

USING DESIGN-RESEARCH TO ADVANCE COASTAL ADAPTATION IN THE FRASER RIVER DELTA

LOKMAN, KEES

University of British Columbia, klokman@sala.ubc.ca

1. ABSTRACT

Coastal adaptation is a wicked problem. In order to bring divergent voices and disciplines together, we need to develop new forms of collaboration, alternative methods of visualization, and envision a range of adaptation approaches. The unique tools, methods and conceptual frameworks of landscape architects, positions them well to contribute significantly to the intellectual debate about climate adaptation. In this context, this paper discusses initial outcomes of an ongoing initiative entitled the Fraser River Delta Collaborative (FRDC), involving a collaboration of academics and student researchers from the University of British Columbia, alongside design professionals, local experts and decision-makers in the Fraser River Delta. With a rapidly growing population of nearly 3 million people, home the largest port on the west coast of North America, and situated along the Pacific Flyway, the region is exposed to a high degree of flood risk. The paper highlights outcomes of the first phase of work, which includes three distinct, yet interconnected studies: 1) the delta lexicon, 2) metabolic flows and critical infrastructures, and 3) the regulatory landscape. In conclusion, the paper addresses a need for design-research collaborations that enable knowledge sharing between academics, design professionals, municipal decision-makers and other stakeholders—fostering meaningful change while narrowing the academia-practice divide.

1.1. Keywords

Climate change adaptation; flood management; collaboration; landscape representation; visualization; multifunctional landscapes