Water and Sewer Fund Presentation

Evanston City Council
July 22, 2013
Agenda

- Sewer Fund
- Water Fund
- Wholesale Water Customers
Evanston Water Consumption

Historical and Projected Water Sales

Water Sold (100 Cu Ft)

- Actual
- VK
- MP
- Projection
Sewer Fund
Sewer Rate

- Sewer rate has been $3.94/100 cu ft ($5.27/1,000 gal) since 2004.
- Average single family residence pays $454/year.
- $17M in GO Bonds approved for 2010-2013.
- Tax-exempt customers pay $4.53/100 cu ft for usage over 10,000 cu ft in any billing period.
Sewer Fund Expense Projections

City of Evanston Sewer Fund Operating Expense Projections

- Operation & Maintenance
- Interfund Transfers
- Capital Improvements
- Debt Service

Large Diameter Sewer Rehab

- IEPA low interest loan funding:
  - $3.6M in 2013 to line 1.6 miles
  - $5.4M in 2014-2017 to line 2.5 miles

- 3.1 miles remaining after 2017 at an estimated cost of $8.8 million
Sewer Fund Cash Flow Projections

City of Evanston Sewer Fund
Projected Unrestricted Reserves

- Projected Unrestricted Reserve
- Target Unrestricted Reserve

FY 2013 | FY 2014 | FY 2015 | FY 2016

$4,000,000 | $3,500,000 | $3,000,000 | $2,500,000 | $2,000,000 | $1,500,000 | $1,000,000 | $500,000 | $0
Water Fund
Water Rate

- As of July 1, 2013, the water rate is $1.80/100 cu ft ($2.41/1,000 gal).
- Additional bi-monthly minimum charge for first 500 cu ft (varies by meter size).
- Average single family residence pays $192/year.
Water Fund Expense Projections

City of Evanston Water Fund
Operating Expense Projections

- Operation & Maintenance
- Interfund Transfers
- Debt Service
- Capital Improvements

FY 2013
FY 2014
FY 2015
FY 2016
Water Capital Program Summary

- Water Treatment Plant improvements:
  - NWC pays ~59% of improvement costs as the assets are depreciated.
  - 14 MG Reservoir = $26.1M
  - Plant Reliability Improvements = $3.0M
  - Intake Improvements = $2.0M

- Other major projects not paid for by NWC:
  - Standpipe Painting & Repair = $2.7M
  - Meter Reading System = $2.4M
Water Main Replacement

- 51 miles of water main >100 years old
- 30” feeder main is almost 80 years old.
## Water Fund Five-Year CIP

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Water Plant Capital Program</th>
<th>Distribution System Capital Program</th>
<th>Total Capital Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>$3,305,000</td>
<td>$3,100,000</td>
<td>$6,405,000</td>
</tr>
<tr>
<td>2014</td>
<td>$4,050,000</td>
<td>$3,190,000</td>
<td>$7,240,000</td>
</tr>
<tr>
<td>2015</td>
<td>$6,250,000</td>
<td>$7,090,000</td>
<td>$13,340,000</td>
</tr>
<tr>
<td>2016</td>
<td>$21,440,000</td>
<td>$6,800,000</td>
<td>$28,240,000</td>
</tr>
<tr>
<td>2017</td>
<td>$7,725,000</td>
<td>$3,490,000</td>
<td>$11,215,000</td>
</tr>
<tr>
<td>2018</td>
<td>$3,000,000</td>
<td>$3,590,000</td>
<td>$6,590,000</td>
</tr>
<tr>
<td>5-Yr Total</td>
<td>$42,465,000</td>
<td>$24,160,000</td>
<td>$66,625,000</td>
</tr>
</tbody>
</table>
## Water Rate Projections

<table>
<thead>
<tr>
<th></th>
<th>FY 2013</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Annual Water Rate Increase</strong></td>
<td>3%</td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Water Rate per 100 cu ft</strong></td>
<td>$1.80</td>
<td>$1.98</td>
<td>$2.18</td>
<td>$2.40</td>
</tr>
<tr>
<td><strong>Water Rate per 1,000 gallons</strong></td>
<td>$2.41</td>
<td>$2.65</td>
<td>$2.91</td>
<td>$3.21</td>
</tr>
<tr>
<td><strong>Average Resident Annual Water Cost</strong></td>
<td>$192</td>
<td>$211</td>
<td>$232</td>
<td>$255</td>
</tr>
<tr>
<td><strong>Annual Cost Increase</strong></td>
<td>$6</td>
<td>$19</td>
<td>$21</td>
<td>$23</td>
</tr>
</tbody>
</table>
Water Fund Cash Flow Projections

City of Evanston Water Fund
Projected Unrestricted Reserves

- Projected Unrestricted Reserve
- Target Unrestricted Reserve

<table>
<thead>
<tr>
<th>Year</th>
<th>Projected Unrestricted Reserve</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2013</td>
<td>$5,000,000</td>
</tr>
<tr>
<td>FY 2014</td>
<td>$4,000,000</td>
</tr>
<tr>
<td>FY 2015</td>
<td>$3,000,000</td>
</tr>
<tr>
<td>FY 2016</td>
<td>$2,000,000</td>
</tr>
</tbody>
</table>
Water and Sewer Fund Summary
## Rate Projections

<table>
<thead>
<tr>
<th></th>
<th>FY 2013</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Water Bill for Avg. Residential Use</td>
<td>$192</td>
<td>$211</td>
<td>$232</td>
<td>$255</td>
</tr>
<tr>
<td>Annual Sewer Bill for Avg. Residential Use</td>
<td>$454</td>
<td>$454</td>
<td>$454</td>
<td>$454</td>
</tr>
<tr>
<td>Combined Annual Water &amp; Sewer Bill</td>
<td>$645</td>
<td>$665</td>
<td>$686</td>
<td>$709</td>
</tr>
<tr>
<td>Increase in Annual Water &amp; Sewer Bill</td>
<td>$6</td>
<td>$20</td>
<td>$21</td>
<td>$23</td>
</tr>
<tr>
<td>% Increase in Annual Water &amp; Sewer Bill</td>
<td>1%</td>
<td>3%</td>
<td>3%</td>
<td>3%</td>
</tr>
</tbody>
</table>
Regional Cost Comparison

- Survey includes communities using Lake Michigan water and part of MWRD.
- Most of these communities do not have relief sewers like Evanston (lower sewer rates but also more flooding).
- Regional average is $608 per year for single family resident.
- Chicago’s water/sewer rates will increase 15% in 2014 and 2015.

<table>
<thead>
<tr>
<th>Community</th>
<th>Annual Water &amp; Sewer Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buffalo Grove</td>
<td>$371</td>
</tr>
<tr>
<td>Skokie</td>
<td>$374</td>
</tr>
<tr>
<td>Palatine</td>
<td>$399</td>
</tr>
<tr>
<td>Northbrook</td>
<td>$420</td>
</tr>
<tr>
<td>Chicago</td>
<td>$477</td>
</tr>
<tr>
<td>Arlington Heights</td>
<td>$487</td>
</tr>
<tr>
<td>Wheeling</td>
<td>$567</td>
</tr>
<tr>
<td>Niles</td>
<td>$574</td>
</tr>
<tr>
<td>Glenview</td>
<td>$624</td>
</tr>
<tr>
<td>Lincolnwood</td>
<td>$643</td>
</tr>
<tr>
<td>Evanston</td>
<td><strong>$645</strong></td>
</tr>
<tr>
<td>Des Plaines</td>
<td>$677</td>
</tr>
<tr>
<td>Wilmette</td>
<td>$682</td>
</tr>
<tr>
<td>Park Ridge</td>
<td>$710</td>
</tr>
<tr>
<td>Oak Park</td>
<td>$750</td>
</tr>
<tr>
<td>Morton Grove</td>
<td>$758</td>
</tr>
<tr>
<td>Schaumburg</td>
<td>$774</td>
</tr>
<tr>
<td>Deerfield</td>
<td>$791</td>
</tr>
<tr>
<td>Lincolnshire</td>
<td>$826</td>
</tr>
</tbody>
</table>
Regional Cost Projections

Assumptions:

- Communities buying water from Chicago pass on the 15% water rate increases in 2014 and 2015.
- Otherwise 2% annual water and sewer rates are assumed for all communities (CPI only).
Future Challenges

- An average of $5M per year in water bonds is needed for the next 20 years to help pay for capital improvements, while slowly increasing the water rate to become self-sufficient.
- Perform a capital funding study in 2014 to evaluate long-term funding options for water improvements.
- Aging of Water Plant infrastructure and equipment.
Future Uncertainties

- Additional revenue from new wholesale customers could significantly reduce borrowing needs for future CIP.
- Future water consumption trends.
- Negotiation of a new Water Supply Agreement with Skokie.
- Re-Open Water Supply Agreement with the Northwest Water Commission.
Wholesale Water Customers
Existing Wholesale Water Customers

- **Village of Skokie**
  - Became a wholesale customer in 1944
  - Latest agreement signed in 1997
  - 20-yr term (expires in 2017)
  - Currently paying $0.98/1,000 gal

- **Northwest Water Commission**
  - Became a wholesale customer in 1985
  - Latest agreement expires in 2030 +/- 5 years
  - Currently paying on average $0.60/1,000 gal
Engineering and Financial Analysis

- Transmission main feasibility study conducted in coordination with 5 potential wholesale customers and the Northwest Water Commission:
  - Lincolnwood
  - Niles
  - Park Ridge
  - Des Plaines
  - North Suburban Municipal Joint Action Water Agency

- Regional transmission main is technically and financially feasible for all but Lincolnwood.
Potential New Wholesale Customers
Outlook

- Lincolnwood:
  - No modifications needed at the Water Plant or in the distribution system.
  - A dedicated transmission main would be constructed from Evanston’s South Standpipe.
  - City has submitted a proposal to Lincolnwood and has begun contract negotiations.
  - Would take about one year to design, permit, and construct the transmission main.
Outlook

- Niles, Park Ridge, and Des Plaines:
  - Possible additions to the Northwest Water Commission or could construct their own main.
  - Morton Grove could also potentially be served by a new pipeline to these communities.
  - Would have to increase water treatment capacity from 108 mgd to 132 mgd to serve all of these communities.
  - City has submitted a proposal to these communities and offered to begin contract negotiations.
Outlook

- NWC and NSMJAWA:
  - Addition of NSMJAWA would likely mean the addition of the other communities as well, since it would decrease their cost for a new transmission main.
  - NWC would also benefit from a lower cost to construct a redundant transmission main.
  - Would require a major water plant expansion from 108 mgd to 214 mgd.
  - City has submitted a proposal to NSMJAWA and offered to begin contract negotiations, though their contract with Chicago extends 10 more years.
Summary

- **Current Operations:**
  - Substantial Capital needed that is not supported without debt issuance and debt issuance has interest costs on top of capital costs.
  - Separation of Water Operating and Water Capital revenues could create a flow of funds without interest.

- **Expanded Operations:**
  - Substantial Capital needed depending on the option.
  - Capital and Operating costs completely covered by new revenues.
Utilities Department Update

QUESTIONS