

**4.9-16 WATER CONSERVATION/PRINCIPLES OF WATER BUDGETS
HELIX WATER DISTRICT**

4.9-16(A) General

Water budgets will be assigned to all Irrigation Classes. A water budget is a tool to encourage appropriate water use during all seasons. Water budgets assign target usage for each billing cycle. Water budgets will be tied to a tiered rate billing structure. Accounts that use more water than their assigned budget target will be billed at a higher tier or tiers than the target usage tier. These higher tiers are referred to as water conservation rates.

4.9-16(B) Requirements

- (1) Water budgets are based on a property's irrigated landscape area.
- (2) Water budgets are assigned on a per meter basis for sites with more than one meter. The site is responsible for providing Helix staff with a map or description of the landscape areas served by each meter.

4.9-16(C) Procedure

- (1) Budgets will be calculated by Helix staff using the formula below in compliance with the Maximum Applied Water Allowance (MAWA) as outlined in California's Model Water Efficient Landscape Ordinance:

$$\text{Water budget in HCF} = \frac{\text{LA} \times (\text{ETAF} \times \text{ETo}) \times 0.62}{748}$$

- (a) LA=Irrigated landscape area in square feet
- (b) ETAF (Evapotranspiration Adjustment Factor)=
 - i. 0.7 for existing, non-rehabilitated landscapes
 - ii. 0.55 for residential landscapes (new or redeveloped) that are permitted on or after December 1, 2015
 - iii. 0.45 for non-residential landscapes, new or redeveloped, that are permitted on or after December 1, 2015
 - iv. 1.0 for schools or public sites with functional use turf (e.g. parks, picnic areas, athletic fields)
- (c) ETo=Reference Evapotranspiration from the closest CIMIS station (Station 153/Escondido or Station 147/Otay Lake) in inches

- (d) 0.62=Conversion factor (to gallons per square foot)
- (e) The ET Adjustment Factors may be modified as the District Water Shortage Levels change (See Table A below.)
- (f) The California Irrigation Management Information System lists the historical and daily ETo figures on-line at <http://www.cimis.water.ca.gov>. Helix water budget calculations will be in compliance with these figures. Effective with bills issued on or after November 16, 2015, CIMIS daily ETo values will be used by the District to calculate water budgets instead of historical values.

Table A: Water Shortage Level ET Adjustment Factor

Water Shortage Level	I	II	III	IV
ETAF Existing (prior to 12/1/15)	0.7	TBD	TBD	TBD
ETAF Residential (new or redeveloped after 12/1/15)	0.55	TBD	TBD	TBD
ETAF Non-Residential (new or redeveloped after 12/1/15)	0.45	TBD	TBD	TBD

*TBD = To be determined by the Board.

- (2) Water budgets are calculated on a bi-monthly billing cycle basis.

4.9-16(D) Compliance

- (1) If a customer believes that the assigned budget is too low, given their site conditions, they may apply for a variance to their water budget for potential adjustments to the irrigated landscape area, plant type or other special circumstances approved by the General Manager or his/her designee.
- (2) Newly planted low-water-use landscapes (with a crop coefficient of less than 50%) are eligible to apply for an increased water budget during its establishment period not to exceed three years. The watering schedule must be reduced to comply with the site’s standard water budget within three years. All requests are subject to field verification.

- (3) If the District is unable to confirm a customer's landscaped areas served by each meter, the District will calculate and assign a water budget of 1 HCF per billing period for each meter, until such time the required information is provided and confirmed.