

Soil & Water Conservation Society of Metro Halifax ('SWCSMH')

(a volunteer scientific stakeholder-group)

310-4 Lakefront Road, Dartmouth, NS, Canada B2Y 3C4

Email: limnos@chebucto.ns.ca

Tel: (902) 463-7777

Homepage: <http://www.chebucto.ns.ca/Science/SWCS/SWCS.html>

Ref.: WAB0017 (total= 13 pages)
To: Chairman Dr. Wayne Stobo and Members,
Halifax/Halifax County Watershed Advisory Board (WAB), HRM
From: S. M. Mandaville (Professional Lake Manage.), Chairman & Exec. Director
Date: June 28, 2000
Subject: **The PROPER SCIENTIFIC WAY an STP has to be ASSESSED PRIOR to (not after) an STP is APPROVED!!**

For several years, there has been wide concern among our member-professionals all over HRM with respect to the long term impacts of STPs (sewage/wastewater treatment plants). NSDoE does not have any established scientific criteria for approvals. The probable impact of an STP on a freshwater lake can be quite significant, especially during the summer months when the lakes do not flush appreciably.

While the design of an STP is definitely the domain of a professional civil engineer, the only professional who has the credibility in the scientific evaluation is a genuine Limnologist/Professional Lake Manager with education in Limnology.

I am herewith happy to include a 12-page published paper of a world-class Chemical Limnologist, Dr. Joe Kerekes PhD, Scientist-Emeritus with Environment Canada Atlantic, Dartmouth. Dr. Kerekes was also one of the leading scientists who headed the international OECD (Organization for Economic Co-Operation & Development) peer consensus standards-development which I referred to at numerous times during our Board meetings over the last 6 months.

In this published paper, Dr. Kerekes carries out an intensive scientific analysis of the impact of a proposed secondary-level package STP prior to its installation at a development site which drains into Freshwater Lake, Cape Breton Highlands National Park. He warns against secondary treatment as that would result in the Freshwater Lake becoming 'Mesotrophic', its management objective being 'Oligotrophy'!!

Citation:

Kerekes, J. 1983. Predicting Trophic Response to Phosphorus Addition in a Cape Breton Island Lake. Proc. N.S. Inst. Sci. 33:7-18.