UTILITIES DEPARTMENT

Budget Workshop

Fiscal Year 2015-2016

June 9, 2015
Utilities & Engineering

<table>
<thead>
<tr>
<th>Total Staff</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>FTE</td>
<td>104</td>
<td>57.5%</td>
</tr>
<tr>
<td>Interim FTE</td>
<td>7</td>
<td>3.9%</td>
</tr>
<tr>
<td>LBE</td>
<td>9</td>
<td>5.0%</td>
</tr>
<tr>
<td>Contractor</td>
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<td>2.8%</td>
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<tr>
<td>Vacancy</td>
<td>56</td>
<td>30.9%</td>
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<td>Total</td>
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<table>
<thead>
<tr>
<th>Managers*</th>
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<tr>
<td>FTE</td>
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<td>16.7%</td>
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<td>16.7%</td>
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<tr>
<td>LBE</td>
<td>3</td>
<td>10.0%</td>
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<tr>
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<td>30</td>
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*management employees that supervise

<table>
<thead>
<tr>
<th>Dept. &amp; Div. Mgrs</th>
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<tbody>
<tr>
<td>FTE</td>
<td>0</td>
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<tr>
<td>Interim FTE</td>
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<td>20.0%</td>
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<tr>
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<td>20.0%</td>
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<td>20.0%</td>
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<tr>
<td>Total</td>
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</table>
Water Division
2 FTE (1 LBE) / 1 vacant

- **Metering**
  - 15 FTE / 1 LBE / 1 vacant

- **Distribution**
  - 16 FTE / 2 vacant

- **Production and Treatment**
  - 8 FTE / 2 vacant

- **Maintenance**
  - 7 FTE / 7 vacant

- **Laboratory**
  - 1 FTE / 1 vacant

### Water Staff

<table>
<thead>
<tr>
<th>Category</th>
<th>FTE</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>FTE</td>
<td>32</td>
<td>65.3%</td>
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<tr>
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<td>6.1%</td>
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<tr>
<td>LBE</td>
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<td>4.1%</td>
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<tr>
<td>Contractor</td>
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<td>24.5%</td>
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<td>Total</td>
<td>49</td>
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Wastewater Staff

<table>
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<th>FTE</th>
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<tbody>
<tr>
<td>FTE</td>
<td>48</td>
<td>80.0%</td>
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<tr>
<td>Contractor</td>
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<td>3.3%</td>
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<td>16.7%</td>
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<tr>
<td>Total</td>
<td>60</td>
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</table>
Compliance & Supply Management

Compliance & Supply Mgmt Division
2 FTE (1 Contract)/1 vacant

Environmental Compliance
15 FTE (1 contract)/6 vacant
- Wastewater and storm water Source control
- Water quality
- Cross connection control

Utilities Planning & Supply Mgmt
6 FTE (1 LBE)/4 vacant
- Agency agreements
- Urban Water Management Plan
- Water conservation

Financial & Admin Services
8 FTE/4 LBE/1 Contract/5 vacant
- Budgeting
- Customer service / community affairs
- Contracts & grants

Laboratory & Research
1 FTE/1 vacant
- Water & WW lab
- AWPF wetland, membrane, and direct reuse research

Comp & Supply Staff

<table>
<thead>
<tr>
<th></th>
<th>FTE</th>
<th>%</th>
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<td>36.4%</td>
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<td>6.1%</td>
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<tr>
<td>LBE</td>
<td>5</td>
<td>15.2%</td>
</tr>
<tr>
<td>Contractor</td>
<td>3</td>
<td>9.1%</td>
</tr>
<tr>
<td>Vacancy</td>
<td>11</td>
<td>33.3%</td>
</tr>
<tr>
<td>Total</td>
<td>33</td>
<td>100%</td>
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</tbody>
</table>
Engineering & Maintenance Division

2 FTE / 1 vacant

Master Planning & Asset Management
5 FTE / 4 vacant
- Master plans
- Safety
- Modeling & simulation
- Technical writing

Design Services
9 FTE (1 LBE) / 5 vacant
- Civil
- Water, WW, storm water, recycled water
- Electrical/SCADA
- Engr. Tech. (drafting)

Construction Services
13 FTE (1 LBE) / 5 vacant
- Construction management
- Inspection
- Survey

Maintenance
1 FTE / 1 vacant
- Plant maintenance
- Grounds
- Electrical/SCADA

Engr & Maint Staff

<table>
<thead>
<tr>
<th></th>
<th>FTE</th>
<th></th>
</tr>
</thead>
<tbody>
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<td>FTE</td>
<td>12</td>
<td>32.4%</td>
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<tr>
<td>Interim FTE</td>
<td>1</td>
<td>2.7%</td>
</tr>
<tr>
<td>LBE</td>
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<td>5.4%</td>
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<td>0.0%</td>
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<tr>
<td>Vacancy</td>
<td>22</td>
<td>59.5%</td>
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<tr>
<td>Total</td>
<td>37</td>
<td>100%</td>
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</table>
Staffing History

- Approx. 1994 Public Works combined with Building & Safety and staff significantly reduced
- Approx. 1999 reestablished Public Works Department
- 2006 Public Works Reorg. Phase 1 Consolidation
  - Phase 2 was not implemented, leaving management vacancies
  - Several positions filled by LBEs
- 2010 Early Retirement Incentive Program (ERIP)
  - General fund -14
  - Landscape districts, CDBG, CDC, Housing -13
  - Water, WW, ER -19
- 2010 PW Reorganization
  - Call center, contract/procurement, and admin services sections disbanded
- Attrition since 2010
- Utilities & Engineering Department staffing plan Nov approved 2014
Staffing Plan Update

- Job description update – 95% complete
  - Update certification requirements
- Salary survey – approx. 30% complete
- HR will fill top 7 management positions by December 2015
- Consultants will fill approx. 15 technical positions
- Expand water and wastewater operator support to reduce overtime
  - Use LBE operators where possible
  - Continue operations contracts through 2016
- Apprenticeship programs to develop more operator candidates
  - City Corps EPA grant
Utilities and Engineering Accomplishments

• Integrated Public Works Master Plan
  • Completed a condition assessment of all water & wastewater infrastructure.
  • Developed a capital improvement plan and an integrated rate model.
  • Developing plans to rebuild aging infrastructure.

• Operational Assessment
  • Conducted a comprehensive review of operations & maintenance practices.
  • Developed plans to transform the Utilities & Engineering Department into an highly efficient organization.
  • Began American Public Works Association Self Assessment.
  • Began implementing operations improvements
    • Increased use of existing automation.
    • Optimized employee work schedules and practices.
  • Developed and began implementing a staffing plan.
Treatment and Production
- Treated and delivered over 25,000 acre-ft of potable water
- Served approximately 44,000 customer accounts

Drought Response
- Averaged 11% water reduction in 2014 compared to 2013
- On track in 2015 to meet 12% goal
- Began construction of low water consumption demonstration garden in Library parking lot

Recycled Water
- Negotiated recycled water agreement and obtained permits
- Began recycled water delivery to River Ridge

Maintenance
- Re-commissioned the groundwater desalter
- Began Phase 2 rehabilitation of water wells
Water Fund Operating Revenue and Expense History

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Actual Revenue</th>
<th>O&amp;M Expenses</th>
<th>Debt Service &amp; Capital Outlay</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 12-13</td>
<td>$53.7 million</td>
<td>$48.3 million</td>
<td>$8.3 million</td>
</tr>
<tr>
<td>FY 13-14</td>
<td>$58.6 million</td>
<td>$51.2 million</td>
<td>$13.9 million</td>
</tr>
<tr>
<td>FY 14-15</td>
<td>$57.0 million</td>
<td>$55.8 million</td>
<td>$15.8 million</td>
</tr>
<tr>
<td>FY 15-16</td>
<td>$55.7 million</td>
<td>$55.1 million</td>
<td>$14.9 million</td>
</tr>
</tbody>
</table>

* Does not include depreciation expense of $4.6 million

Transfer adjustment with RW revenue & CIP Reimb.
Total Revenue: $55.1 million

Miscellaneous Revenues
$5.8
11%

Fees
$3.5
6%

Rates
$45.8
83%

Misc. includes fees, reimbursements, interest earnings, services to other programs.
WATER: FY 15/16 PROJECTED REVENUE

Total Revenue: $58.2 million

Miscellaneous Revenues: $5.8 million (10%)
Rates: $45.8 million (79%)
CIP Reimbursement: $0.7 million (1%)
Recycled Water: $2.4 million (4%)
Fees: $3.5 million (6%)

Misc. includes fees, reimbursements, interest earnings, services to other programs.
Debt Service & Capital Outlay
$14.9
25%

O&M
$45.8
75%

Total O&M Expenses: $60.8 million
Misc. includes supplies, equipment, parts, chemicals, & testing.
WATER: FY 15/16 BOND DEBT

2010B Series, $83.7, 45%
2006 Series, $48.4, 26%
2010A Series, $11.3, 6%
2012 Series, $8.1, 5%
Lease Purchase, $0.2, 0%
2014 Series, $33.8, 18%

Total: $185.54 million
Maturities from 2022 to 2040
**WATER: FY 15/16 FUND BALANCE**

- **Operating Fund**: $24.7 million (49%)
- **Water Bonds**: $11.2 million (22%)
- **Connection Fee**: $10.2 million (20%)
- **Capacity Charge**: $3.3 million (7%)
- **Other Fees**: $0.7 million (2%)

**Total**: $50.2 million
Water: Department Priorities

- Expand the recycled water system (Community Forum)
- Increase water conservation
- Maintain water quality
- Maintain water supply reliability
- Begin preventative maintenance programs
- Complete utility rate study
• 15 years+ of deferred maintenance
  • Distribution system, SCADA (control systems) and wells
• Operator overtime due to vacancies
• Conservation is reducing revenue more than expenses
• GMA emergency ordinance restricts use of pumping credits and allocations
• Funding for GREAT Program Phase 1 completion
**Water: Opportunities**

- **Water Purchases ($18.3 million/30% of budget)**
  - Leak detection
  - Upgrade meters during replacement project to improve low flow accuracy. Savings of $1.5 mil/yr.
  - GMA Emergency Ordinance E limits pumping of allocations and credits. Potential savings of $3 mil/yr.

- **Indirect City Cost ($6.4 mil/10% of budget)**
  - Postpone paying $2.7 mil infrastructure use fee for street maintenance until water rates are increased

- **Labor ($5.5 mil/9% of O&M)**
  - Fill operator vacancies to reduce overtime by 2,000 hours
  - Upgrade automation system (SCADA) to eliminate 1 future FTE

- **Contract services ($3.9 mil/6% of budget)**
  - Fill staff vacancies to replace contractors saving $500,000/yr

- **Utilities ($2.8 mil/5% of budget)**
  - Rebuild motors and replace VFDs to increase energy efficiency saving $100,000/yr
  - Install solar panels (37,000kWh last month at AWPF=$3,000)
Wastewater – FY 14/15 Accomplishments

• **Treatment Operations**
  - Treated 19 mil gal/day (21,000 acre-ft/yr) of wastewater.
  - Optimized pre-chlorination to save $200,000/year.
  - Completed Pilot study for Chemically Enhanced Primary Treatment (CEPT).
    - Bio-tower elimination
  - Implemented Energy Management Program (EMP).

• **Collection System**
  - Sanitary sewer overflows during FY2014-15 were below the regional and statewide average per 100 miles of pipe. Oxnard is 1.23 per 100 miles of pipe, State of California Average is 16.21.
  - Successful pilot study for odor control in the collection system; resulted in a 90% reduction in atmospheric hydrogen sulfide.
  - Cleaned 53% of the collection system.
  - Fall protection installed at sewer lift stations to prevent accidents.

• **Recycled Water**
  - Started the Advanced Water Purification Facility (AWPF).
WASTEWATER FUND OPERATING REVENUE AND EXPENSE HISTORY

* Does not include depreciation expense of $8.4 million
WASTEWATER: FY 15/16 PROJECTED REVENUE

Total Revenue: $32.0 million

Rates
$31.0
97%

Misc
$1.01
3%

Misc. includes fees, reimbursements, interest earnings, services to other programs
Debt Service & Capital Outlay
$9.6
29%

O&M
$23.7
71%

Total O&M Expenses: $33.3 million
WASTEWATER – FY 15/16 PROJECTED EXPENSES

Total O&M Expenses: $33.3 million

- Debt Service & Capital Outlay: $9.6 million (29%)
- Labor: $8.5 million (26%)
- Indirect & Infrastructure: $4.9 million (15%)
- Utilities: $3.8 million (11%)
- Contract Services: $2.3 million (7%)
- Shop: $1.5 million (4%)
- Misc: $2.8 million (8%)
Wastewater: FY 15/16 Bond Debt

Total: $116.06 million
Maturities from 2020 to 2036
WASTEWATER: FY 15/16 FUND BALANCE

- Contamination Prevention: $1.90 (33%)
- Connection Fee: $0.60 (10%)
- Operating Fund: $3.35 (57%)

Total: $5.85 million
Rehabilitate wastewater treatment plant (Community Forum)
Complete utility rate study
Replace contract staffed positions
Reduce contracted engineering and maintenance support
Wastewater – Challenges / Unmet Needs

- 20 years+ of deferred maintenance
- Funding for plant rehabilitation
  - Sea level rise / flooding
- Filling vacancies
  - Operator overtime due to vacancies
  - Contracting top 2 staff positions
• **Capital Improvement**
  - Optimizing existing systems will allow bio-tower to be decommissioned now saving approx. $10 mil and increasing energy efficiency.
    - Rehab primary, and secondary; remove bio-tower
  - Successful pilot study for odor control in the collection system may allow delay of some manhole rehab for 5 yrs.

• **Labor** ($8.5 million/26% of budget)
  - Improved use of existing automation of wastewater operations allowed for the startup of the AWPF with existing staff saving 1 FTE
  - Upgrade automation system to save 1 FTE
  - Sharing roll off driver with ER to save 0.5 FTE
  - Change shifts to enable the Wastewater Maintenance personnel to support the treatment plant, AWPF, and Water Department Maintenance to save approx. 0.5 FTE

• **Indirect Cost** ($4.9 million/15% of budget)
  - Postpone paying $2.3 infrastructure use fee for street maintenance until water rates are increased
Wastewater – Opportunities

- **Utilities ($3.8 million/11% of budget)**
  - Cogeneration power production. Requires two engine rebuilds at $180,000 each.

- **Contract Services ($2.3 million/7% of budget)**
  - In house Laboratory testing to save $20,000/yr
  - Change influent odor control treatment chemicals to save $100,000/yr
  - In–house pipe fitting, welding, machine work, fabrication, plumbing and fleet repair to save $25,000/yr.

- **Shop & Field ($1.5 million/4% of budget)**
  - Perform more in house repairs for routine maintenance
  - Rebuild cogeneration engines will reduce required maintenance
  - Odor control system to reduce H2S in collection system
COMPLIANCE & SUPPLY MANAGEMENT
Fees have not been adjusted recently

Inefficient backflow preventer testing program

Enforcement programs based on self reporting
**COMP. & SUPPLY—Opportunities**

- **Source Control**
  - Increase efficiency through automation and process improvement
  - Work with business licensing and planning to ensure fee collection
  - Adjust fees
  - Increase City and independent testing to ensure compliance

- **Water Quality**
  - Adjust fees
  - Cross connection control
    - Short term - Automate backflow notification process
    - Long term – Re-engineer testing process to be proactive
ENGINEERING & MAINTENANCE
• Vacancies
• Consultant cost
• Arterial street condition
Engineering – Opportunities

- **Consultants**
  - Fill 11 vacancies to replace consultants – Save approx. $1.4 million/yr

- **Streets**
  - Begin regular crack fill/seal program – Save approx. $1 million/yr
  - Arterial stop-gap project to postpone $28 million in arterial projects for 5 to 8 years