### Public Works Benchmarks

#### Benchmark Item

<table>
<thead>
<tr>
<th>Benchmark Item</th>
<th>JULY Totals for the Month</th>
<th>Fiscal *Year-to-Date Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016</td>
<td>2017</td>
</tr>
<tr>
<td>Water Flow (acre-feet)</td>
<td>503</td>
<td>500</td>
</tr>
<tr>
<td>Wastewater Flow (million gallons)</td>
<td>37</td>
<td>37</td>
</tr>
<tr>
<td>Fleet Work Orders, PM &amp; CM, % of Total Time</td>
<td>49%</td>
<td>54%</td>
</tr>
<tr>
<td>Buildings Work Orders Completed (each)</td>
<td>138</td>
<td>92</td>
</tr>
<tr>
<td>Customer Service Requests (each)</td>
<td>147</td>
<td>135</td>
</tr>
<tr>
<td>Backflow Testing (each)</td>
<td>284</td>
<td>330</td>
</tr>
<tr>
<td>Plan Checking (each)</td>
<td>20</td>
<td>29</td>
</tr>
<tr>
<td>Trash Complaints (actual call-outs)</td>
<td>22</td>
<td>19</td>
</tr>
</tbody>
</table>

*Fiscal year is July 1 to June 30*
MEMORANDUM

TO:       Steven J. Pinkerton  
          General Manager

THROUGH:  Joe Pomroy, P.E.  
          Director of Public Works

FROM:     Ronnie Rector  
          Public Works Contracts Administrator

SUBJECT:  Public Works Department’s Monthly Status Report for July, 2017

DATE:     August 17, 2017

DIRECTOR HIGHLIGHTS

The Water Resource Recovery Facility was set-up for peak flow operation for the July 4th period. This has been the highest impact week to the District’s operation for a number of years. Flows were elevated for the holiday period but was considered lower compared to the last 3 years. This year we benefited with a scheduled work day on Monday July 3rd to catch-up on duties and to remove debris and solids.

The Board has ended the residential education period for overfilled containers and garbage placed next to containers. Beginning August 1, all overfilled containers and trash being placed next to containers will be issued a Solid Waste Violation.

The trash violation statistics are presented in the following Table.

<table>
<thead>
<tr>
<th></th>
<th>July 1 to June 30</th>
<th>Fines Paid</th>
<th>Credits Issued</th>
<th>Net of Fines</th>
<th>Total Complaints</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014-15</td>
<td></td>
<td>$46,258</td>
<td>$17,323</td>
<td>$28,935</td>
<td>200</td>
</tr>
<tr>
<td>2015-16</td>
<td></td>
<td>$18,997</td>
<td>$12,834</td>
<td>$6,163</td>
<td>162</td>
</tr>
<tr>
<td>2016-17</td>
<td></td>
<td>$11,195</td>
<td>$4,198</td>
<td>$6,997</td>
<td>254</td>
</tr>
<tr>
<td>2017-18</td>
<td></td>
<td>$100</td>
<td>$500</td>
<td>-$400</td>
<td>19</td>
</tr>
<tr>
<td>2005-17</td>
<td></td>
<td>$205,919</td>
<td>$73,978</td>
<td>$131,941</td>
<td>1652</td>
</tr>
</tbody>
</table>

Garbage Can Enclosure (Bear Box) Rebate Program: Since July 1, 2014, 464 applications for rebates have been received with 365 successful installations to date. Rebate is $150 for all new applications.
WASTE NOT HIGHLIGHTS

2017 is the

- 25th Anniversary of the Waste Not Programs
- 15th Anniversary of the Tahoe Water Suppliers Association

Staff attended the TKPOA Water Quality Working Group meeting on July 14, 2017. TWSA outreach included water station use/limited distribution of water pouches:

- Red White & Tahoe Blue - July 1 to 4 - 5,000 attendees – booth interactions: 800
- Tales and Trails – July 29 – 700 participants
- Guitar Fish Festival - July 28 to 30 – 2,000 attendees

Staff attended the 2017 “State of the Lake Report” Release event on July 26 and 27. TWSA is a $2,500 sponsor; Waste Not is a $500 sponsor of the production of the report produced annually by the Tahoe Environmental Research Center.

Staff continues to spend extensive time reviewing research materials related to the Tahoe Keys Property Owner Association’s (TKPOA) “Application for Exemption to Apply Aquatic Herbicides Test Project” which was submitted to the Lahontan Regional Water Quality Control Board in January 2017. Staff is researching state and federal regulatory information that will be important in the decision making process.

Staff has been working with Tahoe RCD and the Tahoe Fund on the matching grant offer for purchasing bottom barriers, authorized by TWSA Board. The joint fundraising project for bottom barrier mats launched in June 2017 as a Tahoe Fund Project.

Staff continues to research Public Works sustainability metrics evaluation system. The framework for an IVGID Sustainability Annual Report is in development. Energy, water and waste records are being input into an EPA Energy Star data tracking and analytics portal.

Data from NV Energy is being uploaded to the EPA Energy Star Website for better tracking and two STOKE templates have been released to aid certification this winter.
UTILITIES HIGHLIGHTS

Monthly compliance reports were submitted for the water and wastewater systems to the state and local agencies with no permit violations. The Laboratory team completed all required monthly testing and submittals. Water production was 162.8 MG and processed Wastewater was 36.5 MG. 20,000 gallons of septage was received at the WRRF site. 153.1 tons of Biosolids were hauled to the Bentley facility for composting. We received 461,392 gallons of wastewater from State Parks sites.

Water Resource Recovery Facility (WRRF)

Projects included taking S-3 and S-2 aeration basins off line, pulling the aeration basin mixer out for repairs, calibrating the gas monitors at the headwork’s, changing the #1 centrifuge oil and replacement of the spent media in the #3 odor scrubber.

The exhaust fans and louvers were cleaned in the aeration blower room to see if it will help with cooling, as the blowers continue to experience high heat readings and shut downs.

Operators had to replace the power supply unit due to lost signals from the MRT unit.

The wetlands enhancement facility monthly rounds were completed with no issues.

Burnt Cedar Water Disinfection Plant (BCWDP)

The BCWDP facility met all treatment and monitoring requirements for the month. The raw water system was disinfected by adding a chlorine dose.

Water Pump Stations / Tanks

Staff completed bi-weekly sampling of all water reservoirs for chlorine residual. All pump station PM’S were completed.

Contractors removed and sent out for repairs the WPS 4-2 #2 pump and motor and installed a new flow meter at WPS 6-1. I/E team completed the meter install by wiring the transponder to the meter, and have started on the R3A-1 solar panel upgrade and install. R5-3B was drained and will be disinfected until future use.
Sewer Pump Stations

SPS 8 experienced ragging issues and K G Walters performed an onsite visit at for the upcoming upgrade project.

Water Distribution

In addition to the normal workloads, staff performed 70 line locations, 1 water main line repair, installed drain valves on 14” pump line for testing purposes, abandoned Washoe I sewer pump line, installed a flushing valve on the Northwood easement line, performed 3 service line freezes for contractors, continued on commercial and FSA meter testing, continued on scheduled PRV service and rebuilds and completed the post indicator inspections.

Wastewater Collection

The team assisted with the annual replacement of the odor scrubber at SPS 10, continued on the annual hydro flushing program, completed the SEZ manhole inspections. Other projects consisted of compacting road grindings at the wetlands facility, assisted on the PW yard projects, assisted on the Washoe County erosion projects, assisted the UMS person with multiple projects and started on the summer BMP box cleaning. Staff also completed 9,880 feet of hydro flushing.

Utility Maintenance Specialist

Projects completed for July at the WRRF site consisted of locating, raising and testing diversion lines, tapping and plumbing the RAS to expel air, tree stump grinding, and fabrication and installation of aeration basin plates for flow control.

Other projects completed consisted of cleaning out old ARV boxes on the 14’ pump line from the BCWDP, removing debris around R2-1 to install screens on vents, repaired loose louver supports at SPS 16, installation of a new mag meter at WPS 6-1, installation of 6 insulating blankets on the export line ARV’s, installation and replacement of meter parts and a transponder on the Schneider Ranch meter, and installation and programming the new transponder on the Clear Creek Golf Course meter.

Reviewed and submitted for payment for repair work on the east side export line, completed the layout and compacting of road grindings at the wetlands facility, installed the new odor scrubber at SPS 10 and sealed the connecting manhole into the station.
There are currently 11 more projects being worked on, waiting on parts, contractors, proposals, scheduling, funding etc. Lists of projects are available on request.

**Asset Management**

19 Buildings, 5 Pipeline and 31 Plant Preventative Maintenance work orders were generated. 81 Buildings, 22 Pipeline and 16 Plant project work orders were also generated.

GIS projects primarily consisted of 10 meter/address change forms, 3 asset changes, including a new mag meter, numerous assets for four associations, including all of the infrastructure upgrades, and several APN changes for Bill Master.

Buildings Division work orders included updating quarterly performance measuring, request for 311 service cost estimates and work order type breakdowns for different venues.

Other projects included monitoring department work orders and entry accuracy, monitoring plant data entry, monitoring manhole inspection entry for accuracy and update full time year round labor rates.

Completed data counts for Pipeline month-end requirements, reviewed other department charge-outs before distribution, supplied snow removal history at the Admin building to Pipeline.

Participated in a recent Nexgen Backflow webinar for future use and started on the annual Sanitary Sewer Management Plan report.

**Miscellaneous / Training / Safety**

Our CDL driver continues to haul biosolids for the WWRF site, green waste for Parks and Golf, metal to recycling, and equipment drop off or returns for all PW departments.

Pipeline activities included the monthly District Safety meeting, completion of the annual harness and sling inspections, inspecting all fire extinguisher and eyewash stations and training on our new emergency generator.

**Call-Outs (After Hours)**

The plant team responded to 17 alarms or call-outs. The pipeline team responded to 6 call-outs. A complete list is on file.
ENGINEERING HIGHLIGHTS

The Department is working on several CIP projects currently under construction or in the bidding phase, including:

- **2017 Watermain Replacement Project** – This project replaced approximately 3,000 lf of old watermains with new 8” PVC or Class 350 DIP watermains, and upgraded related appurtenances within the Mill Creek neighborhood, along Sawmill, Selby and Pine Cone Roads. All work is complete and final contract close-out is in process. Washoe County’s water quality improvements and pavement projects in the same neighborhood will occur over the remainder of the summer.

<table>
<thead>
<tr>
<th>Original Contract Amount</th>
<th>Change Orders to Date</th>
<th>Current Total Contract Amount</th>
<th>Total Payments for Work Completed to Date</th>
<th>Current Balance to Completion (including retainage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$904,713.80</td>
<td>$48,097.35</td>
<td>$947,087.45</td>
<td>$907,204.25</td>
<td>$39,883.20</td>
</tr>
</tbody>
</table>

- **Public Works Equipment Storage Building** – This project is to construct a new 7,600 square foot vehicle storage building at the Public Works facility on Sweetwater. The project was awarded to Geney/Gassiot of Reno, Nevada, and construction began in early June, with earthwork, site utilities, and relocation of the District’s fuel island. Substantial completion is anticipated for June 3, 2018, with final completion on June 30, 2018.

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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>$2,026,997</td>
<td>$29,897.19</td>
<td>$2,056,894.19</td>
<td>$239,987.76</td>
<td>$1,816,906.43</td>
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</tbody>
</table>

- **Sewer Pump Station 8 Improvements Project** – This project consists of upgrades and rehabilitation of existing facilities at Sewer Pump Station #8, including process and mechanical equipment, pumps, motors, piping and electrical systems. The project was awarded to K. G. Walters Construction of Santa Rosa, California. Work
is scheduled to begin after Labor Day, with substantial completion by December 4, 2017.

K. G. Walters Contract Status:

<table>
<thead>
<tr>
<th>Original Contract Amount</th>
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</tr>
</thead>
<tbody>
<tr>
<td>$685,000</td>
<td>$0</td>
<td>$685,000</td>
<td>$0</td>
<td>$685,000</td>
</tr>
</tbody>
</table>

- **WRRF Access and Decant Improvements Project** – This project will construct a new decant facility for the District’s Vactor trucks, a new modular gravity retaining wall replacing an existing failed timber wall, and a widened access road to the back half of the Water Resources Recovery Facility. The project was awarded to Burdick Excavating of Carson City, Nevada. Work is scheduled to begin in late July with substantial completion by November 1, 2017.

Burdick Excavating Contract Status:

<table>
<thead>
<tr>
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<th>Total Payments for Work Completed to Date</th>
<th>Current Balance to Completion (including retainage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$417,555</td>
<td>$0</td>
<td>$417,555</td>
<td>$0</td>
<td>$417,555</td>
</tr>
</tbody>
</table>

Additionally, the Engineering Department is overseeing a number of other projects in the bidding, planning and design phase, including the Incline Beach House project, office space remodel at the Public Works facilities, safety enhancements for the natatorium mezzanine at the Recreation Center, the Diamond Peak Incline Creek Culvert Rehabilitation, the second phase of the Effluent Export Pipeline Replacement Project, as well as a number of other improvements at the WRRF, the Burnt Cedar Water Disinfection Plant, and District water and sewer pumping stations.

**FLEET HIGHLIGHTS**

Fleet has received and put into service one new vehicle as part of the 2017/18 CIP; this vehicle is a Chevrolet Traverse, operated by the Recreation Department. Fleet staff has been working on several 2017/18 CIP projects and have placed orders for needed equipment for this fall and winter.
Department Highlights:

Sweetwater shop: All shop activities are running smooth at this time and the mechanics are keeping up with preventive maintenance schedule and repairs.

Ski shop: All shop activities are running smooth and mechanics are preparing to start the summer services and overhauls of the equipment in preparation for next season.

Golf shop: All Golf operation vehicles and equipment are fully repaired, serviced and ready for use. The golf shop operation is running smooth at this time and the mechanics have changed to early start time in order to get equipment checked and adjusted before start of operations.

BUILDINGS HIGHLIGHTS

Administration

Installed new snowmelt system to Accounting entrance roof and gutter system.

Public Works

Replaced several windows in PW Building due to seal failure. Replaced and upgraded pressure washer in wash bay. Reinstalled gate power damaged in drainage project. Installed new loop conduit.

Treatment Plant

Constructed wooden enclosures for two stainless steel fire alarm boxes at the ozone plant.

Chateau

Cleaned carpets throughout building. Replaced and painted plywood on dumpster/delivery door. Installed power for new beverage machine in catering kitchen with 50A receptacles.

Aspen Grove

Golf

Winter damage - replaced interior doors, closures and lock sets at Champ Maintenance Building. Re-keyed Champ Course bathroom doors. Repaired damaged roof and sheetrock at Mtn. Course bathrooms

Ski

Winter damage - new door project at Snowflake

Parks


Recreation Center

Upgraded burglar alarm modules for Wi-Fi transmission. Inspected and repaired non-functioning air handlers #3 and #5

Tennis Center

Installed piping on lower fence at courts 1 & 2 to prevent balls from catching under fence.

Incline Beach F&B

Replaced locks on service windows.

Burnt Cedar Beach F&B

Replaced 3-door freezer due to failed compressor. Installed 120 volt, 20 amp single receptacle and one pole circuit breaker for new freezer.

Beaches

Rebuilt chlorine injector and repaired liquid pump. Assisted staff with chemicals and pool clarity. Repaired retaining wall cap at Burnt Cedar pool. Replaced a 4 X 6 post on fence separating the ozone building and parking lot at Burnt Cedar Beach.
BUSINESS OFFICE HIGHLIGHTS

- Staff posted 50 delinquent accounts for shut-off; 15 online account customers were also notified of posting by email.
- No accounts were shut-off for nonpayment. There is currently 1 account shut-off for a delinquent balance.
- There were no liens or release of liens recorded.
- E-statements were sent to 989 accounts through online account access.
- Potential leak notifications were indicated for 407 accounts on their monthly statement; 83 online account access customers were also notified of their leak by email.
- Eighteen changes in ownership were processed on utility accounts.
- Staff processed $1,296.54 in credits related to water leaks.
- Staff is working on contract administration of our various CIP projects, including those contained within Engineering’s report, above.