

Adaptive Communities are Resilient Communities

BC communities have already experienced the impacts of a changing climate such as flooding, drought, wildfire and more frequent and intense storms. The extent and costs of these events have been significant.

“Successful adaptation does not mean that impacts will not occur, only that they will be less severe than would have been experienced had no adaptation occurred,” say D. S. Lemmen, F. J. Warren and J. Lacroix.

Planning for a Changing Climate: Some communities are already anticipating and adapting to this “new normal”, and they are using existing planning legislation and tools. Being able to start with good information about projected future conditions is key to assessing the risks and vulnerabilities of a particular location.

Figure 15 identifies seven strategic resources to help achieve the goals for resilient communities, and these are described opposite.

Each Community is Different: “We worked in partnership with Pacific Climate Impacts Consortium to make the regional climate science maps and data projections available to communities through the **Plan2Adapt** interactive web tool,” says Cathy LeBlanc,

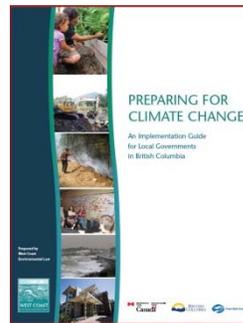


Intergovernmental Relations and Planning Branch, Ministry of Community, Sport and Cultural Development.

“Communities can use the science projections to figure out what is happening (i.e. climate variables), so what (i.e. impacts) and then what (i.e. affected sectors). Each community is different and by developing its own strategies for mainstreaming adaptation into its decisions and operations, it will become more resilient.”

“Collaborating with other communities and partners, using key adaptation resources, and mainstreaming activities, will help to increase community resilience,” concludes Cathy LeBlanc.

Preparing for Climate Change: An Implementation Guide for Local Governments in BC (2012) provides over 90 links to examples of planning tools being used for adaptation and it provides three land use scenarios and two checklists.



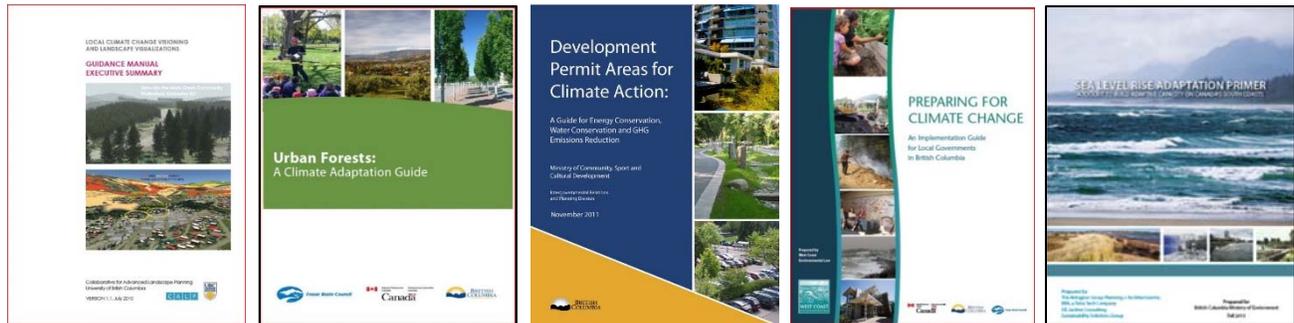
It reinforces the linkages between low impact development, emergency management, asset management, and financial and strategic planning. And it encourages communities to collaborate with their neighbours to assess regional impacts.

A number of other recent partnerships developed key adaptation resources including:

- ▶ **Local Climate Change Visioning and Landscape Visualizations Guidance Manual** (2010) - to help communities visualize localized scenarios for flood adaptation, snow pack melt, wildfire, and sea level rise.
- ▶ New resources for coastal communities facing flooding, storm surge and sea level rise, such as the **Sea Level Rise Adaptation Primer** (2013).
- ▶ **Urban Forests: A Climate Adaptation Guide** (2010) - to help plant the right tree, for the right place and the right time.
- ▶ **The Development Permit Areas for Climate Action: A Guide for Energy Conservation, Water Conservation and GHG Emissions Reduction** (2011) – that promotes the use of DPAs individually or in combination to achieve broader rainwater management goals.

Previous partnerships helped to produce the **Water Balance Model** (capturing rainwater on-site and recharging aquifers) and the **Stormwater Planning: A Guidebook for BC** (performance targets).

Implement ‘Design with Nature’ practices to build Resilient Communities....



2010 Visioning Guide

2010 Urban Forests Guide

2011 DPA Guide

2012 Implementation Guide

2013 Sea Level Rise Primer

FIVE RESOURCES that provide local government elected officials and practitioners with high-level guidance on how to make informed decisions



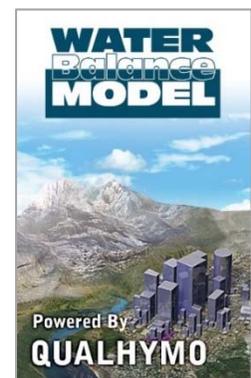
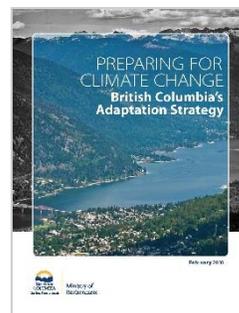
Plan2Adapt:

This online tool allows users to generate information (maps, graphs and data tables) to better understand how climate will change in their area, how the region will be impacted and what they can do to prepare.

ONLINE TOOLS enable scenario comparisons.

Climate change innovation by the Pacific Climate Impacts Consortium is incorporated in the Climate Change Module within the Water Balance Model.

Launched in 2003, this online scenario modelling and decision support tool is designed to help local government implement green infrastructure that is effective in maintaining the natural Water Balance.



The model supports two provincial initiatives: **Living Water Smart**; and **Preparing for Climate Change: British Columbia's Adaptation Strategy**.

Figure 15