

Joint Committee on Sengekontacket Pond

**Actions to Validate Source of Bacterial Contamination On Sengekontacket Pond**

Source Information needed	Actions
Validate actual bird type and count on Sarson Island and at selected other sites on Pond	Survey/count bird populations – use County Beach surveying team (April to Sept). <b><i>Mass Audubon Coastal Waterbird Program staff (who conduct the Sylvia State Beach bird counts for the County) have agreed to add counts of geese, cormorants and gulls on Sarson Island and report to both FOS and the County periodically over the 2008 period.</i></b>
Algae/eutrophication	Survey actual growth during summer months. Weekly mid-June to mid-September collect wrack from bottom (need boat, snorkeling equipment) from a consistent set of locations. Dry and weigh to measure rate of development.
Fertilizer	Survey properties at pond edge for use of fertilizer (residences and lawns, association and club properties and practices, etc.)
Dog activity	Survey dog activity ( both on leashes and loose) to get a better handle on their impact on the contamination, especially defecation in the wrack. Create information/awareness flier for local homeowners with pets.
Road runoff	With assistance of Highway Depts in OB and Edg. , survey proximate road surfaces immediately after storms for runoff; survey nearby land areas for contamination sources (dogs, farm animals, birds, etc.). Collect samples from the Boulevard and, if concentrated runoff, at the bridges. Collect from the fresh water inputs that are located at Farm Neck, at the inner end of Major's Cove (2 or 3 locations), at the spring north of the Town landing at the Boulevard, at the spring at the Tuthill property and at the Beach Road crossing of the drainage out of Lily Pond at least once. Analyze for fecal coliform and possibly also for nitrate.
Water temperatures	During warmer months, survey water temperatures at DMF testing sites at various depths of water column. Use battery operated temperature monitors anchored to specific locations to capture data continuously each day for the summer months. Coordinate with MV Shellfish Group to use adaptor and software to download data (see Rick Karney).
Weather/air temperatures	Record air temperatures and rain occurrence during warmer months. Use Lovewell/Weather Bureau data.
Septic systems	With assistance of Health agents in OB and Edg. , survey properties abutting pond for evidence of septic issues. Create information/awareness flier for riparian owners.
Dredging	Survey for evidence or absence of flushing before and after Dredging

Water testing

In conjunction with FOS develop a more comprehensive protocol for bacteria testing and collection of MV samples. Include site locations, water column depth, wrack and silt, timing (vs. DMF) frequency and cost. Confirm testing type (E.coli vs. Enterococcus, DNA vs. ribotyping).