

From: "Richard Scott" <richard.scott@dal.ca>
To: "shalom M. Mandaville"
Date: Thu, 26 Feb 2004 16:14:21 -0400
Subject: Reference

Shalom,

I'm asking a favour because you are so much more organized than I.

I'm trying to find the reference that explains the derivation of the equation used to calculate mean ice-free P concentration. i.e $P \text{ Input} \times (1 - \text{retention}) / 0.956 \times \text{water surface area} \times \text{areal water load}$. I'm trying to understand why when all input information to both versions of the Dillon-Rigler model is the same, the predicted output P conc is different. The equations used in both versions to calculate P conc is different and 1 possible reason contributing to the difference. The Valley version simply divides the net P load (total - portion lost to sediments) / net runoff (total - lake evaporation). Other reasons include model output values for the amount of P and volume of water which are used in the calculation. But, if we were to assume both of these were identical, we'd still end up with different values, simply because the equations used to determine P conc are different.

Can you help? Thanks.

Rick