WATER HIVES

Redfish Water Solutions, Inc.

WATERHIVES.COM

Meet Our Team

Jerry Young
CEO/President

High-tech engineering leader across semiconductors, high-volume technical manufacturing, and large industrial processing facilities
Executive team member for green energy production development company Project Engineering Leader for the largest off-peak solar production facility in the U.S.
30+ years experience within manufacturing implementation, research & development, engineering management and new product development

Michael Hall
CTO/Co-Founder

34 years of Semiconductor Manufacturing,
Engineering and Management
5 years of establishing technology divisions for startups

Brooks Roberts
CofS/Co-Founder

25 years of semiconductor manufacturing in a QA/QC Engineering capacity
5 years of establishing technology divisions for startups
Multiple roles with companies involved with water contamination in the petroleum industry, and investigating soil and water contamination for environmental property assessments

Paul Taylor
Manager of QC

19+ years of semiconductor manufacturing experience in a Global Quality capacity 10+ years starting, running, and fostering new startup companies

Business and Financial Advisors

Bert Young

Executive with experience managing 40% annual growth as the CFO of a public company. Expertise with various financial transactions involving company acquisitions, the merger of two $500 million revenue companies, strong technology focus in implementing financial systems, CIO, and officer of a Fortune 50 company.

Don Thomason

Highly successful sales and sales leadership career. His experience is in technology, telecommunications, and start-up environments. He is best known for creating can-do cultures of empowerment and creativity, being customer-centric, and successfully bringing new and disruptive technologies to market.

Omar Leeman

Senior management positions including CEO, Chairman of the Board, Board Member, Fortune 50 company Division President, and other leadership positions. His experience is in technology, telecommunications, and software development. Leeman's forte is in sales, marketing, operations, growing new product lines, and turnaround business situations. He has served on both private and public company Board of Directors, including Telegea, Inc., AccessData, Inc., and The SCO Group (SCOX).

Al Morten

Founder/CEO Solimar Power Partners, being a privately held independent energy company with offices in Washington, D.C. It is an active developer of energy infrastructure projects, with specific expertise in power generation and other energy-related businesses in the United States and Internationally.

Al is responsible for managing Solimar's Development Project Gate Process (Early Stage, Mid Stage, and Late Stage), executing corporate strategy by state and various utilities, hiring key personnel, structuring and negotiating PPA pricing and financing, and originating contracts with third-party engineering, procurement, and construction companies (EPCs). Solimar currently has over 1 GW of utility-scale solar projects in early and mid-stage development throughout the United States.

Technical Advisors

Steven R. Sedlmayr

Steven is an accomplished inventor and entrepreneur with expertise in physics, chemistry, materials science, and engineering. He has experience with 3D fabrication and printing for prototypes and manufacturing. He is the youngest recipient of an NSF grant. Steven, from the age of 16 worked with Martin Marietta Corp in the Airline Division to the Propulsion & Spaceflight Mechanics Dept where he developed propulsion systems and flight mechanics for space programs and became the youngest Configuration Manager in company history. Working on the Viking Project he received a special Certificate of Acknowledgment from NASA. Holder of 50+ patents including early flat screen TV technology, being the founder and CEO of Advanced Display Technologies for 25 years.

Alfredo Avila

Alfredo is a mechanical/electrical engineer who has vast experience with companies Alfredo addressing industrial growth, efficiency, and social responsibility. He has managed multiple divisions with multi-million-dollar companies in the US and Mexico.

Alfredo participated in the design and launched the joint venture of existing Company between Cargill Inc. and GModelo/Anheuser-Busch Inbev, and managed the company as a standalone independent entity, where among many other achievements, reduced natural gas consumption by30% to world class benchmark and water by 30% (US benchmark). Created Grupo Modelo's retail segment, where he grew the business from 56 to 257 stores in 5 years.

Vision of the Company

Our vision is to deliver Water as a Service through a new, disruptive water purification technology. Cleaning the world's water while reducing the carbon footprint of current water processing including solutions for critical industries such as semiconductor manufacturing and desalination projects.

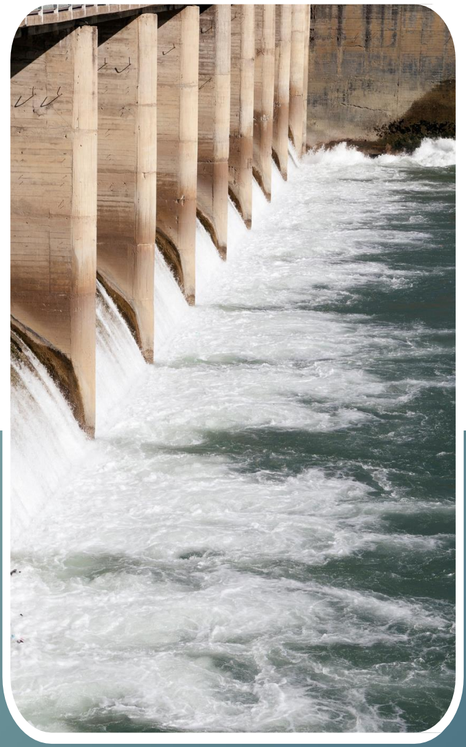
A separate non-profit entity will provide the technology to developing countries lacking safe, clean drinking water.

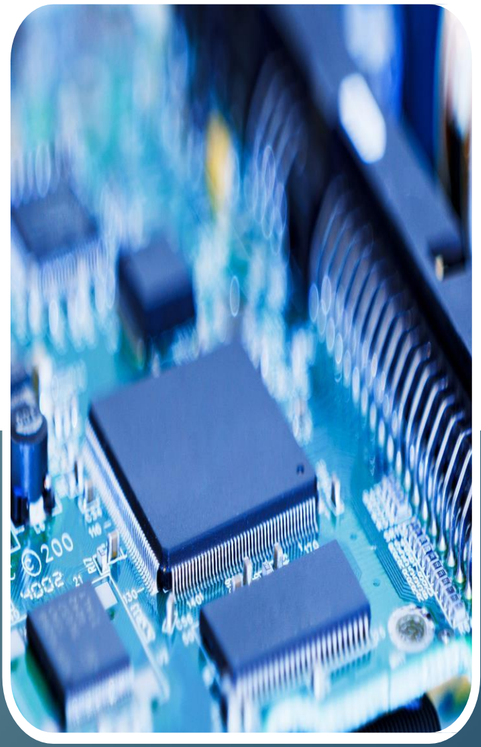
The Problem:

Today’s clean water filtration solutions are:

- **Costly to produce and operate**
- **Substantial carbon footprint**
- **Lack ease in manufacturing components**
- **Challenging to scale**
- **Lack modularity**

New water regulations are pressing industry for clean water solutions.

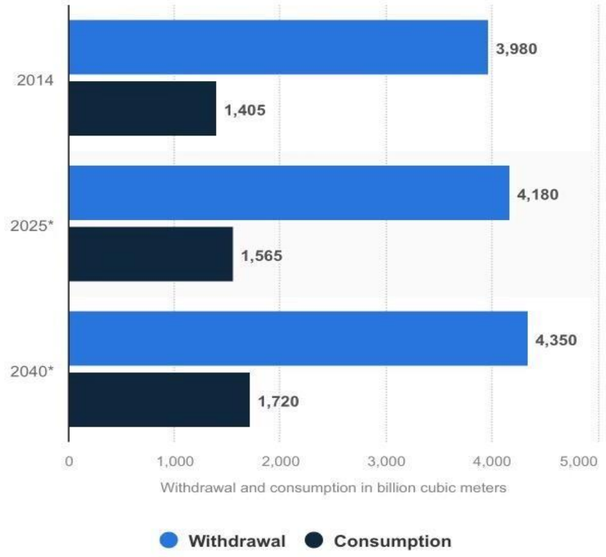


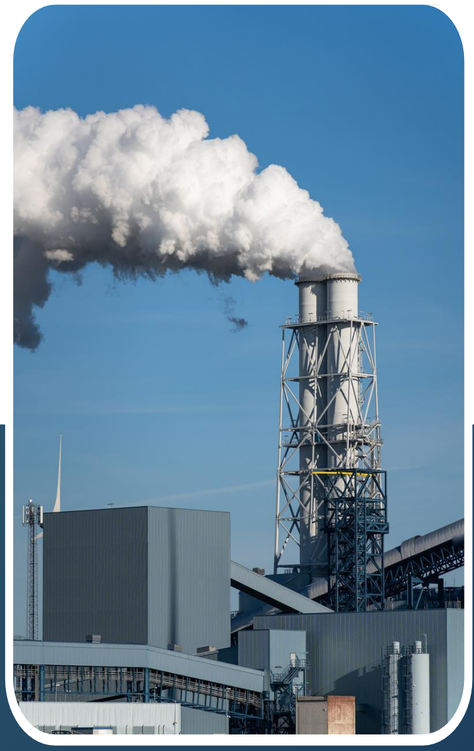


Energy & Environment › Water & Wastewater

Projected water withdrawal and consumption from 2014 to 2040

(in billion cubic meters)





Water Intensive Industries

- Desalination
- Household water
- Food & Beverage
- Agriculture
- Pharmaceuticals
- Semiconductor
- Automotive
- Aerospace
- Oil and Gas

The Market Opportunity

- **The global Reverse Osmosis market is estimated to be $11.7 billion in 2020**
- **Projected to reach $19.1 billion by 2025 (CAGR of 10.3%)**
- **Reverse Osmosis has a substantial carbon footprint**

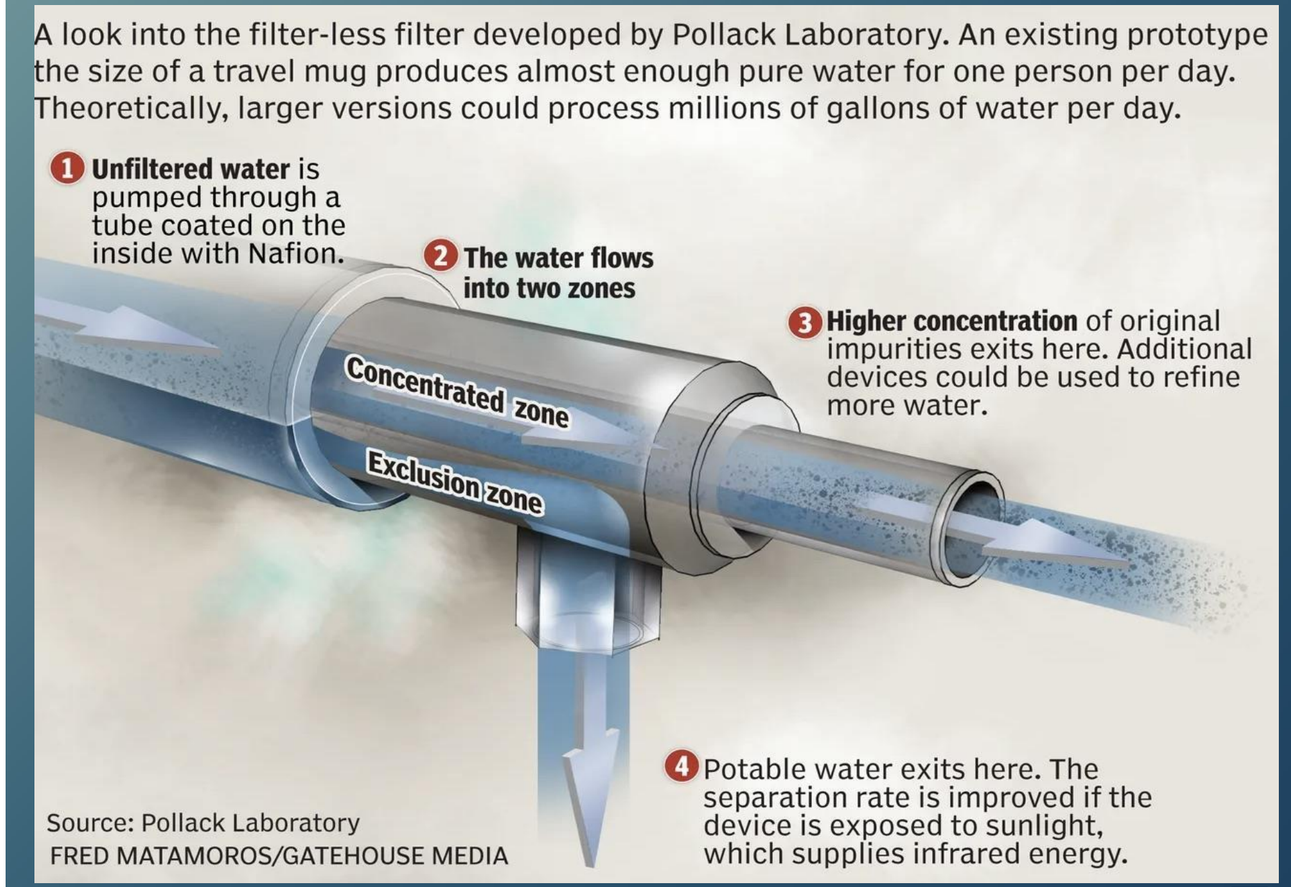
  0.5% of Total Annual Global Carbon

Reverse Osmosis is energy intensive. The Water Hives solution is not and may represent an opportunity for customers to earn carbon credits

The Solution

Water Hives patented design utilizes hydrophilicity as proven at the University of Washington's Pollack Laboratory. When a hydrophilic surface comes in contact with water, an exclusion zone of pure water is formed. Water Hives technology uses capillary action to pull the pure water from this region.

Water Hives micro-capillaries remove the water from the pure water zone creating a perpetual smooth flow of pure water. The impure water will then cascade to a subsequent hive and separate additional pure water until the degree of desired purity or volume is achieved. All while using 3 orders of magnitude less energy, compared to Reverse Osmosis.



THE PRODUCT

Redfish Water Solutions, Inc. holds the patent for Water Hives™, a unique water purification system. Issue date of patent was April 18, 2023

Patent No. 11629070

ABSTRACT

Water purification systems including an inlet chamber, a purification module, a purified water outlet, and an impure water outlet. The inlet chamber is configured to receive an input water stream. The purification module includes a purification chamber configured to divide the input water stream into a purified water stream fluidly coupled to the purified water outlet and an impure water stream fluidly coupled to the impure water outlet. The purification chamber includes a first hydrophilic surface and a second hydrophilic surface spaced from the first hydrophilic surface. The first hydrophilic surface and the second hydrophilic surface cooperate to establish purified zones of substantially pure water and an impure zone of impurity concentrated water from the input water stream. The purified water stream is supplied by substantially pure water from the purified zones and the impure water stream is supplied by the impurity concentrated water from the impure zone.

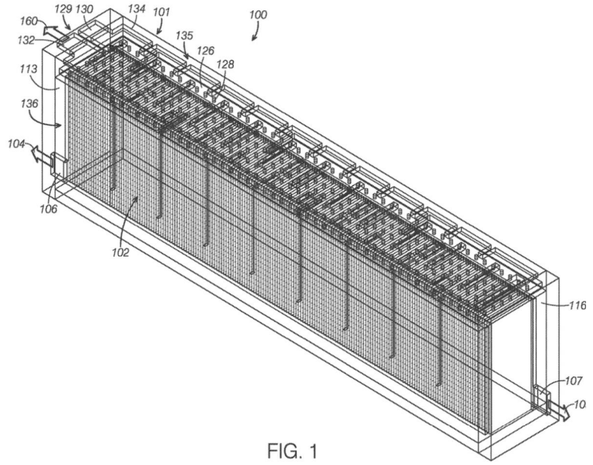


FIG. 1

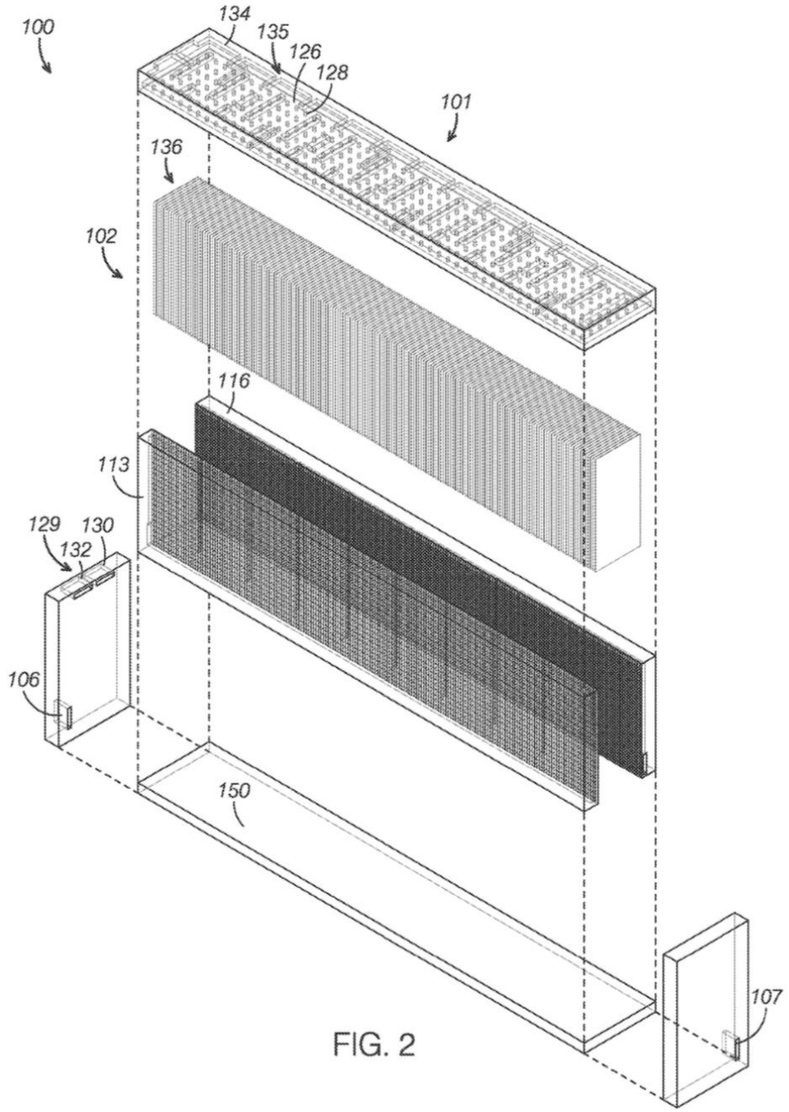
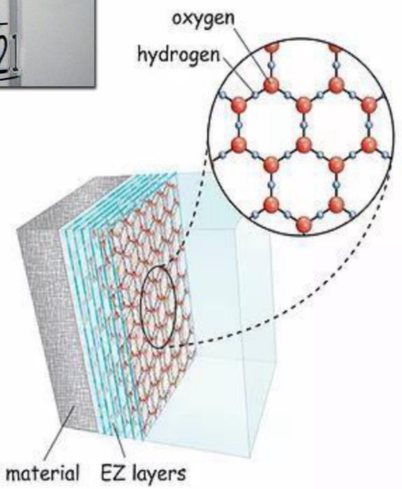


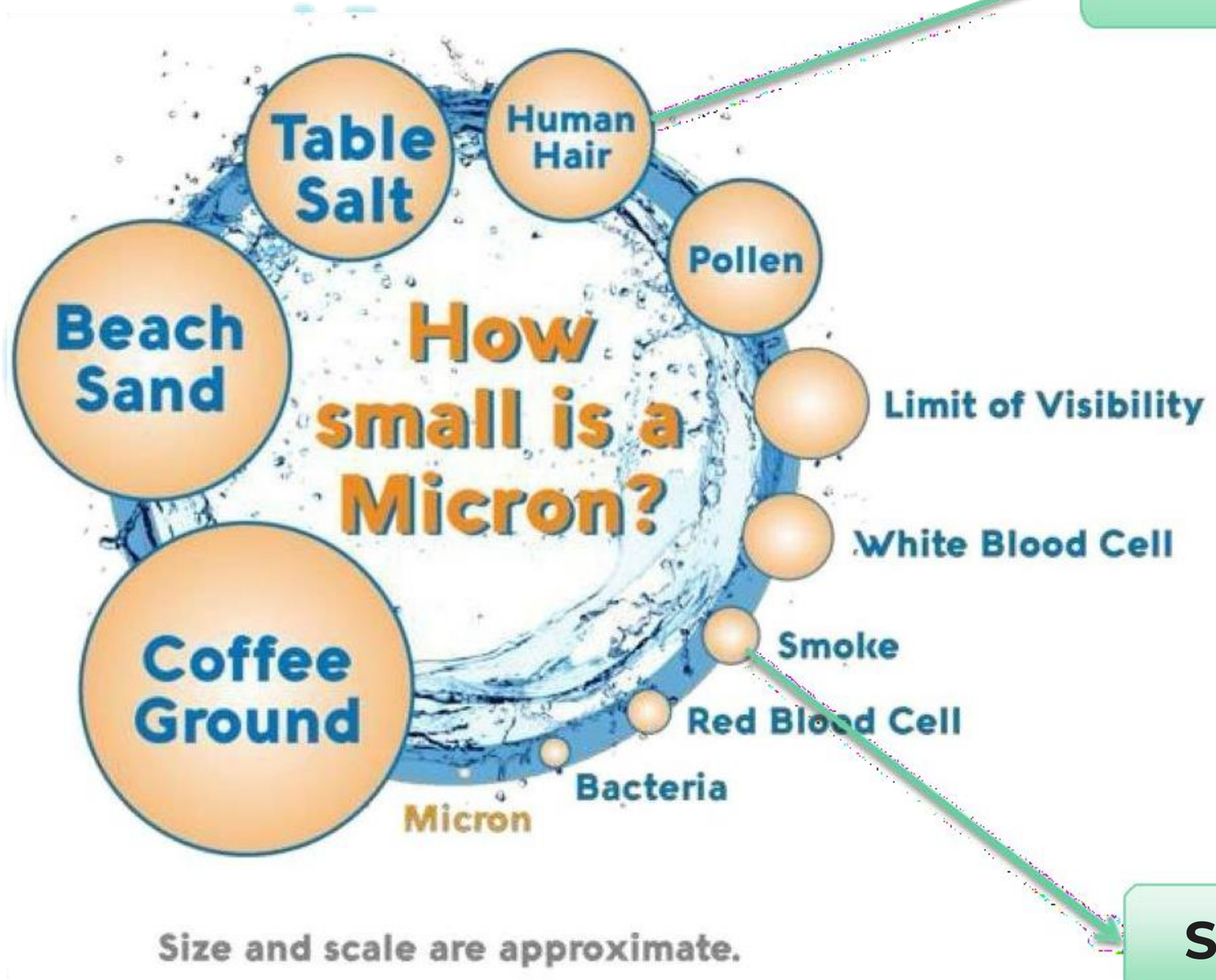
FIG. 2

Hydrophilicity, or adhesion, occurs on a glass surface because the attraction of the molecules is stronger than bond of the water by itself. The simplest example of this is the curvature of the water on the edges of any glass container or when water sticks to the edge of the glass when pouring.

Hydrophilic surfaces have highly polarizing groups such as -OH groups at the surface which being polar in nature, strongly attract the H-O-H molecules, expelling everything else from the vicinity.



Water Hives are cleaning on microscopic levels

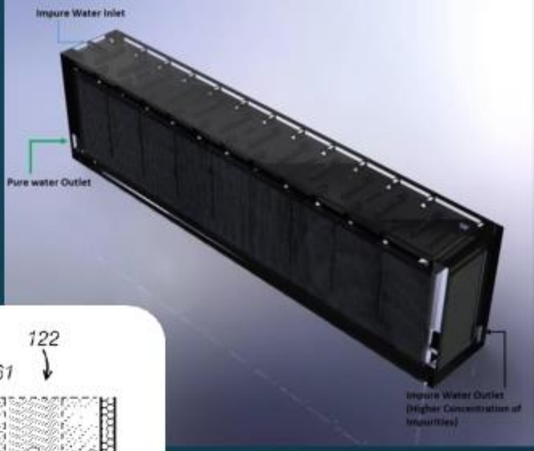


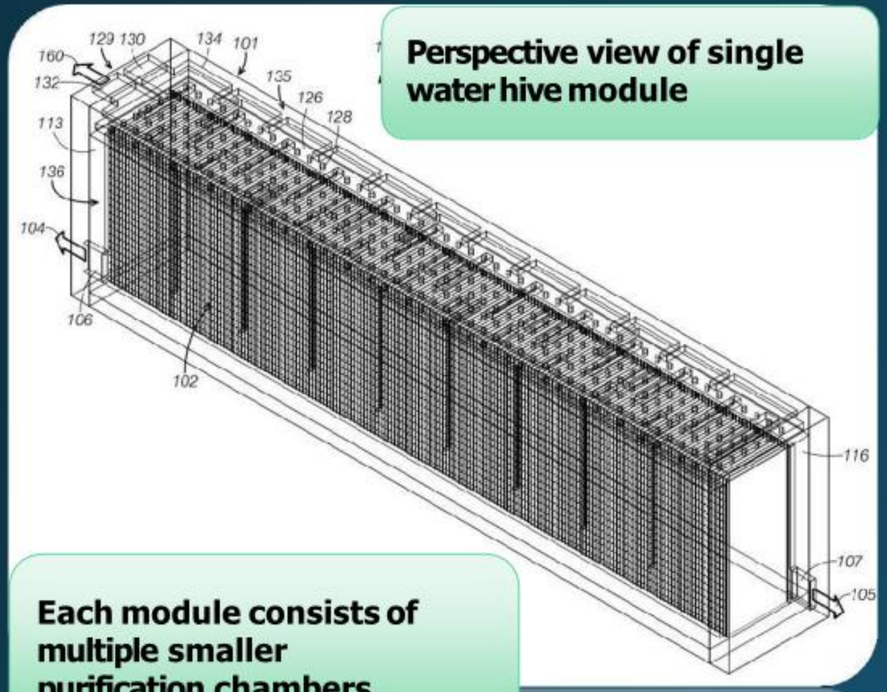
Size of Exclusion zone

Our Water Hive manufacturing materials and design use microfabrication processes from already well-established semiconductor industry processes and 3D printing of Water Hive components. Making manufacturing materials inexpensive and plentiful, leading to reduced manufacturing costs.

Size of our Capillaries

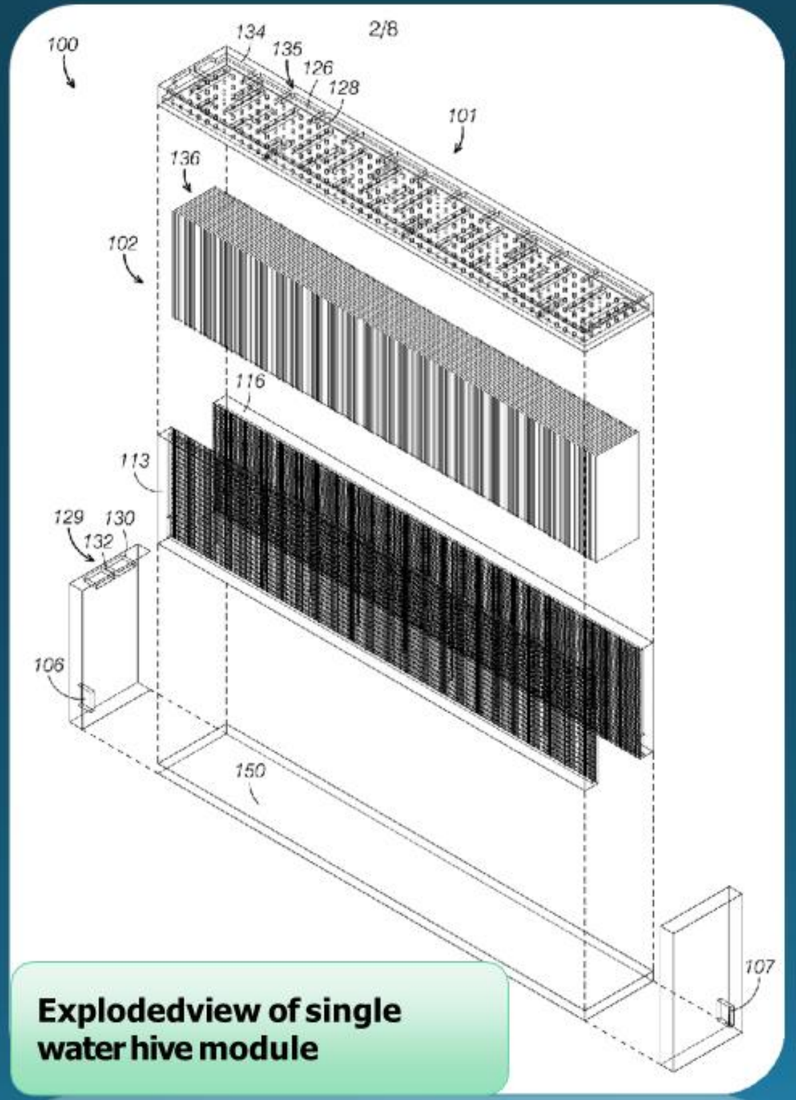
Design in a snapshot



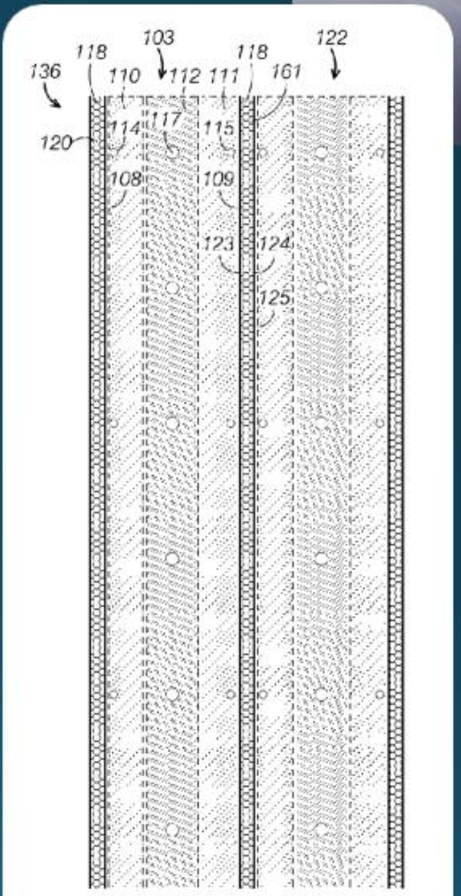


Perspective view of single water hive module

Each module consists of multiple smaller purification chambers.

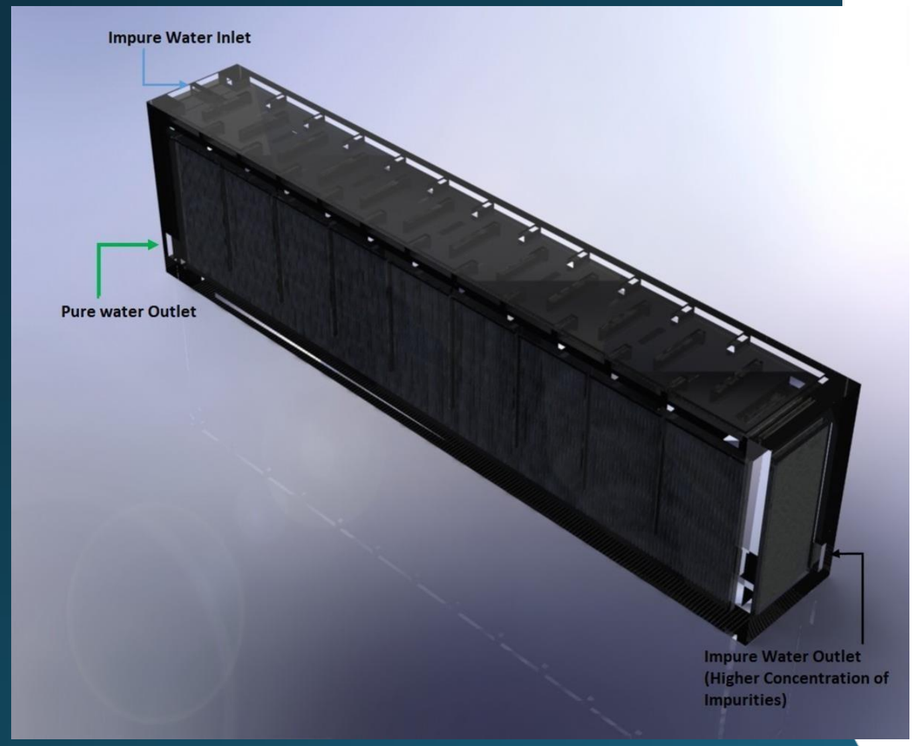


Explodedview of single water hive module



Right side elevation view of two adjacent purification chambers

Perspective view of a single water hive module



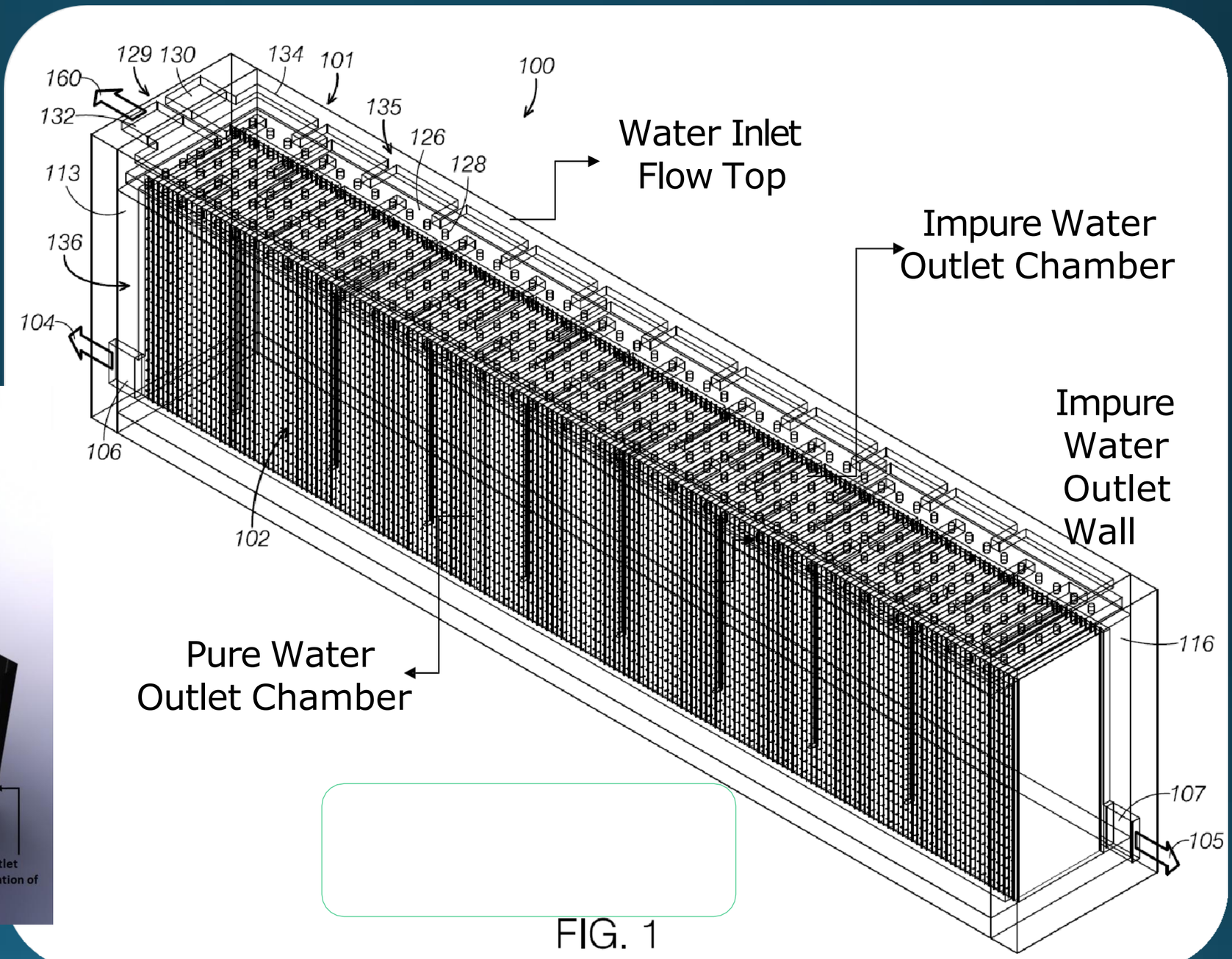


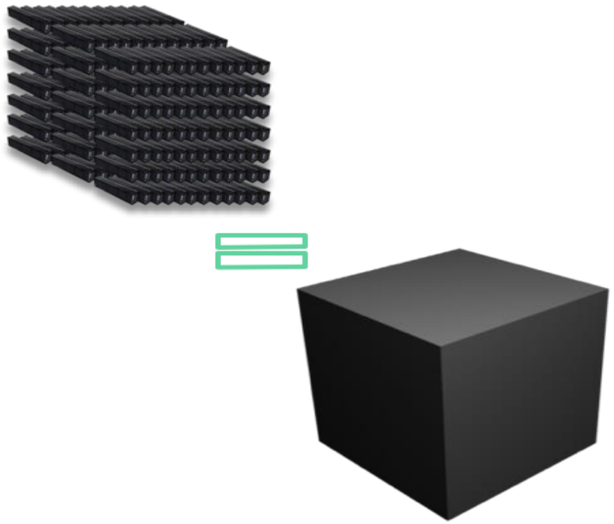
FIG. 1

Vision

Water Hives is estimated to reduce energy costs by 40% or more over Reverse Osmosis.

Single Water Hive

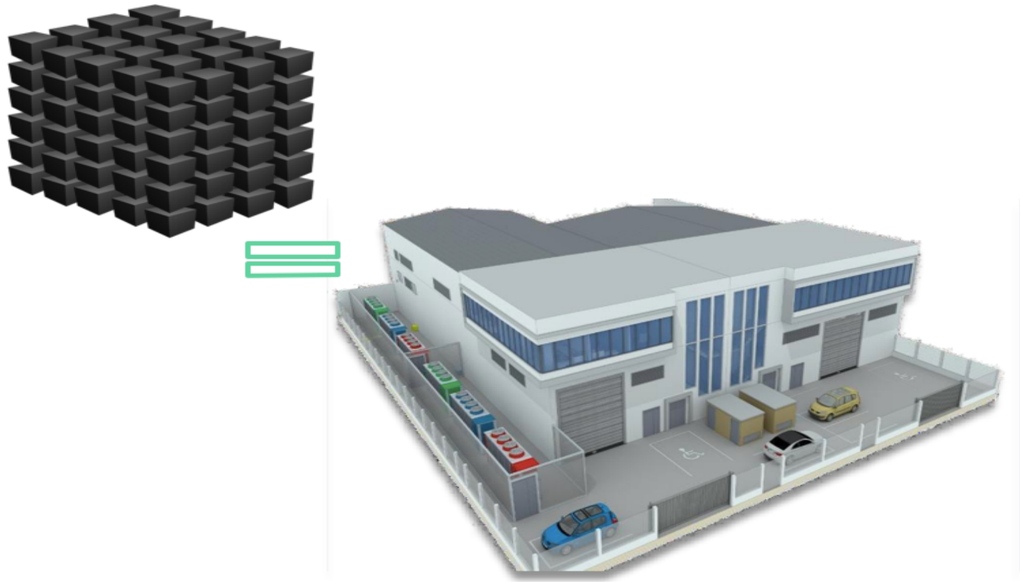
~ 4” L x 0.63” W x 1.1” H



Water Hive Cell

~163 Water Hives working in tandem.

~ the size of a car battery



Water purification plant

Multiple Water Hive Cells stacked together in a server like fashion.

Very scalable.

Who are the largest Reverse Osmosis suppliers?

The Competition

SUEZ Water Technologies

Veolia Water Technologies

Evoqua

Pentair

Dow Water and Process Solutions

GE Water and Process Technologies

IDE Technologies

Koch Membrane Systems

Toray Industries

Fluence

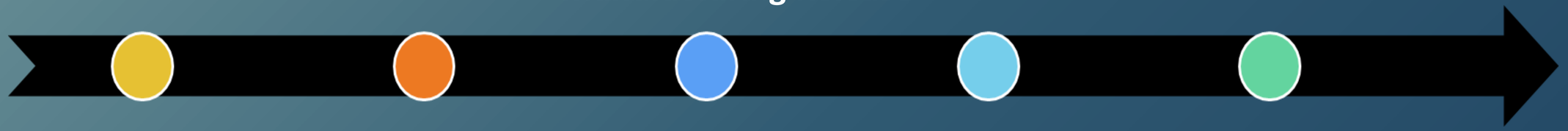
Cambrian

Road Map

Benchtop
Design and Materials

Phase Two
Proto-type and
Manufacturing Release

Phase Three
Manufacture Plant Scaling

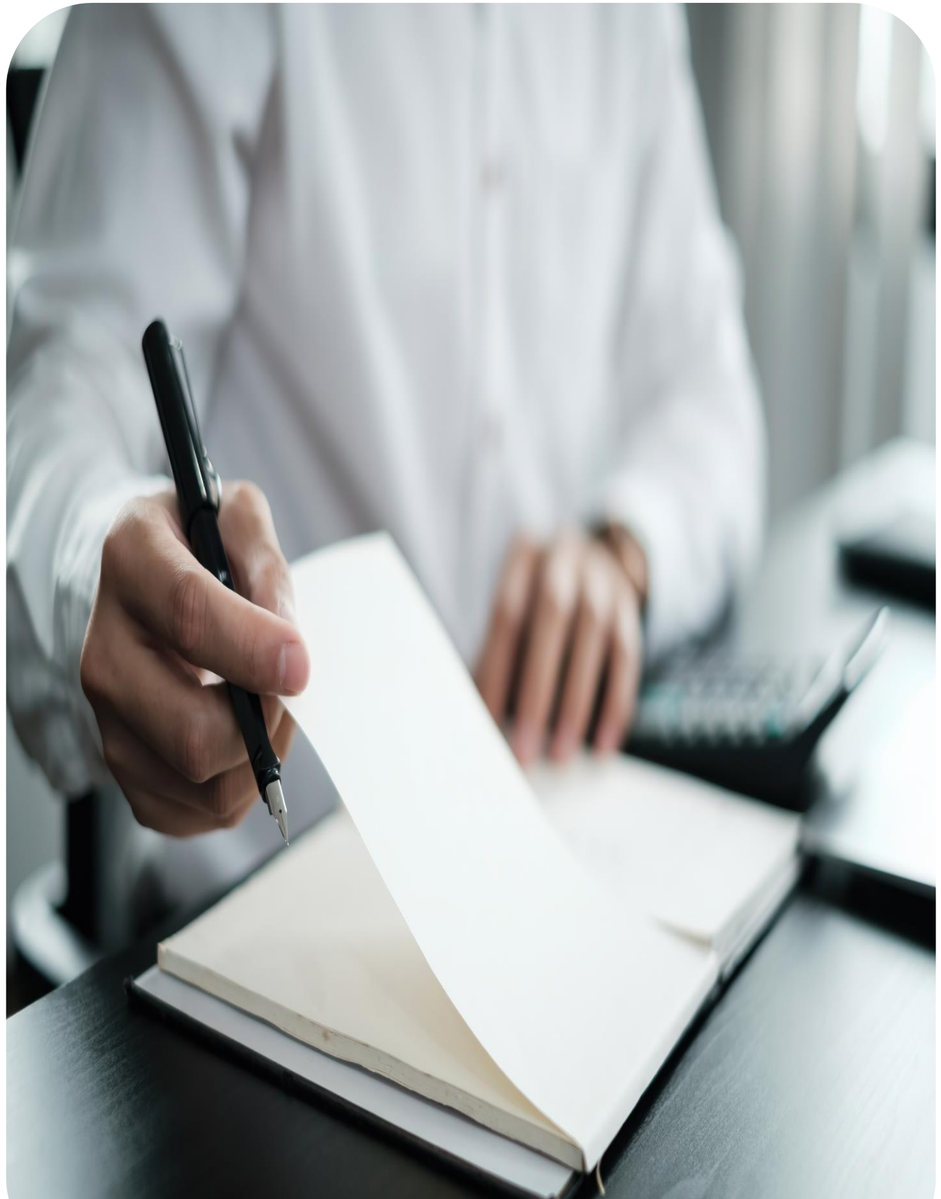


Phase One
Proof of Manufacture Ability

June – December 2024

Pilot Customers
January – December 2025

Customer Expansion
January 2026 - - - -



Financial Highlights

Water as a Service (WaaS)

Long Term Contracts

Revenues beginning 2025

Customers 2025 (2 Pilot) - 2026 (8) - 2027 (19) with ACV of $16.2m in 2027 Gross Margin expected of 63%

Positive Cash Flow in 2nd half of 2027

THANK YOU

For additional Information contact:

Jerry Young (208)-989-2464
or
Bert Young (801)-694-0392

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