



A. Why is this action important?

Water efficiency is an important component of energy efficiency. While the connection is not always obvious, energy is used to treat, pump, heat, and distribute water. When less water is consumed, less energy is required for these activities and fewer greenhouse gas (GHG) emissions are produced. Water-efficient fixtures are recommended throughout local government buildings to save money and reduce energy use, in addition to the benefit of overall water conservation.

B. How to implement this action

Water-efficient fixtures are often easy to install and generally have a short payback period. Water-efficient fixtures should be installed in bathrooms, kitchens, and any other relevant areas throughout local government buildings. Water-efficient fixtures may include low-flow or dual-flush toilets, faucet aerators, low-flow showerheads, or waterless urinals. Minimum recommended flow rates are as follows:

- Bathroom Faucets: 1.5 gallon per minute (GPM)
- Kitchen Faucets: 1.5 GPM (higher flow may be necessary for some purposes, such as utility sinks)
- Showerheads: 2 GPM
- Toilets: 1.28 gallons per flush (GPF) or 1.1/1.6 GPF for a dual-flush model

The <u>WaterSense</u> label from the US EPA is also given for many low-flow products; these fixtures are typically 20 percent more water-efficient than traditional products. WaterSense labeled products are backed by independent, third–party certification and meet EPA's specifications for water efficiency and performance.

C. Time frame, project costs, and resource needs

Water-efficient fixtures can be installed any time; it is not necessary to wait until existing fixtures stop working because new, low-flow fixtures greatly reduce water consumption. Payback for such fixtures is usually short, often less than a year or two, though that number will be different if a local government has its own water utility. Toilet replacements require more labor time and up-front investment, as compared to placing aerators on faucets or replacing showerheads. If the local government does not have in-house capacity for these upgrades, it may have to hire a contractor.

D. Which local governments implement this action? Which departments within the local government are most likely to have responsibility for this?

This action is applicable to any local government. Facilities managers or the building division within a public works department would likely be responsible for implementing. If the local government has a water utility, staff from that department may be involved as well.

E. How to obtain points for this action

Local governments can earn points for this Climate Smart Communities (CSC) action by increasing the percentage of water-efficient fixtures in government buildings. An increase in the percentage of water-efficient fixtures can be accomplished through upgrades of existing fixtures or through using efficient fixtures in new construction. Installation must have been performed within 10 years prior to the application date.

Points are obtained based on the percentage of fixtures that have been upgraded to water-efficient fixtures (defined as meeting the flow rates specified in Section B above and/or having a WaterSense label). If the exact number of fixtures upgraded is not available, local governments may use the building square footage affected by the upgrades as a proxy.

	POSSIBLE POINTS
Install water-efficient fixtures for 10% of total fixtures or building square footage	1
Install water-efficient fixtures for 20% of total fixtures or building square footage	2
Install water-efficient fixtures for 45% of total fixtures or building square footage	3
Install water-efficient fixtures for 70% of total fixtures or building square footage	4

F. What to submit

To obtain points based on the percentage of water-efficient fixtures, provide the following information:

- Total number of fixtures across the local government's entire building portfolio
- Percentage of fixtures that were installed within 10 years prior to the application date and that they meet the flow rates described above in Section B and/or have a WaterSense label
- Location: building(s) in which the fixtures were installed
- Installation date: month and year when the fixtures were installed
- Previous type: type of fixture that was replaced (for upgrades of existing fixtures only)
- Efficiency: the type of fixtures installed (brands and model numbers from procurement records, for example) or other documentation demonstrating that the fixtures meet the flow rates described above in Section B and/or have a WaterSense label

If the specific number of water fixtures is not available, applicants may obtain points based on square footage. To do this, provide the following information:

- Total building square footage across the local government's entire building portfolio
- Percentage of building square footage containing fixtures that were installed within 10 years prior to the application date and that they meet the flow rates described above in Section B and/or have a WaterSense label
- Location: building(s) in which the fixtures were installed
- Previous type: type of fixture that was replaced (for upgrades of existing fixtures only)
- Efficiency: the type of fixtures installed (brands and model numbers from procurement records, for example) or other documentation demonstrating that the fixtures meet the flow rates described above in Section B and/or have a WaterSense label

All CSC action documentation is available for public viewing after an action is approved. Action submittals should not include any information or documents that are not intended to be viewed by the public.

G. Links to additional resources or best practices

- List of EPA WaterSense Water-efficient Products
- EPA WaterSense Best Management Practices for Commercial and Institutional Facilities
- <u>Alliance for Water Efficiency Resource Library</u>

H. Recertification requirements

The recertification requirements are the same as the initial certification requirements.