

ESS-13 Recommendation Inquiry

Where to Use ESS-13:

ESS-13 is sometimes used to seal ponds with a compacted clay bottom or to reduce pond leakage caused by seepage through porous soils or poorly compacted soils. ESS-13 will not work for all ponds. In cases where ESS-13 is not expected to perform, our biologists will provide you with an alternative solution.

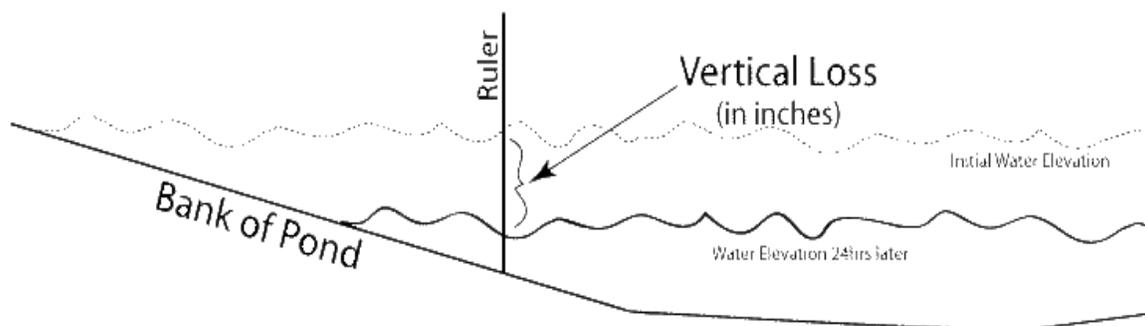
Please take a moment to tell us about your pond by filling out pages 3-4. Return the completed form to Aquatic Biologists, Inc. at the address above or email to info@aquaticbiologists.com. One of our biologists will review you data and respond shortly.

Measurement Assistant:

In determining the amount of product necessary in treating your pond it is important for us to be clear on a couple of things: the current vertical loss occurring over a 24 hour time period and the slope angle of the pond. Please read carefully the following to insure we are all referring to the same measurements.

Vertical Loss:

In measuring the 24 hour vertical loss it is useful to use a steel ruler or staff gauge that is driven into the ground in an area of the pond that is easily accessible. The pond should have water in this area for the entire 24 hour period as well. Simply note the elevation on the ruler at the start of the test and return the next day to determine the new elevation.



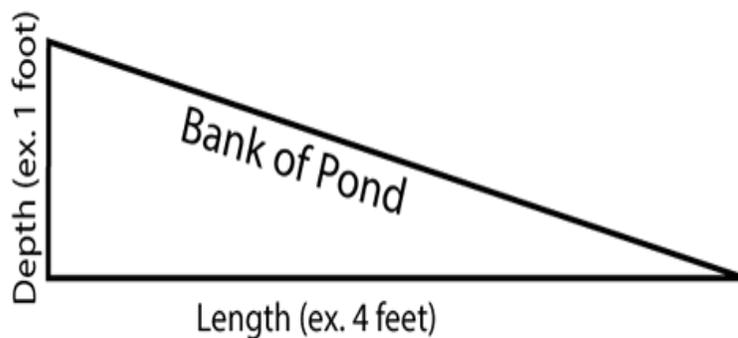
Evaporation Loss:

Pond evaporation can be calculated using a bucket (pail) that is completely full of water and placed in a level location directly next to or within a shallow area of the pond. Fill the bucket as near to the top as possible without allowing it to spill over. Note the water level. Re-measure 24 hours later. It is important that the bucket be re-filled after each 24 hour reading. This process should be repeated daily for three days.

There will be additional evaporative losses from water that is absorbed into the soil at the water's edge. This is called wicking or capillary action. Multiply the evaporation from the bucket by 50% to calculate this evaporative loss and add to the evaporative loss in the bucket. This total evaporation amount will closely approximate your pond's evaporation rate and should be subtracted from the "gross" total loss amount. The remainder will be credited as "net" pond loss (seepage).

Slope:

Slope is determined by measuring the length of the slope and the depth of the pond. It is usually expressed as Length: Depth (i.e. 4:1, 2:1, 1:1, etc.)



**Length : Depth
(ex. 4:1)**

ESS-13 Recommendation Inquiry Form

Name (First, Last): _____

Business/HOA/Lake Association Name: _____

Title: _____ Email: _____

Phone: _____ Project Name: _____

Mailing Address: _____

Address of Pond or Lake: _____

Best Way to Reach During Normal Business Hours: Mail Email Phone

Project Information

Is this an existing lake? Yes No Age of the pond/lake: _____

Is there water in the pond? Yes No Is the pond losing water? Yes No

How many vertical inches is the pond losing per day? _____

How was the pond constructed? _____

What is the pond used for? _____

Is the pond aerated? Yes No If yes, describe system: _____

Size of the pond

Length: _____ feet Width: _____ feet Total Acreage: _____ Surface Acres

Maximum Depth When Completely Full: _____ feet Current Maximum Depth: _____ feet

Slope Angle (3:1, 2:1, etc.): _____ : _____

Site Conditions

Is there ground water present in the pond? Yes No

Has anyone attempted to seal the lake before? Yes No

If yes, with what? _____

Has there been any testing done on the soil? Yes No

If yes, what were the results? _____

Is the site around the pond established? Yes No

Is there accessibility to the pond without damaging the existing surrounding? Yes No

What are the soils like in the area? Clay Sand Gravel Other

If other, describe: _____

Are there fish in the lake? Yes No

If yes, what species _____

Please describe any structural problems (rock layers, sinkholes, evidence of leaking water through a dam, etc.) _____

Are there pipes or penetrations? Yes No If yes, describe: _____

Do you have a permanent water source to fill the lake other than rainfall? Yes No

Describe any construction or landscaping work done in or near the pond area prior to when you first noticed the leakage: _____

How far from the pond was this work done: _____

Additional Comments: _____

Please include any pictures or other information that may be helpful.

Return form by US Postal Service to:

Aquatic Biologists, Inc.
N4828 US Hwy 45 S.
Fond du Lac, WI 54937

Or scan and email form to:

info@aquaticbiologists.com