

---

# UTILITY FEES, RATES AND COLLECTIONS



## WATER AND WASTEWATER ASSISTANCE

---

Department of Local Affairs  
1313 Sherman Street, Room 521  
Denver, Colorado 80203  
303-866-2156  
[www.dola.colorado.gov](http://www.dola.colorado.gov)



# UTILITY FEES, RATES AND COLLECTIONS

Colorado Department of Local Affairs  
1313 Sherman Street, Room 521  
Denver, Colorado 80203  
(303) 866-2156  
[www.dola.state.co.us](http://www.dola.state.co.us)

## INTRODUCTION

Colorado Revised Statutes (CRS) provide many options to local governments and other community organizations to allow them to raise revenues for funding needed improvements to water and wastewater systems. This publication details the commonly used mechanisms for local utilities to use to generate revenues to meet their system needs. It is not intended as legal advice, and should not be solely relied on when evaluating revenue options and other utility practices. For more specific guidance local officials should consult the Revised Statutes or their attorney.

For more information or for more DOLA technical assistance publications see the department's web site at [www.dola.state.co.us](http://www.dola.state.co.us) and click on Data, Information and Publications.

## **FEES**

Fees are fixed charges to users of a system in exchange for some specific service or privilege provided by the system. The "tap" or "connection" fee is probably the most common of these. In accounting terms, the revenues generated from tap fees are most commonly classified as non-operating revenue. Fees are used to recover a broad range of other costs, including the following:

Meter testing/calibration fee	Meter size change fee
Meter turn off/on charge	Meter re-read charge
Meter removal charge	Sale of plan/specifications/blueprint copies
New account charge	Emergency water turn-on/off charge
Returned check charge/penalty	Fire protection charge
Appointment/field visit charge	Illegal turn-on penalty
Water tap testing	Illegal water use penalty
Bulk water sales - fire hydrant/water dock	Turn-off/on at main charge
Sales of materials	Delinquent charge

## **Tap, Plant Investment, Impact Fees**

Many different terms are used to describe the fee (or connection charge) required at the time a customer applies to connect his or her property's plumbing system to the public system. In Colorado, the term tap fee often is used to refer to the cost of constructing the physical connection to the main. Plant investment fees (or system development charges) are fees collected to help finance capital

improvements. Plant investment fees can assign the capacity costs associated with growth, at least in part, to those causing the growth instead of existing customers. Making these fees fair and rational is important from the legal and public perception standpoints. Since these fees are dependent on real estate activity, financial planners should be sensitive to the risk of this revenue not being available in times of diminished economic activity.

Waiving tap fees or other system charges as economic development incentives or for other reasons such as subsidized utility service to low-income housing is practiced to some extent in Colorado, but loan agreements or bond covenants may prohibit such practices.

Under the “Land Development Charges” statute at **§29-1-803 CRS** impact fees are to be deposited in an interest-bearing account, accounted for separately from other revenues, and not commingled with other funds. Some examples of language that local governments have used in ordinances and rules and regulations to impose tap fees are listed in Appendix A.

### **Availability of Service Fees**

Colorado Statutes provide special districts (created pursuant to Title 32, Article I) with the authority to charge availability of service fees to repay water and/or sewer debt (**§32-1-1006 CRS**). This specific provision allows special districts to service debt according to a prescribed formula where the revenue generated by the fee cannot exceed 50% of the average usage charge for that system. In addition, the residential property that is assessed the fee must be within 100 feet of the water or sewer line to which it can be connected. Attached in appendix A are some examples of language used by Colorado special districts to authorize the use of availability of service fees.

### **Property Taxes**

A common source of revenues for Title 32 special districts is property taxes generated by a “general” mill levy applied to the assessed value of taxable property within the district. For 2005, records maintained by the Colorado Division of Local Government showed that more than 200 water, sanitation, and water and sanitation districts collect this source of revenue through a “general” mill levy. For 2005 tax collections, these mill levies averaged 6.9 mills for water districts, 3.5 mills for sanitation districts, and 6.6 mills for water and sanitation districts. The majority of the revenue generated by these taxes is used for operating expenses, but some may be used to pay debt. A more common method of paying debt with property taxes is to have voters authorize a “debt” mill levy allowing a special mill levy to be assessed to pay annual debt obligations. The 1992 TABOR amendment to the state constitution places various limits on the revenues that local governments can collect and spend, and local officials should consult with qualified legal and financial advisors when considering new taxes.

### **Readiness to Serve Fees**

Another type of charge used by municipal and special district systems is the readiness to serve fee where customers are billed whose property remains connected to a central water/sewer system even though the property may be vacant and unused.

### **Fire Protection Fees**

The oversizing of a water system to provide this standby service increases capital and annual O&M costs. Recovery of these costs is often through a property tax since it can be argued that the system provides greater benefits to more valuable properties and in turn collects more revenue from these properties. Often, larger water utilities assess a fire protection charge directly to a municipality providing firefighting services. Basing these charges on the number of hydrants in the municipality is a common technique for allocating costs between different areas.

### **Drought Fees/Surcharges**

Drought conditions can disrupt a utility's financial plans, and may require surcharges, rationing or other measures to ensure adequate revenue for the system. Surcharges are imposed generally to fund a certain need, and are in effect for a defined period of time. A way to avoid drought surcharges may be to establish a rate stabilization fund, possibly funded with a surcharge during non-drought years. This may diminish the impact on customers that can result from water conservation measures.

## **RATES**

Setting rates for a water or sewer utility should be a process of allocating expenses (operations, maintenance, debt service, repair/replacement, capital improvements, etc.) to customer classes (residential, commercial, industrial, etc.). In this process, it is often helpful to separate fixed costs (those which recur and can be reliably scheduled) from variable costs (which often are based on usage). The Colorado Revised Statutes generally allow local governments to create rate systems to meet their individual needs. The use of meters is generally considered to be a evidence of a "modern" system and is necessary to equitably bill customers for their demand on the system. All water systems with at least 600 taps must install meters according to **§37-97-101 CRS**.

Many consultants offer rate setting services. They can assist with the complicated financial modeling and accounting implications of rate setting. In addition, various sources of technical assistance are available in this area. One of the most well known is the "Show-Me Ratemaker" software system available from the Missouri Department of Natural Resources' Outreach and Assistance Center at <http://www.dnr.mo.gov/oac/> . Also, the EPA Region 10 Environmental Finance Center at Boise State University can provide its Rate Checkup software

for utility rate setting. More information is available at: <http://sspa.boisestate.edu/efc/> . Department of Local Affairs staff is also available to assist local governments with rate setting and financial planning.

Various types of rate structures are available to utility managers. They range from a simple flat rate (used mostly by wastewater systems and small unmetered water systems which have developed no basis for charging different customers different amounts), to complex block rate structures which, in addition to routine operation and maintenance costs, may take into account capital replacement costs, pressure differentials, number of fixture units per customer, source of supply fees, seasonal fluctuations in usage, water conservation, customers' past consumption patterns, etc. Some of the most common rate structures are listed below.

### **Types of Rate Structures**

*Flat Rate:* This refers to the type of billing utilized for customers on an unmetered system. Can be applied to certain measures such as number of plumbing fixtures or number of rooms per structure served, or size of lawn to be watered, etc.

*Uniform Rate:* This provides a constant rate per unit of water, which does not change with the amount of consumption.

*Descending Block Rate:* Provides a "base" rate for an initial amount of service, and then lower per-unit-charge as more service is used. Does not promote water conservation.

*Ascending, or Inverted Block Rate:* Provides a higher per unit charge as more water is used. Encourages water conservation.

### **Inside-Outside Rate Differences**

Many communities charge their "outside" customers more than what they charge "inside" customers, and provide various reasons for this price differential. Some financial reasons commonly referenced include that inside customers were generally the "first" ones on a system and have consequently invested more in the system over time, property taxes may have from time to time supported the utility, and they are only paid by inside customers, and the overall financial burden related to system expansion or replacement is felt most heavily by inside customers.

A number of factors can be taken into consideration when trying to differentiate between the cost of service among customer classes. During times of growth, it is not uncommon for existing customers to argue that they should not have to pay for costly new facilities that benefit only new customers and growth. Some rate structures attempt to match facilities of a certain age with a certain class of customers, and thereby justify a cost differential. The location of customers in relation to each other or to the treatment plant can be a factor. The use of "pressure zones" or "districts" can be used for cost of service and rate setting purposes.

Another factor which can differentiate one class from another is the demand characteristics of these classes. Customers that place high peak demands on a system can be more costly to serve if they cause treatment plants or pipelines to be oversized. The ratio of maximum hour usage to average day usage could vary significantly from a residential class to an industrial class, and consequently serve as the basis for a cost differential.

Another factor which can be used to differentiate costs between customer groups is the construction or size of the mains that serve those groups. For example, under certain conditions, certain types of pipe (such as cast iron, tile or asbestos) may require more maintenance than other types (such as PVC). Similarly, large volume commercial or institutional customers may argue that they should not bear the costs associated with smaller distribution lines serving primarily residential or other small volume customers.

These factors may also be used in the development of a fee structure, as with impact fees, tap fee surcharges, system development fees, etc.

Some examples of classes of customers that can be established in rate systems include:

- Residential
- Commercial (broken down by category, if appropriate)
- Industrial (broken down by category, if appropriate)
- Institutional (colleges, schools, hospitals, etc.)
- Other governmental utilities (each utility is usually considered separately)
- Inside/Outside jurisdiction customers
- Fire protection (public and private)
- Other classes as deemed appropriate by local cost of service circumstances

Functional wastewater categories for the allocation of costs to user classes can be based upon such factors as:

- Treatment requirements (i.e. volume, BOD, TSS, ammonia, phosphorus, etc.)
- Transmission - for customers who must be served by a lift or pumping station.
- Collection - for customers in low density areas
- Disposal
- Billing and collection - for hard to bill customers
- Customer service
- Accounting and finance
- Administration

## **Measures of Rate Burden**

The characteristics of the local economy and the ability of customers to pay higher utility bills are often raised as issues when a utility is setting rates. A common indicator of local economic conditions is the median household income (MHI) that is generated every ten years by the U.S. Census Bureau for municipalities and counties. In the last two sets of Census data (1990 and 2000), the same two Colorado Counties showed the lowest and highest MHI figures. In 1990, Colorado's county MHI ranged from \$13,057 (Costilla) to \$51,718 (Douglas), with the MHI for the state as a whole being \$30,140. In 2000, the changes in Colorado's economic conditions could be seen as Colorado's county MHI figures ranged from \$19,531 (Costilla) to \$82,929 (Douglas), and the state MHI was \$47,203.

A common measure of rate burden is the comparison of total annual rates (monthly rate x 12) divided by the MHI of the community. EPA has used the "affordability threshold" of 2.5% of MHI when developing guidelines for granting variances at the local level. If applied to the Colorado MHI of \$47,203, this results in a monthly rate of over \$98.

## **Average Rates in Colorado**

Various efforts are made to monitor water and wastewater system rates in Colorado, in part to help local officials evaluate their own practices. Using audited data from annual municipal financial statements, the Division of Local Government calculates an estimated average monthly municipal water and sewer rate per municipal household every year. For the past decade, these averages have been:

<u>DLG Averages</u>	<u>1993</u>	<u>1996</u>	<u>2003</u>
Water	\$20.66	\$25.66	\$29.97
Wastewater	\$11.29	\$13.76	\$14.06

The DLG estimates are developed using a "top-down" methodology whereby municipal water and sewer revenues are aggregated statewide on a fiscal (calendar) year basis, and then converted to average monthly household water and sewer payments, using population and household statistics provided by the state demographer's office. Adjustments are made so revenues derived from commercial and industrial customers are excluded from the analysis. Water and sewer utilities serving large numbers of non-residents are also excluded from the analysis because accurate customer population estimates for these municipalities are not readily available.

Using surveys, the Colorado Municipal League and the Colorado Special District Association generate data on utility rate practices for municipalities and special districts in Colorado. The Colorado Municipal League's periodic publication of Municipal Water & Wastewater Utility Charges and Practices in Colorado showed the following results for the same years for 10,000 gallons of water use, and average base charge for sewer use:

<u>CML Averages</u>	<u>1993</u>	<u>1996</u>	<u>2003</u>
Water	\$20.31	\$22.21	\$27.60
Wastewater	\$14.58	\$14.93	\$14.34

Though averages can be used as measures of how your system operates financially, they should not be the primary basis for setting utility rates. The revenue needs of the system should be the determining factor when setting rates.

### **COLLECTIONS**

The Colorado Legislature has established specific limits on penalties that can be imposed for overdue utility charges. For local governments, these procedures are detailed in **§29-1-1102 CRS**. No delinquency charge can be imposed unless five days have passed since the due date. Delinquency charges that are imposed cannot exceed \$15.00 or five percent of what is owed (excluding earlier penalties) per month. However, interest can also be charged on an amount due, not to exceed

In developing and implementing a collection process, consistency and impartiality are key principles to follow. Properly adopted ordinances/resolutions authorizing the governing board of the system to take action against nonpaying customers are necessary.

The use of private collection agencies is one option, but an alternative that may be less costly is the one that is provided in **§31-20-105(1)(e) CRS** that allows municipal systems to certify to the county treasurer overdue water and sewer fees for collection annually on the property tax bill to the property's owner.

This method is also available to Colorado special districts, under **§32-1-1101(1)(e) CRS** though the amounts the district certifies to the county treasurer must exceed \$150 and be at least 6 months overdue.

## APPENDIX A

### SAMPLE ORDINANCE/RESOLUTION LANGUAGE

#### **Impact, Tap, Plant Investment Fees**

"...An applicant for water service in the Town shall agree to pay a water plant investment fee as may be set by resolution of the Town from time to time. Such fee shall be paid in full prior to connection. New plant investment fees may be charged upon change or enlargement of use by any user. Plant investment fees shall be due and payable at or before the issuance of a building permit..." (*Town of Granby Ordinance 401, Sec. 2-11-22*)

"...At the time of issuance of a permit for a new tap and service connection, the applicant shall pay, to the Town Clerk the appropriate water and sewer tap fees, including the plant investment fee(s) and the installation charge(s). Said payment must be made prior to any work being commenced on the connection to the municipal system. Under no circumstances shall any plant investment charge be waived, as said charge is made to provide revenues for future system improvements..." (*Town of Silverton Ordinance 9-1-5*)

"A plant investment fee for all water taps larger than six (6) inches in diameter shall be negotiated with the City manager and approved by the City council. The negotiated plant investment fee shall be based on the pipe carrying capacity and water and wastewater usage profile. The negotiated plant investment fee shall be collected in addition to the connection fee...and shall be collected concurrently with the connection fee." (*City of Longmont Ordinance 14.08, Section 14.08.635*)

"A tap fee shall be charged by the district for each connection to the public water or sewer system of the district for each residential dwelling unit...A connection fee for hotels, motels, commercial buildings for industrial uses or any other structure shall be determined from time to time by the board of directors upon individual application for such tap, depending upon the nature, size, and use to be made by reason of such connection...Tap fees and permits are not transferable and may be used only on the property to which assigned." (*Mountain Water and Sanitation District Rules and Regulations, Sec. 9.3*)

The water plant investment fee...shall be determined by ...counting the various fixtures...to determine the number of water points...and multiplying the total water points times the sum of twenty dollars...

		Fixture Value (per fixture or as noted)
Toilets and Urinals	Private	0.008
Toilets and Urinals	Public	16.20
Sinks	Private	2.50
Sinks	Public	5.00
Sinks	Commercial	15.00
Swimming Pools (per gallon of capacity)		0.0025
Car wash (per bay)		150.00
Convention Center per seat		1.00
Lawn irrigation Systems (per s.f. of lawn over 3,000 s.f.)		0.004

***(Steamboat Springs Ordinance 1315)***

**Availability of Service Fees**

"...the District may assess availability of service or facilities fees upon providing notice of the meeting to consider such fees. Availability of service or facilities fees shall be assessed solely for the purpose of paying principal and interest on any outstanding indebtedness or bonds to mature and accrue during the annual period within which such fees are payable. Property shall be considered as having water or sewer service available for the purpose of assessing service availability fee when District water and sewer mains are installed in public right of way, easement, private drive, or common area, at an elevation capable of serving the property, and when water or sewer lines are installed within 100 feet of a property line. *(Genessee Water and Sanitation District Rules, 10.16)*

"All property owners shall be charged an availability of service charge for each lot within 100 feet of the public water and sewer system within the District. Two or more adjoining lots which have been combined by a formal vacation of lot lines through an action approved by Jefferson County become a single lot. Adjoining lots may also be consolidated through the exemption procedure described herein..." *(Mountain Water and Sanitation District Rules and Regulations, Sec. 9.11)*

"Availability of Service Charges of \$48.00 per year will be assessed against each property where both sewer and water lines are installed and ready for connection within one hundred feet of the property line of the residential lot to be assessed but to which the sewer and water line have not been connected. However,

charges shall be adjusted to reflect an amount needed to service the debt on an annual basis. CRS 32-1-1006 is attached and made part of this resolution.”  
(*Colorado City Metropolitan District Resolution No. 10-2003*)

### **Readiness to Serve Fees**

"A readiness-to-serve fee shall be charged for all properties which have had service installed, but for which service is turned off, whether such turn-off is voluntary or involuntary..." (*Genesee Water and Sanitation District Rules and Regulations, Section 10.13*)

"...Any person connected to the public sewage system shall pay the monthly service fee regardless of whether the building sewer in question is being utilized. This payment will be required for unoccupied and connected dwellings, businesses shut down or temporarily idle, and vacant mobile home spaces and all other unused connections..." (*Durango West Metropolitan District Resolution 89-03, sec. 8-C*)

"...Any property connection to the system shall pay the minimum rate...for twelve months per year whether the property is occupied or the water system is used."  
(*Town of Grover Ordinance #78-2, Section 15*)

### **Types of Rate Structures**

"The user charge system...must be designed to produce adequate revenues required for operation and maintenance (including replacement). It shall provide that each user which discharges pollutants that cause an increase in the cost of managing the effluent or sludge from the treatment works shall pay for such increased cost." *40 CFR Ch. 1, Section 35.2140 (7-1-92 Edition)*

Any non-residential user with loadings greater than the average residential user needs to pay its pro-rata share compared to the average residential user...A BOD average of 200 parts per million (ppm) and TSS of 250 milligrams per liter (mg/l) average domestic sewage will be acceptable... *State of Colorado Sewage Treatment Construction Grants Program - Standard Operating Procedures, Revised July, 1994, appendix III.*

### **Inside-Outside Rate Differences**

"Outside City customers will be charged one hundred five percent (105%) of the amount charged inside City customers for similar service to compensate for additional infiltration from the longer interceptor lines..." (*City of Englewood Municipal Code 12-2-3, B, 5*)

"The rates...of this Resolution shall be doubled for water users located outside the Town limits of the Town of Granby, Colorado." (*Town of Granby Resolution 1989-11-14*).

### **COLLECTIONS**

"...Fees and charges levied in accordance with this Chapter shall be paid within thirty (30) days from the date of billing to the City. If the bill is not paid within ninety (90) days after billing, it shall be deemed delinquent, whereupon a delinquency charge not to exceed the amount of fifteen dollars (\$15.00) or up to five percent (5%) per month, or fraction thereof, not to exceed a total of twenty-five percent (25%) of the amount due, whichever is greater shall be imposed for collection services. Interest in the amount if eighteen percent (18%) per year shall be charged on the amount due only." (*City of Englewood Municipal Code 12-2-3, H, 1*)

"For a violation of any rule, regulation, or section of this chapter and for the non-payment of charges, the City reserves the right to turn off the water thirty-six (36) hours after posting notice at the address where service is provided. After the water has been turned off from any service line to the user on account of non-payment of water charges, the same shall not be turned on until the back charges are paid in full, together with the expense of turning off and on such water." (*City of Florence Ordinance 2-90 section 1, 1990*)

"Until paid, all fees, rates, tolls, penalties, interests on delinquencies, reasonable attorney fees, and other costs of collection shall constitute a perpetual lien on and against the property served, and any such lien may be foreclosed in the same manner as provided by the laws of the State for the foreclosure of mechanic's liens or may be collected in any other manner legally permissible, including certification to the Grand County Treasurer for collection." (*Town of Granby Ordinance 401, Sec. 2-11-26*).

## APPENDIX B

### STATUTORY PROVISIONS RELATING TO FEES, RATES AND COLLECTIONS

#### GENERAL

29-1-1102 CRS Prohibits local government delinquency charge imposition within 5 days after the scheduled due date, and prohibits charging a penalty on an outstanding penalty amount. Also limits delinquency charges to either \$15 or up to 5% of the amount due.

#### MUNICIPALITIES

31-15-709 (a) CRS Municipalities may assess the costs of water and sewer line construction against adjacent lots or lands proportionate to the frontage on the street in which the line is to be laid.

31-20-105 CRS Municipalities may certify to the County Treasurer overdue water and sewer fees to be collected annually on the tax bill to the property owner.

31-35-617 CRS Municipalities may not terminate sewer use privileges unless the user is outside the municipal limits. Provides for delinquent sewer charges to be collected by the County Treasurer as if they were taxes.

31-35-701 CRS Implementation and collection of “just, reasonable, and necessary sewer rates” to system users outside the municipal limits by ordinance.

31-35-402(f) CRS allows

- \* setting rates and fees
- \* setting minimum charges
- \* tap fee charges
- \* disconnection fees
- \* reconnection fees
- \* delinquency charges (1% per month)
- \* collection of rates, fees, etc. (in advance or otherwise) for service provided
- \* issuance of revenue bonds

**SPECIAL DISTRICTS**

- 32-1-1001(1)(j) CRS allows
- \* setting rates and fees
  - \* collections of liens as foreclosure of mechanics' liens
- 32-1-1001(1)(k) allows special districts to furnish services and facilities outside district boundaries, and establish appropriate rates and fees for those services
- 32-1-1006(1)(b)(l) allows establishment of different rates, fees, and mill levy within a district based upon different levels of service
- 32-1-1006(1)(h)(l)(C) allows availability of service fees on certain vacant land for debt service
- 32-1-1101(1)(e) allows delinquent rates and fees to be collected by the County Treasurer as if they were taxes
- 32-4-522 (2)(a) Calls for rates and fees to be uniform among customers classes, and based upon some measurable consumption factors.

**COUNTIES**

- 30-20-402 (1)(b) allows operation and maintenance of water and sewer facilities

## REFERENCES / FURTHER READING

- Principles of Water Rates, Fees and Charges, AWWA Manual M1, Fifth Edition, 2000, American Water Works Association.
- Water Rates, Fees and The Legal Environment, First Edition, by C. (Kees) W. Corssmit, PhD, 2005, American Water Works Association.
- Water Week, AWWA, vol. 11, no. 47, November 20, 2002, “SAB Urges Affordability Criteria Modifications”
- A Revenue Guide for Local Government, by Robert L. Bland 1989, International City Management Association.
- Comprehensive Guide to Water and Wastewater Finance and Pricing, Second Edition, by George A. Raftelis 1993, by Lewis Publishers.
- Colorado Law of Cities and Counties, Third Edition, by John C. Banks. Published in 1979 by John C. Banks, Attorney at Law.
- Management Policies in Local Government Finance, 1981 by International City Management Association, edited by J. Richard Aronson and Eli Schwartz.
- Colorado Revised Statutes
- Financial Management Manual, Office of the Colorado State Auditor, 2003
- Governmental Accounting, Auditing and Financial Reporting, 1988 by Government Finance Officers Association
- Paying For Growth. Impact Fees Under Senate Bill 15. 2002 by the Colorado Municipal League
- Water and Sewer Utility Charges and Practices in Colorado, 1994, 1997 Colorado Municipal League
- Colorado Special District Association survey
- Heil, Karen A. Municipal Utilities in Colorado - Can They Charge Their Nonresident Customers More Than They Charge Their Resident Customers Just Because The Nonresident Lives On The Wrong Side of the Boundary? University of Colorado Law Review, Volume 60, Number 2, 1989 pp. 357-381.