

Preface water study 2007

This test was as an information gathering study.

The International Professional Pond Contractors Association chose this test site location because of the extreme logistical properties this pond brought to this initial study.

The criteria for this site:

1. Newer subdivision
2. No old growth trees
3. Minimal protection from wind
4. Maximum exposure to sun.
5. Total square foot of water area, 488 sqft.
 - a. 294 square foot static surface area.
 - b. 194 square feet water in constant motion
6. Combined water fall vertical drops totaling $5\frac{1}{2}$ feet.
7. Established plant growth in bog/stream/pond.
8. Established turf area, 588 sqft. adjoining water area.



2007 Summary

Ponds win the H₂O Conservation Cup again!

Water consumption was carefully measured for both the Water Feature and the Turf Areas. The Water Feature resulted in a dramatic saving over the turf area. The 2007 weather patterns were actually a disadvantage to the Water Feature and yet the results still show a dramatic savings.

The general weather conditions over this period of time were low temperatures in the mid 70 degrees at night to upper 90 degrees during the day. There were several 100 degree plus days which is typical for this area from Mid June through Mid September. August resulted in a protracted period of days with upper 90 degree to 100 temperatures and wind averaging 10 mph with gust 35 to 50 mph for days at a time.

When the dust settled – the 2007 results are that the Water Feature consumed **8,078 gallons** and Turf Area consumed **71,439 gallons**.

Water comparison of totals 2007

Water area 8,078 gallons June 3rd 2007 thru Oct. 6th, 2007

Turf area 71,439 gallons July 1st 2007 thru Oct. 6th, 2007

Comparison 2003

Water area 9,000 gallons June 1st 2003 thru Nov. 1st 2003

Turf area 27,000 gallons June 1st 2003 thru Nov. 1st 2003

Turf/sprinkler data 2007

28 sprinkler heads, five zones total set for optimum impact operating at 4 a.m.

3 heads metered in control area;

June 30 thru July 28 and Oct 6 sprinklers set for 15 minutes every five days.

August 4 thru September 29 control area (3 sprinkler heads) set 15 minutes every other day.

25 remaining sprinkler heads set for 15 minutes every 5 days.

Control areas

Water area 8,078 gallons June 3rd 2007 thru Oct. 6th 2007* **

Turf area 11,939 gallons July 3rd 2007 thru Oct. 6th 2007* **

Total water usage for Water Feature, Turf, & Household

42 units May 24th thru July 26th, 2007 - 31,500 gallons

54 units July 26th thru Sept 26th, 2007 - 40,500 gallons

30 units May 24th thru July 26th, 2006 - 22,500 gallons

29 units July 26th thru Sept. 26th, 2006 - 21,750 gallons

Property increase 2006/2007 16,250 gallons.