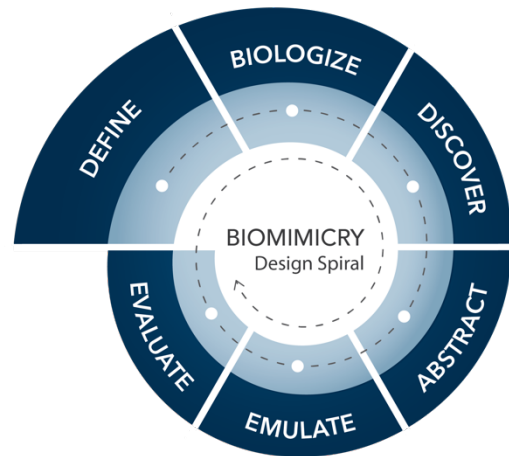


Stream Solutions Biomimicry Design Challenge

Learning Target

I can collaboratively design and construct a prototype using the biomimicry design spiral to reduce human impact on streams and watersheds.

(Image from: <https://biomimicry.org/what-is-biomimicry/>)



Design Brief

A design brief is a document used by professional designers and their clients to communicate information, goals, and requirements of a creative project. This design brief describes the design challenge to develop a solution to help protect or enhance the habitat in an urban stream.

The Opportunity

Bowker Creek has been faced with many environmental issues since the urban development of Victoria, BC, such as poor water quality, pollution, habitat loss, risk of flooding, safety concerns, invasive species, and degradation of stream channels. Parts of Bowker Creek are completely underground or under roadways, surrounded by impervious surfaces (like cement, asphalt, or any artificial surfaces). In order for us to improve the survival of salmon in this stream and create a viable aquatic habitat, we need to restore the habitat and health of the stream.

You Are Challenged To ...

... Plan an innovation and construct a prototype using the biomimicry design process that will address one of the environmental issues or concerns in Bowker Creek. Your group's prototype or innovation will demonstrate how your project connects the United Nations Sustainable Development Goals (SDGs)

(<https://www.un.org/sustainabledevelopment/sdg-fast-facts/>) and provides stream solutions for Bowker Creek.



This resource is part of the BC Urban Streams & Watersheds lesson plans, assembled in 2025. Learn more and download additional resources at www.engagewithnbs.ca/for-schools

This material is available to reuse and adapt in your classroom.

