

PROPOSAL PAPER

Independent Technical Panel on Demand Management Measures  
Final Report on California Landscape Water Use  
1-21-16 Draft

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Section #: 4 (From the current draft outline)

Section Title: Voluntary Turf Replacement (From the current draft outline)

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**Background:**

According to the *California Water Plan 2013 Update*, the residential landscape and large landscape sectors account for approximately four million acre-feet, or 44 percent, of statewide urban water use per year. <sup>1</sup> [uniform data to be inserted here] A large volume of the water used by these sectors is wasted due to leaks, overwatering, and poorly maintained irrigation systems. Contributing to the high water use is the prevalence of turf and other high-water-use plants. <sup>2</sup> [footnote text missing]

Many water suppliers around the state have offered customer incentives for turf, and customer participation has been strong. Notably, the Metropolitan Water District has provided over \$300 million to support turf replacement in Southern California. [insert data or references for MWD program], supplementing turf replacement incentives offered by many of its local agencies. In response to the Governor's April 2015 Executive Order, the Department of Water Resources is also managing a program aimed at replacing 50 million square feet of turf. [insert data or references for DWR program].

The amount of turf in California is vast – over two million acres. No incentive program or programs can pay to convert this large area, and replacement of all turf is not necessary to greatly improve the efficiency of landscape water use. Nevertheless, the stop and start nature of programs to date undercuts the development of strong practices and a capable workforce to accomplish the replacement of unneeded turf over the next two decades.

A statewide turf replacement incentive program would provide multiple benefits through the installation of sustainable landscapes. Sustainable landscapes have multiple benefits, including that they use significantly less water, reduce stormwater runoff, reduce embedded energy use, and reduce green waste generation.

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**Recommended Action:**

This recommendation would reduce the amount of water used to irrigate turf through a turf replacement incentive program. Turf replacement incentive programs are not intended to fund entire projects, but rather provide just enough of an incentive for property owners to take action. Turf replacement incentive programs are also not intended to be available indefinitely. Instead, they are implemented to provide an initial boost to the landscape transformation process and initiate change in the marketplace. There are far too many acres of turf in the state for a turf replacement incentive program to fund replacement of all turf. The transition from turf to sustainable landscapes will take years accomplish, but when complete, will dramatically reduce the amount of water used for landscape irrigation.

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<sup>1</sup> Department of Water Resources. 2014. *California Water Plan Update 2013*. Volume 3 - Resource Management Strategies, Chapter 3 - Urban Water Use Efficiency, 3-10.

<sup>2</sup> Ibid., 3-12.

**The Independent Technical Panel recommends that --**

Legislation be enacted to authorize –

1. a five-year statewide turf replacement incentive program in the form of a non-refundable tax credit to encourage upgrades of existing landscapes to sustainable landscapes. The tax credit for individuals for single-family residential properties would be \$1 per square foot, and the credit for businesses for commercial and rental residential properties would be \$0.50 per square foot.

The tax credit for single-family residential properties would be capped at \$1,500, and the business tax credit would be capped at \$10,000 per property.

Program requirements for converted areas would include, but not be limited to, the following:

- Turf removed must have been installed prior to the effective date of the bill, and irrigated with potable water;
- Turf replacement must take place after the effective date of the bill;
- Minimum of 250 square feet of turf must be replaced;
- Minimum of 50 percent of removed turf area must be replaced with plants;
- Irrigation fixtures must be at least as efficient as high-efficiency nozzles and point source emitters;
- Hardscape must be permeable, pervious, or porous;
- New landscape materials must remain in place for at least five years;
- On-site stormwater capture via rain gardens, bio-swales, dry streambeds, are to be installed where possible; and
- Projects must be documented as compliant with these provisions by –
  - o The local water supplier; or
  - o A contractor not involved in project installation and certified by the Department of Water Resources to verify project installation.

2. A report to the Governor and Legislature by the BOE, in consultation with the Department of Water Resources, on the number of projects, turf area, dollar value of credit, and projected water savings of the tax credits claimed during years one through four of the credit program, and from each agency regarding the extension or modification of the tax credit after year five.

**Moved up [2]: Recommended Action: The Independent Technical Panel recommends that --**

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**Moved up [1]:** A statewide turf replacement incentive program would provide multiple benefits through the installation of sustainable landscapes. Sustainable landscapes have multiple benefits, including that they use significantly less water, reduce stormwater runoff, reduce embedded energy use, and reduce green waste generation.

**Deleted:** To increase the visibility and public acceptance of sustainable landscapes, the program would target the replacement of turf for residential front yards. To qualify for a tax credit a minimum of 250 square feet of turf would need to be replaced

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Utilize a minimum of three inches of mulch;

Utilize on-site stormwater capture via rain gardens, bio-swales, dry streambeds, etc., where possible;