

# **Urban Water Use Efficiency Recommendation Package: Glossary and Abbreviations and Acronyms**

**WUES-DWR-2021-21**

**A Report to the State Water Resources Control Board  
Prepared Pursuant to California Water Code Sections  
10609.6(a)(1), 10609.8(a), 10609.10, 10609.10(b)(2), 10609.14,  
10609.16, and 10609.20**

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California Department of Water Resources  
Water Use Efficiency Branch

Note: This report is part of the package of reports developed by the California Department of Water Resources to meet the requirements of Senate Bill 606 and Assembly Bill 1668 of 2018 for urban water use efficiency.

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# 1.0 Glossary

Listed below for easy reference are key terms used in the various reports included in the California Department of Water Resources' Urban Water Use Efficiency Recommendation Package. Where applicable, definitions from statutes and regulations are provided. Note that all reports in the Urban Water Use Efficiency Recommendation Package are given a serial number in the form of "WUES-DWR-2021-xx."

**animal exercising arena.** An open space used for animal training, exercises, and activities. An exercise arena can also be referred to as a horse corral, paddock, or other non-vegetated exercise and riding areas (collectively, "corrals").

**best management practice.** A set of practices, measures, or procedures that are beneficial, empirically proven, cost effective, and widely accepted by the professional community.

**bioengineered slope.** A slope designed and constructed with live vegetation as an integral component of stability.

**bonus incentive.** The adjustment to the annual urban water use objective that an urban retail water supplier may have based on the eligible potable reuse volume, as described in California Water Code Section 10609.20(d).

**California Irrigation Management Information System.** A network of automated weather stations that are owned and operated cooperatively between the California Department of Water Resources and local agencies. The stations are installed in most of the agricultural and urban areas in the State of California and provide farm and large landscape irrigation managers and researchers with "real time" weather data to estimate reference evapotranspiration use to estimate crop and landscape evapotranspiration rates and make irrigation management decisions.

**Census County Division.** A subdivision of a county used by the U.S. Census Bureau for the purpose of presenting statistical data that are delineated cooperatively with state and local government authorities.

**commercial agricultural use of water in residential parcels.** Water used for products produced on residential parcels for commercial purposes.

**commercial, industrial, and institutional parcels.** For the purposes of variance development, commercial, industrial, and institutional parcels are property parcels with a commercial, industrial, and institutional land use designation under the governing general plans of counties and cities.

**commercial, industrial, and institutional water use.** Water used by commercial water users, industrial water users, institutional water users, and large landscape water users, as defined in California Water Code Section 10608.12(d).

**commercial, industrial, and institutional water use best management practice implementation program.** A component (or program) of the Commercial, Industrial, and Institutional Water Use Efficiency Program that requires urban retail water suppliers to include an implementation program for commercial, industrial, and institutional water use best management practices.

**commercial, industrial, and institutional water user water management plan.** A water management plan developed by or for a commercial, industrial, and institutional water user to identify water uses and opportunities for improvement in water use efficiency and define an implementation and finance strategy.

**commercial water user.** A water user that provides or distributes a product or service, as defined in California Water Code Section 10608.12(e).

**consumption rate.** The average amount an element is consumed or expended during a given time interval.

**conversion threshold.** The minimum size threshold for converting mixed-use commercial, industrial, and institutional dedicated irrigation meters or In-Lieu Technologies.

**dedicated irrigation meter.** A meter used only for irrigation of outdoor landscape areas. However, a mixed-use meter with no more than five percent of total delivered water serving non-landscape irrigation purposes can also be considered a dedicated irrigation meter for the purpose of the urban water use objective and actual water use calculations and reporting.

**dedicated meter.** A meter used for outdoor water use purposes.

**dew point temperature.** The temperature at which water vapor in the air condenses into liquid water at the same rate at which it evaporates.

**direct potable reuse.** The planned introduction of recycled water either directly into a public water system, as defined in Section 116275 of the California Health and Safety Code, or into a raw water supply immediately upstream of a water treatment plant. Direct potable reuse includes, but is not limited to, the following: (1) Raw water augmentation means the planned placement of recycled water into a system of pipelines or aqueducts that deliver raw water to a drinking water treatment plant that provides water to a public water system, as defined in Section 116275 of the California Health and Safety Code. (2) Treated drinking water augmentation means the planned placement of recycled water into the water distribution system of a public water system,

as defined in Section 116275 of the California Health and Safety Code, as defined in California Water Code Section 13561(b).

**dry-bulb temperature.** The ambient temperature, measured by a thermometer freely exposed to the air but shielded from radiation and moisture.

**efficient water use technology.** Any device or process that improves water use efficiency and does not directly measure the amount of water used. Efficient water use technologies are not equivalent technologies.

**environmental buffer.** A water body such as an aquifer, wetland, river, or reservoir which provides a number of benefits. Benefits include contaminant removal, dilution and blending, and time to detect and respond to failures before final treatment and distribution. These benefits, in conjunction with varying levels of upstream treatment, provide the necessary public health assurances required of potable reuse projects.

**equivalent technology.** Any other device or process that is not a dedicated irrigation meter that measures the volume of water delivered to the landscape and reports directly to the urban retail water supplier, on the same time interval as service area dedicated irrigation meters and with the same accuracy as service area dedicated irrigation meters, such that it can be used for billing purposes if an urban retail water supplier chooses to do so.

**evaporative cooler.** A device that cools air through the evaporation of water.

**evaporative cooling.** The process by which thermal energy transfers from hot, dry air to liquid water, causing some of that water to vaporize and create cool, moist air.

**evapotranspiration.** The amount of water transpired by plants, retained in plant tissues, and evaporated from plant tissues and surrounding soil surfaces.

**evapotranspiration factor.** An adjustment factor when applied to reference evapotranspiration that adjusts for plant factors and irrigation efficiency which are two major influences upon the amount of water that needs to be applied to the landscape.

**evapotranspiration of applied water.** The amount of consumptive use by crops, landscapes, or other vegetation. Evapotranspiration of applied water is the portion of evapotranspiration that was provided by applied irrigation water.

**Existing Facility.** An existing facility for bonus incentive is one that meets all of the following: (1) the facility has a certified environmental impact report, mitigated negative declaration, or negative declaration on or before January 1, 2019; (2) the facility begins producing and delivering potable reuse water on or before January 1, 2022; (3) the facility uses microfiltration and reverse osmosis technologies to produce the potable reuse water, as described in California Water Code Section 10609.20(d)(4); and (4) the

North City Project, phase one of the Pure Water San Diego Program, for which an environmental impact report was certified on April 10, 2018 are also included, as defined in California Water Code Section 10609.21(a).

**high levels of total dissolved solids.** For the purposes of variance development, high levels of total dissolved solids in recycled water were defined as between 900 and 1,600 milligrams per liter.

**horse corral.** An open space used for horse training exercises and activities. Horse corrals can also be referred to as animal exercise arenas, paddocks, or other non-vegetated exercise and riding areas (collectively referred to as, “corrals”).

**hydrologic region.** A geographical division of the State of California based on the local hydrologic basins. The California Department of Water Resources divides the State of California into 10 hydrologic regions that correspond to the State’s major water drainage basins: North Coast, North Lahontan, Sacramento River, San Francisco Bay, Central Coast, San Joaquin River, Tulare Lake, South Coast, South Lahontan, and Colorado River.

**indirect potable reuse.** The planned introduction of recycled water into a public water system, as defined in Section 116275 of the California Health and Safety Code, through the use of an environmental buffer such as that in the indirect potable reuse for groundwater recharge or reservoir water augmentation as described in California Water Code Sections 13561(c) and 13561(d).

**indirect potable reuse for groundwater recharge.** The planned use of recycled water for replenishment of a groundwater basin or an aquifer that has been designated as a source of water supply for a public water system, as defined in Section 116275 of the California Health and Safety Code, as defined in California Water Code Section 13561(c).

**industrial water user.** A water user that is primarily a manufacturer or processor of materials as defined by the North American Industry Classification System code sectors 31 to 33, inclusive, or an entity that is a water user primarily engaged in research and development, as defined in California Water Code Section 10608.12(i).

**In-Lieu Technologies.** Technologies that improve landscape water use efficiency by any means other than the direct measurement of water use that is an equivalent technology. In-Lieu Technologies refers to the devices, equipment, or analytical methods that are defined in the California Department of Water Resources’ recommended In-Lieu Technologies Performance Measure.

**institutional water user.** A water user dedicated to public service. This type of user includes, among other users, higher education institutions, schools, courts, churches,

hospitals, government facilities, and nonprofit research institutions, as defined in California Water Code Section 10608.12(j).

**irrigable-irrigated land.** A landscape area of healthy vegetation where the vegetation appears to be in growth, not senesced, and is foliated. The area is presumed to be maintained and managed through active irrigation.

**irrigable-not irrigated.** A landscape area of planted and previously maintained vegetation that appears water stressed (brown or leafless plants). These are areas that likely were not irrigated when the imagery was taken, but possibly were irrigated in the past, and may be irrigated again during the year after the imagery was taken.

**irrigation efficiency.** The efficiency of water application and use, calculated by dividing a portion of applied water that is beneficially used by the total applied water, expressed as a percentage. The two main beneficial uses are crop water use (evapotranspiration) and leaching to maintain a salt balance.

**key performance indicator.** A performance metric for a specific business activity which is a quantifiable measure of performance over time for a specific objective.

**large landscape.** A nonresidential landscape as described in the performance measures for commercial, industrial, and institutional water use adopted pursuant to California Water Code Section 10609.10, as defined in California Water Code Section 10808.12(l).

**Last-In-First-Out.** Last-In-First-Out assumes recycled water entering an environmental buffer does not mix with the environmental buffer volume of water from other sources and that this recycled water is extracted first when using the environmental buffer water supplies.

**leaching requirement.** Leaching is the basic means for controlling salinity. The leaching requirement is the extra amount of water applied to percolate (or move) salts below the plant root zone. Also known as the “leaching fraction.”

**livestock.** The U.S. Code of Federal Regulations Section 780.328 defines "livestock" as, "cattle, sheep, horses, goats, and other domestic animals ordinarily raised or used on the farm. Turkeys or domesticated fowl are considered poultry and not livestock." California Civil Code Section 3080 states "livestock means any cattle, sheep, swine, goat, or horse, mule or other equines." For the purposes of variance development, only livestock greater than 200 pounds were considered because they consume more water on a daily basis than smaller livestock and could therefore have a material effect on an urban retail water supplier's water use.

**local emergency.** Local emergency is as established in California Government Code Section 8558(c). A “local emergency” means the duly proclaimed existence of

conditions of disaster or of extreme peril to the safety of persons and property within the territorial limits of a county, city and county, or city, caused by conditions such as air pollution, fire, flood, storm, epidemic, riot, drought, cyberterrorism, sudden and severe energy shortage, plant or animal infestation or disease, the Governor's warning of an earthquake or volcanic prediction, or an earthquake, or other conditions, other than conditions resulting from a labor controversy, which are or are likely to be beyond the control of the services, personnel, equipment, and facilities of that political subdivision and require the combined forces of other political subdivisions to combat, or with respect to regulated energy utilities, a sudden and severe energy shortage requires extraordinary measures beyond the authority vested in the California Public Utilities Commission. California Government Code Section 8558 also defines two other conditions or degrees of emergency (state of emergency and state of war emergency).

**lot size.** The total parcel area, less the building footprint.

**major emergency.** See "qualified major emergency."

**major water users.** Users that use a significant percentage of an individual urban retail water supplier's total supply, or users that generally use a substantial amount of process water as part of their regular operations.

**material effect.** Having real importance or great consequences. In the context of California Department of Water Resources' recommendations regarding the urban water use objective and variances, a material effect is an effect on the urban water use objective that could influence the compliance status of an urban retail water supplier.

**maximum applied water allowance.** The upper limit of annual applied water for the established landscaped area, as specified in the Model Water Efficient Landscape Ordinance. It is based upon the area's reference evapotranspiration, the evapotranspiration factor, and the size of the landscape area.

**mixed-use meter.** A meter serving both indoor water use and outdoor landscape irrigation.

**new landscape.** New construction projects with an aggregate landscape area equal to or greater than 500 square feet requiring a building or landscape permit, plan check or design review, as defined in California Code of Regulations Section 490.1(a)(1).

**noncommercial agricultural use of water in residential parcels.** Water used to grow products on residential parcels with noncommercial intentions.

**Other Facility.** Other facility for bonus incentive is one that is not an Existing Facility for bonus incentive; that is, a facility, using any approved technologies for potable recycled water production, that either has a certified environmental impact report, mitigated



negative declaration, or negative declaration completed after January 1, 2019, or begins production and delivery of potable recycled water after January 1, 2022.

**payback period.** The amount of time before the cost savings exceed the initial upfront cost to install the device or to reach the break-even point.

**performance measures.** Actions to be taken by urban retail water suppliers that will result in increased water use efficiency by commercial, industrial, and institutional water users. Performance measures may include, but are not limited to, educating commercial, industrial, and institutional water users on best management practices, conducting water use audits, and preparing water management plans. Performance measures do not apply to process water, as defined in California Water Code Section 10608.12(n).

**potable reuse.** Direct potable reuse, indirect potable reuse for groundwater recharge, and reservoir water augmentation, as defined in California Water Code Section 13561, as defined in California Water Code 10608.12(o).

**process water.** As defined in California Water Code Section 10608.12(p), this is water used by industrial water users for producing a product or product content or water used for research and development. Process water includes, but is not limited to, continuous manufacturing processes, and water used for testing, cleaning, and maintaining equipment. Water used to cool machinery or buildings used in the manufacturing process or necessary to maintain product quality or chemical characteristics for product manufacturing or control rooms, data centers, laboratories, clean rooms, and other industrial facility units that are integral to the manufacturing or research and development process is process water. Water used in the manufacturing process that is necessary for complying with local, State, and federal health and safety laws, and is not incidental water, is process water. Process water does not mean incidental water uses.

**psychrometrics.** The study of thermodynamic properties of air-vapor mixtures.

**public participation.** Activities that provide opportunities for interested members of the public to be informed of the development process of recommendations for water use efficiency standards, variances, and performance measures.

**public water system.** A system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year. A public water system includes the following: (1) any collection, treatment, storage, and distribution facilities under control of the operator of the system that are used primarily in connection with the system; (2) any collection or pretreatment storage facilities not under the control of the operator that are used primarily in connection with the system; and (3) any water system that treats water on behalf of one or more public

water systems for the purpose of rendering it safe for human consumption, as defined in California Health and Safety Code Section 116275(h).

**qualified major emergency.** Based on the conditions or degrees of emergency, defined in California Government Code Section 8558(b), that have a direct connection to water use or water loss, or is declared by local water agencies as a “water shortage emergency” per California Water Code Section 350.

**raw water augmentation.** The planned placement of recycled water into a system of pipelines or aqueducts that deliver raw water to a drinking water treatment plant that provides water to a public water system, as defined in California Health and Safety Code Section 116275, as defined in California Water Code 13561(b)(1).

**recycled municipal wastewater contribution.** The running monthly average of total volume of the recycled municipal wastewater used for replenishing a groundwater basin and credited diluent water for the preceding 120 months, as described in California Code of Regulations, Title 22, Section 60320.116(a).

**recycled water.** Water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is, therefore, considered a valuable resource, as defined in California Water Code Section 13050(n), as defined in California Water Code Section 10608.12(q).

**reference evapotranspiration.** The evapotranspiration rate from an extended surface of 3- to 6-inch-tall (8- to 15-centimeter-tall) green grass cover of uniform height, actively growing, completely shading the ground, and not short on water (the reference evapotranspiration rate reported by the California Irrigation Management Information System).

**rehabilitated landscapes.** Any relandscaping project that requires a permit, plan check, or design review; and the modified landscape area is equal to or greater than 2,500 square feet, as defined in California Code of Regulations Section 491(ooo).

**return on investment.** A profitability metric used to evaluate the efficiency of an investment or to compare the efficiency of a number of different investments.

**relative humidity.** The amount of water vapor present in air expressed as a percentage of the amount needed for saturation at the same temperature.

**reporting period.** The years for which an urban retail water supplier reports compliance with the urban water use target, as defined in California Water Code Section 10608.12(s).

**reservoir water augmentation.** The planned placement of recycled water into a raw surface water reservoir used as a source of domestic drinking water supply for a public

water system, as defined in California Health and Safety Code Section 116275, or into a constructed system conveying water to such a reservoir, as defined in California Water Code 13561(d).

**residential parcels.** For the purposes of variance development, residential parcels are property parcels with a residential land use designation under the governing general plans of counties and cities.

**seasonally occupied home.** Homes occupied for part of the year, seasonally or for recreation, that include second homes, vacation homes, and vacation rentals, provided that the home is still categorized as a residence. It is not necessary for a seasonally occupied home to have any particular seasonal pattern of occupancy – only that it is not the usual residence for any individual. For the purposes of variance development, all residential homes with seasonal, recreational, or occasional occupants were counted as seasonally occupied.

**service connection.** The point of connection between the customer's piping or constructed conveyance, and the water system's meter, service pipe, or constructed conveyance (California Health and Safety Code Section 116275(s)).

**Special Landscape Area.** An area of the landscape dedicated solely to edible plants, areas irrigated with recycled water, water features using recycled water and areas dedicated to active play such as parks, sports fields, golf courses, and where turf provides a playing surface, as defined in California Code of Regulations, Title 23, Section 491(iii).

**stakeholder engagement.** Activities that engage stakeholders who have explicitly chosen to actively participate in the development of recommendations for water use efficiency standards, variances, and performance measures by providing input specific to the various components.

**stakeholder outreach.** Public participation and stakeholder engagement activities that are designed to facilitate a dialogue between the California Department of Water Resources and its stakeholders in an inclusive, transparent, and accessible manner, and that advance information sharing to the benefit of the development process for recommendations on water use efficiency standards, variances, and performance measures.

**stakeholders.** A broad group of members of the public with vested interests in the development of the recommendations on water use efficiency standards, variances, and performance measures. Stakeholders included, but were not limited to, representatives of State of California agencies, cities, counties, urban retail water suppliers, environmental organizations, industry, professional consultants, and other interested parties and the public.

**state of emergency.** State of emergency is as established in California Government Code Section 8558(b). “State of emergency” means the duly proclaimed existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions such as air pollution, fire, flood, storm, epidemic, riot, drought, cyberterrorism, sudden and severe energy shortage, plant or animal infestation or disease, the Governor’s warning of an earthquake or volcanic prediction, or an earthquake, or other conditions, other than conditions resulting from a labor controversy or conditions causing a “state of war emergency,” which, by reason of their magnitude, are or are likely to be beyond the control of the services, personnel, equipment, and facilities of any single county, city and county, or city and require the combined forces of a mutual aid region or regions to combat, or with respect to regulated energy utilities, a sudden and severe energy shortage requires extraordinary measures beyond the authority vested in the California Public Utilities Commission. California Government Code Section 8558 also defines two other conditions or degrees of emergency (state of war emergency and local emergency).

**state of war emergency.** State of war emergency is as established in California Government Code Section 8558(a). “State of war emergency” is the condition that exists immediately, with or without a proclamation thereof by the Governor, whenever this state or nation is attacked by an enemy of the United States, or upon receipt by the state of a warning from the federal government indicating that such an enemy attack is probable or imminent. California Government Code Section 8558 also defines two other conditions or degrees of emergency (state of emergency and local emergency).

**threshold of significance.** A minimum volume of unique water use in an urban retail water supplier’s service area that could have a material effect on that urban retail water supplier’s urban water use objective.

**total dissolved solids.** The inorganic salts, metals, and minerals present in water. This term is usually expressed in parts per million or milligrams per liter.

**treated drinking water augmentation.** The planned placement of recycled water into the water distribution system of a public water system, as defined in Health and Safety Code Section 116275, as defined in California Water Code 13561(b)(2).

**urban retail water supplier.** A water supplier, either publicly or privately owned, that directly provides potable municipal water to more than 3,000 end users or that supplies more than 3,000 acre-feet of potable water annually at retail for municipal purposes, as defined in California Water Code Section 10608.12(t).

**urban water use efficiency standards.** The standards effective through California Water Code Section 10609.4 (indoor residential use) or adopted by the State Water Resources Control Board (outdoor residential, water loss, and commercial, industrial,

and institutional outdoor irrigation of landscape areas with dedicated meters), pursuant to California Water Code Section 10609.2.

**urban water use objective.** An estimate of aggregate efficient water use for the previous year based on adopted water use efficiency standards and local service area characteristics for that year, as described in California Water Code Section 10609.20, as defined in California Water Code Section 10608.12(u).

**usual residence.** The concept created by the Census Act of 1790 for the place where a person lives and sleeps most of the time. This place is not necessarily the same as the person's voting residence or legal residence.

**variances.** Allowable volumes of water that can be added to the urban water use objective for efficient unique uses of water that could have a material effect on the urban water use objective.

**water assessment.** A comprehensive analysis of the current water use of a facility and subsequent development of a strategy to increase water use efficiency.

**water audit.** See water assessment.

**water loss.** The total of apparent loss and real loss (California Code of Regulations, Title 23, Section 638.1(a) and Section 638.1(k), respectively) in an urban retail water supplier's system. Apparent loss means loss due to unauthorized consumption and/or nonphysical (paper) loss attributed to inaccuracies associated with customer metering or systematic handling errors. Real loss means the physical water loss from the pressurized potable water system and the urban retail water supplier's potable water storage tanks, up to the point of customer consumption.

**water management plan.** A plan that identifies water uses and opportunities for improvement in water use efficiency. An implementation plan and associated financial strategies are often included.

**water salinity.** Salinity can be described in terms of soluble salts, or in terms of total dissolved solids.

**water shortage emergency.** Water shortage emergency is as established in California Water Code Section 350: "The governing body of a distributor of a public water supply, whether publicly or privately owned and including a mutual water company, shall declare a water shortage emergency condition to prevail within the area served by such distributor whenever it finds and determines that the ordinary demands and requirements of water consumers cannot be satisfied without depleting the water supply of the distributor to the extent that there would be insufficient water for human consumption, sanitation, and fire protection."

**wet-bulb temperature.** The lowest temperature to which air can be cooled by the evaporation of water into the air at a constant pressure. It is measured by wrapping a wet wick around the bulb of a thermometer and the measured temperature corresponds to the wet-bulb temperature.

## 2.0 Abbreviations and Acronyms

Listed below for easy reference are key abbreviations and acronyms used in the various reports included in the California Department of Water Resources' Urban Water Use Efficiency Recommendation Package.

2013 CII Task Force Report	2013 Commercial, Industrial, and Institutional Task Force Water Use Best Management Practices Report to the Legislature
2017 Framework	Making Water Conservation a California Way of Life, Implementing Executive Order B-37-16
2018 Legislation	2018 Legislation on Water Conservation and Drought Planning (Senate Bill 606 [Hertzberg] and Assembly Bill 1668 [Friedman], as amended)
AB	Assembly Bill
AC	air conditioner
ACS	American Community Survey
ACWA	Association of California Water Agencies
afy	acre-feet per year
AMI	advanced metering infrastructure
APN	assessor's parcel number
ASABE S623	American Society of Agricultural and Biological Engineering Standard 623
AWE	Alliance for Water Efficiency
AWT	advanced water treatment
AWWA	American Water Works Association
BAWSCA	Bay Area Water Supply and Conservation Agency
BMP	best management practice
CaDC	California Data Collaborative
CAL FIRE	California Department of Forestry and Fire Protection
Cal-SIMETAW	California Simulation of Evapotranspiration of Applied Water
CalWEP	California Water Efficiency Partnership

CCR	California Code of Regulations
CCWD	Contra Costa Water District
CDC	Centers for Disease Control and Prevention
CDFA	California Department of Food and Agriculture
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFM	cubic feet per minute
CFR	United States Code of Federal Regulations
CII	commercial, industrial, and institutional
CII-BMP	commercial, industrial, and institutional water use best management practice
CII-BMP implementation program	commercial, industrial, and institutional water use best management practice implementation program
CII-BMPs Performance Measure	Commercial, Industrial, and Institutional Water Use Best Management Practices Performance Measure
CII Classification System PM	Commercial, Industrial, and Institutional Water Use Classification System Performance Measure
CII-DIM	commercial, industrial, and institutional dedicated irrigation meter
CII-DIMWUS	Commercial, Industrial, and Institutional Outdoor Irrigation of Landscape Areas with Dedicated Irrigation Meters Water Use Efficiency Standard
CII-DM	commercial, industrial, and institutional dedicated meter
CIILA_new	commercial, industrial, and institutional landscape area for new landscapes, post-January 1, 2020
CIILA_r	commercial, industrial, and institutional landscape area for regular landscapes, pre-January 1, 2020
CII Water Supplier BMPs	commercial, industrial, and institutional water use best management practices implemented by urban retail water suppliers
CII Water User BMPs	commercial, industrial, and institutional water use best management practices implemented by commercial, industrial, and institutional water users or associated property owners or managers



CII Water User WMP	water management plan for commercial, industrial, and institutional water users
CIMIS	California Irrigation Management Information System
CL	stakeholder comment letter
Conversion Threshold PM	Conversion Threshold Performance Measure
CPUC	California Public Utilities Commission
CUWA	California Urban Water Agencies
CUWCC	California Urban Water Conservation Council (now California Water Efficiency Partnership)
CWA	California Water Association
CWEE	University of California, Davis, Center for Water-Energy Efficiency
D	stakeholder discussion with the California Department of Water Resources (Note: Acronym as used in WUES-DWR-2021-20)
DAC	disadvantaged community
DIM	dedicated irrigation meter
DiPRRA	direct potable reuse responsible agency
DM	dedicated meter
DOE	U.S. Department of Energy
DOF	California Department of Finance
DPR	direct potable reuse
dS/m	decisiemens per meter
DWR	California Department of Water Resources
eAR	electronic annual report
EC	evaporative cooler (Note: Acronym as used in WUES-DWR-2021-01B, WUES-DWR-2021-04, and WUES-DWR-2021-05)
EC	electrical conductivity (Note: Acronym as used in WUES-DWR-2021-09)
ECe	plant threshold salinity
ECiw	salinity of the irrigation (recycled) water

EDSWL	estimating efficient distribution system water loss
EF	evaporation factor
EIR	Environmental Impact Report
EIRWU	efficient indoor residential water use
EO	Executive Order
EORWU	efficient outdoor residential water use
EPA	U.S. Environmental Protection Agency
ERLA	existing residential landscape area
ET	evapotranspiration
ETAF	evapotranspiration factor in Model Water Efficient Landscape Ordinance design standard (on parcel level)
ETF	evapotranspiration factor (on urban retail water supplier level)
ETF_gs	evapotranspiration factor based on the average reference evapotranspiration for an average growing season in the service area of an urban retail water supplier
ETF_gsCrop	evapotranspiration factor based on the crop-specific growing season and reference evapotranspiration in the service area of an urban retail water supplier
ETF_SLA	evapotranspiration factor for special landscape areas' irrigation with recycled water per Model Water Efficient Landscape Ordinance, as amended
ETo	reference evapotranspiration
ETo_gs	average reference evapotranspiration during growing season in the service area of an urban retail water supplier
ETo_gsCrop	crop-specific reference evapotranspiration during growing season in the service area of an urban retail water supplier
ETWU	expected total water use
Existing Facility	existing facility for bonus incentive
FRA	Federal Responsibility Area
GC	California Government Code

GIS	geographic information system
gpcd	gallons per capita per day
gpd	gallons per day
gpy	gallons per year
HD	hemodialysis
HOA	homeowners association
HSC	California Health and Safety Code
IE	irrigation efficiency
IE_Crop	crop-specific irrigation efficiency
II	irrigable-irrigated
INI	irrigable-not irrigated
In-Lieu Technologies PM	In-Lieu Technologies Performance Measure
IPR	indirect potable reuse
IRWD	Irvine Ranch Water District
IRWU	indoor residential water use
IRWUS	Indoor Residential Water Use Efficiency Standard
JAMA	Journal of the American Medical Association
Kc	crop coefficient
Kc_gs	crop coefficient during growing season
Kc_gsCrop	crop coefficients for the duration of growing season
K <sub>L</sub>	landscape coefficient
KPI	key performance indicator
LA	landscape area
LA_Crop	irrigated land area per crop or crop type
LAM	landscape area measurement
lb	pound
Legislature	California State Legislature
LIFO	Last-In-First-Out
LR	leaching requirement
LRA	Local Responsibility Area

MAWA	maximum applied water allowance
MCL	maximum contaminant level
mg/L	milligrams per liter
MWA	Mojave Water Agency
MWDOC	Municipal Water District of Orange County
MWELO	Model Water Efficient Landscape Ordinance
N/A	not applicable
NAICS	North American Industry Classification System
NAIP	National Agricultural Imagery Program
NI	not irrigable
NRLA	new residential landscape area
OR_LAM	Outdoor Residential Landscape Area Measurement
OR_LAM_Ag Mask	Outdoor Residential Landscape Area Measurement Agricultural Mask
ORWU	outdoor residential water use
ORWUS	Outdoor Residential Water Use Efficiency Standard
Other Facility	A facility that is not an Existing Facility for bonus incentive
OTWU	objective-based total water use
PD	peritoneal dialysis
Pe <sub>eff</sub>	effective precipitation
Pe <sub>eff_gs</sub>	average effective precipitation during growing season
Pe <sub>eff_gsCrop</sub>	crop-specific effective precipitation during growing season
PF	plant factor
PM	working group public meeting (Note: Acronym as used in WUES-DWR-2021-20)
potable reuse	potable water reuse
ppm	parts per million
PRISM	Parameter-elevation Relationships on Independent Slopes Model

PWS	public water system
Reclamation	U.S. Department of the Interior, Bureau of Reclamation
Recommendation Package	Urban Water Use Efficiency Recommendation Package
RLA	residential landscape area
ROI	return on investment
RWC	recycled municipal wastewater contribution
S	stakeholder survey (Note: Acronym as used in WUES-DWR-2021-20)
SB	Senate Bill
SB X7-7	California Water Conservation Act of 2009
SDAC	severely disadvantaged community
sf	square feet
SFR	Single-Family Residence
SLA	Special Landscape Area
SLA_htds	total special landscape area irrigated with high total dissolved solids recycled water
SMCL	secondary maximum contaminant level
SNMP	Salt and Nutrient Management Plan
SRA	State Responsibility Area
State	State of California
State Water Board	State Water Resources Control Board
SWAT	smart water application technologies and protocols
Task Force	Commercial, Industrial, and Institutional Task Force
TDS	total dissolved solids
UCANR	University of California, Division of Agriculture and Natural Resources
UCD	University of California, Davis
USRDS	U.S. Renal Data System
UWMP	Urban Water Management Plan

UWUO	urban water use objective
UWUO_EP	the standards-based urban water use objective during qualified emergency period(s) for the qualified emergency zone(s)
UWUO_SB	urban water use objective without any variances
WC	California Water Code
WCEC	Western Cooling Efficiency Center
WDR	waste discharge requirement
WECP	Water and Energy Efficiency Program
WELO	Water Efficient Landscape Ordinance
WGW	working group workshop
WLS	Water Loss Standard
WMP	water management plan
WRF	Water Research Foundation
WUS	Water Use Studies