

# Water Conservation Policy

JUNE 2015



## I. PURPOSE OF THE POLICY

The purpose of this policy is to initiate a branch-wide, collaborative effort of water conservation at California's courthouses. Ideally, the best practices identified in this policy will encourage judicial branch entities to implement water saving practices.

The policy identifies water conservation practices that may be applied to both capital projects and existing courthouse facilities. For capital projects, the policy identifies immediate and ongoing practices, as well as enhanced practices that require further analysis on a project-by-project basis. For existing courthouse facilities, the policy identifies immediate best practices and long-term goals.

This policy is consistent with the design principles and other requirements of the *California Trial Court Facilities Standards*. Specific water conservation measures of this policy will be incorporated into a future edition of those standards.

## II. APPLICATION OF THE WATER CONSERVATION POLICY

This policy is applicable to the following courthouses:

- All capital outlay projects
- All courthouses managed by the Judicial Council of California

This policy does not apply to county-managed court facilities or leased court facilities. However, Judicial Council staff will share this policy with county-managed facilities and advocate for the implementation of the policy in an effort to promote consistent water conservation practices at all California courthouses. In addition, Judicial Council staff will share this policy with landlords of courthouse facilities in an effort to encourage water conservation practices at those facilities as well. The policy will be reviewed annually and updated as necessary based on climate conditions.

## III. DEFINITIONS

- *Capital project* refers to new construction, major renovations, and expansion capital outlay projects.
- *Existing facility* refers to any existing building, managed by the Judicial Council, that the local court occupies to provide its main services, its branch services, or other services and operations. In this policy, the word *courthouse* is considered interchangeable with this term.
- *Gray water* refers to any wastewater, generated at a courthouse facility, that can be recycled onsite and used for toilet and urinal flushing, landscape irrigation, and constructed wetlands.
- Nonessential landscaping project refers to a funded but not initiated landscaping
  project that increases water usage at a courthouse and is not necessary for safety
  purposes.

- **Non-potable water** refers to water that comes from a variety of sources, including recycled water, rainwater, and gray water. It can be used for flushing toilets and irrigation.
- *Smart controller* refers to a controller that reduces outdoor water usage by monitoring and using information about site conditions—such as soil moisture, rain, wind, slope, soil type, and plant type—and applying the right amount of water based on those factors.

# IV. WATER CONSERVATION FOR CAPITAL PROJECTS

Capital projects may include practices that conserve water during the construction process and on an ongoing operational basis. These practices fall into two categories:

- Practices for capital projects
- Enhanced practices requiring further analysis

## A. Practices for Capital Projects

The water conservation practices listed below may be implemented immediately on all capital projects in the preliminary plans phase or earlier. For projects in later stages, project teams will review these practices and implement them where feasible.

## 1. <u>Water Conservation During Construction.</u>

- a. Capital projects required to remove groundwater (dewater) during construction excavation should make best efforts to recycle or reuse the groundwater collected, if feasible.
- b. Non-potable water should be used for dust control activities, if feasible.

#### 2. Plumbing Fixtures.

a. Capital projects should install plumbing fixtures that meet or, if possible, exceed the April 2014 California Energy Commission (CEC) or California Green Code standards, whichever are most stringent, if feasible.

## 3. <u>Landscaping</u>.

- a. Landscaping design that does not include turf/grass should be considered, if feasible.
- b. Landscaped areas should include indigenous and climateappropriate, drought-tolerant plants and trees, if feasible.

c. Site design should encourage permeability on the portions of the site not covered by buildings or vehicle-bearing pavement, if feasible.

## 4. <u>Irrigation Systems</u>.

- a. Irrigation systems should target systems using drip and microsprayers only if feasible.
- b. Irrigation systems should include an automated "smart" controller, if feasible.
- c. Irrigation systems should include a water meter, or submeter, separate from building supply, if feasible.

#### 5. Onsite Water Management.

a. Onsite storm water management practices, where feasible given site limitations, should include water retention basins or other practices to recharge groundwater through natural percolation.

## **B.** Enhanced Practices Requiring Further Analysis

These practices could apply to all capital projects but will be studied individually by project to determine cost and feasibility on a life-cycle basis.<sup>1</sup>

## 1. Onsite Water Management.

- a. Capital projects should evaluate onsite systems that reuse 100 percent of all gray water generated by a courthouse facility, if feasible.
- b. Capital projects should evaluate the use of nonpotable water for irrigation, toilet and urinal flushing, and heating, ventilation, and air-conditioning (HVAC) systems (if applicable to selected HVAC systems), if feasible. Sources may include onsite sources—such as gray water, rain water retention, and displacement from mechanical cooling systems—or off-site sources, such as recycled water provided by the local water agency.

## 2. Paving and Hardscape.

a. Permeable paving and permeable hardscape materials should be considered for pedestrian and vehicle areas, if feasible.

Refer to California Trial Court Facilities Standards: 2011, section 1.C, for life cycle cost analysis methodology.

#### 3. HVAC.

- a. Design teams should consider mechanical cooling systems that are air chilled versus water chilled, if feasible.
- b. Design teams should consider system features that reduce or collect evaporation, if feasible.

## V. WATER CONSERVATION FOR EXISTING FACILITIES

These best practices are identified as a means to work collaboratively on water conservation efforts at existing facilities. The practices for consideration fall into two categories:

- Immediate best practices for consideration
- Long-term goals

#### A. Immediate Best Practices for Consideration

- 1. Immediate best practices refer to practices that could be applied immediately to all existing facilities.
  - a. Consider limiting the watering of all turf. Turf watered once a week may turn brown, but it will not die completely. Alternatively, all courthouses should be following local water guidelines, which will ensure that they avoid financial penalties issued by local water agencies.
  - b. Consider decommissioning all water features, i.e., fountains, pools, and misters.
  - c. Consider putting all nonessential landscaping projects on hold.
  - d. Consider limiting sidewalk and hardscape water wash-off, except for biohazard removal.
  - e. Consider placing informational signage reminding facility users of drought conditions at the entrances to all existing courthouse facilities.
- 2. The Judicial Council, in its role as facility manager, will complete as many of the practices listed below as financially feasible. Implementation will be evaluated based on practices that ensure the highest water savings for the investment required.
  - a. Equip all onsite hoses with shut-off nozzles, if feasible.
  - b. Equip all irrigation systems with "smart" controllers, if feasible.

- c. Address all identified water leaks within two business days, if feasible.
- d. Post informational signage and include a toll-free telephone number for the public to call should a water leak or water waste be observed, if feasible.
- e. Have onsite service providers include proactive monthly leakdetection investigations during standard rounds and readings activities, if feasible.
- f. Annually observe water meters at facilities that have installed water meters for leak-detection purposes, if feasible.
- g. Ensure that plumbing fixture replacements use new fixtures that meet CEC or California Green Code standards, whichever are most stringent, if feasible.
- h. Ensure that any funded landscaping- or plumbing-related renovation projects comply with water conservation standards herein, if feasible.
- i. Identify the top 25 water-using Judicial Council—managed facilities annually by July 1. Schedule a water audit of those identified facilities by the end of the fiscal year, if feasible.
- j. Develop guidelines by December 31, 2015, as to when and how to consider onsite water recycling at existing facilities, particularly for irrigation and toilet and urinal flushing, if feasible.

# B. Long-Term Goals

- 1. Big water users in Judicial Council—managed facilities should be evaluated for potential plumbing fixture replacement to low-flow fixtures, if feasible.
- 2. Big water users in Judicial Council—managed facilities should be evaluated for potential turf replacement, if feasible.
- 3. Water features—i.e., fountains, pools, and misters—should be evaluated for permanent conversion to planters or other non-water-using landscape features, if feasible.
- 4. Cooling towers or other evaporative systems scheduled for replacement should be evaluated to determine if a higher priority status is justified by potential water savings, if feasible.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Refer to the *Trial Court Facility Modifications Policy* (rev. Dec. 12, 2014), section III, Priority Categories, for definitions of the priority levels.

5. Ten percent of all Judicial Council—managed facilities should use recycled water for all landscaping needs, if feasible.

## VI. TRACKING WATER CONSERVATION PRACTICES

- A. Judicial Council staff should track water usage by analyzing the water bills it receives, if feasible. Any facility indicating unusual fluctuations in usage from the previous reporting period should be reviewed by Facilities Management staff in collaboration with appropriate court staff, if feasible.
- B. Judicial Council staff should work with county staff to collect utility usage data for facilities for which the Judicial Council is not the customer of record and may not have access to the data, if feasible. When these data are collected, the Judicial Council should review the information and work with county/court staff as appropriate, if feasible.
- C. Judicial Council staff should send letters annually to each presiding judge and court executive officer informing the court leadership of electricity and water cost and/or usage at each of the court's facilities, if feasible. The letter should include baseline information for both electricity and water consumption to allow for the comparison of usage against a baseline standard as well as other court facilities, if feasible.