

## Lake Youngs Summary for September 1, 2010

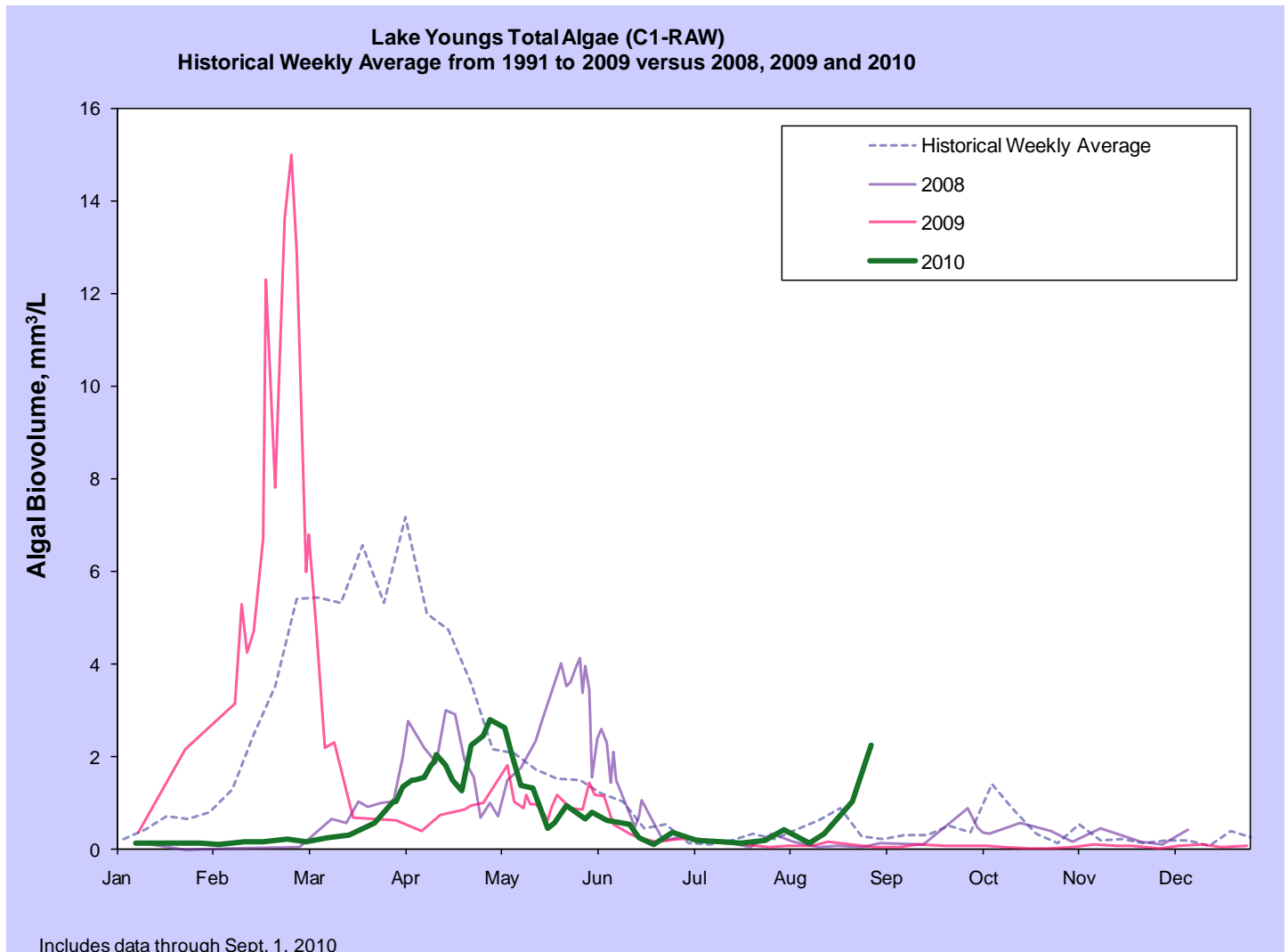
The total algal biovolume in Lake Youngs is at a current level of 2.3 mm<sup>3</sup>/L, dominated by *Fragilaria* along with significant amounts of *Tabellaria* and *Synedra*. There are 12 species currently present in Lake Youngs, including *Uroglena* and *Aphanothece*. The *Uroglena* is at very low levels, and is not causing a taste and odor problem in the finished water. *Cyclotella* is present at very low numbers, but should not be a problem. *Fragilaria* is 54% of the total biovolume. All three dominant species are diatoms, and are common in Lake Youngs.

Water temperature is slightly below normal with an average around 17.8 °C in the water going to the treatment plant. The peak day did not exceed 20 °C this summer (average for the day). Coliform levels have been well below average for this time of year in Lake Youngs. This past week's numbers ranged from 14 to 78 cfu/100mL, compared to the historical average for August which is 2115 cfu/100mL.

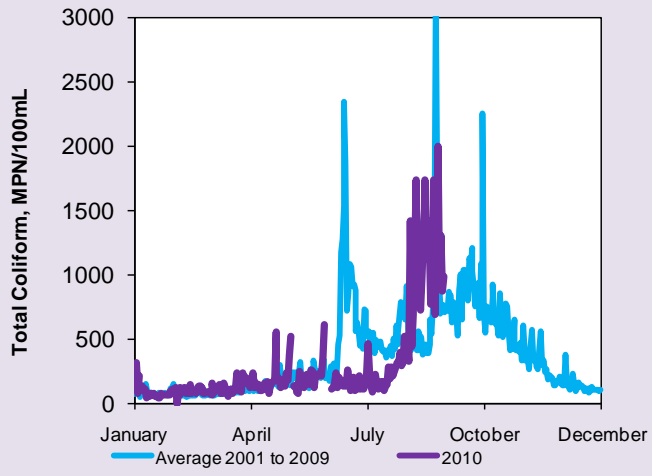
The fall bloom that Lake Youngs is experiencing should not be causing filter clogging calls for the residential customers (unless it continues to increase). The Cedar Treatment Facility is seeing a slight increase in cleaning requirements, and the increase in pH in Lake Youngs is resulting in a small increase in ozone demand. A previous fall bloom of *Fragilaria* occurred in August 2007, and reached a peak biovolume of 6.8 mm<sup>3</sup>/L. The bloom lasted around 4 weeks.

One purveyor has reported cartridge filter clogging occurring at one PRV station, but not all stations.

Algae sampling is still occurring at the normal weekly collection schedule.



**Landsburg Raw Water Total Coliform**



**Lake Youngs Raw Water Total Coliform**

