



Pleasant Bay Watershed Fertilizer Management Plan

Pleasant Bay Alliance

The Horsley Witten Group, Inc. (HW) and Effective Organics developed a Fertilizer Management Plan for the Pleasant Bay watershed. While wastewater from on-site septic systems is the primary source of nitrogen loading, fertilizer loadings to the Bay are an important secondary source of nitrogen within the watershed and were therefore the focus of this Management Plan. The current and future nitrogen loadings to Pleasant Bay were reviewed based on land use analyses conducted by the Massachusetts Estuaries Project (MEP) as part of their development of total maximum daily loads (TMDLs) for the Pleasant Bay sub-watershed. Based on current fertilizer loading information, and an analysis of options to control future loading, the Management Plan identifies the potential to reduce the overall controllable nitrogen load to the Bay by 5.2%.

Recommendations for fertilizer reduction include minimizing fertilizer applications on municipal properties, athletic fields and parks; minimizing, to the extent feasible, fertilizer applications on golf courses; enforcement of 50-foot no disturb buffers around wetland resource areas, and restoration or enhancement of wetland buffers on existing properties; outreach and education techniques for year-round residents, second home owners, and landscape professionals to encourage improved fertilizer practices; training for turf grass managers to encourage fertilizer and landscaping practices to minimize the use of nitrogen; and regulations to reduce the size of lawns.

Adoption of the strategies targeting current nitrogen loading could result in an overall nitrogen loading reduction of approximately 5,400 pounds (lbs)/year, which represents 5.2 % of the controllable nitrogen load within the watershed. In addition, targeting residential lawns for future development could result in reduced nitrogen loads associated with future development.

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Client Contact:
Carole Ridley
Pleasant Bay Alliance
508-430-2563

HW Contact:
Mark Nelson, P.G.

www.horsleywitten.com

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Sandwich, MA

90 Route 6A
Sandwich, MA 02563
tel: 508-833-6600

Newburyport, MA

30 Green Street
Newburyport, MA 01950
tel: 978-499-0601

Providence, RI

370 Ives Street
Providence, RI 02906
tel: 401-272-1717