Short case study of Harbor Bay Median Sheet Mulch project



HARBOR BAY MEDIAN

- Located in the City of Alameda
- 2 ½ miles of medians along a busy road
- Project located in environmentally sensitive area less than 100 yards from shoreline
- Renovation designed by <u>April Philips Design Works</u> and constructed by <u>Cagwin & Dorward</u>
- Lawn sheet mulched in place with compost, cardboard and mulch
- Irrigation retrofitted to inline emitters
- Low water use plantings installed

BEFORE



Grading near hardscape lowered, excess sod flipped and put in center



Layer of compost put on top of lawn, then cardboard, then more compost. Extra compost added to improve sandy soil conditions.



Inline irrigation placed on top of compost & cardboard



Small grass plugs planted and natural liquid fertilizers added to help plants get established



First year after planting



Two years after planting



Harbor Bay Median

Water Savings

| | 2006–10 Avg | 2011 | Savings | Savings |
|---------|-------------|---------|----------|--------------|
| Cost/Yr | \$21,615 | \$6,770 | \$14,846 | 69% |
| Units | 6,123 | 2,274 | 3,849 | 2.9M Gallons |

Cost is based on today's price of water - \$3.11 per unit

Units = Weather Normalized Data

2011 – 1st year of establishment (typically higher water usage)

Harbor Bay Median Benefits

- Water use reduced by 2.9 million gallons annually
- Watering costs reduced by \$15,000
- Water consumption reduced by 69%
- Greenhouse gas emissions reduced by 5,300 pounds
- Synthetic fertilizer use reduced by 1,300 pounds
- Avoided 221 tons of sod being landfilled
- Incorporated 530 tons of local, recycled compost & mulch
- Achieved Bay-Friendly Landscape Rating, earning 79 points
- Completed the largest sheet mulching project in California