

TEOS Foundation

The Earth's Oceans & Streams Foundation

In the U.S. and all over the globe, current farming practices are damaging our Land, Oceans and Streams.

Nutrient pollution is one of America's most widespread, costly and challenging environmental problems. Excessive nitrogen and phosphorus in water and from the air can cause health problems in people, fish and animals, and damage our forests, lakes, rivers, streams and oceans. – EPA www.epa.gov/nutrientpollution/effects/index.html

TEOS Foundation, Inc. is being formed to solve this in a way that will increase farm production, produce a superior product and cut costs, all while eliminating pungent odors and flies. Using a century old technology that produces a mineral rich compost, farming can, once again, be a harmonious and even profitable venture. When used in place of chemical fertilizers to enrich the soil, *EasyEarth* compost, will restore land, water and air by eliminating pollutants, thus resulting in a farm that is easily in compliance with anti-runoff regulations.

We call this method “Full Circle Farming”, a time tested technique where farmers use the carefully composted waste from their farm animals to replenish their land without polluting water or air, resulting in abundant, nutrient dense crops. Often, there is enough of the unique composted product left over after dressing a farmer's fields that it can serve as a new source of income.

And in other areas where farmers routinely move to find productive land again as in the Amazon forest, land can be enriched with *EasyEarth* and maintain it's productivity endlessly. This can stop deforestation now, but we need to have the animals help.

Full Circle Farming removes the dysfunction of the cow not fulfilling it's part in the circle of agriculture. The fact that it has been removed from the circle and been turned into a gross polluter and deforester of the planet to feed it, is upside down and can be righted by including the cow in Full Circle Farming once again. The cow is the key.

Odorless manure and compost from cows can make the difference. Land does not have to be depleted to feed cows, they can make the land restoration ingredients themselves. In order to keep feeding humans dairy products and meat products, we must use this resource. This is resource stream conservation.

Once the concept is presented and begins to be understood, restoration of the land and water through this method begins to make logical and intuitive sense. To waste our precious resource of water without increasing it's effectiveness as much as possible is unthinkable in today's climate of drought. This Spirity water conditioning system can dramatically increase the effectiveness of every drop used since it has a dispersant quality so less water goes further and no downstream damage occurs.

What is happening is that the water conditioner (Spirity) used for farm's animals creates a different pathway in which the expected putrefaction cycle for waste is replaced with decomposition by hydrolysis. Hydrolysis retains nutrients without having to go through the ammonia/nitrate/nitrite cycle and therefore readily contributes the original nutrients back to the land. Without these decomposing odoriferous (polluting) elements at the dairy or the hog farm, its run off is not harmful to waterways. Hence, it's good for the water all the way from the dairies of Wisconsin and the hog farms of Iowa to the Gulf of Mexico.

The mission of TEOS Foundation is to bring safe, nutritious food to consumers in a way they can feed themselves, while restoring our earth, oceans and streams to health. To accomplish this the foundation will promote and educate consumers and farmers on the benefits of Full Circle Farming (FCF) both from a nutritional point of view and an

ecological point of view. FCF will achieve clean water and air, as well as produce safe, nutritious food.

How it began:

The technology behind *EasyEarth* began with a scientist named Edgar Parks in the early part of the last century. Edgar received the micro-terrains and notes on their use that had been brought to America by an Icelandic soil scientist who had passed away soon after his arrival. Edgar using this information had developed a micro terrain he called Parkstone which was a cow manure based compost that he applied to everything, often in the form of a liquid or a tea.

He had 20-year old chickens who still laid eggs. He grew amazing crops on his property in Topanga Canyon near Los Angeles, CA. While he was experimenting with Parkstone he took on an apprentice, Carlos Sebastian, who carried forward Edgar's work after his death in 1970.

Carlos continued to develop the technology of Parkstone to it's current state today, a food-grade water product he calls Spirity, which is a concentrate that can be diluted very significantly to allow cows, chickens and other animals to provide odorless manure if Spirity is routinely added into their water source. The odorless manure is then processed into compost together with additional enhancing elements to create *EasyEarth*.

What that means:

When farms use *EasyEarth* to dress their fields and do not add any chemical fertilizer, the resulting run off has been tested for sensitive species and even the most sensitive, water fleas, not only did not die, they reproduced. Chickens, soon after the addition of Spirity to their water, lay double yolks. Additionally, chickens raised as food, grow more quickly to a higher weight, so they can be brought to market for less cost to the farmer. All from a simple water conditioner.

Spirity seems to have the ability to help water be pure again. It helps water to be an organized fluid that can do what we all believe water is supposed to do. This is true whether the water is in a cow or a chicken or a stream or river. Once this material is introduced in enough volume to the water sheds that currently create Dead Zones in the Gulf of Mexico, Puget Sound and any body of water into which animal run off occurs, it can help remedy the downstream issues that currently exist.

It can reduce the amount of land needed to feed cows by creating greater yields from existing land. Existing land fertility can be maintained by the continuing addition of *EasyEarth* to the land. And, the farmer can produce *EasyEarth* himself, with the help of his animals. This will allow for stopping deforestation and even create the ability to reforest as less land is needed when FCF methods are employed. We are losing the Amazon rain forest due to cattle feeding. Without the trees to carry water to the sky, the rain does not fall.

That's the satellite view. To the dairy farmer, the view is that the farm becomes odorless so flies are no longer attracted. His cows become shiny and their tails are full and bushy. His crops grow to bumper size. He uses less water every year he is using compost to dress his fields since the soil he is creating holds water better than what he had before. He is restoring the land on his farm every time he puts down more compost, year after year.

The milk from his cows is the highest quality at his creamery, so he gets paid a bonus for his milk since the bacteria (somatic cell) count in his milk is so low. He has fewer unscheduled vet visits so his vet costs go down. He has no hoof problems on his cows so he doesn't need to have them walk through expensive formaldehyde as his competitors do. Gradually, gradually, he is making more money every year.

Then comes the real bonus, he gets to sell any excess compost from his farm. One farmer, with 600 cows, his first year of having compost to sell, sold his excess, that he didn't need for his fields, for \$50,000. And, the two farms that purchased his compost benefited as well.

Farmers with cows, chickens and other animals everywhere, not just in the US, using this technology can help us and help the animals recreate profitable farming and restore the planet. It sounds simple and it is.

The next step:

Carlos has concluded that the only method of truly bringing this technology to the world is on a non-profit basis. To do otherwise, only brings greed into the process and slows everything down. So the formation of TEOS Foundation is our goal.

TEOS will make possible providing this technology to farmers in a very seamless way. They can incorporate it into their farms without it impacting their everyday methods of doing things, except the environment in which they do their daily routines is far more pleasant without odors and flies.

Our plan is to provide Spirity to farmers as a compost amendment which is administered to the cows (or other animals) through their normal water source. The manure from the cows, now odorless, is then processed by a service company that routinely shows up at the farm and turns the windrows of compost.

Soon the farmer has the compost he needs to dress his fields, the profits from the excess is then split between the service company and the farmer. The service company is paid from the manure of the cows, something the farmer used to pay to have hauled away. In order to provide this service to farmers and the planet, TEOS plans to create small businesses that will perform the composting and setting up the Spirity delivery systems on the farm. Proceeds from the sales of compost will be split between the service company owner and TEOS. This will provide on-going funding from all farms so more farms can benefit.

Plants to manufacture Spirity on sight is another project that TEOS will undertake and continue to move forward as the need demands. Carlos has plans for a Spirity manufacturing plant that will fit inside a cargo container. It would only require the ability to replace filters to create water clean enough to make Spirity and a small cartridge that contains the magic necessary to manufacture Spirity which can then be diluted as the need demands.

Carlos has had many years now of experience with this micro-terrain ecology. He feels the need of the planet is great and he wants to bring this micro-terrain to farmers and their animals everywhere.

It makes sense to Carlos to start in California, his backyard, and the next logical area to tackle is the upper Mississippi River drainage area for the Gulf of Mexico. By having farmers there utilize the program, the restoration of the Gulf begins. We have individuals in the Mississippi and Ohio Valleys who have long standing relationships with farmers who can start the program and help create *EasyEarthCare* companies there as well.

Funding for expansion can be raised from sales of *EasyEarth* which will also help fund TEOS, large contributors and the general public to support the continuing work of TEOS Foundation. As the results come in, funding from government sources around the world will be possible. Funding from many sources will help to bring this technology to farms around the world as fast as possible. Then more worldwide projects can be tackled.

Recent television specials have highlighted the need for this technology now. All of them have explained the issues of production of large amounts of animals being the problem, they can be the solution if we give them the tools.

The recent VICE episode on HBO called “Meathooked and the End of Water” ended with the following statement –

“Without water there is no food. Without water there is no energy. Without water there is no life. Where we gonna be 50 years from now if we take no action? We'll be in the post Apocalypse, the Apocalypse will have happened.”

TEOS, Full Circle Farming and Spirity **is** that action.



Aerial view of the very green fields of John's farm March 07 discussed below

How it has worked before:

Cows:

One of the best examples we have had is John's dairy farm.

For over 10 years John applied FCF to his farm. His farm was a model for the FCF process. Spiritly conditioned the water his dairy cows used which improved nutrient retention in his compost and reduced the time to cure the compost over other composting methods. Using FCF, John was in compliance with water quality standards since they began testing. He had an *EasyEarthCare* Farm. His dairy operation was so successful he was able to pay off all of his debt and retire from dairy farming at the age of 45! (He still grows almonds.)



*6'5" tall John with his abundant, 13' corn just before harvest in 2007;
a direct result of the Full Circle Farming system.*

Clean noses, eyes, fence rails – no flies



John's cows lived free of flies.

Notice the clean noses and the clean railings – free of fly droppings. One rarely saw a fly at John's farm. Spirity changes the way waste decomposes so it no longer has a putrid odor as it breaks down. Without odor, no flies are attracted. Odor and flies are one of the compliance issues that farmers are facing in today's regulatory environment, with FCF, this issue does not exist.



Another added bonus is breeding mosquitoes are no longer in or around the dairy. Spirity water conditioning is able to create and maintain an environment that mosquitoes don't like and they seek other places to breed. They go to other, unconditioned dairies or farms, where they find the odor they prefer.

An environmental balance is created raising the level of animal comfort. Consequently, cows are much more comfortable and have fewer health issues due to disease transmission by flies and mosquitoes. It is an effective control for the common dairy diseases of cow udder mastitis, hoof rot and hairy wart. Environmental balance is not conducive to harmful disease causing organisms.



Happy cows also produce higher quality milk which gave John more dollars for his milk. John's cow in this photo is relaxing in the yard undisturbed by flies or mosquitoes, it's shiny coat is a by-product of the lack of odor in it's environment.

Just the effect on cheese is monumental.

Cheese produced from cows receiving conditioned water may be eaten by more than 90% of lactose intolerant people as shown by our not very scientific testing of every lactose intolerant person we could find while the cheese was available for a short time a few years ago. One of our test subjects was an Asian man who had had to sell his successful pizza business when he became so lactose intolerant he doubled up in pain when he ate cheese. He couldn't eat enough of the mozzarella cheese produced by cows on Spirity and shared it with a friend on chemo who had trouble eating or holding down food who found it to be a favorite that his system tolerated well. The number of people who cannot tolerate dairy today may well be able to be dramatically reduced if all cows received Spirity conditioned water.

Chickens:



½ chicken on the left grown with Spirity and on the right without

When chickens are provided Spirity, they become more disease resistant and have greater weight gain with stronger bones in the same amount of time. With Spirity the half chickens in the photo were larger by 1 1/8 pounds than those grown without it. This farmer sold his frozen half chickens at farmer's markets and received \$5 per pound. That means he received a bonus *per bird* of over \$10 just by adding a little Spirity to the chicken's drinking water routinely. Having farmers in this segment apply FCF is essential to pollution reduction as they constitute such a large part of the American diet. Manure from chickens is highly beneficial and nutrient rich, if the chickens are raised using FCF, it can make great *EasyEarth*.

At a test farm in Kentucky, chickens drinking and being sprayed with conditioned water increased their output so dramatically the farmer moved from being in 12th place in his grower group of 25 to being in 3rd place, so his chances of being cut off from producing, as is happening to so many of his neighbors, was reduced and his income was increased by about 25% due to the Regional Rating System within the poultry industry. As soon as his chickens began to use the conditioned water, they initially laid eggs with two yolks, twins! Twice the chickens from the same number of eggs.

Hogs:

At a test farm in Iowa, it was observed that hogs raised on this water conditioning have cleaner lungs, livers and organs than those raised according to the norm today. For hogs raised on dirt, it is clear from our tests that hogs raised with Spirity are healthier and their meat has a higher pH than is usually seen.

In the long run:

Water:

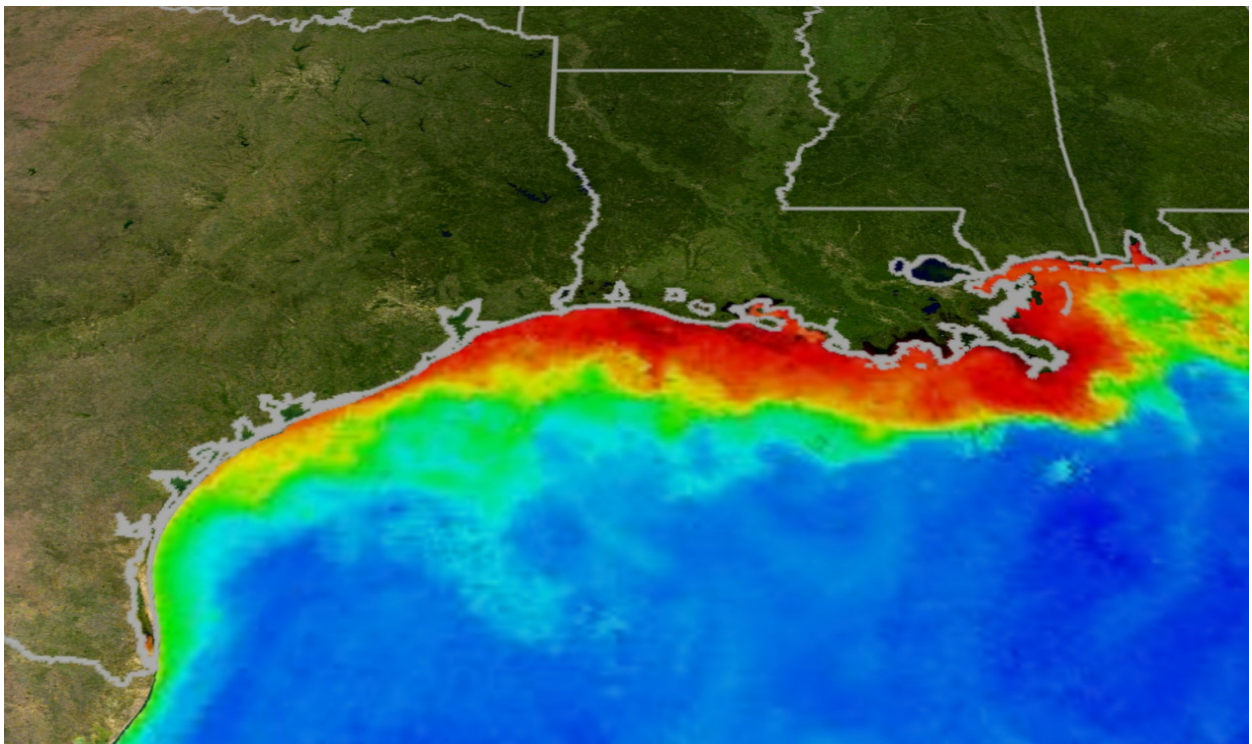
Our most precious resource is the most forgotten and the most in need of our assistance. Farming practices are depleting this resource and causing enormous downstream problems that we need to solve now.

The graphics below illustrate the effects current farming practices are having downstream.



River systems with farming practices causing Dead Zones in the Gulf of Mexico

If farms reduce their nutrient pollution, the whole world will benefit. Farms today use nitrogen based chemical fertilizer. When these synthetic fertilizers are applied to fields, the plants uptake only about 30% of the nitrogen applied. The balance ends up in our ground water and our rivers. As shown in the graphic below, nutrient (including nitrogen) run off enters the Gulf of Mexico and stimulates overgrowth of algae causing “Dead Zones” - areas without adequate oxygen to sustain life, all the fish die.

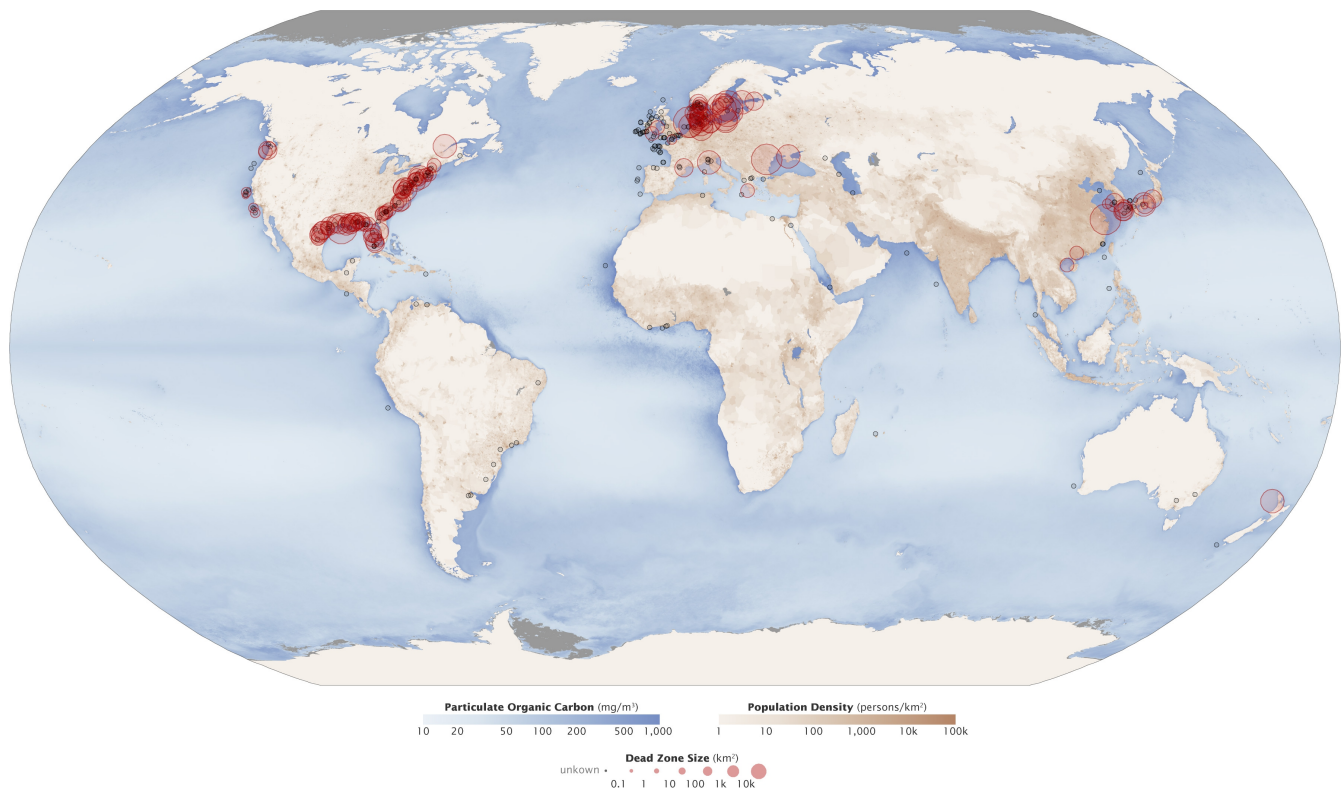


2015 Gulf of Mexico Dead Zone Map – darker orange less oxygen

Nitrogen in the Dead Zones evaporates into the atmosphere as nitrous oxide; contributing to air pollution and climate change. The Gulf Dead Zone has **not** been getting smaller.

Without nutrient pollution, it **could**.

The annual Gulf of Mexico Dead Zone is approximately the size of New Jersey and similar Dead Zones occur everywhere agricultural runoff is present worldwide as shown in the map below.



Full Circle Farming eliminates nutrient pollution by farms. Farmers no longer need chemical fertilizers to grow abundant crops.

No nutrient pollution = no Dead Zones.

Land:

Spirity in the run off from *EasyEarth* farms does no harm to the earth, oceans or streams, and on the farm, creates rich soil as seen at John's farm (photos below) What was once dry sand became humus rich soil which grew the lush oats in the picture. John's oats yielded over 16 tons per acre in a neighborhood where the norm was 8 tons. John could easily feed his cows without purchasing feed, his yields were extraordinary.



Humus rich soil created these healthy oats



*Carlos standing in John's oats
(grown with Spirity)*



Neighbors oats the same day (no Spirity)

And John's farm was a non-polluting farm. His farm was in compliance with environmental standards currently in place in California. His lagoon below looked (and smelled) like a calm lake. He used this run off water for his fields. The bird in the small picture is drinking and foraging at the water's edge. Very unlike the typical dairy lagoon.



John's lagoon looked and smelled like a clean lake

Full Circle Farming *restores* earth and water, it's *easy* on the earth.



Bird foraging at the edge of John's lagoon

The compost in the picture below is spread on fields to grow bumper crops and restore the land. Fields need less water as a result since the ground holds water with the addition of this odorless compost.



Humus Rich Odorless Compost at John's farm. No flies around this truck.

Cows and other farm animals can help create the compost we need to restore land and water. Without them, the process is much more difficult. We need to help all those animals that are currently supplying our food to restore our planet as well. With the help of TEOS Foundation that can be reality.

The Earth will balance herself, no matter what humans do, we can be part of the solution or we can be eliminated by it, TEOS Foundation can make the difference.

We offer you the opportunity to become one of the founders of TEOS Foundation by contributing to start the non-profit foundation and move Full Circle Farming and EasyEarth forward. To discuss the possibilities, please call Carlos Sebastian or Chrisida Almberg at 818-506-5464 or 818-493-0701. Or contact IDEA to discuss how this technology will be incorporated into their program.