

## **Public Works Department and Engineering**

### **Fiscal Year 2019/2020 Performance Measures**

The Incline Village General Improvement District Public Works Department provides water and sewer services to Incline Village and Crystal Bay, Engineering services for all District Capital Projects, Fleet Maintenance for Public Works, Community Services and Administration and management of the Solid Waste Franchise.

All Public Works staff takes responsibility of providing clean and safe drinking water and collecting and treating sewage very seriously and is evidenced by our highly skilled staff, well maintained infrastructure, excellent customer service and our secure financial position. This includes all divisions in Public Works from Fleet to Engineering to Office Management to the staff repairing watermains and treating wastewater. The following sections highlight the individual Divisions in Public Works.

The Engineering Division manages the Capital Improvement Program (CIP) projects for the management, design, scheduling, bidding, contract administration, and construction oversight. Engineering also provides procurement assistance for goods and services and performs small construction projects conducted under operating. Engineering also manages the District's GIS system, mapping, archiving, land coverage, and aerial photography database.

The Fleet Division is responsible for procuring vehicles and equipment utilized for all operating Divisions; setting up, installing auxiliary equipment and making necessary modifications for the equipment's specific job requirements. Fleet maintains and repairs all vehicles and equipment throughout the equipment's service life and replaces/disposes of used and excess equipment at the end of its life cycle. Fleet operates the District's welding repairs, metal machining requirements and prototype metal fabrication projects. Fleet also conducts Federal required trainings and Department operational training including proper use of snowblowers and how to operate the passenger trams.

Waste Not is the Incline Village General Improvement District's Conservation program and provides community conservation services to protect our resources. The Waste Not program is located at Public Works. Our mission is to empower sustainable living by providing conservation programs for recycling, household hazardous waste, water conservation, watershed management, and education. Waste Not operates the residential household hazardous and electronic waste drop-off site at Public Works.

The Compliance division reviews Washoe County Building Department plan submittals for new development and remodels of all properties that impact water and sewer. Compliance also performs field inspections of water and sewer installations, grease interceptor inspections for compliance with regulations, and cross connection control (backflow) testing and repairs. The Division reports to the Engineering Manager.

The District owns, operates and maintains the following water and sewer system infrastructure to meet or exceed Federal EPA and State of Nevada regulations. The District has a comprehensive preventative maintenance program as part of its asset management program for all of the pipes, pumps, motors, valves, generators, instruments and other equipment and appurtenances.

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**Water System**

UV & Ozone Water Treatment Plant able to treat up to 8.5 million gallons daily  
 100 Miles of Water Mains between 4” to 24”  
 756 IVGID Fire Hydrants and 105 Private Fire Hydrants  
 2,031 Gate Valves  
 13 Water Tanks with 7 Million Gallons of Storage  
 14 Water Pumping Stations with 26 Pressure Zones  
 Service connections to over 4,300 Water Meters

**Sewer System**

105 Miles of Gravity Lines and 14 Miles of Sewer Force Main between 6” to 24”  
 1,926 Sewer Manholes  
 19 Sewer Pump Stations  
 A wastewater treatment plant able to treat up to 2.1 million gallons daily  
 20 Miles of Effluent Pipeline to Carson Valley  
 A 900 acre wetland site located in the Carson Valley for effluent water

**Season/Service Period**

Water and Sewer distribution and treatment is staffed and operated 24 hours every day.  
 Administration and customer service hours are non-holiday weekdays 8 to 4:30.  
 Solid Waste Services are scheduled over a variety of plans on weekdays.

**Water and Sewer Service Measures**

The District reads approximately 4,450 meters and prepares utility bills monthly for the following customer statistics. Water and sewer production and employee count is also provided.

<u>Measure</u>	<u>2017-18 Actual</u>	<u>2018-19 Budget</u>	<u>2019-20 Planned</u>
Water Users	8,070	8,106	8105
Sewer Users	7,979	8,014	8016
Water Accounts Billed	4,251	4,270	4269
Sewer Accounts Billed	4,160	4,178	4180
Water Production (million gallons)	1,000	900	900
Sewer Production (million gallons)	400	400	380
Positions	34.6	34.6	34.4
FTE's	31.2	32.2	32.2

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**Water and Sewer Items of Note for Fiscal Year 2019-20 Budget**

The proposed utility rate increase is to raise water rates by 4.0% and sewer rates by 4.0% for a total utility rate increase of 4.0%. In 2018-19, total water and sewer revenues for Public Works are budgeted to be \$11.85 million and are proposed to be \$12.29 million in 2019-20 under this rate study. This is an increase in revenues of \$440,000 from increased commodity sales, additional users and from the rate increase. Public Works has proposed in the personnel budget to eliminate the Waste Not Intern position and hire a full time position focused on Waste Not programs and sustainability for Public Works.

**Efficiency**

<b>Performance Description</b>	<b>Performance Measurement</b>	<b>IVGID Measurement 2019-20</b>	<b>IVGID Q1 2019-20</b>
<b>Customer Service Accounts</b>	<b>AWWA Median</b>	<b>District Value</b>	<b>District Value</b>
Billing Accuracy Rate-Errors per 10,000 bills	8.1	4	1.2
Water Total O&M Cost (\$/account)	\$361	\$275	\$275
Wastewater Total O&M Cost (\$/account)	\$344	\$385	\$385

**Effectiveness**

<b>Performance Description</b>	<b>Performance Measurement</b>	<b>IVGID Measurement 2019-20</b>	<b>IVGID Q1 2019-20</b>
<b>Unplanned Disruption of Water Service</b>	<b>AWWA Median Per 1000 Customers</b>	<b>District Value Per 1000 customers</b>	<b>District Value Per 1000 customers</b>
< 4 Hours	1.06	1.0	0.0
From 4 to 12 Hours	0.48	0.25	0.0
> 12 Hours	0.00	0.00	0.00
<b>Technical Service Complaints</b>	<b>AWWA Median</b>	<b>District Value</b>	<b>District Value</b>
Water Technical Service Complaint per 1000 accounts	6.0	3.0	5.4
Wastewater Technical Service Complaint per 1000 accounts	10.6	3.0	4.4

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**Community Value**

<b>Performance Description</b>	<b>Performance Measurement</b>	<b>IVGID Measurement 2019-20</b>	<b>IVGID Q1 2019-20</b>
<b>Customer Service Complaints</b>	<b>AWWA Median</b>	<b>District Value</b>	<b>District Value</b>
Water Customer Service Complaint per 1000 accounts	1.0	0.5	0.0
Wastewater Customer Service Complaint per 1000 accounts	0.5	0.5	0.0
<b>Residential Monthly Bill</b>	<b>Lake Tahoe Average (6 Agencies)</b>	<b>District Value</b>	<b>District Value</b>
Average Monthly Residential Water and Sewer Bill (72,000 gallons/yr)	\$129.99	\$107.79	\$107.79

**Engineering Service Measures**

The Engineering Division major capital projects in construction scheduled for Fiscal Year 2019-2020 include the Aeration System Improvements Project at Water Resource Recovery Facility; the donor funded Incline Park Facility Renovations Project; electrical and pumping improvements at Sewer Pump Station #1; Mountain Clubhouse Renovation; Tennis Center Renovation and Water Reservoir Safety Improvements, Electrical Improvements at WPS 2-1.

The Engineering Division is also working on a number of capital projects that are presently in the planning and design phase. These include the Community Services Master Plan Update, the Ski Way Rehabilitation Project, and the second phase of the Effluent Export Pipeline Replacement Project.

The Engineering Division seeks to bill 80% of time for its full time staff to Capital Projects.

<u>Measure</u>	<u>2017-18 Actual</u>	<u>2018-19 Actual</u>	<u>2019-20 Budget</u>	<u>2019-20 Actual</u>
Total Hours Worked	6240	5995	8320	1256
Billed Productive Hours	5206	4858	6656	1074
Percentage Billed Hours	83%	81%	80%	85.5
Positions	4	5	5	5
FTE's	4.1	4.95	4.95	4.95

The Engineering Division is currently organized with an Engineering Manager who supervises a Principal Engineer(vacant), Senior Engineer, Engineering Technician and a budgeted, but only occasionally filled, Engineering Intern (0.3 FTE). The Public Works Contracts Administrator (0.65 FTE) also supports the Engineering Division.