

## Wastewater Education and Operators without Borders

### Driving Community Access to Safe, Secure and Economically Sustainable Water and Sanitation around the Globe



Waste Water Education 501(c)3 and Operators without Borders have established a strategic partnership to jointly accelerate essential access to improved water and sanitation here in the US and around the world.

There is an urgent need to improve access to water and sanitation in developing nations across the globe. It has been estimated that, to fully achieve the United Nations Sustainable Development Goal 6 (ensure availability and sustainable management of water and sanitation for all) by the 2030 deadline, **a fourfold increase in pace is required.**

The scale of the challenge is staggering - half of the world's population still does not have access to adequate water, sanitation and hygiene services and infrastructure. In 2019, this gap was responsible for at least 1.4 million preventable deaths. In addition:

- 1 in ten people do not have clean water close to home;
- 578 million people have no choice but to drink dirty water;
- Two out of five people do not have a basic hand-washing facilities;
- More than 673 million people still practice open defecation.

Water is a critical element across most of the 17 United Nations Sustainable Development Goals. Goal 6 specifically focusses on water access, sanitation and hygiene, aiming to achieve the following by 2030:

- Universal and equitable access to safe and affordable drinking water for all;
- Access to adequate and equitable sanitation and hygiene for all and an end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations;
- Improved water quality by reducing pollution, eliminating dumping and minimising release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally;
- A substantial increase in water-use efficiency across all sectors and sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity;
- Implementation of integrated water resources management at all levels, including through transboundary cooperation as appropriate;
- Protection and restoration of water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes;

- Expanded international cooperation and capacity-building support to developing countries in water and sanitation-related activities and programs, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies;
- Support for and strengthened participation of local communities in improving water and sanitation management.

Measured progress against SDG 6 highlights that more needs to be done by governments, institutions and industry if the targets are to be met by 2030. To deliver on this agenda, it is estimated that between US\$30 billion to US\$1.1 trillion per year needs to be invested in essential infrastructure, educational programs, targeted support and capacity development initiatives. Within this, capacity development is considered essential for supporting financing, service delivery, innovation and the data management needed for sustainable and equitable WASH services. It has been noted by the UN that professional water associations can play a significant role in this space, by:

1. Developing and implementing regular capacity development programs;
2. Creating national training institutions;
3. Establishing standards, regulations and professional certification.

For many small communities, both in the US and overseas, central water and wastewater infrastructure is unaffordable, geologically impossible and unsustainable. When natural disasters occur, such infrastructure is always vulnerable and it is critical that such services are returned to operation as quickly as possible, with rebuilding often being untenable.

Through this new strategic collaboration, Waste Water Education and Operators without Borders will work in partnership to improve community water and wastewater resilience. We will achieve this by building the skills and capacity of water operators and accelerating adoption of leading-edge technologies and practice to enable a step-change in locally appropriate water, sanitation and hygiene solutions.

In addition, we will also work to mobilise water professionals across the world to respond to natural and other emergencies and to quickly reinstate essential water and sanitation infrastructure in partnership with local institutions and the community. **Our emphasis will be towards meeting the needs of the resource-poor and remote, impoverished and war-stricken regions.**

Both Waste Water Education and Operators without Borders have a track record in building the capacity of water professionals: OWB in developing nations, WWE in the US, to design, construct and operate vital water and sanitation systems and respond to emergency situations. For instance we have:

- Successfully delivered ICS 200 and 300 training to the water utility staff in the Bahamas, Barbados and Jamaica, as well as ICS 100 and ICS 200 training in Trinidad and Tobago;
- Collaborated with Rotary International's HANWASH (Haiti National Clean Water, Sanitation and Hygiene Strategy) initiative to bring safe drinking water to all Haitians;
- Built training and delivery partnerships across multiple professional agencies and States

The challenge before us is immense and additional funding support is essential to achieve the scale of the change necessary. Whilst both organisations will continue to seek targeted investment through various philanthropic charities and trusts, we are also interested in securing sponsorship from private and public entities and donations from the public to deliver the support required.

**Additional funding is most urgently required to:**

- Support the development and education of our staff and volunteers;
- Create 'immediate need' decentralised sanitation options for US communities and Ukraine;
- Create 'fit-for-need' emergency sanitation systems and installer trainer capacity;
- Develop and deliver additional targeted training and capacity development programs, including a comprehensive emergency preparedness program;
- Develop digital training products;
- Translate tools and training materials into different languages;
- Deliver Incident Command Systems training to better prepare for emergency situations in developing nations;
- Establish satellite communications or Wi-Fi hotspot access to improve for remote training capacity.