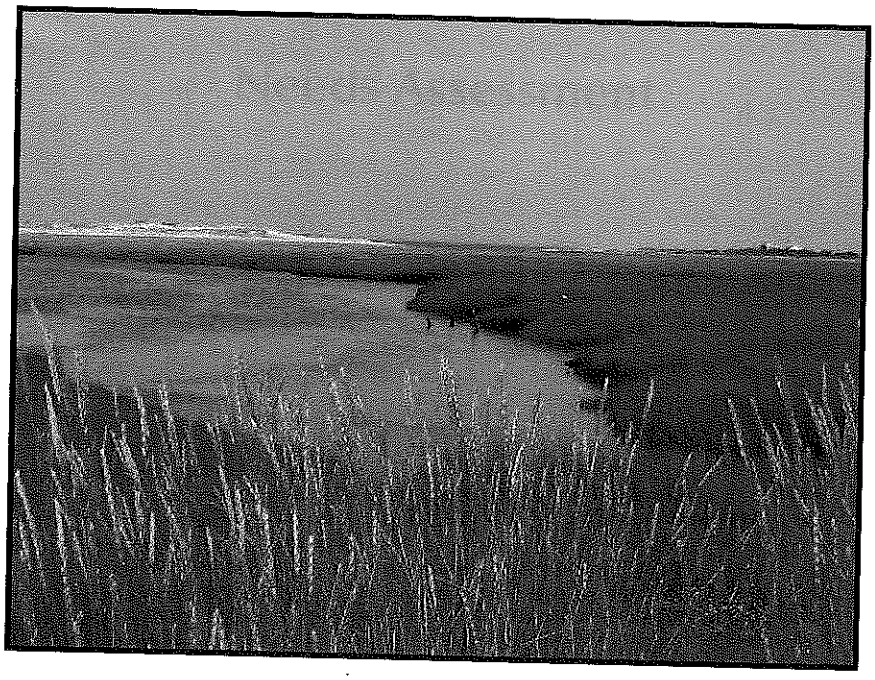
Town of Sandwich
Comprehensive Water Resources Management Plan

Needs Assessment

March 2012



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3.4 SURFACE WATER PROTECTION

3.4.1 Freshwater Ponds

The freshwater ponds targeted for reviewed in the CWRMP were identified in Section 2. A pond assessment report was prepared for these ponds by Water Resource Services, Inc. (included in Appendix A). One of the principal causes of water quality degradation in freshwater ponds is the increased loading of phosphorus. Phosphorus sources include subsurface wastewater disposal, lawn fertilization, stormwater runoff, and release from bottom sediments.

There is a lack of current, quantitative water quality data for most of the ponds in Sandwich; accordingly, the analysis and interpretation used professional judgment. The "trophic status" is a relative measure of the biological productivity in the ponds -- ranging from "oligotrophic" (least amount of biological growth) through "mesotrophic" to "eutrophic" (most amount of biological growth). Based on the limited data available, most or all of the ponds appear to be meeting their designated uses; however, most of the Sandwich ponds have been identified as having moderate to high risk of water quality degredation from one or more sources. A summary of the pond health and management priorities is presented in Table 3-5.

TABLE 3-5
POND HEALTH AND MANAGEMENT PRIORITIES

Water Body	Waste-water	Storm-water	Internal Nutrient Cycling	Rooted Plants	Algal Blooms	Preliminary Trophic State Assessment
Peters Pond	M	M	H	L	M	Meso-Eut
Snake Pond	M	M	M	L	L	Oligo-Meso
Pimlico Pond	M	M	L	M	L	Meso-Eut
Weeks Pond	L	M	L	M	L	Meso
Lower Shawme Lake	M	H	L	H	H	Eut
Upper Shawme Lake	M	H	L	H	H	Eut
Hog Ponds	L	L	L	L	L	Oligo
Triangle Pond	M	L	M	L	H	Meso-Eut
Lawrence Pond	M	L	M	L	L	Oligo-Meso
Spectacle Pond	H	M	H	L	M	Meso
Hoxie Pond	M	L	H	L	M	Meso-Eut

Notes: H=high, M=medium, L=low; Oligo=Oligotrophic, Meso=Mesotrophic, Eut=Eutrophic