Monitoring Programs:
The continuous monitoring and water quality mapping programs both collect dissolved oxygen, chlorophyll, turbidity, water temperature, salinity and pH data. Continuous monitors measure data every 15-minutes, while each monthly water quality mapping cruise measures several thousand surface water quality measurements. During bi-weekly continuous monitor exchange and monthly water quality mapping cruises, in situ calibration samples are taken for light attenuation, nutrients, chlorophyll and total suspended sediment. These calibration data, in combination with the spatially and temporally intensive automated data, provide managers with insight into the effects of current management efforts to reduce nutrient and sediment pollution and can guide future actions.

Water Quality Mapping

Synopsis:
Water Quality Mapping
• Surface dissolved oxygen has improved over the 5-year period. Some of this improvement may be related to cruise times starting about 15 minutes later in the morning in each subsequent year and thus further away from timing of the monthly cruises may greatly affect results due to the ephemeral nature of algal blooms.
• Average turbidity levels never reach a level that is supportive of underwater grass growth.
• During 2008-2009, chlorophyll and dissolved oxygen ‘attainment’ has rebounded from levels seen in 2006-2007 at Sycamore Point.

Continuous Monitoring
• Dissolved oxygen, water clarity and chlorophyll levels are better at downstream locations.
• For this analysis, negative turbidity values were not factored into the calculations. These values could be acceptable data that represent exceptional water clarity and therefore passing values may be artificially lowered.