



IVGID PUBLIC WORKS · 1220 SWEETWATER ROAD · INCLINE VILLAGE NV 89451  
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## **Introduction to IVGID Public Works**

The Incline Village General Improvement District Public Works Department provides water and sewer services, as well as management of the solid waste contract, to the 8,039 residential and commercial users located within Incline Village and Crystal Bay. Trash collection is provided by Waste Management Inc. (dba Incline Sanitation) through a franchise agreement.

It is a great responsibility to provide clean and safe drinking water to all of our residents and visitors. The Nevada Department of Environmental Protection (NDEP) regulates our drinking water system through authority by the EPA under the Safe Drinking Water Act and its amendments.

The collection and treatment of wastewater is equally important in protecting the public health and safety of our residents and visitors. There is a higher level of responsibility because we are located in the Lake Tahoe Basin. In addition the District must operate and maintain a complex effluent export system to send all of our treated wastewater out of the Lake Tahoe Basin to meet these regulatory requirements. The NDEP is the regulating authority of IVGID for the collection and treatment of wastewater under the Clean Water Act and its amendments.

The Public Works Department 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. It is the employees that make the difference and the high performance culture has been carried forward through changes in staff and leadership.

### Water Infrastructure Assets Include:

- 90 Miles of Water Mains
- Over 4,200 Water Meters
- 13 Water Tanks with 6 Million Gallons of Storage
- 26 Pressure Zones
- 14 Water Pumping Stations
- Production and Treatment of an average of about 1 Billion Gallons of water annually

### Sewer Infrastructure Assets Include:

- 105 Miles of Gravity Sewer Lines
- 14 Miles of Sewer Force Main
- 19 Sewer Pump Stations
- 1,926 Sewer Manholes
- 20 Miles of Effluent Pipeline to Carson Valley
- A 900 acre wetland site located in the Carson Valley for effluent water
- Treatment of an average of about 474 Million Gallons of sewage annually

## **Public Works FAQ's**

**In case of a water or sewer emergency please call (775) 832-1203, 24 hours a day.**

Our office location is 1220 Sweetwater Rd, Incline Village NV 89451 and office hours are Monday-Friday 8:00 am to 4:30 pm. Our phone is (775)832-1203, email address is pw@ivgid.org and website is www.ivgidpublicworks.org.

**Please contact our office to make sure we have current contact information on file in case we need to contact you about a water leak or other water or sewer emergency at your property.**

Ordinances for Trash, Sewer and Water are available for viewing at our office or online at: [www.ivgid.org/utilities\\_services/ordinances](http://www.ivgid.org/utilities_services/ordinances)

Monthly we mail an informative Public Works Newsletter with your utility bill that has current public works and community information. Archives are available online at: [www.ivgid.org/utilities\\_services/forms](http://www.ivgid.org/utilities_services/forms)

### **Helpful Contact Numbers:**

Customer Service/Billing: (775) 832-1203

24 hour Trash Hotline: (775) 832-1221

Backflow Inspections: (775) 832-1313

Inspection Request Line: (775) 832-1224

Waste Not: (775) 832-1284

Waste Management: (775)831-2971



## **WATER FAQ's**

### **Where does our water come from?**

The source of your drinking water is Lake Tahoe. Pumped directly out of the lake, your drinking water is first disinfected with our state-of-the-art ozone and ultraviolet disinfection. A small dose of chlorine is added prior to your water being distributed through water pump stations to water storage tanks, and then travels through pipelines to be delivered to your property.

### **What should I do to winterize my property?**

It is recommended that all properties have a Customer Service Valve (CSV), installed past the water meter that is easy to access. If you are leaving the property for a period of time, turn the CSV off to stop the water supply to the house. You may want to check with a licensed contractor to verify any additional systems hooked up to your water supply will function properly once the CSV is shut-off. If you do not have a CSV seasonal water turn off requests can be made by contacting our office. There is a service call charge, at the time the meter is turned off and this request requires 48-hours notice. A fine for meter tampering may be charged if the meter is turned on/off without a service call. It is the homeowner's responsibility to make sure the meter is accessible or additional charges may be incurred to get access to the meter. It is also important to leave the thermostat at 55° when you are away to prevent freezing of internal pipes. Don't run the water in order to keep pipes from freezing. This is a costly waste of water and can cause water damage under certain circumstances. On irrigation systems it is important to shut off and drain the system, detach hoses from hose bibbs and remove backflow devices and store them inside.

### **How do I locate and read my meter?**

Your water meter is generally near the street at the corner of the lot marked with a metal fence post with blue paint. The meter is under a metal or concrete lid. Brush away any soil or dirt before you remove the lid and please take great care in not damaging the meter, transmitter or associated wires. The water meter register has a black protective dust cover which you will need to flip back to read the meter. Water meters have numbers and spinning dials, which record usage. When water is not being used, none of the numbers or dials on the meter should move. Our meters have a small red star wheel "the leak detector" which spins to indicate when water is traveling thru the meter. If you are not sure you are looking at the correct meter simply run a hose bibb at your house to verify the meter is yours.



**Water Meter Register**

### **How do I know if my meter is accurate?**

Today's modern meters are extremely accurate. Most meter inaccuracies are due to age and wear and yield a reading that is less than what was actually used. You can also check your meter accuracy by simply running water until your meter pointer is at zero. Then, insuring that nothing else is using water in the house , accurately fill a one or two gallon container and return to your meter to see if the pointer moved the appropriate amount. Each number on the clock face of the meter dial represents one gallon. If you accurately dispensed one gallon, the pointer should have incremented by approximately one gallon.

### **Why am I responsible for keeping my meter box accessible?**

Meter boxes need to be accessible at all times in case of an emergency at your property or for any other reason in which the meter needs to be shut-off or for meter maintenance. Make sure that snow, dirt, rocks, vehicles, etc. are not covering your meter box. This could save your property from costly water or sewer damage. If we are required to uncover your meter box additional charges may be assessed to your utility bill.

### **Am I required to have a meter stake at my property?**

Yes, having a meter stake at your meter location will aid us in locating the meter in case of an emergency at your property, especially when there is accumulation of snowfall or pine needles. Call us if the stake is missing, we will replace it.

### **Who is allowed to turn my water meter on or off?**

In order to avoid damage to the meter and its components, as well as your home, only trained IVGID personnel are allowed to turn the meter valves. It is recommended that all properties have a Customer Service Valve (CSV) installed past the water meter that is easy to access so that customers can turn off their own water. If a meter is found to have been turned on/off by someone other than IVGID trained personnel a \$100 tampering fine may be assessed to the utility bill.

### **I think I may have a water leak at my property. Where do I start?**

The most common leak inside a home is caused by toilets. We have dye tablets available at our office which can help you to identify if you have a leaking toilet. We also have informational flyers available to help you locate and fix water leaks. These documents are available online or by contacting our office.

### **The water pressure to my property is low. What could cause this?**

The water pressure to your property can vary depending on your location. All homes should have water pressure regulators which are placed on the service line to regulate the water pressure to the house so that plumbing fixtures operate properly. If you have low water pressure you may need to adjust or replace this device or call a plumber for further assistance.

## **WATER QUALITY FAQ's**

### **How can I find out about our water quality?**

Each June a comprehensive Consumer Confidence Report (CCR) on the water quality of the system is published and sent to all customers and is posted on our website. This is in compliance with Federal EPA reporting requirements.

### **Why should I choose tap water over bottled water?**

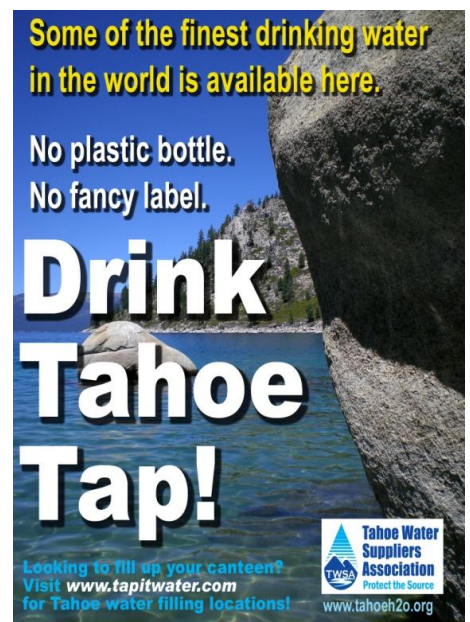
Water systems are more rigorously tested and monitored than the bottled water industry. Americans are drinking a lot of bottled water: 8.3 billion gallons annually, about 26 gallons per person (in 2006). About 86% of the plastic bottles in the U.S. go to the landfill instead of being recycled. Tap water costs less than a penny per gallon and we are fortunate to have some of the finest drinking water in the world!

### **Is chlorine used in the water?**

Yes, chlorine is used in the water to make sure it stays disinfected while it travels through the water infrastructure to your property. Chlorine will dissipate over time with exposure to air and can also be removed from the water with the use of a carbon water filter.

### **Do you put fluoride into the water?**

No, we do not add fluoride into the treated potable water.



## **WATER CONSERVATION FAQ's**

### **How do I know how much water I am using?**

Your monthly bill will show you how much water was used during the previous month, as well as your use over the past 12 month period. Meter reads are collected once a month.

### **I would like to monitor my water use. How can I do this?**

Your monthly utility bill will indicate your last meter read and the date of the read. Then you will need to locate your water meter as detailed in the Water FAQ's section. When you have your current meter read you can then subtract the read from your last bill from the current meter read to find out how much water you have used over that period of time. The District also offers the use of a remote reading device that we can lend to you at no cost for up to two weeks. The device is programmed to read your meter by radio and can be placed somewhere in your house or garage in a convenient location. You can retrieve your meter reads as often as you like without having to access your water box. The District will program, deliver and set up the device for you. If you wish to keep the monitor after the rental period we will simply bill your account \$100 for the cost of the device.

### **How much water use is normal indoors?**

According to the American Water Works Association, before implementing basic water conservation techniques, the average indoor use is approximately 60 to 70 gallons per day per person. That translates into approximately 3,600 to 4,200 gallons per month for two people or 7,200 to 8,400 gallons per month for a family of four. Simple conservation measures can typically result in a 15-20 percent reduction in this number.

### **How can I tell if I am overwatering my landscaping?**

Irrigation audits are available for customers who feel their irrigation water use is higher than it needs to be. This can be scheduled by contacting our Waste Not department, (775)832-1284.

### **Where can I find some assistance with development of a water conserving landscaping plan?**

A fabulous resource for learning about water conservation strategies is the UNR Cooperative Extension publication located at: [www.unce.unr.edu/publications/files/nr/2006/eb0601.pdf](http://www.unce.unr.edu/publications/files/nr/2006/eb0601.pdf). The North Lake Tahoe Demonstration Garden is also another great resource, which is located on the Sierra Nevada College campus.

## **BACKFLOW FAQ's**

### **Why is backflow testing required?**

Your property's main waterline supplies drinking water to your house. This pipe also supplies water for alternative uses such as boiler, fire and irrigation systems; which are cross connections. Glycol, fertilizer, waste, and gas can be found in these alternative pipes. If pressure is reduced in your main waterline, the polluted water in the alternative systems can flow backwards and contaminate your drinking water. A backflow device prevents water in the alternative lines from flowing backwards, thus protecting your drinking water and your health. The State of Nevada requires backflow devices be inspected annually to make sure they are working properly.

### **Who needs backflow testing?**

Backflow devices are required on non-drinking water systems which are directly connected to the drinking water supply line at a property. These include, but are not limited to: irrigation, boiler (hydronic heat) and fire sprinkler systems. We currently have 3500 backflow devices which are being tested annually in our backflow program.

### **I received a postcard stating backflow testing is needed. What do I need to do to comply?**

Backflow devices need to be tested in the same quarter annually. These can be scheduled to be tested by IVGID staff members who are certified backflow testers online at [www.ivgidpublicworks.org](http://www.ivgidpublicworks.org) or by calling (775)832-1313. Backflow test performed by IVGID will be billed on the utility bill charged at the rate set in Exhibit C of the Water Ordinance and includes an hour of labor (when repair to a device is needed). Private certified backflow testers can also perform the test. The form which needs to be completed and submitted with test results is available online or by contacting the IVGID Compliance department (775)832-1224. Results can be emailed to [pw@ivgid.org](mailto:pw@ivgid.org). The inspection needs to be done during the same quarter each year. Backflow results need to be received prior to the end date of the quarter indicated on your postcard. If results are not received the property may be shutoff for non-compliance.

## SEWER FAQ's

### Where does my sewage go?

Sewage water travels first through pipelines and pump stations to get to the Wastewater Treatment Plant. The wastewater treatment process from start to finish takes approximately 15 hours. The solids removed in this process are sent to an outside company for composting with other organic material. The export pipeline transports the plant's secondary treated effluent to the 770 acre IVGID Wetlands site in Douglas County for beneficial reuse. All effluent water is required to be transported outside of the Tahoe Basin to protect this national treasure.

### What items should not be flushed down the toilet?

Flushable wipes, facial tissue, paper towels, cotton swabs and cotton balls, feminine sanitary products, FOG (fats, oils or greases), pharmaceutical products, unused medicine, and HHW (household hazardous waste). Toilets are not trashcans!

### Why are flushable wipes bad to flush down the toilet?

Flushable wipes don't disintegrate; try pulling and tearing at one or soak one in a cup of water for a day. What you'll find is they don't breakdown. Imagine what happens in your pipes, our sewer mains and sewer pumps. Wipes can clog the connection to the sewer line causing backups resulting in expensive repairs for the homeowners and/or cause back-ups that spill sewage into our fragile mountain environment.



### What problems can be caused by fats, oils and greases (FOG) being put down the drain?

If you dump leftover food scraps, oils and grease down the drain, the greases and fats stick to the inside of the pipes. Grease causes sewer blockages and overflows that damage homes and threaten the environment. The best way to solve grease blockage problems is to keep FOG out of the drain in the first place. These items cause costly preventative maintenance in the sewer mains and pump stations, leading to increased sewer charges.

### How do I dispose of pharmaceutical products or unused medicine besides putting them down the drain?

Many drugstores offer a return program on unused medicine. Rite Aid and Safeway in King's Beach both accept medicine; Raley's in Incline Village does not. If you cannot access a recycling option, you may dispose of old medicine in the trash by crushing the pills, placing them back in the original package, place the container in a plastic bag and wrap the bag with tape; then dispose of in your household trash.

## BILLING FAQ's

### What utility services are included in my IVGID bill?

Water, sewer and trash charges are billed together for single family residential customers. Commercial trash accounts are billed directly by Waste Management.

### How often are bills generated and what are the payment due dates?

Water, sewer and trash utility bills are generated monthly. Payments are due by the 18<sup>th</sup> of each month, or the following business day if this date falls on a weekend. Payments made after this date will not be reflected on your next statement.

### How can payments be made on accounts and where are payment drop-off locations?

Payments for Public Works accounts can be made by: Check, Money Order, Cash, FREE monthly Automatic Payment (EFT) from a checking account, thru online bill payment with your bank, or via our Online Account Access (will be subject to a service fee).

A 24 hour drop box is located at the IVGID Admin office at 893 Southwood Blvd. Payments can also be made at the Public Works office during business hours, which is located at 1220 Sweetwater Rd.

### What forms of payment are accepted with Online Account Access and what are the service fees?

Payment can be made by eCheck or with a Visa, MasterCard or Discover credit card. EChecks will be charged a flat rate of \$1.50 per transaction and credit cards will be charged a service fee of 2.45% with a \$2.00 minimum transaction amount.

**Why is there a service fee when paying with Online Account Access?**

The payment processor and your credit card collect these fees. IVGID does not collect this fee or any of the revenue.

**Can I make a one time payment by credit card without setting up for an Online Account Access account?**

Yes! On the login page click the "Guest Payment" link. You will need to enter the account number exactly as it appears on the statement (including dashes). You will then need to verify the correct information is displayed for the account you wish to pay and then specify the amount of payment you would like to make. A service fee will apply for online payments.

**How does EFT/auto-payment work and what is needed to sign up?**

EFT will automatically transfer payments from your checking account on the date indicated on the statement. A copy of the bill is still mailed to you in order for you to have the information on the payment amount which will be deducted from your account and shows the amount of water use at the property. The form needs to be completed, signed and returned to our office with a voided check in order to set-up this payment option.

**How do I make changes to the mailing address or contact phone numbers on my account?**

Changes to contact information can be made via Online Account Access or the Change of Address form is available online. You can also make changes by submitting the information on the payment stub which is mailed in with your payment.

**I am past due on the payment of my utility bill. When will a late charge be accessed?**

Late fees are assessed if payment is not received by the last day of the month.

**My property was posted for shutoff due to non-payment. What does the notification mean?**

Properties which are posted for shutoff have two months of outstanding balance which has not been received by the time billing had been generated for the next billing period. A minimum of five calendar days are given to make the payment. Please contact our office if you need to make arrangements for payment towards a past due balance on your account.

**I would like to set up an agent/tenant to receive the bill on my account. What is needed to arrange this?**

When this option is used the owner acknowledges that all invoices, delinquency notices, shut off notices, inspection notices, and other correspondence for the utility account will be sent to the agent/tenant's mailing address. For this reason we suggest that property owners call or email us periodically to verify status of the payments on the account. The owner of the property will still be responsible for any charges left unpaid. IVGID does not prorate any charges on the account upon move in or move out, but we are able to provide date ranges for the timeframe charges were incurred on the utility account. The Designation of Agent/Tenant form is available online or by contacting our office.

**How are water and sewer billing rates determined?**

A rate study is performed anytime water and sewer rates need to be evaluated for change. Base rates are determined off of the cost of operation, maintenance, repair, and administration costs. Details from the most recent rate study are found in the Water and Sewer Rate Study section of this packet. Capital charges are collected to fund the replacement of infrastructure and assets in the District. Water tier rates are in place to encourage water conservation and cover any costs associated with having to increase the water rights held by the District. Our annual Water Management Plan is a reporting requirement to the State of Nevada and details the water consumption in the District. A copy of this report is available online at: [www.ivgid.org/utilities\\_services/forms](http://www.ivgid.org/utilities_services/forms) or by contacting our office.

**What does the Defensible Space Fee pay for?**

The Defensible Space Fee pays for the work IVGID does on its property to manage the watershed and reduce fire fuel loads. This work also provides a protective boundary for the homes of Incline Village and Crystal Bay from the potential destruction caused by wildfires. The Fuels Management Program began in 1991 in a collaboration of the NLTFPD and IVGID. Annually approximately \$450,000 to \$500,000 is spent to maintain the 1,000+ acres of land IVGID owns. The defensible space fee on the Public Works statement pays for 50% of the IVGID share of costs for fuels treatment. The other 50% share of this cost is paid by the IVGID Recreation Facility Fee. The Angora Fire in South Lake Tahoe and wild fires in other mountain regions continue to remind us of the significance of this effort in our community.

**TRASH & RECYCLING FAQ's****When are my next trash and/or recycling pick up days?**

Waste Management provides weekly trash service. Residential recycling service is every other week based on your location. Call Waste Management at (775) 831-2971 for your schedule or recycling schedules are available on our website.

### What are the trash and recycling drop-off hours?

The Waste Management transfer station is open Monday - Friday 8:00 am to 4:30 pm, Saturday and Sunday 8:00 am to 4:00 pm. It is located on the corner of Sweetwater Rd. and State Route 28 in Incline Village.

### What are my curbside limits?

You can place 1 cubic yard (Seven 32 gallon cans or bags) curbside each week for trash collection. A weight limit of 75 lbs. applies to each trash container. There is no limit on how many blue bags (designated recycling) you place curbside. Blue bags should not exceed 40 lbs. All trash or recycling materials must be in a container, bag or bundled. If you have large bulky items please contact Waste Management for instructions on proper disposal.

### Why is trash service mandatory and what are the rates which apply for trash and recycling collection?

Trash service is mandatory per the Washoe County ordinance which requires refuse be collected not more than 7 days from the last collection day. Each residential property is required to have at least residential street and recycling services. The current trash and recycling rates are available online or by contacting our office.

### How do I contain my trash if I have curbside service and I am not going to be home on my trash day?

As a courtesy, District single family residences (with appropriate ID/license/utility bill) with curbside service may now drop off the weekly equivalent curbside allocation of household trash plus blue bag recyclables at no cost. If this option is chosen, the property will not receive trash service on their next scheduled service day. If materials are placed curbside after using this option, collection will occur, however, the customer will be charged \$2.31 per can/bag. For hours and information: please call the Transfer Station: (775)833-6251. Waste Management's Incline Transfer Station, located at 1200 Sweetwater Road is open seven days a week. Trash must be contained at all times. You may also want to consider a bear box or a bear cart; which allows you to keep trash outside even if it is not your service day.

### How do I report a trash problem?

If you see an open/overfilled dumpster, trash spill or trash out before the service day, please call the 24 hour trash hotline: (775)832-1221.

### How can I keep bears/wildlife from getting into my trash?

The best way to keep bears and other wildlife out of your trash is to keep your refuse in a bear-proof garbage container at all times. These must be purchased by the resident. There are two kinds of bear-proof garbage containers – bear boxes and bear carts. Bear boxes are permanent steel boxes installed on a concrete base that can hold from one to three cans of garbage. Bear carts are steel reinforced, 96-gallon garbage containers, on wheels, with a bear-resistant latching system. For more information on either of these options contact Waste Not. More information can also be found at [www.stashyourtrash.org](http://www.stashyourtrash.org). Many people keep trash in the garage until the day of pick up. Be advised, bears have broken into garages in our community in pursuit of food waste. Place trash curbside after 5 am on day of service only.

### What can I recycle at the curb?

You can recycle the following items in a 'blue bag':

- Glass (all colors)
- Aluminum cans, aluminum foil, steel, or tin cans
- Clean mixed paper (junk mail, all office paper, magazines, newspaper, envelopes and paper bags)
- Corrugated cardboard (flatten/cut into smaller pieces or tied into bundles)
- Paperboard (cereal boxes, toilet paper, paper towel rolls, egg cartons)
- Hard plastics #1 through # 7
- Plastic bags can be recycled if bundled together
- NO plastic film and NO Styrofoam

It is very important that all food waste is rinsed off. There is no need to sort items; they can all be placed in the same bag.

### Where do I put my recycling if I have dumpster trash service?

Do not put blue bags/recyclables in a regular dumpster. Look for a Waste Management 96-gallon cart or special dumpster designated for 'mixed recyclables' near your dumpster. Place the recycling inside this container for collection; a blue bag is not needed for contents inside the tote.



**Remember to always lock dumpsters!**

**How do I recycle cardboard?**

Recycle corrugated cardboard in your blue bag. Please cut or flatten cardboard to fit in the blue bag. Cardboard may also be cut, securely bundled and placed next to your blue bags. Loose cardboard will not be collected curbside. If you have large quantities, 7 day a week drop-off is available at the Waste Management Transfer Station at no charge.

**Where can I purchase blue recycle bags in Incline Village?**

Tahoe Supply Company, 872 Oriole Way sells large quantities of blue bags. Smaller quantities can be purchased at: Spitsen Lumber, 1054 Tahoe Blvd.; Ace Hardware, 910 Tahoe Blvd; Raley's, 930 Tahoe Blvd.; or Village Market, 770 Mays Blvd. Our office also has blue bag samples available for pick-up.

**How do I recycle tree trimmings, Christmas trees, yard debris?**

Seasonal recycling programs are available for green waste. Please contact Waste Not for current program details.

**How do I recycle car batteries, motor oil and anti-freeze?**

Drop off your car batteries, motor oil and anti-freeze for recycling at the Waste Management Transfer Station during business hours, (775)831-2971.

**Where do I take Household Hazardous Waste (HHW)?**

Waste Not accepts HHW for District residents every Tuesday and Thursday from 3:00 to 5:00 pm at 1220 Sweetwater, Incline Village or an appointment can be made by calling (775)832-1284. This program accepts: acids, aerosols, batteries, fluorescent light bulbs, household cleaners, fertilizers, pesticides, flammable liquids, herbicides, poisons, solvents, gasoline, oil paints and stains. Latex paint is now accepted. Waste Not cannot accept HHW from commercial customers. Commercial customers may call a commercial hazardous waste disposal service. We will refuse potentially dangerous or unlawful substances. Please contact us for current program details.

**Where can I take computers, electronics and televisions to be recycled?**

Waste Not accepts electronic waste for District residents on Tuesdays and Thursdays between 3:00 pm and 5:00 pm. Items accepted include televisions, monitors, towers, laptops, accessories (including cables), office equipment, stereos, kitchen appliances, and most small appliances with cords or batteries. Most items are accepted at no charge. There is a \$5 to \$15 fee for television recycling. For more information, call Waste Not.

**Where do I take large appliances to be recycled? Is there a charge?**

Large bulky items are not collected curbside under normal service. Special pickup can be arranged by calling Waste Management at (775) 831-2971. Appliance drop-off is available 7 days a week at the Incline Transfer Station. Refrigerators, washers, dryers, water heaters and stoves are accepted for recycling. Contact Waste Management for current pricing.

**What about those "hard to recycle" items? How do I get more information on recycling?**

Waste Not maintains a comprehensive recycling guide which is available by calling (775)832-1284, or visiting the web at: [http://ivgid.org/conservation/waste\\_not](http://ivgid.org/conservation/waste_not).

**WATER AND SEWER BUILDING COMPLIANCE FAQ'S****I am planning a construction, remodel or landscaping project. Where do I start?**

Contact the Washoe County Building and Safety Department, (775) 328-2020 for plan review requirements.

**What are the water and sewer requirements for construction?**

The requirements for connecting to the water and sewer system are outlined in the IVGID Requirements to Construct Water and Sewer Service Lines packet, which is available online or by contacting our office. The IVGID Compliance department can also help with questions by calling (775) 832-1224.

**CAPTIAL INFASTRUCTURE PROJECTS (CIP) FAQ'S****How can I find out information on IVGID CIP projects which are occurring around town?**

Information on the IVGID projects are available online at: [www.ivgid.org/community\\_resources/construction](http://www.ivgid.org/community_resources/construction). The webpage also contains links to project information for Washoe County and NDOT projects.



## **Water and Sewer Rate Study**

*As presented by Memorandum to the IVGID Board of Trustees in February 2014*

The Public Works Department conducts an annual rate study to calculate the appropriate rates for water and sewer service to meet revenue and expense demands while maintaining an appropriate reserve fund balance. The rate study includes a five year projection for revenues and expenses with an eye out for large capital projects outside of the five year window. This annual effort insures rates are meeting the needs of the District and that adjustments can be made efficiently and effectively. A short summary of the Utility Rate Studies from 2009 to 2013 is provided in the following paragraphs.

### Utility Rate Study 2009 - Summary

In February 2009, a new five year utility rate study was presented to the Board to continue sound financial planning for the maintenance, operation and replacement of water and wastewater infrastructure. The Board chose not to raise rates because of the difficult economic times and the direction was provided to Staff to hold key rates flat for the upcoming fiscal year.

### Utility Rate Study 2010 - Summary

In February 2010, the five year utility rate study was presented to the Board to continue sound financial planning for the maintenance, operation and replacement of water and wastewater infrastructure. In 2010, the increases were water by 4.3% and sewer by 3.9% for a total utility rate increase of 4.1%.

At this workshop, the 5-year utility operating and capital revenues and expenses were discussed. The study showed an average rate increase of 4.6% over five years to balance the operating net income in year 5 (2014-15) and to achieve an operating profit in utilities in year 2 (2011-12). The new rate structure also reduced the amount from 4000 to 3000 gallons included in the base rate. The plan was to completely eliminate the base gallons included in the base rate over a four year period. The new rates were approved by the Board in a Public Hearing and the rates went into effect with the May 2010 bills.

### Utility Rate Study 2011 - Summary

In February 2011, the five year utility rate study was presented to the Board to continue sound financial planning for the maintenance, operation and replacement of water and wastewater infrastructure. At this workshop, the 5-year utility operating and capital revenues and expenses were discussed with a proposed utility rate increase to raise water by 5.3% and sewer by 9.4% for a total utility rate increase of 7.7%.

Prior to 2011, the average rate increase was expected to be 4.6% per year. The rates were then adjusted for an average 5.8% increase per year for five years to meet the projections. This was greater than the 2010 projection that rates would increase by 4.6% per year for five years. This was caused by two major items; the first was the need to raise an additional \$400,000 in revenue to pay the District's larger share of the Export Project costs when the District's cost share was expected to be reduced from 75% to 55%, and the second item was the additional revenue to cover the bond payments for the \$3,000,000 bond for the Burnt Cedar Water Disinfection Improvements to come into compliance with Federal Regulations. The rate increases for 2011 and 2012 were to average 7.5% per year to ramp up this additional CIP revenue requirement and bond payment needs.

### Utility Rate Study 2012 - Summary

In February 2012, the five year utility rate study was presented to the Board to continue sound financial planning for the maintenance, operation and replacement of water and wastewater infrastructure. At this presentation, the 5-year utility operating and capital revenues and expenses were discussed with a proposed utility rate increase to raise water by 3.3% and sewer by 9.9% for a total utility rate increase of 6.8%. The utility rate increase was approximately 1% lower than last year's projection because of operation cost reductions. Operational costs were lowered by \$364,000 from the 2011-12 budget to the 2012-13 budget, a 5.7% reduction.

The rates were currently scheduled for an average 5.2% increase per year for five years. This is slightly less than the 2011 Rate Study projection that rates would increase by 5.8% per year for five years. The reduction is mainly caused because the 2011 rates were raised by 7.7% and operational expenses have been lowered for 2012-13. The largest rate increase will be in 2013 when sewer rates will have to increase significantly to continue to raise capital reserves for the \$23 million Effluent Export Project. This rate increase was expected to be greater than 10% to generate the capital revenue needed.

### Utility Rate Study 2013 - Summary

In February 2013, the five year utility rate study was presented to the Board to continue sound financial planning for the maintenance, operation and replacement of water and wastewater infrastructure. At this presentation, the 5-year utility operating and capital revenues and expenses were discussed with a proposed utility rate increase to raise water rates by 1.7% and sewer rates by 11.1% for a total utility rate increase of 6.8%. At close of fiscal year 2011-12, Public Works beat the budget by \$600,000 which was added to the reserve fund balance. The increase in the reserve fund therefore reduced the proposed 20% sewer rate increase to 11% for 2013.

The rates were currently scheduled for an average 5.2% increase per year for five years to meet the projections presented here. This is the same as last year's projection that rates would increase by 5.2% per year for five years. Years 2013 and 2014 will have large sewer rate increases to continue to raise capital for the \$23 million Effluent Export Project. The sewer rate increase is expected to be greater than 10% in each of those years to generate the capital revenue needed going forward. Water rate increases are expected to be in the 2-4% range. In 2013, the amount of water included in the base rate for water and sewer was eliminated, completing the 4-year effort to reduce it from 4000 gallons to 0 gallons.

### Rate Structure

The Public Works budget is comprised of water, sewer, and trash funds. Water is further broken down into water supply, pumping, treatment, transmission and compliance services. Sewer is further broken down into effluent disposal, pumping, treatment, collection and compliance. General administration includes customer service, legal, lobbying, central services and other miscellaneous expenses. The general administration is spread evenly between sewer and water. Trash will not be a part of the utility rate study.

The water and sewer rates are based on the water and sewer budgets and are made up of three main components - fixed charges, variable charges, and capital improvement charges. Each major division in the water and sewer budget has a portion of fixed and variable costs and the rates are designed to fund these expenses. The fixed, variable and CIP rate components are discussed below.

### Fixed Charges (Water and Sewer Base Rates)

To provide water and sewer services, there is a portion of the costs that are fixed charges. These are sometimes called the ready to serve costs. Essentially, there is a certain level of costs that are incurred to staff, operate and maintain our system prior to delivering any water or treating any wastewater from our customers. There is a requirement for minimum staffing to be prepared to provide service, a certain amount of supplies such as tools, training, and equipment that are needed to be ready to serve and there are electrical and gas charges to our facilities so that they can be ready to serve our demands. These fixed charges are calculated as a percentage of the budget components to determine the fixed charges of operating the water and sewer system.

### Variable Charges (Water and Sewer Consumption)

To provide water and sewer services, there is a portion of the costs that are variable charges. These charges are the costs to treat and distribute water and to collect, treat and dispose wastewater. The variable charge for water is essentially the cost to pump it out of Lake Tahoe, treat the water and deliver it to the customer. The variable charge for sewer is essentially what it costs to collect the wastewater and deliver it to the wastewater plant, treat the wastewater, pump and dispose of the effluent and biosolids. This requires staff, chemicals, supplies, tools, equipment, and energy to perform these services.

### Capital Improvement Charge

The capital improvement charge funds the replacement of water and sewer infrastructure. There are separate connection fees to new customers to buy into existing infrastructure. The capital charge is based on funding the costs of the five year capital improvement plan with a consideration for the multi-year capital plan.

## **FINANCIAL IMPACT AND BUDGET**

### 2014 Five Year Rate Study

The rate study for 2014 has been prepared to determine the next five years of operating and capital expenses and to provide sufficient and stable revenue to meet the operating cost increases and the near term capital needs. The analysis is done on a cash flow basis in order to achieve a target reserve fund balance. The reserve fund is set by Board Policy. In the five year period of this rate study, reserves will be below target policy levels while we accumulate savings to fund the Effluent Export Project. Unrestricted reserves will fluctuate from \$2.5 to \$3.5 million in this five year period.

The single largest driver for rate increases in 2012, 2013, and 2014 is the necessary replacement of the effluent export pipeline. The Effluent Export Project objective is to replace an additional 30,000 lineal feet of pipeline in the Tahoe Basin in the SR-28 right-of-way. On August 1, 2009, a significant leak occurred on the pipeline that caused a road failure and necessitated a repair. It has been determined that it is prudent to begin the replacement of this additional six miles of pipeline at an estimated cost of \$23 million over the next 10 years. Previous capital budgets showed that up to 75% of this work was to be funded through the Section 595 Program. The capital plan has been modified to receive no funding for the Effluent Export through the 595 Program since, for the last four years, the Federal Government has not increased the authorization level nor appropriated new funding.

This year's sewer rate adjustment continues the multi-year process to increase the Sewer CIP billing rate component to account for the increase in the District's portion of funding the Effluent Export Project from a 25% to a 100% cost share. The proposed 2014 sewer rate will include the final major increase to account for the District paying 100% of the Effluent Export Project costs.

Funding for Capital asset replacement in Public Works is a blend of funds already collected for that purpose in previous years and current year capital revenues. The District also uses borrowing to pay replacement of capital assets that places some of the financial burden on future rate payers. This has been the traditional method in paying for capital in Public Works. We are currently using about 16% of the collected capital revenue to pay for debt. In 2012/13, two significant loans were paid off while we also began payments on the new \$3 million State Revolving Fund Loan that financed the Burnt Cedar Water Disinfection Plant Project that renovated our water disinfection facilities to achieve compliance with Federal Regulations.

The rate model is prepared to determine the revenue needs to meet operating and capital expenses while maintaining prudent reserves. This target reserve balance has been adjusted downward based on current economic conditions in Nevada and with consideration given to the cost of borrowing money versus spending down reserves. At this time, borrowing costs for long term loans are quite high because of uncertainty in the economy. The District is also a low priority on the Clean Water State Revolving Loan Fund Project list and we do not expect to receive funding under current State Loan funding levels.

Once a revenue target is established, the water and sewer rates are adjusted to generate that revenue in the most equitable way possible. The revenue is also balanced among the various rate components to pay for fixed, variable and capital components. The new rate structure is modeled for all of the customer classes and, for some classes; it is modeled for every customer for the entire year. This is done to confirm that no individual customer will receive a disproportionate rate increase or decrease.

The proposed utility rate increase is to raise water rates by 2.4% and sewer rates by 9.1% for a total utility rate increase of 6.0%. In 2013, the water rate increase was 1.7% and sewer rate increase was 11.1% for a total utility rate increase of 6.8%. The following table shows the rate increase for each customer class.

<b>Customer Class</b>	<b>Water Rate Increase</b>	<b>Sewer Rate Increase</b>	<b>Utility Rate Increase</b>
Commercial	2.6%	7.4%	5.6%
Irrigation	2.8%		2.8%
IVGID Domestic	2.4%	8.2%	6.0%
IVGID Irrigation	2.8%		2.8%
IVGID Snowmaking	2.8%		2.8%
Multi Family	2.2%	9.5%	6.6%
Single Family	2.5%	9.0%	5.9%
<b>Total</b>	<b>2.4%</b>	<b>9.1%</b>	<b>6.0%</b>

Utility Rates

The utility rates are being adjusted to meet expected cost increases and to fund future capital replacement. Increasing revenue is a basic concept but it was verified that in adjusting the rates that no customer saw a disproportionate change in rates that would unfairly shift the cost burden to other rate payers.

The rate structure is shown below for the water rates and sewer rates. The rates below include a \$1.05 total defensible space charge to each user. The base rate for water is increasing by \$0.51 per month. The base rate for sewer is increasing by \$4.28 per month.

Residential Water Rate Comparison

2014 Rate Component	2014 Rate		2013 Rate Component	2013 Rate
Base Rate	\$ 9.55		Base Rate	\$ 9.50
Capital Improvements	\$ 13.69		Capital Improvements	\$ 13.28
Customer Account Fee	\$ 3.25		Customer Account Fee	\$ 3.20
Defensible Space	\$ 0.52		Defensible Space	\$ 0.52
<b>Monthly Water Bill</b>	<b>\$ 27.01</b>		<b>Monthly Water Bill</b>	<b>\$ 26.50</b>
Consumption	\$ 1.32		Consumption	\$ 1.28
1st Tier	\$ 1.00		1st Tier	\$ 0.96
2nd Tier	\$ 1.16		2nd Tier	\$ 1.12

Consumption, 1<sup>st</sup> Tier, and 2<sup>nd</sup> Tier are per 1000 gallons of water use.

Residential Sewer Rate Comparison

2014 Rate Component	2014 Rate		2013 Rate Component	2013 Rate
Base Rate	\$ 15.20		Base Rate	\$ 14.85
Capital Improvements	\$ 27.68		Capital Improvements	\$ 23.80
Customer Account Fee	\$ 3.25		Customer Account Fee	\$ 3.20
Defensible Space	\$ 0.53		Defensible Space	\$ 0.53
<b>Monthly Sewer Bill</b>	<b>\$ 46.66</b>		<b>Monthly Sewer Bill</b>	<b>\$ 42.38</b>
Consumption	\$ 2.68		Consumption	\$ 2.60

Consumption is per 1000 gallons of use.

Operating Revenues and Expenses

The five year rate study is presented below for operating revenues and expenses. The operating expenses are escalated at a nominal 3% per year over the five year period. The 2014-15 is not the actual budget number but an estimate used for rate setting purposes. The operating expenses includes staff costs, services and supplies, utilities, insurance, legal and audit fees, central services expense and the defensible space costs but it does not include depreciation. Final budget numbers are inputted into the rate study for future rate adjustments.

Operating revenues is the portion of revenue generated from the water and sewer rates that is not the CIP charge. The operating revenue is increasing by an average of 3.0% per year for five years and is a mix of rate increase and sales of water and sewer. The information below represents the net income for operating, excluding the capital revenue and the depreciation expense. The rate study goal is to keep a balance between operating expenses and revenues over the five year period. The variance between operating revenue and expense is within 2% and the slight loss over 5 years is a projection. Typically, the Public Works Department beats its budget projection and the slight operating loss is not a concern at this point. The rate model is revisited annually and recalibrated with actuals from the completed fiscal year.

5-Year Plan	2014-15	2015-16	2016-17	2017-18	2018-19	5-Yr Sum
Operating Revenue	6,563,000	6,764,000	6,972,000	7,187,000	7,409,000	\$34,895,000
Operating Expense	(6,690,000)	(6,899,000)	(7,113,000)	(7,334,000)	(7,560,000)	(\$35,596,000)
					<b>Subtotal</b>	<b>(\$701,000)</b>

Capital Revenues and Expenses

The capital expense is the current five year capital plan that is being developed as part of the budget process. The five year expenses and revenues are presented in the following table. The capital revenue is the summation of monthly capital fees collected in the utility rates, connection fees, and interest income and increases by approximately 5.2% per year averaged over 5 years. The capital expense is the capital improvement projects net of grants. The five year impact is to balance revenues and expenses.

<b>5-Year Plan</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>	<b>5-Yr Sum</b>
Capital Revenue	4,372,000	4,532,000	4,697,000	4,868,000	5,046,000	\$23,515,000
Capital Expense	(5,327,000)	(4,034,000)	(4,763,000)	(4,685,000)	(4,642,000)	(\$23,451,000)
					<b>Subtotal</b>	<b>\$64,000</b>

There are several important points to remember in the estimate of capital expenses. The capital expenses assume that we spend 100% of all capital budgets. The Effluent Export Project has also been adjusted with the assumption that we will not receive Section 595 funding which increases our capital costs. The large rate increases will occur in sewer capital for 2013 and 2014.

With the 2012-13 budget year, Public Works began accumulating \$2,000,000 per year in savings for the construction of the Effluent Export Project. We expect to have accumulated a total of \$8,000,000 by the construction project start date in spring 2016 while also continuing to collect \$2 million annually for this critical project.

The reserve balance is a critical fund to be managed in Public Works. At this time, there are several large variables mentioned above that can significantly swing the reserve balance. The amount of the bonding will be adjusted to assure the reserve fund remains at a prudent balance while also considering the costs of borrowing, the economic conditions in Nevada and the susceptibility of the funds. The uncommitted reserve fund, separate from the accumulated savings for the Export Project, is currently scheduled to be less than the Policy target for the next five years. The current goal is to keep the uncommitted reserve fund above \$2.5 million.

Federal Funding of Capital Projects

The District has received Federal Funding in the amount of \$15,500,000 for the Sewer Effluent Export Project and \$2,700,000 for Water Infrastructure Projects over the last 10 years. This combined amount of \$18,200,000 over 10 years equates to a total savings of \$2,020 per residential customer or on average \$17 per month. The Effluent Export Project funding comes through our partnership with the US Army Corp of Engineers and we receive funding from the Section 595 Program of the Water Resources and Development Act of Congress. The Water Infrastructure funding comes through the Lake Tahoe Fire Partnership led by the South Lake Tahoe Public Utilities District and is funded through the US Forest Service.

Summary

The proposed utility rate increase is to raise water rates by 2.4% and sewer rates by 9.1% for a total utility rate increase of 6.0%. The rates are currently scheduled for an average 3.9% increase per year for five years to meet the projections presented here. This is less than last year’s projection that rates would increase by 5.2% per year for next five years. The lower projection is because 2013 and 2014 had large sewer rate capital improvement fee increases to continue to raise capital for the \$23 million Effluent Export Project. The sewer rate increase is 11% and 9% respectively in each of those years to generate the capital revenue needed going forward.

In 2013-14, total revenues for Public Works are budgeted to be \$10.28 million and are now projected to be \$10.91 million in 2014-15. This is an increase in revenues of \$630,000. A total of \$443,000 of increased revenue is for capital asset replacement and an \$187,000 increase of operational revenue from increased sales and from the rate increase.

The current reserve balance had been built up in preceding years to pay for some of the major capital expenses in the last few years such as the Burnt Cedar Water Disinfection Plant Improvements and water and sewer main projects. The reserve balance will be below Policy targets but the District will be accumulating savings to pay for the Export Project.

The contributions to the reserve will be essentially zero over the next five years as we expect to have an uncommitted reserve fund balance in Year five of \$2.7 million.

<b>2013 Five Year Rate Study</b>	<b>5-Year Total</b>
Operating and Capital Revenue	\$58,410,000
Operating and Capital Expense	\$59,047,000
<b>Net</b>	<b>(\$637,000)</b>

Schedule

Staff will incorporate direction from the Board on the utility rate study. The next step will be at the February 26, 2014 meeting when the Board of Trustees will set the date of the Public Hearing for April 9, 2014 for the revised Water and Sewer Ordinances that include the new rate structure plus additional changes to the Ordinances to align them with our business practices and to authorize Staff to publish the legal notice of same. If the rates are approved at the Public Hearing, then the new rates will become effective with the May 19<sup>th</sup> billing cycle.

**ALTERNATIVES**

Staff can investigate other alternatives based on Board direction and bring back at the February 26, 2014 or March 12, 2014 Board meeting. The public hearing date would then be scheduled for April 23, 2014.

**COMMENTS**

Staff has investigated the equity of the rate structure for the various customer classes. Equity is calculated by determining the proportion of fixed and variable costs generated by each customer class compared to the fixed and variable revenue collected from each customer class. The current rate structure exhibits reasonable equity amongst the three major user classes.

Customer Class	Costs as Percentage of Total Costs	Revenue as Percentage of Total Revenue
Commercial	15.3%	14.9%
Multi-Family	42.9%	40.5%
Single Family	41.8%	44.5%

The current use patterns are showing the rate structure is fairly equitable among the customer classes but we are beginning to see some changes in use patterns that will need to be monitored for the impact to equity. We have seen a change in the multi-family use patterns as occupancy rates are decreasing. The current rate structure is a full service cost model with a pay for what you use commodity charge. This naturally creates a rate structure that is equitable since all customers will pay for what they use. A customer’s base rate is calculated from the meter size which is equivalent to the customer’s demand potential.

Area Water and Sewer Rates

The presentation at the Board meeting includes a slide on the area water and sewer rates. The Table below shows the area water and sewer rates and the increase in rates since the 2013 Utility Rate Study Presentation when compared to the average IVGID customer use pattern.

Agency	Monthly Water and Sewer Rate	Change from 2013 Rate Study
Incline Village GID	\$ 91.17	\$ 5.32
South Tahoe PUD	\$ 82.69	\$ -
Tahoe City PUD	\$ 124.15	\$ 3.26
North Tahoe PUD	\$ 113.69	\$ 1.41
Truckee Donner PUD	\$ 109.25	\$ 2.65
Kingsbury GID	\$ 130.68	\$ 3.44
Round Hill GID	\$ 111.00	\$ -

## **History of IVGID Public Works**

In 1961, the community of Incline Village was being developed by the Crystal Bay Development Company. In order to pay for improvements, The Incline Village General Improvement District (IVGID) was created by Washoe County on June 1, 1961 authorizing the newly created District to levy taxes to pay for improvements and for five elected Trustees to set up and run the District.

The District's first job was to construct, maintain and operate the District's sewer and water systems and to build roads to Washoe County specifications, which were then later dedicated to the County for maintenance and were no longer a District responsibility. The original systems included the Burnt Cedar water intake pump station which supplied water to 2 one-million gallon reservoirs and water rights totaling 1,250 acre feet for domestic consumption. IVGID issued bonds to pay the cost of building water, sewer and road improvements, and the bonds were repaid through assessments levied against the properties that benefited from the improvements.

In 1963 the District's original sewage treatment plant was completed and designed to handle sewage originating from commercial and multi-family residential areas only. The original design of Incline Village was to permit each single family residential lot to construct individual septic tank systems, therefore, capacity was not designed into the original plant for single family residential sewage. Treated effluent was stored in the winter and irrigated the golf course during the summer. In 1966 the first utility flat rates were adopted at \$6.00/month for water and \$2.00/month for sewer rates.

In 1969, Incline Village Inc. proposed to develop an additional 4,000 equivalent residential lots in Incline Village. The Incline Village General Improvement District commissioned an engineering study to determine the water and sewer system improvements to serve all of the present and planned development within the District. During the development by Incline Village Inc., the water and sewer system improvements were constructed according to the original plan to serve the developable lots.

A regulation that was passed in the late 1960's necessitated the construction of the effluent export system to pump treated effluent out of the Tahoe Basin. This was necessary because of a state and federal mandate that the use of septic tanks in the Tahoe Basin be discontinued and that all treated effluent be exported out of the Basin. By 1971, the District had complied with the federal mandate and the treated effluent was exported to a ranch in Douglas County during the irrigation season and to the Carson River during the non-irrigation season. During the period of growth in Incline Village there was also an increase in its boundaries due to annexation and expanded service contracts. The properties along Lakeshore Drive that were not part of the original District and the area between the District and the California State Line also had to find a way to serve their properties with sewage collection, treatment, and export. The residential properties along Lakeshore Drive that were not a part of the District annexed to IVGID in order to obtain sewer service. Washoe County Sewer Improvement District No. 1 (the club area and a small residential area in Crystal Bay), and Crystal Bay General Improvement District (the area between IVGID and Washoe 1) obtained sewer service through maintenance agreements with IVGID. The merger of Washoe County Sewer Improvement District No. 1 was completed in 1978. However, IVGID served the Crystal Bay General Improvement District with sewer service through an agreement until 1996. IVGID was not willing to merge with CBGID until their water system was brought up to IVGID standards, and that was finally done in 1996, at which time the merger with CBGID was completed.

After the construction of the effluent export system, IVGID's treated effluent was being used for irrigation on a ranch in Douglas County in the summer and was being discharged into the Carson River in the winter. New regulations on the disposal of wastewater required IVGID to either upgrade its treatment facility in order to continue disposing of the treated effluent in the Carson River or to have a year-round land-based disposal system. In 1983 IVGID completed the purchase of 900 acres in Douglas County to be used for development of a disposal site for its treated effluent. Construction of the Wetlands Enhancement Facility was completed in 1984 with local and federal funding.

In 1992 the wastewater treatment plant went through a major upgrade to improve the aeration system and solids handling facilities to improve treatment efficiency and redundancy and to increase capacities.

Construction of IVGID's Burnt Cedar Water Disinfection Plant was completed in 1995. The plant used ozone to disinfect IVGID's drinking water and allowed IVGID to receive an exemption from the filtration requirements of the federal Surface Water Treatment Rule.

In 1995 Waste Not was formed within Public Works. Waste Not was designed to develop and manage recycling programs for residential, commercial, and internal customers. In later years Waste Not developed programs including but not limited to Household Hazardous Waste disposal, water conservation, and watershed monitoring.

The Solids Agreement with Bently Agrowdynamics was signed in 1999. The agreement diverted the bio-solids from the landfill to composting at the Bently facility increasing our solid waste diversion rate and providing a low cost and long term disposal option.

In March 2003 the \$3.2 million Public Works facility was completed at the existing site that created "one-stop" shopping for all of IVGID Public Works. The new building now combines utility billing, compliance, utility supervision, engineering, fleet operations, building maintenance, and management under one roof. The new building also replaced the outdated vehicle shop with a new state of the art facility. In 2003, the Solids Handling Dewatering upgrade was completed at the sewage treatment plant which improved processes and reduced costs for handling sewage solids.

The blue bag recycling program was rolled out in 2008 where all recyclable materials are placed in a single bag for collection and delivered to the recycling facility in Truckee.

The Federal Government passed the Long Term 2 Enhanced Surface Water Treatment Rule in 2006 which requires enhanced disinfection to provide additional protection from disease-causing microorganisms and contaminants that can form during drinking water treatment. This is for water systems that use surface water as their raw water supply. The rule requires that IVGID add a second disinfection process by 2013. The CIP has included the installation of a UV disinfection system to be added to the water treatment plant and the replacement of the ozone disinfection equipment which was installed in 1995. This project finished construction in 2012 and is in operation.

The most important project in the Capital Improvement Budget over the next five years is Phase II of the Effluent Export Project. The Effluent Export Project started in 2003 with a planned completion date in 2011 to replace six miles of pipeline, make upgrades to the Spooner Pumping Station, and convert two State Parks wastewater plants into raw wastewater pumping stations with installation of a new forcemain to deliver that wastewater to the District. Through a total of six miles of pipeline have been installed and the work for State Parks has been completed. A total of \$18 million have been spent and the total of all the project phases is expected to cost \$21 million. The remaining \$3 million in project costs was spent upgrading the Spooner Pumping Station which was completed in 2013.

Phase II will replace the remaining six miles of aging pipeline within the Lake Tahoe basin. The six miles of pipeline is comprised of approximately 17,300 lineal feet of welded, cement mortar lined, high pressure pipe and 13,700 lineal feet of bell and spigot, cement mortar lined, low pressure steel pipe. This pipeline experienced a significant leak in 2009. Subsequent investigations confirmed progressive corrosion of this pipeline that necessitates replacement. Design of this project is underway with construction estimated to start in 2014.