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## A BILL FOR AN ACT

RELATING TO URBAN WATER CONSERVATION.

**BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:**

1           SECTION 1. (a) There is established a four-year  
2 irrigation water conservation best management practices pilot  
3 program, under which the department of accounting and general  
4 services shall implement irrigation water conservation best  
5 management practices as established by the Landscape Industry  
6 Council of Hawaii to improve the efficiency of landscape  
7 irrigation installations at state facilities through low cost,  
8 practical measures. The pilot program shall complete, at  
9 minimum, four projects with an aggregate area of twenty-five  
10 thousand square feet of landscape irrigation using best  
11 management practices at or around the existing ten capital  
12 district buildings that are part of a pilot study on energy and  
13 water conservation.

14           Irrigation water conservation best management practices  
15 shall include:

- 16           (1) Best management practices for maintenance; and  
17           (2) Best management practices for new installations or  
18           major renovations.



1 (b) As used in this section:

2 "Best management practices for maintenance" includes the  
3 use of:

4 (1) Seasonal timing adjustments to irrigation controller  
5 systems;

6 (2) Aeration of lawns when compaction increases, and short  
7 run-time cycle irrigation in areas where runoff and  
8 ponding occur;

9 (3) Irrigation controllers programmed for long run times  
10 to water as deeply, evenly, and infrequently as  
11 possible to encourage deep rooting and increased  
12 drought resistance;

13 (4) Mulch, organic matter in soils, and drought-tolerant  
14 plants or plants that are naturally occurring at the  
15 site and surroundings;

16 (5) The practice of allowing grass to grow taller to  
17 conserve water; and

18 (6) Schedule systems to run water at night;

19 provided that best management practices for maintenance may also  
20 include periodic practical water audits to review the system  
21 components and verify that the components meet the original



1 design criteria for the efficient operation and uniform  
2 distribution of water.

3 "Best management practices for new installations or major  
4 renovations" includes the use of:

5 (1) New installations that require a coverage test prior  
6 to acceptance; and irrigation system designs, plans,  
7 and specifications that remain on site and contain  
8 water conservation language;

9 (2) Systems designed with sprinklers spaced to achieve  
10 head-to-head coverage or better, and with a  
11 precipitation rate not exceeding the soil infiltration  
12 rate;

13 (3) Systems designed to irrigate similar site, slope, sun  
14 exposure, soil conditions, and plant materials with  
15 similar water use on the same circuit;

16 (4) Climate-based automatic irrigation controllers  
17 utilizing either evapotranspiration and weather  
18 sensors, or soil moisture sensors;

19 (5) Flow sensors with a malfunction valve shutoff system  
20 capability in an irrigation controller and water  
21 submeters that measure outdoor water usage on larger  
22 sites;



- 1 (6) Water conserving irrigation components and check
- 2 valves and drip irrigation for individual specimen
- 3 plants;
- 4 (7) Storm water design methods, including infiltration
- 5 beds, swales, and basins that allow water to collect
- 6 and soak into the ground on site, utilizing low impact
- 7 development principles;
- 8 (8) Nonpotable water sources when available; and
- 9 (9) A qualified irrigation designer, such as an Irrigation
- 10 Association-certified irrigation designer, Irrigation
- 11 Association-certified irrigation contractor, and a
- 12 maintenance contractor with water conservation
- 13 expertise.

14 SECTION 2. The department of accounting and general  
15 services shall submit a report regarding the results of the  
16 four-year irrigation water conservation best management  
17 practices pilot program, including any proposed legislation, to  
18 the legislature no later than twenty days prior to the convening  
19 of the regular session of 2019. The report shall contain but  
20 shall not be limited to information on training conducted,  
21 installation measures, and water savings as measured by gallons.



1 SECTION 3. There is appropriated out of the general  
 2 revenues of the State of Hawaii the sum of \$ or so much  
 3 thereof as may be necessary for fiscal year 2014-2015 for the  
 4 implementation of a four-year irrigation water conservation best  
 5 management practices pilot program pursuant to this Act.

6 The sum appropriated shall be expended by the department of  
 7 accounting and general services for the purposes of this Act.

8 SECTION 4. This Act shall take effect on July 1, 2014.  
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INTRODUCED BY:

*[Handwritten signatures]*  
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JAN 17 2014



# H.B. NO. 2069

**Report Title:**

Urban Water Conservation; Best Management Practices; Public Agency; Appropriation.

**Description:**

Establishes a four-year pilot program requiring DAGS to implement irrigation water conservation best management practices, as established by the Landscape Industry Council of Hawaii and report to the Legislature. Makes an appropriation.

*The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.*

