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NEWS RELEASE

FOUR UNIVERSITY TEAMS SELECTED TO MOVE ON IN WESTERN CANADA AQUAHACKING CHALLENGE 2021

Kelowna, B.C. – The Okanagan Basin Water Board (OBWB) and Aqua Forum co-hosted a live-streaming of the *AquaHacking 2021 – Western Canada Challenge* semi-finals yesterday afternoon. In the end, four university teams, looking to make waves in the water world, were announced, solidifying their chances of taking their solutions for some of the west's most critical water issues to the next round.

A total of 137 participants registered from post-secondary institutes across Western Canada, Ontario and Quebec, forming 21 teams, of which 10 pitched at the semi-final. The issues identified by Western Canada water leaders as critical for solving in the west were: optimization of drinking water/wastewater treatment plants; on-farm nutrient capture & recycling; toxic algal blooms, and; innovative 'social' water technologies for water information.

The finalists are:

- **SIP** (UBC Okanagan) – Issues: optimization of drinking water and innovative social technologies. Solution: A mobile filtration station in the form of a gravity filter backpack. *Team members: Elana Wood, Yosamin Esanullah, Fikunayomi Adelaja, and Mana Tokuni in Kelowna, and Yamen Shehab in Doha, Qatar.*
- **Algaegator** (UBC Okanagan) – Issues: nutrient capture and toxic algal blooms. Solution: A solar-powered filtration system that uses a submerged pump to move polluted water into a tank for electrocoagulation to remove toxic chemicals. *Team members: Erik Hohl, Dolphin Chan and Sam Kinakin of Kelowna, Tanner Cheyne from Calgary, Vancouver's Matthew Hinchliff and Omar Noury of Winnipeg.*
- **Eco-Friendly Wastewater Treatment** (University of Saskatchewan) – Issue: optimization of wastewater treatment plants. Solution: Use Fate Models to improve wastewater treatment plant efforts to remove pollutants, including pharmaceuticals, Endocrine Disruptor Compounds, and pesticides, before releasing water back into the environment. Fate models estimate contaminant concentrations over time. In addition, maximize pollutant removal using agricultural biomass residues (e.g. straw) as adsorption for final filtration. *Team members: Khaled Zoroufchi Benis, Shahab Minaei and Mohsen Asadi, all of Saskatoon.*
- **Triple C** (UBC Okanagan) – Issue: optimization of drinking water. Solution: Focusing on improving water quality in Indigenous communities, the team developed a device to help prevent water contamination in water cisterns using a hydraulic coupling on the water delivery hose and the cistern lid. *Team members: Mikhail Ignatyev and Emilia Dyck, both from Kelowna, Sydney Strocen of Winnipeg, and Sam Keeble from Vancouver.*

These teams will now compete for \$50,000 in seed funding and placement in a start-up incubator to further refine their solution and bring it to market.

"It's exciting to be around young people approaching the future with such innovation, hope and hard work," said OBWB Executive Director Anna Warwick Sears. "These teams took a very pragmatic approach with straight-forward solutions to big problems."

“We are also very impressed with the solutions presented by the four finalist teams,” added Kariann Aarup, AquaHacking Director. “These young innovators have reached a key milestone on their AquaHacking journey and we look forward to supporting them through the next phase of the challenge as they continue to refine their solutions and develop their business plans. Their out-of-the-box thinking gives us all great hope for the future of freshwater in Canada.”

Organizers note that although three of the four finalist teams are from UBC Okanagan, it has been great to see participation from students across Canada and beyond, with international students attending participating universities remotely.

Thanks go to the advisory committee and to the water, tech and business experts from across Western Canada who judged the pitches. This includes representation from the International Joint Commission, Western Economic Diversification Canada, United Nations University Institute for Water, Environment and Health, International Institute for Sustainable Development, Sustainable Development Technology Canada, The Gordon Foundation, Innovate BC, BC Water Funders Collaborative, the Okanagan Sustainability Leadership Council, WaterSmart Solutions, Purppl, Associated Engineering, Water Rangers and 30 Turtle. Thanks also to water issue leaders from the Universities of Manitoba, Saskatchewan, and Waterloo, Okanagan College, Canada Water and Waste Assoc. and Canada Water Resources Assoc. who helped mentor participants.

Supporters and funders of the Western Canada Challenge include: De Gaspe Beaubien Foundation, Okanagan Basin Water Board, RBC Foundation, Lavery Lawyers, Ovivo, Mitacs, IBM, and Teck Resources.

Implementation partners are: Hackworks, Waterlution, Foresight, and the OBWB’s Okanagan WaterWise education and outreach program.

Missed the semi-final event? Watch the broadcast at <https://youtu.be/ZSH0EEvnQaM>. For more on the Western Canada AquaHacking Challenge, visit <https://aquahacking.com/en/westerncanada2021/>.

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About Aqua Forum

Aqua Forum is a non-profit organization dedicated to raising awareness of water issues among Canadians. Its flagship program, the AquaHacking Challenge, is an innovative competition that engages young Canadians in developing entrepreneurial skills and creating tech solutions to freshwater issues. Since 2015, eight challenges have been held, resulting in 28 start-ups which continue to be active to this day. Find out more at <https://aquahacking.com>.

About Okanagan Basin Water Board

The **Okanagan Basin Water Board (OBWB)** is unique to Canada and was formed in 1970 as a valley-wide partnership to identify and resolve critical water issues in the Okanagan watershed. Its Board of Directors



includes representatives from the three Okanagan regional districts, the Okanagan Nation Alliance, the Water Supply Association of BC and the Okanagan Water Stewardship Council (WSC) – a technical advisory body to the board. The OBWB provides three main services: a Milfoil Control Program, Sewage Facilities Grants Program, and the Water Management Program which includes the WSC, Water Research, Water Conservation and Quality Improvement Grants, and Communications and Outreach. Learn more at <https://www.obwb.ca/>.