WaterSmart Certification Qualification Checklist

Indoor Water Use

✓ = Required	Hardware/Devices/Equipment	Comments
	Plumbing Fixtures	
✓	**High-Efficiency Gravity Flush Toilets** • Pressure Assist ≤ 1.1/1.6 gallons/flush • Pressure Assist ≤ 1.1/1.6 gallons/flush • Single Flush ≤ 1.28 gallons/flush	High Efficiency Toilets using 1.28 gallons per flush (GPF) or less are recommended. 1.28 HET with dual flush are optimal. Businesses with existing 1.6 GPF toilets qualify for Watersmart program. Older toilets, defined as using more than 3.5 GPF, do not qualify for the program. Senate Bill 407 will mandate all 3.5gpf or more toilet(s) be replaced by 2019.
✓	**Flushometer bowl and valve toilets** ≤ 1.1/1.6 gallons/flush	Same as above. Retrofit of valve and fixture required if < 2-yr. payback.
✓	**Urinals** • Urinals 0.125gpf • Urinals ≤ 1.0/0.5 gallons/flush • Zero-Water Urinals (Note: These urinal types require additional maintenance).	High Efficiency Urinals (HEU) using 0.125/0.5 gallons per flush (GPF) are recommended and are optimal. Businesses with existing 1.0 GPF urinals qualify for Watersmart program. Older urinals, defined as using more than 1.5 GPF, do not qualify for the program. Senate Bill 407 will mandate replacement of any urinal manufactured to use more than one gallon of water per flush by January 1, 2019.
✓	**Lavatory Faucets (Restrooms)** • Faucet aerators 0.5 gallons/minute (Optimum) • Flow Restrictors 1.0 gallons/minute	Lavatory/restrooms faucet can use aerators with 1.0gpm. 0.5gpm are the recommended flows for optimal water savings.
✓	**Lavatory Faucets (Locker Rooms)** • Flow Restrictors 0.5 gallons/minute • Faucet aerators 1.0 gallons/minute	Lavatory faucet for locker rooms can use aerators with 1.5gpm and still qualify for WaterSmart program. 0.5gpm & 1.0gpm are the recommended flows for optimal water savings.
✓	**Office Break Rooms / Kitchen Faucets** • Faucet aerators 1.5 gallons/minute or less • Flow Restrictors 1.5 gallons/minute	1.5 GPM are the recommended flows for optimal water savings. Older unrestricted faucets or faucets using more than 2.0 GPM, do not qualify.
✓	**Shower heads ≤ 2.0 gallons/minute**	2.0 or less are optimal and reccommended for water savings. (Free showerheads available from EBMUD. May require applicant purchase where installation of hand-held, high-end, or more durable showerheads are needed).
	Food Service Equipment	
	EBMUD recognizes that food prep may need higher flows. A restrictor is recommended on all faucets.	
✓	**Food Prep/Dish Washing Faucets** • Faucet aerators 1.5 gallons/minute • Faucet aerators 2.2 gallons/minute • Flow Restrictors 2.5 gallons/minute	Aerators and flow restriction recommended where faucet is used for rinsing rather than filling.
✓	**Hand Wash Faucets** • Faucet aerators 0.5 gallons/minute • Flow Restrictors 1.0 gallons/minute	Hand wash ONLY faucets in food service can use aerators 1.0 GPM and still qualify for WaterSmart program. 0.5 GPM are the recommended flows for optimal water savings.

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	Food Service Equipment	
✓	**Pre-rinse spray nozzles** ≤ 1.6 gallons/minute **Pre-rinse spray nozzles** ≤ 1.15 gallons/minute	1.6gpm Pre-rinse nozzles available free from EBMUD. EBMUD recommends a pre-rinse spray valve with a flow rate of 1.15 gpm or less. EBMUD offers a $50 rebate. Only end nozzle is rebated. Entire apparatus will not be rebated.
	Dishwashers (Criteria by machine type) • Under Counter High Temp ≤ 0.86 gal/rack • Under Counter Low Temp ≤ 1.19 gal/rack • Stationary Single Tank Door High Temp ≤ 0.89 gal/rack • Stationary Single Tank Door Low Temp ≤ 1.18 gal/rack • Single Tank Conveyor High Temp ≤ 0.70 gal/rack • Single Tank Conveyor Low Temp ≤ 0.79 gal/rack • Multiple Tank Conveyor High Temp ≤ 0.54 gal/rack • Multiple Tank Conveyor Low Temp ≤ 0.54 gal/rack	Retrofit required if < 2-yr. payback. Water usage rates are based on the product specification for ENERGY STAR qualified commercial dishwashers. (Note: Commercial dishwashers that have earned the ENERGY STAR are approximately 40 percent more energy efficient and 40 percent more water efficient than standard models).
	Ice Machines Air Cooled Only • Air-cooled nugget and flake ice machines meets criteria. (Cubed ice machine criteria by equipment type follows).	Exceptions may be made for water-cooled ice machines serving a closed loop chiller system and will be evaluated on a case-by-case basis.
	• Ice Making Head ≤ 20 gal/100 lbs ice. • Remote Condensing Unit (with or without remote compressor) ≤ 20 gal/100 lbs ice. • Self Contained Unit ≤ 25 gal/100 lbs ice.	Retrofit required if < 2-yr. payback. Water usage Exceptions may be made for water-cooled ice ENERGY STAR qualified commercial ice machines.
	Steamers • Self-contained, boilerless with (with no water supply connection).	Retrofit required if < 2-yr. payback
	Refrigeration • Condenser cooling using air-cooled or closed-loop system. No single-pass cooling.	Retrofit required if < 2-yr. payback
	Laundry Equipment	
	Commercial Clothes Washers • ≤ 5.5 gallons per cubic foot of laundry (WF). WF=Water Factor (number of gallons needed for each cubic foot of laundry). A lower number indicates lower consumption and more efficient use of water. • ≥ 2.0 cubic feet of laundry per kWh of electricity (MEF) MEF=Modified Energy Factor, measures energy consumption of the total laundry cycle (washing and drying). It indicates how many cubic feet of laundry can be washed and dried with one kWh of electricity; the higher the number, the greater the efficiency.	Retrofit required if < 2-yr. payback. Water and energy usage criteria correspond with Consortium for Energy Efficiency listing of Tier 3 products. Rebates available for qualifying products per current EBMUD List of Qualifying Commercial Clothes Washers for models listed as Tier 3 only.

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✓ = Required	Hardware/Devices/Equipment	Comments
	Wash Down	
✓	**Hose-end use** • Automatic shutoff nozzles and/or high-pressure, low-volume nozzles.	Flow restriction device at hose bib required where nozzles are removed from hose end.
✓	**Equipment and floor cleaning** • High-pressure, and/or low-volume washing equipment. • Water Brooms using 2.10 gallons per minute (gpm).	Retrofit required if < 2-yr. payback. Water Brooms meet criteria for floor cleaning. The spray area of a water broom is 21", the maximum allowable gallon per minute consumption can be no more than 2.10 GPM
✓	**Pressurize air cleaning** • Faucet aerators 0.5 gallons/minute (Optimum). • Flow Restrictors 1.0 gallons/minute.	Payback only where air is a feasible substitute for water.
	Cooling	
✓	**Cooling towers and evaporative condensers** • Minimum 8 cycles of concentration.	Cycles of concentration will be assessed by measuring conductivity of make-up and bleed water. Float valves must be routinely checked and the equipment operational and free of leaks.
✓	**Cooling tower conductivity controller** • System to time and regulate cooling tower bleed water. Install a conductivity controller to automatically control blowdown	Retrofit required if < 2-yr. payback calculated using savings estimates derived from potential for increasing cycles of concentration.
✓	**Cooling tower metering** • of both make-up and blow-down lines for towers with nominal rating of ≥ 250 tons of cooling capacity.	Internal metering of flows are needed to meet consumption monitoring requirement of significant uses within a facility.
	Swamp cooler • Maintenance schedule. Drain and clean regularly.	Swamp coolers are reccommended most often used in areas where daytime temperatures frequently exceed 100°F. Evaporative coolers continually use water. In areas with limited water supplies, water-use impact of adding an evaporative cooler needs to be considered.
	Process Water Use	
	Flow Reduction and Reuse	Retrofit required only where water saving potential and costs can be reliably estimated and for measure(s) with < 2-year simple payback period.
✓	**Process Water Use Metering** • Measure flow to individual equipment and processes within a facility and having estimated usage > 5,000 gallons per day.	Internal metering of flows is needed to meet consumption monitoring requirement of significant uses within a facility.

WaterSmart Certification Qualification Checklist

Outdoor Water Use

✓ = Required	Hardware/Devices/Equipment	Comments
	Irrigation Hardware	
	Smart Controller(s) • self-adjusting, weather-based model(s).	Required for more than 5,000 square feet of irrigated area. Central control systems and stand alone units (on-site sensor and off-site signal types qualify). May require replacement of conventional controllers.
✓	**Standard Controllers**	Programming must not exceed peak irrigation season water budget. Maintenance personnel and schedule for performing seasonal programming adjustments program must be in place.
✓	**Sprinklers and spray heads nozzle**	All spray heads serving an area must be of compatible type and have matched precipitation flow rates.
✓	**No sprinklers and spray heads** • in areas ≤ 8 feet wide.	Convert heads to drip or bubblers with low flow rates required where overspray and significant run-off are present.
✓	**Turf Area Sprinklers head-to-head spacing** • self-adjusting, weather-based model(s)	Installation of additional heads and/or relocation of heads required where measured distribution uniformity is < 60%.
✓	**Sprinkler and spray head check valves** • To prevent low-head drainage.	Factory installed check valve specified if the elevation difference within the zone exceeds 12 inches.
✓	**Sprinkler and spray head pressure regulation** • self-adjusting, weather-based model(s)	Factory installed pressure regulating devises specified if manufacturers recommended pressure at the nozzle is exceeded.
	Landscape Design and Maintenance	
✓	**Turfgrass Area**	No turf area on slope steeper that 1 to 10 degrees
✓	**Turfgrass in Medians and Parkway Strips**	No turfgrass with any dimensions less than eight feet or subsurface drip irrigation of turf grass with any dimension less than eight feet.
✓	**Hydrozoned Plantings**	Plants served by an irrigation valve have similar water requirements.
✓	**Low-Water-Use-Plantings**	Conversion from high-water-use to low-water-use plantings may be required to achieve appropriate hydrozoning.
✓	**Seasonal Irrigation Schedule**	Unless site is equipped with a WaterSmart Controller adjust controller to meet the water needs of the plant material as the season changes.
✓	**Irrigation Station Mapping**	Display diagram of irrigation zones by station, irrigation hardware type (ex: spray, rotor, drip, subsurface drip), and plant type (Ex: lawn, shrub, annuals).
✓	**No irrigation of large mature shrubs or trees**	Required where established plants can thrive with no supplemental irrigation.

WaterSmart Certification Qualification Checklist

✓ = Required	Hardware/Devices/Equipment	Comments
	Other Outdoor Uses	
✓	**Vehicle Washing** • Reduce overall water use wherever possible by on-site recycling. • Use non-potable water sources for make-up water where available. • Water efficiency benchmark is to use no more than 40 gallons of make-up water per vehicle (except for buses and larger vehicles). • Where alternate non-potable water sources of suitable quality are available, such as municipal reclaimed water, these water sources should be utilzed to reduce the demand on potable water resources.	On-site reuse of wash water and wastewater pre-treatment or off-site vehicle washing at facility with reuse and pretreatment systems. An additional area for water conservation is the towel and chamois washers used at many facilities offering wipe-down service after the car is washed and rinsed. The wash bin is often operated under continous flow of water with an overflow drain allowing thousands of gallons of water to be wasted every day. All such washers should include a high level shutoff to stop water flow before water levels reach the overflow drain, or include a metered fill valve to shut off the water when unattended.
✓	**Pools and Spas**	Pool covers recommended. No leakage and efficient filter backwash water usage. If heated, reduce your pool and spa water temperature to save water and energy costs. Warmer water evaporates more quickly. Manually clean your filter. A more thorough job is done and uses less water. The average backwash uses between 250 to 1,000 gallons (.95 m3 to 3.78 m3) of water -- without completely cleaning the filter. When the pool is filling, be sure to keep an eye on the water level. Forgetting to shut off fill water can make for a costly waste of water. Common locations for leaks are where the pool and pipes are joined, at separations along the pool top, in the water supply and return lines to the filtration system, and in the liner, sidewalls and floor of the pool itself. Leaks are also found around the pump seals and o-rings. Installing a water meter on the pool makeup line is the most effective way of monitoring water use and detecting leaks.
✓	**Pavement Cleaning**	Sweep outside area with brooms, sweepers or if necessary a water broom. No cleaning with hoses and hose-end nozzles except where required for sanitation purposes.

Revised June 2016