

Keeping Water Clean and Wildlife Happy



Featuring WaterMix

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Introduction

Your career or business in landscaping, water quality or the environment is likely what brought you here, but even if you're not in the business, this book will provide a great introduction to the basics of Natura Solve and water treatments. We have included descriptions of two of our unique products, with some uses and resources for you. The hope is that by providing you with tools to add profitability to your business and value to your customers, you'll have an initial spark that we can then fuel with the incredible product lineup that we've got. We aren't kidding, either. This stuff does amazing things in alignment with nature - and it does so, easily. Sounds too good, yada yada. We know, and hear it all the time. Thing is, we come from a world of tactics, strategies and messaging. From marketing ploys and business development plans, where it's tough to find a quality entity offering a quality something for a fair price but, that's a whole different story. Natura Solve has very much been a labor of love, dedicated to our customers and the communities in which they live.

We offer this with a dedication, to you, and to your success.

Now onto the next section, about Natura Solve and our core offering.

Overview

This eBook has been created in response to the growing need for homeowners, water cleaning companies, and other stewards of the environment, to have a sustainable solution for water quality. There's come to light an array of issues from chemical fertilizers and pest control substances, but we aren't going to get the masses to stop using them anytime soon without viable alternatives. What we have - we believe - is simply better. We have a product that allows you to do what you wish, and not have to worry about negative consequences. For chemicals, we help to break the complex chemical bonds and render components inert. For oils and greases, we help to degrade them quickly, coming out with a low volume topsoil and/or clean water, in most scenarios.

From lower total suspended solids to no more algae, we're delighted to show you how our easy-to-use, mix-and-spray products can help add to your bottom line, from now into the future, in multiple ways. It's exciting to have something that's both great for the environment - bees and fish love it - and inexpensive. A great benefit to you and your business is that you'll need less of our product over time, not more. You'll be able to sustain a service without adding high hard costs.

We have spent a lot of time getting the product and our offering just right, and we have a solid foundation for you, your business and those you serve. Our products have an immediate impact on water quality. Once you start using the product, we'd love a review on Google or facebook, and we're happy to share announcements about you and your business as well.

Feel free to email us at <u>naturasolve@gmail.com</u> if you have specific requests.

How to Use this eBook Best

Using this eBook is simple, we think. Read through it, identify the charts and processes that are right for your needs, and then order the product Online at:

http://NaturaSolve.com/buy

or by calling us at 801-661-2206 (US).

The charts and processes included have been developed by other professionals in your arena, in the field.

Why Renewal?

We have water available, it's just not in good shape. We realized some years back, that there may be problems ahead. Research confirmed this and we made the leap into helping people through the finding of products and services that would return our vital resources to us.

We know that by finding ways to renew and reuse water - for whatever purposes - would lead us to an opportunity to bring significant value to those around us.

We have products that will help to renew the resources we've been given, time and again. By using WaterMix, for example, you'll be helping to decrease pollution and helping to balance out the ecology - the relationship between water, fish, insects, and plants. That stability provides for more than just the short term benefit, it provides for a solid foundation for our future.

When you work with Natura Solve and our products, you can confidently say that you can help clean up the chemical residue that exists from killing off unwanted pests or removing that oil that spilled out of the mystery bucket most households have, while staying beneficial to the natural environment.

Read on to learn more about our products specifically, and know that each time you use one of them, you'll be renewing the earth and waterways you are treating.

Why Natura Solve?

First, we're pretty awesome. We like people and nature, progress and innovation and we aren't afraid of really, really hard work. We think that has value to you as a customer and we like to share in the personal dedication we all have.

Next, we are based in the US. We have local teams and are growing around the globe for support and new opportunities.

Our products are unique blends of naturally occurring bacteria and fungi that have gone through extensive research and testing to ensure we have the best blend available. On top of which bugs we use, how we combine them gives us longer shelf lives and lower costs than our competitors. Providing you the best value available anywhere in the states or abroad.

Natura Solve believes in a clean and sustainable Earth, but we know we won't get there by ignoring who we actually are as a species. We don't believe in putting things 'back' - we don't even think that's possible. We also don't think it's beneficial. See, we interpret the environment as malleable, capable of changing with climate and planetary changes, but we also see that the environment has been shaped by us. We have learned that through learning about fungi, bacteria and natural processes, we can clean up the worst contamination, enable localized species to thrive and provide for robust, diverse nature. We've stripped a lot of good stuff out of the water, our WaterMix helps to put the good stuff back.

Our team is based in Utah, with labs and production in North Salt Lake. We have people in Northern and Southern Oregon, Idaho, Georgia, Oklahoma, and Florida to meet in person and are happy to hop on zoom if that is more convenient.

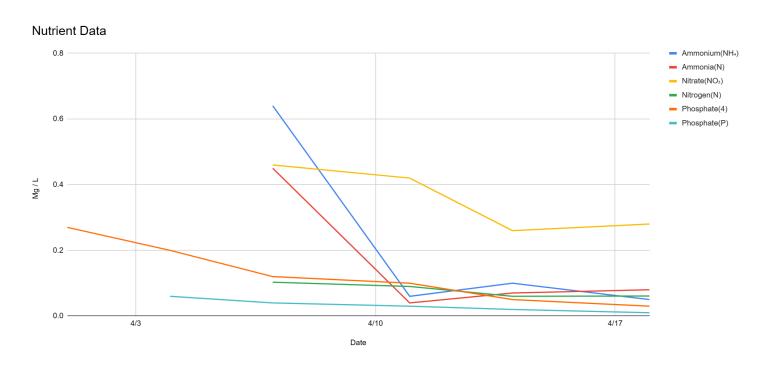
Our technical team is constantly working on new and better biological communities to improve the environment. We look for opportunities to source as close to home as possible and we work within the clean and sustainability community to bring up new innovations in the arena. Hop onto our social media - we're on facebook, Instagram, TikTok - which we're still getting the hang of - and LinkedIn. We post tips, resources and information about the industry. We've got a lot in the works, much that may benefit you and your bottom line.

We look forward to seeing your reviews, before and after images, and always invite you to submit your feedback directly as well. <u>CustomerService@NaturaSolve.com</u>.

WaterMix Introduction

Our WaterMix product is a blend of naturally found microorganisms tailored to thrive in freshwater aquatic environments. Through the communal interactions of the biology, organic compounds (fats, nitrates, and organic materials), chemicals, odors, and heavy metals are removed from the water column and eliminated. With a shelf life of five years, the microbes we have chosen to improve your water quality will adapt to your situation and make a healthier, prettier water environment.

The biological functions of the bacteria and fungi, which they naturally perform, lead to lower suspended solids, clearer water quality, reduced evaporation rates, cleaner water, reduced or eliminated algae populations, the elimination of pathogens, hydrocarbon elimination, and a healthier environment for other larger organisms to thrive. The chart below is one project we completed to eliminate algae in a large (156,000G) aquarium that had established algae growth on the walls and in the water.



Why does this matter? Simply put, money. It took us 30 minutes on site to apply the solution (had to small talk and walk pretty far) and a matter of days to see results. This is in contrast to the standard cleaning schedule of the tank that included multiple full time human cleaners, chlorine, and water recycling. So with our one solution, the tank only needed one human cleaner who could dump a liquid into a tank, no chlorine, and significantly less, if any at all if they so desired, water recycling with a nearby source.

On top of these savings, the company would need less insurance, have cleaner, clearer

tanks, and be in environmental compliance with discharge regulations. Saving the company money, improving the customer experience, and improving the worker/animal experience (by not being in chlorinated water).

WaterMix Algae Elimination and Sample Treatment

Schedules

Harmful algae growth poses health risks for wildlife, native flora, and humans. Simultaneously disrupting recreation, tourism, and the beauty of the environment. Pollution of this sort can be difficult to pinpoint and is often classified as non-point source pollution. While we advocate for the prevention of contamination, sometimes it is impossible to prevent. When WaterMix is added to a body of water, be it a lake, river, stream, front yard water feature, or a bird bath, the algae are eliminated or greatly reduced. This occurs due to the competition of biology for natural resources. The WaterMix colony utilizes the same resources, typically nitrogen and phosphorus, that algae blooms utilize. The difference is that the WaterMix is much more effective at oxidizing and reproducing. This means that the algae simply can not find a food source and that they do not reproduce, ceasing to be an issue.

There is naturally going to be variability between ponds and tanks. However, the two sample dosing schedules below will work well in most cases and can be increased or decreased depending on your situation. If there are any questions, you can always reach out, or play around with the dosing to see for yourself what works best.

With less suspended solids, your water feature will lose less water to evaporation, stay cooler for longer, have more oxygen available than if it were warmer, and look the nicest it can.

Time	Dose Amount		
April 1st	loz of WaterMix for every 3,000G of water		
June 1st	loz of WaterMix for every 3,000G of water		
July 1st	loz of WaterMix for every 3,000G of water		

It is pretty simple and you hardly need any product, which makes it great for storage and applications.

Time	Dose Amount	
April 1st	loz of WaterMix for every 3,000G of water	
April 28th	loz of WaterMix for every 3,000G of water	
June 20th	loz of WaterMix for every 3,000G of water	
July 16th	loz of WaterMix for every 5,000G of water	
August 10th	loz of WaterMix for every 5,000G of water	

This second dose sample will be to ensure that during the warm months, no algae is able to start to grow and you have the prettiest water feature possible. It will get rid of and keep away the algae that may start to grow in pockets from a lack of water circulation.

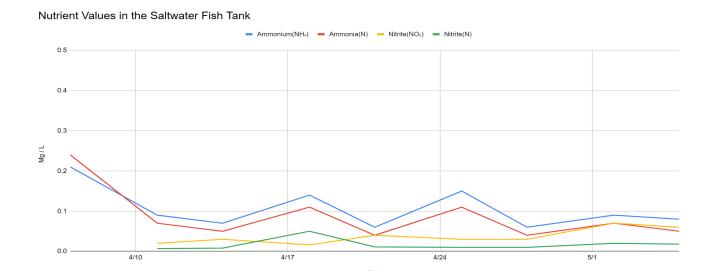
Instructions (Fish Ponds and Tanks):

We are not trying to fool you. Simply figure out how much water you are working with, divide the total water by 3,000, and that is how many ounces you need. There are 128oz in one gallon, so if you are working with a lot of water, it may be good to convert ounces into gallons, to make it easier to measure how much to add. Or not measure, some customers prefer to eyeball it and that is totally OK!

Extra Tips:

- Make sure there is an aeration system or flowing water, the microbes like to live in an aerobic environment and this will produce the best results (1ppm+)
- Store away from direct sunlight at room temperature. It is fine to bring out into the field to use, just be aware that freezing temperatures and direct sunlight will wear down the concentrate in the bottle. (It has to do with UV radiation and why food stays good so long in the freezer)

Supporting Information



The above chart came from a fish tank that had algae growing before we were introduced. The chart shows the natural process of how algae is eliminated by out competition. There is an initial decrease in nutrients, the algae dies off which leads to the upticks, and then there is a leveling off and maintenance that prevents algae from growing and has gotten rid of what was established. Truly great to see the numbers behind what nature intended.

Additional Uses and Treatment Schedules

WaterMix has a lot of opportunities to be used by professionals and homeowners. We touch on some of the uses we think you may be interested in, but by no means does this booklet constitute every possible application. If you come up with one and are unsure if it will work, drop us a line and we are happy to answer your questions.

One of the original uses, and perhaps the most ubiquitous in the research, is how microorganisms remediate hydrocarbons. Hydrocarbons from C_6 to C_{40} are utilized as an energy source for the bacteria and fungi. By breaking apart the bonds and oxidizing the components, oils are "transformed" into gas byproducts. The byproducts can then be used by plants to promote healthy growth. Typical application rates for this treatment are 1 oz of WaterMix to 1200 gallons of water. Dissolved oxygen levels should remain above 1.0 mg/L and we recommend closer to 3.0 mg/L if applicable. The process can sometimes create a slightly foam-like material and water that is environmentally safe to discharge.

The WaterMix colony quickly oxidizes excess nutrients in water to reduce the likelihood that mosquitos will lay their eggs in the water that is treated. With the added benefit of

being safe to interact with, colorless, odorless, and tasteless, using WaterMix to treat for algae or mosquitos is swapping out one harmful organism (at overpopulated densities), for a colony of helpful or benign microorganisms.

Wastewater

An exciting use for WaterMix is in the processing of wastewater. There is an array of wastewaters that are produced that can be effectively remediated with WaterMix. WaterMix can treat water for organics, heavy metals, chemicals, hydrocarbons, and we are anticipating testing PFAS some time in 2023. The wastewaters that are covered here are not comprehensive but will hopefully serve as a foundation that can lead to additional conversations with our team.



Wastewater treatment facilities, where the water goes after we flush the toilet, already have systems in place that utilize the oxidation capabilities of biology. Where WaterMix is concerned, our colony outperforms the bugs that are currently being used. Expanding on the performance of the solution, organic materials will be oxidized faster and more, meaning nitrogen and phosphorus will be removed from the system at a faster rate than what the plant is accustomed to.

WaterMix also rectifies other contaminants that wastewater treatment facilities may not be able to treat for. I am referring to hormones, chemicals, pharmaceuticals, lipids of varying size, heavy metals (and like I mentioned, we are testing for PFAS as well). Not all WWTP are able to effectively reduce contaminants of emerging concern with the biology they happen to have at their plant.

This means that small amounts are being put into the water cycle and being accumulated as the cycle progresses. While the removal of these compounds takes more time than nitrogen and phosphorus, WaterMix has the ability to break the bonds of these chemicals. Eliminating chemicals that otherwise would be going into the environment, or sometimes straight onto the food we eat.

Other benefits of using WaterMix in a wastewater treatment facility include reduced costs. Costs are reduced from the reduction of sludge that requires disposal. We provided an example of the money we save one plant in the additional resources section below. All of these benefits are also realized on a smaller scale in portable toilets. Get rid of odors in minutes and make keeping a clean outhouse easy.

Another great use is in restaurant grease traps. Every restaurant has one, but depending on what is cooked, they fill up at different rates. Requiring someone to be called and paid to clean it out. With WaterMix, all you have to do is pour and stir. The bugs will take two feet of built up fats and reduce it to half an inch in a couple of days.

On A Farm

Grow fish and have an issue with water quality, algae, or pathogens? WaterMix does a great job of getting along with fish and makes your job easy. Just ask Cove Fort Fish Hatchery who no longer need to manually clean their raceways and ponds. Saving them money and making their job easier. Along with happier, healthier trout.

The canal on the left has been treated, where the canal on the right has not. That amount of algae used to require daily cleanings, but now, the farm workers manually clean once a year. By making the water cleaner, cooler, and freeing up time, the Cove Fort Fish farm is expanding operations and increasing the fish density they can sustain, ultimately increasing their profit potential.





A great place to use WaterMix is on a farm that has animals. Lagoons are an environmental hazard and pose health risks in some locations. When conditions for flooding or when people are close to lagoons, these solutions can pose a threat, even when well maintained and designed.

Our solution is simple, spray on the lagoon waste and ensure there is proper aeration. Pathogens, chemicals, hormones, blood, odor, and solid organic material will be eliminated or drastically reduced. Cutting back on the loading of the ponds and the necessity to worry about the environment. A dose rate of 1 oz for every 1200 gallons of water should suffice, but there is no overdoing the amount of product and will only get results happening faster. The WaterMix is safe to discharge into the environment and will eliminate the problems associated with lagoons.

A topsoil will be produced at the end of the process of degrading biological waste and could be a source of revenue or value. The same principle can be used in smaller applications and may be an interest to self sufficiency enthusiasts looking for a new

project and valuable byproducts from a hazardous material. This section is a simplified version of what occurs but provides the basis for the application possibility.

WaterMix Labels and Supporting Information

The first table depicts the sludge volume in a WWTP and the potential savings from not needing to dump the sludge as often.

	Units	Existing Operations. (Operating information provided by confidential Customer).	Average Operations from Test program	Optimum Operations from Test Program
Average interval Sludge Removal	Weeks	Daily (Presently the dewatering of sludge is required 5 days per week throughout the year)	Every 21 Weeks	Every 25 weeks
Sludge to Dewatering	Gallons per year	4,369,123	716,273	606,398
Average Hours of Dewatering Operation	Hours per Year	1,214	199	168
	Hours per year	0	1,015	1,046
Available Dewatering Capacity	% Savings	0%	84%	86%
Wet Tons of Sludge Cake Processed for Disposal	per year	1,429	242	205



<u>.pdf's (naturasolve.com)</u> - Natura Solve MSDS

External References

The research papers and links provided in this section are to help garner your confidence in our approach. The list provided is not a comprehensive gathering of the research that is available on the topic. The researchers in this section are from across the globe and form a community working towards the improvement of our planet through sustainable, environmentally friendly means.

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