

CITY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS - BUREAU OF SANITATION
RESIDENTIAL PRIVATE WATER SUB-METER INFORMATION PACKAGE
(Four Dwelling Units And Fewer On A Single Water Meter)



[BOS Services](#)
[SSC Info](#)
[Cost](#) [Meter price](#)
[Summary](#)

INTENTION OF THIS PACKAGE

The information in this package will provide you with the following: To allow customers with **four dwelling units or less** on a single water meter to be billed **Sewer Service Charges (SSCs)** based upon private water sub-meter readings.

1. [Background](#) information about the program.
2. Points to consider about the [benefits](#) and [responsibilities](#) of private sub-metering.
3. The necessary steps to [install](#) a sub-meter.

1. BACKGROUND INFORMATION

The City Council has authorized a procedure that allows City of Los Angeles sewer system customers to use data from private water sub-meters in the calculation of their sewer service charges (**SSC**). The program is totally optional and the customer will bear all costs associated with it.

The program requires that the customer's plumbing be configured to separate the water distribution lines on the customer's property which drain to the sewer ("tributary lines") from those which do not drain to the sewer ("non-tributary lines"). In the residential situation, tributary lines serve interior (domestic) uses, and non-tributary lines serve exterior (primarily irrigation) uses. The customer may install the private sub-meter on either the tributary or the non-tributary line. Hose bibbs may remain attached to the tributary line, but no credit against the SSC will be given. **Only one (1) sub-meter is allowed per DWP water meter in accordance with Los Angeles Municipal Code (LAMC) Sec.64.41.03(g)3ii.** See the [diagram](#) on page 6 for more information.

The SSC system, also known as the **winter water use** program, bases the SSC upon the lowest average daily delivered water to the premise during the [winter rainy season](#) (approximately mid-October to the end of April). This daily average of wastewater generation will be used to determine the customer's SSC bill throughout the following year (six billing periods). The private sub-meter will substitute actual data for the estimate. Thus, the program should benefit many customers who use a greater than average volume of water for irrigation than for tributary uses.

Since the data from the private sub-meter will provide the best available estimate of the sewage flow generated from a customer's property, the City's base rate of \$3.05 per hundred cubic feet (hcf) of sewage flow will be applied to the readings of a private sub-meter (on the tributary line), or the differences between the readings of the Department of Water and Power (DWP) meter and a private sub-meter (on the non-tributary line), to calculate the customer's SSC bill. The \$3.05 per hcf represents the City's cost to treat one hcf of sewage flow. This rate is the same as the SSC rate applied to our customer on the winter water use program.

2. IS THIS PROGRAM BENEFICIAL TO ME?

For those Sewer Service Charge (SSC) customers that may be considering installing a private water sub-meter in order to decrease their SSC bill, the following guidelines will help you decide if this is the right solution for your property.

1. Is your lowest water consumption during the winter rainy season multiplied by (6), higher than the theoretical annual discharge to the sewer (hcf) from the charts listed below? If it is, then you may benefit from the private water sub-meter program.

An easy way to get an accurate idea if installing a private water sub-meter will decrease your SSC bill is to perform the following calculation:

- A. Take the theoretical annual discharge to the sewer (hcf) according to the number of full time residents on your property from the following tables and multiply it by \$3.05:

TABLE 1

Determination of annual sewage production **without Ultra-low-flush Toilets.**

Number of persons	1	2	3	4	5	6	7	8
Annual discharge (hcf)	37.96	75.92	113.88	151.84	189.80	227.76	265.72	303.68

TABLE 2

Determination of annual sewage production **with Ultra-low-flush Toilets.**

Number of persons	1	2	3	4	5	6	7	8
Annual discharge (hcf)	30.66	61.32	91.98	122.64	153.30	183.96	214.62	245.28

This result will approximate what your private sub-meter would indicate.

- B. Next, take your lowest water consumption (hcf) from a **winter rainy season** billing period (typically October 15- May 1) and multiply it by (6) to get your annual discharge to the sewer. Next, multiply your annual discharge to sewer by \$3.05. This will **approximate** what your annual sewer service charge will be under the winter water use program.
- C. Subtract the result in A by the result in B to determine your savings, if any.
- Is your irrigation plumbing totally separate from your inside plumbing? If not, you will have to rearrange your plumbing to separate the tributary and non-tributary uses. There is an exception for hose bibbs, but no credit against the SSC will be given for non-tributary water discharged through hose bibbs. Estimate your replumbing costs.
 - The estimated cost for the private water sub-meter and its installation as depicted in our attached schematic is approximately \$350 to \$600 (this price range is for installation of a one inch meter or smaller). This includes two hours of time for a qualified licensed and bonded plumber (the price for installation of a sub-meter varies widely according to individual plumber prices). If you can do the work yourself (legal only for single family dwellings), then the cost of installing the sub-meter is much less. Add to this the other replumbing costs needed to totally separate your inside plumbing as described in item 2.

3. HOW WOULD I GO ABOUT ACQUIRING A PRIVATE WATER SUB-METER?

[Top Summary](#)

I. RESPONSIBILITIES OF THE PRIVATE SUB-METER PARTICIPANT

- You will be responsible for all the costs associated with the installation and maintenance of the private sub-meter, etc. The private sub-meter belongs to you.**
- Since this is your private water sub-meter, you will be required to maintain it in good operating condition per manufacturer's specifications.**
- You may be required to periodically calibrate the private sub-meter** per manufacturer's specifications and recommendations and send the results to the City.
- You must install the private water sub-meter in a location in front of the house that is readily accessible to the DWP meter readers.**

5. **The meter must be bought from DWP and installed as a horizontal installation.** See note 1 above and [diagram](#) on page 6.
6. **If your sub-meter is malfunctioning and you do not take the necessary steps to correct it, you will be put back on the City's standard billing system (winter water use program).** This system bills you SSC based upon your lowest average daily delivered water to your premise during the preceding winter rainy season billing periods.
7. You may, at any time, decide to discontinue being charged based upon the private sub-meter readings and revert to the City's standard system for determining your SSC (winter water use program) but you will not be allowed back on the private water sub-meter billings until one year has elapsed.
8. You must sign a release form that indemnifies the City from any damages (physical or financial) which may arise from the installation of the private water sub-meter at your premises.

Study the above guidelines and decide if it will be worth the investment. To be eligible for this program, you **must** perform **all** the following steps to change over to the new billing system using a private water sub-meter. **Only one (1) sub-meter is allowed per DWP water meter per LAMC Sec.64.41.03(g)3Aii.**

II. PROCEDURES FOR OBTAINING THE PRIVATE SUB-METER [Top](#)

The person installing the private water sub-meter must be given this information package to read it carefully **before** the sub-meter is installed. He/she must determine if your plumbing configuration is appropriate for the installation of this private water sub-meter and that you have the proper meter size. A licensed plumbing contractor should be consulted on the proper location of the sub-meter and should verify that tributary and non-tributary plumbing is properly segregated.

1. Whoever is doing the installation **must first obtain a plumbing permit** from the Department of Building and Safety (**DBS**). It is preferable that a licensed and bonded plumbing contractor perform this job. There are various DBS offices throughout the City. Please call **213 482-0061** to find the office nearest you.
2. Then, **take the DBS permit to the DWP to purchase a private water sub-meter¹** and its enclosure box (approximately \$80 - \$600 for meter only) depending upon the size of the meter. **The water sub-meter must be purchased from DWP if you want to qualify for this program. DWP will not read the meter if it is not purchased from them.** Please contact DWP at **213 367-2130** to find the office nearest you.
3. After the private sub-meter has been installed, **you must notify DBS that the sub-meter has been installed and is ready for inspection. If the DBS plumbing inspector finds that the tributary and non-tributary lines have not been totally segregated (except for hose bibbs as explained on the diagram), additional plumbing work will be necessary and inspection cost incurred.** Once the DBS plumbing inspector has approved the installation, DBS will notify DWP to begin reading your private water sub-meter and bill you under the new system.
4. You will receive your first DWP bill with SSC on it based upon the private sub-meter readings after you have accrued one complete cycle (approximately 60 days) of private water sub-meter read data. Please read the [SUMMARY](#) on page 7.

NOTICE TO READER

Please note the following examples are purely for illustration purposes only. They are intended to help you decide if this program is beneficial to you. It is not intended to cover every possible SSC case that may arise in the real world.

EXAMPLE 1

- A. Let us assume a family of three with Ultra-low-flush toilets at their premises. From **Table 2** they will theoretically discharge to a sewer **91.98** hcf.
- B. Take your lowest consumption (hcf) from a **rainy season billing period** (October 15 – May 1) and multiply it by six (6) to get annual discharge to the sewer.

DWP billing date	Water usage on bill	
04/17/07 - 06/14/07	- 56 hcf	
02/16/07 - 04/17/07	- 20 hcf	
12/15/06 - 02/16/07	- 14 hcf	14 hcf X 6 billing periods (one year) = 84 hcf
10/14/06 - 12/15/06	- 46 hcf	ADSV = 84 x DWCF (usually about 0.90; for 07/08, 0.75) = 63 hcf (63.0; the DWCF reduces the volume *)
08/16/06 - 10/14/06	- 89 hcf	
06/16/06 - 08/16/06	- 108 hcf	

- C. For cost comparison of the winter water use SSC program with private water sub-metering program, multiply the total amount of water used in one year under both programs by the SSC rate of \$3.05.

SSC under winter water use program: **63 hcf X \$3.05 (SSC rate) = \$192.15**
 SSC under the private sub-metering: **92 hcf X \$3.05 (SSC rate) = \$280.60**

- D. Difference in cost comparison between the two systems.

$$\mathbf{\$192.15 - \$280.60 = - \$88.45}$$

- E. **According to this example, you would have a lower SSC under the winter water use program. Installation of a private water sub-meter would not be advisable.**

EXAMPLE 2

- A. Let us assume a family of three with Ultra-low-flush toilets at their premises. From **Table 2**, they will theoretically discharge to sewer **91.98** hcf.
- B. Take your lowest consumption (hcf) from a **rainy season billing period** (October 15 – May 1) and multiply it by (6) to get annual discharge to the sewer.

DWP billing date	Water usage on bill	
04/17/06 - 06/14/06	78 hcf	
02/16/06 - 04/17/06	44 hcf	
12/24/05 - 02/16/06	34 hcf	34 hcf X 6 billing periods (one year) = 204 hcf
10/14/05 - 12/15/05	120 hcf	ADSV = 204 x DWCF (about 0.90; for 07/08, 0.75) = 153 hcf (153.0; the DWCF reduces the volume *)
08/16/05 - 10/14/05	193 hcf	
06/16/05 - 08/16/05	97 hcf	

- C. For cost comparison of the winter water use SSC program with private water sub-metering program, multiply the total amount of water consumption used in one year by the SSC rate of \$3.05.

SSC under the winter water use: **153 hcf X \$3.05 (SSC rate) = \$466.65**
 SSC under the private sub-metering: **92 hcf (91.98) X \$3.05 (SSC rate) = \$280.60**

- D. Difference in cost comparison between the two systems.

$$\mathbf{\$466.65 - \$280.60 = \$186.05}$$

- E. **According to this example, you would have a lower SSC under the private water sub-meter program. Installation of a private water sub meter would probably be advisable.**

- F. Assume the private water sub-meter and its installation cost is **\$400**. The length of time that it would take you to recover your up-front cost of \$400 is calculated as follows:

$$\mathbf{\$400 \text{ divided by } \$186.05 = 2.15 \text{ years (or less when the DWCF is greater than 0.75).}$$

REQUEST FOR SSC ADJUSTMENTS OR MORE INFORMATION

Financial Management Division (FMD) can do an investigation, upon written request, to see if you qualify for an adjustment before any money is spent by you to install a private water sub-meter. FMD will require that the customer send a letter that states the reason you believe the property qualifies for an adjustment such as water leak, newly planted area, swimming pool refill, vacancy, new customer to DWP, two (2) or more water meters, etc. Also include a copy of the latest DWP bill or bills for the service address. The requests for an SSC adjustment must be in writing and sent to: **Bureau of Sanitation, Residential SSC, PO Box 79083, Los Angeles, CA 90079-0083 or fax it to: 213 485-4269.**

HOW CAN I GET MORE INFORMATION REGARDING THIS PROGRAM?

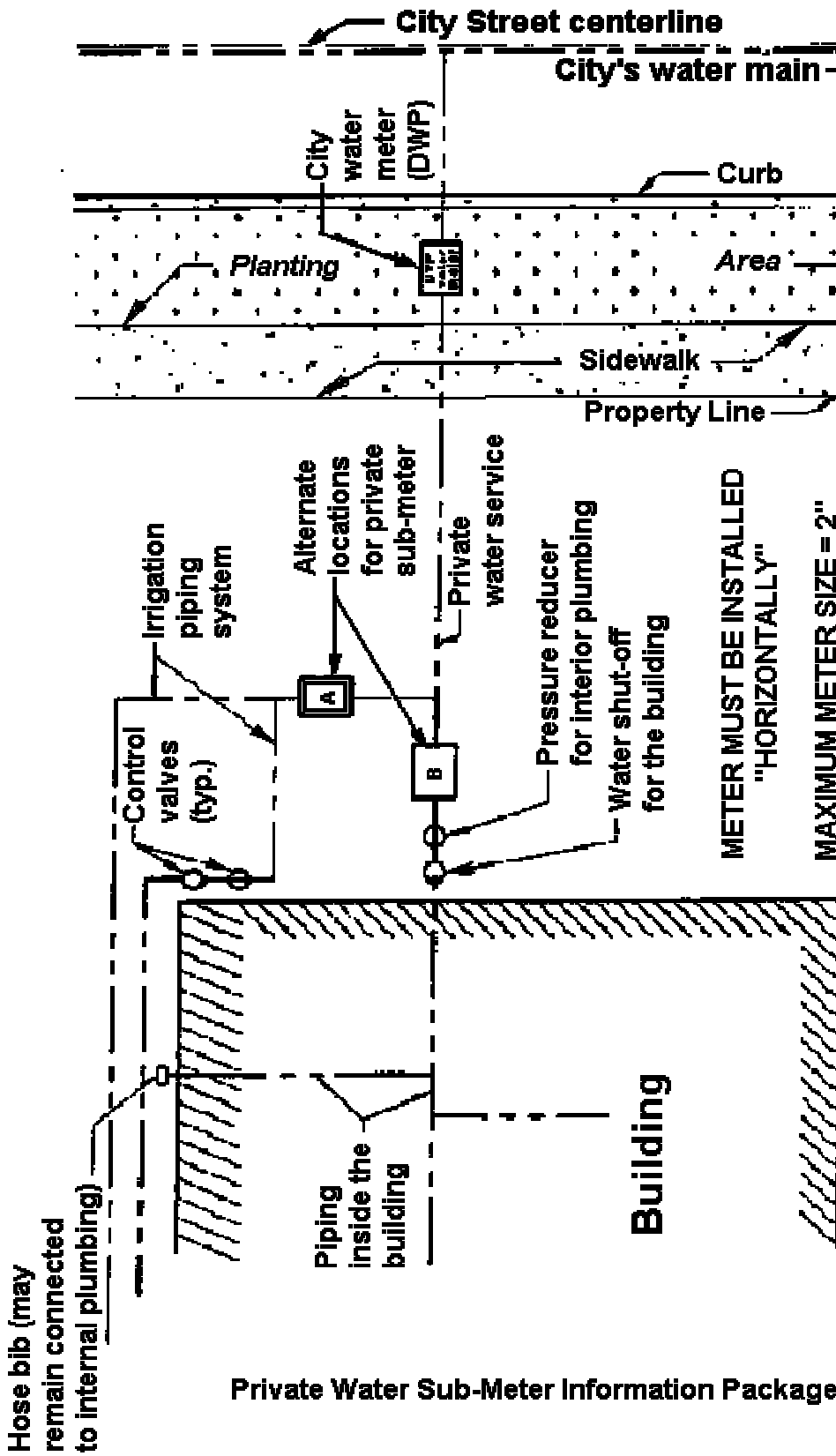
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If you have additional questions, please call the Bureau of Sanitation, Financial Management Division at 213 485-2405 or the SSC Hotline at **1 800 540-0952 or 213 473-4181**. You can also visit our web site at <http://www.lacitysan.org/fmd/ssc1.htm> for additional information.

1 You will be buying an approved meter and also save a considerable amount of money by purchasing a private water sub-meter from DWP, including the following:

- The sub-meters sold by DWP have met their accuracy and quality standards.
- The sub-meters have uniform characteristics because they are from the same vendor.
- The City's Department of Building & Safety and DWP's Water Meter Division have thoroughly tested the sub-meters.
- DWP passes on the savings (10% discount on some meters) that it receives from the manufacturer when it purchases the meters in bulk. DWP's meter vendor was selected based on competitive bids to ensure that you receive the best possible price.

[Meter Price](#) [Summary](#)



Hose bibb (may remain connected to interrial plumbing)

Private Water Sub-Meter Information Package

METER MUST BE INSTALLED "HORIZONTALLY"
MAXIMUM METER SIZE = 2"

Note: SUB-METER A is preferable and less likely to create pressure loss to building.

SUB-METER B is acceptable providing there are no irrigation connections downstream of sub-meter. In low pressure areas there could be a noticeable pressure loss to building with this installation.

NOT TO SCALE

Sewer Service Charge Private Water Sub-Meter Alternative Locations

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SUMMARY INSTALLATION OF A PRIVATE WATER SUB-METER

[Com'l sub-meter](#)
[Res'l sub-meter](#)

Obtain the Private Water Sub-Meter information packet from FMD, DBS or DWP*. Read the package and decide if it is to your advantage to install the meter. You may call FMD at 1 800 540-0952 or 213 473-4181 for information.

1. DECIDE IF THE METER IS TO BE INSTALLED ON THE DOMESTIC LINE OR THE IRRIGATION LINE. **Only one private sub-meter per DWP metered line.**
See sketch on page 4 of the commercial sub-meter info packet or [page 6](#) of the residential sub-meter info.
2. OBTAIN PLUMBING PERMIT "FOR PRIVATE WATER SUB-METER" FROM DBS
3. TAKE PERMIT TO DWP & PURCHASE SUB-METER. Call DWP AT 213 367-2130 for the nearest location to pick up sub-meter.
4. INSTALL SUB-METER (Only a LICENSED PLUMBER can do installations for commercial, multi-residential, etc., properties).
5. CALL DBS TO HAVE THE SUB-METER INSTALLATION INSPECTED.

STEPS CITY DEPARTMENTS MUST COMPLETE

- A. DBS WILL INSPECT THE INSTALLATION AND SEND MEMO TO DWP NOTING TYPE A OR B INSTALLATION ON SKETCH. See the [sub-meter info diagram](#) for explanation.
- B. DWP WILL MODIFY ACCOUNT TO BILL SSC BASED ON SUB-METER READINGS.

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- * **DBS** - Department of Building & Safety - **213 482-0061**
DWP - Department of Water & Power - **213 367-2130**
FMD - Bureau of Sanitation, Financial Management Division – **1 800 540-0952 or 213 473-4181**

Includes DBS info received 4/21/99

[Meter Price](#)

**PRIVATE WATER SUB-METER PROGRAM
WATER FACILITY CHARGES
FISCAL YEAR 2006/2007**

**1" AND Smaller Sewer Sub-Meter Cost Package****NOTES:** ↓

#2 Plastic Meter Box w/RPM Cover (includes hardware)	\$ 45
5/8" X 3/4" Meter	\$ 80
1" Int. Meter	\$ 95
1" Reg. Meter	\$ 125
Meter with Box included: (5/8")	\$ 125
Meter with Box included: (1" Int.)	\$ 140
Meter with Box included: (1" Reg.)	\$ 170

1 1/2" to 2" Sewer Sub-Meter Cost Package

#3 Plastic Meter Box w/RPM Cover (includes hardware)	\$ 180
1 1/2" Meter (included 1 1/2" flange & valve)	\$ 280
2" Meter (included 2" flange & valve)	\$ 345
Meter with Box included: (1 1/2")	\$ 460
Meter with Box included: (2")	\$ 525

Note: The meter must be purchased from DWP and a [plumbing permit](#) obtained from and inspection by Building & Safety is required to qualify the property for billing of the sewer service charge under the private water sub-meter program.

DWP at 213 367-2130 has the most meter information and current prices so call to verify. The larger meters normally require extra hardware and it is reflected in the prices above.

Also see: <http://www.ladwp.com/ladwp/cms/ladwp002068.jsp>
(SCHEDULE OF CHARGES FOR WATER FACILITIES - FISCAL YEAR 2006/2007)

Bureau of Sanitation Hotline (to request info packages only) 1 800 540-0952 or 213 473-4181.

Info Packages web sites: (residential) <http://www.lacitysan.org/fmd/submtrres.htm>
(commercial) <http://www.lacitysan.org/fmd/submtrcom.htm>