

1819.02 Water Conservation Measures – Sierra Vista Sub-watershed Overlay Zone

The following water conservation measures shall be required of all residential and non-residential properties in the Sierra Vista Sub-watershed, as defined by the Arizona Department of Water Resources and delineated on County maps and, when a building permit is required, be subject to plan review and inspections:

A. New Construction and Remodels – Residential:

All interior plumbing in new residential construction, consisting of one-to-four units, attached or detached, shall meet the following requirements:

1. All toilets shall be WaterSense labeled.
2. The installation of a pressure-reducing valve on the house side of the water meter, in an easily accessible location, shall be required for all new single-family residences (preferred location is in the garage or other non-in-ground location). The static service pressure shall be set no higher than 60 pounds per square inch (psi), regardless of input pressure.
3. **Evaporative Coolers:** New single-family construction shall not offer evaporative coolers as the only source of cooling. Maximum rate of unit cannot exceed 3.5 gallons of water per ton-hour of cooling. New evaporative coolers shall not be single-pass coolers.
4. Water softeners, if installed, must meet NSF/ANSI requirements.
5. Drinking water treatment systems, if installed, shall meet NSF/ANSI requirements (such systems shall yield at least 85 gallons of treated water per 100 gallons processed).
6. In existing buildings or premises in which plumbing installations are to be replaced, such replacement shall comply with all code requirements for water-saving devices when a building permit is required pursuant to Article 17.
7. **Hot water on demand:** In new construction, a hot water system will be installed to provide hot water on demand at the point of use in sinks and baths/showers.
 - a. All hot water fixtures shall be WaterSense labeled. Insulation for hot-water pipe with a minimum thermal resistance (R-value) of R-4 shall be applied. Hot water systems shall be designed and shall include such components as may be necessary to deliver hot water at each demand point with no more than 0.6 gallons (2.3 liters) of water delivered prior to the delivery of hot water.
8. **Gray water plumbing:** New residential construction shall have gray water line(s) plumbed to stub out, and to be capped and clearly marked so as to permit the optional use of gray water by residents. The gray water plumbing must connect at least two plumbing fixtures, and preferably those that produce the most gray water without compromising the efficient evacuation of the black water pipes.

B. New Construction and Remodels -- Commercial, Industrial, Multi-Family, and Public Development:

1. Flushing urinals (only for custodial cleaning) or water-free urinals shall be installed in all new public, commercial, multi-family residential common-use and industrial buildings where urinals are used. All applicable plumbing codes shall apply.

2. All new public, commercial, multi-family residential common-use, and industrial building restroom remodels or retrofits shall convert existing urinals to flushing urinals (only for custodial cleaning) or water-free urinals. All applicable plumbing codes shall apply.
3. All new commercial car wash facilities, including automobile dealerships, shall use water recycling systems which recycle a minimum of 75 percent of the water used. This requirement does not apply to small operation auto detailers or similar uses.
4. Kitchens in which dishwashers are installed must use Energy Star[®] rated dishwashers.
5. **Commercial Laundry Facilities:** All laundry facilities intended for public use such as laundromats, hotel guest laundries or multi-family housing laundry rooms will be equipped with Energy Star[®] qualified commercial clothes washers rated equal to or below the lowest current Energy Star[®] Water factor. This provision applies to initial establishment of new laundry facilities and on replacement of existing equipment due to normal wear and tear or other loss.
6. The use of misters is prohibited in commercial and industrial developments.
7. Water softeners, if installed, must meet NSF/ANSI requirements.
8. Drinking water treatment systems, if installed, shall meet NSF/ANSI requirements (such systems shall yield at least 85 gallons of treated water per 100 gallons processed).
9. All new multi-family development exceeding four units shall provide independent-unit metering (water meter for each dwelling unit), with the following exceptions:
 - a. Multi-family complexes providing 80 percent or more low- to moderate-income housing units, as defined by the federal office of Housing and Urban Development (HUD), may provide alternative water-saving design methods in lieu of the use of independent-unit metering. The burden of proof is on the applicant to show that an equivalent, or greater, water savings will be achieved.
 - b. Alternative water-saving methods to include, but not be limited to, the following, may be considered by the County Zoning Inspector and permitted in lieu of the use of independent-unit metering:
 - (1) Short hot-water line run distances (core plumbing systems).
 - (2) Ratio Utility Billing Systems (R.U.B.S. – as allowed under applicable state law).
10. In existing buildings or premises in which plumbing installations are to be replaced, such replacement shall comply with all code requirements for water-saving devices.
11. **Artificial Water Features:** New artificial water features such as ponds, lakes, water courses, and other types of decorative water features are prohibited in any new commercial construction or in common user areas of multi-family housing unless their sole source is harvested rainwater. This provision does not pertain to required storm water detention/retention facilities, holding ponds used for treated effluent being used for permitted irrigation purposes, or permitted swimming pools and spas. Multiple water features on the same property will be considered together to determine surface area. Flowing water used in fountains, waterfalls, and similar features shall be recirculated.
12. **Outdoor Sprinkler Systems:** Any new installation or replacement of an automatic outdoor sprinkler system shall also include the installation of a rain or humidity sensor that will override the irrigation cycle of the sprinkler system when rainfall has occurred in an amount sufficient to negate the need for irrigation at the scheduled time. Where there are multiple areas with a sprinkler system watered from one controller, the sensor must be installed at the largest area.

13. **Landscaping:** Any new landscaping proposing irrigation installation or re-installation in a median or similar strip of permeable surface less than fifteen feet in any horizontal dimension, adjacent to a roadway, sidewalk, parking area or other paved or impermeable area, shall be irrigated by a subsurface (drip), non-sprinkling irrigation system.