

OPINION

Province must halt the decline of its biodiversity

Kim Stephens, Bob Sandford and Tim Pringle urge change.

This is a teachable year. This summer, if you wanted to know what climate change would mean to your future, all you had to do was step outside. The entire Northern Hemisphere was impacted by extreme weather: drought, forest fires or flooding.

Scientists say 2018 marks a turning point in human history when we may have crossed into a new climate regime.

But it is not the end of the world, just the beginning of another. British Columbia is one of the last places on Earth where it is still possible to transcend the climate debate and create a better world. British Columbia has enough remaining natural capital to protect and restore its way back to sustainability. But will we?

Water defines B.C. and the rhythms of water are changing. We have the knowledge and tools to restore balance to the water cycle, but we can do it only if civil engineers, urban planners and decision-makers change their mindsets and grasp the inherent complexity and unpredictability of working with natural systems. We must change how we value nature and service land, and especially how we reconnect hydrology and ecology to mimic the natural flows in streams.

"Eighty per cent of the revitalizing work done by urban planners and civil engineers in the 21st century will undo 80 per cent of the work their predecessors did to cities and nature in the 20th century," foreshadows Storm Cunningham, author of the Restoration Economy. "We don't fully understand complex systems, so humility and adaptive management are needed to restore nature and to revitalize cities."

In 2002, for example, the provincial government released Stormwater Planning: A Guidebook for British Columbia. This set a new direction for land development, founded on the principle of working with nature. Yet, 16 years later, communities are experiencing more flooding and more stream erosion, and streams are going dry during extreme droughts. Why?

Entrenched beliefs and a reluctance to change 20th-century engineering practices have consistently resulted in missed opportunities to "get it right." A central authority is necessary to establish expectations and ensure practitioner accountability.

In the absence of a regulatory requirement, the process to adopt, change or evolve accepted practices is painfully slow. Reinvigoration of the provincial oversight function is essential to help local governments be effective in moving B.C. toward restorative land development.

The good news is that Living Water Smart, a provincial policy, program and regulatory framework established in 2008, is in place to achieve this desired outcome. The not-so-good news is that program's effectiveness has been undermined over the past decade due to cutbacks in civil service capacity. With provincial commitment, the situation can be turned around.

Local governments are implementers. This means they can be change leaders. They can integrate climate adaptation into the activities and actions of engineered and natural asset management; or flipping it around, integrate asset management into the activities and actions of climate adaptation. Getting it right starts with recognition that hydrology is the engine that powers ecological services.

But getting it right depends on provincial and local government alignment to require design-with-nature standards of practice for servicing land so that communities decrease their destructive footprint while increasing restoration activities.

We cannot restore lost biodiversity, but we can halt its decline. We can make where we live better. We can be an example for the world to follow. We can make sustainable attainable if we work together. Restore. Restore. Restore. Let that be our imperative.

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