August

YOUR SOURCE FOR WATER, ENERGY, AND FOOD SECURITY INNOVATION INFO

# AND RITY Water Life



### What We Do

### WATER & WASTEWATER

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

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 a top priority.

### **RENEWABLE ENERGY**

GREEN HYDROGEN ENERGY HARVESTING - Hydrogen (H2) is a WLS wastewater treatment system byproduct that is recovered to allow small municipalities and businesses to participate in the Green Energy revolution. Standalone H2 production systems also provided.

SOLAR POWER READY - WLS systems are designed for low energy consumption Optional Solar Power kit designed for WLS systems.

### **FOOD SECURITY**

WLS systems recover water and nutrients from wastewater for reuse, and provide closed-loop plumbing hydroponics and aquaculture infrastructure for significant resource and cost savings. WLS systems can optimize nutrient levels based on crop species.



Nawendwin - Relatives by Joshua Pawis-Steckley https://www.cigionline.org/articles/environmental-challenges-indigenous-lands/ First Nation Forward Thinking

Water Life Systems (Canada) Inc. (WLS) is working with forward thinking First Nation bands (in French, Premières Nation) to provide their distributed communities throughout Canada with clean water abundance, wastewater treatment systems that no longer pollute the surrounding environment, and clean hydrogen energy to power their life support utilities... all from the scalable WLS electrolytic based water wastewater treatment systems.

"First Nation" is a term used to describe Aboriginal peoples of Canada who are ethnically neither Métis nor Inuit. There are about 500,000 individuals within 634 recognized First Nations governments or bands across Canada, distributed among some 3,117 separate reserves. 79% of these reserves have fewer than 1,000 residents, and 57% have less than 500 residents. This widespread distribution makes it difficult, if not impossible, for the traditional water and wastewater utility to provide services at an economically feasible cost.

First Nation bands have been hampered for decades by an infrastructure funding process that is flawed, slow-moving, and heavy regulated. These failures have forced Indigenous people to look outside of

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the sphere of government for help with their infrastructure needs and seek the resources of the philanthropic community and private business partnerships.

Canada has finally found the political will to assist with the infrastructure challenges of First Nation and other Indigenous communities. While <u>some say</u> it is not enough to fully eliminate a widening infrastructure funding gap, the Canada Infrastructure Bank (CIB) is establishing the \$1-Billon Indigenous Community Infrastructure Initiative (ICII), which will fund new infrastructure projects in Indigenous communities that are vital to economic growth and environmental protection.

The scalable WLS water and wastewater treatment systems provide high quality clean water supply, wastewater treatment without damaging effluent discharges to the surrounding environment and a clean hydrogen energy source at a low cost... all off the power grid where required. First Nation bands are now working with WLS to solve their challenges and

take part in living in the Green Revolution.



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### **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.



In the July Water Life issue, we provided an overview and <u>link to a United Nations</u> <u>published policy brief</u> authored by WLS Co-Founder and President, Thomas Murphy. Let's give you a sneak-peek of conference speaking and moderating engagements that Thomas has booked in the month of August.

Thomas began his water and wastewater presentations with the African Utility Week conference in Cape Town, South Africa as a speaker in 2018 through 2020, and was named a 2019 conference Advisory Board Member for his industry insights. He was invited to speak at the Green Building Convention South Africa in 2019 & 2020, was a speaker for the SAICE Environmental Engineering Division Conference 2020, and participated as a speaker and panel moderator at the 2020 Water Show Africa.

First up this year is the 18 August 2021 South African Institute of Engineering (Environmental Engineering Division) Stormwater Management Conference. This event aims to put a spotlight on the importance of sustainable stormwater practices and South Africa's transition towards it, with representatives of major metropolitans highlighting how sustainable stormwater is achieved in their jurisdictions. The theme of the conference is: Modelling to Maintenance. Various topics under the following sub-themes will be presented: Green Infrastructure; Planning and policy; Modelling and Case Thomas will be presenting on "Stormwater Management at the Building Level: Non-Toxic, Potable Grade Waterproofing for Precast Concrete Detention Chambers – Integrated with Advanced Electronic Monitoring and Treatment Systems for Safe Environmental Discharge or Potable Reuse". This presentation will expand upon experiences from Thomas' associate and WLS Co-Founder, Jamie Gordy, in his Vancouver 2015 drought experience and his implemented solutions that are now part of the WLS water supply solution arsenal.

Next up is the 23 August 2021 The Water Show Africa conference with the theme: Strategy and Innovation For Water End-Users, Utilities and Partners. Thomas is moderating two panel discussions for this year's conference. The first panel will be discussing "Today's clean water utility: establishing strategies to change, grow, adapt, shape and respond to a disruptive environment." The second panel is titled "Aligning the financial case for water with social and environmental sustainability goals."

Both panels will feature internationally and nationally renowned speakers from the USA, South Africa, Zimbabwe, and other nationalities. Thomas will provide briefly provide his insights to the topics and engage the speakers with thought provoking conversation. Check it out!

Studies.

# SUSTAINABLE DEVELOPMENT GEALS



# #WeCanSaveTheWorld

The core mission of WLS is to increase global resiliency and sustainability in water, renewable energy, 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 РигеВОХ™ WLS' decentralized wastewater treatment package plants with closed-loop capabilities, Hydrogen production, and food security 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

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.

and the abundance of freshwater for

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. 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 climaterelated 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 strategies6.1.1

#### 13.2 Target

Integrate climate change measures into national policies, strategies and planning <br&gt; 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 developedcountry 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 <br&gt; 13.a.1 Indicators

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

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

# **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.

# <u>Click here for more</u> <u>information and to complete</u> <u>the inquiry form</u>

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For More Information

https://waterlife.systems

Contact Us <u>mail@waterlife.systems</u> Toll Free: +1 800 360 9813 Office: +1 414 255 0640

