As modern cities face challenges such as climate change and accelerated urbanization, public spaces are confronted with the effects of Urban Heat Islands (UHI) and storm water floods. These issues affect the quality of urban life and lead to a premature deterioration of urban infrastructure. On the other hand, the modern pace of life in North American cities contributes to the scarcity of human interaction and social encounters in the public space. Cities need to reintroduce natural elements, which are known to positively affect social interaction and human well-being. To address this need, scholars and professionals of the built environment are looking for strategies that include space for natural elements such as water and vegetation. Green-roof, urban vertical farming, and vegetation-pervious materials are some of the strategies that have attracted attention of city planners in the past years. Others are looking at water management, water infrastructure, or water as a landscape feature. Designers, however, propose to look at water from a different perspective using a human-centered design approach. This implies studying water in an urban context, understanding the evolution of the material culture, and observing the effects of water.
on human well-being; thus improving urban living, both environmentally and socially. Therefore, we will present how industrial design students at the University of Montreal envisioned new ways of incorporating water into the urban context. A research-driven approach as well as systems thinking helped them understand the problem field, uncover needs, and grasp the complex overlap of various disciplinary concerns. This educational project also prepared students for real life issues they could encounter in the professional world. We intent to explain the process and show the results while emphasizing the contribution of design research to rethink the future of built environments.

• Author(s) Biography (200 words each):

**Tatjana Leblanc:** After studying industrial design at the Kunst Hochschule Berlin-Weissensee in Germany and in the United States at the Ohio State University, Tatjana Leblanc pursued a professional career with several internationally renowned design agencies (FITCH, DESIGN CENTRAL, PLAN CREATIF). Today, as Director and Associate Professor of the School of Design at the University of Montreal, Tatjana Leblanc puts her expertise to the benefit of teaching and research. Within research lab GRAD, she directs research projects that focus on sustainable design approaches and the role of design in the urban environment. Some of the projects have received various design awards including Red Dot’s Best of the best.

**Noëmie Candau:** After studying applied arts and environmental design, Noëmie worked as a furniture designer. Today, as a research assistant at the GRAD research lab at the University of Montreal, she is involved in a government-funded design research program titled: "Concrete and nature - an unexpected symbiosis" and guides undergraduate design students in their diploma projects. Her research focuses on water features and their impact on urban life. She also contributes to an Alliance of experts called “Blue-green lanes” to create sustainable stormwater management concepts.