White Pond Water Quality Monitoring Update, June16, 2022

CURRENT WATER USE STATUS: SWIM AT YOUR OWN RISK

SUMMARY: A visible cyanobacteria bloom emerged this week at White Pond. Out of an abundance of caution, the pond was closed to swimming until water samples could be taken. Water samples taken on June 15 show that the bloom is composed almost entirely of the cyanobacteria genus *Dolichospermum*. Although this type of cyanobacteria can cause blooms, it is much less likely to produce toxins of concern. Estimated microcystin toxin levels are very low in samples taken this week throughout the pond. Because toxin levels are low, the pond will be re-opened to swimming even though a bloom is still visible. Users should be aware that exposure to cyanobacteria can cause dermal reactions such as rashes. For this reason, the pond will be posted as Swim At Your Own Risk as long as a visible bloom is present. Pond users should avoid contact with areas of visible blooms and rinse off with clean fresh water as soon as possible after exposure.

Cyanobacteria Sampling and Bloom Status

Water samples taken June 15 show the cyanobacteria *Dolichospermum* has emerged in large numbers at all sampling sites across the pond and is responsible for the visible bloom that emerged this week. This is a common phenomenon in ponds with a history of cyanobacteria blooms and is referred to as an early season recruitment or seeding event. The good news for pond users is that the vast majority of the cyanobacteria in this week's samples were of the genus *Dolichospermum*. *Dolichospermum* is much less likely to produce the toxin microcystin which causes water use closures. *Microcystis*, the cyanobacteria that produces microcystin toxin, comprised less than 1% of all cyanobacteria cells found in this week's sample.

Microcystin toxin levels at White Pond this week are estimated to be extremely low, both in deep water areas and near the town beach. For this reason, the pond will be reopened to swimming.

The current water use advisory level is Swim At your Own Risk, due to a small risk of skin reactions associated with dermal exposure to cyanobacteria. Skin exposure to cyanobacteria in large concentrations present in visible bloom areas can result in dermal reactions such as skin irritation and rashes. Pond users should avoid contact with areas of visible blooms and rinse off with clean fresh water as soon as possible after exposure.

Water samples will be taken weekly staring next week so that cyanobacteria and toxin levels can be closely monitored now that a bloom has emerged.

A-Pod HAB Trap update

The primary A-Pod position is in position in the Thoreau Cove area below Seymour St, which is shown in solid yellow in the figure below. The primary A-Pod will contain two, 200-foot long collection members which float in the water column. The primary A-Pod is situated to maximize recovery of the deeper and larger cyanobacteria biomass source but it will also remove shallow scums.

In response to increasing numbers of cyanobacteria, two new, smaller A-Pod units were installed this week toward the northern side of White Pond. These units will help capture to capture shallow water concentrations of cyanobacteria and any bloom scums that may form. All A-Pod units have a QR code that can be scanned for those who wish more information. Pond users are asked to not disturb the A-Pods if you observe them or swim near them.