# TOWN OF SWAMPSCOTT

## OPEN SPACE & RECREATION PLAN COMMITTEE

ELIHU THOMSON ADMINISTRATION BUILDING
22 MONUMENT AVENUE, SWAMPSCOTT, MA 01907



Finance Committee
Marzie Galazka, Chair
Town Hall
22 Monument Avenue
Swampscott, MA 01907

April 19, 2017

RE: Recommendation for Dedicated Staff for Organic Land Management Plan and Recreation & Open Space Maintenance

Dear Marzie,

The Open Space and Recreation Plan (OS&RP) Committee recommends that the Town of Swampscott apply the $95,000 it spends annually to subcontract grass cutting services toward the hiring of two new full-time Department of Public Works (DPW) employees. These employees, which would be part of a dedicated parks maintenance staff, will enable the Town to implement an Organic Land Management Plan, as well as generally improve the overall quality of the Town's playing fields, parks, and other open spaces.

The Town's 2013 OS&RP identifies, inventories, and prioritizes Swampscott's open spaces and recreation facilities, and includes a list of specific action items for their maintenance, preservation, and expansion. Achieving the OS&RP's goals will help to strengthen the community's open space and recreation areas while at the same time improving the quality of life for residents. It is obvious that the DPW plays a large role in maintaining and sustaining our Town – be it snow removal, road repair, water or wastewater maintenance, or tree removal (to name a few of its responsibilities). The DPW also plays a critical role in the implementation of the OS&RP. (Appendix A to this letter is a list of the OS&RP action items that require the involvement of the DPW). We believe that applying the money the Town spends each year to subcontract for grass cutting is better spent by bringing this responsibility in-house, thereby strengthening and supporting the Town's DPW so that it can assist in fulfilling the goals of the OS&RP and generally better service the Town.

One important OS&RP action item is the implementation of an Organic Land Management Plan for all athletic field and open space in Swampscott. This plan is designed to eliminate the harmful pesticides that are used on the Towns' athletic fields and other areas, thereby ensuring the health and safety of Swampscott residents and their children. (Appendix B provides background information on the effects of pesticides to humans and animals.) The hiring of two new full time DPW employees, with landscaping experience, and who can be trained on organic lawn maintenance, will enable this program to be effectively implemented.

We hope that you will support this recommendation. Thank you for your consideration.

Sincerely,

Mary Webster, Chair

# APPENDIX A
# OPEN SPACE AND RECREATION PLAN COMMITTEE – DPW INVOLVEMENT

1. Create maintenance programs (site specific) at all facilities with Conservation Commission
2. Determine whether to expand trash/recycling facilities at all locations or implement "carry in/carry out" program at all facilities with Board of Health
3. Add signs/warnings about health risks where applicable at all facilities with Board of Health
4. Extend and clear right-of-way (presently to Puritan Road) through to Humphrey Street at Phillips Park
5. Incorporate nature, resting areas for seniors at Lower Jackson Park with Council on Aging
6. Improve playground at Phillips Park with Recreation Committee
7. Install a community dog park with Recreation Committee and Board of Selectmen
8. Rehabilitate Blocksidge Field with Recreation Committee
9. Post "No dumping" signs at strategic locations (Charles M. Ewing Woods, Harold A. King Forest, Phillips Beach) with Board of Health
10. Reduce sprinkler use to once every three days, install moisture sensors at all facilities
11. Determine size scale and number of monuments along mall so it doesn't lose its "park" feel and maintains Olmsted's Monument Ave planting plan; identify appropriate areas for any future memorials, stones and monuments on Monument Mall with Beautification Committee, Historical Commission, Veterans Affairs Committee
12. Ensure handicap accessibility at Windsor Park with Disability Commission
13. Establish regular sewer maintenance plan
14. Establish stewardship program to assist in maintenance and oversight (students and special interest groups) at all facilities with Conservation Commission
15. Create schedule for implementation of maintenance and access recommendations (per Beach Management Plan) at all Beaches with Harbor & Waterfront Advisory Committee
16. Establish beach cleanup plan for algae, seaweed, debris that washes up may include use of a tractor-pulled rake at all Beaches with Harbor & Waterfront Advisory Committee
17. Develop playground maintenance, equipment replacement, and safety program at all School & Town Playgrounds with PTAs, Recreation, School Committee
18. Open public ways and access points (Executive Office of Energy and Environmental Affairs commitment to public access as grant potential) with Board of Selectmen
19. Incorporate children's playground at Paul A. Polisson Park or Richard B. Johnson Park with Recreation Commission
20. Develop maintenance and design guidelines for roads, paths, islands, and lighting (add special emphasis on developing design guidelines in Olmsted District) with Beautification Committee, Historical Commission
21. Repair seawall and stairway taking into consideration sea level rise and storm surges (per Beach Management Plan) at Eiseman's Beach, Whale's Beach with Harbor & Waterfront Advisory Committee
22. Install unified signage at primary facility entrances as well as along connecting paths/roads with Beautification Committee
23. Work with Essex National Heritage Commission to create signage along Essex Heritage Scenic Byway indicating points of interest with Beautification Committee, Essex Heritage Scenic Byway Advisory Committee

24. Integrate historical elements as part of signage program with Beautification Committee, Historical Commission, Historical Society
25. Investigate and identify pollution runoff on streets and public ways with Conservation Commission
26. Ensure Town completes necessary storm drain work to eliminate source of bacteria at King's Beach with Harbor & Waterfront Advisory Committee
27. Establish tree inventory and management plan (focusing on native trees) with Planning Department
28. Establish storm water management plan at all Beaches
29. Develop park landscaping utilizing beach-appropriate and environmentally suitable species and materials at Chaisson Park, Paul A. Polisson Park, Richard B. Johnson Park with Beautification Committee
30. Remove dead trees and ornamental shrubs, thin remaining trees to improve overall health at Howland Park with Beautification Committee
31. Improve parking lot areas at Foster Pond, Harold A. King Forest
32. Develop stairs/path through park from Burpee Road to High School with crossing on High School driveway at Lower Jackson Park
33. Incorporate amenities (restrooms, picnic tables, benches, bike racks, public showers) at all facilities
34. Blend Swampscott portion into DCR's "Lynn Shore Reservation" (landscape, hardscape, railing, lighting, signage) at King's Beach
35. Reduce pesticide use or replace with organic options with Board of Health
36. Develop plan for replacement of aged/ailing street trees
37. Address DDT contamination (and awareness) at Foster Pond
38. Rehabilitate buildings and develop ongoing maintenance plan at Andrews Chapel, Civil Defense Building with Andrews Chapel Committee, Historical Commission
39. Work with MBTA to replace bus stop shelter with well-designed shelter at Linscott Park
40. Plant coastal-worthy trees without blocking water views (shade, aesthetics, stormwater control) at Blaney Beach & Reservation, King's Beach, Paul A. Polisson Park, Richard B. Johnson Park Conservation Commission
41. Improve tennis and basketball courts at Phillips Park with Recreation Commission
42. Reinstall rose garden on Town Hall Lawn
43. Establish a winter salt management program to protect open space & natural resources (alternatives to salt) with Conservation Commission
44. Repair concrete steps; improve path from base of steps to Ingalls Terrace at Forty Steps
45. Repair seawall taking into consideration sea level rise and storm surges at King's Beach
46. Install boardwalk and viewing platform with signage at Palmer Pond with Beautification Committee, Conservation Commission, Planning Board
47. Establish understory plantings on cliff at Howland Park
48. Institute program (through land use and development) to encourage use of permeable soils with Building Department, Planning Department
49. Replace pavement with more porous materials
50. Incorporate ADA accessibility where possible within means with Disability Commission
51. Establish green roofs where possible Town & School Buildings with Planning Department
52. Improve drainage and prevent contamination of abutting marsh, residences and beaches during any rehabilitation work of parking lot and all playing fields at Phillips Park with Recreation Commission

# APPENDIX B
# TOXIC ACTION CENTER ORGANIZING WITH RESIDENTS TO CLEAN UP AND PREVENT POLLUTION IN NEW ENGLAND SINCE 1987

http://www.toxicsaction.org/problems-and-solutions/pesticides

**Pesticides**

When Rachel Carson wrote Silent Spring in 1962, she raised public awareness about the effects of pesticide use on our health and our environment. However, almost forty years after Carson drew attention to the health and environmental impacts of DDT, use of equally hazardous pesticides has only increased. And all the time there is more evidence surfacing that human exposure to pesticides is linked to health problems. For example, in May 2010, scientists from the University of Montreal and Harvard University released a study that found that exposure to pesticide residues on vegetables and fruit may double a child's risk of attention deficit hyperactivity disorder (ADHD), a condition that can cause inattention, hyperactivity, and impulsivity in children.

**Pesticides and Human Health**

Pesticides have been linked to a wide range of human health hazards, ranging from short-term impacts such as headaches and nausea to chronic impacts like cancer, reproductive harm, and endocrine disruption.

Acute dangers - such as nerve, skin, and eye irritation and damage, headaches, dizziness, nausea, fatigue, and systemic poisoning - can sometimes be dramatic, and even occasionally fatal.

Chronic health effects may occur years after even minimal exposure to pesticides in the environment, or result from the pesticide residues which we ingest through our food and water. A July 2007 study conducted by researchers at the Public Health Institute, the California Department of Health Services, and the UC Berkeley School of Public Health found a sixfold increase in risk factor for autism spectrum disorders (ASD) for children of women who were exposed to organochlorine pesticides.

Pesticides can cause many types of cancer in humans. Some of the most prevalent forms include leukemia, non-Hodgkins lymphoma, brain, bone, breast, ovarian, prostate, testicular and liver cancers. In February 2009, the Agency for Toxic Substances and Disease Registry published a study that found that children who live in homes where their parents use pesticides are twice as likely to develop brain cancer versus those that live in residences in which no pesticides are used.

Studies by the National Cancer Institute found that American farmers, who in most respects are healthier than the population at large, had startling incidences of leukemia, Hodgkins disease, non-Hodgkins lymphoma, and many other forms of cancer.

There is also mounting evidence that exposure to pesticides disrupts the endocrine system, wreaking havoc with the complex regulation of hormones, the reproductive system, and embryonic development. Endocrine disruption can produce infertility and a variety of birth defects and developmental defects in offspring, including hormonal imbalance and incomplete sexual development, impaired brain development, behavioral disorders, and many others. Examples of

known endocrine disrupting chemicals which are present in large quantities in our environment include DDT (which still persists in abundance more than 20 years after being banned in the U.S.), lindane, atrazine, carbaryl, parathion, and many others.

Multiple Chemical Sensitivity (MCS) is a medical condition characterized by the body's inability to tolerate relatively low exposure to chemicals. This condition, also referred to as Environmental Illness, is triggered by exposure to certain chemicals and/or environmental pollutants. Exposure to pesticides is a common way for individuals to develop MCS, and once the condition is present, pesticides are often a potent trigger for symptoms of the condition. The variety of these symptoms can be dizzying, including everything from cardiovascular problems to depression to muscle and joint pains. Over time, individuals suffering from MCS will begin to react adversely to substances that formerly did not affect them.

For individuals suffering from MCS, the only way to relieve their symptoms is to avoid those substances that trigger adverse reactions. For some individuals, this can mean almost complete isolation from the outside world.

**Pesticides and Children**

Children are particularly susceptible to the hazards associated with pesticide use. There is now considerable scientific evidence that the human brain is not fully formed until the age of 12, and childhood exposure to some of the most common pesticides on the market may greatly impact the development of the central nervous system. Children have more skin surface for their size than adults, absorb proportionally greater amounts of many substances through their lungs and intestinal tracts, and take in more air, food and water per pound than adults. Children have not developed their immune systems, nervous systems, or detoxifying mechanisms completely, leaving them less capable of fighting the introduction of toxic pesticides into their systems.

Many of the activities that children engage in - playing in the grass, putting objects into their mouth and even playing on carpet - increase their exposure to toxic pesticides. The combination of likely increased exposure to pesticides and lack of bodily development to combat the toxic effects of pesticides means that children are suffering disproportionately from their impacts.

# 5 REASONS THE USE OF SYNTHETICS ARE NO LONGER A BEST PRACTICE IN TURF MANAGEMENT

Via Chip Osborne at Osborne Organics

1. Stormwater runoff into water bodies – Rivers, streams, ponds, lakes, and ocean
2. Groundwater contamination
3. Children's health
4. Human health
5. Nonproductive influence on the creation of healthy turf systems- plant, soil, and environment (compromising native beneficial soil organisms)

**1. Stormwater Runoff Into Water Bodies**

When using water-soluble synthetic materials, we run the risk of allowing that material to move off target. Even with best intentions, certain environmental conditions may present themselves to facilitate the movement of these soluble nutrients. If we have a turf system with less than maximum density, very often we do not have enough root system to process these nutrients as rapidly as they are being released.

**2. Groundwater Contamination**

Some synthetic materials are more mobile in the soil than others. Along with other information on the label about health effects and environmental effects of a particular pesticide product, we also have information about soil mobility. Some pesticides and fertilizers have the ability to move rapidly downward in the soil and eventually find groundwater.

**3. Children's health**

Science and medicine is now looking at children's exposure to pesticides very differently than they did in the past. The major cause for concern is not an acute oral or dermal exposure, but multiple low dose exposures over several years that can have a cumulative effect.

**4. Human health**

Not all mammals react to all pesticides in the same way. It is typically the lawn care pesticide, when used at the homeowner level or in the public sector, that can affect the largest number of people. The use of these materials contributes to the chemical cloud under which we live in this day and age. For management of grounds and turf, a natural systems-based approach makes sense to reduce overall chemical exposure.

**5. Nonproductive influence on the system and the biomass**

Synthetic materials do very little to build the soil biomass in a positive way. The high concentration of salt in synthetic fertilizers, and some of the pesticide products that we use, can contribute to the minimization of soil biological life. It is the biological life in the soil that is central to a healthy, functioning system.