A G E N D A

HENDERSON WATER & SEWER COMMISSION
(270) 826-2421

May 15, 2017
Monday @ 4:30pm

A. ROLL CALL

B. INVOCATION

C. RECOGNITION FOR 20 YEARS OF SERVICE
   • Kevin Roberts – May 5, 1997 – Director of Plant Operations
   • Chuck Mulligan – May 16, 1997 – Wastewater Treatment Plant Operator
   • Randy Bentley – May 20, 1997 - Maintenance
   • Shane Gatewood – May 20, 1997 – Maintenance

D. REQUEST TO ADDRESS THE BOARD

E. APPROVAL OF MINUTES
   • Approval of Minutes from April 17, 2017

F. MONTHLY REPORTS
   • Financial
   • Operations
   • Engineering
   • Human Resources
   • Safety Report
   • General Manager’s

G. BUSINESS
   • 2017-2018 Budget Review and Approval
   • Action Report #2017-10 – Small Projects – Construction Services
   • Action Report #2017-11 – Emergency Generators at Treatment Plants & Administration Building
   • Action Report #2017-12 – Fiber Optic Connection – HWU to City Building
   • Action Report #2017-13 – NWTP Lab & Office Remodel Update
   • Action Report #2017-14 – Bids for Materials - Inventory
H. EXECUTIVE SESSION – *Requested*

- To discuss matter regarding proposed or pending litigation, pursuant to KRS 61.810 (1) (c)
RECOGNITION FOR 20 YEARS OF SERVICE

- KEVIN ROBERTS – Director of Plant Operations
- CHUCK MULLIGAN – Wastewater Treatment Plant Operator
- RANDY BENTLEY – Maintenance
- SHANE GATEWOOD - Maintenance
Request to Address the Board
ACTION MINUTES OF MEETING
April 17, 2017
ACTION MINUTES
APRIL 17, 2017
HENDERSON WATER & SEWER COMMISSION

A. ROLL CALL

Present at the meeting was Commissioner Paul Bird, Chairman, who presided over the meeting, along with Commissioners John Henderson, Gary Jennings, and Julie Wischer. Commissioner George Jones was unable to attend the meeting. General Manager, Tom Williams and Eric Shappell, Attorney were also present. Other Staff members present were Rodney Michael, Kevin Roberts, Todd Bowley, John Baker, Ken Ferry, Tim Fischbeck, Kathy Ambrose, and Patty Brown. Also in attendance were Mayor, Steve Austin, Mike Vickers, and Laura Acchiardo with “The Gleaner”.

B. INVOCATION – Kevin Roberts

C. APPROVAL OF MINUTES

- Approval of Minutes from March 20, 2017

Minutes were approved as submitted.

D. MONTHLY REPORTS

- Financial

Todd Bowley distributed a supplement to the financials which included a more detailed breakdown of volumetric usage by HWU customers for the last 5 years. This provided a clearer representation of the different customers that are served and how their water usage has trended over the last few years.

Mr. Bowley reviewed the March financials with the board. He pointed out that there was a $285,000 operating loss which was affected by a short month in February, 3 payrolls, and some large repairs. The usage by customers in total was down 2.26% from the previous period last year. The year to date operating income shows a positive $1,086,621 which is $918,061 over the budgeted amount. Commissioner Gary Jennings pointed out that this is mostly due to the difference in salaries, wages and related expenses that were budgeted at a higher amount and included positions that have not been filled due to turnover and retirements. This causes the salary related expenses to be lower. If these positions were filled there would be a considerably lower amount showing in operating income over budget and this is something to keep in mind when looking at these numbers. The amount of available cash would be decreased by this amount also because these are actual cash expenses.

- Operations – Discussed and approved as submitted.

- Engineering – Discussed and approved as submitted.
• Human Resources – Discussed and approved as submitted.

• Safety Report – Discussed and approved as submitted.

• General Manager’s

  Tom Williams reported that budget preparations are going well. He reviewed the modified organizational chart included in the report, showing new positions in green and renamed positions in blue. This is what the budget will be based on this time.

  Mr. Williams also noted the Annual MS4 Report that is prepared by John Baker each year. It contains a lot of detailed information and the effort made by John and other staff members is very much appreciated.

  The board reviewed the information presented concerning Water and Wastewater Tap fees. Even though the cost for these services has risen, it was decided to have the fees remain the same.

  o Strategic Plan for Capital Spending Update

    This report was distributed to the board members prior to the meeting and is accessible on the HWU website for review. It details the projects needed for improving water, wastewater, and stormwater systems for customers served by HWU.

E. BUSINESS

• Resolution #2017-07 – Sense of the Commission Regarding Cash Reserves and Payment in Lieu of Taxes to the City of Henderson

  After discussion, motion was made and approved to Table this resolution.

• Action Report #2017-08 – College Water Tank Project – Coating and Repair

  After review and discussion, motion was made and approved to award the College Water Tank Project to the lowest bidder, Preferred Sandblasting and Painting, LLC, of Shelbyville, Tennessee in the amount of $362,517.00. The total amount authorized for the project is $450,252.00 which includes the awarded bid, engineering services, Inspection services, and contingency as detailed in the Action Report.

• Action Report #2017-09 – South WWTP – Extended Aeration Basins Improvement Project

  Tom Williams discussed the condition of Basins 3, 4, & 5 at the South Wastewater Treatment Plant and reported on the three alternative plans for renovation that were presented by J.R. Wauford. The board agreed that this project needs to be completed to assure continued service to Tyson and other customers served by this plant. The main concern was the availability of funds to complete the project. Even though this will be a strain on the budget, everyone agreed that Alternative 2 would be the best plan. This includes renovation of three existing basins with perforated membrane fine bubble aeration equipment and a concrete floor like the basin that
was renovated at the NWWTP. Staff reported that the new NWWTP basin has had no issues so far and is easier to maintain. A present net worth analysis was also prepared for each alternative which indicated that Alternative 2 would be much better than the current system of replacing liners and equipment every few years. The estimated construction cost for Alternative 2 is $2,530,000. Staff recommends that the Commission authorize approval of detailed design and solicitation of bids for SWWTP Extended Aeration Basins Improvement Project, utilizing Alternative 2, fixed, fine-bubble aeration in three existing basins. When the bidding process is complete the results will be brought back before the board. The amount of $116,000 will be appropriated from the “Special Projects” budget line for design costs. The bulk of funding for construction will be taken from the FY 2017-18 capital budget and will likely run over 2 budget cycles. After discussion, motion was made and approved to go forward with the project using Alternative 2 while keeping the utility within budget.

F. EXECUTIVE SESSION – Requested

Motion was made and approved to go into Executive Session:

- To discuss matter regarding proposed or pending litigation, pursuant to KRS 61.810 (1) (c)

Upon return from Executive Session no further business was conducted.

Motion was made and approved to adjourn.

The next regularly scheduled meeting will be held on Monday, May 15, 2017.
FINANCIAL REPORT
Henderson Water Utility

Financial Summary

For the Ten Months Ended April 30, 2017
Henderson Water Utility  
Operating Revenues and Expenses Summary  
For the Ten Months Ended April 30, 2017  

<table>
<thead>
<tr>
<th></th>
<th>April Actual</th>
<th>April 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>$533,059</td>
<td>$644,806</td>
<td>$6,060,000</td>
<td>$6,259,156</td>
<td>$7,556,325</td>
</tr>
<tr>
<td>Water Penalties</td>
<td>2,605</td>
<td>2,370</td>
<td>25,058</td>
<td>23,696</td>
<td>28,435</td>
</tr>
<tr>
<td>Water Fees</td>
<td>300</td>
<td>4,022</td>
<td>52,894</td>
<td>40,221</td>
<td>48,265</td>
</tr>
<tr>
<td>Wastewater Services</td>
<td>822,300</td>
<td>918,908</td>
<td>8,933,383</td>
<td>8,919,873</td>
<td>10,768,458</td>
</tr>
<tr>
<td>Wastewater Penalties</td>
<td>3,975</td>
<td>3,161</td>
<td>40,515</td>
<td>31,610</td>
<td>37,932</td>
</tr>
<tr>
<td>Wastewater Fees</td>
<td>100</td>
<td>15,800</td>
<td>247,367</td>
<td>157,996</td>
<td>189,595</td>
</tr>
<tr>
<td>Total Operating Revenues</td>
<td>1,362,339</td>
<td>1,589,067</td>
<td>15,359,217</td>
<td>15,432,551</td>
<td>18,629,010</td>
</tr>
<tr>
<td><strong>OPERATING EXPENSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries and Wages</td>
<td>322,535</td>
<td>351,654</td>
<td>3,463,934</td>
<td>3,868,190</td>
<td>4,571,497</td>
</tr>
<tr>
<td>Payroll Taxes</td>
<td>24,165</td>
<td>25,556</td>
<td>250,839</td>
<td>281,120</td>
<td>332,233</td>
</tr>
<tr>
<td>Health Insurance</td>
<td>113,850</td>
<td>122,778</td>
<td>1,056,947</td>
<td>1,227,778</td>
<td>1,473,333</td>
</tr>
<tr>
<td>Pension Benefits</td>
<td>59,345</td>
<td>65,689</td>
<td>632,501</td>
<td>722,578</td>
<td>853,956</td>
</tr>
<tr>
<td>Workers Compensation</td>
<td>12,818</td>
<td>8,320</td>
<td>79,983</td>
<td>99,836</td>
<td>99,836</td>
</tr>
<tr>
<td>Other Employee Benefits</td>
<td>1,706</td>
<td>2,105</td>
<td>15,323</td>
<td>21,053</td>
<td>25,263</td>
</tr>
<tr>
<td>Car Allowance</td>
<td>1,350</td>
<td>2,250</td>
<td>13,530</td>
<td>22,500</td>
<td>27,000</td>
</tr>
<tr>
<td>Electricity</td>
<td>162,664</td>
<td>145,684</td>
<td>1,502,158</td>
<td>1,456,838</td>
<td>1,748,205</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>1,879</td>
<td>4,600</td>
<td>19,772</td>
<td>35,050</td>
<td>37,050</td>
</tr>
<tr>
<td>Chemicals</td>
<td>95,189</td>
<td>94,188</td>
<td>1,010,287</td>
<td>941,875</td>
<td>1,130,250</td>
</tr>
<tr>
<td>Inventory Expense</td>
<td>5,387</td>
<td>15,775</td>
<td>158,705</td>
<td>157,750</td>
<td>189,300</td>
</tr>
<tr>
<td>Fuel</td>
<td>12,477</td>
<td>10,123</td>
<td>86,869</td>
<td>101,229</td>
<td>121,475</td>
</tr>
<tr>
<td>Tools &amp; Small Equipment</td>
<td>9,894</td>
<td>16,363</td>
<td>79,919</td>
<td>156,625</td>
<td>196,350</td>
</tr>
<tr>
<td>Safety Supplies</td>
<td>1,207</td>
<td>5,517</td>
<td>43,879</td>
<td>55,167</td>
<td>66,200</td>
</tr>
<tr>
<td>Lab Supplies and Testing</td>
<td>21,742</td>
<td>30,542</td>
<td>116,995</td>
<td>122,167</td>
<td>-</td>
</tr>
<tr>
<td>Clothing/Cleaning Allowance</td>
<td>615</td>
<td>-</td>
<td>23,338</td>
<td>19,525</td>
<td>19,525</td>
</tr>
<tr>
<td>Vehicle Repair</td>
<td>5,609</td>
<td>4,183</td>
<td>65,736</td>
<td>41,833</td>
<td>50,200</td>
</tr>
<tr>
<td>Other Equipment Repair</td>
<td>18,875</td>
<td>16,233</td>
<td>194,195</td>
<td>162,333</td>
<td>194,800</td>
</tr>
<tr>
<td>Other Structures Repair</td>
<td>31,265</td>
<td>28,350</td>
<td>292,887</td>
<td>283,500</td>
<td>340,200</td>
</tr>
<tr>
<td>SCADA Expense</td>
<td>2,083</td>
<td>3,743</td>
<td>35,277</td>
<td>37,428</td>
<td>44,914</td>
</tr>
<tr>
<td>Administrative Services</td>
<td>47,000</td>
<td>53,000</td>
<td>524,000</td>
<td>530,000</td>
<td>636,000</td>
</tr>
<tr>
<td>Contractual Services</td>
<td>14,027</td>
<td>12,602</td>
<td>598,555</td>
<td>647,197</td>
<td>1,113,400</td>
</tr>
<tr>
<td>Contractual Labor</td>
<td>6,963</td>
<td>17,183</td>
<td>157,424</td>
<td>171,833</td>
<td>206,200</td>
</tr>
<tr>
<td>Sludge Hauling and Disposal</td>
<td>61,909</td>
<td>55,455</td>
<td>236,158</td>
<td>194,091</td>
<td>-</td>
</tr>
<tr>
<td>Professional Services</td>
<td>1,134</td>
<td>2,917</td>
<td>24,349</td>
<td>29,167</td>
<td>35,000</td>
</tr>
<tr>
<td>Equipment Rental</td>
<td>1,703</td>
<td>5,351</td>
<td>36,790</td>
<td>53,513</td>
<td>64,215</td>
</tr>
<tr>
<td>Audit Expense</td>
<td>-</td>
<td>-</td>
<td>20,000</td>
<td>21,000</td>
<td>21,000</td>
</tr>
<tr>
<td>Trust Fees</td>
<td>-</td>
<td>500</td>
<td>255</td>
<td>5,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Public Contributions</td>
<td>-</td>
<td>3,958</td>
<td>4,250</td>
<td>39,583</td>
<td>47,500</td>
</tr>
<tr>
<td>Insurance</td>
<td>-</td>
<td>-</td>
<td>209,473</td>
<td>219,004</td>
<td>292,005</td>
</tr>
<tr>
<td>Technology Expense</td>
<td>10,009</td>
<td>15,837</td>
<td>124,611</td>
<td>158,367</td>
<td>190,040</td>
</tr>
<tr>
<td>Office &amp; Field Supplies</td>
<td>6,710</td>
<td>9,685</td>
<td>134,140</td>
<td>144,103</td>
<td>210,724</td>
</tr>
<tr>
<td>Telephone</td>
<td>7,273</td>
<td>6,137</td>
<td>56,629</td>
<td>61,373</td>
<td>73,647</td>
</tr>
<tr>
<td>Medical Exams</td>
<td>-</td>
<td>500</td>
<td>4,733</td>
<td>5,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Travel and Training</td>
<td>3,735</td>
<td>6,322</td>
<td>46,786</td>
<td>63,222</td>
<td>75,866</td>
</tr>
<tr>
<td>Dues and Subscriptions</td>
<td>247</td>
<td>1,598</td>
<td>12,811</td>
<td>15,982</td>
<td>19,178</td>
</tr>
<tr>
<td>Printing</td>
<td>1,847</td>
<td>967</td>
<td>9,628</td>
<td>9,667</td>
<td>11,600</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>790</td>
<td>679</td>
<td>4,562</td>
<td>6,792</td>
<td>8,150</td>
</tr>
<tr>
<td>Depreciation</td>
<td>290,226</td>
<td>291,667</td>
<td>2,902,257</td>
<td>2,916,667</td>
<td>3,500,000</td>
</tr>
<tr>
<td>Total Operating Expenses</td>
<td>1,358,228</td>
<td>1,438,009</td>
<td>14,268,485</td>
<td>15,112,932</td>
<td>18,038,112</td>
</tr>
<tr>
<td>Operating Income (Loss)</td>
<td>$4,111</td>
<td>$151,058</td>
<td>$1,090,732</td>
<td>$319,619</td>
<td>$590,898</td>
</tr>
</tbody>
</table>
Henderson Water Utility
Variance Analysis
For the Ten Months Ended April 30, 2017

Operating Revenues
Actual $15,359,217
Budgeted 15,432,551
Favorable (Unfavorable) Variance $(73,334)
Percentage Difference ‐0.48%

Billable Gallons
Through 4/30/17 1,984,031,332
Through 4/30/16 2,034,032,577
Difference (50,001,245)
Percentage Difference ‐2.46%

Operating Expenses
Actual $14,268,485
Budgeted 15,112,932
Favorable (Unfavorable) Variance 844,447
Percentage Difference 5.59%

Breakdown of Volumetric Differential For Ten Months Ended

<table>
<thead>
<tr>
<th></th>
<th>Apr-17</th>
<th>Apr-16</th>
<th>Differential %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>490,398,439</td>
<td>518,891,618</td>
<td>‐5.49%</td>
</tr>
<tr>
<td>Industrial (includes IP)</td>
<td>371,006,071</td>
<td>388,981,041</td>
<td>‐4.62%</td>
</tr>
<tr>
<td>Commercial (includes Tyson &amp; HCWD)</td>
<td>1,122,626,822</td>
<td>1,126,159,918</td>
<td>‐0.31%</td>
</tr>
<tr>
<td>Total</td>
<td>1,984,031,332</td>
<td>2,034,032,577</td>
<td>‐2.46%</td>
</tr>
</tbody>
</table>

Notes
Revenue Summary:
Revenues are under budget for current year-to-date in total. Water sales are below budget by approx. $200k, but are being offset by wastewater and other fees which have exceeded year-to-date budget. All three usage classes are below prior year levels continuing trend of overall usage decreases.

Expense Summary:
Expenses continue under budget primarily due to payroll and related expenses being under budgeted amounts due to unfilled positions, etc. Utilities, Chemicals, Sludge Hauling/Disposal and Repairs/Maintenance continue to trend above budget for the year-to-date.

Special:
The classification (residential, industrial commercial) breakdown of volumetric data above was revised from prior reporting. Total usage is unchanged but category breakdown was adjusted upon finding that volumetric data from some contractual clients was being misreported from categories in City system. This was found during last months preparation of detailed usage summary that was presented to Board.
## Henderson Water Utility
### Capital Expenditures Report
#### For the Ten Months Ended April 30, 2017

<table>
<thead>
<tr>
<th>Construction In Progress:</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>US 60 Reimbursable</td>
<td>$ 43,498</td>
<td>$ 8,210</td>
<td>$ 96,345</td>
<td>$ 139,842</td>
<td>$ 65,000</td>
<td>1,000</td>
<td>16-08</td>
</tr>
<tr>
<td>US 60W Water Booster Station</td>
<td>246,326</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>185,000</td>
<td>06/16 GMR</td>
</tr>
<tr>
<td>NWWT Headworks Project</td>
<td>13,374,886</td>
<td>5,642</td>
<td>200,894</td>
<td>13,575,780</td>
<td>100</td>
<td>13,630,139</td>
<td>13-24</td>
</tr>
<tr>
<td>NWTP Rehab</td>
<td>1,543,166</td>
<td>-</td>
<td>142,367</td>
<td>1,685,533</td>
<td>24,407</td>
<td>1,661,226</td>
<td>15-11</td>
</tr>
<tr>
<td>SWTP Rehab</td>
<td>676,092</td>
<td>-</td>
<td>184,147</td>
<td>860,239</td>
<td>170,000</td>
<td>625,100</td>
<td>15-09</td>
</tr>
<tr>
<td>Countryview Subdivision Stormwater</td>
<td>49,585</td>
<td>-</td>
<td>-</td>
<td>49,585</td>
<td>400,000</td>
<td>400,000</td>
<td>14-53</td>
</tr>
<tr>
<td>Frontier Tank Project</td>
<td>555,786</td>
<td>-</td>
<td>-</td>
<td>555,786</td>
<td>35,000</td>
<td>655,800</td>
<td>15-13</td>
</tr>
<tr>
<td>Atkinson Park Watershed</td>
<td>146,369</td>
<td>-</td>
<td>63,904</td>
<td>210,273</td>
<td>64,000</td>
<td>198,500</td>
<td>15-14</td>
</tr>
<tr>
<td>VINE Street Tank</td>
<td>12,799</td>
<td>2,104</td>
<td>10,740</td>
<td>23,539</td>
<td>30,000</td>
<td>450,252</td>
<td>17-08</td>
</tr>
<tr>
<td>Libby Addition</td>
<td>6,657</td>
<td>355</td>
<td>26,561</td>
<td>33,218</td>
<td>20,000</td>
<td>280,000</td>
<td>15-30</td>
</tr>
<tr>
<td>Clarifier Paint &amp; Pipe</td>
<td>185,715</td>
<td>-</td>
<td>185,715</td>
<td>713,892</td>
<td>713,892</td>
<td>215,000</td>
<td>16-05</td>
</tr>
<tr>
<td>North Main Street Pressure</td>
<td>24,128</td>
<td>552</td>
<td>329,269</td>
<td>353,397</td>
<td>165,000</td>
<td>315,000</td>
<td>16-07</td>
</tr>
<tr>
<td>SWTP Building</td>
<td>8,225</td>
<td>-</td>
<td>23,788</td>
<td>32,017</td>
<td>9,000</td>
<td>17,000</td>
<td>N/A</td>
</tr>
<tr>
<td>Sugar Creek Bank</td>
<td>6,849</td>
<td>-</td>
<td>28,452</td>
<td>35,301</td>
<td>43,000</td>
<td>50,000</td>
<td>16-13</td>
</tr>
<tr>
<td>S Main St Sewer</td>
<td>28,225</td>
<td>-</td>
<td>23,788</td>
<td>51,000</td>
<td>66,000</td>
<td>66,000</td>
<td>16-15</td>
</tr>
<tr>
<td>Elm Water Lines</td>
<td>-</td>
<td>-</td>
<td>75,400</td>
<td>75,400</td>
<td>51,315</td>
<td>51,315</td>
<td>16-31</td>
</tr>
<tr>
<td>NWWT Clarifier Project</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>713,892</td>
<td>713,892</td>
<td>16-21</td>
<td></td>
</tr>
<tr>
<td>Clay St Sewer Repair Project</td>
<td>-</td>
<td>862</td>
<td>23,390</td>
<td>23,390</td>
<td>58,800</td>
<td>58,800</td>
<td>17-02</td>
</tr>
<tr>
<td>Riverdale Stormwater Project</td>
<td>-</td>
<td>900</td>
<td>2,688</td>
<td>2,688</td>
<td>10,000</td>
<td>10,000</td>
<td>N/A</td>
</tr>
<tr>
<td>SWTP Basin Renovations</td>
<td>-</td>
<td>11,601</td>
<td>11,601</td>
<td>11,601</td>
<td>116,000</td>
<td>2,530,000</td>
<td>17-09</td>
</tr>
<tr>
<td>Misc Stormwater Projects</td>
<td>-</td>
<td>8,919</td>
<td>8,919</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Special Projects</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>222,001</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Construction In Progress:</strong></td>
<td><strong>16,941,290</strong></td>
<td><strong>124,123</strong></td>
<td><strong>3,522,077</strong></td>
<td><strong>20,463,367</strong></td>
<td><strong>3,167,533</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Buildings and Improvements:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Admin Bldg Improvements</td>
<td>269,525</td>
<td>-</td>
<td>3,344</td>
<td>272,869</td>
<td>100</td>
<td>280,000</td>
<td>15-25</td>
</tr>
<tr>
<td>NWTP Office/Lab Remodel</td>
<td>-</td>
<td>-</td>
<td>15,958</td>
<td>15,958</td>
<td>25,000</td>
<td>25,000</td>
<td>17-04</td>
</tr>
<tr>
<td><strong>Total Buildings and Improvements:</strong></td>
<td><strong>269,525</strong></td>
<td><strong>-</strong></td>
<td><strong>19,301</strong></td>
<td><strong>288,826</strong></td>
<td><strong>25,100</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Equipment and Vehicles:

#### Equipment:
- Wonderware Historian: - 48,443 48,443 53,928 53,928 16-14
- Trench Protection Boxes: - 35,925 35,925 36,013 36,013 16-20
- IT Shel & Servers: - 22,318 22,318 23,135 23,135 16-23
- Refrigerated Auto Sampler: - 5,591 5,591 5,591 5,591 N/A
- Cat Mini Excavator & Trailer: - 55,100 55,100 55,100 55,100 17-03
- Veam IT Network Backup: - 5,986 5,986 5,986 5,986 10,000 10,000 N/A

#### Vehicles:
- Ford F-450 Utility Crew Truck: - 46,267 46,267 48,000 48,000 16-22

<table>
<thead>
<tr>
<th>Total Equipment and Vehicles:</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>-</td>
<td>-</td>
<td>5,986</td>
<td>219,630</td>
<td>219,630</td>
<td>231,767</td>
<td></td>
</tr>
</tbody>
</table>

### Total Capital Expenditures:
- $ 17,210,816
- $ 3,761,008
- $ 20,971,823
- $ 3,424,400
Henderson Water Utility

Financial Statements

For the Ten Months Ended April 30, 2017
### Henderson Water Utility

#### Statement of Net Position

**April 30, 2017**

### ASSETS AND DEFERRED OUTFLOWS

#### Current assets:
- Cash: $6,601,698
- Unrestricted Investments: $35,766
- Restricted Investments: -
- Accounts receivable: $1,231,430
- Inventories: $889,018
- Other current assets: $86,639
- **Total current assets**: $8,844,551

#### Noncurrent assets:
- Construction in progress: $20,463,367
- Utility plant and equipment, net of accumulated depreciation: $62,082,358
- Other assets: $33,048
- **Total noncurrent assets**: $82,578,773

- **Deferred outflows of resources**: $1,340,953

- **Total assets and deferred outflows**: $92,764,277

### LIABILITIES AND DEFERRED INFLOWS

#### Current liabilities:
- Accounts payable: $332,724
- Retainage payable: $25,000
- Deposits payable: $87,155
- Accrued liabilities: $1,728,947
- Current portion of long-term debt: -
- **Total current liabilities**: $2,173,826

#### Noncurrent liabilities:
- Accrued pension liability: $6,734,694
- Long-term debt: $37,286,093
- **Total noncurrent liabilities**: $44,020,787

- **Deferred inflows of resources**: -

- **Total liabilities and deferred inflows**: $46,194,613

### NET POSITION

- Net investment in capital assets: $45,292,680
- Restricted for debt service: -
- Unrestricted: $1,276,984
- **Total net position**: $46,569,664
### Henderson Water Utility

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

*For the Ten Months Ended April 30, 2017*

<table>
<thead>
<tr>
<th></th>
<th>April Actual</th>
<th>April 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 and fees</td>
<td>$535,964</td>
<td>$651,198</td>
<td>$6,137,952</td>
<td>$6,323,073</td>
<td>$7,633,025</td>
</tr>
<tr>
<td>Wastewater services and fees</td>
<td>826,375</td>
<td>937,869</td>
<td>9,221,265</td>
<td>9,109,479</td>
<td>10,995,985</td>
</tr>
<tr>
<td>Total operating revenues</td>
<td>1,362,339</td>
<td>1,589,067</td>
<td>15,359,217</td>
<td>15,432,551</td>
<td>18,629,010</td>
</tr>
<tr>
<td><strong>OPERATING EXPENSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries, wages, and benefits</td>
<td>535,769</td>
<td>578,352</td>
<td>5,513,057</td>
<td>6,243,054</td>
<td>7,383,118</td>
</tr>
<tr>
<td>Contractual services</td>
<td>132,736</td>
<td>147,007</td>
<td>1,597,531</td>
<td>1,651,800</td>
<td>2,081,815</td>
</tr>
<tr>
<td>Supplies and materials</td>
<td>146,511</td>
<td>172,506</td>
<td>1,537,992</td>
<td>1,561,338</td>
<td>1,723,100</td>
</tr>
<tr>
<td>Utilities expense</td>
<td>164,543</td>
<td>150,284</td>
<td>1,521,930</td>
<td>1,491,888</td>
<td>1,785,255</td>
</tr>
<tr>
<td>Repairs and maintenance</td>
<td>57,832</td>
<td>52,510</td>
<td>588,095</td>
<td>525,095</td>
<td>630,114</td>
</tr>
<tr>
<td>Other services and expenses</td>
<td>30,611</td>
<td>45,684</td>
<td>607,623</td>
<td>723,091</td>
<td>934,710</td>
</tr>
<tr>
<td>Depreciation</td>
<td>290,226</td>
<td>291,667</td>
<td>2,902,257</td>
<td>2,916,667</td>
<td>3,500,000</td>
</tr>
<tr>
<td>Total operating expenses</td>
<td>1,358,228</td>
<td>1,438,009</td>
<td>14,268,485</td>
<td>15,112,932</td>
<td>18,038,112</td>
</tr>
<tr>
<td>Operating income (loss)</td>
<td>$4,111</td>
<td>151,058</td>
<td>1,090,732</td>
<td>319,619</td>
<td>590,898</td>
</tr>
<tr>
<td><strong>NONOPERATING REVENUES (EXPENSES)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment income</td>
<td>6,850</td>
<td>2,083</td>
<td>48,319</td>
<td>20,833</td>
<td>25,000</td>
</tr>
<tr>
<td>Other income</td>
<td>642</td>
<td>-</td>
<td>26,434</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Interest expense</td>
<td>(78,026)</td>
<td>(82,617)</td>
<td>(823,830)</td>
<td>(826,174)</td>
<td>(991,409)</td>
</tr>
<tr>
<td>Amortization expense</td>
<td>1,392</td>
<td>(329)</td>
<td>1,872</td>
<td>(3,293)</td>
<td>(3,951)</td>
</tr>
<tr>
<td>Total nonoperating revenues (expenses)</td>
<td>(69,142)</td>
<td>(80,863)</td>
<td>(747,205)</td>
<td>(808,633)</td>
<td>(970,360)</td>
</tr>
<tr>
<td>Income (loss) before capital contributions and distributions</td>
<td>(65,031)</td>
<td>70,195</td>
<td>343,527</td>
<td>(489,015)</td>
<td>(379,462)</td>
</tr>
<tr>
<td>Capital contributions</td>
<td>25,932</td>
<td>20,833</td>
<td>1,503,174</td>
<td>208,333</td>
<td>250,000</td>
</tr>
<tr>
<td>Distribution to City of Henderson</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(400,000)</td>
</tr>
<tr>
<td>Change in net position</td>
<td>(39,099)</td>
<td>91,028</td>
<td>1,846,701</td>
<td>(280,681)</td>
<td>(529,462)</td>
</tr>
<tr>
<td>Net position, end of period</td>
<td>$46,569,664</td>
<td>$44,818,720</td>
<td>$46,569,664</td>
<td>$44,442,282</td>
<td>$44,161,500</td>
</tr>
</tbody>
</table>
Henderson Water Utility  
Statement of Cash Flows  
For the Ten Months Ended April 30, 2017

<table>
<thead>
<tr>
<th></th>
<th>April</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>$ 825,695</td>
<td>$ 15,220,573</td>
</tr>
<tr>
<td>Payments for goods and services</td>
<td>(217,389)</td>
<td>(5,472,024)</td>
</tr>
<tr>
<td>Payments for employees</td>
<td>(549,299)</td>
<td>(5,538,861)</td>
</tr>
<tr>
<td>Net cash provided (used) by operating activities</td>
<td>59,007</td>
<td>4,209,688</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 | (208,051)   | (3,072,596)  |
| Principal payments on long-term debt | -           | (5,136,146)  |
| Interest payments on long-term debt | (438,384)   | (981,131)    |
| Bond proceeds, net of closing costs | -           | 2,468,578    |
| Capital contributions | 25,932       | 115,302      |
| Net cash provided (used) by capital and related financing activities | (620,503)   | (6,605,993)  |

| **CASH FLOWS FROM INVESTING ACTIVITIES** |             |              |
| Investment and other income received | 7,492       | 88,195       |
| Investments proceeds | -           | 741,889      |
| Investments purchases | -          | (207,031)    |
| Net cash provided (used) by investing activities | 7,492       | 623,053      |

Net increase (decrease) in cash  
(554,004) | (1,773,252)

Cash, beginning of period  
7,155,702 | 8,374,950

Cash, end of period  
$ 6,601,698 | $ 6,601,698
OPERATIONS REPORT
General Operations:

A. Treatment Plants – Overview:

1. Regulatory:

   The annual Consumer Confidence Report is being prepared. We hope to incorporate a greater measure of customer focused content. We also intend to “pretty it up” a bit more than it has been.

   With spring approaching, we will begin monitoring our raw water for algae. The milder winter could be a catalyst for a problematic summer.

2. Operational & Financial:

   Budget: No updates to report.

3. System Water Quality:

   Water Quality Calls: There was one water quality call received in April.

   1104 Wedgewood Dr. - The customer complained of an “Earthy-Smell” to the water which started a few days prior to the call. When our water quality specialist arrived, the smell was not noticeable. All testing done on the water was within normal ranges at the time of the investigation, but the customer has been advised to call back immediately if they notice it again.

4. Personnel:

   Staffing Levels:

   a. Water Quality: Full operational staff. The water quality staff is working on educational outreach to schools and has scheduled several school visits and schools coming for plant tours.

   b. North Water: Full operational staff. With the retirement of Pat Edwards this summer, we have hired Rick Green as replacement operator. Rick’s training proceeds well, and he is becoming quite competent as an operator.

   c. North Wastewater: Full operational staff.

   d. South Water: Full operational staff. With the hiring of Daryl Jarrett, the plant is fully staffed, though Daryl is still training.

   e. South Wastewater: Full operational staff. With the hiring of Steve Sigler, the plant is fully staffed, though Steve is still training.

   f. Environmental Compliance & Pretreatment: Full operational staff.

   g. Plant & Pump Station Maintenance: There is currently a vacancy for either an MT1 or MT2 position. Additionally, we have two staff members out on FMLA.
h. Treatment Intern: This position is vacant until school is out. We will be accepting and reviewing applicants this month.

5. Projects:

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

B. North WTP:

1. Treatment Quality:

**Water Quality Goals**: All regulatory and Partnership for Safe Water treatment goals were met. We have now passed half of a year of all filtered water turbidities being below 0.100 NTU, which is the Partnership goal. The regulatory **maximum** limit for turbidity is 0.300 NTU. To consistently be less than one-third of the regulatory limit is remarkable operating.

**Distribution**: We are currently looking to install additional sampling sites in our distribution system so as to get a better representation and understanding of the water quality in our entire system. Currently, we are required by KDOW to have 30 regulatory sampling sites. We believe that it is necessary to add to this number even though regulations do not require us to. Hydrant flushing was performed in the first week in May.

Community Outreach: The water quality specialists have made a special push towards community outreach this month. They visited multiple schools including Holy Name, Spottsville Elementary, and Cairo Elementary. They have also participated in a plant tour with East Heights Elementary and have four more planned in May! The water quality department also participated at Tri-Fest by giving back to our community. We handed out over 500 refillable water bottles to say “Thank You”.

2. Operations & Projects:

**Treatment Challenges**: River turbidities remain high this month, causing the use of more chemical than normal to achieve treatment goals. Operators have also focused on Disinfection By-Product treatment and removal this month. With the rental of an Online Trihalomethane monitor, we have been able to closely monitor the production of DBP’s within the plant and the distribution system. While this month has been a baseline removal due to Disinfection By-Product testing, the data collected has already seen some changes made within the plant to help limit the formation of Trihalomethanes.

**Construction Update**: Operations staff has noticed some of the bolts on the mixer supports for the new flash mix coming loose. Bowling Inc. was contacted and applied epoxied anchors to the supports; however, this has not proved to be sufficient, as the bolts continue to loosen over time. Clark Dietz has been contacted and has provided revisions to the plans that they believe will remedy the problem. This work is scheduled for May 11, 2017. HWU requested that the work be delayed for treatment challenges due to DBP treatment and plant tours.

**Plant Optimization**: Optimization this month has focused on limiting the Trihalomethane production in the plant through the use of a number of techniques including adjustment of Powdered Activated Carbon Feed Rates, lower Chlorine residuals on the Top of Filters, and advanced coagulation. Many of these methods have been tried in the past, but with online
Trihalomethane measurements as well as easy access to grab sample results, results can be seen quickly and adjusted based on concrete data.

**Plant Beautification:** Operators have started spring cleaning. Focus so far has been sorting through storage areas and eliminating clutter.

3. **Budget:**

**Chemicals:** Chemicals were over budget for the month due to river conditions and continued additional treatment for distribution water quality while work on Elm Street finishes up. Additional treatment was also needed for Disinfection By-Product removal. Additionally, there was a purchase of a chemical, which is purchased only a few times per year.

**Monthly Total O&M:** The NWTP was over budget for the month. This is largely due to the additional chemicals needed for Disinfection By-Product removal.

4. **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:**

   **Effluent Quality:** All regulatory treatment goals were met. Effluent quality is excellent.

   **Biosolids Quality:** Sludge solids remain at good quality.

   **Reports:** All reports have been submitted for the month and year.

2. **Operations & Projects:**

   **UV Disinfection:** Disinfection is impressive.

   **Personnel:** One operator will be applying for his first WW license this quarter.

   **Construction:** Codell Construction was in the plant to address landscaping. Bowling Construction has intensified work on the Clarifier rehab project. New equipment is anticipated to arrive in May.

   **Sludge Hauling:** Hauling has picked up, and the storage building inventory is under control.
**Dry Bed Sludge Hauling:** There is some maintenance work to be done on slow-draining areas of a couple of beds.

**Treatment Challenges:** Algae is returning with the warmer weather. Operators are washing down the clarifier frequently to prevent build-up. RAS pump #2 is still out of service at the shop.

### 3. Budget

**Chemicals:** Chemical expenditures were over budget for the month as press polymer was used for increased sludge removal in preparation for warmer weather.

**Fuel:** Under budget for the month.

**Solids Management:** Over budget slightly for increased polymer for the month.

### D. South WTP:

#### 1. Treatment Quality:

**Water Quality Goals:** All monthly regulatory goals were met. We have had to fight hard to stay within the regulatory goals this month. The rain and up and down temperatures make controlling this plant very difficult.

**Distribution:** Hydrants in the south system were flushed May 3, 2017.

#### 2. Operations & Projects:

**Personnel:** Daryl Jarrett began training to be an operator April 17, 2017.

**Treatment Challenges:** With warmer weather approaching we will be monitoring algae formation on the river. The spring weather and temperature swings make controlling this treatment plant very challenging. We are successful; but it takes a great deal of effort, skill, and persistence to maintain our water quality.

**Projects:** Once the weather stabilizes and is more suitable to work outside, we will resume work on the overall appearance of the plant. This year we will finish the trim on all of the winter shelters that were built to replace the ones removed during the cone painting. Hopefully, we will also be able to get the storage building built that we have been working toward for the last two years.

**Maintenance:** Maintenance projects continue to be addressed. There has been a marked improvement in maintenance needs being addressed in a timelier manner at this plant since combining the maintenance teams.

#### 3. Budget

**Chemicals:** Chemicals were over budget for the month.

**Monthly Total O&M:** Total O&M expenditures were under budget for the month.
4. **Average Water Treated and Water Pumped Data Trend:**

![Graph showing SWTP Treated and SWTP Pumped data trend]

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

**E. South WWTP:**

1. **Treatment Quality:**
   
   **Effluent Quality:** All treatment goals were met.

   **Bio Solids Quality:** Sludge solids are good. Spring is here, and we are ramping up our sludge disposal as we normally do. We will be getting with Hazex to increase to two trucks nightly, as needed. So far, there have been no issues resulting from bridge work being performed.

2. **Operations & Projects:**

   **Personnel:** Steve Sigler began training as a new operator on April 24, 2017. His training is proceeding as expected, and he is doing well learning the position.

   **Aeration Basin Repairs:** We are working with plant maintenance to form a plan to repair # 6 aeration basin by using the # 4 aeration basin parts. This needs to be completed before the summer heat gets here. This will buy us time until a larger renovation project can be designed and constructed.

   We are also planning for the replacement of our chlorine injection system and feed point.

3. **Budget:**

   **Chemicals:** Under budget for the month.

   **Solids Management:** Under budget for the month.

   **Monthly Total O&M:** Total monthly expenditures were under budget.

**F. Plant & Pump Station Maintenance:**

**Personnel:** (No Change) One MT position is vacant and is intended to be filled in the new fiscal year. With the return of one of the MT staff from FMLA this past week, we are down only two MT staff members – one on Workman’s Comp and the other on FMLA.
CSO Basin:  **(No Change)** Pump #1 is back and needs to be installed. Ashby Electric is ending their repair operation; we were told that this was their last repair.

North Pump Stations:  **(No Change)** We are in the process of evaluating each station so that levels can be adjusted to allow the station to operate more efficiently. This is an ongoing process that lags at times due to being short-staffed. We’ve adjusted two stations since the last report - Brenntag and Fair Street.

Work Spaces:  **(No Change)** In the near future, there will be three fully functional maintenance work shops, one located at each North plant, and a single space at the South plants. This will cut down on travel times and help with better assignment of resources. These are now “In Play” and being used.

Training Classes:  This is the last week of our Electrical/Ladder Logic class at HCC. We have doubled up several weeks allowing us to finish the class sooner in order to put the maintenance personnel back in the field while we have agreeable weather. Many Topics were covered, with the last several weeks focusing on “Real World” issues, wiring several circuit panels, and troubleshooting problems. Completing this class will allow four of our employees a chance to Promote to Maintenance Tech II’s.

Crane Certification Classes:  We spent a week in training so we could get certified to operate our Boom Truck. We all passed the general knowledge and the hands-on portion of the test. We had some problems with the service mechanic portion of the test. Only two of seven passed. The retest was given on March 30. We had several study sessions before the test. The study sessions were a success! All five of the remaining employees passed the service mechanic portion of the test! We now have seven Maintenance employees who are Certified to operate and maintain our Crane Truck.

NWWTP:  We just sent our third 200 HP Motor to Electric Motors for Inspection/Repair/Cleaning. The motors drive the Aeration Basin Blowers. We are working with Rick Wolf (Electric Motors) to “Rush” the motors through to limit our downtime. Bearings are being replaced and endbells are being machined to improve the bearing fits in the housings. Team Carnine (Jim & David Gilbert) has taken the lead on this and have done a FANTASTIC job!!

We have removed, repaired, and reinstalled six of the seven blower motors in EAB Building #1. The last motor will be sent to the shop this week, and this long process will be complete. We are planning on repeating the same procedure on the motors in EAB Building #2 in the next few years.

SWWTP:  Work has begun removing the Air Equipment from Basin #4 and installing it in Basin #6. It has been a slow process due to the weather (rain & wind). We have removed half of the diffusers from Basin #4 and have begun the process of cleaning/repairing the diffusers that have been removed. We are looking at having Basin #4 ready to be dropped in the next few weeks. This is hard and nasty work. The diffusers are buried in sludge and liner, and there is no easy way of getting them out.

G.  Pretreatment Program & FOG Services:

Accuride Corporation: Received a Notice of Violation for an exceedance of their daily and monthly permitted limit of Zinc. The facility is currently back in compliance with the permit.

Compliance Sampling: Second quarter compliance sampling of all industry in the pretreatment program will occur during the month of May.

Pretreatment Services: Hall Environmental will be onsite in May to assist in the required annual industry inspections.
FOG Program: The residential FOG flyer has been posted on HWU’s Facebook and Twitter page. John Baker has made the F-500 Fats, Oils, and Grease Management policy much easier to access with a clickable picture linked directly to the FOG policy. The flyer has been printed and is being mailed out to residential areas that have had previous FOG problems.

Taco John’s and Dairy Queen were inspected for Compliance with the FOG policy.

H. Automation Department:

1. **(No Change)** The new US 60 West Water Booster Station has been tested. Automation components are functioning properly. It was observed that local area water pressure decreased to an unsatisfactory level whenever a pump was running, even after utilizing soft-start and throttling flow with valves. We are in the process of analyzing the water model for improved piping scenarios and have obtained pricing information for the possibility of using variable frequency drives.

2. **(No Change)** We continue to install 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 and wiring, and integrating into a nearby SCADA panel, usually a pump station. We have 13 sensors installed so far, with the latest located at International Paper, the Airport, and Atkinson Park pump stations. The pressure sensor information is transferred from SCADA to a GIS website at http://gis.hkywater.org/wpressurescada.html. PLCs have been programmed for 36 locations and will be activated as sensors are installed.

3. **(No Change)** A new magnetic flowmeter has been installed at the Third Street CSO Basin in order to record the volume of captured combined sewer being pumped to the NWWTP. The flowmeter has been incorporated into SCADA and continuously trended. We have yet to record any flow data from the Basin due to an apparent blockage in the force main that was discovered as a result of installing the flowmeter. Crews are working to either clear the obstruction or to determine the reason why we cannot pump through the force main.

4. **(Ongoing)** We continue to install amperage meters on our pump station motors and have twenty-three stations fitted to date. We are updating each station with newer technology digital relays as well as installing current transformers.

5. The Vine Street Tank repeater antenna has been replaced. All communications are operational. We had a communications loss with the North system water tanks and booster stations for only about 20 minutes, while the antenna was changed.

6. We have replaced the low service and high service manual pump controls at the NWTP. This is quite an improvement in the overall look of the control center. On the back side of the control center is an electrical closet. It was a “rat’s nest” of wiring. We have cleaned it up as much as practical.
7. We repaired the SWWTP Fine Bar Screen. The 20-year-old PLC that runs the screen had an I/O card fail. We replaced the card, along with the power supply. There is an identical PLC on the other bar screen and since both are the same age, we ordered replacement parts for both. We will keep the extra components in stock until needed.

8. We will be incorporating the level monitoring of the SWWTP magnesium tanks into SCADA. This project will involve installing new conduit and wiring to the existing PLC. This project should be completed within the next two weeks.

9. We have incorporated the Second Street Pump Station Overflow into SCADA. Second Street PS is a licensed overflow site, and we have been monitoring it and capturing flow data for many years. But, we must make a weekly site visit to manually retrieve the data from the instrument. Now we are utilizing an additional piece of communications equipment that allows us to transmit overflow directly through an RTU/radio. This will eliminate the need for weekly site visits and will provide overflow information at this location in near real-time. We will be doing the same thing with the Third Street CSO Basin. These two locations differ from the CSO sites along the Ohio River in that they are pump stations, and therefore have electrical power supplied to them as well as traditional SCADA with RTU/radio communications. The locations along the Ohio River utilize cellular technology and communicate to a dedicated server that we must query in order to import data into SCADA.

10. We have completed running a scenario with our water model to depict the areas of oldest water within our system. The scenario was for 14 days. We are now going to run scenarios for 21 and 28 days. This information will help management locate the areas of least water movement (oldest water) and therefore, where we might need to focus improvements. The scenarios also include water age within our tanks.
I. SOC General / HWU General:

1. Growing and Evolving:

   We’re happy to announce that William L. “Buzzy” Newman, Jr., has joined the Henderson Water Utility as our new Director of Field Operations, replacing Rodney Michael. Buzzy started here on May 1, 2017, so we will have a few months of overlap prior to Rodney’s retirement on 31 July. We’re all happy to be working with Buzzy in this new capacity.

2. Henderson aces water report (The Gleaner):

   The headline of an article on the front page of The Gleaner on Tuesday, May 9, 2017, reads: “Henderson aces water report”. The article went on to state that “The report gave Henderson a spotless report card.”

   The report was created by The Natural Resources Defense Council, and was based on a tabulation of violations of the US EPA’s Safe Drinking Water Act (SDWA). SDWA is the federal law that protects public drinking water supplies throughout the nation. Under the SDWA, US EPA sets standards for drinking water quality and, with its partners, implements various technical and financial programs to ensure drinking water safety.

   The complete Gleaner article is attached at the end of this Operations Report.

3. Fire Hydrant Flushing:

   On Monday, May 1, 2017, Henderson Water Utility crews began flushing fire hydrants throughout the city. Flushing began at 6 a.m., and continued around the clock until the process was completed on Thursday, May 4.

   The utility flushes hydrants every May and October, as recommended by the Kentucky Division of Water, to maintain water quality. Crews measure the amount of chlorine in the water to be sure it is safe to drink, and to be sure freshly chlorinated water is distributed throughout the system.

   This hydrant flushing is separate from that done by the Henderson Fire Department, which flow-tests 20 percent of hydrants every spring or early summer to document water pressure and determine if they have sufficient water for fire protection within the city.

   Fire Department results are provided to the Insurance Services Office to help calculate the fire protection rating for the city of Henderson.
### J. Customer Service: Customer Service Calls and Work Orders (NORTH):

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>
</tr>
</thead>
<tbody>
<tr>
<td>Water Main Repairs</td>
<td>1</td>
</tr>
<tr>
<td>Water Service Line Repairs</td>
<td>3</td>
</tr>
<tr>
<td>Water Meter Inspection</td>
<td>14</td>
</tr>
<tr>
<td>Water Meter Changes</td>
<td>5</td>
</tr>
<tr>
<td>Water Meter Repair</td>
<td>5</td>
</tr>
<tr>
<td>Water Meter Disconnected</td>
<td>2</td>
</tr>
<tr>
<td>Water Meter Reposition</td>
<td>1</td>
</tr>
<tr>
<td>Water Meter Box Cleaned</td>
<td>14</td>
</tr>
<tr>
<td>Water Meter Locate</td>
<td>0</td>
</tr>
<tr>
<td>Water Meter Leak Detection</td>
<td>5</td>
</tr>
<tr>
<td>Water Meter Consumption Check</td>
<td>9</td>
</tr>
<tr>
<td>Fire Hydrant Repairs</td>
<td>0</td>
</tr>
<tr>
<td>Low Water Pressure Calls</td>
<td>2</td>
</tr>
<tr>
<td>Water Leak Calls</td>
<td>7</td>
</tr>
<tr>
<td>Water Quality Calls</td>
<td>1</td>
</tr>
<tr>
<td>No Water Calls</td>
<td>1</td>
</tr>
<tr>
<td>Turn Water Off/On Calls</td>
<td>7</td>
</tr>
<tr>
<td>Install Temporary Hydrants</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stormwater Maintenance</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storm line Repairs</td>
<td>8</td>
</tr>
<tr>
<td>Storm Intake Repairs</td>
<td>0</td>
</tr>
<tr>
<td>Stormwater Flooding Calls</td>
<td>1</td>
</tr>
<tr>
<td>Clean/Unblock Intakes</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pump Station Maintenance</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump Station Repairs</td>
<td>4</td>
</tr>
<tr>
<td>Pump Station Inspections</td>
<td>0</td>
</tr>
<tr>
<td>Pump Station Cleaning</td>
<td>8</td>
</tr>
<tr>
<td>Pump Station Maintenance</td>
<td>38</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sewer Line and Service Maintenance</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewer Main Repairs</td>
<td>1</td>
</tr>
<tr>
<td>Sewer Service Line Repairs</td>
<td>0</td>
</tr>
<tr>
<td>Sewer Manhole Repairs</td>
<td>1</td>
</tr>
<tr>
<td>Sewer Main Cleaning</td>
<td>6</td>
</tr>
<tr>
<td>Sewer Main Grease Removal</td>
<td>0</td>
</tr>
<tr>
<td>Sewer Overflow Calls</td>
<td>2</td>
</tr>
<tr>
<td>Sewer Backup Calls</td>
<td>13</td>
</tr>
<tr>
<td>Sewer Blocked Calls</td>
<td>2</td>
</tr>
<tr>
<td>Sewer Odor Calls</td>
<td>1</td>
</tr>
<tr>
<td>Sewer Service Line Locates</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>New Services</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Taps</td>
<td>3</td>
</tr>
<tr>
<td>Sewer Taps</td>
<td>3</td>
</tr>
<tr>
<td>Sewer Tap Locates</td>
<td>2</td>
</tr>
<tr>
<td>Water Meter Installation</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Miscellaneous Services</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sink Hole Calls</td>
<td>8</td>
</tr>
<tr>
<td>Inspect Misc. Items</td>
<td>5</td>
</tr>
<tr>
<td>Smoke Test Lines</td>
<td>0</td>
</tr>
<tr>
<td>Camera Inspect Lines</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regulatory Issues</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downspout Removal Letters Mailed</td>
<td>0</td>
</tr>
<tr>
<td>Downspout Letters Mailed To Date</td>
<td>225</td>
</tr>
<tr>
<td>Downspout Removal Requests:</td>
<td></td>
</tr>
<tr>
<td>Total Complied and Re-inspected</td>
<td>218</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.
K. Collection System:

1. HWU fab shop has built 4 structural repair sleeves and installation tools to repair the 24” SS main on Clay Street at the railroad track. This job is scheduled the first week of June, weather permitting. We wanted to wait until school is on summer break to begin the project, due to school bus traffic.

L. Distribution System:

1. The scouring of lines on Jefferson and Dixon St. should resume soon. The crews began placing the customers on temporary connections on May 8th.

2. N. Main Project: This project is complete except for the concrete and blacktop work.
M. Stormwater Phase II:

1. MS4 KYG2000 General Permit: Back to the Drawing Board

Kentucky MS4 communities are currently grandfathered under the 04-01-2010 version of MS4 General Permit KYG2000. That permit expired over two years ago, on 03-31-2015.

There have been several attempts to come up with a new general permit. Two permit candidates have been advertised for “Public Notice”. The most-recent version went out for “Public Notice” on 02-03-2017. The US EPA has determined that the 02-03-2017 version does not meet the requirements of “Option 1” of the “Remand Rule”, which went into effect nationwide on 11-17-2016. The US EPA did say, however, that with a few “tweaks”, the version of our currently-grandfathered KYG2000 permit could be used for a new permit.

The Remand Rule promotes greater public engagement through clear requirements on the opportunities for public participation in the permitting process. The MS4 General Permit Remand Rule establishes two alternative approaches an NPDES permitting authority can use to issue and administer small MS4 general permits that address a partial remand of the Phase II stormwater regulations by the U.S. Court of Appeals for the Ninth Circuit.

The Kentucky Division of Water’s current plan is to start with the 04-01-2010 version of KYG2000, and add three minor “Tweaks”, as follows:

- MS4s must have Written O&M Manuals
- MS4s must complete the Mapping requirements as described in the 05-10-2016 DRAFT Permit
- MS4 staff must have 12 hours of training each year

There might be other additional requirements, to be determined at a later date.

The good news for HWU is that we are already complying with all aspects of the grandfathered MS4 General Permit. We will probably not be required to complete costly TMDL (Total Maximum Daily Load) stream sampling for water quality. And we already mostly meet the requirements of the proposed new additions. The new permit, if approved, will impose little or no new burdens on us.

2. KSA, the Kentucky Stormwater Association, will hold its three-day Annual Meeting on July 19-21, 2017, in Bowling Green. Staff from Henderson Water Utility will participate in the meeting.

N. Information Technology Department:

1. Disaster Recovery – HWU uses backup software called AppAssure. AppAssure was recently sold by Dell to a company named Quest. Given that, as well as other factors, we recently purchased a new backup software called Veeam. AppAssure is a legacy backup product; Veeam is a next generation disaster recovery solution that takes images of virtual machines (VMs) natively at a VMWare level as opposed to AppAssure that treats VMs like physical machines. In the event of data loss, Veeam claims to offer quicker and more reliable recoveries. The City purchased Veeam last year, and the HPD is planning to purchase it soon. The City could replicate their backups to our Veeam for redundancy and vice versa. We did not renew the annual maintenance and support for AppAssure, which expired at the end of April. Cancellation of maintenance services does not terminate our right to continue to use AppAssure for archival purposes.
2. Emergency Backup Generators - A couple of weeks ago we met with Three I Engineering to discuss backup generator systems for the plant offices and Administration building. The assumption is that generators would be used to power offices and very minimal plant processes. The engineering design is the subject of Board Action Report 2017-11.

3. Time and Attendance Software - In January and February we mentioned that we were reviewing ExecuTime and Kronos time and attendance systems and that we would move on this project pending the City’s interest. Tentatively, the City is planning to fund their portion of the purchase through a mid-year budget adjustment this fall. We have included funds for our portion as a line item in the 2017-2018 Internal Capital Projects.

4. Cityworks Webinar - Several of us attended a Cityworks webinar covering Managing Natural Events. It was informative. They showed, among other things, how St. John’s county Florida used Cityworks in conjunction with ESRI GIS mapping to graphically communicate their Public Works response to Hurricane Matthew. They created heat maps showing concentrations of outages and repair progress. The webinar sparked a good discussion on how HWU could maximize our investment in Cityworks and ESRI to assist us in a future disaster scenario.

O. GIS Department:

The valve exercising crew has taken on the job of collecting GPS positions of our water valves. Since they are locating each valve, it is much more efficient for them to GPS at that time. They are making very good progress. We now have survey-grade GPS locations on 12% (430 out of 3620) of our water valves.
Henderson aces water report; Ky. Struggles

Union, Webster counties had SDWA violations

(KENTUCKY COURIER-JOURNAL AND GLEANER STAFF)

Kentucky fares poorly in a new report by a big national environmental group that analyzed safe drinking water violations across the country -- but the report gave Henderson a spotless report card.

Union and Webster counties, on the other hand, did not do so well.

No state in the nation in 2015 had a larger segment of its population — 53 percent — getting its water from utilities with at least one violation of federal safety regulations, the Natural Resources Defense Council found. Only Puerto Rico was higher, at 69 percent.

State officials disputed the study.

Smaller, rural systems also tended to get the most violations, the study found. The Louisville Water Co. had no violations that year.

The study bases its rankings on two factors: Safe Drinking Water Act violations tracked by the U.S. Environmental Protection Agency and the number of customers served by those utilities.

According to the Natural Resources Defense Council report, the city and county water systems of Henderson — both served by the same Henderson Water Utility treatment center — had zero Safe Drinking Water Act violations.

In Union County, the report cites 12,783 people served by systems with SDWA violations totaling 15. Those customers included those in Morganfield, Uniontown and the Union County Water District and violations (a total of three) included Coliform in Morganfield and excess Disinfection By-Products, or DBPs. Union County and Uniontown’s systems had DBP violations (six each).

In Webster County, there were a total of 7,445 people served by systems with Safe Drinking Water Act health violations. The 7 cited violations included Coliform and DBP in Providence Water Works and DBP in Clay Water Works and the Dixon Water Department (Clay and Dixon had one violation each; Providence had five total).

The states are ranked by the total number of customers potentially affected by drinking water violations.

Based on NRDC’s analysis, Kentucky ranked fifth in the category of health-based violations at utilities that served a total of 1.5 million people. Those are the most serious violations, such as elevated levels of contamination or failing to comply with treatment techniques.

Kentucky was 10th among all states for total offenses based on population. Indiana was 24th. About 11 percent of its population got its water that year from utilities with at least one violation of federal safety regulations.

“We take it for granted that when we turn on our kitchen tap, the water will be safe and healthy, but we have a long way to go before that is a reality across our country,” said Erik Olson, health program director at NRDC and a report co-author.

An interactive map allows people to check how many violations were reported in their counties. It shows violations were counted across the state. The map can be found at nrdc.org/resources/threats-tap-widespread-violations-water-infrastructure.

Nationally, the fix is to invest in two things — enforcement of the law and improvements to infrastructure, Olson said. Nine of 10 violations across the country were not given any citations, he said. “Only about 3 percent faced any penalties,” he added.

NRDC said the Trump administration’s plan to cut the EPA budget 30 percent won’t help.

The Kentucky Energy and Environment Cabinet is responsible for enforcing drinking water standards in the state.

The NRDC mischaracterized Kentucky’s drinking water compliance data and misrepresented the cabinet’s compliance and enforcement programs, said agency spokesman John Mura in a written statement.

“Public drinking water in Kentucky is reliable and of high quality,” Mura said. “NRDC’s characterization of public drinking water is irresponsible and does not promote meaningful dialogue regarding the important concerns of safe drinking water and drinking water infrastructure investment.”

Nicole Estes does a water quality analysis at a Louisville plant in 2016.
<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>4/25/2017</td>
<td>138</td>
<td>1312 Taransay Dr.</td>
<td>Yes, they all did a great job. Mr. Basham explained everything to me. Thanks.</td>
<td></td>
</tr>
<tr>
<td>4/28/2017</td>
<td>124</td>
<td>238 S. Main St.</td>
<td>We were not home at the time of inspection. Said they would be back as schedule permits. The person we talked to on the phone was courteous.</td>
<td></td>
</tr>
</tbody>
</table>

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Service Request Tags Given Out</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>07 Work Order Tags Given Out</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02 Door Tags Returned</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ENGINEERING REPORT
Project work starting to pick back up. As noted below, several items on this list are awaiting the availability of funds.

1. **North Wastewater Treatment Plant:**
   - **Clarifier Repairs:** This project includes replacement of the metal rotating mechanisms on these two units, which we split out from the larger headworks project. Mark Bowling (MBI) is the contractor. Some work on demolition, concrete repairs, and weir replacement has started. Shop drawings on the equipment have been received and reviewed.

   Also, working on a small project to demolish the old Headworks building, which is right next to the cemetery and looks terrible. Will bid this at the end of May, and bring to you for action in June.

   We also have worked on a gate for the maintenance area, and have included that in the overall costs of the larger project. Gate and electrical work totaled $13,423.

2. **Atkinson Park Sewershed Study – Myrene Drive Sewer Pump Station:**
   Phased in five sections, design of these projects is progressing. We have several easements appraised, and have four signed on the Myrene FM portion of the work, and one on the Atkinson Park FM, from the Hospital, just north of 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, and we have met with all those and are adjusting our plans based on their concerns.

   We have received the KDOW construction permit for the Spruce Drive portion of the project (which eliminates one pump station). This will not be bid until 2018 at the earliest. Have one easement for this segment signed and recorded.

   Easement documents on the North Elm Street portion of the Myrene force main segment are being appraised as both right of way and an easement, in anticipation of the City possibly wanting to team with us on property impacts in that section from Villa Drive to Springwood Drive.

3. **South Water Treatment Plant – Rehab Projects: (no change since last report)**
   Several projects were included in a 2014 preliminary engineering report for the SWTP.

   **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 in the year, if then.

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

4. **Future Water Distribution System Projects:**
   Looking ahead to possible/planned industrial development in the Riverport and other “south” areas of Henderson, we have issued an RFP for engineering firms interested in design of a 20” water main located on S. Main Street from Hancock Street to Yeaman Avenue. This RFP also includes a project
to paint and refurbish the Green River Road water tank. Proposals were due on 26 April 2017, and the selection of consultants will come before you at our next meeting.

5. **Countryview Subdivision Stormwater Project:**
   Have submitted plans to Texas Gas for several crossings of their high pressure main, and met with their representative in the field in May 2016 to discuss our crossings and the permits required. HWU Staff working on plan updates for first phase, hoping to start construction on some part of this project, sometime this year.

6. **College Tank Painting:**
   Opened bids on April 12th. Contract signed with Preferred Sandblasting and Painting. Waiting on contract, bond and insurance paperwork to set up a pre-construction meeting.

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 was held up by a data collection difficulty with the City’s meter data, but that has now been received. Neither of these projects is currently funded, so there’s no urgency.

8. **South Wastewater Treatment Plant – Repair/Rehab of Extended Aeration Basins:**
   Geotechnical investigation on site is complete, awaiting report. Contract with Wauford for design of this project has been signed. This work will eat up a substantial portion of our capital spending for one year.

9. **South Elm Street (Jefferson to Clay) Water Line: (no change since last report)**
   Work finishing up on street repairs that we are doing, to be followed by asphalt paving by the city’s contractor. It’s likely that we’ll continue this project later this year, and replace the two blocks that run north to Washington, where we will be able to connect to a 20” line laid during the Downtown project.

10. **Clay Street Sewer Repair: (no change since last report)**
    This 24” clay pipe crosses the CSX & former Illinois Central RR tracks just south of Clay Street, at the edge of the street. The line shows as existing on our 1918 system map, so it’s been a good investment, but is now broken in two spots under the tracks. We looked at lining, and have come up with an “internal band” system to repair it from the inside. Work will include installing a manhole on the line that will allow us easier access, in the future. This line will likely be replaced by a new crossing (or two) at some point in the future, when we do a sewer separation project in the East End.

11. **Riverdale Court:**
    Investigation in this area off South Main Street revealed a previously unknown storm sewer pipe that ties into the Downtown Interceptor near the River. Taking that line off the Interceptor and running a separated storm line to the River will allow about 2 acres of area to be taken off the combined system, at relatively low cost, so we’re working on a plan. Will require an easement from one riverfront property owner, and we have made contacts on that.

12. **Emergency Generators:**
    Investigation of providing a minimal level of emergency power for five office locations is the subject of an action report at this meeting.
HUMAN RESOURCE REPORT
HWU Human Resources Summary: May 15, 2017

**Staffing Levels:**

1. SWTP Water Treatment Operator I [1 position]: employee started on April 17th
2. Maintenance Team Leader [1 position]: waiting for direction from department
3. SWWTP Wastewater Treatment Operator [1 position]: employee started on April 24th
4. Utility System Worker I [3 positions]: exam held on May 4th; register will be sent to the department
5. SOC – Seasonal Worker [4 positions]: no request for action
6. Seasonal Engineering Intern [1 position]: staffing agency is in communication with candidate

**Safety Report (as of 2/28/2017):**  **March and April data unavailable from new system at time of report**

<table>
<thead>
<tr>
<th></th>
<th>HWU</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours Worked</td>
<td>26,225</td>
<td>+ 12,032</td>
</tr>
<tr>
<td>Total Cases</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Days Away/Restricted Cases</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Days Away From Work Cases</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Actual # Days Away From Work</td>
<td>133</td>
<td>+ 28</td>
</tr>
<tr>
<td>Transfer/Restricted Cases</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Actual # Days Restricted Duty</td>
<td>0</td>
<td>0</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 April: one at SWTP and one at NWWTP. Workers' compensation insurance carrier deemed an employee that was on lost-time status reached maximum medical improvement (MMI) from a 2016 injury.
- The April comprehensive fixed facility safety audits were conducted at the North Water and Wastewater Treatment Plants. No major issues were identified at NWTP. One major issued was identified at NWTTP. There were taped wires hanging from a blower motor with the power still on the wires. Maintenance was contacted and proper lock-out/tag-out procedures were immediately applied. Both locations were last audited in February 2017.

**Other:**

**Upcoming City-wide Events:**

- Safe driver training – distracted driver training was conducted on April 18th, 19th and 20th. Fifty-four (54) HWU staff completed the training. Staff is coordinating with the City & HWU’s insurance carrier to provide the safe driver training to staff that could not attend any of these training sessions.
SAFETY REPORT
A. Safety Committee:

There was a safety committee meeting held by teleconference in April. There were no concerns.

B. Training

Training performed in April:

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

2. Safe Driving class was held by the city.

3. Confined Space class providing water and waste water license holder 16 hours of credit will be held May 24-25th.

C. Safety Inspections:

1. South Water Treatment Plant
   - 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 April were on the 3rd, 5th, 11th, 14th, 17th, 20th, and 25th.

2. South Waste Water Treatment Plant:
   - 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 April were on the 3rd, 5th, 11th, 14th, 17th, 20th, and 25th.

3. WTP North:
   - See facility audit below.

4. WWTP North:
   - See facility audit below.
5. **Administrative Building:**
   - There were no safety issues found during visits.

6. **SOC:**
   - There were no safety issues found during visits.

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

D. **Comprehensive Safety Audits:**

1. **WTP North:**
   
   There were no major issues noted during audit.

2. **WWTP North:**

   There was one significant noted during audit. There were taped wires from a blower motor hanging with the power still on to the wires. Maintenance was contacted and proper LO/TO procedures were immediately applied.

E. **Recordable Injuries:**

1. There were two recordable injuries in April with one day of lost time each. One plant operator turned over a UTV and received several bumps and bruises while spraying the parking lot. The other was a maintenance tech at the NWWTP who strained his shoulder while opening a digester door. Both employees missed one day of work then returned to full duty.
GENERAL MANAGER’S REPORT
Regulatory Issues

**LTCP/CJ Termination, new KPDES Permit** and a **Local Plan Approval** agreed order are still outstanding. We have prepared a response to a draft permit for the North WWTP, but are holding it pending further action by KDOW. There has been movement on KDOW’s end toward our interpretation of the “presumptive” approach used in our LTCP, and this is a very positive development.

Habitat for Humanity of Henderson

In accordance with long-standing policy, we have waived tap fees for a house to be constructed by Habitat at 1125 Helm Street, in the East End. The total fees waived are $2,195.

Billing

At your request, we worked with the City IT and Billing staff, and starting 1 July, there will be a single line shown on water bills for “Water and Sewer Charges”. There will be a separate line for the new “Stormwater Impact Fee”.

Chemical Bids

Our annual contracts for chemicals were bid in June 2015, with a one-year award and option for two, one-year renewals. We have elected to renew all those bids at the current pricing, as it appears to be in the best interest of the Utility to do so (does not include sodium bisulfite, which we are no longer using at the NWWTP). Details of those bids are in Action Report 2015-16. There are a few chemicals we use that are not included in annual bids, since they are sole source.

The only chemical that increased in price (as allowed by the renewal language in the contracts) was acid alum, which increased by 2.5% for an annual budgetary impact of $5,238.

Budget

Budget preparation was a smooth process, as it has been the last few years. Your CFO plunged in with both feet, and had a positive impact. This is also Rodney’s last lap around this track.

Nothing’s constant, except change.

Included in the budget is the first top-to-bottom review of wages that we’ve done since 2004. This was prompted by the changes the City made to the pay scales for hazardous-duty employees, late last year. The current Commission has now completed a study of City grades, classifications and pay for their non-hazardous cohort, and we are taking our lead from them.

Rather than adopt their method, however, we have looked at data from other Kentucky cities our size, and used that representation of pay grades to compare to ours. Where our mid-range deviated by more than $1,000 from the average of the other cities, we have proposed adjustments to our grades, and this will lead to the reclassification of approximately 47 of our roughly 90 full-time positions. No position was classified downward. As the City has done, we capped those increases for most employees at 4%.
There were a few employees who, due to circumstances of their hire dates, got slightly more (this is due to the 2.5% probationary increase that occurs 6 months from hiring with a satisfactory performance review). This variance was concentrated in our lowest pay grade (10). There were a few positions where the comparable cities data didn’t seem to make sense, or where we believe we were not seeing an apples-to-apples comparison, so there are some variations on the theme, and in some instances where large gaps showed up, we only made up part of the gap due to the 4% cap.

As the City has done in their plan, every classified employee is getting a minimum “pay adjustment” of 1%. On top of that, the City has specified a 1% cost of living increase and a maximum 1% merit increase, in the new fiscal year.

We’re also using this opportunity of a full study to address inequities between some of our positions. For instance, our Sr. Water and Wastewater Operators (Water Op II and Wastewater Op II) were in different grades, 18 and 16 respectively. This is a chance to rectify that, putting employees with equal duties on an even footing. In addition, our Pretreatment Coordinator and the new position we’re proposing of a Distribution System Operator for water will also be at grade 18, so that employees with roughly equal levels of responsibility (and risk to us) for providing safe, clean water, are compensated at equal levels. This also led us to look at the position of Field Crew Leader. We put a lot of responsibility on those individuals, and they are also being raised to grade 18.

A complete listing of this plan by classification and grade is attached, and these adjustments are included in the budget document you have before you tonight.

Cost to us is approximately $100,000 annually, just in straight wages.
<table>
<thead>
<tr>
<th>HWU</th>
<th>Position Name</th>
<th>Current Grade</th>
<th>Average for Like Position</th>
<th>HWU Variant from Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>HWU</td>
<td>Receiving/Inventory Clerk</td>
<td>9</td>
<td>27,250.17</td>
<td>32,562.60</td>
</tr>
<tr>
<td>HWU</td>
<td>SOIC Secretary</td>
<td>9</td>
<td>27,250.17</td>
<td>32,562.60</td>
</tr>
<tr>
<td>HWU</td>
<td>Utility System Worker II</td>
<td>9</td>
<td>27,250.17</td>
<td>32,562.60</td>
</tr>
<tr>
<td>HWU</td>
<td>Inventory Control Technician</td>
<td>7</td>
<td>20,502.39</td>
<td>25,966.93</td>
</tr>
<tr>
<td>HWU</td>
<td>Maintenance Technician I</td>
<td>7</td>
<td>20,502.39</td>
<td>25,966.93</td>
</tr>
<tr>
<td>HWU</td>
<td>Wastewater Treatment Operator I</td>
<td>7</td>
<td>20,502.39</td>
<td>25,966.93</td>
</tr>
<tr>
<td>HWU</td>
<td>Water Treatment Operator I</td>
<td>7</td>
<td>20,502.39</td>
<td>25,966.93</td>
</tr>
<tr>
<td>HWU</td>
<td>Secretary, Senior</td>
<td>7</td>
<td>20,502.39</td>
<td>25,966.93</td>
</tr>
<tr>
<td>HWU</td>
<td>SOIC Secretary, Senior</td>
<td>7</td>
<td>20,502.39</td>
<td>25,966.93</td>
</tr>
<tr>
<td>HWU</td>
<td>Utility System Worker II</td>
<td>7</td>
<td>20,502.39</td>
<td>25,966.93</td>
</tr>
<tr>
<td>HWU</td>
<td>Engineering Technician</td>
<td>11</td>
<td>58,894.32</td>
<td>70,673.67</td>
</tr>
<tr>
<td>HWU</td>
<td>Locational Geopositional Technician</td>
<td>11</td>
<td>58,894.32</td>
<td>70,673.67</td>
</tr>
<tr>
<td>HWU</td>
<td>Administrative Assistant</td>
<td>11</td>
<td>67,951.63</td>
<td>80,096.28</td>
</tr>
<tr>
<td>HWU</td>
<td>Maintenance Technician II</td>
<td>11</td>
<td>67,951.63</td>
<td>80,096.28</td>
</tr>
<tr>
<td>HWU</td>
<td>Utility System Worker III</td>
<td>11</td>
<td>67,951.63</td>
<td>80,096.28</td>
</tr>
<tr>
<td>HWU</td>
<td>Vehicle Mechanic</td>
<td>11</td>
<td>67,951.63</td>
<td>80,096.28</td>
</tr>
<tr>
<td>HWU</td>
<td>Env. Comp. &amp; Pretreatment Coor</td>
<td>15</td>
<td>48,858.26</td>
<td>59,120.46</td>
</tr>
<tr>
<td>HWU</td>
<td>Maintenance Welder</td>
<td>15</td>
<td>48,858.26</td>
<td>59,120.46</td>
</tr>
<tr>
<td>HWU</td>
<td>Wastewater Treatment Operator II</td>
<td>15</td>
<td>48,858.26</td>
<td>59,120.46</td>
</tr>
<tr>
<td>HWU</td>
<td>Utility System Crew Leader</td>
<td>17</td>
<td>59,941.69</td>
<td>64,971.26</td>
</tr>
<tr>
<td>HWU</td>
<td>Utility System Specialist</td>
<td>17</td>
<td>59,941.69</td>
<td>64,971.26</td>
</tr>
<tr>
<td>HWU</td>
<td>Water Quality Specialist</td>
<td>17</td>
<td>59,941.69</td>
<td>64,971.26</td>
</tr>
<tr>
<td>HWU</td>
<td>Construction Inspector</td>
<td>17</td>
<td>68,043.81</td>
<td>72,458.30</td>
</tr>
<tr>
<td>HWU</td>
<td>Maintenance Technician, Sr</td>
<td>18</td>
<td>77,043.81</td>
<td>82,458.30</td>
</tr>
<tr>
<td>HWU</td>
<td>Water Treatment Operator II</td>
<td>18</td>
<td>77,043.81</td>
<td>82,458.30</td>
</tr>
<tr>
<td>HWU</td>
<td>Maintenance Team Leader</td>
<td>18</td>
<td>77,043.81</td>
<td>82,458.30</td>
</tr>
<tr>
<td>HWU</td>
<td>Safety &amp; Training Coordinator</td>
<td>20</td>
<td>39,228.14</td>
<td>44,778.72</td>
</tr>
<tr>
<td>HWU</td>
<td>Plant Utility System Supt</td>
<td>20</td>
<td>39,228.14</td>
<td>44,778.72</td>
</tr>
<tr>
<td>HWU</td>
<td>Automation Specialist</td>
<td>21</td>
<td>40,321.49</td>
<td>45,860.05</td>
</tr>
<tr>
<td>HWU</td>
<td>Treatment Plant Operator Chief</td>
<td>21</td>
<td>40,321.49</td>
<td>45,860.05</td>
</tr>
<tr>
<td>HWU</td>
<td>Purchasing Manager</td>
<td>25</td>
<td>44,911.39</td>
<td>52,104.40</td>
</tr>
<tr>
<td>HWU</td>
<td>GIS Manager</td>
<td>25</td>
<td>50,156.77</td>
<td>57,632.95</td>
</tr>
<tr>
<td>HWU</td>
<td>Information Systems Manager</td>
<td>25</td>
<td>50,156.77</td>
<td>57,632.95</td>
</tr>
<tr>
<td>HWU</td>
<td>Projects &amp; Compliance Mgr</td>
<td>27</td>
<td>54,464.79</td>
<td>62,594.92</td>
</tr>
<tr>
<td>HWU</td>
<td>Automation Manager</td>
<td>31</td>
<td>53,422.87</td>
<td>61,498.08</td>
</tr>
<tr>
<td>HWU</td>
<td>Information Systems Mgr</td>
<td>31</td>
<td>53,422.87</td>
<td>61,498.08</td>
</tr>
<tr>
<td>HWU</td>
<td>Chief Engineer</td>
<td>37</td>
<td>76,830.37</td>
<td>86,314.07</td>
</tr>
<tr>
<td>HWU</td>
<td>Director of Plant Ops</td>
<td>38</td>
<td>80,904.32</td>
<td>90,173.83</td>
</tr>
<tr>
<td>HWU</td>
<td>Director of Field Ops</td>
<td>38</td>
<td>80,904.32</td>
<td>90,173.83</td>
</tr>
</tbody>
</table>

**HWU Variance from Average**

- For grades below 20, the variance is calculated as follows: `Variance = Average - Current Grade`
- For grades above 20, the variance is calculated as follows: `Variance = New Grade - Current Grade`
- New Grade: `New Grade = Current Grade + Variance`
- New Midpoint: `New Midpoint = New Grade / 2`
- New Midpoint Range: `New Midpoint - Minimum New Midpoint = New Midpoint Range`

**Contract Employees**

- **HWU Chief Financial Officer**: 70,000.00
- **HWU Director of Field Ops**: 135,000.00
- **HWU General Manager**: 143,000.00

**New or Re-Titled**

- **HWU Distribution System Operator**: 18
- **HWU Utility Sys. Specialist - Camera Truck Lead**: 18
- **HWU Maintenance Supervisor**: 24

**Will be Contract Employee**

- **HWU Director of Plant Ops**: 38

**To be Re-Graded/Renamed**

- **HWU Safety & Training Coordinator**: 20

**Trim Title - Purchasing Aide**

- **HWU Receiving/Inventory Clerk**: 9

**New Title**

- **HWU Maintenance Technician I**: 69,363.54
- **HWU Wastewater Treatment Operator I**: 68,944.00
- **HWU Water Treatment Operator I**: 68,944.00
- **HWU Secretary, Senior**: 72,707.87
- **HWU Maintenance Technician II**: 80,096.28
- **HWU Utility System Worker II**: 74,799.00
- **HWU Vehicle Mechanic**: 76,984.32
- **HWU Safety & Training Coordinator**: 66,180.00
- **HWU Water Quality Specialist**: 64,971.26
- **HWU Construction Inspector**: 72,458.30
- **HWU Maintenance Technician, Sr**: 82,458.30
- **HWU Water Treatment Operator II**: 82,458.30
- **HWU Maintenance Team Leader**: 82,458.30
- **HWU Safety & Training Coordinator**: 66,180.00
BUSINESS

- 2017-2018 Budget Review and Approval
- Action Report #2017-10 – Small Projects – Construction Services
- Action Report #2017-11 – Emergency Generators at Treatment Plants & Administration Building
- Action Report #2017-12 - Fiber Optic Connection – HWU to City Building
- Action Report #2017-13 – NWTP Lab & Office Remodel Update
- Action Report #2017-14 – Bids for Materials - Inventory
Budget Review and Approval
(Budget was distributed earlier)
Henderson Water Utility
Action Report # 2017 - 10

To: Henderson Water & Sewer Commission
From: Tom Williams, P.E., General Manager
Subject: Small Project – Construction Services
Date: 15 May 2017

Project Background:

- In the past, we have bid annual contracts for various construction-related services (hauling, etc). These services are used to supplement our existing in-house capabilities, on an as-needed basis.
- The idea has been floated that we do the same for labor and equipment contracts, in case we need extra manpower, or wish to do a small project with an outside vendor, when our own workload precludes us doing work in a timely manner.
- We set this up as a pre-qualification, since the types of labor, equipment, materials and construction would make it difficult to bid it as a line-item procurement.
- We received responses from three local firms, Schneider Farms and Excavating, Hazex, and Mark Bowling, Inc. All are familiar to us, having done work for us at one time or another.
- As small projects are identified, a more specific bid/quote process will identify limited, discrete projects of a well-defined scope and extent, on which the pre-qualified vendors will submit bids. Individual projects under this process cannot exceed $ 20,000 in total expenditure.

Budget/Financial Considerations:

- There are no easement or outside design costs for this procurement, and any project expenses will be handled in accordance with our purchasing policy.
- We will set aside $ 50,000 in the current fiscal year for this type of work, 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 for Approval:

Tom Williams, P.E.
General Manager

BOARD ACTION – 15 May 2017

PASSED:______ FAILED:_______ TABLED:_______ DATE:_______
Henderson Water Utility  
Action Report # 2017 - 11

To: Henderson Water & Sewer Commission  
From: Tom Williams, P.E., General Manager  
Subject: Emergency Generators at Treatment Plants & Administration Building  
Date: 15 May 2017

Project Background:

- HWU does not currently have backup power (generators) available at any of our locations, although some of the plants do have the option of being fed from alternate substations.
- Staff feels it would be prudent to have the offices at each plant and the administration building furnished with some minimal amount of power generation to provide an area of "refuge", so that emergency planning can proceed at each location, in the event of an extended power outage.
- This will involve basic life-support functions, keeping the lights on, phones, heat and air. It is not practical, in our opinion, to attempt to power the entire treatment and distribution functions at the plants, as the generator sets required for that would be huge.
- We solicited a proposal from Three I Engineering, an Evansville firm, the only local group with much experience in this field. Three I has a substantial electrical engineering staff.
- Three I was among the firms we retained under our General Engineering contracts back in 2011, and they have performed other work (the structural evaluation of the Raw Water Intake Bridge) for us.
- Design costs for the five locations (2 wastewater plants, 2 water plants, and the Administration Building) are estimated not to exceed $20,000.
- We anticipate the costs for the five generator sets to range from $25,000 to $50,000 each, so the work will likely be spread over more than one fiscal year. We may investigate adding generators at other critical locations (major sewer pump stations, high-service pumps at the water plants), depending on our experience with these units, moving forward. We also may only do one unit at the South Plants complex, and share one "refuge".

Budget/Financial Considerations:

- Funds for this work will be taken from the "Special Projects" line in the FY 2016-17 Capital budget.

Legal Considerations:

- Procurements necessary for this purchase have and will follow the Kentucky Model Procurement Code.

Recommendations & Approvals:

- Board approval authorizes all items necessary to complete the scope of work for this project, including issuance of any additional bids, purchase orders, change orders, or other authorizations required to complete this project without delay. Procurement of the generator units themselves will come back to the Commission in an updated action report, prior to any work being performed.

Respectfully Submitted for Approval:

__________________________
Tom Williams, P.E.  
General Manager

BOARD ACTION – 15 May 2017

PASSED: _______  FAILED: _______  TABLED: _______  DATE: _______
Henderson Water Utility
Action Report # 2017 - 12

To: Henderson Water & Sewer Commission
From: Tim Fischbeck, Information Technology Manager
Subject: Fiber Optic Connection – HWU to City Building
Date: 15 May 2017

Project Background:

- In about 2002, various City and County departments, including HWU, formed the Geographic Information System (GIS) Board, which dovetailed with Henderson Municipal Power and Light (HMPL) establishing a fiber optic “ring”, allowing fast connections by all the various offices to the GIS information. The “dark fiber” connections were a key step in allowing the GIS to be built, and GIS information being shared between all parties. We have continued to invest heavily in this system and the information contained there is essential to our operations.
- The ring was routed in what was then the most practical way, but it led to some odd pathways; for instance, the County link to the Planning Commission runs through our Administration Building, to the Hospital, then to the Peabody Building.
- Pricing for our connections was an issue that was never really worked out. Also, the connections to the HMPL network were basically a limitless data stream, capacity far beyond our need or ability.
- HMPL now can sell some of that “bandwidth”, has suggested we reduce the capacity of our link, and has proposed raising prices to market levels for our connection to the ring.
- HWU Staff have investigated our options. We have concluded that we can splice into an existing HWU owned fiber line at the corner of 3rd & Main, and run a new fiber line from that location to the City building using an existing abandoned water main that runs to Main & Washington, at a cost of approximately $30,000. Payback at the new market pricing will be less than 3 years.
- Constructing this point-to-point link may allow greater integration of our IT operations with the City, including off-site backups for both, easier use of phone systems, etc.

Budget/Financial Considerations:

- Funds for this work will be taken from the “Special Projects” line in the FY 2016-17 Capital budget.

Legal Considerations:

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

Recommendations & Approvals:

- Board approval authorizes all items necessary to complete the scope of work for this project, including issuance of any additional bids, purchase orders, change orders, or other authorizations required to complete this project without delay.

Respectfully Submitted:

Tim Fischbeck
Information Technology Manager

Approved for Submittal:

Tom Williams, P.E.
General Manager

BOARD ACTION – 15 May 2017

PASSED: _______ FAILED: _______ TABLED: _______ DATE: _______
Henderson Water Utility
Action Report # 2017 - 13

To: Henderson Water & Sewer Commission
From: Kevin Roberts, Director of Plant Operations
Subject: NWTP Lab & Office Remodel
Date: 15 May 2017

Project Background & Update:

- **This updates Action Report 2017 – 04, dated 23 January 2017**
- The addition of a Water Quality Specialist at the North Water Treatment Plant and Lab has led to relocating the Chief Operator’s office. This provided us with the opportunity to refresh the spaces now occupied by the Water Quality staff.
- We are now prepared to renovate the Lab area. Most of the countertops and cabinets date to the 1989 plant renovation, and are in need of replacement. We’re also adding LED lighting, new sinks, new flooring and a drop ceiling, and painting all cabinets, walls and existing doors. Quotes were obtained from three sources, and the breakdown is below.

<table>
<thead>
<tr>
<th>Proposed Budget – North Water Treatment Plant Office/Lab Remodel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previously Authorized (Installation and Labor)</td>
</tr>
<tr>
<td>Spending to Date</td>
</tr>
<tr>
<td>Demolition</td>
</tr>
<tr>
<td>Electrical &amp; HVAC</td>
</tr>
<tr>
<td>Finishes – Counters, Cabinets, Sinks, Paint, Flooring</td>
</tr>
<tr>
<td>Contingency (10% of new work)</td>
</tr>
<tr>
<td><strong>Total Estimated Cost</strong></td>
</tr>
</tbody>
</table>

Budget/Financial Considerations:

- Funds for this work will be taken from the “Special Projects” line in the FY 2016-17 Capital budget, with an additional appropriation of $ 14,100.00.

Legal Considerations:

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

Recommendations & Approvals:

- Board approval authorizes all items necessary to complete the scope of work for this work, including issuance of any additional bids, purchase orders, change orders, or other authorizations required to complete the purchase without delay.

Respectfully Submitted:

Kevin M. Roberts
Director of Plant Operations

Approved for Submittal:

Tom Williams, P.E.
General Manager

BOARD ACTION – 15 May 2017
PASSED: _____  FAILED: _____  TABLED: _____  DATE: _____
Henderson Water Utility
Action Report #2017 - 14

To: Henderson Water & Sewer Commission
From: Kathy Ambrose, CPPO, CPPB Purchasing Manager
Subject: Bids for Materials - Inventory
Date: 15 May 2017

Background:
- HWU prepares annual bids for the items which we normally maintain in inventory.
- The anticipated quantities listed in the bid document are based upon historical usage.
- Purchase Orders related to these bids will be issued on an as-needed basis to replenish inventory quantities, and there are no minimum guaranteed purchases.
- Inventory purchases are charged to the Operating Budget.
- The bids issued included co-operative language which would allow any city or county agency to purchase directly from the document at the awarded bid prices.
- Bids for DI Fittings & Accessory Packs needed for the inventory were taken on 13 April 2017, and the low bid was submitted by HD Supply of Bowling Green, in an amount of $27,318.99.
- Bids for the Sewer Pipe & Fittings for inventory were also taken on 13 April 2017, and the low bid was submitted by HD Supply of Bowling Green, in an amount of $18,267.67.
- Detailed tabulations of the bids are available on request.

Legal Considerations:
- This procurement is in accordance with KRS 45A.365 of the Model Procurement Code.
- The initial bid term is one year (15 May 2017 – 14 May 2018) with the ability to renew for two additional one-year terms.

Recommendations & Approvals:
- Staff recommends awarding these bids to the vendor with the lowest bid.

Respectfully Submitted:  
Kathy Ambrose, CPPO, CPPB  
Purchasing Manager

Approved for Submittal:  
Tom Williams, P.E.  
General Manager

Commission Action – 15 May 2017

PASSED: ____________  FAILED: ____________  TABLED: ____________