

SECTION 4: VOLUNTARY TURF REPLACEMENT

RECOMMENDATION #1: Turf Replacement Incentive Program

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.¹ 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 cool-season turf grasses and other high-water-use plants.²

Many water suppliers around the state have offered customer incentives for turf since the mid 2000s and customer participation has been strong. Notably, the Metropolitan Water District (MWD) of Southern California has provided over \$300 million to support turf removal in Southern California. [insert data or references for MWD program], supplementing turf replacement incentives offered by many of its member agencies. In response to the Governor's April 2015 Executive Order, the Department of Water Resources (DWR) 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 acres³. No incentive program or programs can provide financial incentives 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 turf replacement programs undercuts the development of strong practices and a capable workforce to accomplish the replacement of ornamental turf over the next two decades.

Purpose Statement

The purpose of this recommendation is to 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 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

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

² Ibid., 3-12.

³ Total turf in California: 2.75 million acres plus or minus 25%. C. Milesi, et al, "Mapping and Modeling the Biogeochemical Cycling of Turf Grasses in the United States," *Environmental Management*, Vol. 36, No. 3, July 2005, p. 433.

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.

The Independent Technical Panel Recommends That:

1. Establishment of 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 with single-family residential properties would be \$1 per square foot, and the credit for commercial and multifamily 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 tax credit for commercial and multifamily residential properties 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 existing prior to the effective date of the bill
- Only turf irrigated with potable water is eligible
- 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 [low-water-use](#) plants
- Irrigation fixtures must be at least as efficient as high-efficiency nozzles and point source emitters
- Hardscape must be permeable, pervious, or porous
- Utilize a minimum of 3" of mulch
- 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

2. A report to the Governor and Legislature be prepared and submitted by the Franchise Tax Board, in consultation with the DWR, 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.