

# Adapting BC Forestry to Climate Change Information Sources

## About Climate Change in BC

Pacific Climate Impacts Consortium (PCIC) – <http://www.pacificclimate.org>

- Plan2Adapt regional projections of future climate scenarios [pacificclimate.org/tools-and-data/plan2adapt](http://pacificclimate.org/tools-and-data/plan2adapt)
- *Climate Overview 2007 – Hydro-climatology and Future Climate Impacts in BC*. 2009. (152 pgs) <http://pacificclimate.org/docs/publications/PCIC.ClimateOverview.Revised.March2009.pdf>
- Regional analyses for
  - Columbia Basin <http://pacificclimate.org/sites/default/files/publications/Murdock.CBT2007-2010Update.Jul2011.pdf>
  - Cariboo-Chilcotin - <http://pacificclimate.org/sites/default/files/publications/Werner.ClimateChangeCaribooChilcotin.Sep2008.pdf>
  - Prince George – <http://pacificclimate.org/sites/default/files/publications/Werner.ClimateChangePrinceGeorge.Aug2009.pdf>
  - Vanderhoof to Fraser Lake - <http://www.pacificclimate.org/project/infrastructure-and-climate-risk-yellowhead-highway>

Climate WNA (Western North America) for historical and future climate information – [pacificclimate.org/tools-and-data/climatewna](http://pacificclimate.org/tools-and-data/climatewna)

*Environment Canada Climate Data and Information Archive – Historical Normals and Averages*  
[http://www.climate.weatheroffice.gc.ca/climate\\_normals/index\\_e.html](http://www.climate.weatheroffice.gc.ca/climate_normals/index_e.html)

*Selecting and Using Climate Change Scenarios for British Columbia*. Murdock & Spittlehouse, 2011 (39 pgs)  
<http://pacificclimate.org/news/2012/new-publication-selecting-and-using-climate-change-scenarios-british-columbia>

## Regional Forestry Related Climate Change Assessments

West Kootenays - *Resilience and climate change: Adaption potential for ecological systems and forest management*. <http://www.westkootenayresilience.org/>

Kamloops TSA – *Kamloops future forest strategy*. <http://k2kamloopstsa.com/>

Morice & Lakes TSAs – *Multi-scale trans-disciplinary vulnerability assessment*  
[http://bvcentre.ca/research/project/a\\_multi-scale\\_trans-disciplinary\\_vulnerability\\_assessment/](http://bvcentre.ca/research/project/a_multi-scale_trans-disciplinary_vulnerability_assessment/)

Clayquot – *Building on traditional and scientific knowledge to build resilience in the face of climate change*.  
<http://ecotrust.ca/clayoquot/building-traditional-and-scientific-knowledge-develop-resiliency-face-climate-change>

Vanderhoof – *Assessing potential biophysical and socio-economic impacts of climate change on forest-based communities – a methodological case study*. [http://publications.gc.ca/collections/collection\\_2009/nrcan/Fo133-1-415E.pdf](http://publications.gc.ca/collections/collection_2009/nrcan/Fo133-1-415E.pdf)

Northwest Skeena – *Climate change adaptation planning for Northwest Skeena communities*.  
<http://brinkmanforest.com/ffesc/>

Quesnel TSA – *Integrating Climate Change Adaptation Strategies with Sustainability and Socioeconomic Objectives*. <http://biod.forestry.ubc.ca/FFESC/> (PPT only)

## Current BC Research

### Future Forest Ecosystem Science Council Projects -

[http://www.for.gov.bc.ca/hfp/future\\_forests/council/index.htm#c](http://www.for.gov.bc.ca/hfp/future_forests/council/index.htm#c)

Completed and current projects with weblinks -

[http://www.for.gov.bc.ca/hfp/future\\_forests/council/index.htm#completed-projects](http://www.for.gov.bc.ca/hfp/future_forests/council/index.htm#completed-projects)

BC Regional Adaptation Collaborative - <http://www.fraserbasin.bc.ca/programs/bcrac.html>

## Climate Change Impacts for BC Forests

*BC Journal of Ecosystem and Management on Climate Change* Volume 13 No. 1 (2012) Published by FORREX Forum for Research and Extension in Natural Resources – <http://jem.forrex.org/index.php/jem>

*Climate Impacts on BC Watershed Hydrology*. 2008. Pike et. al. (4 pgs)

<http://cbtadaptation.squarespace.com/storage/ClimateImpactsonBCWatershedHydrology.pdf>

*Climate Change Effects on Watershed Processes in British Columbia, Chapter 19*. 2010. Pike, R.G. et al. in: R.G. Pike, T.E. Redding, R.D. Moore, R.D. Winkler, K.D. Bladon (Eds.), *Compendium of Forest Hydrology and Geomorphology in British Columbia*. BC Ministry of Forests and Range, Forest Sciences Program, Victoria, B.C. and FORREX Forest Research Extension in Natural Resources, Kamloops, BC Land Management Handbook 66 (48 pgs). <http://pacificclimate.org/sites/default/files/publications/Pike.Ch19ForestHydrology.Dec2010.pdf>

*Climate Change Adaptation and Biodiversity – Background & summary reports*. 2009. SFU - ACT. (72 pgs).

<http://act-adapt.org/biodiversity/>

*Ecological resilience and complexity: A theoretical framework for understanding and managing BC's forest ecosystems in a changing climate*. 2009. Campbell et. al. MOF Technical Report 055. (36 pgs).

<http://www.for.gov.bc.ca/hfd/pubs/Docs/Tr/Tr055.pdf>

PCIC Forest pest and tree species suitability project - <http://pacificclimate.org/project/forest-pests-and-tree-species-suitability-future-climates>

## Adapting Forest Management to Climate Change

*Reducing Uncertainty and Risk through Forest Management Planning, 2012*. Kenneth Day and David Manuel Pérez. (Submitted - will be posted on BCCFA website)

*Climate Change and Forest Management in Canada: Impacts, Adaptive Capacity and Adaptation Options, 2011*. Johnston, et. al.

[http://www.sfmn.ales.ualberta.ca/en/Publications/~/\\_media/sfmn/Publications/StateofKnowledgeReports/Documents/SOK2010ClimateChangeJohnstonetalEn.ashx](http://www.sfmn.ales.ualberta.ca/en/Publications/~/_media/sfmn/Publications/StateofKnowledgeReports/Documents/SOK2010ClimateChangeJohnstonetalEn.ashx)

*Vulnerability of Canada's Tree Species to Climate Change and Management Options for Adaptation, 2011*.

Johnston, et. al. [http://www.ccfm.org/pdf/TreeSpecies\\_web\\_e.pdf](http://www.ccfm.org/pdf/TreeSpecies_web_e.pdf)

*Climate Change Adaptation and Extreme Weather – SFU ACT Background & Summary reports*. <http://act-adapt.org/extreme-weather/>

*Impacts to Adaptation: Canada in a Changing Climate*. 2007. Natural Resources Canada. (See Synthesis - 20 pg and the BC chapter – 56 pg) [http://adaptation.nrcan.gc.ca/assess/2007/index\\_e.php](http://adaptation.nrcan.gc.ca/assess/2007/index_e.php)

## **Analyzing and Deciding How to Adapt Forest Management Systems**

*A structured decision-making approach to climate change adaptation in the forest sector.* 2005. Ohlsen, D. W., McKinnon G. A. and Hirsch, K.G. The Forestry Chronicle. VOL. 81, No. 1.

*Alberta Sustainable Resource Development Climate Change Adaptation Framework -*

<http://www.srd.alberta.ca/MapsPhotosPublications/Publications/ClimateChangeAdaptationFramework.aspx>

*A framework for assessing vulnerability of forest-based communities to climate change.* 2007. Williamson, T.B.; Price, D.T.; Beverly, J.L.; Bothwell, P.M.; Parkins, J.R.; Patriquin, M.N.; Pearce, C.V.; Stedman, R.C. and Volney, W.J.A. Nat. Resour. Can., Can. For. Serv., North. For. Cent., Edmonton, Alberta. Inf. Rep. NOR-X-414.

## **Climate Change Barriers and Adaptive Capacity in BC Forest Management**

*Removing multi-scale barriers to climate-change adaptation in managed forests of BC.* 2012. D. Daust and D. Morgan. [http://bvcentre.ca/files/research\\_reports/09-12RemovingBarriers.pdf](http://bvcentre.ca/files/research_reports/09-12RemovingBarriers.pdf)

*Achieving climate change adaptation in West Kootenay forest management – Barriers & opportunities.* 2012, Pearce. Unpublished Report #8 from the West Kootenay Climate Vulnerability and Resilience Project.

[http://www.westkootenayresilience.org/Report8\\_BarriersOpportunities-Draft.pdf](http://www.westkootenayresilience.org/Report8_BarriersOpportunities-Draft.pdf)

*Adaptive capacity of community forests to climate change – An assessment of the potential role of community forests as governance mechanisms for promoting local adaptation.* 2012. E. Furness. Will be posted on BCCFA website.

## **Rural Community Climate Change Adaptation**

*Pathways to climate resilience: A guidebook for Canadian forest-based communities.* 2011. C. Pearce and C. Callihoo. Canadian Model Forest Network.

[http://www.modelforest.net/pubs/Pathways\\_to\\_Climate\\_Change\\_Resilience\\_FINAL\\_Feb\\_2011.pdf](http://www.modelforest.net/pubs/Pathways_to_Climate_Change_Resilience_FINAL_Feb_2011.pdf)

[http://www.modelforest.net/pubs/Pathways\\_to\\_Climate\\_Change\\_Resilience\\_Community\\_Resource\\_Collection\\_Final\\_Feb\\_2011.pdf](http://www.modelforest.net/pubs/Pathways_to_Climate_Change_Resilience_Community_Resource_Collection_Final_Feb_2011.pdf)

Columbia Basin Trust Communities Adapting to Climate Change Initiative Adaptation Resource Kit –

<http://adaptationresourcekit.squarespace.com/introduction-to-adaptation-act/>

*Increasing the resilience of British Columbia's rural communities to natural disturbances and climate change.* 2012.

Krishnaswamy, A., Simmons, E., & Joseph, L. BC Journal of Ecosystems and Management 13(1):1–15.

Published by FORREX Forum for Research and Extension in Natural Resources.

<http://jem.forrex.org/index.php/jem/article/viewFile/164/115>

## **General**

*Climate change, impacts, and adaptation scenarios: climate change and forest and range management in British Columbia.* 2008. D. Spittlehouse. MOF Technical Report 045 <http://www.for.gov.bc.ca/hfd/pubs/Docs/Tr/Tr045.pdf>

*Climate change and Canada's forests: From Impacts to Adaptation.* 2009. Williamson et. al.

[http://nofc.cfs.nrcan.gc.ca/bookstore\\_pdfs/29616.pdf](http://nofc.cfs.nrcan.gc.ca/bookstore_pdfs/29616.pdf)

Ministry of Forest, Lands and Natural Resource Operations Climate Change

[http://www.for.gov.bc.ca/mof/Climate\\_Change/](http://www.for.gov.bc.ca/mof/Climate_Change/)

BC Government Climate Action Team – Adaptation <http://www.env.gov.bc.ca/cas/adaptation/index.html>

Adaptation to Climate Change Team (Simon Fraser University) (ACT) - <http://www.sfu.ca/act/>

Resources North Climate Change Network - <http://www.resourcesnorth.org/rna/380/nccn>

Natural Resources Canada forestry adaptation - <http://cfs.nrcan.gc.ca/pages/35>

Canadian Council of Forest Ministers – Climate Change <http://www.ccfm.org/english/coreproducts-cc.asp>

Climate Change Resource Centre, US Forest Service <http://www.fs.fed.us/ccrc/>

North Cascadia Adaptation Partnership - <http://northcascadia.org/events.php>