What to Expect After a Cleanout

So you just had your annual cleaning of your water feature.

What does this mean, biologically? During our cleanouts we pump out your existing water into holding vats, housing your fish in the existing "aged" water with the idea in mind that we don't want to cause undue stress to fish. Your water feature is then power washed and thoroughly inspected & cleaned. The primary focus of a cleanout is to remove the dense sludge build-up at bottom, which can wreak havoc on fish, plants & water parameters if disturbed. While cleanouts are recommended annually & prove to be beneficial, the process also removes a large amount of the GOOD BACTERIA that naturally colonizes over time. This is the good stuff, like LIQUID GOLD. Now, post-cleanout, we must give that feature a good jump start with a strict bacteria regimen for 3-4 weeks after a full cleanout. Yes, you heard that right. Sometimes it can take Mother Nature 3-4 *WEEKS* (& even longer in some cases) to achieve a fully balanced state of biological equilibrium.

Patience is a virtue. Fish & plants most definitely help with this transition.

What should YOU do post cleanout? Sometimes the clarity can get a bit worse before it gets better, this doesn't necessarily mean anything is wrong, but rather the ecosystem is in a state of flux. As long as your feature has the necessary filtration, it will improve, continue adding your beneficial bacteria religiously & try to *refrain from using an algaecide* during this time frame as it can be counter-productive to re-establishing the beneficial bacteria load within the feature. The *frequency* in which beneficial bacteria is added increases immediately after a cleanout & heavy rains or whenever there are clarity/algae/water parameter problems.

Routine/Preventative Application Rate: weekly

Persistent Problem Application Rate: every 3 days until the problem is under control.

What are BENEFICIAL BACTERIAS? Beneficial Bacteria are essential helpers in a Water Garden and for pond filters. They munch on pond fish waste and other organic matter, the bacteria converts deadly ammonia into "first nitrates" thus being an integral part of pond filtration. The nitrates will then be taken up by the pond plants. This cycle makes the Beneficial Bacteria essential to the health and well-being of the water and the creatures of the pond including Koi and all other pond fish. Additionally it helps reduce problem nutrients such as nitrogen and phosphate.

Application Measurements

	≤500 Gallons*	~1000 Gallons*	~2000 Gallons*	~4000 Gallons*
Clarity Max	2 scoops	4 scoops	8 scoops	16 scoops
Biological Clarifier	1 packet	1 packet	2 packets	4 packets
Algaway 5.4	5 tsp	3 TBS	3 oz	6 oz
Algae-Off – light algae growth	2.5 tsp	5 tsp	2 oz	3.5 oz
Algae Off – heavy algae growth	2 oz	4 oz	8 oz	2 cups

*Approximate # gallons = length x width x depth x 7.48

Green Water

MY POND IS GREEN! Green pond water is caused by a type of single celled free floating algae. It is one of the most common problems that people have in their pond and can sometimes be very difficult to control. Sometimes this algae has a way of continuously clouding a pond even though all the usual criteria for maintaining clear water are met. Those scenarios which are the most susceptible to green water include newly constructed ponds & situations in which all of the water is replaced.

String algae is another culprit of green water. String algae attach to plants, hangs from rocks in waterfalls, or hangs on the surface of the water. The long strands tangle together and form thick mats that can double their weight within 24 hours!

REASONS: Green water could be from a number of things, but the main cause is simply Mother Nature, warm days and cool nights are a major reason for algae growth. Other causes such as a buildup of organic matter in the pond, a heavy fish load or even your water source, including rain, have high phosphates. Phosphates also contribute to algae growth as it is one of the main nutrients that plants require to grow. High pH combined with high phosphate levels are prime breeding ground for algae.

pH levels should be >8.0 and phosphates should be 0. Ideal pH = 7.5

SOLUTIONS: Cleaning dirty green pond water by natural methods IS possible—it just requires a little PATIENCE, hard work, and TIME to get it resolved. Natural ways to treat algae should be attempted first, to avoid affecting the pond life.

1) USE BENEFICIAL BACTERIAS! Start using ClarityMax and Biological Clarifier (2-part regimen) 1-2 days after clean out and continue weekly to maintain a healthy pond.
2) HAVE PATIENCE! It may take a few weeks for your pond to balance out, especially if you have added new water, including rain water, into the pond.
3) 3-4 weeks after a clean out, if the water is still green; introduce a algaecide.
4) If pH is >8.0 a pH reducer is required, recommend adding mid-day and at the same time each day. If phosphates are over .05 consider a 10% water change and use bacteria once a week until normal levels resume. Be sure pond is getting adequate aeration when adding any chemical.
5) Make sure you have the correct size filter and pump for your pond. Too small of a pump and filter will delay the clearing of dirty water as it takes longer to cycle through. Your pump should be able to turn your pond twice each hour. *FUN FACT:* this is THE most common mistake of contractors & DIY'ers!
6) Consider using UV clarifiers to help in pond green water treatment. It does not harm the pond and aquatic life in any way but combats algae.

To remove and reduce string algae you must scoop it out as it detaches & floats to the surface, otherwise the decaying algae will provide nutrients for BIGGER & BADDER algae blooms! String algae removal typically takes 20-70 days, so again HAVE PATIENCE!

1) Stop all water movement, sprinkle Algae Off directly on string algae, wait 15 minutes then remove all algae. Repeat daily as needed until algae is under control.
2) AGAIN HAVE PATIENCE! It may take a few months for your pond to balance out, especially if you have added new water, including rain water, into the pond.

DO YOU NEED A TEST KIT? TO PURCHASE PRODUCTS CONTACT US @ 817.491.0929.

WHAT'S IN MY POND WATER?

pH

(acidity or alkalinity of the water)

Many factors can change the pH in water, including hardness of water and acid rain. Aquatic plants & algae remove carbon dioxide from the water during the heat of the day which causes the pH to rise above pH 8.0 but then fall at night as temperatures drop. These fluctuations are normal & will not harm pond life. However, extremes in pH can stress fish & plants.

Abnormal pH levels = 0-6 water is acidic
Normal pH levels = 6-8 water is neutral (7 is optimal)
Abnormal pH levels = 8-14 water is basic/alkaline

AMMONIA

(fish excretions & decaying matter in pond)

Fish excretions, decaying plants, & uneaten food cause ammonia spikes. High levels of Ammonia are toxic to fish: prolonged exposure to low levels will cause fish to become weak & susceptible to a variety of diseases, whereas high levels will result in rapid fish loss. Ammonia is colorless & odorless.

Normal Ammonia levels = zero ppm (parts per million)
Abnormal Ammonia levels = 0.5 ppm is slightly elevated, anything above is abnormal

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NITRITES / NITRATES

(ammonia that has been converted to nitrite by bacteria during filtration)

High levels of Nitrite are toxic to fish. Fish will become weak & susceptible to a variety of diseases and eventually fish will die from oxygen starvation. It is impossible to see or smell nitrites in pond water. *Nitrites* become *nitrates* which are usually removed from the pond environment by plants.

Normal Nitrite/Nitrate levels = zero ppm (parts per million)
Abnormal Nitrite/Nitrate levels = anything above zero is abnormal

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PHOSPHATES

Phosphates enter the pond via outside sources such as excess fish food, tap or rain water, and plant debris. Phosphates cause unclear water conditions and if too high can be hazardous to fish.

Normal Phosphate levels = zero ppm (parts per million)
Abnormal Phosphate levels = anything above zero is abnormal

PLAN OF ACTION: If any of the water levels above are out of optimum range, reduce the amount of fish food given and the frequency of feedings. Add beneficial bacteria's regularly & continue testing the water until levels return to normal. If tests results continue to be out of range, a partial to full water change is recommended and contact SUBLIME WATER GARDENS at 817-491-0929 for product recommendations. When changing more that 10% of your pond remember to slowly acclimate your fish back into the new water.