

IDENTIFYING WATER CONSERVATION

TARGETS AND GOALS

IDENTIFYING TARGETS AND GOALS – BASELINE GPCD

A base use figure, or **baseline**, should be included to calculate your estimated savings. Consider state and regional targets and goals, local climate, and demographics (*i.e., wet year versus dry year, high usage versus low usage*).

Once a baseline has been identified, you can use this to help determine and set appropriate goals for water conservation and loss prevention for 5 and 10 years into the future.

Remember, identifying future targets and goals is a required part of the Water Conservation Plan and is the foundation for reducing the loss or waste of water, improving water use efficiency, and for increasing the reuse of water.

IDENTIFYING TARGETS AND GOALS - TOTAL GPCD

(GPCD= Gallons Per Capita Per Day)

1. Determining Total GPCD is helpful and statutorily required in establishing water-use benchmarks and evaluating conservation measure effectiveness within your utility.
2. To calculate Total GPCD, you must know the entity's total system input and the permanent population of the given service area.
3. Total system input (TSI) is calculated by adding the water produced to any imported water minus any exported water.

(TSI = (Produced water + Imported water) – Exported water)

4. Once you have calculated your Total System Input (TSI) you must divide that total by your permanent population and then divide by 365 days (1 year) to get your Total GPCD.

(GPCD = TSI / Permanent Population / 365)

IDENTIFYING TARGETS AND GOALS – RESIDENTIAL GPCD

(GPCD= Gallons Per Capita Per Day)

1. Determining Residential GPCD is helpful and statutorily required in establishing water-use benchmarks and evaluating conservation measure effectiveness within your utility specifically for the residential use customers.
2. To calculate Residential GPCD, you must know the entity's Residential water use (Single Family and Multi-family water use) and the permanent residential population of the given service area.

Residential GPCD = (Gallons for Residential Use / Residential Population) / 365

3. Once you have calculated your Residential GPCD, depending on the entities water use, this can help determine if targeted water conservation efforts can be made towards the residents of the service area using specific Best Management Practices.

IDENTIFYING TARGETS AND GOALS – WATER LOSS

(GPCD= Gallons Per Capita Per Day)

An annual water loss audit is the best way to determine your entity's baseline and is mandatory for entities receiving financial assistance from TWDB. An annual water loss audit is recommended for all other entities.

1. *Water Loss GPCD = (Total Water Loss / Permanent Population) / 365*
2. *Water Loss Percentage = (Total Water Loss / Total Gallons in System) x 100;*
or (Water Loss GPCD / Total GPCD) x 100

It is mandatory for all retail water providers to perform a water loss audit every five years. For more information on water loss auditing, refer to the **Water Loss Audit Manual for Texas Utilities**.

Direct Link:

https://www.twdb.texas.gov/publications/brochures/conservation/doc/WaterLossManual_2008.pdf?d=5718.5

IDENTIFYING TARGETS AND GOALS

To assist you in explaining your targets and goals in your Water Conservation Plan, use:

TWDB's Form 1964 -Water Conservation Plan 5- and 10-Year Goals for Water Savings

Water Conservation Plan Goals Table
TWDB Form No.1964
Title 31 TAC Chapter 363, Rule §363.15 (B)

Texas Water
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WATER CONSERVATION PLAN 5- AND 10-YR GOALS FOR WATER SAVINGS

Name:

Water Conservation Plan Year:

	Historic 5-yr Average	Baseline*	5-yr Goal for year _____	10-yr Goal for year _____
Total (GPCD) ¹				
Residential (GPCD) ²				
Water Loss (GPCD) ³				
Water Loss (Percentage) ⁴	%	%	%	%

1. Total GPCD = (Total Gallons in System ÷ Permanent Population) ÷ 365
2. Residential GPCD = (Gallons Used for Residential Use ÷ Residential Population) ÷ 365
3. Water Loss GPCD = (Total Water Loss ÷ Permanent Population) ÷ 365
4. Water Loss Percentage = (Total Water Loss ÷ Total Gallons in System) x 100; or (Water Loss GPCD ÷ Total GPCD) x 100

GPCD - Gallons Per Capita Per Day

*A base use figure, or baseline, should be included to calculate your estimated savings. Consider state and regional targets and goals, local climate, and demographics (i.e. wet year versus dry year, high usage versus low usage).

To access this form, go to:

https://www.twdb.texas.gov/conservation/municipal/plans/doc/TWDB-%20WCP_GoalsTableForm_2022.pdf

For additional information, please contact TWDB's Municipal Water Conservation team at wcpteam@twdb.texas.gov or 512-475-1639