

IEWK Prado Lakes Secchi Disk Dip In July 10, 2008



Inland Empire Waterkeeper was pleased to partner with the International Baccalaureate program at Raney Intermediate School in Corona to perform turbidity measurements with a real Secchi disk in our Waterkeeper canoe at Prado Park Lake! Each student also was able to take readings of ammonia, nitrate, phosphate, dissolved oxygen and temperature. All results will be sent to the Dip-In database run by Kent State in Ohio. This event was made possible through a generous donation from [Malcolm Pirmie, Inc.](#) Following are more photos and sampling results.



Programs Director Autumn DeWoody provides guidance on hands-on sampling.



The first group takes off for Secchi disk testing with Waterkeeper Lee Reeder.



Programs Director Autumn DeWoody and IEWK intern Abe Kim lead the water sampling.

Sampling Results

TEST	Result 1	Result 2
D.O.	< 4 ppm	~7 ppm
Nitrate	~ 5 ppm	~ 0 ppm
pH	~8	~9.5
Phosphate	~2 ppm	< 1 ppm
Water Temp	28-30 C	26 C

Secchi Disk Results

Name	Depth	Time
Jimmy Flora	34 inches	9.35 am
Serena Master	40 inches	9.50 am
Sabrina Thomas	30 inches	10.05 am
Austin Ha	29 inches	10.10 am
Hannah Lee	29 inches	10.25 am
Sabrina Houston	33 inches	10.30 am
Austin Ha	37 inches	10.45 am
Mean depth: 33 inches		

Our average Secchi depth was 33", which is about 1 meter and we can deduce that Prado Lake is a Eutrophic lake. Since we measured the Secchi depth at times between 9:30 am and 10:45 am, there is some room for error in our measurements because it is best to measure the Secchi depth at the sun's peak, which is around 12 pm. However, when we made our measurements, it was about 80 degrees already and the sky was very clear. It has moderate amount of dissolved oxygen on the top and probably a low concentration at the bottom. The pH is high for a freshwater lake, where desirable is around 6.5 to 8.5. Where productivity and nutrient level on the bottom of the lake is high, on the top it is scarce. Although nutrient level is low on the surface of the water, the lake as a whole has a high level due to surrounding agricultural benefactors such as fertilizers, manure from cows, and duck feeding. However, due to the rooted plant growth along the shores and out into the lake, the water clarity was not clear. So our Secchi depth readings were quite low and it was hard for sunlight to penetrate the water.