

Olympic Hopeful

WHY RIO'S WATER ISN'T MAKING THE CUT

LUKE GIROUX

Every four years, since the late 19th century, athletes gather together from around the globe to compete in the largest sporting event in contemporary times, the Olympic Games. This summer over 10,000 athletes, culminating years of preparation and dogged determination, will go for the gold in Rio de Janiero.

Of the 10,000 athletes competing in the 2016 summer games, about 1,400 are engaged in outdoor water sports. Whether it's rowing, sailing, canoeing, triathlon, or distance swimming, five out of the 42 summer Olympic sports will take place in bodies of water in and around Rio.

When most of us think about Rio, we picture a tropical oasis of beaches, water, surf, and sun. Visions of Copacabana beach along the Atlantic Ocean, with suntanned natives and an active night life, are typical visuals that come to mind. These images are much different than the stark reality that awaits the Olympians as they travel to Brazil this summer. Household waste and raw sewage, and the infestation of the bacteria that accompany them, have been the norm in the waters in the shadow of Christ-the-Redeemer statue.

RIO DE JANEIRO, BRAZIL -Skyline view of Sugarloaf Mountain and Guanabara Bay at sunrise. Photo: lazyllama

INTERNATIONAL WATERS





Many of Rio's poorest residents live in broken-down slums, tarpaper shacks built on top of each other, pressing up to the banks of sewage-blackened rivers. Clumps of waste float listlessly by, the surface bubbles with escaping gases, penetrating the air with a sulfuric stench as it makes its way into nearby Guanabara Bay. Not exactly a tropical oasis, nor an ideal setting for world-class athletes.

Brazil is the world's seventh-largest economy, but struggles on the world stage when it comes to access to water and sanitation. A fiscal crisis that shook Brazil in the 1980s largely froze sewer investment in Rio for two decades, and it took another decade for regulations divvying up responsibility for those investments between the municipal, state, and federal governments.

During that time Rio's population experienced explosive growth – from around 9 million in 1980 to 12 million today, and the situation was compounded by poor city planning, political infighting and economic instability.

Challenges of Olympic proportions

When the City of Rio pitched their Olympic plans for hosting the 2016 summer games to the International Olympic Committee (IOC), their intent was to have the sailing competitions take place in Guanabara Bay, rowing and canoeing in Rodrigo de Freitas – the picturesque tidal lagoon in the heart of the city – and the triathlon and swimming events off of Copacabana Beach in the Atlantic Ocean.

The city's plans, presented to the IOC a decade ago, also acknowledged the water quality challenges that Rio faced. And a significant part of the bid package promised to make improvements to water infrastructure and to address water quality concerns in the waters used for the competitions. The plans called for, among other improvements, an 80% reduction in sewage and waste in Guanabara Bay.

Fast forward 10 years and challenges still exist, with the pending Olympic activities rapidly approaching. Images of massive amounts of dead fish and household waste floating in Rodrigo de Frietas and other Rio waterways are all over the internet, as are numerous reports of athletes getting sick after training in Olympic venues. Although there has been much speculation yet no direct correlation of the illnesses to the polluted water, the world community is asking questions about the improvements that have been made, to ensure the health and wellbeing of the 10,000 athletes – and the millions of spectators – that will descend upon Rio in the coming months.

City and IOC authorities insist they are addressing water quality issues at Olympic venues and beyond. Ongoing monitoring and assessment of competition locations have taken place since the bid was awarded to Rio in 2009, and certainly some progress has been made. The state sewage company has built eight new sewage pumping platforms in the lagoon, eliminated illicit sewage dumping pipes that fed into it, and created a control center to monitor potential dumping.

Sewage treatment stations have also increased their utilization rates and advanced from primary treatment, mechanical methods that separate waste from water, to secondary treatment, which uses biological processes to further remove organic matter. A fleet of two dozen eco-boats have been methodically patrolling Rio waterways, scooping up floating debris in their path, and will continue to do so even after the games have come and gone.

The Brazilian government has spent more than \$1 billion in clean-up efforts, significantly less than expected, the economic challenges of the recession curtailing additional plans. Because of their efforts, however, the percentage of sewage that still goes untreated in the metropolitan area has dropped significantly since 2009 – from 83% to 50% – and is expected to drop even further, to roughly 20% by the time the Olympic torch is lit in August.

Global presence, global impact

To their credit, the IOC has a history of choosing cities and countries to help effect change within those regions. The 2008 summer games were granted to Beijing, in the hopes of opening China to the rest of the world. In 1988, the summer games went to Seoul, to help usher in a civilian government at a critical juncture in Korea's history. The intention of the IOC in choosing Rio, was to help expedite the advancement of Brazil as a developing country.

If the IOC continues to choose global communities to help effect change, which is certainly a noble objective and a primary benefit of the games, then we'll continue to see issues like those we've seen in Rio. These issues exemplify the challenges of an expanding society, struggling to maintain the regulated constraints of growth, juxtaposed against the fundamental infrastructure necessary to keep that society safe from disease and environmental catastrophe.

Water quality and sanitation issues will continue to plague the city of Rio, long after the Olympic flame burns out. But if the coastal oasis continues to implement the sanitary and water treatment improvements that were promised, they will keep the Olympic spirit of Rio alive, and their residents, visitors and local environment safe and healthy well into the 21st century.

MISSION: WATER Who's Minding the Planet?