AGENDA

HENDERSON WATER & SEWER COMMISSION
(270) 826-2421

June 20, 2016
Monday @ 4:30pm

A. ROLL CALL

B. INVOCATION

C. RECOGNITION FOR 20 YEARS OF SERVICE
   - JERRY BASHAM - NWWTP
   - NANCY PARKER - SWTP
   - JEREMY STORCKMAN - SWTP

D. APPROVAL OF MINUTES
   - Approval of Minutes from May 16, 2016

E. MONTHLY REPORTS
   - Financial
   - Operations
   - Engineering
   - Human Resources
   - Safety Report
   - General Manager’s
     o Approval of Technical Standards Manual for Water Facilities

F. BUSINESS
   - Action Report #2016-14 – Wonderware Historian Replacement
   - Action Report #2016-15 – South Main Street Sewer Replacement Project
   - Resolution #2016-16 – Approval of Requests for Wastewater Service
     Outside the City Limits in Finley Addition
G. EXECUTIVE SESSION – *Requested*

- To discuss matters regarding future acquisition of real property pursuant to KRS 61.810 (1) (b)
RECOGNITION FOR 20 YEARS OF SERVICE

• JERRY BASHAM

• NANCY PARKER

• JEREMY STORCKMAN
ACTION MINUTES OF MEETING
May 16, 2016
ACTION MINUTES
MAY 16, 2016
HENDERSON WATER & SEWER COMMISSION

A. ROLL CALL

Present at the meeting was Commissioner Paul Bird, Chairman, who presided over the meeting, along with Commissioners George Jones, John Henderson, Gary Jennings, and Julie Wischer. General Manager, Tom Williams and Eric Shappell, Attorney were also present. Other Staff members present were Rodney Michael, Leason Neel, Tim Fischbeck, John Baker and Patty Brown. Also in attendance were Assistant City Manager, Buzzy Newman; Mayor, Steve Austin; and Laura Acchiardo with “The Gleaner”. Others in attendance included Delbert Meuth, Roger Meuth, Aaron Meuth, and Austin Vowels.

B. INVOCATION - Tim Fischbeck

C. REQUEST TO ADDRESS THE BOARD

- Meuth Concrete

Delbert Meuth, Roger Meuth and Aaron Meuth representing Meuth Concrete addressed the board questioning why they have to pay sewer charges on water that is used to mix concrete. They explained that it gives them a disadvantage in bidding jobs with some of their competitors who do not have to pay the sewer charge. Rodney Michael stated that HWU has a combined water/wastewater rate structure. He indicated that there are other customers that use water in their processes that are also charged in this way. The rate structure would have to be revamped somehow and that process will take some time. The board acknowledged the Meuth’s concerns and stated that rate changes are something that are being looked at, but this is not an easy task. The difficulty is trying to maintain a reasonable cost for residential customers but also being fair to commercial and industry customers. The board assured them that they understand the need to be competitive in their business, but at this time the rate structure will probably stay the same.

D. APPROVAL OF MINUTES

- Approval of Minutes from April 18, 2016

Minutes were approved as submitted.
E. MONTHLY REPORTS

- Financial – Discussed and approved as submitted.

Leason Neel noted one thing on the Variance Analysis concerning the inventory expense. As seen in the Revenue & Expense Summary there are items in inventory that will eventually be capitalized so it will come out of that expense and be put in capital projects.

Staff also addressed the Electricity Expense numbers that were higher due to the startup of the North Wastewater Plant’s new UV equipment. This is something that should go down some in the future, because at startup the equipment ran constantly.

Commissioner Paul Bird asked if a report could be furnished to the board members showing volumetric breakdowns for the last several years. Leason Neel advised that he would gather the information and provide it to the board next month.

- Operations – Discussed and approved as submitted.

Rodney Michael pointed out that the CityWorks software has been in use for a year now. He stated that it is working well, but that there are still a lot of things that can be learned about the system. There is a lot of useful information that can be obtained through the system which can point out trouble areas and this can be helpful in scheduling routine maintenance for certain problems. It also helps with costing information since each work order contains labor hours, materials used, and equipment used. This data helps to determine how much it costs to do certain jobs.

- Engineering – Discussed and approved as submitted.

  o Strategic Plan for Capital Spending

Tom Williams reviewed the Strategic Plan for Capital Spending with the board noting that a section had been added which addresses risk factors that the utility has. The board discussed how the totals for capital projects needed each year are in excess of the funds available.

- Human Resources – Discussed and approved as submitted.

- Safety Report – Discussed and approved as submitted.

Tom Williams noted that the North Water Treatment Plant, the South Water Treatment Plant, and the South Wastewater Treatment Plant have been presented the Thoroughbred Safety and Health Award for 24 months of continuous operation without a lost time incident.
• General Manager’s – Discussed and approved as submitted.

  Tom Williams reviewed the GM Report with the board and highlighted the fact that the Independence Bank depository agreement has been renewed for a year.

F. BUSINESS

• Action Report #2016-13 – Sugar Creek Bank Stabilization Project

  After review and discussion, motion was made and approved to accept Action Report #2016-13 – Sugar Creek Bank Stabilization Project to stabilize the bank along a section of Sugar Creek behind Grandy’s where a large diameter sanitary sewer pipe has been exposed. The estimated cost of this repair is $50,000 and will be taken out of the “Unidentified Capital Projects” line item in the budget.

• 2016-2017 Budget Review and Approval

  Tom Williams reviewed the 2016-17 Budget with the board. Revenues listed at $18,629,010, will stay the same as the previous year and expenses, listed as $18,038,112, will increase by 5.28% from last year. The increase is largely due to higher projected costs for salaries, benefits, pension contributions, and power. The personnel changes included in the summary were also discussed.

  The Capital Budget includes a total of $3,424,400. Capital projects, vehicles, and equipment will be included in this amount. Again this year, capital projects will be identified as the year goes by and each project will be brought before the board in the form of an Action Report.

  The board discussed the items in the budget and requested that completion of unidentified capital projects wait until further in the budget year in case some type of unforeseen critical repair needs to be taken care of. The exceptions to this would be if the projects are considered critical or if it would cost more money to complete the project at a later date.

  Mr. Williams reported that an updated Cash Flow Projection will be included in next month’s board packet to reflect the new budget. He noted that the next few years will be tight as far as funds go for additional capital projects.

  The board continued to discuss the need for a different rate structure and agreed that this will have to be addressed soon with different scenarios making sure that revenue does not decline and keeps up with the infrastructure needs of the utility. It was reiterated that any change in rate structure is going to affect certain groups of customers differently; some positively and some negatively.

  Motion was made by Commissioner Julie Wischer and seconded by Commissioner Gary Jennings to accept the 2016-2017 budget as presented and directed the GM to
present it to the Henderson City Commission for their approval. All members voted Aye.

G. EXECUTIVE SESSION – Requested

- To discuss matters that might lead to the appointment, dismissal, or discipline of an individual employee pursuant to KRS 61.810 (1) (f)

Motion was made and approved to go into Executive Session to discuss matters that might lead to the appointment, dismissal, or discipline of an individual employee pursuant to KRS 61.810 (1) (f).

Motion was made and approved to return to Regular Session.

Upon return from Executive Session, the motion was made by George Jones, seconded by Julie Wischer and approved unanimously to have Tom Williams, as General Manager, and Paul Bird, as Chairman of the Board, to negotiate a contract with Todd Bowley who was selected to fill the position of Chief Financial Officer.

Motion was made and approved to adjourn.

The next monthly meeting will be held on June 20, 2016.
FINANCIAL REPORT
Henderson Water Utility
Financial Summary
For Eleven Months Ended May 31, 2016
### Henderson Water Utility

**Operating Revenues and Expenses Summary**

**For the Eleven Months Ended May 31, 2016**

<table>
<thead>
<tr>
<th></th>
<th>May Actual</th>
<th>May Budget</th>
<th>Year to Date Actual</th>
<th>Year to Date Budget</th>
<th>Fiscal Year Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating Revenues</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Sales</td>
<td>575,520$</td>
<td>629,694$</td>
<td>6,740,398$</td>
<td>7,006,631$</td>
<td>7,556,325$</td>
</tr>
<tr>
<td>Water Penalties</td>
<td>2,094</td>
<td>2,370</td>
<td>26,094$</td>
<td>26,065$</td>
<td>28,435$</td>
</tr>
<tr>
<td>Water Fees</td>
<td>540</td>
<td>4,022</td>
<td>35,224$</td>
<td>44,243$</td>
<td>48,265$</td>
</tr>
<tr>
<td>Wastewater Services</td>
<td>888,814$</td>
<td>897,372$</td>
<td>9,490,796$</td>
<td>9,766,087$</td>
<td>10,768,458$</td>
</tr>
<tr>
<td>Wastewater Penalties</td>
<td>3,141</td>
<td>3,161</td>
<td>40,503$</td>
<td>34,771$</td>
<td>37,932$</td>
</tr>
<tr>
<td>Wastewater Fees</td>
<td>12,610</td>
<td>15,800</td>
<td>293,538$</td>
<td>173,795$</td>
<td>189,595$</td>
</tr>
<tr>
<td><strong>Total Operating Revenues</strong></td>
<td>1,482,719$</td>
<td>1,552,418$</td>
<td>16,626,553$</td>
<td>17,051,593$</td>
<td>18,629,010$</td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries and Wages</td>
<td>320,470$</td>
<td>336,472$</td>
<td>3,737,907$</td>
<td>3,953,545$</td>
<td>4,374,135$</td>
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<tr>
<td>Payroll Taxes</td>
<td>22,623</td>
<td>26,491</td>
<td>265,755$</td>
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<tr>
<td>Workers Compensation</td>
<td>(92)</td>
<td></td>
<td>75,813$</td>
<td>99,836$</td>
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<tr>
<td>Other Employee Benefits</td>
<td>1,205</td>
<td>2,044</td>
<td>18,093$</td>
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<td>24,524$</td>
</tr>
<tr>
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<td>$ 1,495,700$</td>
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Henderson Water Utility

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</tr>
</tbody>
</table>

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11
Henderson Water Utility
Variance Analysis
Eleven Months Ended 05/31/2016

Actual Operating Revenues $ 16,626,553
Budgeted Operating Revenues 17,051,593
Favorable (Unfavorable) Variance $ (425,040)
Percentage Difference -2.49%

Billable Gallons
Through 05/31/2016 2,225,573,918
Through 05/31/2015 2,285,439,314
Difference (59,865,396)
Percentage Difference -2.62%

Actual Operating Expenses $ 15,005,918
Budgeted Operating Expenses 15,688,560
Favorable (Unfavorable) Variance $ 682,642
Percentage Difference 4.35%

Breakdown of Volumetric Differential For Eleven Months Ended:

<table>
<thead>
<tr>
<th></th>
<th>May-16</th>
<th>May-15</th>
<th>Differential %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>565,888,899</td>
<td>568,147,214</td>
<td>-0.40%</td>
</tr>
<tr>
<td>Industrial</td>
<td>953,049,629</td>
<td>1,003,045,363</td>
<td>-4.98%</td>
</tr>
<tr>
<td>Commercial</td>
<td>706,635,390</td>
<td>714,246,737</td>
<td>-1.07%</td>
</tr>
</tbody>
</table>

Revenue Summary: Revenues will end the year below budget due to lower volumes sold and increased stormwater cost allocation due to added emphasis on fixing these problems over the last couple of years.

Expense Summary: Expenses should be in line or slightly favorable to budget for year. While payroll related expenses and depreciation will be favorable to budget, utilities, various supplies and contractual services are going to be over budget.
**Henderson Water Utility**

**Capital Expenditures Report**

**For the Eleven Months Ended May 31, 2016**

### Construction In Progress:

<table>
<thead>
<tr>
<th></th>
<th>Beginning Balance</th>
<th>Current MTD Activity</th>
<th>Current YTD Activity</th>
<th>Project to Date Balance</th>
<th>Fiscal Year Budget</th>
<th>Total Capital Budget</th>
<th>Action Report No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center &amp; Julia</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ 100</td>
<td></td>
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<tr>
<td>Pump Station Modifications</td>
<td>27,545</td>
<td>-</td>
<td>-</td>
<td>27,545</td>
<td>110,000</td>
<td>110,000</td>
<td>13-14</td>
</tr>
<tr>
<td>US 60 Reimbursable</td>
<td>6,398</td>
<td>6,398</td>
<td>6,398</td>
<td>1,000</td>
<td>1,000</td>
<td>16-06</td>
<td></td>
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<tr>
<td>US 60W Water Booster Station</td>
<td>83,846</td>
<td>-</td>
<td>157,943</td>
<td>241,589</td>
<td>142,000</td>
<td>242,000</td>
<td>06/16 GMR</td>
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<tr>
<td>NWWT Headworks Project</td>
<td>10,970,179</td>
<td>13,173</td>
<td>2,234,952</td>
<td>13,241,131</td>
<td>2,650,960</td>
<td>13,630,139</td>
<td>13-24</td>
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<tr>
<td>NWTP Rehab</td>
<td>302,015</td>
<td>137,369</td>
<td>1,047,130</td>
<td>1,349,145</td>
<td>1,661,226</td>
<td>1,661,226</td>
<td>15-11</td>
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<tr>
<td>SWTP Rehab</td>
<td>213,891</td>
<td>41,900</td>
<td>420,301</td>
<td>634,192</td>
<td>330,000</td>
<td>655,100</td>
<td>15-09</td>
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<tr>
<td>Countryview Subdivision Stormwater</td>
<td>41,488</td>
<td>-</td>
<td>8,097</td>
<td>49,585</td>
<td>400,000</td>
<td>400,000</td>
<td>14-53</td>
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<tr>
<td>Frontier Tank Project</td>
<td>14,111</td>
<td>11,509</td>
<td>540,451</td>
<td>554,562</td>
<td>655,800</td>
<td>655,800</td>
<td>15-13</td>
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<tr>
<td>Cooper Park Stormwater</td>
<td>138,646</td>
<td>-</td>
<td>116,409</td>
<td>255,054</td>
<td>346,000</td>
<td>346,000</td>
<td>15-10</td>
</tr>
<tr>
<td>South Main &amp; Drury Stormwater</td>
<td>10,691</td>
<td>-</td>
<td>1,580</td>
<td>12,171</td>
<td>35,000</td>
<td>35,000</td>
<td>14-51</td>
</tr>
<tr>
<td>Atkinson Park Watershed</td>
<td>-</td>
<td>7,086</td>
<td>142,139</td>
<td>149,219</td>
<td>198,500</td>
<td>198,500</td>
<td>15-14</td>
</tr>
<tr>
<td>College Tank</td>
<td>-</td>
<td>2,224</td>
<td>5,062</td>
<td>5,062</td>
<td>15,000</td>
<td>15,000</td>
<td>15-03</td>
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<tr>
<td>Vine Street Tank</td>
<td>-</td>
<td>-</td>
<td>33,000</td>
<td>33,000</td>
<td>35,000</td>
<td>1,083,000</td>
<td>15-06</td>
</tr>
<tr>
<td>Finley Addition</td>
<td>-</td>
<td>1,801</td>
<td>6,657</td>
<td>6,657</td>
<td>20,000</td>
<td>20,000</td>
<td>15-30</td>
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<tr>
<td>6th Street Water Main</td>
<td>-</td>
<td>1,801</td>
<td>1,801</td>
<td>1,801</td>
<td>70,000</td>
<td>70,000</td>
<td>15-32</td>
</tr>
<tr>
<td>Clarifier Paint &amp; Pipe</td>
<td>-</td>
<td>43,156</td>
<td>58,156</td>
<td>58,156</td>
<td>215,000</td>
<td>215,000</td>
<td>16-05</td>
</tr>
<tr>
<td>North Main Street Pressure</td>
<td>-</td>
<td>1,467</td>
<td>15,134</td>
<td>15,134</td>
<td>315,000</td>
<td>315,000</td>
<td>16-07</td>
</tr>
<tr>
<td>SWTP Building</td>
<td>-</td>
<td>4,884</td>
<td>4,883</td>
<td>4,883</td>
<td>17,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sugar Creek Bank</td>
<td>7</td>
<td>7</td>
<td>50,000</td>
<td>50,000</td>
<td>50,000</td>
<td>50,000</td>
<td>16-13</td>
</tr>
<tr>
<td>S Main St Sewer</td>
<td>-</td>
<td>2,082</td>
<td>2,082</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Special Projects</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1,187</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Construction In Progress</strong></td>
<td><strong>11,811,111</strong></td>
<td><strong>273,044</strong></td>
<td><strong>4,802,182</strong></td>
<td><strong>16,813,293</strong></td>
<td><strong>7,233,773</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Buildings and Improvements:

<table>
<thead>
<tr>
<th></th>
<th>Beginning Balance</th>
<th>Current MTD Activity</th>
<th>Current YTD Activity</th>
<th>Project to Date Balance</th>
<th>Fiscal Year Budget</th>
<th>Total Capital Budget</th>
<th>Action Report No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC Bldg Roof</td>
<td>13,991</td>
<td>-</td>
<td>-</td>
<td>13,991</td>
<td>34,125</td>
<td>15-12</td>
<td>14-23</td>
</tr>
<tr>
<td>NWWT/TP Digestor Blower</td>
<td>-</td>
<td>22,375</td>
<td>22,375</td>
<td>23,000</td>
<td>23,000</td>
<td>23,000</td>
<td>15-17</td>
</tr>
<tr>
<td>Blower Bldg # 1 Roof</td>
<td>-</td>
<td>11,543</td>
<td>11,543</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admin Bldg Improvements</td>
<td>18,272</td>
<td>4,551</td>
<td>251,252</td>
<td>269,524</td>
<td>280,000</td>
<td>280,000</td>
<td>15-25</td>
</tr>
<tr>
<td>Sludge Storage Bldg</td>
<td>9,188</td>
<td>1,323</td>
<td>163,085</td>
<td>172,273</td>
<td>150,000</td>
<td>150,000</td>
<td>15-04</td>
</tr>
<tr>
<td><strong>Total Buildings and Improvements</strong></td>
<td><strong>41,451</strong></td>
<td><strong>5,874</strong></td>
<td><strong>448,255</strong></td>
<td><strong>489,706</strong></td>
<td><strong>453,100</strong></td>
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<td></td>
</tr>
</tbody>
</table>

### Equipment and Vehicles:

<table>
<thead>
<tr>
<th></th>
<th>Beginning Balance</th>
<th>Current MTD Activity</th>
<th>Current YTD Activity</th>
<th>Project to Date Balance</th>
<th>Fiscal Year Budget</th>
<th>Total Capital Budget</th>
<th>Action Report No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>130,257</td>
<td>235,000</td>
<td></td>
</tr>
<tr>
<td>Virtual Server</td>
<td>-</td>
<td>-</td>
<td>40,160</td>
<td>40,160</td>
<td>45,000</td>
<td>45,000</td>
<td>15-23</td>
</tr>
<tr>
<td>Generator</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>25,000</td>
<td>25,000</td>
<td></td>
</tr>
<tr>
<td>Tapping Machines</td>
<td>-</td>
<td>-</td>
<td>9,439</td>
<td>9,439</td>
<td>23,310</td>
<td>23,310</td>
<td>14-32&amp; 52</td>
</tr>
<tr>
<td>Work Order Mgmt. System</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Transformers</td>
<td>-</td>
<td>34,584</td>
<td>46,909</td>
<td>46,909</td>
<td>20,000</td>
<td>20,000</td>
<td>16-03</td>
</tr>
<tr>
<td>Engineering Plotter</td>
<td>-</td>
<td>-</td>
<td>9,602</td>
<td>9,602</td>
<td>9,602</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organic Carbon Analyzer</td>
<td>-</td>
<td>-</td>
<td>66,216</td>
<td>66,216</td>
<td>70,000</td>
<td>70,000</td>
<td></td>
</tr>
<tr>
<td>Equipment Trailer</td>
<td>-</td>
<td>-</td>
<td>16,684</td>
<td>16,684</td>
<td>16,684</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trench Piling</td>
<td>-</td>
<td>-</td>
<td>18,059</td>
<td>18,059</td>
<td>18,059</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicles</td>
<td>-</td>
<td>-</td>
<td>194,588</td>
<td>194,588</td>
<td>191,197</td>
<td>191,197</td>
<td>15-24</td>
</tr>
<tr>
<td>Camera Tractor</td>
<td>-</td>
<td>-</td>
<td>8,554</td>
<td>8,554</td>
<td>9,000</td>
<td>9,000</td>
<td></td>
</tr>
<tr>
<td>Wash Truck</td>
<td>-</td>
<td>-</td>
<td>220,547</td>
<td>220,547</td>
<td>230,000</td>
<td>230,000</td>
<td>15-19</td>
</tr>
<tr>
<td><strong>Total Equipment and Vehicles</strong></td>
<td><strong>34,584</strong></td>
<td><strong>630,728</strong></td>
<td><strong>630,728</strong></td>
<td><strong>788,209</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Total Capital Expenditures

<table>
<thead>
<tr>
<th></th>
<th>Beginning Balance</th>
<th>Current MTD Activity</th>
<th>Current YTD Activity</th>
<th>Project to Date Balance</th>
<th>Fiscal Year Budget</th>
<th>Total Capital Budget</th>
<th>Action Report No.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ 11,852,562</td>
<td>$ 313,503</td>
<td>$ 5,881,165</td>
<td>$ 17,733,727</td>
<td>$ 8,380,836</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Henderson Water Utility
Financial Statements
For Eleven Months Ended May 31, 2016
Henderson Water Utility  
Statement of Net Position  
May 31, 2016

**ASSETS**

Current assets:
- Cash $7,600,114
- Unrestricted Investments 1,103,996
- Restricted Investments 505,122
- Accounts receivable 1,259,705
- Inventories 902,859
  - Total current assets 11,371,796

Noncurrent assets:
- Construction in progress 16,613,286
- Utility plant and equipment, net of accumulated depreciation 64,618,169
- Other assets 110,928
  - Total noncurrent assets 81,342,383

Deferred outflows of resources 655,170

Total assets $93,369,349

**LIABILITIES**

Current liabilities:
- Accounts payable $258,227
- Retainage payable 464,389
- Deposits payable 84,834
- Accrued liabilities 1,668,529
  - Current portion of long-term debt -
  - Total current liabilities 2,475,979

Noncurrent liabilities:
- Accrued pension liability 5,018,088
- Long-term debt 40,032,239
  - Total noncurrent liabilities 45,050,327

Deferred inflows of resources 560,000

Total liabilities 48,086,306

**NET POSITION**

Net investment in capital assets 41,310,144
- Restricted for debt service 505,121
- Unrestricted 3,467,778
  - Total net position 45,283,043

Total liabilities and net position $93,369,349
### Henderson Water Utility

**Statement of Revenues, Expenses, and Changes in Net Position**

*For the Eleven Months Ended May 31, 2016*

#### OPERATING REVENUES

<table>
<thead>
<tr>
<th></th>
<th>May Actual</th>
<th>May Budget</th>
<th>Year to Date Actual</th>
<th>Year to Date Budget</th>
<th>Fiscal Year Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water sales and fees</strong></td>
<td>$578,154</td>
<td>$636,085</td>
<td>$6,601,716</td>
<td>$7,076,937</td>
<td>$7,633,025</td>
</tr>
<tr>
<td><strong>Wastewater services and fees</strong></td>
<td>904,565</td>
<td>916,332</td>
<td>9,824,837</td>
<td>9,974,657</td>
<td>10,995,985</td>
</tr>
<tr>
<td><strong>Total operating revenues</strong></td>
<td>1,482,719</td>
<td>1,552,417</td>
<td>16,426,553</td>
<td>17,051,594</td>
<td>18,629,010</td>
</tr>
</tbody>
</table>

#### OPERATING EXPENSES

<table>
<thead>
<tr>
<th></th>
<th>May Actual</th>
<th>May Budget</th>
<th>Year to Date Actual</th>
<th>Year to Date Budget</th>
<th>Fiscal Year Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Salaries, wages, and benefits</strong></td>
<td>515,154</td>
<td>537,442</td>
<td>6,917,356</td>
<td>6,267,264</td>
<td>6,885,613</td>
</tr>
<tr>
<td><strong>Contractual services</strong></td>
<td>176,397</td>
<td>180,697</td>
<td>1,935,170</td>
<td>2,039,339</td>
<td>2,235,867</td>
</tr>
<tr>
<td><strong>Supplies and materials</strong></td>
<td>169,773</td>
<td>134,079</td>
<td>1,583,233</td>
<td>1,493,844</td>
<td>1,627,925</td>
</tr>
<tr>
<td><strong>Utilities expense</strong></td>
<td>134,954</td>
<td>119,513</td>
<td>1,389,648</td>
<td>1,327,755</td>
<td>1,447,204</td>
</tr>
<tr>
<td><strong>Repairs and maintenance</strong></td>
<td>52,959</td>
<td>44,063</td>
<td>742,587</td>
<td>731,129</td>
<td>759,357</td>
</tr>
<tr>
<td><strong>Depreciation</strong></td>
<td>291,666</td>
<td>291,667</td>
<td>2,908,333</td>
<td>3,208,336</td>
<td>3,500,000</td>
</tr>
<tr>
<td><strong>Total operating expenses</strong></td>
<td>1,392,355</td>
<td>1,363,906</td>
<td>15,005,918</td>
<td>15,688,562</td>
<td>17,133,310</td>
</tr>
</tbody>
</table>

**Operating income**  
90,364  
188,511  
1,620,635  
1,363,032  
1,495,700

#### NONOPERATING REVENUES (EXPENSES)

<table>
<thead>
<tr>
<th></th>
<th>May Actual</th>
<th>May Budget</th>
<th>Year to Date Actual</th>
<th>Year to Date Budget</th>
<th>Fiscal Year Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Investment income</strong></td>
<td>4,116</td>
<td>2,083</td>
<td>46,779</td>
<td>22,917</td>
<td>25,000</td>
</tr>
<tr>
<td><strong>Other income</strong></td>
<td>600</td>
<td>-</td>
<td>38,821</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Interest expense</strong></td>
<td>(97,845)</td>
<td>(100,748)</td>
<td>(1,088,258)</td>
<td>(1,108,227)</td>
<td>(1,208,973)</td>
</tr>
<tr>
<td><strong>Total nonoperating revenues (expenses)</strong></td>
<td>(92,328)</td>
<td>(100,135)</td>
<td>(1,016,749)</td>
<td>(1,101,482)</td>
<td>(1,201,615)</td>
</tr>
</tbody>
</table>

**Income (loss) before capital contributions and distribution**  
(1,964)  
88,376  
603,886  
261,550  
294,085

**Capital contributions**  
-  
100,000  
195,008  
333,411  
377,411

**Distribution to City of Henderson**  
-  
-  
-  
-  
-(400,000)

**Change in net position**  
(1,964)  
188,376  
798,894  
594,961  
271,496

**Net position, beginning of period**  
45,285,007  
44,890,733  
44,484,149  
44,484,149  
44,484,149

**Net position, end of period**  
$45,283,043  
$45,079,109  
$45,283,043  
$45,079,110  
$44,755,645

16
Henderson Water Utility  
Statement of Cash Flows  
For the Eleven Months Ended May 31, 2016

<table>
<thead>
<tr>
<th></th>
<th>May</th>
<th>Year to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CASH FLOWS FROM OPERATING ACTIVITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receipts from customers</td>
<td>$1,462,626</td>
<td>$16,355,632</td>
</tr>
<tr>
<td>Payments for goods and services</td>
<td>(640,469)</td>
<td>(6,080,921)</td>
</tr>
<tr>
<td>Payments for employees</td>
<td>(515,154)</td>
<td>(5,912,058)</td>
</tr>
<tr>
<td><strong>Net cash provided (used) by operating activities</strong></td>
<td>307,003</td>
<td>4,362,653</td>
</tr>
</tbody>
</table>

| **CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES** |            |              |
| Distribution to City of Henderson | -          | -            |
| **Net cash provided (used) by noncapital financing activities** | -          | -            |

| **CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES** |            |              |
| Acquisition and construction of capital assets | (418,085)  | (6,408,085)  |
| Principal payments on long-term debt | -          | (13,764,603) |
| Interest payments on long-term debt | (25,742)   | (1,319,978)  |
| Bond proceeds, net of closing costs | -          | 11,622,103   |
| Capital contributions | -          | 195,008      |
| **Net cash provided (used) by capital and related financing activities** | (443,827)  | (9,675,555)  |

| **CASH FLOWS FROM INVESTING ACTIVITIES** |            |              |
| Investment and other income received | 4,806      | 85,787       |
| Investments proceeds | 65,163     | 1,709,886    |
| Investments purchases | (29,668)  | (328,638)    |
| **Net cash provided (used) by investing activities** | 40,301     | 1,467,035    |
| **Net increase (decrease) in cash** | (96,523)   | (3,845,867)  |
| **Cash, beginning of period** | 7,696,637  | 11,445,981   |
| **Cash, end of period** | $7,600,114 | $7,600,114   |
Henderson Water Utility
Other Financial Highlights
As of June 2016
## Henderson Water Utility
### Projected Cash Flows

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Projected Operating Revenues</strong></td>
<td>14,687,498.00</td>
<td>14,746,532.00</td>
<td>16,107,887.17</td>
<td>15,734,477.00</td>
<td>17,732,340.00</td>
<td>17,605,009.00</td>
<td>18,101,009.84</td>
<td>18,629,010.00</td>
<td>19,471,318.96</td>
<td>20,355,478.53</td>
<td></td>
</tr>
<tr>
<td><strong>Projected Operating Expenses</strong></td>
<td>12,961,663.00</td>
<td>13,188,295.00</td>
<td>14,206,053.43</td>
<td>14,429,794.00</td>
<td>15,087,150.19</td>
<td>15,419,716.00</td>
<td>17,133,310.00</td>
<td>18,038,112.00</td>
<td>18,579,255.36</td>
<td>19,136,633.02</td>
<td></td>
</tr>
<tr>
<td><strong>Net Operating Income</strong></td>
<td>1,725,835.00</td>
<td>1,558,237.00</td>
<td>1,901,833.74</td>
<td>1,304,683.00</td>
<td>2,937,565.66</td>
<td>2,576,884.00</td>
<td>2,185,293.00</td>
<td>590,898.00</td>
<td>892,063.60</td>
<td>1,218,845.51</td>
<td></td>
</tr>
<tr>
<td><strong>Projected Depreciation</strong></td>
<td>2,357,741.00</td>
<td>2,398,941.00</td>
<td>2,465,606.70</td>
<td>2,546,946.00</td>
<td>2,565,136.21</td>
<td>3,003,332.00</td>
<td>3,325,565.00</td>
<td>3,500,000.00</td>
<td>3,500,000.00</td>
<td>3,500,000.00</td>
<td></td>
</tr>
<tr>
<td><strong>Current Asset/Liability Changes</strong></td>
<td>1,177,579.00</td>
<td>-166,684.00</td>
<td>-1,055,028.50</td>
<td>997,765.00</td>
<td>472,515.00</td>
<td>734,025.00</td>
<td>320,960.00</td>
<td>117,579.00</td>
<td>-822,000.00</td>
<td>-822,000.00</td>
<td></td>
</tr>
<tr>
<td><strong>Net Cash Operating Income</strong></td>
<td>3,965,997.00</td>
<td>3,790,494.00</td>
<td>3,312,411.94</td>
<td>4,849,394.00</td>
<td>5,030,186.87</td>
<td>4,846,191.00</td>
<td>5,831,818.00</td>
<td>4,090,898.00</td>
<td>4,392,063.60</td>
<td>4,718,845.51</td>
<td></td>
</tr>
<tr>
<td><strong>Debt Service</strong></td>
<td>1,483,432.00</td>
<td>1,484,984.44</td>
<td>1,634,501.18</td>
<td>2,182,623.87</td>
<td>2,801,449.00</td>
<td>3,431,481.11</td>
<td>3,190,855.16</td>
<td>3,242,554.72</td>
<td>3,226,555.52</td>
<td>3,234,139.44</td>
<td></td>
</tr>
<tr>
<td><strong>Proceeds From Debt Assumed</strong></td>
<td>-</td>
<td>-</td>
<td>10,000,000.00</td>
<td>9,817,515.00</td>
<td>9,848,182.72</td>
<td>8,045,812.39</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>Capital Spending on Separation Projects</strong></td>
<td>1,753,370.38</td>
<td>1,604,446.88</td>
<td>7,774,875.46</td>
<td>6,255,939.59</td>
<td>11,490,282.18</td>
<td>4,700,666.45</td>
<td>6,790,059.00</td>
<td>2,650,960.00</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td><strong>Estimated Other Capital Spending</strong></td>
<td>1,968,743.62</td>
<td>3,182,122.12</td>
<td>185,798.54</td>
<td>3,533,924.41</td>
<td>3,839,629.97</td>
<td>513,423.55</td>
<td>1,285,455.00</td>
<td>4,805,476.00</td>
<td>3,424,400.00</td>
<td>1,500,000.00</td>
<td></td>
</tr>
<tr>
<td><strong>PILOT Payment</strong></td>
<td>400,000.00</td>
<td>400,000.00</td>
<td>400,000.00</td>
<td>400,000.00</td>
<td>400,000.00</td>
<td>400,000.00</td>
<td>400,000.00</td>
<td>400,000.00</td>
<td>400,000.00</td>
<td>400,000.00</td>
<td></td>
</tr>
<tr>
<td><strong>Contributed Capital and Investment Income</strong></td>
<td>351,915.00</td>
<td>527,371.00</td>
<td>487,726.00</td>
<td>757,693.54</td>
<td>1,189,508.00</td>
<td>881,675.12</td>
<td>207,968.00</td>
<td>286,808.00</td>
<td>275,000.00</td>
<td>30,640.20</td>
<td>26,276.32</td>
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<tr>
<td><strong>Change In Unrestricted Cash and Investments</strong></td>
<td>(1,287,634.00)</td>
<td>(2,353,688.44)</td>
<td>3,804,962.76</td>
<td>3,052,573.23</td>
<td>(12,311,666.28)</td>
<td>6,530,477.73</td>
<td>2,419,229.23</td>
<td>(5,905,507.16)</td>
<td>(2,701,056.72)</td>
<td>(703,851.72)</td>
<td>(389,017.61)</td>
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<td><strong>Unrestricted Cash and Investments</strong></td>
<td>12,406,643.00</td>
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<td>13,857,917.32</td>
<td>16,910,490.55</td>
<td>4,598,824.27</td>
<td>11,129,302.00</td>
<td>13,548,531.23</td>
<td>7,643,024.07</td>
<td>4,941,967.35</td>
<td>4,238,115.63</td>
<td>3,849,098.02</td>
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<tr>
<td><strong>Debt Service Coverage</strong></td>
<td>2.66</td>
<td>2.65</td>
<td>1.53</td>
<td>1.72</td>
<td>1.79</td>
<td>1.37</td>
<td>1.73</td>
<td>1.42</td>
<td>1.24</td>
<td>1.19</td>
<td>1.28</td>
</tr>
</tbody>
</table>

**Assumptions:**
- Rate increase of 5.85% each 7/1/ through 7/1/18.
- PILOT payment remains $400,000 a year.
- New Contract rates go into effect based on audited cost throughout year ending 6/30/2018.
- Projected Operating Expenses Increase @ 3.0% a year
<table>
<thead>
<tr>
<th>Year Ended June 30</th>
<th>Average Usage 2002-2015</th>
<th>Last Year Above</th>
<th>Henderson Water Utility</th>
<th>Water Usage (in Gallons)</th>
<th>Average Usage</th>
<th>Last Year Above</th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>721,032,571</td>
<td>750,816,487</td>
<td>721,857,441</td>
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<td></td>
<td>698,116,499</td>
<td>698,172,112</td>
<td>665,420,178</td>
<td>655,179,533</td>
<td>633,425,396</td>
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<td>687,298,673</td>
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<td></td>
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<tr>
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<td>1,495,814,802</td>
<td>1,494,132,359</td>
<td>1,844,886,218</td>
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<td></td>
<td>1,219,932,261</td>
<td>1,215,315,153</td>
<td>1,089,655,337</td>
<td>1,097,876,573</td>
<td>1,103,429,864</td>
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<tr>
<td>Commercial</td>
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<td>960,973,646</td>
<td>961,877,053</td>
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<td></td>
<td>932,666,707</td>
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<td>818,530,078</td>
<td>796,118,017</td>
<td>910,620,466</td>
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</table>
### Number of Customers/Meters
#### Year Ended June 30

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2015</th>
<th>Change</th>
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</thead>
<tbody>
<tr>
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<td>9740</td>
<td>9767</td>
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<tr>
<td>Industrial</td>
<td>63</td>
<td>53</td>
<td>-15.87%</td>
</tr>
<tr>
<td>Commercial</td>
<td>1058</td>
<td>970</td>
<td>-8.32%</td>
</tr>
</tbody>
</table>
General Operations:

A. Treatment Plants – Overview:

1. Regulatory: No major events or regulatory happenings to report on this month.

2. Operational & Financial:

   Sludge Disposal: Every year at this time, we run up against a problem with sludge hauling. Our need to reduce the solids inventory in the process train means we produce more biosolids, and this conflicts with our hauler’s needs to ramp up for spring/summer projects. We may need to supplement our regular hauler with some temporary assistance from another vendor.

3. System Water Quality:

   a. Algae Monitoring Program: Due to increasingly warmer weather, varieties of green, blue-green, and diatoms have increased but due to rain, and turbidity, the presence is down.

   b. Cryptosporidium testing has only one test left in the annual analysis study.

   c. The annual Consumer Confidence Report (CCR) is completed and posted.

   d. KDOW conducted their routine comprehensive audit of the microbiology lab in the 14th and 15th.

   e. There were 4 water quality calls responded to.

   1) 240 Larue Rd: This customer called the SOC last month to report black substance forming on her faucet. Chemistries and BacT analyses were normal. A visit to the residence was scheduled and the customer showed our Water Quality Specialist what appears to be mold buildup on the faucets. She was advised to bleach the faucet and to continue to bleach on a regular basis. (This could be from an inefficiently performing A/C that isn’t taking enough moisture out of the air. It could also be from low or no-copper fixtures/water lines. Copper is a natural biocide – with the emphasis on eliminating lead and copper in plumbing lines and fixtures we can anticipate this kind of complaint becoming increasingly prevalent in the coming years.)

   2) 915 S Green St: Complaint received of water tasting plastic-like. BacT and chemistries were normal. The customer was notified and satisfied with results – also advised that the water taste had returned to normal.

   3) 1122 Powell St: Customer reported rusty water lasting for 3 days. The closest hydrant was opened and flushed for 5 minutes. BacTs and chemistries were normal. Advised customer to flush house plumbing for 5 minutes.

   4) 921 Marywood Dr: Customer stated she saw distribution crew about 1-1.5 months ago flush and test water in the night. Water from that point forward tastes of “dirty plastic” and
could smell it as well. Went to hydrant customer indicated and flushed for 10 minutes. Then told customer to flush her house for 5-10 minutes.

4. Personnel:

a. Current Plant Operations Staff Levels:

   1) North Water: Full operational staff. The process has been started in hiring the additional Water Quality Specialist. Examination set for June 30th.

   2) North Wastewater: Full operational staff.

   3) South Water: Full operational staff.

   4) South Wastewater: Full operational staff.

   5) Environmental Compliance & Pretreatment: This position is unmanned at present time due to FMLA. Duties are being split between in-house staff and our contracted consultant, Hall Environmental.

   6) Plant Maintenance: Full operational staff.

   7) Pump Station Maintenance: Full operational staff.

   8) Treatment Intern: A Treatment Intern has been hired and is assisting in the Water Quality Lab with algae monitoring. She will also be assisting in a distribution system tracer study in the coming weeks.

5. Projects:

a. Plant Beautification Efforts: This effort is continuing throughout the plants on an on-going basis.

B. North WTP:

1. Treatment Quality:

   a. All regulatory treatment goals were met. Due to construction and needing basins offline, our Partnership for Safe Water (internal) goals were not met.

   b. (No Change) Phosphate and pH is now being monitored monthly and systematically in the distribution system at the same sites we collect for Cl2 and bacteriological analysis.

2. Operations:

   a. Treatment Challenges: Construction is coming to a close and the plant should be ramping into what will be the new “normal” of operations. Operators have expressed favorable comments on how much quicker the plant is responding to treatment/chemical changes. With this comes the challenge of needing to predict necessary changes that are needed rather than responding to changes that are already happening.
b. **Intake Screen:** The screens have been fully repaired by E&I and their subcontractor. E&I had stated that this should have been caught by the performance of routine maintenance. However, no one who has inspected the problem believes that to be the case. Regardless, there is no chance of it not being checked routinely in the future.

c. **Construction:** The new raw water line and flash mixing chamber are installed and in service. There was a problem with the installation of the mixer but it is being resolved. Pulsator 2 is fully operational and complete. Work on Pulsator 1 should also be complete soon. While the contractor had the street opened up, we were able to locate and identify the lines that are underground. This will make any future work in the area much easier from a design perspective.

d. **Plant Optimization:** *(No Change)* With the ongoing construction, plant optimization has been lowered in priority and attention. Plant staff are making plans and preparations for measuring filter optimization once the plant returns to a normal state.

e. **Budget:**

1) Chemical expenditures were under budget this month.
2) Total expenses for the month were under budget.

f. **Average Water Treated and Water Pumped Data Trend:**

Note: These values are current readings, but the actual billed readings are approximately 45 days behind.

C. **North WWTP:**

1. **Treatment Quality:**

   a. **Effluent Quality:** All regulatory treatment goals were met. The new UV system is maintaining very low E. coli results. The new clarifier is working well and solids in outgoing water are mostly remaining at single digits.

   b. **Biosolids Quality:** Sludge solids are remaining around good to excellent quality (14 – 16%).

   c. **Reports:** All reports have been submitted for the month.
2. **Operations:**

   a. **Plant Update:**

      1) All internal goals have been met.

      2) Large project maintenance is underway with airline work on #3 aeration basin.

      3) New overhead doors were installed at the press bldg. replacing the old, brittle fiberglass doors.

      4) The UV operations are working well and we are pressing the contractor on getting the last bank of lamps into the run routine (awaiting air conditioner repairs).

      5) Minor repairs to aeration blower #1 are in progress.

   b. **Personnel:**

      1) Vacations are being covered as this is a busy time for them. Training on PM & other issues continue as situations arise.

      2) Jerry Basham reached his 20th anniversary with HWU

   c. **Construction:** Construction still on-going:

      1) Tie-ins to piping on basin 2 continues.

      2) New manhole for the return sludge (RAS) from older clarifiers is about 80% complete.

      3) Surveyors came and mapped the old clarifiers & surroundings for upcoming work on the rehab of clarifiers.

   d. **Hauling Contractor:** Hauling of pressed sludge is better this month but we still have 4 drybeds full of sludge to gradually incorporate into the hauling.

3. **Budget:**

   a. Chemical expenditures were over budget for the month.

   b. Fuel (Off-Road Diesel) was under budget for the month.

   c. Pressed Sludge Hauling and Disposal was over budget for the month.

   d. Total Budgeted Expenditures was over budget for the month.

D. **South WTP:**

   1. **Treatment Quality:**

      a. All regulatory and in-house treatment goals were met.
2. **Personnel:**
   
a. Brad Bickwermert has applied for a KYDOW Drinking water certification class and Class IIA test for July. We should receive notification of the status of the application soon.

b. Nancy Parker and Jeremy Storckman reached their 20th anniversary with HWU. (*Nancy Parker has also not taken a sick day in that 20 years*).

3. **Operations:**
   
a. **Treatment Challenges:** With spring’s arrival and the wet season, fluctuating raw water turbidity, fluctuating temperatures, and working to prepare for the clarifier cone painting project has made maintaining consistent water goals challenging. We expect this to settle back into normal after the cone painting has been completed and spring has passed.

b. **Construction:**
   
1) The Cone painting project started the week of April 11th is complete. All that is left to do is some clean-up and inspection of work. This was a project full of potential risk and problems, but it went without a hitch on our end. This was a job well done by the operators and the contractor.

2) Additional pH equipment has been installed at Low Service, 4 Star tank, and Tyson tank in order to better monitor distribution system water quality. We are waiting for these units to be calibrated.

3) The pad for a new storage building has been poured. Randy Bentley will be ordering the building soon.

c. **Plant Maintenance:**
   
1) New buildings around the Clarifier drain and draw off valves will be constructed over the summer in preparation for winterization.

d. **Inspections:**
   
1) No inspections to report.

e. **Budget:**
   
1) Chemical expenditures were over budget for the month due to carbon purchases.

2) Total Expenses for the month were over budget, largely due to chemical expenses.
f. Average Water Treated and Water Pumped Data Trend:

[Graph showing data trend]

Note: These values are current readings, but the actual billed readings are approximately 45 days behind.

E. South WWTP:

1. Treatment Quality:
   a. Effluent Quality: Effluent quality has declined this past month due to Tyson discharge of high organic loading, rising temperatures and the need to move more sludge out of the plant.

2. Operations:
   a. Personnel:
      1) No new updates to report.
   b. Projects:
      1) Clean Up: This continues to take place on a consistent basis.
      2) Aeration Basin #5: An air bulge that has appeared off and on over the last several years appeared again in the last two months and has been worsening (getting larger). We have been closely monitoring this and making plans to move the equipment into EAB6.
      3) Aeration Basin #6: This basin is empty and is being readied for inspection. Any liner problems will be repaired and then equipment from EAB5 will be moved into EAB6. We are going to want a little longer before replacing the aeration equipment and putting it back in service.
      4) Exterior Lighting: (No Change) We have been slowly replacing all of our existing exterior halogen lighting with LEDs as the halogens have been going out. Galloway Electric gave us a quote to replace all of them out at once. We are obtaining additional quotes at this time.
      5) Digesters: The digesters have been progressively decreasing in air delivery over the past several months. We have dropped Digester 2 and are gearing up towards replacing the piping and diffusers. Once completed, we will move to do the same in Digester 1.
6) **(No Change)** A work order has been submitted for airline repairs on the operating basins. The airlines come off from time to time due to the normal wear and tear of age and the swinging back and forth of the trunk lines.

7) **Headworks Building Damage:** (Update) The claim from the Insurance Company came back at just over our deductible. We will proceed with the repairs through the O&M budget in the coming weeks.

c. **Budget:**

1) **Chemicals:** Chemicals were under budget for the month.

2) **Sludge Hauling & Disposal:** Sludge removal costs were under budget this month.

3) **Total Budget:** Total budgeted expenses for the month were under budget.

F. **Pump Station Maintenance**

1. North Fork PS: Pump #1 has been pulled and taken to Chandler (KM/Straeffer) for inspection/repair. The Bar Screen is currently down for repairs. (We are waiting for a tech.)

2. Atkinson Park PS now has (2) pumps in service.

3. Weyerhauser Station is back to full operation after the installation of a repaired pump and rebuilding both check valves.

G. **Plant Maintenance:**

1. Work on the Maintenance office space at the NWWTP in nearly complete. A new roof on top and sheetrock inside has been installed. Temporary employee Corey did the painting for us. Looks good.

2. **(No Change)** Parts are in for a new wireless remote-stop system for the NWWTP sludge conveyor. Installation is on the schedule for this month.

3. Clean out of the 3 bay building adjacent to welding shop is still progressing.

4. **(No Change):** NWWTP wiring deterioration issue at the clarifiers. Second event in just a few months. Probably needs to be addressed during rehab.

5. Met June 6 and discussed future training needs with HCC. Looking at adding welding training in the next session. HCC also has some new training equipment that would be beneficial to us. Tony Gish was invited to sit on the Tech Center Advisory Board. This will benefit the Utility in future training as well as, perhaps, working towards expanding into operator training programs at HCC.

6. Security cameras and devices are being upgraded and installed at the treatment plants.

7. Basin airline work is beginning at the NWWTP.
8. Power blips at the NWWTP are still being investigated.

H. Pretreatment Program & FOG Services:

1. Second quarter Industry compliance sampling is complete.

2. Tyson Foods – The SWWTP is experiencing what appears to be a pattern as the hotter months approach. Tyson’s discharge becomes higher in ammonia (and everything else) and results in a sustained slug of organic material. This typically does not have a good effect on the plant and we are experiencing exactly that right now. Tyson has been contacted and are investigating what the root cause is.

I. Automation Department:

1. **(No Change):** We have completed automation for the new water booster station. It is ready for final testing and to be placed into operation.

2. **(No Change):** We have been installing pressure sensors around our north water system in order to assist in water modeling, water quality control, and to enhance our pressure monitoring. Installation requires setting a pit, tapping a water line, running conduit & wiring, and integrating into a nearby SCADA panel, usually a pump station. We have 10 sensors installed so far, with the latest being on a line near Vine Street Tank.

3. The NWWTP is running fully on the new system. We have integrated the control systems into our existing, and nearly everything appears to be operating as expected, with a few punch list items left to nail down. The LAN communication problem has been resolved. However, it appears there is a problem maintaining steady, clean power. This may or may not be related to new construction. We have installed a power monitoring and recording device on the incoming 3-phase supply. We’ll analyze this data over the next few weeks to determine if the problem is inside the plant.

4. A new magnetic flowmeter has been installed at the Third Street CSO Basin in order to record the amount of captured combined sewer being pumped to the NWWTP. The flowmeter will be incorporated into SCADA and continuously trended.

5. This past month we were able to sell our old radio equipment on GovDeals.com. We netted $1,235.00 for equipment that became obsolete with the last FCC bandwidth regulations.

6. We have ordered equipment for measuring and reporting, via SCADA, pump amperage at each station. This will enable us to establish some baseline performance for normal operation of each pump motor, and should provide early indication of potential problems. We have installed meters for six pump stations to date.

7. We have installed conduit and run fiber optic for the NWWTP Blower Buildings. The blowers are now connected to SCADA via Ethernet. Radio equipment has been removed.

8. A new Historian server is planned to be ordered this month. An action report is included.
J. SOC General

1. It is with profound sadness that we mourn the passing of Curtis Posey, Utility System Worker at Henderson Water Utility.

Curtis was involved in an automobile accident on his way home from work Wednesday evening, June 8, 2016.

Curtis worked at HWU for 15-1/2 years. He held a Class I Distribution License, and worked on the camera van that is used to perform video inspections of the distribution and collection system.

Curtis’ friends and co-workers heard Curtis speak often and lovingly about his wife Peggy, his daughter Christy, other family members, and his Chihuahua dogs Scooter and Little Man.

Many who worked closely with Curtis remember him as being very neat, organized and never late to work! Curtis was a very kind, friendly man and a joy to work with. He also loved Snickers bars, so his friends and co-workers will probably gather together and have a Snickers bar in loving memory of their good friend Curtis Posey! Curtis will be missed by us all at Henderson Water Utility.

2. On Wednesday, June 8, 2016, we held a one year Cityworks Asset Management System (AMS) update meeting with Ron Butcher and Mark Harmon of the Timmons Group. The purpose of this meeting was to discuss how HWU’s implementation of Cityworks is progressing. We spoke of the success we are having with the software and also of the few things that we would like to see updated or changed within the software.

Although there were a few suggestions, most HWU employees were extremely happy with the Cityworks AMS. Ron and Mark from the Timmons Group were very impressed with the Standard Operating Procedures (SOPs) that were created by the staff at HWU. They were so impressed that they wanted to take a copy of the SOPs back to Timmons.

We are very pleased with the Cityworks AMS and are very proud of all the employees that have embraced the change. They have welcomed the chance to learn the program and have impressed not only us here at HWU, but also the Timmons Group. We have really come a long way in the last year by using the Cityworks AMS. Cityworks will continue to flourish in HWU’s future.

1. The tabulation below shows calls we responded to last month. This tabulation by no means represents all of the calls that came in. We provided the following services:

<table>
<thead>
<tr>
<th>Water Line and Service Maintenance</th>
<th>Qty.</th>
<th>Sewer Line and Service Maintenance</th>
<th>Qty.</th>
</tr>
</thead>
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<td>Sewer Main Repairs</td>
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<td>Water Service Line Repairs</td>
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<td>Sewer Service Line Repairs</td>
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<td>Water Meter Inspection</td>
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<td>Sewer Manhole Repairs</td>
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<td>Water Meter Changes</td>
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<td>Water Meter Repair</td>
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<td>Water Meter Disconnected</td>
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<td>Sewer Overflow Calls</td>
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<tr>
<td>Water Meter Reposition</td>
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<td>Sewer Backup Calls</td>
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</tr>
<tr>
<td>Water Meter Box Cleaned</td>
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<td>Sewer Blocked Calls</td>
<td>4</td>
</tr>
<tr>
<td>Water Meter Locate</td>
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<td>Sewer Odor Calls</td>
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<tr>
<td>Water Meter Reposition</td>
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<td>Sewer Service Line Locates</td>
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<td>Turn Water Off/On Calls</td>
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<td>Install Temporary Hydrants</td>
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<td>Storm Intake Repairs</td>
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<td>Stormwater Flooding Calls</td>
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<td>Clean/Unblock Intakes</td>
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<tr>
<td>Pump Station Inspections</td>
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<tr>
<td>Pump Station Cleaning</td>
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<tr>
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<td>Water Meter Installation</td>
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<td>Smoke Test Lines</td>
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<table>
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<tbody>
<tr>
<td>Downspout Removal Letters Mailed</td>
<td>1</td>
</tr>
<tr>
<td>Downspout Letters Mailed To Date</td>
<td>214</td>
</tr>
<tr>
<td>Downspout Removal Requests:</td>
<td></td>
</tr>
<tr>
<td>Total Complied and Re-inspected</td>
<td>175</td>
</tr>
</tbody>
</table>

**HWU Service Call Summary**

- **1 - Water Line and Service Maintenance** (Total Calls in 18 Sub-Categories)
- **2 - Stormwater Maintenance** (Total Calls in 4 Sub-Categories)
- **3 - Pump Station Maintenance** (Total Calls in 4 Sub-Categories)
- **4 - Sewer Line and Service Maintenance** (Total Calls in 10 Sub-Categories)
- **5 - New Services** (Total Calls in 4 Sub-Categories)
- **6 - Miscellaneous Services** (Total Calls in 4 Sub-Categories)
- **7 - Regulatory Issues** (Downspout Letters Mailed)
2. Rolling 2-Year History of Monthly HWU Service Calls.
L. Collection System:

1. The S. Main St. surprise sewer failure is about 50% complete. Crews have gotten a few of the houses tied across the road. There are 3 customers to go and we hope to get those done this week.

2. We worked this month on a couple of the neighborhood stormwater projects and ditch cleaning.

M. Distribution System:

1. We finally got the 41A main back together at the creek crossing and it is holding. This proved to be a much greater challenge than we expected due to different types of pipe that were originally installed for the crossing. Keep your fingers crossed that this holds during the Vine St. Tank project.

2. Related to the upcoming project to paint the Vine Street tank, we are running the North distribution system in a couple of different operating scenarios, to simulate having this critical tank off-line. These tests will help to insure that we can provide sufficient pressure and flow to the East End, and to our industrial customers in the North System. Work on this test has begun which includes filling, disinfecting, and bringing the Graham Hill ground-mounted tank back into service. Having Vine Street off-line complicates system operation, and also may impact hydrant flushing at the end of April, and DBP testing at the first of May. Josh Thompson prepared an SOP for the NWTP operators related to this test, which will be used over the next months as the tank is painted and put back into service.
N. Stormwater Phase II:

1. The Kentucky Division of Water has released a new KYG2000 General Permit for MS4 (Municipal Separate Storm System) for public comment. The 30-day public comment period began Friday, April 8, 2016, and then was extended until May 24.

KSA, the Kentucky Stormwater Association, held a meeting on May 2 in Elizabethtown. The draft permit was the main topic of discussion. KSA membership studied the draft permit, line-by-line, and offered comments that we hope will satisfy KDOW and US EPA requirements, while helping to ease the regulatory burden to MS4 communities.

2. KSA holds four meetings each year: three 1-day Quarterly Meetings and a 3-day Annual Meeting. This year’s Annual Meeting will be held June 29 through July 1 in Louisville.

   Topics to be presented at the meeting will include:
   
   • Stormwater solution case studies
   • Post-construction BMPs
   • Regulatory overview and updates
   • Stormwater education and outreach
   • Green infrastructure tour
   • Innovative stormwater technologies
   • And more!

   HWU staff actively participates in all KSA meetings.

O. Information Technology Department

1. As reported in last month’s Operations Report, we had purchased Hach WIMS Portable software. That software has been installed and is in operation. We are currently piloting the software on one iPad at the NWTP; and thus far, it is proving to be a useful tool.

2. As reported in last month’s Operations Report, HMP&L changed their Networking pricing structure. On Monday 6/13/2016, HMP&L upgraded our Internet circuit from 10MB down/10MB up to 25MB down/25MB up. They also laid the groundwork for our new Point-to-Point Ethernet circuits which will be active in two to three weeks.

P. GIS Department:

1. We created a crystal report that will replace our current web-based Sewer Overflow Response Protocol (SORP) final sewer overflow report. This report will generate from within Cityworks pulling the information from the Cityworks sewer overflow inspection form and eliminate double entry of information into another program.

2. **(No Change)** We will begin the implementation of Freeance Mobile for Cityworks this month. Freeance is a mobile device app that will be installed on some of the crews iPads, and will make using Cityworks in the field on a mobile device much more user friendly.

3. **(No Change)** We are also in the initial stages of upgrading our CCTV software (Pipelogix) to integrate with Cityworks and GIS. Reports, attribute information, condition scores, pictures, and videos will become more accessible through the GIS and Cityworks for viewing and analysis.
4. We currently have surveyed 89% (2884 out of 3358) of our wastewater manholes. Tony Samples is doing the GPS field work as well as updating the spatial and attribute (rim elevation) information in the GIS. Joe Bentley, Scott Clary, and Ron Bentley have also been helping out by investigating manholes that we could not locate. Based on their findings, we are removing the manholes from the GIS if they don’t exist.
<table>
<thead>
<tr>
<th>Date</th>
<th>Crew #</th>
<th>Address</th>
<th>Comments</th>
<th>Rodney’s Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10 Service Request Tags Given Out</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>01 Work Order Tags Given Out</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0 Door Tags Returned</td>
</tr>
</tbody>
</table>
When it Rains it Drains

Communities like Henderson are facing more stringent federal and state regulations to reduce pollution. These regulations focus on improving the quality of our streams by reducing the amount of pollution carried by stormwater runoff into our waterways.

10 Simple Steps to Improve the Quality of Our Streams
1. Don't dump anything down storm drains.
2. Use pesticides and fertilizers sparingly.
3. Put litter in its place.
4. Pick up after your pet.
5. Sweep driveways (do not spray wash).
6. Collect yard waste & keep it out of storm drains.
7. Use a car wash (they recycle dirty water).
8. Recycle used motor oil.
9. Check your car for leaks (fix them!).
10. Have your septic tank inspected every 3-5 years.

Understanding Stormwater
To find out more about stormwater, visit:

Environmental Protection Agency:
www.epa.gov/npdes/stormwater
www.epa.gov/owow/nps/

For Kids:
www.epa.gov/owow/nps/kids/

Kentucky:
www.water.ky.gov

Henderson:
www.hkywater.org
E-mail: stormwater@hkywater.org
Phone: (270) 826-2824

www.hkywater.org

Fats, Oils and Grease (FOG)

Many of the problems caused by FOG in the sewer system originate from fats, oils and grease that are poured down drains in homes. Although the wastewater collection system is owned, managed and maintained by HWU, the entire community of Henderson benefits from it being used responsibly. Through education and by adopting certain habits, it is easy to minimize FOG sources at home.

The Do's and Don'ts of FOG

Do!
• Place cooled oil and grease into trash bins or covered collection containers.
• Be aware of the “hidden oils” such as salad dressings, cheese, cookies, pastries, sauces and gravies.
• Scrape food scraps from dishes into trash bins.
• Manually wipe off all visible fats, oils, grease and food residue from dishes and cookware into trash bins.
• Use a strainer in the sink to collect excess food particles.
• Clean up grease spills with absorbent material and place into trash bins.
• Encourage neighbors to help keep fats, oils and grease out of the sewer system.

Don’t!
• Don’t pour oil or grease down the drain.
• Don’t scrape food scraps down the drain.
• Don’t pour liquid foods (syrups, batters, gravy, etc.) down the drain.
• Don’t run hot water over greasy dishes, pans or fryers – it will not prevent FOG from sticking to the inside of the pipes.
• Don’t use chemicals to remove grease clogs; they can damage the piping system.
• Don’t rely on a garbage disposal to get rid of grease.

Consumer Confidence Reports

NORTH Water Treatment Plant
Serving the City of Henderson and portions of Henderson County

2016 Henderson Water Utility North annual water quality report is available.

This report contains important information about your drinking water.

Please go to www.hkywater.org/ccr/north.pdf to view your 2016 annual water quality report or to request a paper copy call 270-826-2421.

SOUTH Water Treatment Plant
Serving the City of Sebree, Beech Grove, and portions of Henderson County

2016 Henderson Water Utility South annual water quality report is available.

This report contains important information about your drinking water.

Please go to www.hkywater.org/ccr/south.pdf to view your 2016 annual water quality report or to request a paper copy call 270-826-2421.

Henderson Water Utility urges you to sign up for FREE CodeRED notifications on your mobile device by calling (toll free) 1-866-939-0911 or by visiting tinyurl.com/HendersonKY-CodeRED

Be notified in an emergency such as a major water outage or boil water advisory.

Is your phone connected to a land line in Henderson County or in the City?
Great news: You’re already registered!
Lead and Copper in Your Drinking Water

Henderson Water Utility (HWU) takes its role in safeguarding the public health very seriously. We also take a lot of pride in producing and delivering to you high quality water that you can be confident in. HWU is paying close attention to the developing water quality problem in Flint, Michigan. Our thoughts are with all those who are struggling without access to safe and reliable water in their homes. No one should have to question the safety of water at the tap.

The drinking water that HWU produces and sends throughout its network of water mains is safe, with levels of lead and copper that are extremely low. However, if a water customer has old lead service lines running between the water main in the street and the home, or has old lead plumbing inside the home, then it is possible that unsafe levels of lead might be present in the water supply.

When lead and copper regulations became effective around 25 years ago, HWU began to remove all old lead service lines we could find. However, there are occasions when we discover older lead service lines that were not indicated in any of our records. When these lines are discovered, they are immediately and completely replaced.

If you suspect your home might have a lead service line, contact HWU at 270-826-2824 about working together to replace the lines.

You should eliminate any lead plumbing lines if you have them in your home, but this is not an easy or inexpensive solution for many.

Lead and Copper levels are regulated by what is called an Action Level (AL). If the concentration of lead or copper is greater than the AL, corrective action must take place.

The Action Level for Copper is 1.3 mg/L, or about 1.3 parts per million (ppm). The Action Level for Lead is 0.015 mg/L, or about 0.015 ppm.

HWU is required to collect samples for lead and copper analysis every 3 years. The last three test cycles were in 2015, 2012 and 2009. Test results are summarized in the table below:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>COPPER (AL=1.3 mg/L)</th>
<th>LEAD (AL=0.015 mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>&lt; 0.221</td>
<td>&lt; 0.0015</td>
</tr>
<tr>
<td>2012</td>
<td>&lt; 0.101</td>
<td>&lt; 0.002</td>
</tr>
<tr>
<td>2015</td>
<td>&lt; 0.108</td>
<td>&lt; 0.002</td>
</tr>
</tbody>
</table>

If you ever suspect a problem with your water, Henderson Water Utility wants to know about it. It is our goal to have satisfied customers who are confident and proud of the quality of their water.

To that end, we welcome every question that comes in, we investigate every complaint, we communicate every concern and we work hard to correct every problem. Our customers are a vital resource to us in understanding how the water is affected after it leaves the plant. What you taste, smell and observe is crucial to our providing you with the best quality water that we can.

Here are some simple things that every customer can do to ensure the best quality water is coming out of their faucets.

- Always use fresh, cold, running water for drinking and cooking. Never use hot water from the faucet for drinking or cooking, especially when making baby formula or food for infants.
- Always buy plumbing fixtures that have zero or low-lead levels. Read the labels of any new plumbing fixtures closely.
- Get your water tested. The only way to know with certainty if you have lead at the tap is to have your water tested by a certified laboratory. If you are concerned that your family is at risk, HWU can help you find a lab to test for lead.
- Purchase a certified water filter that is effective at removing lead. Make sure that the filter is changed at the frequency recommended by the manufacturer.

If you “Like” Henderson Water Utility on Facebook, you will also get our notifications.

Also be sure to follow @HWUwater on Twitter!
Producing more than 3 Billion gallons of drinking water a year, with more than 200 miles of water line, Henderson Water Utility is at your service!

Henderson Water Utility works around the clock to provide the best quality water to every tap. We ask that all of our customers help us protect our water sources—they are the heart of our community, our way of life, and our children’s future.

2016 Consumer Confidence Report

DRINKING WATER QUALITY REPORT FOR 2016
REPORTING DATA COLLECTED IN 2015
NORTH WATER TREATMENT PLANT
PWSID: KY0510188

This report is designed to inform the public about the quality of water and services provided on a daily basis. Our commitment is to provide our customers with a safe, clean, and reliable supply of drinking water. We want to assure that we will continue to monitor, improve, and protect the water system and deliver a high quality product. Water is the most indispensable product in every home and we ask everyone to be conservative and help us in our efforts to protect the water source and the water system.

The area around your water source is mostly residential but also contains some industrial activity. The final source water assessment for this system has been completed and is contained in the Henderson County Water Supply Plan. The plan is available for inspection at HWU, or the GRADD office in Owensboro, KY. An analysis of the susceptibility of Henderson’s Ohio River water supply to contamination indicates that this susceptibility is generally moderate. However, there are areas of high concern. Potential sources of concern include bridges, waste generators, transporters, landfills, railroad, row crop land, urban and recreational grass coverage, and sewer lines. Each of these are rated as high in susceptibility because of the contaminant type, proximity to the intakes, and chance of release. Our surface water source comes from the Ohio River at river mile marker 803. Surface water is classified as rivers, lakes, streams, ponds, and reservoirs.

CRYPTOSPORIDIUM

We constantly monitor the water supply for various contaminants. It is important for you to know that Cryptosporidium may cause serious illness in immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders. These people should seek advice from their healthcare providers. We are required to monitor the source of your drinking water for Cryptosporidium in order to determine whether treatment at the water treatment plant is sufficient to adequately remove Cryptosporidium from your drinking water. Henderson Water Utility levels are below detectable limits on all Cryptosporidium testing.

YOUR RIGHT TO KNOW: If you have any questions regarding this report or your water utility, please contact Kevin Roberts (270-869-6616) or Ashley Cooper (270-869-6591). We want you to be informed about your water utility. You can also access our website at www.hkywater.org. You are also invited to attend any of our regularly scheduled Water & Sewer Commission Board Meetings scheduled the third Monday of each month at 4:30 PM at the Bobby Gish Administration Building, 111 5th Street.

Did You Know?...

- A hot water faucet that leaks 60 drops per minute can waste 192 gallons of water and 48 kilowatt hours of electricity per month?
- Drinking 5 glasses of water a day decreases the risk of colon cancer by 45%, the risk of breast cancer by 79%, and bladder cancer by 50%?
- There are many people in the world who walk at least 3 hours for water.
- It takes 7.5 years for the average American household to use the same amount of water that flows over Niagara Falls in one second (750,000 gallons)
- In a 100-year period, a water molecule spends 98 years in the ocean, 20 months as ice, about 2 weeks in lakes and rivers, and less than a week in the atmosphere.
The data presented in this report are from the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data in this table, though representative, may be more than one year old. Unless otherwise noted, the report level is the highest level detected.

<table>
<thead>
<tr>
<th>Allowable Levels</th>
<th>Turbidity (NTU)</th>
<th>TT Representative samples of filtered water</th>
<th>No more than 1 NTU</th>
<th>Less than 0.3 NTU in 95% of monthly samples</th>
<th>0.07</th>
<th>100</th>
<th>No</th>
<th>Soil Runoff</th>
</tr>
</thead>
</table>

### Regulated Contaminant Results

#### Radioactive Contaminants

<table>
<thead>
<tr>
<th>Contaminant [code] (units)</th>
<th>MCL</th>
<th>MCLG</th>
<th>Report Level</th>
<th>Range of Detection</th>
<th>Date of Sample</th>
<th>Violation</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined Radium (pCi/L)</td>
<td>5</td>
<td>0</td>
<td>1.4</td>
<td>1.40 to 1.40</td>
<td>Aug-14</td>
<td>No</td>
<td>Erosion of natural deposits</td>
</tr>
</tbody>
</table>

#### Inorganic Contaminants

<table>
<thead>
<tr>
<th>Contaminant [code] (units)</th>
<th>MCL</th>
<th>MCLG</th>
<th>Report Level</th>
<th>Range of Detection</th>
<th>Date of Sample</th>
<th>Violation</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asbestos (MFL)</td>
<td>7</td>
<td>7</td>
<td>0.10</td>
<td>0.102 to 0.102</td>
<td>Jun-11</td>
<td>No</td>
<td>Decay of asbestos cement water mains; erosion of natural deposits</td>
</tr>
<tr>
<td>Barium [1010] (ppm)</td>
<td>2</td>
<td>2</td>
<td>0.067</td>
<td>0.067 to 0.067</td>
<td>Oct-15</td>
<td>No</td>
<td>Drilling wastes; metal refineries; erosion of natural deposits</td>
</tr>
<tr>
<td>Di (2-ethylhexyl) phthalate [2039] ppb</td>
<td>6</td>
<td>0</td>
<td>0.950</td>
<td>0 to 3.8</td>
<td>Aug-15</td>
<td>No</td>
<td>Discharge from rubber and chemical factories</td>
</tr>
<tr>
<td>Copper [1022] (ppm) Sites exceeding action level = 0</td>
<td>AL = 1.3</td>
<td>1.3</td>
<td>0 (90th percentile)</td>
<td>0 to 0.21</td>
<td>Jul-15</td>
<td>No</td>
<td>Corrosion of household plumbing systems</td>
</tr>
<tr>
<td>Fluoride [1025] (ppm)</td>
<td>4</td>
<td>4</td>
<td>.89</td>
<td>0.89 to 0.89</td>
<td>Oct-15</td>
<td>No</td>
<td>Water additive which promotes strong teeth</td>
</tr>
<tr>
<td>Lead [1030] (ppb) sites exceeding action level = 0</td>
<td>AL = 15</td>
<td>0</td>
<td>0 (90th percentile)</td>
<td>0 to 13</td>
<td>Jul-15</td>
<td>No</td>
<td>Corrosion of household plumbing systems</td>
</tr>
<tr>
<td>Nitrate [1040] (ppm)</td>
<td>10</td>
<td>10</td>
<td>2.300</td>
<td>1.28 to 2.300</td>
<td>Mar-15</td>
<td>No</td>
<td>Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits</td>
</tr>
</tbody>
</table>

#### Disinfectants/Disinfection Byproducts and Precursors

<table>
<thead>
<tr>
<th>Contaminant [code] (units)</th>
<th>MCL</th>
<th>MCLG</th>
<th>Report Level</th>
<th>Range of Detection</th>
<th>Date of Sample</th>
<th>Violation</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)</td>
<td>TT*</td>
<td>N/A</td>
<td>1.47 (lowest average)</td>
<td>1.06 to 2.08 (monthly ratios)</td>
<td>N/A</td>
<td>No</td>
<td>Naturally present in environment</td>
</tr>
</tbody>
</table>

*Monthly ratio is the %TOC removal achieved to the % TOC removal required. Annual average of the monthly ratios must be 1.00 or greater for compliance.

<table>
<thead>
<tr>
<th>Contaminant (units)</th>
<th>MCL</th>
<th>MCLG</th>
<th>Report Level</th>
<th>Range of Detection</th>
<th>Date of Sample</th>
<th>Violation</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine (ppm)</td>
<td>MRDL = 4</td>
<td>MRDLG = 4</td>
<td>1.63 (highest avg)</td>
<td>0.2 to 2.5</td>
<td>N/A</td>
<td>No</td>
<td>Water additive used to control microbes</td>
</tr>
<tr>
<td>Chlorite (ppm)</td>
<td>1</td>
<td>0.8</td>
<td>0.23 (average)</td>
<td>0 to 0.31</td>
<td>Dec-15</td>
<td>No</td>
<td>Byproduct of drinking water disinfection</td>
</tr>
<tr>
<td>Chlorine Dioxide (ppb)</td>
<td>MRDL = 800</td>
<td>MRDLG = 800</td>
<td>130</td>
<td>0 to 130</td>
<td>Jan-15</td>
<td>No</td>
<td>Water additive used to control microbes</td>
</tr>
<tr>
<td>HAA (ppb) [Haloacetic Acids]</td>
<td>60</td>
<td>N/A</td>
<td>37 (highest location average)</td>
<td>15 to 84</td>
<td>N/A</td>
<td>No</td>
<td>Byproduct of drinking water disinfection</td>
</tr>
<tr>
<td>TTHM (ppb) [Total Trihalomethanes]</td>
<td>80</td>
<td>N/A</td>
<td>37 (highest location average)</td>
<td>14 to 76</td>
<td>N/A</td>
<td>No</td>
<td>Byproduct of drinking water disinfection</td>
</tr>
</tbody>
</table>
**Other Contaminants**

<table>
<thead>
<tr>
<th>Contaminant [code] (units)</th>
<th>MCL</th>
<th>MCLG</th>
<th>Report Level</th>
<th>Range of Detection</th>
<th>Date of Sample</th>
<th>Violation</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cryptosporidium [oocysts/L]</td>
<td>0</td>
<td>TT (99% Removal)</td>
<td>0 (positive samples)</td>
<td>12 (# of Samples)</td>
<td>N/A</td>
<td>No</td>
<td>Human and animal fecal waste</td>
</tr>
</tbody>
</table>

**AVAILABILITY OF MONITORING DATA FOR UNREGULATED CONTAMINANTS**

Our water system has sampled for a series of unregulated contaminants. These contaminants do not yet have a drinking water standard set by USEPA. The purpose of monitoring for these contaminants is to help EPA decide whether they should have a standard. As our customers, you have a right to know that this data is available upon request.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemo-therapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

**STORMWATER: WHEN IT RAINS IT DRAINS**

Stormwater runoff occurs when precipitation flows over the ground. Impervious surfaces like driveways, sidewalks, streets, and rooftops prevent stormwater from naturally soaking into the ground. To manage this, communities have storm sewers that help to carry stormwater away from homes and businesses.

When it rains, the stormwater runoff is carried away by pipes and ditches or our storm sewers. These pipes and ditches are different than our regular sewers because the water goes directly into our streams, rivers, and lakes. Unlike sewage, stormwater runoff does not drain to a treatment plant. As it flows, stormwater runoff picks up debris, chemicals, dirt, and other pollution and carries it into our waterways where it can harm fish, frogs, and other aquatic life. This is the same water we use for swimming, fishing, and drinking.

Communities like Henderson are facing new federal regulations to reduce pollution. These regulations focus on improving the quality of our waterways by reducing the pollution in stormwater runoff.

**What Can You Do?**

1. Don’t dump anything down storm drains
2. Use pesticides and fertilizers sparingly
3. Collect yard waste & keep it out of storm drains/street
4. Keep dumpster doors closed, covered, and clean
5. Sweep driveways (do not spray wash)
6. Put litter in its place
7. Use a car wash (they recycle dirty water)
8. Recycle used motor oil
9. Check and repair fluid leaks in vehicles
10. Inspect your septic tank every 3—5 years
11. Promote recycling
12. Pick up after your pet
13. Dispose of hazardous materials properly
14. Cover or seed exposed soil to prevent erosion
15. Store and apply manure away from waterways

Taking an interest in keeping our waterways safe and unpolluted will go a long way towards sustaining them for the future of our children in this community.

Report any pollution that you see because you are the solution to pollution!

**To find out more about stormwater, visit the internet site below:**

[www.epa.gov/npdes/npdes-stormwater-program](http://www.epa.gov/npdes/npdes-stormwater-program)

**TYPE & LOCATION OF YOUR WATER SOURCE**

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water source is the Ohio River. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- **Microbial contaminants** such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations, and wildlife.
- **Inorganic Contaminants** such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil gas production, mining, or farming.
- **Pesticides & Herbicides** which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **Organic Chemical Contaminants** including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- **Radioactive Contaminants** which can be naturally-occurring or be the result of oil & gas production and mining activities.

To ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Spanish (Español) Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.
**WATER WORDS & DEFINITIONS**

**Maximum Contaminant Level (MCL)** - the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal (MCLG)** - the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Maximum Residual Disinfectant Level (MRDL)** - the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

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**Action Level (AL)** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

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**Below Detection Levels (BDL)** - laboratory analysis indicates that the contaminant is not present. MCLs are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

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**Parts per billion (ppb)** - or micrograms per liter, (μg/L). One part per billion corresponds to 1 minute in 2,000 years, or 1 penny in $10,000,000.

**Parts per trillion (ppt)** - One part per trillion corresponds to 1 minute in 2,000,000,000 years, or 1 penny in $10,000,000,000,000.

**Parts per quadrillion (ppq)** - 1 part per quadrillion corresponds to 1 minute in 2,000,000,000,000,000 years, or 1 penny in $10,000,000,000,000,000,000,000.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA’s Safe Drinking Water Hotline (800-426-4791).

**INFORMATION ABOUT LEAD**

Elevated levels of lead in the water can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing.

Your local public water system is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at [http://www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

**HARMFUL ALGAL BLOOMS (HABS)**

Harmful Algal Blooms (HABs) are algae that have the potential to release toxins when under stress, which is a lot like us! Last summer was the first year that Henderson has dealt with a harmful algal bloom on the river and the potential of resulting toxins getting into our water supply. While more is being learned about how HABs behave and what are the best methods of treatment, there is still very little that is certain regarding either of these. Simply put, HABs are unpredictable and inconsistent in how they form, what causes them to release toxins and how they are effectively treated.

The impact that HABs had on Henderson was very slight compared to municipalities and recreational waters upstream on the Ohio. Until agricultural and industrial impacts on the Ohio River watershed are addressed and minimized, the issue of HABs is likely to be a recurring problem. Henderson Water Utility has implemented a monitoring program that will help us identify impending and existing conditions that make HAB formation favorable. We have also increased our ability to identify HAB species. This will help us in treating your water more effectively.

**FLUORIDE REGULATION**—The U.S. Dept of Health & Human Services (HHS) recently announced a new recommendation which lowers the optimal level for fluoride in drinking water to 0.7 ppm. Kentucky statute stipulates that water plants dose fluoride within a range between 0.8 to 1.4 ppm. Kentucky has no plans to change from this. HWU’s goal is to maintain a 0.9 ppm residual at all times to ensure compliance while keeping it on the low range of the scale. If you have any questions about fluoridation please contact Kevin Roberts at 270-869-6616.
2016 Consumer Confidence Report

2016 Consumer Confidence Report

Henderson Water Utility works around the clock to provide the best quality water to every tap. We ask that all of our customers help us protect our water sources—they are the heart of our community, our way of life, and our children’s future.

INFORMATION

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The area around your water source is mostly residential but also contains some industrial activity. The final source water assessment for this system has been completed and is contained in the Henderson County Water Supply Plan. The plan is available for inspection at HWU, or the GRADD office in Owensboro, KY. An analysis of the susceptibility of Henderson’s Green River water supply to contamination indicates that this susceptibility is generally moderate. However, there are areas of high concern. Potential sources of concern include bridges, waste generators, transporters, landfills, railroad, row crop land, urban and recreational grass coverage, and sewer lines. Each of these are rated as high in susceptibility because of the contaminant type, proximity to the intakes, and chance of release. Our surface water source comes from the Green River at river mile marker 41.3, or 9000 Hwy 2096, Robards, KY. Surface water is classified as rivers, lakes, streams, ponds, and reservoirs.

CRYPTOSPORIDIUM

We constantly monitor the water supply for various contaminants. It is important for you to know that Cryptosporidium may cause serious illness in immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders. These people should seek advice from their healthcare providers. We are required to monitor the source of your drinking water for Cryptosporidium in order to determine whether treatment at the water treatment plant is sufficient to adequately remove Cryptosporidium from your drinking water. Henderson Water Utility levels are below detectable limits on all Cryptosporidium testing.

AVAILABILITY OF MONITORING DATA FOR UNREGULATED CONTAMINANTS

Our water system has sampled for a series of unregulated contaminants. These contaminants do not yet have a drinking water standard set by USEPA. The purpose of monitoring for these contaminants is to help EPA decide whether they should have a standard. As our customers, you have a right to know that this data is available upon request.

INFORMATION ABOUT LEAD

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Your local public water system is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Henderson Water Utility works around the clock to provide the best quality water to every tap. We ask that all of our customers help us protect our water sources—they are the heart of our community, our way of life, and our children’s future.
The data presented in this report are from the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data in this table, though representative, may be more than one year old. Unless otherwise noted, the report level is the highest level detected.

<table>
<thead>
<tr>
<th>Allowable Levels</th>
<th>Highest Single Measurement</th>
<th>Lowest Monthly %</th>
<th>Violation</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turbidity (NTU) TT</td>
<td>No more than 1 NTU*</td>
<td>0.217</td>
<td>100</td>
<td>No</td>
</tr>
<tr>
<td>*Representative samples of filtered water</td>
<td>Less than 0.3 NTU in 95% of monthly samples</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Regulated Contaminant Results

#### Microbiological Contaminants

<table>
<thead>
<tr>
<th>Contaminant [code] (units)</th>
<th>MCL</th>
<th>MCLG</th>
<th>Report Level</th>
<th>Range of Detection</th>
<th>Date of Sample</th>
<th>Violation</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Coliform Bacteria # or % positive samples</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>N/A</td>
<td>Jul-15</td>
<td>No</td>
<td>Naturally present in environment</td>
</tr>
</tbody>
</table>

#### Radioactive Contaminants

| Combined Radium (pCi/L) | 5 | 0 | 1.10 | 1.10 to 1.10 | Aug-14 | No | Erosion of natural deposits |

#### Inorganic Contaminants

<table>
<thead>
<tr>
<th>Asbestos (MFL)</th>
<th>7</th>
<th>7</th>
<th>0.10</th>
<th>0.102 to 0.102</th>
<th>Jun-11</th>
<th>No</th>
<th>Decay of asbestos cement water mains; erosion of natural deposits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barium [1010] (ppm)</td>
<td>2</td>
<td>2</td>
<td>0.047</td>
<td>0.047 to 0.047</td>
<td>Oct-15</td>
<td>No</td>
<td>Drilling wastes; metal refineries; erosion of natural deposits</td>
</tr>
<tr>
<td>Copper [1022] (ppm)</td>
<td>AL = 1.3</td>
<td>1.3</td>
<td>0 (90th percentile)</td>
<td>N/A</td>
<td>Jul-14</td>
<td>No</td>
<td>Corrosion of household plumbing systems</td>
</tr>
<tr>
<td>Fluoride [1025] (ppm)</td>
<td>4</td>
<td>4</td>
<td>0.8</td>
<td>0.8 to 0.8</td>
<td>Oct-15</td>
<td>No</td>
<td>Water additive which promotes strong teeth</td>
</tr>
<tr>
<td>Lead [1030] (ppb)</td>
<td>AL = 15</td>
<td>0</td>
<td>0 (90th percentile)</td>
<td>N/A</td>
<td>Jul-14</td>
<td>No</td>
<td>Corrosion of household plumbing systems</td>
</tr>
<tr>
<td>Nitrate [1040] (ppm)</td>
<td>10</td>
<td>10</td>
<td>2.420</td>
<td>1.54 to 2.420</td>
<td>Mar-15</td>
<td>No</td>
<td>Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits</td>
</tr>
</tbody>
</table>

#### Disinfectants/Disinfection Byproducts and Precursors

<table>
<thead>
<tr>
<th>Total Organic Carbon (ppm) (measured as ppm, but reported as a ratio)</th>
<th>TT*</th>
<th>N/A</th>
<th>1.97 (lowest average)</th>
<th>1.22 to 2.70 (monthly ratios)</th>
<th>N/A</th>
<th>No</th>
<th>Naturally present in environment</th>
</tr>
</thead>
</table>

*Monthly ratio is the %TOC removal achieved to the % TOC removal required. Annual average of the monthly ratios must be 1.00 or greater for compliance

| Chlorine (ppm) | MRDL = 4 | MRDLG = 4 | 1.72 (highest avg) | 1.06 to 3.1 | N/A | No | Water additive used to control microbes |
|----------------|-----------|------------|-------------------|-------------|-----| ------>|-------------------------------|
| Chlorite (ppm) | 1 | 0.8 | 0.54 (average) | 0.16 to 0.60 | Oct-15 | No | Byproduct of drinking water disinfection |
| Chlorine Dioxide (ppb) | MRDL = 800 | MRDLG = 800 | 180 | 0 to 180 | Jan-15 | No | Water additive used to control microbes |
| HAA (ppb) [Haloacetic Acids] | 60 | N/A | 32 (Highest Location Average) | 32 to 32 | Aug-15 | No | Byproduct of drinking water disinfection |
| TTHM (ppb) [Total Trihalomethanes] | 80 | N/A | 50 (Highest Location Average) | 50 to 50 | Aug-15 | No | Byproduct of drinking water disinfection |

### Other Contaminants

<table>
<thead>
<tr>
<th>Cryptosporidium [oocysts/L]</th>
<th>0</th>
<th>TT (99% Removal)</th>
<th>0 (positive samples)</th>
<th>12 (# of samples)</th>
<th>N/A</th>
<th>No</th>
<th>Human and animal fecal waste</th>
</tr>
</thead>
</table>
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Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA’s Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemo-therapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

TYPE & LOCATION OF YOUR WATER SOURCE

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water source is the Green River. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

**Microbial contaminants** such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations, and wildlife.

**Inorganic Contaminants** such as salts and metals, which can be naturally-occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil gas production, mining, or farming.

**Pesticides & Herbicides** which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

**Organic Chemical Contaminants** including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

**Radioactive Contaminants** which can be naturally-occurring or be the result of oil & gas production and mining activities.

To ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

YOUR RIGHT TO KNOW

If you have any questions regarding this report or your water utility, please contact Kevin Roberts (270-869-6616) or Ashley Cooper (270-869-6591). We want you to be informed about your water utility. You can also access our website at www.hkwwater.org. You are also invited to attend any of our regularly scheduled Water & Sewer Commission Board Meetings scheduled the third Monday of each month at 4:30 PM at the Bobby Gish Administration Building, 111 5th Street.

HWU MANAGEMENT & STAFF

Tom Williams—General Manager
Kevin Roberts—Director of Plant Operations
Rodney Michael—Director of Field Operations
Glenn Fields—Utility System Superintendent
Jeff Roberts—Automation Manager
Ashley Cooper—Water Quality Specialist
Nancy Parker—Chief Operator, South Plant
Josh Thompson—Chief Operator, North Plant
STORMWATER: WHEN IT RAINS IT DRAINS

Stormwater runoff occurs when precipitation flows over the ground. Impervious surfaces like driveways, sidewalks, streets, and rooftops prevent stormwater from naturally soaking into the ground. To manage this, communities have storm sewers that help to carry stormwater away from homes and businesses. When it rains, the stormwater runoff is carried away by pipes and ditches or our storm sewers. These pipes and ditches are different than our regular sewers because the water goes directly into our streams, rivers, and lakes. Unlike sewage, stormwater runoff does not drain to a treatment plant. As it flows, stormwater picks up debris, chemicals, dirt, and other pollution and carries it into our waterways where it can harm fish, frogs, and other aquatic life. This is the same water we use for swimming, fishing, and drinking.

Communities like Henderson are facing new federal regulations to reduce pollution. These regulations focus on improving the quality of our waterways by reducing the pollution in stormwater runoff.

What Can You Do?
1. Don’t dump anything down storm drains
2. Use pesticides and fertilizers sparingly
3. Collect yard waste & keep it out of storm drains/street
4. Business owners can keep dumpster doors closed, covered, and clean
5. Sweep driveways (do not spray wash)
6. Put litter in its place
7. Use a car wash (they recycle dirty water)
8. Recycle used motor oil
9. Check and repair fluid leaks in vehicles
10. Inspect your septic tank every 3—5 years
11. Promote recycling
12. Pick up after your pet
13. Dispose of hazardous materials properly
14. Cover or seed exposed soil to prevent erosion
15. Store and apply manure away from waterways

Taking an interest in keeping our waterways safe and unpolluted will go a long way towards sustaining them for the future of our children in this community. Report any pollution that you see because YOU are the solution to pollution!

To find out more about stormwater, visit these internet sites:
- www.epa.gov/npdes/npdes-stormwater-program
- www.epa.gov/owow/nps
- www.nccwep.org/involvement/kids/
You can also view our website at www.hkywater.org

QUESTIONS & ANSWERS

SEWER BACKUPS IN HOMES OR BUSINESSES

Your home or business is at risk if the elevation of your lowest floor, containing plumbing fixtures or floor drains, is lower than the top of a manhole near your property. The Henderson Water Utility staff will be happy to assist you in determining if your home or business is at risk.

HOW DO I DETERMINE IF MY HOME OR BUSINESS IS AT RISK FROM A SEWER BACKUP?

HOW DO I PREVENT A BACKUP? If your home or business is at risk of a backup, to prevent a backup from happening and possibly causing damage to your home or business, HWU strongly suggests you install either a sump pump or a backwater valve. A backwater valve may be required under city ordinance Section 23-18. A sump pump is the most reliable alternative; but it is also the most expensive. At the bottom of this page you will find specific information about a backwater valve including installation and maintenance information. You should contact your plumber for cost information and other details on the installation of a backflow valve or sump pump.

WHAT DO I DO IF I HAVE A BACKUP? If you suspect the backup is in your line between the home or business and the main line in the street, call your plumber. If you believe the backup is in HWU’s line call us at 826-2824. This number is answered 24 hours a day, seven days a week. If you have a backup and need to contact a company to clean up the area in your home where the backup occurred, below is a list of some companies that do this type of clean up. For current contact information, you may also look in the phone book yellow pages under “Water Damage Restoration”, “Water Damage Emergency Service”, or “Fire & Water Damage Restoration”.

WILL MY HOMEOWNER’S INSURANCE COVER A SEWER BACKUP? Every homeowner’s insurance policy is different. Check with your insurance company to see if you’re covered.

GRAVITY BACKWATER VALVE SPECIFICATIONS, INSTALLATION, & INSPECTION/Maintenance

Specification
The gravity backwater valve should be a PVC Company part number 375 P for 3”, 475 P for 4”, and a 675 P for 6”, or an approved equal.

Installation
The backwater valve should be installed in the sewer line either outside the house or in the floor of the basement. The backwater valve should be accessible for maintenance. If it is installed at a depth of 30” or less below the ground or floor, a meter box or 16” pipe is adequate for the access. If the below ground or below floor elevation is greater than 30”, a concrete, PVC or polyethylene pipe manhole of 30” diameter or larger should be installed around the valve to allow access for maintenance.

Inspection and Maintenance
After significant rainfall events or at least once every 6 months the backwater valve should be inspected. The cleanout top should be opened and the flapper in the valve removed and inspected. Before replacing the flapper the inside of the backwater valve should be inspected and the area cleaned as necessary. After replacing the flapper, the cleanout top should be replaced.

How to Specify
NDS #375P, #475P, or #675P PVC Backwater Valve, threaded access cap, elastomeric flapper gasket, neoprene access cap gasket, and removable uni-directional flow flapper.

<table>
<thead>
<tr>
<th>Desc</th>
<th>Part #</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>3”</td>
<td>375P</td>
<td>1.5”</td>
<td>7.5”</td>
<td>5.5”</td>
</tr>
<tr>
<td>4”</td>
<td>475P</td>
<td>2.0”</td>
<td>10.5”</td>
<td>7.0”</td>
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<tr>
<td>6”</td>
<td>675P</td>
<td>2.25”</td>
<td>15.5”</td>
<td>8.7”</td>
</tr>
</tbody>
</table>
ENGINEERING REPORT
1. North Wastewater Treatment Plant:

   **Headworks/Plant Upgrade**: Tie-ins to Basins 1 and 2, which had to go a long way around to get to the influent ends of the basins, are complete. Work on tie-ins for Clarifiers 1 & 2 is underway. The current penalty for liquidated damages is over $240,000, due to delays in completion beyond the original 18 month schedule (completion was supposed to be 22 October 2015).

   Additional work on the plant will include the two projects listed below, as well as additional paving.

   **Clarifier Repairs**: The two older secondary clarifiers are in need of maintenance to the large rotating mechanisms in the center, and replacement of the weirs and baffle plates. We had a contractor (PPMI) do a limited amount of blasting, so we could determine what shape the metal parts are in, and that work uncovered paint containing lead, which will increase our costs for rehabbing these structures. The good news is, the metal parts are in decent shape, and we haven’t lost as much “section” as we feared. The bids will include options for repair of the mechanisms, and an alternate bid for total replacement, so we can make an informed judgement on which strategy to implement. Parts for replacement of the weirs and baffle plates are already in our hands. We have signed a supplement to Wauford’s contract for the plant work, to cover this work. Also includes a new electrical service for these units, powered from the new electrical building. This is the one “new” project that we will likely need to authorize in the new fiscal year before January 2017, since these clarifiers must be in service for the NWWTP to operate at its new higher peak flow. All other work on capital projects will be delayed, until we know better what our financial condition is, half-way through FY 2017.

   **Digester Building**: Wauford has prepared plans for upgrades in this building, bringing access up to code and reworking piping to make it simpler to operate and easier to maintain. We received KDOW approval for this project in early December, but will likely not take bids until 2017-18.

2. Atkinson Park Sewershed Study - Myrene Drive Sewer Pump Station: (no change since last report)

   Phased in five sections, design of these projects is progressing. We have 5 easements appraised and are starting to make property owner contacts. Geotechnical report has been received, and shows that rock is not a problem at any locations, which is good news, especially at the “golf course hill”, next to Atkinson Pool. Directional drilling may be used at select locations to help us avoid extra costs like work on the golf course, in their parking lot, and other sensitive areas. We’ve received a permit for the crossing of Green Street by the new Atkinson Park pump station force main, which crosses at 14th Street.

   The construction of a revamped Myrene Drive pump station is being studied further, to see if there are better alternatives for location and/or arrangement of this station in a cramped location without much room to maneuver. This may require temporary easements from surrounding property owners.
We have received the KDOE construction permit for the Spruce Drive portion of the project (which eliminates one pump station). This will likely not be bid until 2018. All the easement documents for the Spruce Drive project are in the appraisal process.

3. **South Water Treatment Plant – Rehab Projects:**
Several projects were included in a 2014 preliminary engineering report for the SWTP.

**Membrane Filtration Plant:** Award of the membrane equipment was made to GE/Xenon, and they set up a pilot plant that has confirmed the choice of the equipment; that experiment is now concluded, and plant design is progressing. We received 75% plans and had a meeting to discuss and make sure everything is on the right track. Automation department has begun review of electrical and control plans and specs.

**Update on Clearwell Project:** Bidding of the new 800,000 gallon prestressed tank is awaiting availability of funds, and we will likely not bid this until late next year. The current Clearwell, while it needs painting, is not a critical water-quality issue at the moment. KDOE has granted plan approval, including an exception for the clearwell being a single compartment.

**Repair of Metal Structures in the Current Plant:** This work will help to keep the existing plant operational for its remaining 5 to 10 year expected life (prior to switching to the membrane filtration concept). Sam Estes Painting is performing this work on long, weekend shutdowns. Pre-construction meeting was held on March 16th, with some outside work on the cones starting the week of April 11th. Plant staff has done an exceptional job of stepping up and making this work, and the quality of Estes work so far is good. Most of the exterior painting is done (one clarifier is shown at right), as well as the badly rusted splitter box at the filters.

**Raw Water:** Plans for the Raw Water & Effluent Lines Relocations have received KDOE review and approval. New agreement with Big Rivers has cleared the way to bid this project, probably next fiscal year.

**Lake – Backup Water Source:** On hold until we get a chance to do detailed design.

4. **Highway #41A South/Finley Addition Sewer System Project:**
Contractor has begun working on the plumbing connections to homes, although actual hookups will require most of the project to be completed first, so everything works and the wastewater has a place to go. Working on getting consent to annexation forms signed prior to hookup, and action on several “Requests for Wastewater Service Outside the City Limits” are on the agenda tonight. Project is 92% complete through the end of May by dollar volume. County is looking at further grant funding to complete another portion of the project.

5. **North Water Treatment Plant – Rehab and Basin Repair Project:**
Contractor on this project is M. Bowling, Inc. of Henderson. Operation of the plant during construction has been a challenge, but Josh and staff have done an excellent job keeping us in water. The new flash mix is complete and in operation, and the 30” raw water line across Water Street has been completed.
New walls for the pulsators basins are complete, as is all of the large diameter piping. Some work remains on Basin 3. The flow meter location was switched out on 14 June.

North WTP Renovations Project – Above, Raw Water Line Crossing under Water Street
Below Left, Piping in Dry Basins – Below Right, Flow Meter Installation

6. Countryview Subdivision Stormwater Project:
We have a joint project with the City in the current budget to improve drainage by installing storm sewers in this neighborhood. The City committed $100,000 for each of the last two fiscal years, as did we. Easements will likely be a holdup, since we must cross property to get ditches out to the creek, which basically surrounds this neighborhood. Met with Corps of Engineers representative to determine needs for permitting of the outlets to the creek, and to avoid crossing wetland areas. Have submitted plans to Texas Gas for several crossings of their high pressure main, and met with their representative in the field on May 6th to discuss our crossings and the permits required. HWU Staff working on plan updates for first phase, hoping to start construction this fall.

7. Graham Hill and Green River Road Pressure Zone Studies: (no change since last report)
Have received a draft report from Strand on their Green River Road area study. Pointed out several options, and we are looking at two or three small projects that might have a big impact. Wauford’s Graham Hill study is held up by a data collection difficulty with the City’s meter data. Neither of these projects is currently funded, so there’s no urgency. Having plans for future projects like these, which
probably need to be done at some point but aren’t critical, is a good idea, so we can use up excess funds as they become available, even if in small amounts.

8. **College Tank Painting: (no change since last report)**
   Modeling report has been completed, which shows that this tank will need to be raised in the future, but we will paint this tank in the 2017-18 fiscal year, and look to raise it, if necessary, the next time it needs to be coated. That may fit better with the schedule for building the 41A tank, which is the primary reason for raising this one. They will work better in tandem if their overflow elevations are equal or nearly so. Strand has looked at the tank with staff, and we know the full scope of work for the painting, now. Plans and specs should follow on quickly, but money for this project will likely not be available until the first of next calendar year.

9. **Vine Street Tank Painting:**
   Work on the interior of this tank has begun, with the first items being related to the radio room, equipment and conduit associated with radio repeater equipment for us, the Fire Department and the Housing Authority; these new rooms are shown at right. We negotiated a reduction in price by deleting interior cleaning and painting, and funding is set aside in the new fiscal year capital plan. The exterior will be sand-blasted, as the coating is significantly deteriorated. In this case, no lead paint is present, so curtaining is not required, but the contractor prefers to install it due to the proximity of people and houses. Painting contractor is Preferred Sandblasting and Painting from Shelbyville, Tennessee. Mark Bowling is subcontracting the building-related portion of the work.

10. **North Main Street Pressure Zone:**
    Materials delivered. Work is set to begin around July 1st. The section of pipe on 12th Street from Merritt to Main was installed as we did a stormwater pipe repair at 12th and Main, allowing us to only impact the hospital’s main employee entrance one time instead of twice. This project keeps getting delayed by other priorities.

11. **U.S. 60 West Water Booster Station: (no change since last report)**
    Startup delayed due to other projects.

12. **South Wastewater Treatment Plant – Repairs to Basin # 6 (no change since last report)**
    Basin 6 of the South Wastewater Plant was taken out of service in 2008 due to a slope slip under the liner. Since that time, we’ve been able to get by without this basin, knowing that at some point we would need to bring it back up. That point is now, based on increases in biological loadings from Tyson. The liner in Basin 6 has shown no further signs of slippage, and since last month, the liner in Basin 5 is now leaking, so we are planning to move the equipment in Basin 5 over to Basin 6, then repair the liner in 5 and install new equipment there.
13. U.S. 60 West Widening – KY 425 to Henderson Community College:
   Preliminary line and grade inspection held on May 13th. Qk4’s local office is handling the overall work, with assistance from Stigall Engineering on the gas line work. A local reimbursement agreement with the Kentucky Transportation Cabinet has been signed. Relocation plans must be complete and in KYTC’s hands by August 1st. We understand that actual work on the highway will begin in 2017. We gave approval to preliminary plans on May 25th, and work on potholing to confirm tie-in locations is complete. Branson Surveys is preparing the easement document for our lines across the College property.

14. Custom Resins Water Line:
   Custom Resins is expanding, and in order to provide fire suppression service to a new building, we need to extend the “Mosaic” portion of the Riverport Loop water line (addressed in our strategic plan) to the Riverport. Have been in conversations with GRADD, Dept. of Local Government and Henderson County Fiscal Court about obtaining grant funds for this, since the extension is tied to economic development. Public hearing on the grant was held on May 3rd, and we hope to be able to report positively on this soon. If we can’t work out using grant funding on the water line, we may need to participate with Custom in upsizing a line that they would lay as part of their project.

15. Sugar Creek Sewer Line – Bank Stabilization:
   Behind Grandy’s on US 41 North, we have an 18” gravity sewer line that has been exposed by the migration of Sugar Creek to the south. This line carries waste from a few hundred homes stretching all the way back into Frontier Subdivision, and from several of the restaurants along the Strip. Have obtained permits from the Corps and KDOW for work on the stream bank, which will include installing large concrete blocks to form a retaining wall to protect the line from future bank failures. While not an emergency yet, this will be if the line breaks. The sewer main was 50% blocked with grease, but has now been cleaned. We are moving cautiously on this, trying not to create a bigger problem than the one we discovered.

16. South Main Street Sewer (Oak Way St to Riverdale Court): (New Project)
   Deteriorated plain concrete pipe on the west side of S. Main is being abandoned, with homes on that side of the street being tapped into a parallel main on the east side of S. Main. Subject of an Action Report for this meeting, we began work early on an emergency basis due to the City’s project to repave this section of Main Street. During investigation of lines in this area, we discovered that a fairly large area had been misidentified as being in the combined system, when it is in fact separated. We will take credit for this in our annual report on CSO/LTCP activities.
HWU Human Resources Summary: June 20, 2016

Staffing Levels:

1. Chief Financial Officer [1 position]: new employee started June 6th
2. Utility System Worker I [5 positions as of 7/2016]: exam is scheduled for June 30th
3. Water Quality Specialist [1 position as of 7/2016]: exam is scheduled for June 30th
4. Seasonal Utility System Worker [1 position]: waiting on direction from management
5. SOC – Seasonal Worker [4 positions]: no request for action
6. Treatment Plants – Seasonal Maintenance Worker [2 positions]: staffing agency working on person for NWTP; no request for action for SWW
7. Seasonal HWU Intern in water treatment [1 position]: staffing agency person started May 24th

Safety Report (as of 5/31/2016):

<table>
<thead>
<tr>
<th></th>
<th>HWU</th>
<th>Change</th>
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<tbody>
<tr>
<td>Hours Worked</td>
<td>65,603</td>
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<tr>
<td>Total Cases</td>
<td>5</td>
<td>+ 2</td>
</tr>
<tr>
<td>← Days Away/Restricted Time Cases</td>
<td>5</td>
<td>+ 2</td>
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<tr>
<td>← Days Away From Work Cases</td>
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<tr>
<td>← Transfer/Restricted Cases</td>
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<td>← Actual # Days Restricted Duty</td>
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<td>+ 25</td>
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Incident Rates

<table>
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<th>HWU</th>
<th>Change</th>
<th>2012 NAICS 2213</th>
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<tbody>
<tr>
<td>Total Recordable Rate</td>
<td>15.24</td>
<td>+ 3.66</td>
<td>2.8</td>
</tr>
<tr>
<td>← DART Incident Rate</td>
<td>15.24</td>
<td>+ 3.66</td>
<td>1.4</td>
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<tr>
<td>← DAFW Rate</td>
<td>6.10</td>
<td>- 1.62</td>
<td>0.8</td>
</tr>
<tr>
<td>← Trans / Restrict. Rate</td>
<td>9.15</td>
<td>+ 5.29</td>
<td>0.6</td>
</tr>
</tbody>
</table>

- 2012 NAICS is the classification for Utilities: Water, Sewage, and other systems
- DART = Days Away, Restricted, or Transferred
- DAFW = Days Away From Work
- How incident rates are calculated: [(# Cases) x 200,000] / Employee Hours Worked
- Change data compared to data at the end of the previous month.

- Two recordable incidents in May; both employees are on modified duty.
- The May comprehensive fixed facility safety audits were conducted on the Administration building and SOC. No safety issues were identified at the Administration building. The minor safety issues identified at the SOC have been corrected. Both locations were last audited in February 2016.

Other:

Upcoming City-wide Events:

- Workplace Violence / Harassment training was provided on May 31st, June 1st and June 2nd. The video of the training session is in the process of being viewed by employees that were unable to attend the live sessions.
SAFETY REPORT
A. Safety Committee:

There was no meeting in May due to scheduling conflicts.

B. Training

Training performed in May:

1. Safety meetings are continuing for the crews at the SOC.

2. The following training was given in May for a new Maintenance Tech. PPE, Confined Space, LO/TO and BBP.

C. Safety Inspections:

1. Administration Building
   
   - See facility audit below.

2. Systems Operation Center (SOC):
   
   - See facility audit below.

3. WTP North:
   
   - There were no significant safety issues found during periodic site visits. These visits unlike the complete audits below may not cover every area of the facility on the day visited. Site visit dates in May were on the 2nd, 3rd, 5th, 19th, 24th, and 31st.

4. WWTP North:
   
   - There were no significant safety issues found during periodic site visits. These visits unlike the complete audits below may not cover every area of the facility on the day visited. Site visit dates in May were on the 2nd, 3rd, 5th, 19th, 24th, 27th, and 31st.
5. **WTP South:**
   - There were no significant safety issues found during periodic site visits. These visits unlike the complete audits below may not cover every area of the facility on the day visited. Site visit dates in May were on the 2nd, 4th, 6th, 19th, 23rd, 24th, and 31st.

6. **WWTP South:**
   - There were no significant safety issues found during periodic site visits. These visits unlike the complete audits below may not cover every area of the facility on the day visited. Site visit dates in May were on the 2nd, 3rd, 5th, 19th, 24th, 27th, and 31st.

7. **Water Distribution/ Collection System:**
   - There were no safety issues with employees observed during safety site visits and proper PPE and signage was being used.

D. **Comprehensive Safety Audits:**

   1. **Administration Building:**
      
      There were no issues noted.

   2. **Systems Operations Center:**
      
      There were only a few minor issues noted during the audit.

E. **Recordable Injuries:**

   1. There was two recordable accidents with no lost time in May. A crew worker was flushing hydrants and sprained his wrist and a supervisor sprained his arm while removing a manhole cover.

F. **Misc:**

   1. The Safety Coordinator attended the KY Governors Safety Conference May 9-12. Awards were received for NWTP, SWTP, and SWWTP for 24 months without a lost time accident.
GENERAL MANAGER’S REPORT
**Regulatory Issues**

*LTCP/CJ Termination* and a *Local Plan Approval* agreed order are still outstanding. The document we’ve prepared dealing with our Post-Construction monitoring program, the definition of overflows, and other related matters are awaiting action from KDOW. We’ve been told that a draft KPDES permit for the North WWTP has been prepared, but we have not seen it as yet. We have also begun work on an *“LTCP Completion Report”* that will document all aspects of the LTCP projects (scope, timing, approvals, etc.). This will be a huge data-mining exercise, which we’ll likely wade into after the Consent Judgment Annual Report is complete.

**Financial – Rates**

Last month we heard a request from *Meuth Concrete* for relief on their water/sewer bills, due to most of their water used being incorporated in the concrete they produce and sell. Their request was that this water should not be subject to sewer charges.

We’ve been approached on this issue multiple times over the years, and have always rejected such appeals. Our rates, while they are broken out as water and sewer charges on the bills, are truly a combined rate, and our expenses aren’t broken-out by water, wastewater and stormwater. Going down this path would lead to a decrease in revenue, which would have to be made up by other customers.

Meuth made a point about a competitor that pays our out-of-City rates, but doesn’t have sewer available, but we should clarify that this competitor does pay for sewer service, even though it’s not available at their location. We require that of all commercial users outside the City Limits even if they don’t have access to sewer, which reinforces that our rates are really a combined rate.

If so directed, we can address “production/evaporation use” in a rate study later this year, since we’ve already talked about changing the rates to include some kind of fixed charge.

**Financial – Capital Projects**

On the *Capital Expenditures Report*, you’ll notice three items that are over budget. To clear up and prepare for the end of the fiscal year, we need to appropriate the remaining balance of the Special Projects line thusly:

- $57,000 to the *US 60 West Water Booster Station*. Total approved = $242,000, and this project is complete.
- $17,000 to the *South WTP Building* project. This project was mentioned in this report last month, but is not large enough to require formal Board approval by Action Report.

This leaves a balance in the Special Projects line item of $1,187.
The SWTP Rehab project is also over budget, but this is the catch-all heading for the ongoing improvements and repairs at that plant, so we will be appropriating additional funds to that line item as we move forward with projects.

The Wonderware Historian action report that’s on the agenda for tonight will be taken from the un-used portion of the “Equipment” line item.

Technical Standards Manual for Water Facilities

We’ve been working internally for about a year to revise and update our Technical Standards for Water, Wastewater and Stormwater, and have finally gotten the Potable Water Manual to the point of bringing it to you for approval. Most of the updates are changes to methods to reflect how we actually do things, as well as adding part numbers we now use, and a lot of formatting.

The only change that could add significant costs to a contractor or developer is the inclusion of joint restraints for pipe at fittings (elbows, bends, tees and dead-ends). This is additional insurance for us, to keep pressure points in our water system from blowing out, and is something we’ve done internally for a number of years. We anticipate this will add no more than 1.5% to the costs of installation, on average. Offsetting this change, we dropped the requirement that some sections of pipe could only be ductile iron, which is significantly more expensive at present than PVC.

With your approval, these changes will be forwarded to the Planning Commission for adoption. They have some authority over these standards, since KRS 100 under which the PC is organized contains provisions for subdivision regulations and specifications for physical improvements.

Personnel – Director of Engineering

Moving into the new fiscal year, I would like to advertise our Director of Engineering position. Workload is to the point where I feel we need the additional assistance. We know that retirements are coming that will significantly impact our project-related abilities, and getting someone on board to learn and transition now will be important to succession planning.

With your approval, we will have a late July deadline for applications, with hopes of filling the position in the August/September timeframe.

Personnel – Chief Financial Officer

Glad to have Todd Bowley on board as our new CFO, and sorry to see Leason Neel at his last monthly meeting. Change, welcome or not, planned or not, is inevitable. We wish Leason well in his “new normal”, whatever that is and wherever life takes him.
BUSINESS

• Action Report #2016-14 – Wonderware Historian Replacement
• Action Report #2016-15 – South Main Street Sewer Replacement Project
• Resolution #2016-16 – Approval of Requests for Wastewater Service Outside the City Limits in Finley Addition
Henderson Water Utility
Action Report # 2016-14

To: Henderson Water & Sewer Commission
From: Jeff W. Roberts, Automation Manager
Subject: Wonderware Historian Replacement
Project No.: 22-1700-0011
Date: 20 June 2016

Background:

- HWU utilizes two servers running specialized SQL databases and management software for the real-time collection, archiving, and reporting of all information being transmitted over the SCADA system, a tremendous amount of data. These servers, along with the management software, SQL database engine, and client access licenses (CALs) are called “Wonderware Historians”.
- Due to regulatory requirements for documentation and data retention and for purposes of reporting, it is considered best practice to have redundancy for such critical hardware/software, and this is the reason for two Historians, running in tandem and collecting identical information.
- Our original Historian was installed in 1999, and uses Windows Server 2000 for an operating system. Microsoft has discontinued support for this operating system, making this computer potentially vulnerable to a security breach. Furthermore, reporting from this server has become increasingly difficult because the Historian software and operating system have not kept pace with the continuous updates and changes to the Microsoft Office software used for generating reports.
- In order to achieve full redundancy with this critical regulatory and operating information, staff recommends the purchase of a new Wonderware Historian to replace the outdated server. InSource Solutions is our regional distributor for Wonderware software, so this must be a sole source purchase.

Budget/Financial Considerations:

- Staff obtained a quote from InSource Solutions, Inc. for a new Historian, including Microsoft SQL Server 2012, Wonderware CALs, and annual support for a total of $53,928. Adding a 5% contingency, the total amount will be $ 56,624, to be taken from “Unidentified Capital Projects” in the current capital budget.
- Procurements necessary for the completion of this project have and will follow the Kentucky Model Procurement Code.

Recommendation:

- Board approval authorizes the General Manager to initiate all work necessary to complete this project within the approved budget, including issuance of any bids, purchase orders, change orders, or other authorizations required to complete the work without unnecessary delays.

Respectfully Submitted

Jeff W. Roberts
Automation Manager

Approved For Submittal

Tom Williams, P.E.
General Manager

Commission Action – 20 June 2016

PASSED:___________  FAILED:___________  TABLED:___________
Henderson Water Utility
Action Report # 2016-15

To: Henderson Water & Sewer Commission
From: Tom Williams, P.E., General Manager
Subject: South Main Street Sewer Replacement Project
Project No.: 22-1802-0067
Date: 20 June 2016

Project Background:

- On South Main Street from Oak Way Street to Riverdale Court (900 and 1000 blocks), we have 12-inch sewer lines on both sides of the street. After a manhole collapse in the 900 block of S. Main, we inspected the sewer line on the west side of S. Main and discovered that it is a very old, plain concrete pipe. The top of this pipe is deteriorated to the point you can break it with your fingers, due to corrosion from gas over the years.
- Staff looked at options to replace this line, and have determined the best strategy is to move taps for seven houses to the parallel sewer on the east side of S. Main, and retire the old concrete line. This will require crossing the street twice (taps will be combined before crossing).
- The City is repaving that section of S. Main this spring, and we have been rushed to complete this work prior to paving, which required us to begin work prior to Board action.
- The work will be performed by our crews.

Budget/Financial Considerations:

- There are no easement or design costs for this project, and materials will be acquired in accordance with our purchasing policy.
- Construction costs for this project are estimated at $60,000, and we'll include a 10% contingency for a total of $66,000. Funds will be set aside from the “Unidentified Capital Projects” line item in the current capital budget.

Legal Considerations:

- Procurements necessary for the completion of this project have and will follow the Kentucky Model Procurement Code.

Recommendations & Approvals:

- Board approval authorizes all work necessary to complete the scope of work for this project, including issuance of any additional bids, purchase orders, engineering services, change orders, easement acquisition, or other authorizations required to complete the work without unnecessary delays.

Respectfully Submitted:

[Signature]

Tom Williams, P.E.
General Manager

BOARD ACTION – 20 June 2016

PASSED:_______ FAILED:_______ TABLED:_______ DATE:_______

64
HENDERSON WATER AND SEWER COMMISSION
RESOLUTION OF THE BOARD OF COMMISSIONERS

Resolution No. 2016-16
Approval of Requests for Wastewater Service
Outside the City Limits in Finley Addition

The following Resolution was duly adopted by the Board of Commissioners of the Henderson Water & Sewer Commission at a regular meeting held on Monday, 20 June 2016, at which meeting a quorum was present.

BE IT RESOLVED, that the Henderson Water and Sewer Commission by and through its Board of Commissioners under the authority granted to the Board of Commissioners under Chapter 23 Article II Division 3 Sections 23-36 through 23-45.1 of the City Code of Ordinances hereby recommends to the Board of Commissioners of the City of Henderson, Kentucky, that the City of Henderson grant Requests for Wastewater Service Outside the City Limits from the following property owners:

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<thead>
<tr>
<th>PVA Parcel Number</th>
<th>Address</th>
<th>Owner Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>45B-15</td>
<td>664 Hwy 41 A</td>
<td>Alan E. &amp; Barbara Holeman</td>
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<tr>
<td>46-100.1</td>
<td>608 US Hwy 41A</td>
<td>Pea Ridge Waste Management (now Stinson Group LLC)</td>
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<tr>
<td>46-131</td>
<td>3649 Hwy 41 A</td>
<td>Patricia Corbell Philips</td>
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<td>46B-60</td>
<td>670 Hwy 41 A</td>
<td>D. E. &amp; Lillian F. Hout</td>
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<td>46F-1</td>
<td>1999 Springfield Drive</td>
<td>Lisa Thompson Meyer</td>
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<td>46F-2</td>
<td>1993 Springfield Drive</td>
<td>Joe Middleton, Jr. and Betty Middleton</td>
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<td>46F-3</td>
<td>1987 Springfield Drive</td>
<td>Donald E. Shelton, Sr., and Jeanie M. Shelton</td>
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<td>46F-4</td>
<td>1981 Springfield Drive</td>
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<tr>
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<td>1969 Springfield Drive</td>
<td>Randy D. and Karen R. Waddell</td>
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<td>46F-9</td>
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<td>46F-23</td>
<td>614 Winchester Street</td>
<td>Robert Adam Schwartz</td>
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<td>608 Winchester Street</td>
<td>James S. and Julie Coffman</td>
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<td>Aaron G. Bugg &amp; Kristin D. Littrell</td>
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<td>46F-27</td>
<td>1980 Springfield Drive</td>
<td>Brian G. Hart</td>
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<td>Jerome D. Carpenter</td>
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<td>46F-29</td>
<td>1992 Springfield Drive</td>
<td>Tommy A. and Michelle Hale</td>
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<tr>
<td>46F-30</td>
<td>1998 Springfield Drive</td>
<td>Otha Ray and Wanda Brown</td>
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These services are being provided as part of the Finley Addition Sewer project, which is being funded by Henderson County Fiscal Court, using State grant funds.

All the property owners listed in the table above have signed a “Consent to Annexation” form, along with the required “Restrictive Covenant Not to Oppose Annexation”, as specified in Chapter 23-98 (e) of the City Code of Ordinances. The Restrictive Covenants have a term of twenty (20) years, and will be recorded in the County Clerk’s office to provide notice to potential future owners.

HWU Staff has reviewed these requests, and has determined that the properties can be connected to the wastewater system without exceeding the capacity of any components of the system and without causing any problems in the collection and treatment systems.

The General Manager is hereby authorized to deliver this Resolution to the City of Henderson, for action by the City Commission and recording of the restrictive covenants.

IN WITNESS WHEREOF, having come before the Board of Commissioners on Monday, 20 June 2016, and upon Motion made by Commissioner ____________, and seconded by Commissioner ____________, the Board of Commissioners voted as follows:

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<thead>
<tr>
<th>Commissioner</th>
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<td>Commissioner, R. Paul Bird, Jr.</td>
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<td>Commissioner, George Jones, III</td>
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<td>Commissioner, John Henderson</td>
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<td>Commissioner, Gary Jennings</td>
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<td>Commissioner, Julie Wischer</td>
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</tbody>
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___________________________
Tom Williams, P.E.
HWU General Manager
EXECUTIVE SESSION

- To discuss matters regarding future acquisition of real property pursuant to KRS 61.810 (1) (b)