



## The Pros and Cons of Including Artificial Turf in Landscape Transformation Programs Designed to Save Water

About Landscape Transformation Programs Communities in the West and other drought-prone areas are increasingly turning to landscape transformation rebates to help save water. These programs, known by names such as turf conversions or cash for grass, typically replace turf grass with water-efficient or xeriscape landscapes that can include climate-appropriate low-water plants, mulch, hardscaping such as patios and walkways, and, in some instances, low-water grasses, to reduce the overall water demand of the landscape. Often, these programs also require efficiency upgrades to the irrigation system. As landscape transformation programs grow in popularity, water utilities, homeowners, and businesses are evaluating whether artificial turf is a good option to save water.

Water Savings Estimates for Landscape Transformations AWE's [Landscape Transformation study](#), the most expansive and diverse assessment of landscape transformation programs to date, revealed that single-family household participants achieved average water savings between 7-39%. These programs can also help residents and businesses save money on their utility bills, support the flourishing of pollinators and local wildlife, minimize the use of emission-producing maintenance equipment, and reduce the application of lawn and garden chemicals.

### Artificial Turf and Water Savings

- Landscape transformations can save significant amounts of water, whether that is by replacing turf grass with a sustainable landscape or with artificial turf.
- Water savings from artificial turf may be offset by the need to water artificial turf for cooling and cleaning, especially when used for athletic fields.
- Water savings estimates for artificial turf should be evaluated based on the local climate, rainfall, and community landscape irrigation practices and habits.

Artificial Turf and Other Environmental Factors Artificial turf is likely to save water compared to irrigated landscapes; however, that is also true for hardscapes or inorganic mulches like rocks or gravel. There are other factors beyond water savings to consider, including the following Pros and Cons of artificial turf:

#### *Pros:*

- Potential to reduce fertilizer and mower use, pesticide application, and related pollution.
- Can be a durable, low-maintenance surface for athletics and spaces with high foot traffic.

*Cons:*

- Does not increase plant, animal and insect biodiversity as natural landscapes can.
- Increases urban heat island effects due to high surface temperatures, which may have negative impacts on recreational use, human health, and the health of nearby plants and trees.
- Must be replaced periodically, with used artificial turf often going to landfills due to low availability and the cost of recycling solutions.
- May contain chemicals of concern, such as carcinogens, VOCs, and PFAS.
- Can generate microplastic contamination.
- May adversely impact soil health and groundwater infiltration.
- Potential for pet waste build up and odors.
- Can increase stormwater runoff.

\* For a more detailed evaluation of pros and cons, explore this [report](#) from Western Resource Advocates.

Conclusion Many landscapes, including artificial turf, can reduce outdoor water use compared to traditional turf grass. Among AWE's water utility member organizations with landscape transformation programs, most do not rebate for artificial turf, while others do with conditions such as limiting the extent to which it can be installed or offering a lower rebate amount than for replacement with low water plant material. In deciding whether to utilize artificial turf, it is important to consider the full range of environmental factors in the context of community goals.