



University
of Victoria



UNIVERSITY OF VICTORIA NEWS RELEASE

Dec. 17, 2020

FAQs: Living with Water

What is the Living with Water project?

The [Living with Water Theme Partnership](#) is a four-year \$1 million project funded under the [PICS Theme Partnership Program](#) to study the impact of sea level rise and coastal flooding in the South Coast of British Columbia (BC), which includes the Fraser River Delta, Burrard Inlet, and Squamish Delta. The project will conduct case studies of existing flood adaptation projects, and develop new planning, design and decision-making tools and frameworks to help coastal communities successfully adapt to uncertain futures across shared ecosystems and shorelines.

Who is involved?

The project team will be led by the [UBC Coastal Adaptation Lab](#) (CAL) at the University of British Columbia (UBC) in partnership with Simon Fraser University, University of Waterloo, Wageningen University and West Coast Environmental Law. The “solution seeker” partners who are directly involved in the project and plan to use the research findings include the City of Surrey, City of Vancouver, District of Squamish, Squamish Nation (Skwxwú7mesh), Tsleil-Waututh Nation, and the BC government.

Why is this project needed?

Currently there is no authority with the jurisdiction (federal, provincial, municipal or territorial) to implement a regional coastal flood adaptation plan for BC. Instead, the responsibility for flood-risk management lies with municipalities and First Nations, who face resourcing and legislative barriers to planning beyond their own boundaries. With the scale and frequency of coastal flooding projected to increase due to climate change, an integrated approach is needed to ensure the best societal, environmental and economic outcomes—Vancouver alone has as much as \$19 billion in property values in its flood plain.

What will the project deliver?

Living with Water will focus on three interrelated components currently lacking in the BC south coast region for flood adaptation assessment and planning:

- 1. Integration of community values and Indigenous knowledge and perspectives:** Urbanized delta regions face competing interests ranging from the conservation of natural ecosystems through to economic development. This team will develop a wide spectrum, values-based approach to assess coastal flood risk and trade-offs, with a commitment to move Indigenous knowledge and cultural practice from the periphery to the centre of coastal adaptation.
- 2. Broadening the solutions space:** Much of the existing coastline is behind hard infrastructures (dikes and seawalls). There is a need to also consider approaches that allow habitats to migrate with rising water levels and offer protection through wave buffering. This team will create decision-support tools for the inclusion, design and implementation of alternative cutting-edge solutions (e.g. nature-based, managed retreat, multi-functional dikes).
- 3. Addressing governance challenges:** This team will analyze legislation, bylaws, policies, regulations and strategies for flood plain management in South Coast BC, to provide guidance on developing multi-level governance arrangements for integrated regional coastal flood adaptation.

Who can use the findings?

Urbanized deltas and small island nations across the world are facing, or will soon be facing, the multifaceted challenges of sea level rise and coastal flooding. New knowledge generated through Living with Water will strengthen coastal flood adaptation knowledge within and beyond BC. Research results will be open-source.