

## ETc Table 37. Zone 15 Dry Year

### ETc Table for Irrigation Scheduling and Design

#### Zone 15 Monthly Evapotranspiration

Surface Irrigation Dry Year

IRRIGATION TRAINING AND RESEARCH CENTER, California Polytechnic State University, San Luis Obispo

Table does not include adjustments for bare spots and reduced vigor

	1999 (Dry Year)												
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Precipitation	inches	inches	inches	inches	inches	inches	inches	inches	inches	inches	inches	inches	inches
Grass Reference ET <sub>o</sub>	0.90	1.77	3.40	5.27	7.74	8.10	8.47	7.34	5.84	4.09	1.82	1.53	56.27
Apple, Pear, Cherry, Plum and Prune	0.67	1.36	2.21	3.63	6.97	7.34	7.83	6.80	5.14	2.30	0.27	0.15	44.65
Apples, Plums, Cherries etc w/covercrop	0.78	1.89	4.00	5.27	8.34	9.01	9.47	8.36	6.17	3.14	0.95	0.65	58.03
Peach, Nectarine and Apricots	0.67	1.36	2.05	2.70	6.44	7.43	7.88	6.92	5.20	2.21	0.27	0.15	43.27
Immature Peaches, Nectarines, etc	0.67	1.37	1.87	1.71	4.20	4.84	5.27	4.35	3.28	1.37	0.28	0.15	29.36
Almonds	0.67	1.56	2.52	4.00	6.63	6.54	6.92	6.59	4.40	2.30	0.27	0.15	42.55
Almonds w/covercrop	0.89	1.98	3.39	5.22	7.48	7.87	8.40	7.15	4.89	2.93	1.16	0.88	52.23
Immature Almonds	0.67	1.46	2.18	3.36	5.50	5.59	6.03	5.25	3.58	1.62	0.28	0.15	35.66
Walnuts	0.67	1.36	2.31	2.84	7.32	9.03	9.54	8.27	5.73	2.67	0.37	0.15	50.26
Pistachio	0.67	1.36	1.69	1.70	2.73	6.37	8.95	7.73	5.94	2.82	0.31	0.15	40.40
Pistachio w/ covercrop	0.95	1.99	3.36	4.18	5.67	8.05	9.76	8.45	6.68	3.90	1.24	0.91	55.13
Immature Pistachio	0.67	1.37	1.69	1.08	1.65	4.20	6.29	5.50	3.97	1.74	0.34	0.15	28.66
Misc. Deciduous	0.67	1.36	2.36	3.43	6.58	7.07	7.54	6.30	5.10	2.16	0.27	0.15	42.98
Grain and Grain Hay	0.79	2.02	3.86	5.75	3.97	0.01	0.01	0.00	0.03	0.00	0.85	0.40	17.71
Rice	0.70	1.39	1.68	1.36	7.66	9.87	10.55	9.06	2.62	0.00	0.28	0.15	45.30
Cotton	0.70	1.39	1.68	1.37	1.66	5.05	9.02	8.08	5.83	1.26	0.28	0.15	36.45
Safflower and Sunflower	0.91	1.57	2.53	5.46	9.05	7.79	0.73	0.00	0.03	0.00	0.28	0.15	28.51
Corn and Grain Sorghum	0.70	1.39	2.67	1.67	2.77	7.52	8.99	5.43	0.37	0.00	0.28	0.15	31.92
Misc. field crops	0.70	1.39	2.67	1.67	2.74	7.85	8.34	2.73	0.03	0.00	0.28	0.15	28.54
Alfalfa Hay and Clover	1.02	2.01	3.87	5.65	7.10	7.44	7.65	6.77	5.20	1.80	1.56	1.57	51.65
Pasture and Misc. Grasses	0.70	1.96	3.13	4.76	7.70	8.15	8.46	7.44	5.80	3.27	0.75	0.15	52.28
Small Vegetables	0.93	1.73	3.36	5.67	1.82	0.00	0.01	1.04	1.35	0.98	1.46	1.53	19.89
Tomatoes and Peppers	0.70	1.39	2.21	1.26	4.36	8.73	7.47	0.47	0.03	0.00	0.28	0.15	27.03
Potatoes, Sugar beets, Turnips etc.	1.00	1.58	2.79	5.77	8.74	9.05	8.06	0.07	0.03	0.00	0.28	0.15	37.52
Melons, Squash, and Cucumbers	0.70	1.39	1.68	0.64	0.84	1.26	5.38	6.12	1.79	0.00	0.28	0.15	20.23
Onions and Garlic	0.78	1.95	3.51	4.81	5.13	0.79	0.02	0.00	0.03	0.00	1.03	0.38	18.42
Citrus (no ground cover)	0.99	2.01	3.72	4.66	5.63	5.94	6.15	5.31	4.19	3.03	1.43	1.36	44.44
Immature Citrus	0.83	1.74	2.70	3.00	3.47	3.71	3.90	3.25	2.75	1.76	1.02	0.76	28.89
Misc Subtropical	0.67	1.36	2.36	3.43	6.58	7.07	7.54	6.30	5.10	2.16	0.27	0.15	42.98
Grape Vines with 80% canopy	0.67	1.37	2.01	1.81	4.26	6.19	6.64	4.89	3.10	0.00	0.27	0.15	31.38
Grape Vines with cover crop (80% canopy)	0.77	1.77	3.15	3.60	5.65	6.91	7.49	5.98	3.58	1.52	0.79	0.55	41.77
Immature Grapes Vines with 50% canopy	0.68	1.37	1.86	1.38	3.23	4.61	5.18	3.66	2.26	0.01	0.27	0.15	24.66
Idle	0.71	1.40	1.68	0.65	0.05	0.00	0.01	0.00	0.03	0.00	0.28	0.15	4.95

## ETc Table 38. Zone 16 Dry Year

### ETc Table for Irrigation Scheduling and Design

#### Zone 16 Monthly Evapotranspiration

Surface Irrigation Dry Year

IRRIGATION TRAINING AND RESEARCH CENTER, California Polytechnic State University, San Luis Obispo

Table does not include adjustments for bare spots and reduced vigor

	1999 (Dry Year)												
	January	February	March	April	May	June	July	August	September	October	November	December	Annual
	inches	inches	inches	inches	inches	inches	inches	inches	inches	inches	inches	inches	inches
<b>Precipitation</b>	2.33	0.76	2.11	1.49	0.05	0.06	0.00	0.00	0.11	0.43	0.08	0.22	<b>7.63</b>
<b>Grass Reference ETo</b>	0.82	1.90	3.55	5.51	7.98	8.32	8.75	7.41	6.10	4.45	2.10	1.55	<b>58.44</b>
Apple, Pear, Cherry, Plum and Prune	0.51	1.03	<b>2.18</b>	<b>4.95</b>	7.23	7.61	<b>8.15</b>	<b>6.97</b>	<b>5.26</b>	<b>2.85</b>	0.10	0.19	<b>47.05</b>
Apples, Plums, Cherries etc w/covercrop	0.71	1.97	<b>4.23</b>	<b>6.42</b>	<b>8.68</b>	<b>9.48</b>	<b>9.82</b>	<b>8.48</b>	<b>6.62</b>	<b>3.92</b>	1.51	0.92	<b>62.75</b>
Peach, Nectarine and Apricots	0.51	1.03	<b>1.83</b>	<b>4.20</b>	<b>6.67</b>	<b>7.67</b>	<b>8.22</b>	<b>6.79</b>	<b>5.55</b>	<b>2.69</b>	0.10	0.19	<b>45.46</b>
Immature Peaches, Nectarines, etc	0.52	1.04	<b>1.67</b>	<b>3.11</b>	<b>4.19</b>	<b>5.29</b>	<b>5.29</b>	<b>4.51</b>	<b>3.48</b>	<b>1.90</b>	0.10	0.19	<b>31.29</b>
Almonds	0.51	<b>1.31</b>	<b>2.28</b>	<b>5.50</b>	<b>6.65</b>	<b>6.81</b>	<b>7.28</b>	<b>6.64</b>	<b>4.71</b>	<b>2.71</b>	0.10	0.19	<b>44.72</b>
Almonds w/covercrop	0.67	<b>1.95</b>	<b>3.31</b>	<b>6.18</b>	<b>7.95</b>	<b>7.89</b>	<b>8.75</b>	<b>7.05</b>	<b>5.71</b>	<b>2.66</b>	0.96	0.64	<b>53.71</b>
Immature Almonds	0.52	<b>1.15</b>	<b>1.97</b>	<b>4.68</b>	<b>5.65</b>	<b>5.90</b>	<b>6.37</b>	<b>5.23</b>	<b>3.75</b>	<b>2.14</b>	0.10	0.19	<b>37.65</b>
Walnuts	0.51	1.03	<b>2.34</b>	<b>4.33</b>	<b>7.54</b>	<b>9.40</b>	<b>9.90</b>	<b>8.43</b>	<b>6.03</b>	<b>3.23</b>	0.18	0.19	<b>53.13</b>
Pistachio	0.51	1.03	1.52	<b>2.96</b>	<b>2.80</b>	<b>6.52</b>	<b>9.38</b>	<b>7.95</b>	<b>6.13</b>	<b>3.30</b>	0.25	0.19	<b>42.56</b>
Pistachio w/ covercrop	0.75	1.97	3.00	<b>5.41</b>	<b>5.89</b>	<b>8.39</b>	<b>10.21</b>	<b>8.72</b>	<b>6.93</b>	<b>4.39</b>	1.27	0.78	<b>57.71</b>
Immature Pistachio	0.52	1.04	1.52	<b>2.49</b>	<b>1.68</b>	<b>4.36</b>	<b>6.47</b>	<b>5.57</b>	<b>4.23</b>	<b>2.19</b>	0.15	0.19	<b>30.40</b>
Misc. Deciduous	0.51	1.03	<b>2.18</b>	<b>4.71</b>	<b>6.99</b>	<b>7.24</b>	<b>7.73</b>	<b>6.64</b>	<b>5.18</b>	<b>2.83</b>	0.10	0.19	<b>45.34</b>
Grain and Grain Hay	<b>0.64</b>	<b>2.09</b>	<b>3.95</b>	<b>6.22</b>	<b>4.05</b>	0.07	0.00	0.00	0.12	0.40	0.76	<b>0.40</b>	<b>18.69</b>
Cotton	0.53	1.04	1.50	2.43	1.74	<b>5.21</b>	<b>9.33</b>	<b>8.15</b>	<b>6.22</b>	<b>2.13</b>	0.11	0.19	<b>38.57</b>
Safflower and Sunflower	0.86	<b>1.26</b>	<b>2.37</b>	<b>6.08</b>	<b>9.34</b>	<b>8.06</b>	<b>0.75</b>	0.00	0.12	0.40	0.10	0.19	<b>29.54</b>
Corn and Grain Sorghum	0.53	1.04	2.65	<b>2.83</b>	<b>2.90</b>	<b>7.70</b>	<b>9.23</b>	<b>5.22</b>	<b>0.44</b>	0.40	0.10	0.19	<b>33.24</b>
Misc. field crops	0.53	1.04	2.65	<b>2.83</b>	<b>2.83</b>	<b>8.09</b>	<b>8.70</b>	<b>2.83</b>	0.14	0.40	0.10	0.19	<b>30.32</b>
Alfalfa Hay and Clover	<b>0.90</b>	<b>2.08</b>	<b>4.02</b>	<b>6.22</b>	<b>7.34</b>	<b>7.67</b>	<b>7.85</b>	<b>6.93</b>	<b>5.51</b>	<b>2.25</b>	<b>1.76</b>	<b>1.64</b>	<b>54.17</b>
Pasture and Misc. Grasses	0.53	<b>1.58</b>	<b>2.89</b>	<b>5.67</b>	<b>7.96</b>	<b>8.36</b>	<b>8.82</b>	<b>7.48</b>	<b>6.07</b>	<b>3.87</b>	<b>0.65</b>	0.19	<b>54.07</b>
Small Vegetables	<b>0.81</b>	<b>1.52</b>	<b>3.55</b>	<b>6.06</b>	<b>1.65</b>	0.06	0.00	1.01	<b>1.46</b>	<b>1.57</b>	<b>1.57</b>	<b>1.58</b>	<b>20.83</b>
Tomatoes and Peppers	0.53	1.04	2.05	<b>2.63</b>	<b>4.50</b>	<b>9.02</b>	<b>8.31</b>	<b>5.64</b>	0.14	0.40	0.10	0.19	<b>29.55</b>
Potatoes, Sugar beets, Turnips etc.	0.92	<b>1.31</b>	<b>2.70</b>	<b>6.28</b>	<b>9.05</b>	<b>9.47</b>	<b>8.17</b>	0.06	0.14	0.40	0.10	0.19	<b>38.78</b>
Melons, Squash, and Cucumbers	0.53	1.04	1.50	2.03	0.85	<b>1.45</b>	<b>5.54</b>	<b>6.17</b>	<b>2.05</b>	0.40	0.10	0.19	<b>21.84</b>
Onions and Garlic	<b>0.63</b>	<b>1.95</b>	<b>3.53</b>	<b>5.38</b>	<b>5.26</b>	<b>0.82</b>	0.00	0.00	0.12	0.40	0.84	<b>0.47</b>	<b>19.39</b>
Citrus (no ground cover)	<b>0.89</b>	<b>2.05</b>	<b>3.61</b>	<b>5.89</b>	<b>5.89</b>	<b>6.06</b>	<b>6.34</b>	<b>5.36</b>	<b>4.44</b>	<b>3.66</b>	<b>1.72</b>	<b>1.25</b>	<b>47.16</b>
Immature Citrus	<b>0.68</b>	<b>1.56</b>	<b>2.58</b>	<b>4.26</b>	<b>3.64</b>	<b>3.76</b>	<b>4.00</b>	<b>3.43</b>	<b>2.86</b>	<b>2.30</b>	<b>0.95</b>	<b>0.76</b>	<b>30.78</b>
Misc Subtropical	<b>0.51</b>	<b>1.03</b>	<b>2.18</b>	<b>4.71</b>	<b>6.99</b>	<b>7.24</b>	<b>7.73</b>	<b>6.64</b>	<b>5.18</b>	<b>2.83</b>	<b>0.10</b>	<b>0.19</b>	<b>45.34</b>
Grape Vines with 80% canopy	0.52	1.04	<b>1.86</b>	<b>3.19</b>	<b>4.51</b>	<b>6.38</b>	<b>6.77</b>	<b>5.08</b>	<b>3.20</b>	0.40	0.10	0.19	<b>33.23</b>
Grape Vines with cover crop (80% canopy)	0.58	1.65	<b>3.09</b>	<b>4.99</b>	<b>5.96</b>	<b>7.09</b>	<b>7.81</b>	<b>5.96</b>	<b>3.84</b>	2.11	0.76	0.54	<b>44.37</b>
Immature Grapes Vines with 50% canopy	0.52	1.04	<b>1.67</b>	<b>2.79</b>	<b>3.29</b>	<b>4.78</b>	<b>5.39</b>	<b>3.68</b>	<b>2.36</b>	0.46	0.10	0.19	<b>26.27</b>
Idle	0.54	1.04	1.49	2.03	0.06	0.06	0.00	0.00	0.12	0.39	0.10	0.19	<b>6.02</b>