The Fine Art of Flushing

Water sector 'artists-in-residence' take unique approaches to public outreach

By Justin Jacques

he work of an artist — like the work of a wastewater treatment professional — represents more than the

materials that go in and the product that comes out. Just as a painting created without cultural relevance may fail to connect with viewers, a piece of water infrastructure built without considering the needs, desires, and sentiments of its surrounding community may face opposition.

U.S. wastewater organizations are taking an

outside-the-box approach to build connections between people and their infrastructure — making wastewater treatment more visible (and even more beautiful) to the



San Francisco-based photographer Robert Dawson became the San José-Santa Clara Regional Wastewater Facility's inaugural "photographer-in-residence" in 2010. As part of his 6-month residency, Dawson captured several unique views of the infrastructure systems that support the development of the Silicon Valley region. Here, a pool of algae collects within a wastewater treatment process. Image courtesy of Dawson



Many of Dawson's photos capture the intrinsic (and unexpected) beauty of the wastewater treatment process. In this photo, wastewater undergoing treatment takes on a fractal-like quality more typical to abstract art than photography. Image courtesy of Dawson

public they serve. The three examples below show how artists have helped forge connections with the public about the vital work that takes place at water resource recovery facilities (WRRFs).

Picture Perfect

When San José, California, constructed its first wastewater treatment system in the 1880s, it served about 10,000 people and consisted of a small network of collection systems. That system gradually transformed into the San José–Santa Clara Regional Wastewater Facility, now serving approximately 1.4 million residents and more than 17,000 businesses.

Although the 632,000-m³/d (167-mgd) facility is one of the largest advanced wastewater treatment centers in the U.S., the San José Environmental Services Department estimates it will require more than \$1 billion in capital investments by 2040 to meet the growing needs of the area's flourishing

population. Garnering that kind of support will require customers to understand the value of the hidden-away treatment systems that many will never witness firsthand, described San Franciscobased photographer Robert Dawson. In 2010, Dawson became the San José–Santa Clara Regional Wastewater Facility's inaugural "photographer-in-residence."

"Most of us are generally unaware of wastewater treatment until it doesn't work," Dawson said, stressing the importance of keeping the system in working condition. "Failure to sustain water infrastructures has been a telltale indicator of societal decline and stagnation."

Dawson spent 6 months shadowing facility staff. He produced dozens of unique photographs that illustrate the immense scale of the systems underpinning the region's development. He also captured the dedication of their operators. Some photos of wastewater in

various stages of treatment evoke a surreal feeling more typical of abstract art than infrastructure. Other shots in the collection offer unique views of the San José–Santa Clara Regional Wastewater Facility campus, capturing the 24-hour job of protecting the San Francisco Bay. Several more are simply headshots of facility staff to draw attention to people and jobs not typically celebrated in media and art.

"One of the greatest pleasures of working [at the San José facility] was meeting the people that made it all work," Dawson said. "These are truly the unsung heroes who work hard every day to keep the plant functioning and the South San Francisco Bay alive."

While Dawson's work appeared in gallery exhibits throughout the Silicon Valley area, the San José–Santa Clara Regional Wastewater Facility maintains a permanent exhibition.

Explore snapshots from Robert Dawson's residency at bit.ly/WET-Dawson.

Making Prints

The City of Alexandria, Virginia, officially broke ground on its RiverRenew project in December 2020. The project involves building



South Carolina-based hip hop artist Benny Starr used his lyrical talents as the first artist-in-residence for The U.S. Water Alliance (Washington, D.C.). His task and contributions extend beyond producing water-inspired music to also lend an artistic perspective to all the Alliance's ongoing programs and projects. Image courtesy of Starr

a 3-km-long (2-mi-long) long tunnel approximately 30 m (100 ft) underground. The tunnel will work in tandem with upgrades to the city's WRRF to reduce by about 98% combined sewer overflows that affect the city and its waterways. While most residents will never see the new components to be built as part of the \$600 million initiative, its costs could entail monthly sewer rate increases of as much as \$40 per household, according

to the project's website.

To help members of the public better understand the benefits of the RiverRenew project and wastewater treatment in general, Alexandria Renew Enterprises (AlexRenew) recruited Alexandria-native visual artist sTo Len for an 18-month residency in September 2019.

Len used Japanese-inspired printmaking techniques to create works of art directly from wastewater in various stages of treatment. The resulting prints, which span the spectrum from deep brown to pure blue, were displayed at a local art gallery during December 2020 as part of an exhibit titled, RENEWAL.

"I enjoy the challenge of finding beauty in unlikely places and then using a beautiful image as a tool of seduction," Len said. "Once I have your attention, then other layers of meaning begin to unfold, and we can start to have a deeper dialogue."

RENEWAL also includes a collection of photographs. These depict new perspectives of the Potomac River, the concrete tunnels beneath Alexandria, and the AlexRenew WRRF. Also included in the exhibit was a display case full of unique objects Len discovered in the WRRF's headworks or near its outfalls: a blue pool noodle, a child's shoe, a toy giraffe, and more.

"Often the work of wastewater treatment is invisible to the public we serve," said Caitlin Feehan, Program Director for the RiverRenew project. "We hoped that art could be an opportunity to engage our community in seeing the beauty, health, and wellness created through the transformation of wastewater every day."

Len described how exhibit guests would react with curiosity, at first unsure of what they were looking at. Curiosity would turn to disgust, followed by fascination and understanding as the prints grew progressively cleaner. A point he continually emphasized was that all the material for his work originated from Alexandria households.

"Our waste is all too often forgotten about once we flush it or throw it away, but nothing magically goes 'away," Len said. "'Away' is an actual place, be it a wastewater treatment facility, a landfill, or your local watershed, and that place is directly connected to our lives. I think that if we can begin to demystify the 'away' places, then we can begin to build a better relationship with our part in this process."

Take an interactive, virtual tour of sTo Len's RENEWAL exhibit at bit.ly/WET-Len.



During his residency, one of Dawson's primary focuses was on the people who work tirelessly to treat the wastewater of approximately 1.4 million residents and over 17,000 businesses. Dawson says his intent was to showcase the lives of these normally unseen personnel, such as by sharing this bulletin board of the staff's best fishing catches. Image courtesy of Dawson



Visual artist sTo Len became Alexandria (Virginia) Renew Enterprises' first artist-in-residence in September 2019. Len's work includes prints made directly from wastewater, objects found in a water resource recovery facility, and unique photographs. These works were featured in an Alexandria art gallery. Image courtesy of Len/Torpedo Factory Art Center (Alexandria, Virginia)

Sound Perspective

Reimagining the typical ways drinking water and wastewater utilities incorporate communities into their operations drove the U.S. Water Alliance (UWA; Washington, D.C.), a national nonprofit focused on improving water-sector equity and sustainability, to hire South Carolina-based hip-hop artist Benny Starr as its first artist-in-residence in October 2020.

"I believe that equity isn't simply something you do, rather you see to it that equity is in all that you do," Starr said. "In the same sense, I believe that while doing art is good, we also need to recognize the art in everything that we do."

Starr has experience writing music about water, environmental justice, and the inextricable overlaps between them. In 2019, he released *A Water Album*, a conceptual exploration of race, climate change, and inequity that uses water motifs as the thread

that ties the album's 12 tracks together.

However, Starr's work with UWA goes beyond simply producing music; it also focuses on weaving creative and culturally sensitive perspectives into UWA's activities. This could include developing new approaches to public outreach or forging partnerships with new types of stakeholders. The tangible pieces of art Starr has created as part of the year-long residency can be better understood as extensions of the ideological "products" Starr has brought to UWA rather than the products themselves, described Katy Lackey, UWA Senior Program Manager. For example, an October concert in observance of Imagine A Day Without Water viewable at bit.ly/WET-Starrconcert — breathes life into UWA's talking points about conservation and the value of water by interspersing moving, spoken-word performances with music

from A Water Album.

"Art allows the impact of water projects to become more salient. The more people can see, feel, and touch something tangible, the more they value and appreciate their water, and the more likely they are to feel differently and change their behavior," Lackey said. "We're working with Benny to leverage the artistic process to disrupt our usual ways of thinking and problem-solving, exploring ways we can do better, innovate, and shift culture in the water sector."

UWA plans to choose a new artist-in-residence each year as it works to make art a key component of water sector operations.

It also recently launched a Water, Arts, and Culture Accelerator. This program will develop partnerships between four WRRFs and four local artists to enhance outreach efforts. Additionally, it introduced a new Artist category for its annual U.S. Water Prize. The first Artist

prize will be awarded in 2021, Lackey said.

"In the face of a changing climate, technical brilliance and scientific innovation alone won't build a more equitable, sustainable water future for us all," Starr said. "To do that, we must radically shift the way we see one another as well as our collective relationship with our waterways. That is what it takes to build better water solutions. I believe the arts. because of their effect on how we think and how we feel, help us to accomplish that and so much more."

Learn more about the partnership between Benny Starr and UWA at bit.ly/WET-Starr.

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