

## A NEW POND SERVICE



**NO MECHANICAL  
DREDGING!**

**NO DAMAGE TO  
LANDSCAPE!**

**NO DRAINING OF  
POND!**

### REMOVE BOTTOM SEDIMENTS FROM YOUR POND

Every pond is in a dying process the moment it is created. Leaves, weeds, algae and other organic matter travel to the bottom of the pond, taking the form of MUCK. This gradually fills in the pond and is the direct cause of the many problems that pond owners have. MUCK contains toxic gases and harbors nutrients that cause excessive weed and algae problems, which deteriorates the ecosystem of a pond. Now there is a unique, efficient, and economical way of removing the MUCK and restoring new life to your pond. Let's compare the old solution with the new solution and you decide which is the better approach.

### THE OLD SOLUTION – MECHANICAL DREDGING

Mechanical dredging is most effective when the pond has been completely drained and the bottom sediments have had time to dry. This means all aquatic life must either be relocated or killed off. If the pond is dredged wet, as soon as the dredge hits the sediments, the sediments are so fine they explode into the water column releasing all the toxic gases and nutrients. This kills off most of the existing aquatic life and leaves the pond a black, mucky mess. Once the dredging is finished, the sediments then settle back to the bottom of the pond, and much of the dredging benefits are lost.

Heavy equipment can cause extensive damage to the landscape and is hindered by houses, power lines, telephone poles, and trees. The cost in many cases is prohibitive and most mechanical dredgers will not even consider smaller ponds.

### THE NEW SOLUTION – SEDIMENT REMOVAL SOLUTIONS

High-volume suction pumps are used to descend to the bottom of the pond. They move into the sediment, vacuuming it up, just as you would vacuum a carpet. This not only removes the sediments, but also the toxic gases and nutrients. The bottom is restored to its original depth. The process is extremely efficient. It can also remove loose clay, rocks, and sand, freeing up covered springs, irrigation systems, culverts, and cisterns.

### THE RESULTS ARE CRYSTAL CLEAR

- The restoration of the natural bottom without disturbing existing aquatic life.
- Cleaner water and a healthier ecosystem without damage to the existing landscape.
- A dramatic reduction of weed and algae problems.
- An expanded living space for your fish at a cost up to 75% less than dredging.
- A reduction in toxic gases and nutrients.

FOR MORE INFORMATION, CONTACT YOUR LOCAL SRS DISTRIBUTOR.



# FREQUENTLY ASKED QUESTIONS



We are having great success removing nutrient-rich sediment (MUCK), which is the major cause of foul water, and excessive weed and algae growth. This MUCK severely degrades the quality of ponds. Here are some answers to the most commonly asked questions.

#### **What size ponds can you clean?**

Around 1/8 acre to 10 acres.

#### **How often does this have to be done?**

Depending on how well you maintain your pond after cleaning, it should last 15-20 years.

#### **How does your system work?**

The system hydraulically removes the decaying sediment from the bottom of ponds. Any area could be specifically targeted and is incredibly efficient and environmentally friendly.

#### **Will this adversely affect aquatic life and fish?**

No. You do not have to relocate any aquatic life.

#### **What do you do with all the sludge that you pump out?**

Most people have enough property to discharge on site, if not, we provide other alternatives.

#### **Will this destroy any of my property?**

Because of its liquid form, the sediment will disperse evenly among the grass and trees. In addition, it is so nutrient rich that plants love it and so do farmers.

#### **Do you come out and inspect the ponds and give estimates?**

Only if there is a concern with the discharge area. Even then, I am looking at a pond, which does not tell me much. Only when the system is in full operation will we know how much sediment has accumulated over the period of time, type, and viscosity of the sediment. With our experience, if I know the depth, age, and surrounding foliage, I am usually very accurate ON how much time it will take to clean a specific pond or area. The only other concern is the discharge site and 99% of the time we can solve that over the phone.

#### **Do you have to clean the entire pond?**

No, we are mainly concerned with the bowl area, which is the deepest part, where the bulk of the sediment has accumulated and is doing the most environmental damage. As a matter of fact, we serviced a pond which was going to take at least three days, but because of their budget, we only worked one day. The pond cleaned up so well, it was five years later before she called us back to finish the pond, which confirms that any start is a good start.

#### **How much sediment can you remove?**

In one pond, we went through 12 feet of organic sediment before we reached the original bottom. Most ponds, however, have an average of 1-3 feet of sediment.

#### **How far can you pump the sediment?**

2,000 feet, depending on grade and elevation.

#### **How much does this cost?**

Because all ponds are so different and even sediment samples are not really reliable in indicating how much sediment is in the bottom of the ponds, we charge on a daily basis, like time and material. This avoids wasting our clients' time and money on ponds that we finish ahead of schedule. Naturally, a 1/4 acre pond with 5 feet of sediment is going to take a lot longer than a 1/4 acre pond with 1 foot of sediment, which usually takes us one day. Daily rates are obtained by request.

#### **Why do ponds have to be cleaned?**

Mother Nature tries to reclaim all bodies of water. In the deeper water lies anaerobic bacteria which cannot decompose the onslaught of organic matter. This material slowly builds as a nutrient rich compost, or natural fertilizer plant, saturating the water with nitrogen, phosphates, sulfur dioxides, methane gases, and the list goes on. This causes excessive algae and weed growth, foul water, and sometimes fish kill. All this dies through the winter, adding and compounding a natural cycle that builds over time, filling in our ponds.

#### **What about aeration systems?**

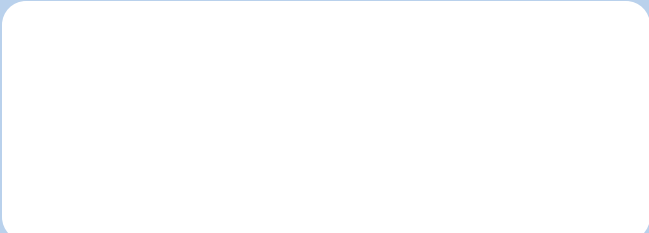
About 80% of the ponds that we clean have aeration systems, (mine included). After following instructions and \$5,200 a year later, I dove to the bottom of my pond and shoved my hand up to my shoulder in solid muck, which was not supposed to be there if aeration systems were that effective. That's when I developed this system. Aeration systems are a big plus to alleviate some of the gases mentioned above from saturating into the water, but as for decomposing sludge from the bottom, there has been little success. After we clean a pond, aeration systems are a great help in keeping a pond healthier longer.

#### **What is the difference between your system and mechanical excavators?**

Water is a disadvantage to heavy equipment. A reputable excavator will drain the pond first to ensure that the sediment solidifies to a more manageable and solid form; otherwise, the sediment will just slop around the blade; they will get stuck, and it's a real bear. That is why they charge so much. Check around. The average cost is around \$75,000 per acre. To dragline wet, remember the sediment is in a soft liquid state. When the bucket hits the sediment, the sediment explodes in the water, saturating the entire water column, (like a spoon stirring chocolate in milk.) Yes, you will have a deeper pond, because they can remove the hard clays and soils at the bottom when they dig. But when they are finished and the pond settles, you are right back where you started. Our system uses the water to our advantage. How does this sound? Insert a straw into the chocolate, suck it all up, and your problems are over. No mess, no costly re-landscaping, only efficient and cost-effective results.

After we clean the ponds, we advise you on how to take care of your pond, so you can enjoy a healthy pond for years to come. We hope we have answered most of your questions. For pricing information, or for additional questions, contact us at the number below.

FOR MORE INFORMATION, CONTACT YOUR LOCAL SRS DISTRIBUTOR.



**GOT MUCK?**



**ARE YOU EXPERIENCING ANY OF THE FOLLOWING PROBLEMS?**

- Is your pond or lake filling in with organic sediments or muck year after year?
- Are sediments clogging your culverts, intakes pipes, or irrigation systems?
- Have your underground springs decreased in volume or become inactive?
- Are you using a lot more chemicals much more often with less effect?
- Are the deeper areas in your pond becoming shallower?
- Have you experienced winter fish kill or find that your larger fish are disappearing?
- Have you lost water clarity and noticed a distinct odor coming from the pond?

**IF YOU ANSWERED YES TO ANY OF THESE QUESTIONS, WE HAVE THE BEST SOLUTION!**

**WHAT WE OFFER:**

- The hydraulic removal of sediments at a cost of up to 75% less than that of mechanical dredging.
- Pricing to fit your budget needs.
- No draining of your pond or relocating aquatic life.
- No mechanical digging which can rupture lined ponds or change existing designs, requiring extensive permitting.
- No damage to your landscape due to heavy equipment.
- Eighteen years of professional experience.
- We are the original founders of this system with top-of-the-line modified and patented equipment, giving you the best and most economical efficiency.

**WE REMOVE SEDIMENTS FROM:**

- PRIVATE PONDS
- GOLF COURSE PONDS
- PUBLIC PONDS
- RETENTION PONDS
- LAKES
- HARBORS
- MARINAS
- CHANNELS

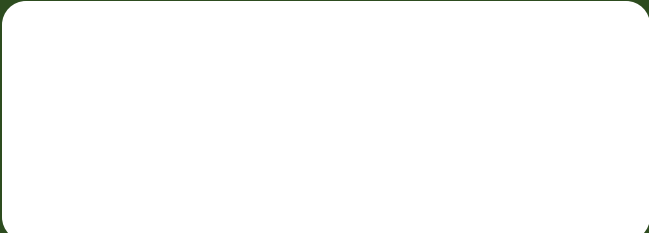


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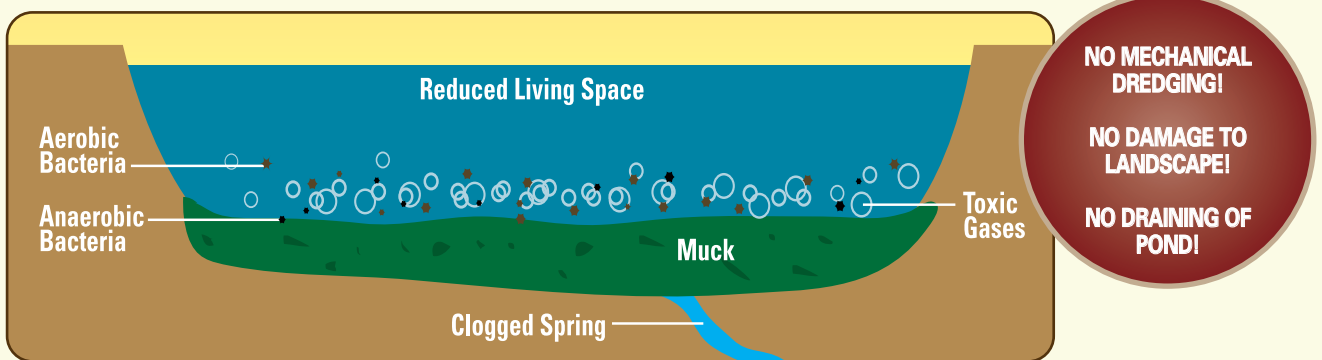


# THE LIFE CYCLE OF A POND

Dear pond owner,

Thank you for your interest in *Sediment Removal Solutions*; a new and innovative idea in pond cleaning. We hope the information enclosed will bring a better understanding of ponds and our procedure.

Unfortunately, for all ponds at the moment of birth, they start a dying process. This is nothing to be alarmed about. It is just part of a natural cycle of nature trying to reclaim the pond; transforming it into a swamp, then a marsh, and finally a prairie.



In the beginning our fine-feathered friends bring algae, weeds and eggs to our ponds. The wind contributes leaves, branches, grasses and other material. All of this accumulates in what we call "the bowl" or "septic tank" of the pond, usually the deepest area. In the shallows up to about three feet, live the aerobic bacteria. This bacterium decomposes foreign matter quickly. In the bowl area live the anaerobic bacteria, which cannot decompose the incoming matter quickly enough. This bacterial war rages on and the fallout is methane, sulfur dioxide, phosphates, and other toxic gases saturating into the water column reducing oxygenated water for fish and other aquatic species. This MUCK is nutrient rich and creates a deteriorating cycle. In essence, instead of the aerobic bacteria feeding the planktonic kingdom, and continuing a natural, healthy food chain, the anaerobic bacteria disrupts this natural process and feeds the plant kingdom, increasing algae and weed growth and suffocating the pond. Natural springs and aerators help, but eventually even they lose ground to this natural process.

We at *SRS* use a hydraulic method of pumping the sludge (MUCK), from the bowl areas. It is an extremely clean and cost-effective way of removing the sludge and toxic gases without the use of heavy equipment. It also does not interfere with the existing wild and aquatic life, which presently inhabit the pond. Once the bowl areas are cleaned to their original bottom, the toxic gases are removed with the muck, greatly enhancing the water clarity and quality giving your pond a fresh new start as it was in the very beginning. Due to the high volume of sediments removed per day, we will require a discharge area on site to discharge the sediments to, such as a wooded area or fields that flow away from the pond. The sediments will not mound up, but will flow and seek its own gravitational level. It is excellent fertilizer and will not harm grasslands or wooded areas. The pump used can reach 200 feet into a pond and discharge back up to 2,000 feet, depending on elevation and grade. For those of you who do not have an adequate discharge area, there is an alternate way to contain the muck. **We are having remarkable success cleaning ponds in this manner and are sure we can be a valuable service to you. Please contact us with any questions you may have.**

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# A BRIEF OVERVIEW



1

Your pond is ready for a SRS cleaning.



2

Our certified divers jump into action with our patented system.



3

Sediments and muck are sucked up...



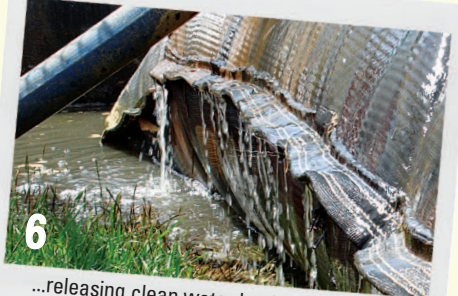
4

...and transferred to our uniquely designed silt containers.



5

Silt containers can sit up to 2,000 ft. away from ponds, retaining sediments and muck...



6

...releasing clean water back to your pond.



7

After the sediment has dried, it can be dispersed or removed from your property.



8

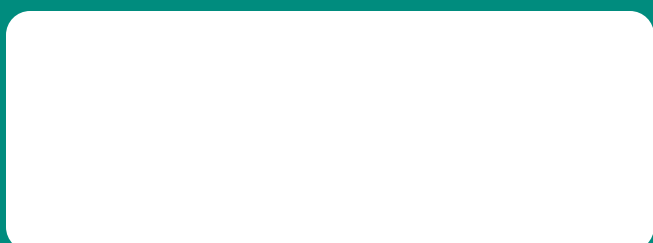
You are left with a clean, healthy pond to enjoy.

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# THE SILT CONTAINER



**PREPARATION IS KEY**  
Attached you find everything you need to prepare for the silt container that will play a major role in removing the MUCK from your pond. If you have any questions, contact your SRS distributor.

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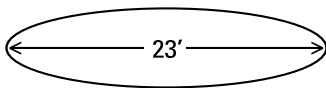


# THE SILT CONTAINER

## EXAMPLE SILT CONTAINER GRADES 23" X 100" CONT.

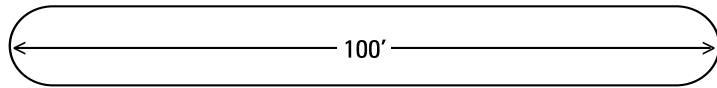
Container sizes may change

Front view

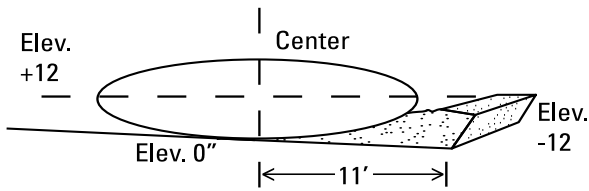


+ or - 1" in 23', ok width

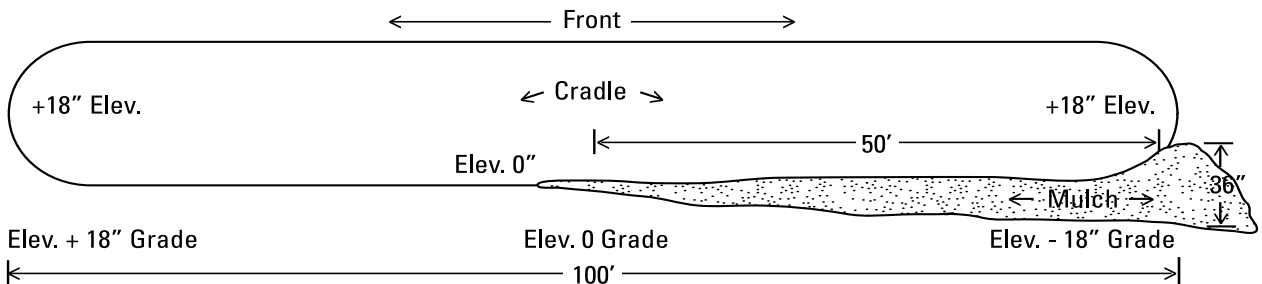
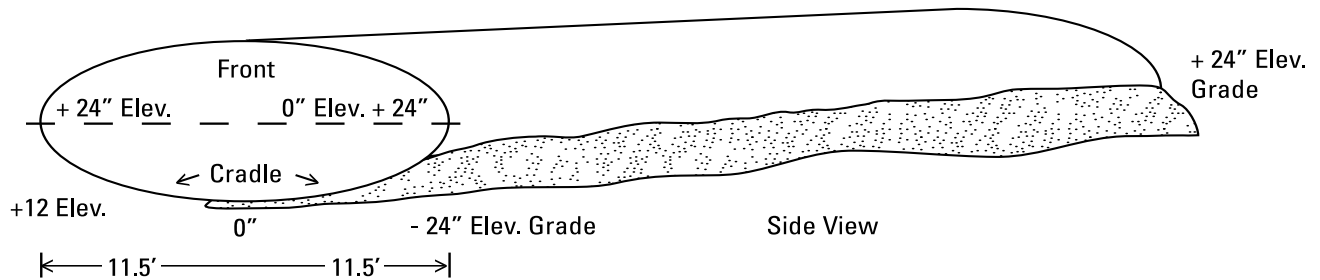
Side view



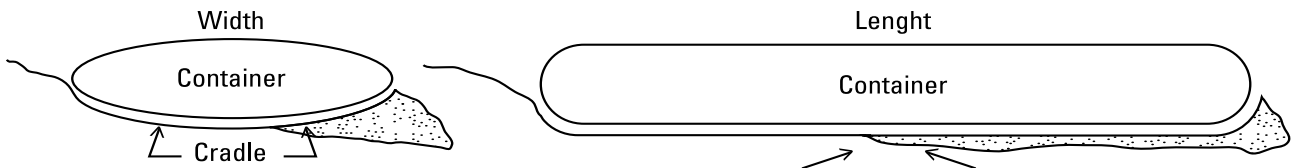
6" or less in 100' or .5% grade, ok length



+ 30" of mulch or wood chips length of entire container.  
Taper mulch to center of container to balance grade



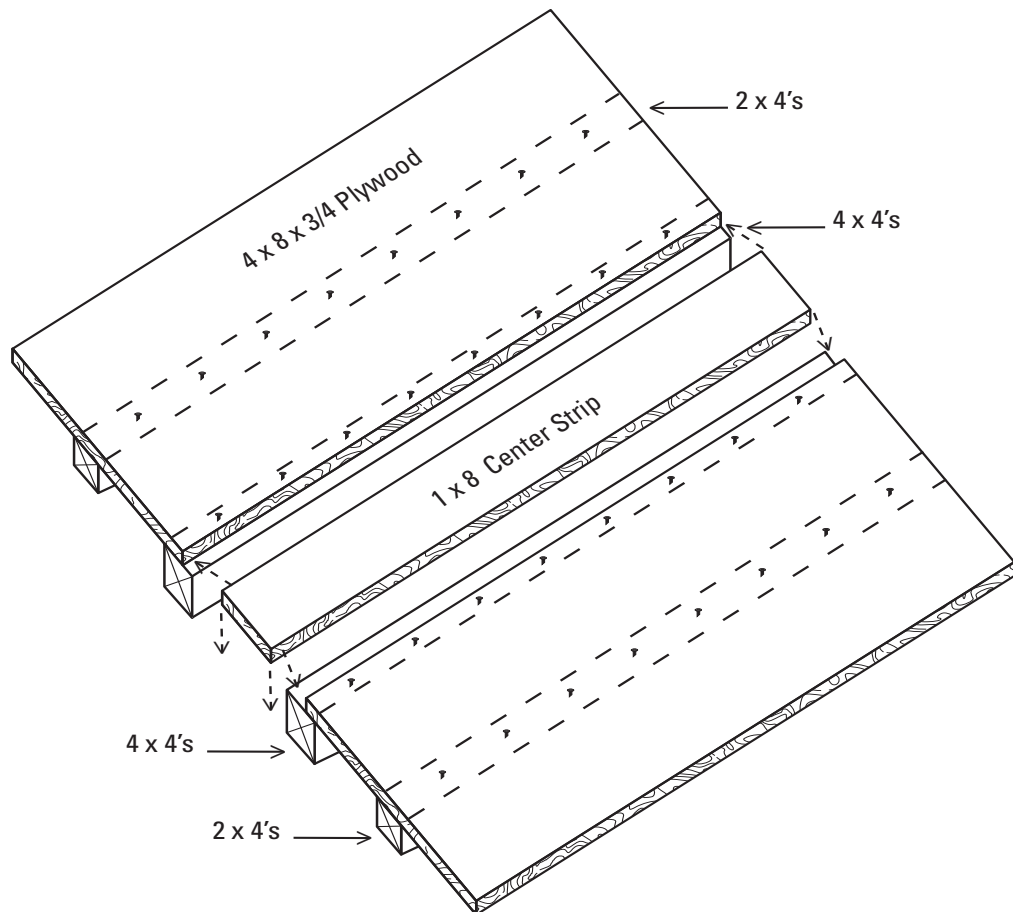
All you're doing is balancing the slope of the grade which will form a cradle to prevent the container from rolling.





## GOLF CART RAMP

Quantity	Material List
2	4' x 8' x 3/4" Plywood
1	8' - 1" x 8" Board or 3/4" Plywood Strips - 8"
2	8' - 4" x 4" Post
2	8' - 2" x 4" Studs
1	Box of 2" Phillip screws (No less than 50)





# THE SILT CONTAINER

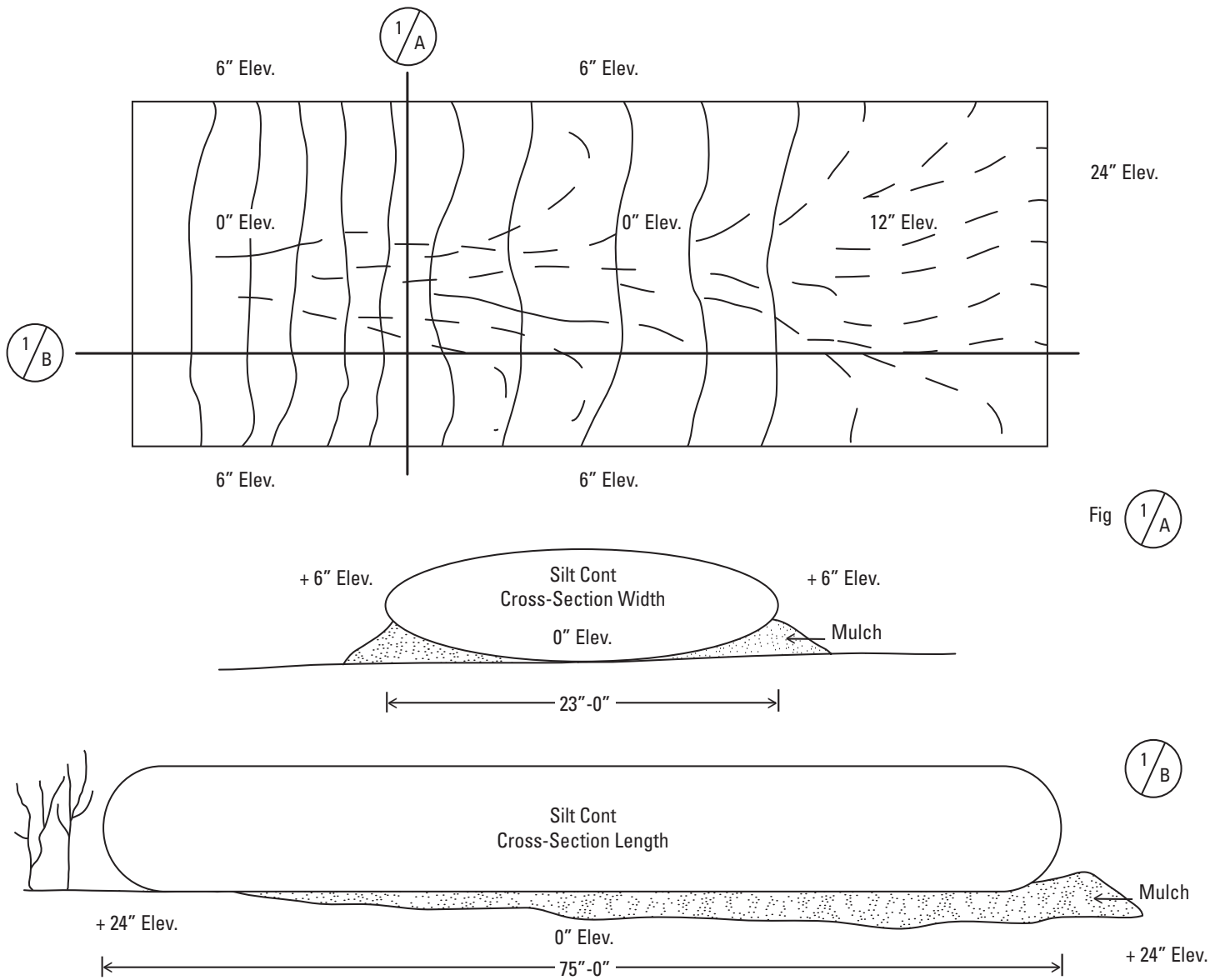


Fig 1/A

1/B

## TESTIMONIALS



Dear SRS:

Five years ago, you cleaned our pond. Since that time, we have enjoyed our pond more than we ever thought possible! The fish are doing great too. There are too many bluegills so we have introduced some bass and walleye, but the kids enjoy catching everything!

I always give you the credit for the initial cleaning and the great advice on maintaining the water. We've been told the water looks cleaner than most pools!

Hope your summer is as enjoyable as ours have been.

B.W. & G.W - Wisconsin

Dear SRS,

We have solicited 3 proposals for sediment removal in Turner's Pond. Your proposal came in 50% less than the first proposal and 400% less than the second proposal! Needless to say, we look forward to working with you again, as you did a great job on the Heathergreen Pond for us last fall.

R.W.- Village Administrator, Wisconsin

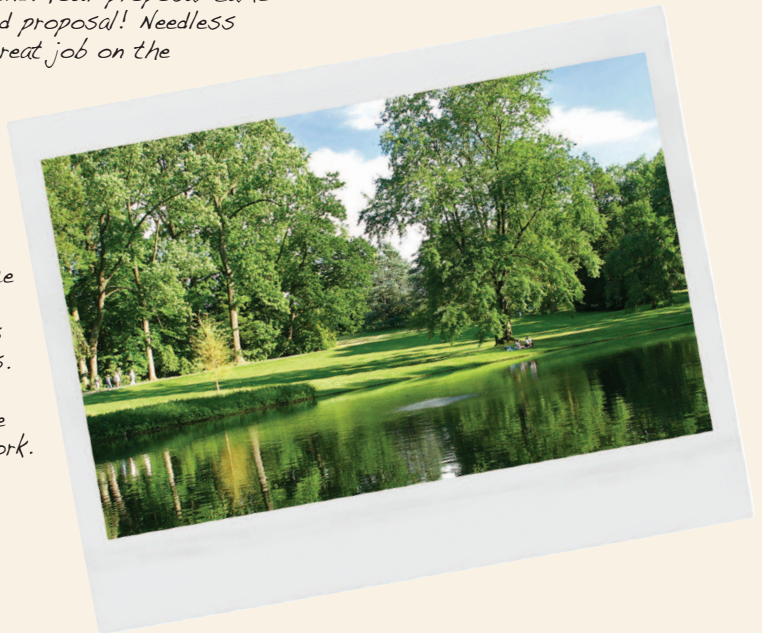
Dear SRS:

Earlier this summer we had problems with duck weed...but since the services of SRS, our pond has been beautiful. No more of that nasty stuff growing in it. In fact it is as pretty as it was when we moved here 15 years ago and decided to "improve" things.

The Marine biologists who treat our pond four times a year are quite impressed as well. We are very grateful for your good work.

Again, thanks a lot!

A.P. - Illinois



FOR MORE INFORMATION, CONTACT YOUR LOCAL SRS DISTRIBUTOR.



# AERATION SYSTEMS



Before



After



## SRS HIGH INTENSITY AERATION SYSTEMS

Getting high volumes of oxygen into your pond or lagoon requires more than the traditional compressor based systems you may be familiar with. SRS utilizes industrial grade equipment in all of our aeration systems to provide you with the highest levels of dissolved oxygen possible in an affordable system.

No matter how profound your problem, no matter how high the salt content, the pH, or how many suspended solids, SRS aerator technology will allow you to quickly achieve meaningful results such as the following:

- **Greatly Increase Dissolved Oxygen Levels**
- **Lower pH, Lower Dissolved Salts on Soil and Water**
- **Eliminate Calcium Carbonate in Sprinkler Pipes and Soil**
- **Increase Cat-ion exchange area on soil**
- **Greatly Increase Bio-availability of Fertilizer/Nutrients**
- **Eliminate Lagoon Sediment and Odors**
- **Eliminate Moss Infestations**
- **Eliminate Algae and Algae Blooms**
- **Eliminate Algae in Sprinkler Pipes and Heads**
- **Control Mosquito Population**
- **Eliminate Black Layer Outbreaks**
- **Dramatically Improve Water Percolation/Penetration**

See reverse side for details on the SRS aeration process.



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# AERATION SYSTEMS - THE PROCESS



## SRS AERATION PROCESS

### Phase One

The first phase of the process begins with the installation of the SRS Aeration System. The system is made up of a positive displacement blower unit, large diameter self-weighted hose and high SCFM aeration units. SRS custom designs each system exclusively for your lagoon, in order to ensure maximum results. Once the system is in place, a two-week initial aeration process begins. During this process your lagoon will be fed thousands of pounds of oxygen. Oxygen is shattered by the aeration units into millions of tiny air bubbles where it mixes with the water, greatly increasing the concentration of dissolved oxygen. Each aeration unit is capable of diffusing oxygen at a volume of 20 standard cubic feet per minute or more. Within hours, the oxygen will naturally begin to remove offensive odors, and stimulate organic breakdown of materials. After the two-week preparation time has occurred, SRS will initiate the second phase.



### Phase Two

Phase two begins when SRS inoculates the lagoon with an engineered, all natural, aerobic bacteria solution. The aerobic bacteria solution, presented in an oxygen rich environment, rapidly and naturally digests all of the available organic material in the lagoon, including all types of algae, animal waste and suspended material. The aerobic bacteria solution simply expedites Mother Nature's natural process of digesting waste, and because the organic material is broken down by natural enzymes, the pH of the water is greatly reduced and the water becomes naturally fortified with bio-available nitrates and phosphates; the key ingredients in fertilizer. Additional inoculations are performed over the course of the first year of operation to ensure that your lagoon has the balance it needs. At the end of this two-stage process, you are left with a clean, oxygen rich, odor free lagoon, that is full of bio-available natural fertilizers that are ready to be circulated onto crops, nursery stock and golf courses.

### Performance

The SRS Aeration System provides extremely high oxygen transfer rates in all depth lagoons. This feature makes it possible to install aerators in existing lagoons, saving the high costs of reconstruction and deepening depth, as well as minimizing power consumption

### Maintenance

The SRS Aeration System is extremely easy to maintain. It is only necessary to grease the positive displacement blower, change the oil and check the belts once a month! In addition, the system can function year round, 24 hours a day, in any climate.

### Installation

The SRS Aeration System is designed for ease of installation in your existing pump house or as a stand-alone system and can be easily installed in existing lagoons without the need to de-water.

### Cold Weather Operation

No problems with icing due to complete submergence of aeration components. Pumping action and turbulence prevent formation of surface ice.

