

Payback Calculator References

1. This calculator uses the estimated water use formula from the State of California's [Model Water Efficient Landscape Ordinance](#) (MWELo). This formula assumes an existing lawn of cool season turf has a plant factor of 0.8.
2. The existing irrigation efficiency is assumed to be 0.55 for spray irrigation and 0.65 for rotors.
 - Bernuth, R. D. 2013. Landscape Irrigation Auditor Handbook. Irrigation Association. p. 61
3. The new irrigation efficiency is 0.75 for spray irrigation and 0.81 for drip irrigation and are based on values used in MWELo.
4. The new low water landscape plant factor is 0.3. The Water Use Classifications of Landscape Species (WUCOLS) plant factor for low water plants ranges from 0.1 to 0.3.
5. The water saving assumptions derived from sheet mulching include cardboard being used as a weed barrier, no application of fertilizers or herbicides, and compost applied at ½" depth. Mulch is included in the plant factor determination.
 - Gleick , P.H., Haasz, D., Henges-Jeck, C., Srinivasan, V., Wolff, G., Cushing, K.K., and A. Mann. 2003. Waste Not, Want Not: The Potential for Urban Water Conservation in California. Pacific Institute
 - Approx 1% increase in organic matter per 1 cubic yard compost / 1000 square feet; McGill Environmental Systems personal communication
 - Hudson, B. E. 1994. Soil organic matter and available water capacity. Journal of Soil and Water Conservation. Vol. 49, No. 2. p. 189-194

Disclaimer: This calculator was created by East Bay Municipal Utility District (EBMUD) and StopWaste to obtain an estimate of a payback period on a landscape project and is intended for informational use only.