Revenue note at 3% interest
  - Bridge note to cover revenue short-fall between June 2008 and July 2009
  - Bridge note could be paid by developer contribution

CDBG – Debra May

- No CDBG representation at the meeting

**Wastewater Treatment Plant Upgrade Funding Strategy**  
**November 20, 2007**  
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**Discussion:**

Time line for funding needs

| <b>Funding Needs</b> | <b>Project Phase</b> | <b>Time</b>    | <b>Sources of Revenue</b>   |
|----------------------|----------------------|----------------|---|
| Short-term           | Design               | 6/2008-7/2009  | Water/sewer revenue bonds   |
| Mid-term             | Construction         | 8/2009-12/2010 | State Revolving Fund<br>State Appropriation<br>PWTF loan<br>Rural Development<br>Upfront Connection Charges |
| Long-term            | Debt Repayment       | 12/2010        | General facility charge   |

- The City needs to cover the cash flow shortages between June 2008 and July 2010 in order to keep the project moving forward.
- Developers would rather pay general facility charge at the time of building permit (i.e. at the time of need) than pay cash up front today even if the connection fee doubles as proposed between now and final construction.
- Any advanced funding from developers (i.e. before connections are needed) should take into consideration the time value of money.
- An LID doesn't seem to be a financing vehicle the City can use for short-term financing since the properties that would benefit are mostly vacant land.
- The City needs to keep in mind the needs of the bond market and ensure any funding from the open market provides sufficient return on investment compared to the risk. Instead use: does not result in utility rates that are too high compared to surrounding communities.

Next meeting agenda

What is the best financial tool to meet the City's short-term need for funding and the City's ability to repay debt service?





**Sultan WWTP Upgrade  
Cash Flow Estimate**

|  | Jan-09       | Feb-09       | Mar-09       | Apr-09       | May-09       | Jun-09       | Jul-09       | Aug-09       | Sep-09        | Oct-09        | Nov-09        | Dec-09        | Jan-10        | Feb-10        | Mar-10        | Apr-10        | May-10        |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| <b>Cash Flow Estimate</b>                          |              |              |              |              |              |              |              |              |               |               |               |               |               |               |               |               |               |
| <b>WWTP Upgrade Related C</b>                      |              |              |              |              |              |              |              |              |               |               |               |               |               |               |               |               |               |
| Design Cost  |              |              |              |              |              |              |              |              |               |               |               |               |               |               |               |               |               |
| BC and subconsultants design                       |              |              |              |              |              |              |              |              |               |               |               |               |               |               |               |               |               |
| Enviroquip MBR design                              |              |              |              |              |              |              |              |              |               |               |               |               |               |               |               |               |               |
| <sup>1</sup> Construction Cost                     | \$700,000    | \$1,125,000  | \$1,575,000  | \$1,250,000  | \$950,000    | \$1,075,000  | \$1,000,000  | \$1,000,000  | \$1,000,000   | \$1,000,000   | \$1,000,000   | \$1,000,000   | \$900,000     | \$720,000     | \$651,000     | \$551,000     | \$615,000     |
| Additional O&M                                     | \$700,000    | \$1,125,000  | \$1,575,000  | \$1,250,000  | \$950,000    | \$1,075,000  | \$1,000,000  | \$1,000,000  | \$1,000,000   | \$1,000,000   | \$1,000,000   | \$1,000,000   | \$900,000     | \$720,000     | \$651,000     | \$551,000     | \$615,000     |
| <b>WWTP Upgrade Related L</b>                      |              |              |              |              |              |              |              |              |               |               |               |               |               |               |               |               |               |
| Existing PWTF Design Payment                       | \$0          | \$0          | \$0          | \$0          | \$0          | \$229,500    | \$229,500    | \$0          | \$0           | \$0           | \$0           | \$0           | \$0           | \$0           | \$0           | \$0           | \$0           |
| <b>WWTP Upgrade Related R</b>                      |              |              |              |              |              |              |              |              |               |               |               |               |               |               |               |               |               |
| Existing PWTF Design Loan (\$)                     |              |              |              |              |              |              |              |              |               |               |               |               |               |               |               |               |               |
| <b>Project Cash Shortfall</b>                      | -\$700,000   | -\$1,125,000 | -\$1,575,000 | -\$1,250,000 | -\$950,000   | -\$1,304,500 | -\$1,000,000 | -\$1,000,000 | -\$1,000,000  | -\$1,000,000  | -\$1,000,000  | -\$1,000,000  | -\$900,000    | -\$720,000    | -\$651,000    | -\$551,000    | -\$615,000    |
| Cumulative Project Cash Shortfall                  | -\$1,922,500 | -\$2,647,500 | -\$4,222,500 | -\$5,472,500 | -\$6,422,500 | -\$7,727,000 | -\$8,727,000 | -\$9,727,000 | -\$10,727,000 | -\$11,727,000 | -\$12,727,000 | -\$13,727,000 | -\$14,627,000 | -\$15,347,000 | -\$15,998,000 | -\$16,549,000 | -\$17,164,000 |
| <b>ERUS</b>  |              |              |              |              |              |              |              |              |               |               |               |               |               |               |               |               |               |
| Total ERU Capacity of WWTP                         | 2,180        | 2,180        | 2,180        | 2,180        | 2,180        | 2,180        | 2,180        | 2,180        | 2,180         | 2,180         | 2,180         | 2,180         | 2,180         | 2,180         | 2,180         | 2,180         | 2,180         |
| ERU Capacity Available                             | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0            | 0             | 0             | 0             | 0             | 0             | 0             | 0             | 0             | 0             |
| <b>Funding Options</b>                             |              |              |              |              |              |              |              |              |               |               |               |               |               |               |               |               |               |
| 1) Developer Connection t                          |              |              |              |              |              |              |              |              |               |               |               |               |               |               |               |               |               |
| Total charge per ERU                               | \$13,685     | \$13,685     | \$13,685     | \$13,685     | \$13,685     | \$13,685     | \$13,685     | \$13,685     | \$13,685      | \$13,685      | \$13,685      | \$13,685      | \$16,548      | \$16,548      | \$16,548      | \$16,548      | \$16,548      |
| Number of ERUs                                     | 550          | 550          | 550          | 550          | 550          | 550          | 550          | 550          | 550           | 550           | 550           | 550           | 550           | 550           | 550           | 550           | 550           |
| Total Charge                                       | \$7,528,750  | \$7,528,750  | \$7,528,750  | \$7,528,750  | \$7,528,750  | \$7,528,750  | \$7,528,750  | \$7,528,750  | \$7,528,750   | \$7,528,750   | \$7,528,750   | \$7,528,750   | \$9,151,900   | \$9,151,900   | \$9,151,900   | \$9,151,900   | \$9,151,900   |
| 2) City Revenue Notes with Agreement for Payback   |              |              |              |              |              |              |              |              |               |               |               |               |               |               |               |               |               |
| 3) PWTF Year 2010 - shift                          |              |              |              |              |              |              |              |              |               |               |               |               |               |               |               |               |               |
| 4) Rural Development/USI no deadlines, NEPA and En |              |              |              |              |              |              |              |              |               |               |               |               |               |               |               |               |               |
| 5)   |              |              |              |              |              |              |              |              |               |               |               |               |               |               |               |               |               |

**Sultan WWTP Upgrade  
Cash Flow Estimate**

|                                      | Jan-09      | Feb-09      | Mar-09      | Apr-09      | May-09      | Jun-09      | Jul-09      | Aug-09      | Sep-09      | Oct-09      | Nov-09    | Dec-09    | Jan-10      | Feb-10      | Mar-10      | Apr-10      | May-10      |
|--------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------|-----------|-------------|-------------|-------------|-------------|-------------|
| 6) DOE                               | \$7,132,450 | \$6,007,450 | \$4,432,450 | \$3,182,450 | \$2,232,450 | \$5,927,950 | \$4,927,950 | \$3,927,950 | \$2,927,950 | \$1,927,950 | \$927,950 | -\$72,050 | \$3,578,650 | \$2,858,650 | \$2,207,650 | \$1,656,650 | \$1,041,650 |
| 7) CDBG                              |             |             |             |             |             |             |             |             |             |             |           |           |             |             |             |             |             |
| 8) State Line Item                   |             |             |             |             |             | \$5,000,000 |             |             |             |             |           |           |             |             |             |             |             |
| 9) SRF<br>earliest funding June 2009 |             |             |             |             |             |             |             |             |             |             |           |           |             |             |             |             | \$0         |
| 10) CERB                             |             |             |             |             |             |             |             |             |             |             |           |           |             |             |             |             |             |
| 11) Other Developers                 |             |             |             |             |             |             |             |             |             |             |           |           |             |             |             |             |             |
| 12) Rates                            |             |             |             |             |             |             |             |             |             |             |           |           |             |             |             |             |             |

1 The 2006 Engineering Report et  
Construction cost includes CM ser  
2 As of Nov 07, ~\$255,000 Spent  
3 Per A-6 handout titled "Example

