A. ROLL CALL

B. REQUEST TO ADDRESS THE BOARD

C. RECOGNITION FOR 20 YEARS OF SERVICE
   - Melissa Lutz – Water Quality Specialist

D. APPROVAL OF MINUTES
   - Approval of Minutes from July 15, 2019

E. MONTHLY REPORTS
   - Financial
     o Discussion of Billing/Meter Issue
   - Plant Operations
   - Field Operations
   - Engineering
   - Human Resources & Safety
   - General Manager’s
     o Policy C-100 Phones and Pagers, Revision 9

F. BUSINESS
   - Action Report #2019-26 – Kresge Drive Stormwater Project
   - Action Report #2019-27 – Janitorial Services
   - Discuss Changing September Regular Meeting Date to September 23, 2019

G. EXECUTIVE SESSION – None Requested
REQUEST TO ADDRESS THE BOARD
RECOGNITION FOR 20 YEARS OF SERVICE

• Melissa Lutz – Water Quality Specialist
  (August 9, 1999)
ACTION MINUTES OF MEETING
July 15, 2019
A. ROLL CALL

Present at the meeting was Commissioner Paul Bird, Chairman, who presided over the meeting, along with Commissioners George Jones, Gary Jennings, and Julie Wischer. Commissioner John Henderson was unable to attend the meeting. General Manager Tom Williams and Eric Shappell, Attorney were also present. Other staff members present were Kevin Roberts, Todd Bowley, Tim Fischbeck, Kathy Ambrose, and Patty Brown. Others in attendance were Mayor Steve Austin; City Manager, William “Buzzy” Newman; and Public Information Officer, Donna Stinnett. There were no members of the media present.

B. REQUEST TO ADDRESS THE BOARD - None

C. APPROVAL OF MINUTES

- Approval of Minutes from Special Called Meeting June 3, 2019

  Motion was made by Commissioner Gary Jennings, seconded by Commissioner Julie Wischer to approve the minutes as submitted for the Special Called Meeting held on June 3, 2019. All members present voted aye with no opposition. Motion passed.

- Approval of Minutes from June 17, 2019

  Motion was made by Commissioner Julie Wischer, seconded by Commissioner Gary Jennings to approve the minutes for the June 17, 2019 regular board meeting as submitted. All members present voted aye with no opposition. Motion passed.

D. MONTHLY REPORTS

- Financial (Verbal Summary) – Discussed and approved as submitted

  Todd Bowley informed the board concerning the June 30, 2019 financial numbers. He explained that because this is the fiscal year end, invoices will still be coming in for June and the numbers will not be complete until the books are closed sometime in August. He stated that revenue was over budget for the month with the usage trend continuing as in past months. There have been some issues with a couple of internal reports for treated and pumped water that will probably need to be revised which might affect the water loss percentages. It is possible that the water loss for North may not be as high as earlier thought. Staff is working to check on the numbers and determine if one pump was counted twice. This was during a time that a high service pump failed so it will be evaluated further to see if any other months might have been affected. He noted that going into June there was a little over $7.9 million in Cash and $8.6 million as of today. Electricity and sludge are still high with most of the other expenses being under budget. Once everything is final
Operating Income overall should still be over budget. The June numbers will be presented when final numbers are confident enough to be reliable and not changing.

- **Plant Operations** – *Discussed and approved as submitted.*
  
  Kevin Roberts was asked about the open Water Quality Specialist position. There is a test going out to see what candidates with the proper qualifications are available.

- **Field Operations** – *Discussed and approved as submitted.*

- **Engineering** – *Discussed and approved as submitted.*
  
  Tom Williams explained that this report is shorter since a few projects have been completed and several projects are in the works including the Green River Road Tank work. He noted that there have been some complaints about the condition of the South Elm Street area, but there is a wait for milling and paving contractors because this is a very busy time for them.

- **Human Resources & Safety** – *Discussed and approved as submitted.*
  
  Tom Williams reported on the open crew leader and utility system worker positions and noted that testing is planned, and the normal process will begin for hiring.

- **General Manager’s** – *Discussed and approved as submitted.*
  
  Mr. Williams highlighted each item of his report. He informed the Board that there are two properties being transferred that have had plats drawn up to make adjustments to the property lines. One is for HMPL’s parking lot next door and the other is the transfer of two lots at the SOC location. He asked that the Board approve the signing of these plats by Chairman, Paul Bird. Motion was made by Commissioner Julie Wischer and seconded by Commissioner Gary Jennings to authorize signing of the two Plats by Paul Bird, Chairman of the Board, making the adjustments to the Plats for the property next door transferred to HMPL and the two lots on Alvasia Street located at the SOC. All members present voted aye with no opposition.

  The next item discussed were the changes being made to the Sewer Use Ordinance which are the subject of a resolution being voted on tonight. The first change was to language on Cross-Connections and Backflow Prevention. This will allow the setting up of a program to deal with the places where these exist.

  The second change is pertaining to local limits for heavy metal discharge. After reviewing with our consultant, it is believed that the local industries can meet the new limits with the pre-treatment facilities they have if they are operated correctly. The plan is to go to every industry and talk to them individually to make sure they understand where these numbers come from and listen to their concerns. It pertains to Chemical Oxygen Demand (COD) and Biochemical Oxygen Demand (BOD). This information is detailed further in the GM Report.

  The next item reviewed was the Strategic Plan. This includes a list of things including projects that are underway and those being planned for the remainder of the year. Also included is a rough idea for what will be done the next couple of years. Possibly raising the Capital Spending in the Cash Flow Projection for the next two years was discussed in the
event there is enough surplus to raise the level to $3.5 million but this would be something that is decided on in January when the numbers are more defined. The Board discussed that this would have to be looked at carefully before any determination is made to raise the capital spending level. If usage trends continue as they are now it could be a possibility that there will be more money available to fund some of the projects that are needed sooner than expected without having to borrow money. The question was asked concerning the South Water Treatment Plants status and what the needs would be going forward. Mr. Williams noted that the South Plant would become a priority if a new large customer is preparing to open a plant or a major failure occurs and then this would be moved up on the list as needed, with a cost of $10 million to $12 million to revamp the plant. There is a plan already prepared if this happens and the funding would then have to be obtained. He added that a lot of money has been spent there recently to extend the life of the plant. The Board agreed that when the Cash Flow Projection numbers are presented in January it will be easier to determine if raising the capital spending level is possible.

Mr. Williams also brought to the Boards attention the easement extinguishment plat on the house on Briarcliff in Frontier that had the sewer beneath it. This gets the easement out from underneath the house also.

Chairman Paul Bird said that a group met with International Paper earlier today and toured their facility and discussed some of their questions. The tour was extremely interesting and provided a look into how they run their plant and the product they produce.

E. BUSINESS

- Action Report #2019-20 – North Water Treatment Plant – High Service Pump #3

  Tom Williams reviewed this action report with the Board. This emergency expenditure was discussed at last month’s meeting and this finalizes the information. After discussion, motion was made by Commissioner Julie Wischer and seconded by Commissioner Gary Jennings to approve Action Report #2019-20 – North Water Treatment Plant – High Service Pump #3 as detailed in the Action Report and awarding the bid to Wastewater Solutions, LLC in the amount of $40,727 with the total appropriation amount of $45,000 coming from the 2019-20 Capital Budget. All Commissioners present voted aye, with no opposition. Motion passed.

- Action Report #2019-21 – South WTP – Raw Water Pumps & Pipelines

  This action report was reviewed with the Board concerning the raw water pumps and pipelines that are related to the Big Rivers intake. The estimate from J.R. Wauford for the HWU dedicated pump design phase is $145,000. This will update information they had previously provided for this project. After discussion, motion was made by Commissioner Gary Jennings and seconded by Commissioner Julie Wischer to approve Action Report #2019-21 South WTP – Raw Water Pumps & Pipelines authorizing $145,000 for this project with the funds being appropriated from the 2019-2020 Capital Budget as detailed in the Action Report. All Commissioners present voted aye, with no opposition. Motion passed.

- Resolution #2019-22 – Recommending Changes to Chapter 23 of the City of Henderson Code of Ordinances
Tom Williams reviewed the information provided concerning the recommendation for changes to Chapter 23 of the City of Henderson Code of Ordinances that was discussed in the GM report. The discussion continued concerning the cross connection and backflow preventer section of the ordinance. Attorney, Eric Shappell reported that it is the States responsibility to enforce the code and it goes on to state that the City, County, and Commonwealth Attorney basically at the local level are its agents. Therefore, it is up to the City with HWU as the agent to enforce it since the Kentucky Plumbing Code has been adopted. Tom Williams said there is a long list of things that require back flow preventers on them like irrigation systems, sprinkler systems, and other industrial type things. The inspection of these type back flow preventers and cross connections are to be done by the owner of the facility. The concentration would be on inspection of larger facilities for industrial and fire suppression systems. Attorney, Eric Shappell noted that HWU is not responsible for inspecting these, but they will be the ones who collect the inspection reports after they are completed by a certified tester. There was much discussion concerning the availability of authorized inspectors or plumbers to do this task for all the facilities or homes involved. Kevin Roberts noted that inspection reports have been received from bigger industries such as Tyson, Accuride, and Gibbs and we file these reports. The Board agreed that the wording in the Ordinance is good and Mr. Williams said that this will leave it to HWU to define what is needed through policy. Attorney, Eric Shappell added it would be HWU’s responsibility to send out letters to people stating they are required to have these checked on a routine basis and then have copies of the inspection sent to HWU. Tom Williams noted that when things are mandated from the State or EPA it is always an unfunded mandate and no money is given to regulate any of this. This resolution will have to be forwarded to the City for their review and approval of the changes to the ordinance.

Motion was made by Commissioner Julie Wischer and seconded by Commissioner Gary Jennings to approve Resolution # 2019-22 Recommending Changes to Chapter 23 of The City of Henderson Code of Ordinances as detailed in the resolution including the attachment of changes. Roll call vote was taken and the results are as follows: Commissioner, Paul Bird, Aye; Commissioner, George Jones, Aye; Commissioner, John Henderson, Absent; Commissioner, Gary Jennings, Aye; Commissioner, Julie Wischer, Aye. Resolution passes.

• Resolution #2019-23 – Acceptance of Stormwater Management System Maintenance Agreement – 2429 U. S. Highway 60 East

After discussion, motion was made by Commissioner Julie Wischer and seconded by Commissioner Gary Jennings to approve Resolution #2019-23 – Acceptance of Stormwater Management System Maintenance Agreement for Lighthouse Storage located at 2429 US Highway 60 East as detailed in the resolution. The Board Chairman and Secretary are authorized to sign the agreement and then it will be forwarded to the City of Henderson for their approval and signing. Roll call vote was taken and the results are as follows: Commissioner, Paul Bird, Aye; Commissioner, George Jones, Aye; Commissioner, John Henderson, Absent; Commissioner, Gary Jennings, Aye; Commissioner, Julie Wischer, Aye. Resolution passes.
• Action Report #2019-24 – Cleaning, Painting & Upgrades to Fire Hydrants

Tom Williams reviewed this Action Report with the Board. After soliciting of bids only one bid was received, and it arrived late. The model procurement code allows entering into negotiations. A price was negotiated in the total amount of $63,850 for painting of 250 additional fire hydrants and furnishing 176 of those with the new connect nozzles. Motion was made by Commissioner Julie Wischer and seconded by Commissioner Gary Jennings to approve Action Report #2019-24 – Cleaning, Painting & Upgrades to Fire Hydrants as detailed in the action report awarding the contract to Muscat Painting & Decorating, of East Dundee, Illinois in an amount not to exceed $41,850. Funding will come from the operational account, not from capital budget. All Commissioners present voted Aye, with no opposition. Motion passes.

F. EXECUTIVE SESSION – None Requested

Motion was made by Commissioner Julie Wischer, seconded by Commissioner Gary Jennings to Adjourn. All members present voted Aye with no opposition. Motion passed.

The next regularly scheduled meeting will be held on Monday, August 19, 2019.
Henderson Water Utility  
Operating Revenues and Expenses Summary  
For the One Month Ended July 31, 2019

<table>
<thead>
<tr>
<th></th>
<th>July Actual</th>
<th>July 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>
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<tr>
<td>Water Sales</td>
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<td>$784,651</td>
<td>$768,367</td>
<td>$8,900,000</td>
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<td>2,917</td>
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<td>2,500</td>
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<td>1,040,157</td>
<td>1,040,317</td>
<td>12,050,000</td>
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<td>37,500</td>
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<td>5,000</td>
<td>425,000</td>
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<td>735,240</td>
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<td>417</td>
<td>614</td>
<td>417</td>
<td>5,000</td>
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<tr>
<td>Stormwater Fees</td>
<td>-</td>
<td>125</td>
<td>-</td>
<td>125</td>
<td>1,500</td>
</tr>
<tr>
<td><strong>Total Operating Revenues</strong></td>
<td>$1,914,429</td>
<td>$1,884,037</td>
<td>$1,914,429</td>
<td>$1,884,037</td>
<td>$22,219,240</td>
</tr>
</tbody>
</table>

| **OPERATING EXPENSES** |         |         |                     |                     |                    |
| Salaries and Wages    | 493,163  | 506,175 | 493,163             | 506,175             | 4,386,850          |
| Payroll Taxes         | 36,521   | 36,678  | 36,521              | 36,678              | 317,875            |
| Health Insurance      | 117,592  | 130,500 | 117,592             | 130,500             | 1,566,000          |
| Pension & OPEB Benefits| 110,330  | 112,846 | 110,330             | 112,846             | 978,000            |
| Workers Compensation  | 18,919   | 26,500  | 18,919              | 26,500              | 106,000            |
| Other Employee Benefits| 1,806    | 1,714   | 1,806               | 1,714               | 20,564             |
| Car Allowance         | 900      | 900     | 900                 | 900                 | 10,800             |
| Electricity           | 160,591  | 178,716 | 160,591             | 178,716             | 2,144,595          |
| Natural Gas           | 250      | 300     | 250                 | 300                 | 26,250             |
| Chemicals             | 102,806  | 120,150 | 102,806             | 120,150             | 1,441,800          |
| Inventory Expense     | 47,252   | 15,417  | 47,252              | 15,417              | 185,000            |
| Fuel                  | 5,880    | 9,525   | 5,880               | 9,525               | 96,610             |
| Tools & Small Equipment| 8,435    | 8,051   | 8,435               | 8,051               | 96,610             |
| Lab Supplies and Testing| 33,989  | 34,739  | 33,989              | 34,739              | 416,870            |
| Clothing/Cleaning Allowance | -     | -      | -                  | -                  | 27,575             |
| Vehicle Repair        | 4,327    | 5,433   | 4,327               | 5,433               | 65,200             |
| Other Equipment Repair | 19,673   | 23,033  | 19,673              | 23,033              | 276,400            |
| Other Structures Repair| 19,115   | 31,488  | 19,115              | 31,488              | 377,850            |
| SCADA Expense         | 275      | 3,563   | 275                 | 3,563               | 42,754             |
| Administrative Services| 54,163  | 55,833  | 54,163              | 55,833              | 670,000            |
| Contractual Services  | 25,954   | 28,037  | 25,954              | 28,037              | 336,442            |
| Contractual Labor     | -        | 12,225  | -                  | 12,225              | 146,700            |
| Sludge Hauling and Disposal| 64,587 | 72,917  | 64,587              | 72,917              | 875,000            |
| Professional Services | 1,500    | 2,917   | 1,500               | 2,917               | 35,000             |
| Equipment Rental      | 3,858    | 4,270   | 3,858               | 4,270               | 51,240             |
| Audit Expense         | 4,750    | 4,750   | 4,750               | 4,750               | 23,500             |
| Public Contributions  | -        | -       | -                  | -                  | -                  |
| Insurance             | 687      | -       | 687                 | -                  | 300,000            |
| Technology Expense    | 9,501    | 15,929  | 9,501               | 15,929              | 191,142            |
| Office & Field Supplies| 1,766    | 9,723   | 1,766               | 9,723               | 116,680            |
| Telephone             | 4,424    | 5,394   | 4,424               | 5,394               | 64,733             |
| Medical Exams         | -        | 629     | -                  | 629                 | 7,550              |
| Travel, Training & Education| 2,821 | 5,857  | 2,821               | 5,857               | 70,288             |
| Dues and Subscriptions| 596      | 1,519   | 596                 | 1,519               | 18,233             |
| Advertising and Printing| 250     | 583     | 250                 | 583                 | 6,995              |
| Miscellaneous         | 127      | 856     | 127                 | 856                 | 10,277             |
| Depreciation          | 322,500  | 322,500  | 322,500            | 322,500            | 3,870,000          |
| **Total Operating Expenses** | $1,682,576 | $1,792,938 | $1,682,576 | $1,792,938 | $19,434,323 |

**Operating Income (Loss)**  
$231,853  $91,098  $231,853  $91,098  $2,784,917
Henderson Water Utility
Variance Analysis
For the One Month Ended July 31, 2019

Operating Revenues
Actual $ 1,914,429
Budgeted 1,884,037
Favorable (Unfavorable) Variance $ 30,392
Percentage Difference 1.61%

Billable Gallons
Through 7/31/19 209,387,205
Through 7/31/18 219,448,908
Difference (10,061,703)
Percentage Difference ‐4.58%

Operating Expenses
Actual $ 1,682,576
Budgeted 1,792,938
Favorable (Unfavorable) Variance $ 110,362
Percentage Difference 6.16%

Breakdown of Volumetric Differential For Year to Date Ended

<table>
<thead>
<tr>
<th></th>
<th>Jul-19</th>
<th>Jul-18</th>
<th>Differential %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>47,808,213</td>
<td>49,812,543</td>
<td>‐4.02%</td>
</tr>
<tr>
<td>Industrial (includes IP)</td>
<td>39,478,355</td>
<td>43,528,652</td>
<td>‐9.30%</td>
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<tr>
<td>Commercial (includes Tyson &amp; HCWD)</td>
<td>122,100,637</td>
<td>126,107,713</td>
<td>‐3.18%</td>
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<tr>
<td>Total</td>
<td>209,387,205</td>
<td>219,448,908</td>
<td>‐4.58%</td>
</tr>
</tbody>
</table>

Notes

Revenue Summary:
Revenues for first month were in line with budget for fiscal year.

Expense Summary:
Total Expenses were under the monthly allocated budget totals.
Inventory expense over monthly budget due to restock orders after 6/30 inventory and additional purchases for capital projects that will be expenses in future months.

Usage Trend:
One month is difficult to gauge a trend with, but will closely monitor Industrial and Commercial to see if decrease continues. Only looking at one month can skew outlook when factors such a work days, customer schedules, weather can cause one month variations.

Summary:
Cash flow for month was positive, and should continue to increase until significant capital and debt activity occur. Work continues with City IT and Billing/Revenue personnel to finish resolving ongoing reporting issues. Received A/R reports in late July, and continue to work with them on various issues regarding reports. Work continues to close out FY2019 and prepare for audit. Have "closed" books for fiscal year. Will present June 2019 financials when amounts are more "firm" after resolving reporting issues and completing year end procedures. No Capital Spending report this month, little activity and still closing prior projects etc would not have been very useful.
Financial Statements

For the One Month Ended July 31, 2019
### Assets and Deferred Outflows

**Current assets:**
- Cash: $8,046,706
- Designated Cash for Contractual Adjustments, net: $542,099
- Unrestricted Investments: $50,390
- Accounts receivable: $1,643,863
- Unbilled revenue: $1,528,172
- Inventories: $789,154
- Other current assets: $189,411
- **Total current assets:** $12,789,795

**Noncurrent assets:**
- Construction in progress/Current year capital expenditures: $8,509,443
- Utility plant and equipment, net of accumulated depreciation: $74,438,030
- Other assets: $197,988
- **Total noncurrent assets:** $83,145,461

**Deferred outflows of resources:**
- $3,326,228

- **Total assets and deferred outflows:** $99,261,484

### Liabilities and Deferred Inflows

**Current liabilities:**
- Accounts payable: $347,681
- Retainage payable: $68,242
- Accrued expenses: $542,099
- Accrued interest payable: $206,074
- Other accrued liabilities: $1,185,527
- Current portion of long-term debt: $2,354,090
- **Total current liabilities:** $4,703,713

**Noncurrent liabilities:**
- Deposits payable: $139,604
- Accrued pension liability: $9,938,648
- Accrued OPEB liability: $2,897,354
- Equipment notes payable: $277,108
- Long-term debt: $30,664,400
- **Total noncurrent liabilities:** $43,917,114

**Deferred inflows of resources:**
- $1,363,133

- **Total liabilities and deferred inflows:** $49,983,960

### Net Position

**Net investment in capital assets:** $50,160,494

**Unrestricted:** $(882,970)

- **Total net position:** $49,277,524
Henderson Water Utility
Statement of Revenues, Expenses, and Changes in Net Position
For the One Month Ended July 31, 2019

<table>
<thead>
<tr>
<th></th>
<th>July Actual</th>
<th>July 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>$799,971</td>
<td>$773,783</td>
<td>$799,971</td>
<td>$773,783</td>
<td>$8,965,000</td>
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<tr>
<td>Wastewater sales and fees</td>
<td>1,051,880</td>
<td>1,048,442</td>
<td>1,051,880</td>
<td>1,048,442</td>
<td>12,512,500</td>
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<tr>
<td>Stormwater fees</td>
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<td>61,812</td>
<td>62,578</td>
<td>61,812</td>
<td>741,740</td>
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<tr>
<td>Total operating revenues</td>
<td>1,914,429</td>
<td>1,884,037</td>
<td>1,914,429</td>
<td>1,884,037</td>
<td>22,219,240</td>
</tr>
</tbody>
</table>

| **OPERATING EXPENSES** |             |             |                     |                     |                   |
| Salaries, wages, and benefits | 779,231     | 815,313     | 779,231             | 815,313             | 7,386,089         |
| Contractual services     | 154,812     | 180,949     | 154,812             | 180,949             | 2,137,882         |
| Supplies and materials   | 201,630     | 191,153     | 201,630             | 191,153             | 2,321,405         |
| Utilities expense        | 160,841     | 179,016     | 160,841             | 179,016             | 2,170,845         |
| Repairs and maintenance  | 43,390      | 63,517      | 43,390              | 63,517              | 762,204           |
| Other services and expenses | 20,172      | 40,492      | 20,172              | 40,492              | 785,898           |
| Depreciation             | 322,500     | 322,500     | 322,500             | 322,500             | 3,870,000         |
| Total operating expenses | 1,682,576   | 1,792,938   | 1,682,576           | 1,792,938           | 19,434,323        |

| Operating income (loss) | 231,853     | 91,098      | 231,853             | 91,098              | 2,784,917         |

| **NONOPERATING REVENUES (EXPENSES)** |             |             |                     |                     |                   |
| Investment income        | 18,968      | 8,333       | 18,968              | 8,333               | 50,000            |
| Other income             | (413)       | 833         | (413)               | 833                 | 10,000            |
| Interest expense         | (70,167)    | (70,168)    | (70,167)            | (70,168)            | (860,842)         |
| Total nonoperating revenues (expenses) | (51,612)   | (61,001)    | (51,612)            | (61,001)            | (800,842)         |

| Income (loss) before capital contributions and distributions | 180,241     | 30,097      | 180,241             | 30,097              | 1,984,075         |
| Grants and Capital contributions | 43,789      | 20,833      | 43,789              | 20,833              | 250,000           |
| Distribution to City of Henderson | -           | -           | -                   | -                   | (400,000)         |
| Change in net position   | $224,030    | $50,930     | $224,030            | $50,930             | $1,834,075        |
Henderson Water Utility  
Statement of Cash Flows  
For the One Month Ended July 31, 2019

### CASH FLOWS FROM OPERATING ACTIVITIES

<table>
<thead>
<tr>
<th>Description</th>
<th>July</th>
<th>Year to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receipts from customers</td>
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<td>$2,217,623</td>
</tr>
<tr>
<td>Payments for goods and services</td>
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<tr>
<td>Payments for employees</td>
<td>(780,131)</td>
<td>(780,131)</td>
</tr>
<tr>
<td><strong>Net cash provided (used) by operating activities</strong></td>
<td><strong>863,941</strong></td>
<td><strong>863,941</strong></td>
</tr>
</tbody>
</table>

### CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES

<table>
<thead>
<tr>
<th>Description</th>
<th>July</th>
<th>Year to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution to City of Henderson</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Net cash provided (used) by noncapital financing activities</strong></td>
<td><strong>-</strong></td>
<td><strong>-</strong></td>
</tr>
</tbody>
</table>

### CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES

<table>
<thead>
<tr>
<th>Description</th>
<th>July</th>
<th>Year to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition and construction of capital assets</td>
<td>(253,966)</td>
<td>(253,966)</td>
</tr>
<tr>
<td>Proceeds from issuance of debt</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Principal payments on long-term debt</td>
<td>(4,710)</td>
<td>(4,710)</td>
</tr>
<tr>
<td>Interest payments on long-term debt</td>
<td>(869)</td>
<td>(869)</td>
</tr>
<tr>
<td>Proceeds from sale of capital assets</td>
<td>43,789</td>
<td>43,789</td>
</tr>
<tr>
<td>Grants and Capital contributions</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Net cash provided (used) by capital and related financing activities</strong></td>
<td><strong>(215,756)</strong></td>
<td><strong>(215,756)</strong></td>
</tr>
</tbody>
</table>

### CASH FLOWS FROM INVESTING ACTIVITIES

<table>
<thead>
<tr>
<th>Description</th>
<th>July</th>
<th>Year to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment and other income received</td>
<td>18,555</td>
<td>18,555</td>
</tr>
<tr>
<td><strong>Net cash provided (used) by investing activities</strong></td>
<td><strong>18,555</strong></td>
<td><strong>18,555</strong></td>
</tr>
</tbody>
</table>

Net increase (decrease) in cash

<table>
<thead>
<tr>
<th>Description</th>
<th>July</th>
<th>Year to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net increase (decrease) in cash</td>
<td>666,740</td>
<td>666,740</td>
</tr>
<tr>
<td>Cash, beginning of period</td>
<td>7,922,065</td>
<td>7,922,065</td>
</tr>
<tr>
<td><strong>Cash, end of period</strong></td>
<td>$8,588,805</td>
<td>$8,588,805</td>
</tr>
</tbody>
</table>
PLANT OPERATIONS REPORT
General Operations:

A. Treatment Plants – Overview:

1. Personnel:

Historically, we have had two Water Treatment Plant Operator positions that served in a relief capacity, or “extra” operators, if you will. These are fully certified operators who provide coverage for the regular shift operators. One operator worked out of the NWTP, and the other out of the SWTP. This not only helped us reduce overtime, but also allowed for covering the often-long gap between an operator leaving and getting a replacement hired (this is typically a several-month long process).

Last year, one of the operators serving in a relief capacity retired, and the decision was made to see if we could feasibly operate both water treatment plants with only one relief shift operator. We always try to plan according to a worst-case scenario, and that’s somewhat what we got. Our single relief operator quit for another job, and we have another operator retiring the first week of September. This is placing a strain on coverage that we must maintain.

Looking at the retirement timeline of our operations staff, we have an additional six people considering retirement in the next five years, a total of 28% of our operations staff who will take with them a combined 106 years of experience operating our treatment plants. In the five years following this, we have five additional people considering retirement, another 23.8% of our operator workforce, and another 116 years of experience. (If you’re tracking closely, ten years from now we expect to have replaced over 50% of our plant operations staff and to have lost 222 combined years’ worth of operator experience). We need to prepare for mitigating this loss now.

Studies that track this stuff are showing that there are not many new people entering the field. Succession planning is something that we have always struggled with in plant operations, which was one of the benefits of having two relief operators.

We are making every attempt to operate as lean as we can, especially in the budget categories that have the greatest impact (personnel being the top category!). However, it is our belief that it is in the best interest of HWU to move towards filling this position, returning to having two relief shift operators in place.

2. System Water Quality:

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

2901 HWY 60E: On July 19, 2019, the customer called advising that there was a problem with the water in her bathroom, and she was very concerned. Upon arriving, the customer showed a commode with mold growing in it. All test results for the tap water were normal, and chlorine results were at a good level. The customer was contacted with results and advised that the water was not the cause, and that bleaching the commode regularly could solve the issue.
3. **Personnel:**

**Staffing Levels:**

a. **Water Quality:** Currently we have an open position for a water quality specialist at the Drinking Water Lab, due to the resignation of Heather King.

b. **North Water:** Full operational staff, however Les Lange has submitted his intent to retire on September 3rd. We have hired Neil Tichenor from the current roster, and he is learning the duties of the position.

c. **North Wastewater:** Full operational staff.

d. **South Water:** We are in the process of hiring a replacement for Josh Perkins, the water relief shift operator. Lindsey Cardwell will begin training as the relief Water Operator on September 3rd.

e. **South Wastewater:** Full operational staff.

f. **Environmental Compliance & Pretreatment:** The position is currently unfilled, after David Brister’s retirement, though the workload is being handled by an outside contractor.

g. **Plant & Pump Station Maintenance:** Taylor Jackson continues to learn the duties of Maintenance Tech I, filling the position left by Jim Carnine’s retirement.

h. **Treatment Intern:** The position is currently unfilled as the Treatment Intern has now returned to college.

4. **Projects:**

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

**B. North WTP:**

1. **Treatment Quality:**

   **Water Quality Goals:** All regulatory goals were met.

2. **Operations & Projects:**

   **Plant Tours:** Julie D. Wischer, the Executive Director at the Hugh Edward Sandefur Training Center, and a group from there toured the plant July 8, 2019.

   **Plant Projects:** Work has continued on the filters with the help of Bryce Courtney, our intern for the summer. Current results have shown no issues, and samples of the media will soon be sent to the lab for in-depth analysis.

   **Treatment Challenges:** The Ohio River turbidity has begun to stabilize allowing operators to reduce levels of some chemicals.
3. **Average Water Treated and Water Pumped Data Trend:**

![Graph showing water treated and 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.

   **Biosolids Quality & Hauling**: Hazex continues to meet hauling demands, with sludge production continuing to be lower than normal.

2. **Operations & Projects:**

   **Lab Certification**: Our in-house lab continues to take on more of the testing from our contract lab. The lab will soon be adding some of the ammonia testing needed for the plants and continues to move forward with additional in-house testing.

   **Diffusers**: The diffuser systems in digesters 1 and 4 are on the schedule for repairs. This maintenance is scheduled to begin soon.

   **Codell Punch List**: The contractor has made repairs to the #3 clarifier, filled in some of the erosion areas, corrected some grading issues and replaced the valve stem covers. Work is still needed to finish erosion issues and to repair electrical conduit issues at #3 clarifier, but this work is currently being scheduled.

   **Clarifier #2**: The contractor is awaiting final approval from the engineers on raising the level of the center well, but all other repairs have been completed.

   **UV System**: We are nearing the end of the life cycle on some of the lamps in our UV system. These lamps will need to be replaced. As we have mentioned before, we are investigating a trial of a different and lower cost lamp, but that company is behind schedule.

   **Conveyor System**: A replacement of the 30-inch conveyor belt has been installed. It was budgeted but was immediately necessary due to failure of the old belt. The old belt had been in place for over fifteen years.

D. **South WTP:**

1. **Treatment Quality:**
Water Quality Goals: All regulatory goals were met.

2. Operations & Projects:

Treatment Challenges: The summer months this year have not provided the usual period of smoother operations of the plant as we normally see. This is due to the rain and unusual weather we have had this year, but operators continue to be vigilant in ensuring excellent water quality.

Secondary Cleaning: As stated last month, while cleaning the secondary, several pits and rust spots were located. We have purchased materials for the repairs and will be moving forward with repairs soon.

3. Average Water Treated and Water Pumped Data Trend:

![Average Water Treated and Water Pumped Data Trend](image)

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. The new aeration basins are proving to be a great help with ensuring excellent effluent quality.

   Biosolids Quality: We continue to see a reduction in solids and believe this is an effect of the new aeration basins. With lower than average sludge production, operators have been able to make progress slowly lowering solids within the basins.

2. Operations & Projects:

   Sludge Press Rehab: The Neptune Polyblend system is now in service, and the newly reworked sludge presses are working well. Operators are quickly learning the new portions of the system.

   Headworks Building: A lift will soon be rented to clean and paint the high areas of the original framework. This will help with the building's aesthetics but will also help protect the steel from future corrosion.

F. Plant & Pump Station Maintenance:

North Fork Pump Station: Pumps #2 and #4 are currently in service, while repairs are being made to #1 and #3.
NWTP: On May 10th, the High Service Pump #3 which supplies water to Atkinson Park Tank failed. The pump has been bid, ordered, and will be installed once it arrives. The pump has been delivered and is planned to be installed the week of August 12th.

NWWTP Blowers: After a starter system failure, a new Soft Start has been received and is currently being installed.

Aeration Basin Blower #3 had a dramatic failure internally and is beyond repair. This blower is originally from 1995. We are in the process of gathering specs for a new blower.

RAS Pump VFDs: We have now had two failures that we believe were due to a power outage. During troubleshooting and repairs, there was no indication of an outside source of damage, and the repair contractor believes there may be an issue with the VFDs themselves. We have purchased a new VFD of a different brand, while repairing one of the failed ones with parts that had already been ordered.

SWWTP Basins: Materials are currently being priced and purchased for the safety cables that will be strung around the Basins. We met with Sam Langley to make sure everything will be within OSHA Regulations. We plan to begin soon.

Springfield Pump Station: We are seeing premature failure of some components within the electrical panel at this station. Investigation indicates a heat issue caused by the internal transformer, so we are currently getting prices to move the transformer to the back side of the panel to eliminate the heat issue.

Cresline Pump Station: We have ordered a new pump base from Xylem, Inc. to be installed on the existing pump, after the base we fabricated failed.

Cemetery Pump Station: The check valve for Pump #2 has failed. Repairs to the spacer between the valve and pump are being done by Emerson’s Machine Shop. Once completed, a new check valve will be installed.

Fairmont Pump Station: The Fence around the station was damaged by a traffic accident. We have received three bids, and Tri-State Fence, being the lowest, will begin the repair soon.

G. Pretreatment Program & FOG Services:

Industrial Pretreatment Activity: Second quarter billing for surcharges went out on schedule. All of our industries were contacted about the new Local Limits and COD surcharge change. There were a few that requested a meeting, which was accommodated. All are accepting of the changes.

FOG Program: No updates.

H. Distribution Operator Update:

Fire Hydrants: Work continues identifying, flow testing, mapping, and labeling our fire hydrants to ensure accuracy for HWU and the Fire Department.

Meter Reading: Meters of 3-inches and larger in the north system have been investigated for issues that may cause billing problems. The majority are found to have no issues, with a few still in question that are being investigated further by Todd Bowley and the billing department.
Green River Road Tank: Work continues on the Green River Road Tank. Blasting and welding on the interior is still being done, and containment is ready for the exterior work to begin.
FIELD OPERATIONS REPORT
General Operations:

A. Overview:

Personnel:

Specialist: Fully staffed.

Utility System Worker 1: We had a USW1 resign, effective August 8, 2019. A roster is in place and interviews for four vacant positions have been conducted and/or scheduled. Paperwork has been submitted for two of the candidates already interviewed.

Utility System Worker 2: Fully staffed.

Utility System Worker 3: Fully staffed.

Crew Leader: One of our Crew Leaders of 27 years, Kevin Capps, retired at the end of July. An examination was scheduled for July 25th, but there were no qualified applicants. The position was re-advertised with an exam administered on August 8th. There were seven who took the exam, and three who passed.

B. Automation Department:

Wireless Ethernet: This system is still in the testing phase.

Background Info: Wireless ethernet was also added at the US 60 booster station to replace the radio ethernet that had been in use. We are looking at the possibility of adding it to North Fork and Janalee Drive pump stations. This will enable us to move away from leased fiber optic lines from HMPL.

Rain Gauges: The installation of the rain gauges is complete. We now have permanent rain gauges at the CSO Basin, NWTP, NWWTP and SWWTP in order to measure real time rainfall at those locations also. Each of these locations is being recorded in the Historian and is viewable to the plant operators via Wonderware. This will also be valuable when CSO reporting time rolls around.

C. SOC General / HWU General:

No updates to report.
D. 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>3</td>
</tr>
<tr>
<td>Water Service Line Repairs</td>
<td>2</td>
</tr>
<tr>
<td>Water Meter Inspection</td>
<td>30</td>
</tr>
<tr>
<td>Water Meter Changes</td>
<td>14</td>
</tr>
<tr>
<td>Water Meter Repair</td>
<td>6</td>
</tr>
<tr>
<td>Water Meter Disconnected</td>
<td>3</td>
</tr>
<tr>
<td>Water Meter Reposition</td>
<td>0</td>
</tr>
<tr>
<td>Water Meter Box Cleaned</td>
<td>2</td>
</tr>
<tr>
<td>Water Meter Locate</td>
<td>0</td>
</tr>
<tr>
<td>Water Meter Leak Detection</td>
<td>17</td>
</tr>
<tr>
<td>Water Meter Consumption Check</td>
<td>18</td>
</tr>
<tr>
<td>Fire Hydrant Repairs</td>
<td>3</td>
</tr>
<tr>
<td>Low Water Pressure Calls</td>
<td>4</td>
</tr>
<tr>
<td>Water Leak Calls</td>
<td>8</td>
</tr>
<tr>
<td>Water Quality Calls</td>
<td>1</td>
</tr>
<tr>
<td>No Water Calls</td>
<td>3</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>Sewer Line and Service Maintenance</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewer Main Repairs</td>
<td>3</td>
</tr>
<tr>
<td>Sewer Service Line Repairs</td>
<td>1</td>
</tr>
<tr>
<td>Sewer Manhole Repairs</td>
<td>1</td>
</tr>
<tr>
<td>Sewer Main Cleaning</td>
<td>4</td>
</tr>
<tr>
<td>Sewer Main Grease Removal</td>
<td>0</td>
</tr>
<tr>
<td>Sewer Overflow Calls</td>
<td>0</td>
</tr>
<tr>
<td>Sewer Backup Calls</td>
<td>7</td>
</tr>
<tr>
<td>Sewer Blocked Calls</td>
<td>0</td>
</tr>
<tr>
<td>Sewer Odor Calls</td>
<td>2</td>
</tr>
<tr>
<td>Sewer Service Line Locates</td>
<td>4</td>
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</table>

<table>
<thead>
<tr>
<th>Stormwater Maintenance</th>
<th>Qty.</th>
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<tbody>
<tr>
<td>Storm line Repairs</td>
<td>4</td>
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<tr>
<td>Storm Intake Repairs</td>
<td>1</td>
</tr>
<tr>
<td>Stormwater Flooding Calls</td>
<td>0</td>
</tr>
<tr>
<td>Clean/Unblock Intakes</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>New Services</th>
<th>Qty.</th>
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</thead>
<tbody>
<tr>
<td>Water Taps</td>
<td>10</td>
</tr>
<tr>
<td>Sewer Taps</td>
<td>2</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>10</td>
</tr>
<tr>
<td>Smoke Test Lines</td>
<td>0</td>
</tr>
<tr>
<td>Camera Inspect Lines</td>
<td>4</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>228</td>
</tr>
<tr>
<td>Downspout Removal Requests: Total Complied and Re-inspected</td>
<td>222</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.

![Graph of Work Orders Opened/Closed](image1)

![Graph of Water That Is Unaccounted For](image2)
E. **Collection System:**

We are conducting normal maintenance activity in the collections system.

A contract has been awarded to Mark Bowling, Inc., for the replacement of the Myrene Drive pump station. This is one of our old Cantex pump stations that has reached the end of its useful life and has been giving us regular problems. The limited space available for this project will make it especially challenging. Work originally scheduled to start on July 1\(^{st}\) has been delayed due to our rejection of the contractor’s first selection for pump manufacturer that has resulted in an additional lead time for the pumps and controls. The new start date for this project is September 1\(^{st}\).

F. **Distribution System:**

The Old Madisonville Road project is now complete. We replaced a 6-inch water main that we often had to repair.

Plans are in place to start the 9\(^{th}\) Street project on August 20\(^{th}\). We will be laying 850 feet of 6-inch water main that will replace an old 2-inch line that will be overloaded with the addition of 3 duplexes in the block.

We dug up one end of the repair that was made on the 20-inch main a couple of months ago at Vine and Green Street and found that it is leaking. We are making plans now to dig that up and replace the bell clamp that was installed. This will require us to shut down one block of the 20-inch main again to make this happen.

G. **Stormwater Projects:**

Bowling construction is in the process of reconstructing the storm system for Riverdale Court. The project is virtually complete.

The pipeline installation and final restoration are complete on Phase 1 of the Countryview Storm Sewer project. Design for Phase 2 of this project, encompassing Sutton Drive north of Wilson, the remainder of Brenda Drive, and a short segment of Peggy Drive near its intersection with Country Drive is underway.

H. **Stormwater Phase II:**

Now that we are entering the dry season, we are gearing up to conduct our annual dry weather screening. This is a DOW requirement for all MS4 communities that involves inspecting certain storm sewer outfalls when it hasn’t rained to look for non-stormwater discharges into our system.

I. **Information Technology Department:**

**Security Awareness Training:** The training provided by KnowBe4, which was mentioned in last month’s report, is underway. Approximately 60% of our employees have completed the training.

**Solid State Drive (SSD) Storage (UPDATE):** Obtaining quotes for new SSD storage for our Dell Storage Area Network (SAN) which is where all our VMWare virtual machines are hosted. SSD storage allows for faster data throughput than traditional hard drives due to their lack of moving parts. For instance, we occasionally get error messages due to SAN data-read latency. Evolving server and application requirements have outpaced the capabilities of the SAN’s current hard drives. The old drives will be
repurposed for storing data which is not accessed as often. The Dell hardware automatically manages where the data is stored for maximum efficiency. Good news...The quotes are coming in less than the anticipated $25,000 to $30,000. We are waiting on one last quote to advance with the project.

**HMP&L GIS:** Met with Planning Commission and HMP&L’s new GIS Analyst to discuss HMP&L’s desire to setup an in-house GIS server like ours. This is a great opportunity for inter-departmental teamwork. We have offered to help.

**J. GIS Department:**

No updates to report.
<table>
<thead>
<tr>
<th>Date</th>
<th>Crew #</th>
<th>Address</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/26/19</td>
<td>124</td>
<td>1200 Loeb St.</td>
<td>We raised the meter for Jeff Burris. He called back to say he is very particular about his yard and really was pleased with the job John Zahn and Matthew Cornwell did. He wanted us to pass that along.</td>
</tr>
<tr>
<td>7/29/19</td>
<td>997</td>
<td>Frontier Dr.</td>
<td>Bob Cornbleet called to thank everyone that helped with the water and sewer services for a new build of his.</td>
</tr>
</tbody>
</table>
A. *Water Projects*

1. **South Water & Wastewater Plants – Influent/Effluent Lines and River Intake:**
   Plans to implement our 2014 study to reconstruct our potable influent and wastewater effluent lines, as well as modifications to the Big Rivers intake structure on the Green River are being developed. J.R. Wauford has completed pick-up survey work to make sure conditions haven’t changed since plans were drawn up and will ask for reapproval of a construction permit from DOW. When approval is received, we will plan for bidding and construction.

   The intake modifications will take longer to design and permit, so will likely follow in a couple of years. Bart met with BREC and Wauford on-site on 14 May. That meeting led to some minor changes in layout of the new pumps. Design work has begun. Our relationship with BREC continues to be a good one. We’ve had initial contact with Kenergy about power service for our dedicated pumps.

2. **Green River Road Tank:**
   Bids were opened for the Green River Road Tank on 17 April 2019, and the project was awarded to Tank Pro, Inc. Work has begun and includes full containment due to proximity to residences. Our new logo will be painted on the side of the tank that faces the City’s golf course. Containment is in place and the contractor has begun work on upgrades to ladders and handrails, and interior sandblasting. Photo at right shows progress so far.

3. **South Main Street Water Transmission Main – Hancock to Yeaman:** *No change since last report*
   Strand Associates has prepared plans for this project, which is estimated at $1.5 to 1.8 million and will be critical if a large water user locates in the South/College pressure zone (Riverport area). At this point, funds for this project are planned for FY 2020, and our model shows it to be a priority, even without new industrial use in the South/College pressure zone.

4. **South Water Treatment Plant – Backwash Pump System and New Clearwell:** *No change*
   This project came out of an operational review of the South WTP, which shows that the filters undergo backwash for extended periods, reducing the production of water for sale. To speed up the backwash process, we have designed a pumped backwash system that will provide more head differential, speeding the process and allowing the filters to be returned to service much faster after cleaning. Project will cost around $420,000, and is our next candidate project for a grant application, which will include the replacement of the Clearwell, at an additional $940,000.
B. **Wastewater Projects**

5. **Atkinson Sewershed Study - Myrene Drive & Atkinson Park Sewer Pump Station and Force Mains:**
   We have all the easements signed on the Myrene FM portion of the work. One that remains outstanding is on the Atkinson Park Medical Building, part of the Atkinson FM.

   Bids were received on the Myrene Pump Station on 6 February. A pre-construction meeting was held on April 25th, and we expect construction activity to begin on site by the first of September, subject to timing of procurement of pumps and equipment, which may push completion of this project into next year.

C. **Stormwater and Separation Projects**

6. **Countryview Subdivision Stormwater Project: (No change since last report)**
   Bids on the first big phase were received 15 August 2018, and award of a contract with a reduced scope was negotiated with the low bidder, after the bids came in higher than anticipated. Work on the actual stormwater system has been completed, and we’re talking to the City about paving the portions that have been completed.

   Work has also begun on design of the next phase, with leading Qk4 that effort. Our plan is to design in this FY, and jointly fund with the City a next phase of construction in the 2020-2021 FY, probably bidding that in late spring 2020. We made a report to the City Commission on 13 August about the next phases, and the plans for paving on the streets impacted by the phase we just completed.

7. **Riverdale Court:**
   Investigation in this area off South Main Street revealed a previously unknown storm sewar 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 2-1/2 acres of area to be taken off the combined system, at relatively low cost. Was awarded to M. Bowling Inc in May, and work is underway. Photo at right shows difficult work of installation on a steep slope.

*Photo above shows our crews responding to a water main break on Riverdale (unknown line)*
8. Chestnut/Norris Stormwater Project: (No change since last report)
   This small stormwater project will allow us to separate 9.1 acres of land out of the combined sewer system. We contracted with Qk4, local engineering firm, to do survey and design work on this project. Drafting of the plans is now 95% complete. Have met with a couple of homeowners who will be asked to grant easements. We will also be tying down easements on some existing lines where we haven’t been able to find any easements that were recorded.

9. Center & Julia Phase III-B Stormwater Project: (No change since last report)
   This stormwater project includes a crossing under the CSX tracks near the old depot. We have signed a task order with J.R. Wauford for updated survey and design work. We have provided insurance information to CSX for our permit, and have received a revised invoice, reflecting savings from insurance we already carry that was included on the first invoice; this cut the cost from about $40k to $20,400. The permit has a five-year time limit to start construction, so we’ve moved the project up in the Strategic Plan to accommodate that timeframe. Received plans from Wauford on May 31st that are nearly complete. Acquiring easements from adjacent property owners is going well; we have one signed and have made contact with three others. The Kentucky Transportation Cabinet owns one small parcel near this project, and we are working with them to acquire that land outright. Completion of the project will be contingent on availability of funds.

D. General Administrative / SOC

10. Vactor and Wash Truck Garage at the SOC: (No change since last report)
    Working on a plan to construct a 3-bay metal storage building at the SOC, so that the Wash Truck and the two Vac Trucks can be stored in one easily accessible place.

11. Residential Meter Replacement: (New Project)
    We are embarking on a project to replace all of our residential water meters over a few years, and that’s the subject of an Action Report for this meeting.
HUMAN RESOURCE & SAFETY REPORT
HWU Human Resources Summary: August 19, 2019

Staffing Levels:

1. Water Treatment Operator I [1 position]: new employee to start September 3; test again on August 15th
2. Utility System Worker I [4 positions]: interviews being conducted
3. Utility System Crew Leader [1 position]: exam results sent to the department
4. Water Quality Specialist Lead [1 position]: starting work on position
5. Environmental Compliance & Pretreatment Coordinator [1 position]: Current employees performing duties
6. Treatment Plants – Seasonal Worker [3 positions]: no request for action

Safety Report (as of 7/31/2019):

<table>
<thead>
<tr>
<th>Incident Rates</th>
<th>HWU</th>
<th>Change 2012 NAICS 2213</th>
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</thead>
<tbody>
<tr>
<td>Total Recordable Rate</td>
<td>12.07</td>
<td>+ 6.46 2.8</td>
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<tr>
<td>DART Incident Rate</td>
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<td>+ 2.03 1.4</td>
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<tr>
<td>DAFW Rate</td>
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<td>+ 2.03 0.8</td>
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<tr>
<td>Trans / Restrict. Rate</td>
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<td>- 0.39 0.6</td>
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<th>Hours Worked</th>
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<tr>
<td>82,832</td>
<td>+ 11,492</td>
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<table>
<thead>
<tr>
<th>Total Cases</th>
<th>HWU</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>+ 3</td>
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<table>
<thead>
<tr>
<th>Days Away/Restricted Time Cases</th>
<th>HWU</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>+ 1</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Days Away From Work Cases</th>
<th>HWU</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>+ 1</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Actual # Days Away From Work</th>
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<tbody>
<tr>
<td>68</td>
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<table>
<thead>
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<th>HWU</th>
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</table>

<table>
<thead>
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</thead>
<tbody>
<tr>
<td>7</td>
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</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.

- 3 recordable/lost time/restricted cases occurred in July.
- 1 October 2018 case remained off work; total of 320 days off work through July 31st. Released to return to full-duty on August 5th.

Other:

- Water and wastewater treatment plant staff are participating in the annual OSHA respiratory medical evaluation questionnaire process

Upcoming City-wide Events:
GENERAL MANAGER’S REPORT
Regulatory Issues

No change on the draft KPDES Permit for our North Wastewater Treatment Plant.

As part of the Triennial Review of DOW’s regulations, we have suggested some changes that will pave a way forward in our quest to be released from water quality testing of our combined sewer overflow discharges. It’s a roundabout way to accomplish what seemed to us to be a simple interpretation of the regulations, but the result is what we want, and that’s what counts.

Surplus Property Transfers – Cleaning up Property Lines - Update

Plats for the property we transferred to HMPL (next to Admin) and to Rodger Brown (next to the SOC Training Room) have been signed and processed by the Planning Commission. On the HMPL transfer, Eric has prepared a corrected deed that accounts for the changes we made to the transfer (due to corners not being where we thought). We’ll get that signed on our end and forward to the City for action on their part.

The sale of the Alvasia Street lots to Mr. Brown has been closed.

The easement extinguishment plat for the Thomas’s property at 3013 Briarcliff Trail has also been recorded.

Easement – Mosaic Crop Nutrition – Riverport Water Line Loop

We have received a signed easement from Mosaic Crop Nutrition, related to the Riverport Loop Water Line Phase II project (Custom Resins section). While authorized by Action Report 2018-34 to acquire whatever easements were needed for this project, I’m bringing it forward here to have a record in the minutes. After our Chairman and Secretary sign it, we will forward to the City for acceptance.

Retirement

Kevin Capps, our longest-serving Crew Leader, retired at the end of July. Kevin had been with us almost 27 years, having started in October 1992.

We have begun the process of testing and evaluating to fill his position. Filling the void in our collective knowledge is another thing, entirely. This brings the retiree number to 20 since April 2016.

Repair Spending

We processed purchase orders for repair of two large pumps at the North Fork sewer pump station in July, and I wanted to report on that to you, since you’ll see a big hit in the repairs line item of the financials. The total for the two was $21,328.60, and they are out of warranty. At the time we built that station, we didn’t have any experience with KSB pumps, but they met the specifications and we went forward with the purchase.

These pumps have been a recurring problem. Fortunately, we designed the station with a total of 4 pumps and have enough redundancy to get by. Due to these repeated repairs, we’ve rejected a
submittal of pumps by the same manufacturer for the *Myrene Drive sewer pump station* project. That rejection has significantly delayed startup of the project, but given our history at North Fork, we did not feel comfortable buying another set of problems. All our “lessons learned” are expensive.

**Policy**

A minor revision to *Policy C-100 Phones and Pagers* is attached. This clarifies how we handle payment of allowances in the case where an employee retires or otherwise ends service. Would like to have your assent to this change, and then we will distribute to all our employees.

**Sewer Use Ordinance**

We processed a Resolution last month to recommend several changes to the *Sewer Use Ordinance*. Since that time, we have determined that the limit for Chemical Oxygen Demand (COD) that was in the ordinance previously (800 milligrams per liter, or parts per million), needs to be changed to 1,000 ppm. This will be less strict on industries and will make the new COD Surcharge we’re enacting less of a burden. We’ve made that change in the Ordinance that we forwarded to the City for approval, and wanted to document that here, so we have a record of the change in our minutes. The changes received approval on first reading on 13 August.

**Residential Water Meters**

There’s an Action Report on tonight’s agenda to begin changing out residential water meters, using our own forces, over a period of a few years. We are still nailing down some aspects of this effort, but expect to replace 1,000 meters in this fiscal year.

This is a project that we’ve wanted to do for several years, back to when Bruce was here, but every time we’ve gotten close, there’s been some push to study a smart meter network, or an outside party came in with a plan to finance a changeout all at once, or some other “what-if” has gotten in the way. The time is long past to stop letting the perfect defeat the pretty good.

Water meters, like any mechanical device, have a limited life, and most of ours are probably well past their useful time. Not replacing meters on a schedule may well be part of the reason we’ve seen Residential water use decline, over the years. It will be interesting to see the impact of this program as we move forward. Low-flow fixtures and conservation will still be factors, and declining usage from those sources is predicted to continue, in all the literature that I’ve read. If we see a leveling-out in the decline, we may not be able to attribute all of it to better metering, because when billings go up, there will be more of an impetus to conserve. There are too many variables on a microeconomic level to say that any one factor drives use and revenue either up or down. This will be an interesting exercise.

If our assumptions about accuracy and costs are correct, the payback on our investment will be about 3 years.

Another aspect of this change will be switching to gallon-registered meters, rather than cubic feet meters. At some point in the process, we’ll switch our rates to a per-1,000-gallon paradigm and show use on the bills in gallons. That will make our rates easier to compare to other cities, and maybe make it easier for our customers to visualize and understand their water use.
1.0 POLICY STATEMENT: Some HWU employees are required to be available by phone during off-duty hours, or to use their personal phones during the normal course of business. HWU reimburses employees for this use under an “allowance” arrangement. To qualify for this allowance arrangement, employees must maintain their phone coverage at the specified level. The allowances have been “grossed up” to allow for the taxable nature of this benefit.

2.0 PROCEDURES:

2.1 Employees in the following classifications are eligible for cell phone allowances as follows if that employee’s department head determines that specific employee’s job duties requires on-call/after-hours availability:

2.1.1 A basic phone co-pay of $40 applies to:

- GIS Analyst
- Automation Specialist
- Utility System Specialists
- Maintenance Supervisor
- Vehicle Mechanic
- Water Quality Specialist

- Chief Operators (Water & Wastewater)
- Purchasing Manager
- Utility System Crew Leader
- Maintenance Technicians (I, II & Sr.)

2.1.2 A data plan/phone co-pay of $70 (for those required to have access to email) applies to:

- General Manager
- Treatment Manager
- Lead Automation Specialist
- GIS Manager
- Utility System Superintendent
- Pretreatment Coordinator
- Lead Water Quality Specialist

- Director of Operations
- Chief Financial Officer
- Automation Manager
- IT Manager
- Project Engineer
- Chief Distribution System Operator

2.2 Allowances will be paid to the employee on the first paycheck of each month and are taxable. _*Allowances are for the prior month’s coverage and will not be pro-rated upon retirement or separation (complete the month to get the allowance)._*

2.3 Employees in classifications subject to call-out will be provided with a “pager phone” that rotates among those on duty for call-outs. This phone and its charger are passed to the next person on call, each Monday morning.
2.4 HWU, in its sole discretion, has the authority to add or remove any individual employee from the eligible list for cell phone allowances.

2.5 Employees must immediately notify their department head and the IT Manager if their service is discontinued or changed, so that the allowance can be eliminated or modified.

3.0 RESPONSIBILITY: Department Heads are responsible for ensuring that this policy is monitored and followed within each department. The IT Manager is responsible for keeping updated lists of employees in each category, and for setting up the allowances through the payroll system.

Exceptions to this policy shall be authorized by the General Manager.

APPROVED:

[Signature]

Tom Williams, P.E.
General Manager
BUSINESS

- Action Report # 2019-26 – Kresge Drive Stormwater Project
- Action Report # 2019-27 – Janitorial Services
- Discuss Changing September Regular Meeting Date to September 23, 2019
Henderson Water Utility
Action Report # 2019 - 25

To: Henderson Water & Sewer Commission
From: Tom Williams, P.E., General Manager
Subject: Residential Water Meter Project – FY 2020
Project No: 22.1802.0108
Date: 19 August 2019

Background:

- We have approximately 11,100 water meter accounts, with about 10,500 of those being smaller residential meters in the 5/8-inch (nominal) size. We have spotty information available on the age of those meters, but we have not replaced large numbers of meters in recent memory (20+ years). Inventory records show that, in most years, we replace about 150 of the smaller meters.
- For larger meters (3” and above, numbering around 65) we have a program of regular testing, calibration and replacement.
- Henderson County Water District (HCWD) has constructed a meter testing facility that goes beyond anything we have been able to do in-house, and which allows testing of small meters at low, intermediate and high flow rates. We used their facilities to test 44 residential meters, last summer.
- Test results show that new meters register in the 99% to 101% range, and that meters that were installed up to three years ago test from 98% to 101% accurate, depending on flow rate.
- Tests on meters from the 1978 to 1998 era are not so good. They are especially bad in the low-rate flow range, measuring from 0% to 90% accurate. Tests of these same meters at high-rate flows show meter accuracies of 90% to 104%.
- We’ve discussed several times over the last few years the pros and cons of installing a “smart meter” system, with radio reads, cell phone reads, or even an area network arrangement where the meters talk to each other and chain back to a central point. All these systems have large additional costs for infrastructure, software, and people to analyze the data, and we’ve not been able to make a business case for that additional investment.

New Developments:

- We have researched meter types and styles and have settled on ultrasonic meters as the best technology choice. These meters have no moving internal parts, are replacing the displacement-style meters we currently use, and they come with a 20-year accuracy guarantee.
- The meters we will procure for this project can be retrofitted to a smart meter system without replacing the meter itself, should we decide to go that route in the future.
- New ultrasonic meters cost roughly $ 125 each, and internal costs for installation will be $ 20 each, for a total of $ 145 per meter. The current monthly average residential metered usage across all residential users is 510 CF (3,815 gallons). If we assume a current meter accuracy of 90%, actual average usage should be 567 CF (4,241 gal.), a difference of 57 CF (426 gal.). We charge a combined rate of $ 8.25 per 100 cubic feet (748 gallons), so this delta equals $ 4.67 in monthly revenue, a 31-month payback period on our $ 145 investment per meter.
- We believe that replacing 1,000 meters in the first year of a multi-year program is achievable with current staff. This first year is a testing phase, to determine feasibility; we hope to do more in future years and will attempt to replace all 11,000 in a 4 to 6-year timeframe.
Budget/Financial/Legal Considerations:

- Funds for this work will be taken from the Unallocated Capital Funds line in the Capital Budget.
- Procurements necessary for the completion of this project have and will follow the Kentucky Model Procurement Code.

Recommendations & Approvals:

- Staff requests an appropriation of $150,000 from the “Unallocated Capital Projects” line item in the FY 2019-2020 Budget for residential meter replacement of approximately 1,000 units this fiscal year. We hope to continue this as a multi-year endeavor, and if our assumptions are validated, we will increase this number in future years.
- 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, or other authorizations required to complete the work without unnecessary delays, and includes authorization to declare unusable meters surplus and dispose of them per KRS.
- Future phases of this work may be authorized during the annual budget process.

Respectfully Submitted for Approval:

Tom Williams, P.E.
General Manager

BOARD ACTION – 19 August 2019

PASSED:_______  FAILED:_______  TABLED:_______  DATE:_______
Henderson Water Utility
Action Report # 2019 - 26

To: Henderson Water & Sewer Commission
From: Tom Williams, P.E., General Manager
Subject: Kresge Drive Stormwater Project
Project #: 22.1802.0107
Date: 19 August 2019

Project Background:

- Kresge Drive is a street off South Green, running behind the Rural King store and dead ending in a cul-de-sac. At the end of the street, a storm sewer that drains the area empties into Canoe Creek behind a home at 1817 Kresge. This pipe system drains about 4 acres.
- The soils in this area are highly erodible, and it appears that a pipe joint separated, washing out a large gully and destroying a manhole and some other work that we put in about 5 years ago.
- We have started a project to rebuild the last section of this pipe, carrying it to a point near the Creek, and backfilling and armoring the eroded area to return lost yard area to the surrounding homes.
- Our crews are performing the work with assistance from a piping contractor, and we anticipate the repairs will run more than $30,000. This repair is complicated by the steep slopes in the area that drain toward Canoe Creek, and by the need to bench the area so that we can operate safely. It’s difficult to put a number on our effort, at this point.

Legal/Budget/Financial Considerations:

- Funds for this work will be taken from the Unallocated Capital Funds line in the Capital Budget.
- Procurements necessary for the completion of this project have and will follow the Kentucky Model Procurement Code.

Recommendations & Approvals:

- Staff recommends an initial appropriation of $30,000, and we believe additional funds will be required as we get further into this project. All additional expenditures will be reported to you, monthly.
- 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 – 19 August 2019

PASSED:_______ FAILED:_______ TABLED:_______ DATE:_______
Henderson Water Utility
Action Report # 2019 - 27

To: Henderson Water & Sewer Commission
From: Kathy Ambrose, Purchasing Manager
Subject: Janitorial Services
Date: August 19, 2019

Background:

- Henderson Water Utility has many facilities with no staff members dedicated to cleaning. This is a service which we acquire through the bid process.
- While our current contract was able to be renewed for an additional year, we decided to expand and better clarify the scope of this contract so, instead of renewing the bid, we re-bid the service with new specifications.
- Eight vendors were notified of the bid, plus it was advertised in The Gleaner, Facebook, Twitter, and published on our website.
- One vendor, Epic Systems, submitted a bid. Epic Systems is the vendor who has several of the City of Henderson contracts.

Budget & Policy Considerations:

- The current annual cost is $14,361.60. The new contract cost will be $15,510.84, an increase of 8%.
- It is HWU’s established policy to take the bid(s) evaluated to be in the best interest of the Utility based upon the specifications set out in the original proposal document.

Legal Considerations:

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

Recommendation & Approvals:

- Staff recommends awarding the contract for Janitorial Services to Epic Systems for the initial term of one year (September 2, 2019 – September 1, 2020) with the option of renewing within the terms of the bid document for an additional two, one-year terms if mutually agreeable.
- Board approval authorizes the General Manager to initiate all purchase orders, or other authorizations required to complete the implementation of this service without unnecessary delays.

Respectfully Submitted:

Kathy Ambrose, CPPO, CPPB
Purchasing Manager

Approved for Submittal:

Tom Williams, P.E.
General Manager

Commission Action – 19 August 2019

PASSED: ____________  FAILED: ____________  TABLED: ____________

47
Janitorial Services Bid August 7, 2019  
Bid effective 9/2/19 - 9/1/20

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<th>Location</th>
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<th>Cost per year</th>
<th>Previous bid</th>
<th>previous cost/year</th>
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| Cost per year                                 | $ 15,510.84            | $ 14,361.60  |
EXECUTIVE SESSION

• None Requested