## NON-RESIDENTIAL NAPA HIGH PERFORMANCE BUILDING WATER EFFICIENCY AND CONSERVATION CHECKLIST

APPLICATION CHECKLIST	Napa Mandatory Checked	Voluntary CALGREEN Tier 1 Tier 2	Third-party Documentation/ Verification
REQUIREMENTS			
WATER EFFICIENCY AND CONSERVATION			
INDOOR WATER USE			
<b>5.303.1 Meters.</b> Separate submeters or metering devices shall be installed for the uses described in Sections 5.303.1.1 and 5.303.1.2:			
<ul> <li>5.303.1.1 New buildings or additions in excess of 50,000 square feet.</li> <li>1. For each individual leased, rented, or other tenant space within the building projected to consume more than 100 gallons/day.</li> <li>2. Where separate submeters for individual building tenants are unfeasible, for water supplied to the</li> </ul>			
following subsystems:  a. Makeup water for cooling towers where flow through is			
greater than 500 gallons per minute (gpm)  b. Makeup water for evaporative coolers greater than 6 gpm  c. Steam and hot-water boilers with energy input more than 500,000 Btu/h (147 kW)			
<b>5.303.1.2 Excess consumption.</b> Any tenant within a new building or within an addition that is projected to consume more than 1,000 gallons/day.			
5.303.3 Water conserving plumbing fixtures and fittings. Maximum flow rate requirements for Water Closets, Urinals, Showerheads, Faucets, and Wash Fountains in Section 5.303.3 are superseded by the Tier 1 12% savings requirement made mandatory:			
A5.303.2.3.1 Tier 1 – 12% Savings. A schedule of plumbing fixtures and fixture fittings that will reduce the overall use of potable water within the building by 12% shall be provided via one of the following methods:  1. Prescriptive: Each fixture shall not exceed the maximum flow rate at 12% reduction specified in CALGreen Table A5.303.2.3.1.  2. Performance: A calculation demonstrating a 12% reduction in the building "water use baseline" as established in CALGreen Table A5.303.2.2 shall be provided.			
<b>A5.303.2.3.2 Tier 2 – 20% Savings.</b> A schedule of plumbing fixtures and fixture fittings that will reduce the overall use of potable water within the building by 20% shall be provided.			
<b>A5.303.2.3.3 - 25% Savings.</b> A schedule of plumbing fixtures and fixture fittings that will reduce the overall use of potable water within the building by 25% shall be provided.			
A5.303.2.3.4 Nonpotable water systems for indoor use. Utilizing nonpotable water systems (such as captured rainwater, treated graywater, and recycled water) intended to supply water closets,			

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urinals, and other allowed uses, may be used in the calculations demonstrating the 12%, 20%, or 25% savings.				
5.303.4 Commercial kitchen equipment. 5.303.4.1 Food waste disposers. Disposers shall either modulate the use of water to no more than 1 gpm when the disposer is not in use or shall automatically shut off after no more than 10 minutes of inactivity. Disposers shall use no more than 8 gpm of water.				
<b>5.303.5 Areas of addition or alteration.</b> For those occupancies within the authority of the California Building Standards Commission as specified in Section 103, the provisions of Sections 5.303.3 and Section 5.303.4 shall apply to new fixtures in additions or areas of alteration to the building.				
<b>5.303.6 Standards for plumbing fixtures and fittings.</b> Plumbing fixtures and fittings shall be installed in accordance with the California Plumbing Code, and shall meet the applicable standards referenced in Table 1701.1 of the California Plumbing Code and Chapter 6 of CALGreen.				
A5.303.3 Appliances and fixtures for commercial application. Appliances and fixtures shall meet the following:  1. Clothes washers shall have a maximum Water Factor (WF) that will reduce the use of water by 10% below the California Energy Commission's WF standards for commercial clothes washers located in Title 20 of the				
California Code of Regulations.  2. <b>Dishwashers</b> shall meet the following water use standards:  a. Residential – Energy Star  i. Standard Dishwashers – maximum 4.25 gallons per cycle ii. Compact Dishwashers – maximum 3.5 gallons per cycle b. Commercial - Refer to <b>CALGreen Table A5.303.3</b>				
<ul> <li>3. Ice makers shall be air cooled or, if water-cooled, be part of a closed-loop cooling system.</li> <li>4. Food steamers shall be connectionless or boilerless.</li> <li>5. If water softeners are installed as part of a project, they shall comply with NSF/ANSI Standard 44 provisions, including the following features:</li> <li>Demand-initiated regeneration (DIR) system, not time-clock</li> </ul>				
<ul> <li>initiated</li> <li>Minimum salt efficiency of 3,350 grains total hardness per pound of salt</li> <li>Generate no more than five gallons of water per 1,000 grains of hardness removed during service cycle</li> </ul>				
A5.303.4.1 Non-water supplied urinals are installed.				
<b>A5.303.5 Dual plumbing.</b> New buildings and facilities shall be dual plumbed for potable and recycled water systems for toilet flushing when recycled water is available.				

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OUTDOOR WATER USE				
<b>5.304.1 Landscape water use.</b> Projects with the minimum landscape areas in Napa Municipal Code Section 17.52.520 shall comply with the City of Napa <b>Water Efficient Landscape Ordinance (WELO)</b> .				
<b>A5.304.2 Outdoor water use.</b> For new water service, separate meters or submeters shall be installed for indoor and outdoor potable water use for landscape areas of at least 500 square feet but not more than 1,000 square feet.				
<b>A5.304.6 Restoration of areas disturbed by construction.</b> Restore all landscape areas disturbed during construction by planting with local adaptive and/or non-invasive vegetation.				
<b>A5.304.7 Previously developed sites.</b> On previously developed or graded sites, restore or protect at least 50% of the site area with adaptive and/or non-invasive vegetation.				
<b>A5.304.8 Graywater irrigation system.</b> Install a graywater collection system for onsite subsurface irrigation using graywater in compliance with the California Plumbing Code.				
<b>A5.304.9 Service Pressure.</b> Nonresidential structures shall be limited to a maximum of 60 psi static <b>service pressure</b> ; sites consistently experiencing greater than 65 psi shall require the installation of a pressure regulator. Piping for fire sprinkler systems is excluded from this requirement.				
WATER REUSE				
<b>A5.305.1 Nonpotable water systems.</b> Nonpotable water systems for indoor and outdoor use shall comply with the current edition of the California Plumbing Code.				
A5.305.2 Irrigation systems. Irrigation systems regulated by WELO shall use recycled water. 5.305.1 Newly constructed non-residential developments, where disinfected tertiary recycled water is available to a construction site, may be required to provide both a potable water supply system and a recycled water supply system, allowing the use of recycled water for aboveground and subsurface irrigation to all landscape irrigation systems.				