

A REVIEW OF CONCEPTUAL FRAMEWORKS LINKING PUBLIC HEALTH AND WELL-BEING TO ECOLOGICAL GOODS AND SERVICES

IN THE CREDIT VALLEY WATERSHED

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Research conducted 2016-2018, Report published May 2020

WHY DID WE DO THIS RESEARCH?

Credit Valley Conservation's vision is "a thriving environment that protects, connects and sustains." It includes the principle that well-functioning ecosystems protect and sustain human life. Connecting these two ideas—the environment and the health and well-being of people—is central to an ecohealth approach. It also underpins programs for climate change mitigation and adaptation.

Conceptual frameworks are used to clarify and link different fields or ideas. Making the link between environmental changes and public health requires conceptual frameworks that represent possible health pathways and the key mechanisms that bring public health, the environment and natural resource management together. They create spaces for new conversations and generate new ideas and questions that can be explored.



WHAT DID WE DO?

This project first reviewed a wide range of conceptual frameworks that link ecosystems and human health and well-being with ecological goods and services. These frameworks included seminal works such as the Millennium Ecosystem Assessment framework, Health and Environment Cause and Effect Framework (DPSEAA model), Watershed Governance Prism and Community Health Map. Conceptual frameworks focused on ecosystem services were reviewed, particularly the Ecological Cascade Model.

WHAT DID WE FIND?

Different conceptual frameworks highlight distinctive aspects of the environment/health relationship. Some focus more on the biophysical aspects, while others focus on the social and environmental determinants. Being clear within a particular project about how the terms health and environment are being used, and understanding their key interactions at a particular spatio-temporal scale, allows for a more productive exchange of ideas and interventions.

WHAT ARE THE IMPLICATIONS FOR DECISION MAKERS?

The major implications of this work are three-fold:

First, well-crafted conceptual frameworks increase the likelihood that actions taken and indicators developed will be strongly connected to our current knowledge about interactions between public health and well-being and ecological goods and services. They also facilitate the evaluation of actions taken with the intent of supporting a specific outcome (i.e., an improvement in a health outcome). Conceptual models lead to assumption testing, model refinement, and over time, improved policies and programming. They are central to support innovative action and adaptation, particularly in interdisciplinary fields such as ecohealth. They will become increasingly valuable as climate change undermines established ideas about how ecological systems and public health and well-being interact and intersect.

Second is the idea that public health and well-being is irreducibly linked to actions that protect and enhance ecological systems. The watershed is a logical and powerful public health boundary that can focus much of this work. This reframing of the role of public health in environmental protection and enhancement is supported by the development of a clear conceptual model that links the two domains.

Finally, conceptual frameworks are continually evolving and are not meant to represent the real world, only to simulate it. By necessity, such models are always simplifications of complex realities. Nonetheless, they allow us to model, simulate and learn about potential interactions and their consequences.

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