<table>
<thead>
<tr>
<th>Benchmark Item</th>
<th>OCTOBER</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Totals for the Month</td>
<td>3-Year Average</td>
<td>Fiscal* Year-to-Date Totals</td>
<td>2016</td>
<td>2017</td>
<td>3-Year Average</td>
</tr>
<tr>
<td></td>
<td>2016</td>
<td>2017</td>
<td></td>
<td>2016</td>
<td>2017</td>
<td></td>
</tr>
<tr>
<td>Water Flow (acre-feet)</td>
<td>177</td>
<td>209</td>
<td>207</td>
<td>1,544</td>
<td>1,496</td>
<td>1,503</td>
</tr>
<tr>
<td>Wastewater Flow (million gallons)</td>
<td>26</td>
<td>24</td>
<td>24</td>
<td>125</td>
<td>121</td>
<td>123</td>
</tr>
<tr>
<td>Fleet Work Orders, PM &amp; CM, % of Total Time</td>
<td>60%</td>
<td>56%</td>
<td>61%</td>
<td>60%</td>
<td>57%</td>
<td>60%</td>
</tr>
<tr>
<td>Buildings Work Orders Completed (each)</td>
<td>99</td>
<td>113</td>
<td>111</td>
<td>511</td>
<td>393</td>
<td>472</td>
</tr>
<tr>
<td>Customer Service Requests (each)</td>
<td>106</td>
<td>95</td>
<td>107</td>
<td>517</td>
<td>555</td>
<td>551</td>
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<tr>
<td>Backflow Testing (each)</td>
<td>93</td>
<td>139</td>
<td>119</td>
<td>788</td>
<td>977</td>
<td>850</td>
</tr>
<tr>
<td>Plan Checking (each)</td>
<td>13</td>
<td>35</td>
<td>15</td>
<td>103</td>
<td>136</td>
<td>115</td>
</tr>
<tr>
<td>Trash Complaints (actual call-outs)</td>
<td>25</td>
<td>60</td>
<td>30</td>
<td>76</td>
<td>243</td>
<td>124</td>
</tr>
</tbody>
</table>

*Fiscal year is July 1 through 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 October, 2017

DATE: November 27, 2017

__________________________________________________________

DIRECTOR HIGHLIGHTS

Water production began the month at 3.4 mgd, and dropped to 1.5 mgd by the end of
the month. November will be a low production month before we see increased flows
from snowmaking demands at Diamond Peak.

October has seen all pipeline and treatment plant staff working to assist the Effluent
Export Pipeline repairs. Our primary duties is managing stored effluent when the
pipeline is taken out of service and preparing the pipeline so it can be taken out of
service and have section removed from the existing pipeline. Staff has done a great
job of constantly shifting schedules to assist the contractor.

The new 10-year Solid Waste Franchise Agreement just had its 1-year anniversary.
The recycling rate for route-collected materials is coming in at 16%, which is the same
as the last two years. This year there was a profound increase in green waste, from
350 tons to 885 tons, which pushed the total route-collected recycle rate to 26%. This
is the highest value ever achieved in our service area.

The trash violation statistics are presented in the following table. A total of 96 locking
wildlife resistant garbage carts have been issued under the Zero Tolerance Policy and
Ordinance 1 procedures.
Garbage Can Enclosure (Bear Box) Rebate Program: Since July 1, 2014, 503 applications for rebates have been received with 394 successful installations to date. Rebate is $150 for all new applications with a total of $84,510 spent to date.

**Waste Not Highlights**

- **2017 is the**
  - 25th Anniversary of the Waste Not Programs
  - 15th Anniversary of the Tahoe Water Suppliers Association

Staff met with the North Tahoe Environmental Education Coalition on October 9th to continue coordinating educational efforts on the North Shore of Lake Tahoe. Members discussed strategizing event support for kid’s themed activities and science education days.

Staff submitted extensive public comment on the Tahoe Keys West Lagoon Integrated Control Methods Test; Notice of Intent for the General NPDES Permit for Residual Aquatic Pesticide Discharges from Algae and Aquatic Weed Control Applications for the Tahoe Keys Property Owners Association. Water Quality Order No. 2013-0002-DWQ, General Permit No. CAG990005.

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 was launched in June 2017 as a Tahoe Fund Project.

http://www.tahoefund.org/our-projects/active-projects


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.
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 68.24 MG and processed Wastewater was 24.14 MG. 17,500 gallons of septage was received at the WRRF site. 119 tons of Biosolids were hauled to the Bentley facility for composting. We received 110,003 Gallons of waste water from State Parks sites. All of the monthly reports were submitted for review and approval. All monthly DMR’s were reported with no violations.

Water Resource Recovery Facility (WRRF)

The facility ran on two aeration basins, in plug flow and one clarifier. The export line repair work continued, utilizing the plant basins and second clarifier for storage and then pumped back into the effluent line after the export line repairs were made. Operators repaired a broken 1” line on the #2 water system and removed a debris blockage in the #3 DWSP pump.

SOPS were modified for export line work for correct operating procedures. The lab team has been working closely to sample and monitor the plant process along with our distribution system silica dose and the reservoir tank chlorine samples. 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. A weekly calibration was set up for the CL-17 unit. Contaminated silica was removed and disposed of and, after a LOX delivery created an unusual pressure build-up, Air Products representatives assisted with fixing the problem.

Water Pump Stations / Tanks

Staff completed bi-weekly sampling of all water reservoirs for chlorine residual, and the monthly sodium silica sampling was completed in the distribution system. Upgrades were completed for the battery supply and controllers to WPS 3A-1.

Sewer Pump Stations

Staff worked with NTPUD on a temporary bypass to California during excavation by a contractor near our pump line facilities. SOP’s were modified for the operating procedures at SPS #16 for the effluent line replacements performed by the contactor.
Water Distribution

In addition to the normal workload, staff performed 69 line locations, 9 watermain repairs, 1 fire hydrant repair, performed 3 service line freezes for contractors, 1 service line repair, replaced 1 ARV, piping and box on the export line and repaired a significant air leak on the 16” aeration basin feed line.

Other projects consisted of cleaning out the overflow pond at SPS #1 hauling the spoils to the wetlands, flushed out the plugged culverts at the wetlands facility, hard faced the loader chains, assisted the UMS person with several projects and assisted with support on the export line replacement project.

Scheduled work consisted of completing the PRV quarterlies, and line flushing, all the District sweeping, continued on Commercial meter testing, hydroflushing and annual PRV rebuilds. Staff also started on the fall BMP vault box cleaning

Wastewater Collection

The team continued on the annual hydro-flushing program, main line easement manhole inspections, completed the BMP vault cleaning program, assisted with grease removal and hauling from SPS 1, performed full replacement on SPS 14A internal plumbing and piping, and surveyed and identified manhole interiors for upcoming CIP rehabilitation projects. Staff also repaired a damaged sewer main.

Staff completed 3,480 feet of hydro flushing of sewer mains

Utility Maintenance Specialist

Projects completed for October consisted of contractor installation of a new sewer lateral for building B, installation of the decant site on Spooner summit for the effluent line replacement project, contractor sand blasting and painting the ARV candy canes on the export line, assisting with shutdowns, back draining and inspections for the export line replacement, replaced another ARV and piping/vaults on the export line, contractor pressure washing and painting at SPS #16, warranty recoat work on R 5-2, contractor paving of 3 District sites and shooting all effluent cell elevations to calculate storage capacity reductions.

Projects that are waiting on parts, for contractor scheduling or approval to proceed consist of IP3 backflow, meter and PRV upgrades, permit and easement line work with the USFS, investigation and preparation for the SPS #10 piping and bypass
installation, meeting with NDOT on proposed lowering of our export line at Hwy 395 and Plymouth Drive, assisting the pipeline team with ARV replacement on the export line and replacement of the District sewer force main ARV’s and appurtenances.

There are currently 6 more projects that are in progress, in review or waiting on funding from other organizations. Lists of projects are available on request

**Asset Management**

18 Buildings, 4 Pipeline and 54 Plant Preventative Maintenance work orders were generated; 92 Buildings, 21 Pipeline (including 10 new snow removal and 6 Plant Corrective / Unscheduled / Special project work orders) were also generated.

GIS efforts consisted of water/sewer edits for inspection/construction projects or field work. There were 17 meter/address map changes, 5 meter location changes 3 asset changes from pipeline/engineering and compliance along with continued monitoring of department work orders and service requests.

Monitored the Treatment Plant data entry and coordinated with crew for corrections, including included new data entry for WPS 4-1/5-3 flow tracking into Nexgen and finalizing pipeline month end requirements. 15 monthly work orders, service requests and labor reports were prepared by staff.

Several tasks were coordinated related to Nexgen’s software release, including a server upgrade prior to testing through the data base, a staff overview on upcoming changes and, after the upgrade, verifying the status of previously reported issues, identifying discrepancies for Nexgen to resolve, and work sessions to explain more complicated issues.

**Miscellaneous / Training / Safety**

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

Pipeline activities consisted of attending the District monthly safety meeting, holding a monthly safety meeting, inspections of the eye wash stations and extinguishers. 3 employees attended the automatic control valve class at the NTPUD site.

All bulk chemical deliveries were received by the plant team, including liquid oxygen for the BCWDP site.

**Callouts (After Hours)**
The plant team responded to 14 alarms or callouts. These consisted of Security alarms, low or high chlorine, pump station issues and power outages or issues. The pipeline team responded to 13 callouts. 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:

- **Public Works Equipment Storage Building** – This project will 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, and site utilities. Relocation of the District’s fuel island is complete, and the building itself is now going vertical. Substantial completion is anticipated for June 3, 2018, with final completion on June 30, 2018.

  Geney/Gassiot Contract Status:

<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>$2,026,997</td>
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<td>$2,142,062.53</td>
<td>$1,415,598.91</td>
<td>$727,018.11</td>
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- **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>
<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>$685,000</td>
<td>$0</td>
<td>$685,000</td>
<td>$0</td>
<td>$685,000</td>
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</tbody>
</table>
- **Diamond Peak Emergency Culvert Repair Project** – This project replaced 24” to 30” culvert pipe and installed eight drop inlets at the Diamond Peak Ski Area. The project was awarded to Burdick Excavating of Carson City, Nevada. Burdick Excavating Contract Status:

<table>
<thead>
<tr>
<th>Original Contract Amount</th>
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<th>Current Balance to Completion (including retainage)</th>
</tr>
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<tbody>
<tr>
<td>$328,328</td>
<td>$0</td>
<td>$328,328</td>
<td>$0</td>
<td>$328,328</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 underway and currently focused on excavation for and placement of the pre-cast concrete retaining wall system. Substantial completion is scheduled for November 1, 2017.

Burdick Excavating Contract Status:

<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>
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<tbody>
<tr>
<td>$417,555</td>
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<td>$231,196.12</td>
<td>$186,358.88</td>
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- **Incline Village Bike Park Project** – Phase I of this project will construct a beginner pump track, beginner and intermediate flow trails, installation of District-supplied ramps, temporary and permanent BMPs, and drainage. The project was awarded to Sierra Trail Works of Reno, Nevada. Work is underway with several tons of project-specific sand delivered to the site. Substantial completion is scheduled for October 15, 2017.
Sierra Trail Works Contract Status:

<table>
<thead>
<tr>
<th>Original Contract Amount</th>
<th>Change Orders to Date</th>
<th>Current Total Contract Amount</th>
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<td>$49,874.00</td>
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<td>$66,942.22</td>
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Additionally, the Engineering Department is overseeing a number of other projects in the bidding, planning and design phase, including the Diamond Peak CMP Culvert Rehabilitation Project, Incline Beach House project, office space remodel at the Public Works facilities, 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.

**BUILDINGS HIGHLIGHTS**

**Administration**

Repaired leak on 2nd floor from toilet angle stop; installed a new toilet due to hard-to-find and dated parts. cleaned clogged sewer line for 1st floor toilet; repaired fan switch for IT server cooling fan unit.

**Public Works**

Replaced Vactor Bay broken windows; installed electrical box for new storage building.

**Treatment Plant**

Installed lamps and ballast at Wetlands buildings; performed roof repairs at pump stations, removed snow jacks; inspected unit heater at the Treatment Plant, it will need to be replaced.

**Chateau**

Repaired gas leak and installed new fittings for fryer in Catering Kitchen; installed temporary power to Community Rooms for cooking event; installed new sign for front of Chateau; mounted new soap dispenser and repaired flush valves in second floor women’s room.
Aspen Grove

Reset and repaired cabinet doors that were ripped off the hinges.

Golf

Started roof repairs on the Champ Golf maintenance building; installed a new meter pedestal, pull box, wire, and conduit for bathroom on Champ #6, and replaced defective water heater at Champ Golf maintenance building chemical room.

Ski

Installed 2 new circuits in F&B food storage area; installed an emergency light by back door in F&B food storage area; installed 220 volt receptacle to new steam bench in F&B; installed floor boxes at new cash register area in F&B; installed two new exit lights, disconnected outside Ski Fleet Maintenance; replaced damaged vent caps outside Ski Fleet Maintenance. Restriped lower parking lot following completion of CIP; repaired lighting and repaired/replaced locks, adding new locksets in Ski Patrol’s on-mountain building.

Snowflake Lodge: Installed track lighting above bar and heater in men’s bathroom; replaced lavatory sinks at restrooms; installed a CO detector at bar and mechanical area; re-piped the drain line from ice machine to prevent cross contamination; added 5 new doors, including new lock sets. Investigated low water pressure and added air to the expansion tank; cleared the main sewer line, and repaired and replaced deck boards.

Parks


Recreation Center


Tennis Center

Repaired pathway lighting.

Incline Beach F&B
Prepped and winterized venue for seasonal closure.

**Burnt Cedar Beach F&B**

Prepped and winterized venue for seasonal closure.

**Beaches**

Performed leak testing at the Burnt Cedar pool, and repaired the 2” ball valve at the baby pool; winterized the slide at Burnt Cedar pool. Added new-style buoy anchors to Ski Beach boat ramp, pulled all Incline Beach swim area buoys and replaced them with marker buoys for the winter season.

**FLEET HIGHLIGHTS**

**BUSINESS OFFICE HIGHLIGHTS**

- Staff posted 51 delinquent accounts for shut-off; 16 online account customers were also notified of posting by email.
- There are currently no accounts shut off for delinquent balances.
- There was 1 lien recorded.
- 1,026 accounts received E-statements thru online account access.
- Potential leak notifications were indicated for 349 accounts on their monthly statement. 71 online account access customers were also notified of their leak by email.
- 25 changes in ownership were processed on utility accounts.
- Staff is working on contract administration of our various CIP projects, including those contained within Engineering’s report, above.