

Looking After Your Storage Dams and Settling Ponds

No matter which style of dam or settling pond you have on your property you are dealing with a complex eco-system that is susceptible to changes in in-flow, climate and usage demands which heavily impact on the health of the water body.

In all eco-systems bacteria plays an important role in the breakdown and decay of organic matter that finds its way into the dam. This organic matter can be composed of decaying vegetation, animal manure, fish excrement and decomposing animal carcasses. The decay of these components breaks down into an excess of nutrient that is the food source for algae and other weeds.

Heavy seasonal rain also adds to the nutrient levels with the introduction of extra nitrogen. Algae blooms usually follow increases in temperature and/or heavy rainfall. Consider that inflow can be made up of manure, silt, fertilizers and debris runoff after rain.

HOW BACTERIA HELPS

Dam Clean's high concentrations of specially selected beneficial bacteria, uniquely blended with amino acids and an oxygenation agent to ensure high rates of biomass growth helps to control the balance in these sensitive eco-systems.

This rapid biomass growth is what gives Dam Clean the ability to quickly digest organic solids and reduces the nutrient levels in a dam and in turn this lessens the severity of algae strikes.

Working from the bottom up, Dam Clean consumes the nutrients that algae need to survive leaving irrigation and watering dams clean and clear. Traditional algacides and herbicides merely poison the algae which then sinks to the bottom increasing the organic loading and severity of future blooms.

A NATURAL SOLUTION

In dams with an existing problem, the bacteria will slowly digest the nutrients from the water and outcompete the algae to the point of starvation. Once the algae has died, it will sink to the bottom to be slowly consumed by the bacteria. When the food source has been depleted the bacteria will die back to natural levels.

This eco-cycle gradually cleans out the dam of any organic matter that may be adding to the silt and sludge in the dam which reduces the water capacity. On average up to 75% of the sludge in the bottom of your dam can be organic matter. Often the reduction in sludge will negate the requirement for mechanical dredging of dams. The reduction of nutrient levels also helps to control other weeds that thrive in water bodies high in nutrients. e.g Duck Weed, Frogbit, Salvinia, Water Hyacinth, Water Lettuce and other floating pest vegetation. Reduction of nutrient levels will also help to control weeds like Azola (red fern) that take their nutrients from the air, however the treatment cycle can take up to 12 months.

Other natural control methods include weavels, aeration and mechanical harvesting. e.g. floating excavators.

The reduction of decaying organic matter can also help to floc the dam by reducing the amount of suspended solids floating in the water and allowing the heavier silt to drop to the bottom. In most cases there would be no need for expensive and harmful chemical flocculants.

See over for our products that help keep the balance in your dam or settling pond.

WHATS THE DIFFERENCE BETWEEN A DAM AND A POND

The differentiator is whether there is a natural oxygen level in the water. Size does not always determine classification.

DAMS

The depth of water in a dam often means a reduction in oxygen at the bottom which slows the natural bacterial eco-system. Dams are often still, colder water with little light at the lower levels. Dams take longer to clean, often having accumulated years of sludge and debris. Dams need larger but less frequent doses.

PONDS

Often shallow, with natural or artificial aeration. Warmer in temperature, and higher light levels. Ponds normally have a more balanced eco-system and sludge levels should be less than a dam. However, if overstocked with fish or other marine life, nutrient levels can be very high. Ponds need smaller but more frequent doses.

ENVIRONMENTALLY SAFE

Dam Clean is a proven, cost-effective and environmentally safe solution for your dam cleaning. The product will not harm livestock, fish, other aquatic life, or plants with roots extending into the soil.

With no machinery based environmental disruption, it is perfect for cleaning lined dams and settling or decorative ponds.

DOSAGE

Dam Clean works best when delivered in correct doses according to the size of your water body. The calculation is as easy as finding (in meters) the width (W), the length (L) and then the depth at the deepest point (D) of your body of water:

$$(W) \times (L) \times (D) \times .45 / 1,000 \text{ litres} = \text{Volume in Megalitres}$$

Dam Clean is sold 250gm water soluble bags which are distributed into the dam at regular spacing around the surface making sure to put extra focus on the areas that are worst effected by floating algae. See over for how many bags are required per sludge loading.

NOTE: THE MORE SLOWLY THE PROCESS WORKS, THE LONGER THE CLEANING EFFECT WILL LAST.

CAUTION: OVERDOSING TO GET A "FASTER RESULT" WILL NOT SPEED UP THE PROCESS. IT WILL ONLY COST MORE AND EXTRACT TOO MUCH OXYGEN FROM THE DAM.

HOW SOON WILL I SEE RESULTS?

Depending on the severity of the algae bloom or density of the sludge, you should start to see dead algae starting to clump together on the surface of the water within weeks. It will look worse before it starts looking better! But, this is the first step in the process of naturally reducing the excess nutrient from the water that is causing the problem.

Dams without visible algae will not show immediate difference but will be ready to defend against future strikes.

SEPTIC SCIENCE
Good Bacteria At Work

www.septicscience.com.au
1300 991 948

WHAT TO USE IN YOUR DAM OR SETTLING POND



Dam Clean

Dam Clean contains high concentrations of powerful beneficial bacteria for use in cleaning and maintaining dams. The friendly bacteria digests any nutrients, organic matter and sludge leaving the water condition excellent for stock watering and irrigation.

By using Dam Clean regularly, the bacterial activity needed to rejuvenate the dam's performance will increase, until the unpleasant odours, surface weeds and any algae blooms have disappeared.

Dam Clean has proved to be the most cost effective and ecological solution for dam remediation. It comes in 250g soluble bags that dilute easily and safely when in contact with water.

Initial Dosage per megalitre: (1,000,000Lt)*
 8 Bags per Megaliter Dam Capacity on Day 1
 4 Bags per Megaliter Dam Capacity on Day 15
 4 Bags per Megaliter Dam Capacity on Day 30

Maintenance Dosage:
 4 Bags per Megaliter Dam Capacity per Month or as required

*Dosage applies to a dam with:

Light/medium sludge levels. *e.g. stock watering dams.*

Heavy sludge levels require up to double dosage. *e.g. settling ponds and dairy dams.*

Extreme sludge levels will require consultation. *e.g. abattoirs, milk factories etc.*

The chemical free way to bring dams back to life!

Benefits:

- Controls or eliminates many common floating weeds and algae
- Removes odours caused by decaying sludge
- Removes excess nutrients to reduce future algae/weed outbreaks
- Makes water clean and safe for livestock
- Reduces sludge volume & suspended solids
- Cost effective dam remediation
- Perfect for lined dams
- Cleans up the effects of manure, debris and fertiliser in-flows
- Can be used with other natural weed control methods including weavels

DAM CLEAN

Controls Algae Reduces Sludge!

1 billion good bacteria per gram that multiplies EVERY 15 minutes helps maintain good health for your waterways...



For smaller or shallower bodies of water try...

POND CLEAN ALGAE BUSTING FORMULA



Small Pond:
4x100gm
10x100gm

100gm Bag treats up to 200Lt Ponds



New Formula:
4x100gm
10x100gm
20x100gm
40x100gm

100gm Bag treats over 10,000Lt Ponds

Safe for livestock, irrigation & aquatic animals!



Good Bacteria At Work

www.septicscience.com.au
1300 991 948

