



Xylem Global Student Innovation Challenge



WATER

impacts our lives every day, from meeting our personal needs to influencing the global economy and the well being of our planet. Factors like climate change, pollution and aging infrastructure threaten global water supplies and water security.

Xylem is a leading water technology company committed to "solving water" by creating innovative and smart technology solutions to meet the world's water, wastewater and energy needs.



Gaming for Water with EarthEcho

CHALLENGE STATEMENT

Do you have a passion for games? The EarthEcho Water Challenge is one of the world's largest community science programs empowering more than 1.6 million young people and community members in 146 countries to connect with and protect their local waterways. EarthEcho's volunteers monitor water quality in their communities, share their findings through a global online database, and use the data collected to develop projects to protect water resources.

Create a game to bring more awareness to the public understanding of surface water quality and engage community members in protecting their water resources. How can you utilize EarthEcho's datasets or other publicly sourced data sets on water quality? Can you connect people to their local surface water using the mobile device they use everyday?





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PAIN POINTS

- Expansive databases like these are challenging for those most invested in local water resources, community members, to engage with.
- Globally, there is a lack of public awareness of water issues, which leads to reduced investment in critical conservation efforts.
- The world faces a lack of water data globally, with the biggest gaps in low-income countries.
- Large government databases are challenging to navigate, difficult to access, and often confusing for all but the most savvy data analysts.





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OPPORTUNITY AREAS

- The world is more connected than ever, enabling new digital tools and solutions to contribute to water awareness. EarthEcho's 21st century tools and interactive resources equip youth to identify and solve environmental challenges starting in their own communities.
- Nonprofit and government organizations have put together extensive databases that provide a snapshot of water quality data for a number of given locations but not all water is monitored and these databases are underutilized for examination of surface water quality.
- Young people interact with the world through digital platforms and communities. Digital media and online games create access to sustainability and environmental education like never before. Young people can learn about climate change, bird migration, sustainability, and even fisheries management from online simulations and games.





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GENERAL NOTES

- Your game can use any medium (digital, physical, etc) and target any audience
- In addition to creating your game, consider how you will share it with the community. How will people learn about the game and play it?

RESOURCES AND DATA

There are a number of quality datasets available to access:

- Monitor Water ([Link 1](#)) ([Link 2](#))
- US Environmental Protection Agency ([Link 3](#))
- Blue Water Task Force ([Link 4](#))

Also see Xylem's publication "The Value of Water Information" for inspiration ([Link 5](#))

