



Stop the Leaksm
PONDSEALTM

Technical Problem: Many waterways, independent of size and function, are constructed in porous or permeable soils that are not adequately compacted or amended during construction to reliably hold water. Even when soil basins or synthetic "liners" are properly prepared from the onset, a variety of environmental factors (e.g. repeated freeze/thaw cycles, prolonged desiccation, pockets of more permeable soils, and even subtle seismic activity) can compromise an earthen basin, causing problems over time. Additionally, structural failures or oversights (e.g. a faulty overflow structure or a hydrologically connected agriculture tile) can also eventually cause noticeable and undesirable water loss.

Once a water body is determined to be leaking, traditional techniques limit the remedy options. Many professionals advise that a basin must be completely drained to effectively repair a compromised seal. Beyond the substantial cost, this is often not a desirable option, particularly in more mature waterways (due to the tremendously disruptive impact such a disturbance has on fish communities and the overall ecology in the system).

Product Description: PONDSEAL addresses leaks by reliably delivering a proven natural sealant to a breach without the need for removal of the water column. The product consists of three primary components – premium sodium bentonite, a limestone aggregate core, and binding polymers. Collectively, this "composite particle" typically ranges in size between 1/4" and 3/8" in diameter and is "pebble-like" in appearance and behavior. PONDSEAL is made completely of natural materials and is non-toxic to a waterway's ecology.

Product Function: If the source of the leak is known, PONDSEAL can simply be blanketed over the target area by applying a one to two inch layer of dry product through the water column. The individual particles will quickly and efficiently sink to the bottom of the basin without drift or product loss. The particles will then hydrate and expand to form a uniform protective barrier. Allow one to two days for complete hydration. In the event that the location of leak is not specifically identified, the recommendation is to broadcast a thinner application (e.g. 3/4" dry) over areas that are apt to be problematic. Additional material can always be added to augment an initial application.

Other Technical Advantages: Unlike with other bentonite-based alternatives (powders, chips, pellets), PONDSEAL offers both reliable delivery to a target site and the density to "self-compact" (adding structural integrity). The product will gradually dry when exposed to the atmosphere for prolonged periods, but will re-hydrate and "self-heal" an infinite number of times as water levels fluctuate (or if the material is punctured or cut). PONDSEAL is erosion-resistant and can be further fortified using a surface dressing of stone or gravel (especially in areas of high velocity – e.g. direct exposure to sustained currents, prop wash, etc.).

Application Techniques: When the area to be sealed is small and targeted, PONDSEAL can simply be installed by hand. For larger areas, the material can be handled much like stone aggregate. Product can be placed directly from bulk shipping bags or from a protected stockpile using a wide range of standard construction equipment (e.g. front end loaders, stone slingers, conveyors, and other readily available application methods).

Product Usage Estimator:

| | | Target Product Thickness (inches) | | | | | |
|---------------------------|--|-----------------------------------|-----|-----|------|-----|-----|
| | | 0.75 | 1.0 | 1.5 | 2.0 | 2.5 | 3.0 |
| | | 1.4 | 1.8 | 2.7 | 3.6 | 4.5 | 5.4 |
| Target Area (square feet) | PONDSEAL needed (50-lb. bags or 1-ton super sacks) | | | | | | |
| | 100 | 10 | 14 | 20 | 27 | 34 | 40 |
| 250 | 25 | 34 | 50 | 67 | 84 | 100 | |
| 500 | 50 | 67 | 100 | 3.5 | 4.2 | 5 | |
| 1,000 | 2.5 | 3.5 | 5 | 6.7 | 8.4 | 10 | |
| 10,000 | 25 | 33.5 | 50 | 67 | 83.5 | 100 | |

50-lb. unit pricing
 2,000-lb. unit pricing

Packaging & Pricing: PONDSEAL is available in a variety of packaging options, including 50-lb. bags (for easy handling and placement) and FBIC super sacks (~2,400-lbs. each), for larger installations. For very large projects, product can even be sent by bulk container. PONDSEAL is comparably priced to other traditional bentonite products. Contact AquaBlok or our growing network of distributors for more information.

The PONDSEAL Solution: PONDSEAL utilizes a dense aggregate (limestone) core to deliver bentonite clay through a water column to any area where a leak is suspected. Due to the extreme low permeability, considerable weight (density), and robust swelling characteristics of this novel composite particle, each individual "pebble-like" unit swells into adjacent particles to produce a uniform and durable layer – stopping the leak at its source.

POROUS PAVEMENTS * SEDIMENT CONTROL * EROSION CONTROL * STABILIZATION
 GEOSYNTHETICS * STORM DRAINAGE * LANDSCAPES * PAVEMENT REINFORCEMENTS