



Estes Park Sanitation District  
PO Box 722, Estes Park, CO 80517

### USER FEE RATES IN 2012 – 2014

The Directors of the Estes Park Sanitation District passed the 2012 Financial Budget at the public meeting held on 12/13/11. User Fees for 2012 will increase approximately 8.5 percent. Rates for 2013 and 2014 were also addressed with planned increases of 7 percent and 6 percent respectively. This may change when better information is available in determining our cost structure going forward.

Studies may also be conducted on our billing schedule. The current schedule bases rates on class water use averages for residential customers and actual usage for commercial customers. When the schedule was enacted in 1989, administration and collection costs were treated in the same manner as treatment costs (flow proportioned). The equity of this system may be evaluated going forward.

#### Why Raise User Fee Rates?

The decision to increase rates is not taken lightly. The many components of our operating costs have risen. They include increased testing/ monitoring requirements, and higher commodity costs such as chemicals and fuel. These components have impacted our operation. However, while our costs to operate have risen, the primary reason reflects funding requirements for treatment facility improvements likely to begin in 2012 or 2013. These improvements will begin to address new effluent limits for heavy metals.

#### What Are Heavy Metals and Where Do They Come From?

Estes Park is fortunate to have wonderful tasting water. The taste is derived from the close proximity to the source and the minerals that comprise our geology. While this is positive for taste, it also creates water that is aggressive in nature. The aggressiveness causes corrosion of copper and lead from household and commercial water pipes. The Town of Estes Park Water Department adds a precipitant (zinc orthophosphate) to the water supply to coat your pipes and reduce corrosion. The precipitant does a good job of controlling metals for human consumption. However the level of control is not sufficient to meet the aquatic life requirements in our streams.

While we don't anticipate problems with meeting lead standards, the same cannot be said for copper. Average copper levels in our influent are approximately 44 ug/l (parts per billion). Through our process controls we remove an average of 75 percent of the copper – 10.5 ug/l is discharged to the river at our outfall. At the most stringent level we will need to remove over 90 percent (4.0 ug/l). A similar problem exists for zinc. Zinc is a component of the precipitant used to control the corrosion of copper and lead in your water pipes. While we are grateful for the lower levels of copper and lead in our effluent from its use, it does create another removal issue for us. Regardless, more advanced treatment methods will be required to meet these limits effective in 2015.

#### What Improvements Are Being Considered?

There could be two phases of improvements. The first will involve our facility headworks and include a building to house advanced screening, grit removal, chemical addition and odor control. Advanced

screening and grit removal will be the first steps before processes are implemented to increase removal of metals such as copper and zinc. The building will also house advanced "filtering" equipment to enable us to meet the metals limits. Pilot studies will be done in 2012 to determine the filter equipment necessary. This represents the second phase of the improvements. Depending on variables such as cost, existing resources and financing availability, they both may occur at the same time.

#### Will There Be Other Limits In The Future That Must Be Met?

When The Environmental Protection Agency was formed in 1970, the United States was facing very significant pollution problems. The air quality in cities across our country was very poor. Rivers and lakes in many instances were being used as waste dumps by various industries. Wastewater treatment processes were not adequate to protect our water supplies either. In the beginning the EPA focused on the worst violators and contributors. As these problems and sources were corrected, attention was then paid to other pollution sources. This ongoing process has been in place for 40 years now as we continue to improve our environment to ensure its beneficial use for future generations. During the last 20 years the quality of our effluent has improved very significantly and it will continue to do so going forward.

Science and technology also play a large role in including new pollutants to the list. Understanding the impact of pollutants on environmental health may not have been possible without improvements in detection methods. Removing a pollutant may require new equipment and processes to achieve. Sometimes this can be very expensive. Twenty years ago our staff tested for a ½ dozen parameters such as suspended solids, biological oxygen demand (BOD), and coliform bacteria. Today there are in excess of 50 different items that we routinely test for. Detection limits have changed from mg/l (parts per million) to ug/l (parts per billion). Can parts per trillion be that far away? Fortunately competition among vendors can lead to technology improvements and at more affordable costs.

In the near term we anticipate that limits will be placed on our effluent temperature to minimize the impact on river temperatures. Long term one of the largest concerns will involve nutrient removal. Environmentalists are concerned about the impacts of nutrients – primarily nitrogen and phosphorus – as they enter surface and ground waters from human activities. Nutrient excess can leave an ecosystem out of balance and create algae blooms. Decomposition of these blooms can rob aquatic life of oxygen necessary to exist. Further down the road, efforts will be made to curb endocrine disruptors in our water supply. There are worries that our water supplies are being impacted by all of the medicines, birth control pills and antibiotics etc. that individuals take. These pharmaceuticals inevitably reach our water supplies and their impact is just now being studied. Will it be long before we begin to monitor them in our wastewater? We don't know. The example is used to point out that no longer is the "polluter" a large industry dumping toxins in our water. We are the "polluter" and as methods of detection and removal improve so will the requirements on our discharge. That's why it's important for us to improve our treatment process with one eye on the future. Just as the first phase of headworks improvements will be instrumental in removing metals, that improvement should be part of the solution to achieving nutrient compliance.

Finally, there is one other area that we haven't discussed and that's the requirements of our customers. They expect high quality rivers and streams. They expect odor issues to be kept to a minimum. In short we're expected to be a good neighbor and help create the proper environment for ourselves and guests, and our economy.

If you have questions concerning these new rates or new effluent limits, please stop by the office at 1201 Graves Avenue. I should be available to answer your questions.

James Duell, District Manager