



What We Do

WATER TREATMENT & SUPPLY

Water is life... for both people and business. Our scalable prefabricated systems treat ground, surface, and wastewater sources to supply:

- Drinking / Domestic Water
- Industrial / Process Water
- Agricultural / Irrigation Water

SANITATION & HYGIENE

The COVID-19 pandemic has raised the awareness of global water challenges and the lack of proper sanitation. Public health conditions related to clean drinking water, and adequate treatment and disposal of human excreta and sewage, are our top priority. Our systems are designed to provide Urban, Peri-Urban, and Rural populations with proper sanitation and hygiene services.

FOOD SECURITY

We recover water and nutrients, among other resources, from wastewater for reuse and closed-loop plumbing infrastructure in agriculture and aquaculture-controlled environment operations.

IoT CONNECTED

Our Wi-Fi, Lo-Ra, and Satellite IoT Connected arsenal of digital pathogen, heavy metals and nutrient sensors make our solutions revolutionary.

The problem today...



this issue

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A Global Water Commodities Market Cannot Be Stopped. Should It Be?

In a 2012 Nature science journal article, City University of New York professor Frederick Kaufmann wrote "There is no need to initiate a futures market in water only to create yet more financial madness that seems to resist all attempts at regulation. This time around, let the business stop before it starts."

The pressures to directly commoditize water were resisted in 2012, but fast-forward to Dec 7, 2020, and this time around the business of trading water directly as a commodity, albeit with financial settlement and not physical delivery, has started.

Like sharks circling their victim, water related indicis have been traded on Wall Street and other global markets around the world for decades.

It was only a matter of time for water to be directly traded as a commodity. It is, after all, a natural resource of limited quantity and (increasing) high value.

The new index, introduced by the US company CME Group, set an initial weekly benchmark spot price of water rights in California at around \$ 486.53 per acre-foot, which is equivalent to 1,233 cubic meters. This

index (*NQH20*) is underpinned by the volume-weighted average of the transaction prices in California's 5 major river basins, where water scarcity has significantly increased.

Financial analysts say that this value can be used as a reference for the rest of the world in the water markets. According to [Bloomberg](#), they are intended to **"serve as protection for California's largest water consumers against rising prices and as an indicator of scarcity for investors around the world."** The CME Group states that the futures will help water users manage risk and better align supply and demand

While this does sound like a valid means to increase the value of water and our use of it, read Kaufman's "Wall Street's thirst for water" article and decide for yourself whether the benefits outweigh the risks.

Kaufman, F. Wall Street's thirst for water. Nature 490, 469-471 (2012). <https://doi.org/10.1038/490469a>

OUR MARKETS

INDUSTRIAL

Agriculture | Aquaculture |
Automotive | Commercial
Livestock | Disaster Management
| Environmental Rehab | Food &
Beverage | Military | Mining | Oil
& Gas | Paper & Pulp |
Petrochemical | Pharma | Power
| Specialized Industry | Steel |
Tourism

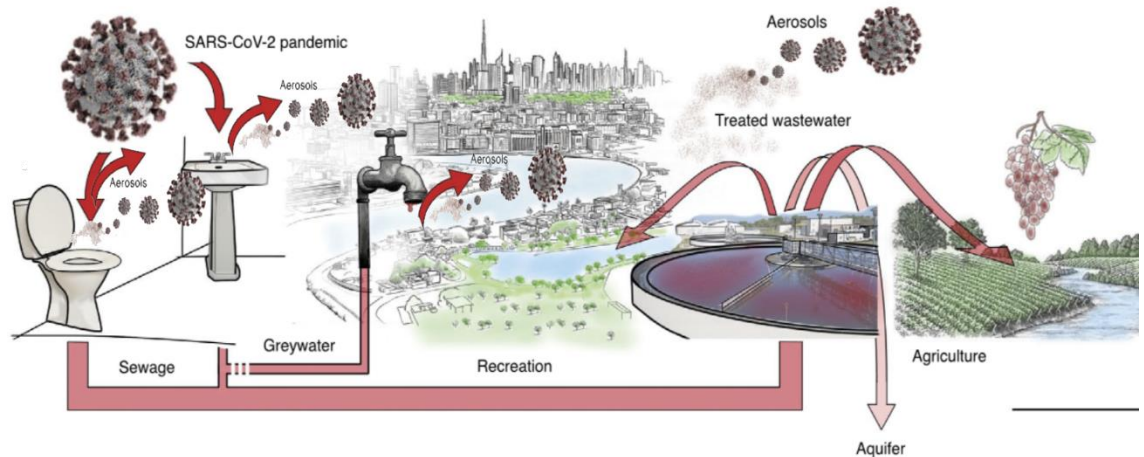
MUNICIPAL

Urban, Peri-Urban & Rural
Utilities | Commercial Buildings |
Public Facilities | Mixed-Use
Buildings | Developments | Multi-
Tenant Residences | Single
Homes

OUR GUARANTEE

Water Life Systems guarantees that you will receive enhanced security and higher quality with Water Life Systems' products and services. The service starts with customizing our solutions to your specific needs and continues through equipment delivery and life cycle maintenance. We back up what we design and manufacture to ensure that you receive complete technical and process support on-demand.

Waterborne pathways



COVID-19 Can Spread Via Our Home Plumbing And Municipal Sewage Lines. What Do We Do?

In the November Water Life issue, we discussed the increase of legionella infection rates across the world, and how man-made water systems in the built environment produce aerosolized bacteria and virus contaminated waters that provide a primary source of new infections. Studies are showing that COVID-19 infections can spread the same way.

A 2020 Nature Sustainability journal article illustrates how evidence is accumulating that SARS-CoVs (Covid-19) are present in wastewater and are a source of infection.

The article states that “conventional WWTPs generally do not remove virions completely and high influent viral loads during pandemics can lead to insufficient reduction of viruses before discharge”. This means that your municipal wastewater treatment plant (WWTP) could be discharging pathogens into your surrounding environment. Don't all of these large, centralized sewage treatment and water systems leak throughout cities? Yes, they do.

More lethal and robust virus' than COVID-19 and legionella will evolve that can enter a city's plumbing infrastructure. If you do not have the means to quickly detect and eliminate the threat before community

contagion ensues, what do you do?

Our company recommends that you solve the problem at the micro (single home) scale as well as the macro (centralized municipal) scale.

Modernize your home and city with “smart” monitoring and treatment systems that not only protect you from bacteria and virus threats but allow you to reuse your freshwater. Live a sustainable and resilient lifestyle.

Utilizing the Water Life Systems low-cost **O3-InGEN™** treatment and monitoring systems can significantly reduce your risk of pathogen exposure due to their presence in wastewater. The Water Life Systems water treatment solutions can be used in most water use applications.

[Contact Us](#) to find out more about our water, sanitation, and food security solutions.

Bogler, Anne & Packman, Aaron & Furman, Alex & Gross, Amit & Kushmaro, Ariel & Ronen, Avner & Dagot, Christophe & Hill, Colin & Vaizel-Ohayon, Dalit & Morgenroth, Eberhard & Bertuzzo, Enrico & Wells, George & Raanan Kiperwas, Hadas & Horn, Harald & Negev, Ido & Zucker, Ines & Bar-Or, Itay & Moran-Gilad, Jacob & Balcazar, Jose & Bar Zeev, Edo. (2020). Rethinking wastewater risks and monitoring in light of the COVID-19 pandemic. Nature Sustainability. 1-10.

SUSTAINABLE DEVELOPMENT GOALS



#WeCanSaveTheWorld

The core mission of WLS is to increase global resiliency and sustainability in water, sanitation, and food security systems.

The world's rapid population growth, coupled with rapid climate change, is increasing the competition for resources. At WLS, we're committed to doing our part to operate sustainably. Our innovative solutions provide resource conservation, energy savings, the reuse of water, food security, and better population well-being and health outcomes.

Advanced O3In-Gen™ technology is one example of WLS' focus on cost savings and increased treatment effectiveness. O3In-Gen™ is used in WLS' PureBOX™ distributed / decentralized package plants and controlled environment food production systems. The systems are ideally suited for a scalable solution to provide clean water, wastewater treatment, and food security for all by 2030 in a world where billions of people do not have access to sufficient water supply and sanitation services. We envision a world without waterborne pollution

and the abundance of freshwater for all using our water treatment and monitoring systems, which correspond most directly to the United Nations Sustainable Development Goals SDG 6 - Clean Water and Sanitation.

At WLS, we're committed achieving the United Nations Sustainable Development Goals (SDGs) by the 2030 goal date. This collection of 17 global goals is designed to be a "blueprint to achieve a better and more sustainable future for all." Our operations and solutions contribute to all the UN's SDGs.

This Issue's SDG Provided by Water Life Systems

World Economic Forum 2020: "The global water crisis is one of the greatest threats to humanity."

The "traditional" way of living is not sustainable for life on Earth. Water Life Systems leadership, in living through their own climate-caused near disasters, being Vancouver 100 year drought in 2015 and the 2017-18 Day Zero scare in Cape Town, South Africa, have developed water supply, sanitation, and food security Micro-Utility solutions that can be deployed into the built environment on a global scale. Tech components can be integrated into centralized systems.

WLS systems are at the core of providing water stressed populations with clean water and sanitation services. Currently some 2.2 billion people worldwide do not have sufficient drinking water services, 4.2 billion people do not have safely managed sanitation services, and 3 billion lack basic handwashing facilities.

Much of the world is not set to meet United Nations Sustainable Development Goals with current systems thinking. No single solution will result in universal access by 2030. A range of adaptable and scalable solutions are needed to overcome geography, gender, and socioeconomic barriers.

SDG 13

Climate Action

13.1 Target

Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

13.1.1 Indicators

Number of deaths, missing persons and persons affected by disaster per 100,000 people

13.1.2 Indicators

Number of countries with national and local disaster risk reduction strategies

13.1.3 Indicators

Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies

13.2 Target

Integrate climate change measures into national policies, strategies and planning

13.2.1 Indicators

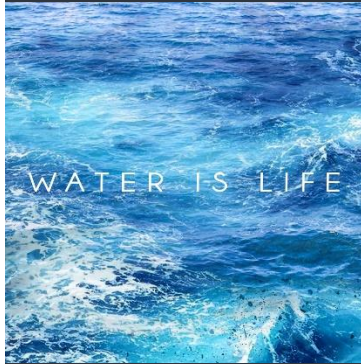
Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)

13.a Target

Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible

13.a.1 Indicators

Mobilized amount of United States dollars per year starting in 2020 accountable towards the \$100 billion commitment



Partnership Tracks

WLS offers various partnership solutions including:

- Integrated product distribution
- Individual tech component licensing
- Complete tech transfer programs for national solution integration

Technical expertise, geography and solution area of your business will determine which track best fits your business model. Partners can participate in one or more tracks, based on expertise and available production facilities.

[Click here for more information and to complete the application](#)

Would you like to participate in the WLS prime partnership program? Please fill out the application to help us determine how to best approach the partnership to ensure mutual success.

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