



# Introduction

Background and History

Providing  
naturally pure,  
healthier water.

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V3.0

## Unlocking the marvels of Sphagnum moss and water

The discovery of life changing products from nature has been the mainstay of advances in medicine and other industries. In today's era of custom pharmaceuticals, gene manipulation, and large scale engineering solutions to common problems, the opportunity to make a significant discovery directly from nature is truly unique. Creative Water Solutions LLC (CWS) is a modern day example of how nature's creation can still provide solutions to complex and pressing human needs.

## Founders

Creative Water Solutions, LLC was founded in 2003 by entrepreneurs David Knighton M.D. and Vance Fiegel, B.S.. Knighton is a retired vascular surgeon, organic chemist, private pilot and published author. Fiegel is a cellular biologist, microbiologist and biochemist who has extensive expertise in applied science, product development, regulatory issues, and intellectual property.

They started working together at the University of Minnesota in 1985. Knighton was an Assistant Professor of Surgery and Fiegel was working in the Department of Surgery Infectious Disease Laboratory. Their partnership started when Knighton hired Fiegel to run his newly founded wound healing and cellular biology laboratory.

## First Disruptive Technology

Dr. Knighton had just started Curative Technologies, Inc in 1984 based on research into platelet growth factors and their role in wound healing and angiogenesis. Vance Fiegel and his team in the laboratory headed the early research and development. Their partnership produced research that resulted in the first patented growth factor product to treat chronic nonhealing wounds. When combined with the clinical treatment algorithm developed by Dr. Knighton in the wound-healing clinic at the University, Curative Technologies became the premier wound healing company in the country. Curative Technologies went public and resulted in annual revenues of \$100 + million per year.

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## Second Disruptive Technology

Their second innovation, which made a significant change in clinical medicine, was the saphenous vein harvest system. Dr. Knighton working in his wound-healing clinic recognized that the incision made to harvest the saphenous vein from the inner leg for cardiac bypass surgery was a significant problem for many patients. Advances were being made in laparoscopic operative techniques that prompted Dr. Knighton to develop a system to harvest the saphenous vein through a small leg incision. The resulting patents were sold to Cardiothoracic Systems which was subsequently purchased by Guidant Corporation and then Boston Scientific. Today this product is used by over 90% of the cardiac bypass procedures in United States resulting in over \$150 million per year of sales.

Both of these innovations changed the standard of care in their respective fields. Acceptance of these new ideas took a significant amount of time, energy and perseverance due to the disruption they caused in the long standing standard of care.

## Creative Water Solutions, LLC

Why Sphagnum moss? Knighton was returning from Germany to Minneapolis. Over Nova Scotia, he finished his work and asked for a magazine. The flight attendant brought three – People, Atlantic Monthly, and Golf Digest. Since he wasn't a golfer and was usually bored by People, he chose the Atlantic Monthly and read a one page article about the use of Sphagnum moss in WWI by the English, Germans, and Americans to treat war wounds. They reported that soldiers with wounds packed in Sphagnum moss survived in higher numbers than soldiers with wounds packed in cotton. His experience as a surgeon and expert in wound healing led to a hypothesis that the Sphagnum moss had to be antimicrobial to have the effect reported in WWI. After reviewing the surgical literature he discovered that some of the Sphagnum moss was harvested in northern Minnesota. Fiegel obtained various species of Sphagnum moss and began years of studies to understand the various properties of The Moss™. Laboratory testing, product testing, and patent applications led to our first product sales in 2004.

Product Progression	Trade names
Residential Spa	SpaNaturally® and SpaMoss®
Residential Pool	PoolNaturally® and PoolMoss®
Commercial Spa	SpaMoss® Pro
Commercial Pool	PoolMoss® Pro
Fountains	
Ponds	
Aquariums	
Industrial Water	ProMoss™
Homes/Animal Husbandry/Potable Water	MossNaturally™



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## What The Moss™ Does

The Moss™ has numerous functions that work in conjunction with chemicals or replace the use of chemicals. In commercial and residential swimming pools and spas, and even decorative fountains and ponds, users experience the following results and benefits when they use The Moss™ and reduce or eliminate chemical treatments.

The Moss:

- Stabilizes pH and water chemistry
- Removes and inhibits organic contamination
- Inhibits staining and scaling
- Inhibits corrosion

Which results in:

- Healthier water, with reduced organics and toxic disinfection byproducts
- Reduced chemical usage
- Reduced water usage
- Stable water chemistry
- Clearer, cleaner water
- Reduced staining and scale buildup
- Less maintenance, longer equipment life

Learn more at <https://cwsnaturally.com/partner-resources/commercial/>

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## The Moss™ In and Around Commercial Facilities

Our first commercial pool treatment was at an outdoor pool facility in 2009 with four pools: Olympic lap pool, diving well, kiddie pool and splash deck. All experienced profound benefits to water clarity, reduced chemical use, reduced inhaler use by swimmers, improved water feel, and scale removal from surfaces of play features. Since then, use of The Moss™ has successfully expanded to include:

- Indoor and outdoor lap, activity, lazy river, wading and wave pools
- Indoor and outdoor spas
- Residential pools and spas
- Indoor and outdoor decorative fountains, water walls
- Golf course ponds
- Koi ponds
- Aquariums



Certified to  
NSF/ANSI Standard 50

## What The Moss™ Does – Supports Your Healthy Lifestyle Choices

You care about what you put in your body and on your body. You care about your family's health. Why should your pool or spa expose you to unnecessary levels of toxic chemicals? Stop stewing in chemicals. Start relaxing in natural water treatment.

Use The Moss™ and reduce or eliminate the use of:

- Metal out
- Clarifiers
- pH adjusters
- Algaecide
- Scale remover
- Stain remover



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In residential swimming pools and spas, and even decorative fountains and ponds, users experience the following results and benefits when they use The Moss™

- Healthier water, with reduced organics and toxic disinfection byproducts
- Reduced chemical usage
- Reduced water usage
- Stable water chemistry
- Clearer, cleaner water
- Reduced staining and scale buildup
- Less maintenance, longer equipment life



“Safe enough for drinking water treatment. Is everything else you put in your pool or spa that safe?”

Learn more at <https://cwsnaturally.com/partner-resources/residential-pool-spa/>

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# Creative Water Solutions

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