

Race to the Finish: Cleaning the Guanabara Bay

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Background:

- Will be used for Summer 2016 Olympic water sports events
- Untreated sewage runs into the bay
- “In 1995 Rio de Janeiro State University identified 800 species in the bay, ten years later there were 400, and now there are just 35”
- **1.7 billion** viruses per liter of water
- **1.7 million** times more contaminates than American standards of hazardous water



Current :

- Eco Boats:
 - Too small for the amount of time we have remaining
- Mangroves:
 - Large trash items get caught in them hindering their progress
 - Favorable long-term solution



Opportunity:

- “Athletes who ingest three teaspoons of water have a 99 percent chance of being infected by viruses”
- Long term solutions for the community
- “60% of Brazilian adults have been exposed to hepatitis A”
- 30% of the population doesn't have access to clean water

Solution:

- Size: The garbage collecting nets are equal in size to the boat
- Material: Bay Net
- Strength: over 3 tons
- Bottom of net will be able to open and reclose
- Net will be laced with chlorine to further sanitize the area

Additional:

- Partition nets in racing area
- Barge that holds and collects the trash
- Community recycling program to keep the bay clean after the Olympics.



Impact:

- Reduce disease among:
 - **6.45 million** people living in Rio
 - **350,000** foreign tourists
 - **1,400** Olympic athletes competing in water sports
- Cleans up the community and makes the citizens proud to live there
- Raises awareness for the people in Rio that still don't have access to clean water

