

CURRICULUM VITAE

ARELIA T. SCHOENEBERG (née Werner)

Pacific Climate Impacts Consortium
Hydrologic Impacts Theme
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RESEARCH INTERESTS

Creating accessible, scientifically state-of-the-art projections of hydrologic scenarios under climate change; supporting data availability and application; data portals; NetCDFs; hydrologic modelling; mountainous and cold-regions hydrology; gridded historical meteorological datasets; statistical downscaling; GCM selection; uncertainty; climate impacts and climate services.

EDUCATION

M.Sc., Water and Climate Impacts Research Centre, University Of Victoria, Victoria, BC, 2008
B.Sc. (Honours), Environmental Science, University of British Columbia, Vancouver, BC, 2000
B.Sc. (Exchange), University of Western Australia, Perth, WA, 1998

PROFESSIONAL APPOINTMENTS

Hydrologist, Hydrologic Impacts Theme, Pacific Climate Impacts Consortium, University Of Victoria, Victoria, BC, 2006 – *present*.
Co-op Student, Science Division, Meteorological Services Canada, Environment Canada, Vancouver, BC, 2006.
Co-op Student, Secondment Pacific Climate Impacts Consortium, Ministry of the Environment, Vancouver, BC, 2006.
Intern, Environmental and Economic Management Project, Canadian International Development Agency, Cebu, Philippines, 2000-2001.

VOLUNTEER POSITIONS

Member at Large, Executive Committee, Canadian Society for Hydrologic Sciences (CSHS), 2019 – *present*.
CSHS Liaison, BC Branch of the Canadian Water Resources Association (CWRA), 2016 - 2017.

AWARDS AND HONOURS

WCRP Open Science Conference Travel Award for Young Professionals, 2010
Canadian Water Resource Association Scholarship, 2005
Science Horizons Research Assistantship, Environment Canada, 2003-2005

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JOURNAL REFEREE

Atmosphere-Ocean
Canadian Water Resources Journal
Hydrologic Sciences Journal
International Journal of Climatology
Journal of Hydrologic Engineering
Journal of Hydrology
Stochastic Environmental Research and Risk Assessment

SOFTWARE DEVELOPMENT

GitHub: <https://github.com/pacificclimate/routomator>
GitHub: <https://github.com/pacificclimate/ClimDown>
GitHub: <https://github.com/pacificclimate/streamflow-trends-on-multi-stats>
CRAN: ‘ClimDown’ R package, released December 2016
CRAN: ‘zyp’ R package, released 2013, updated 2015

COMPUTING

Operating Systems: Linux OS, Microsoft Windows, Mac OS X
Software: Microsoft Word, Excel and PowerPoint; ArcGIS; Adobe Acrobat; GitHub
Programming: R, C-Shell (CSH), NCO, CDO, UNIX, Python, ArcPy
Version Control: git, darcs, mercurial
High Performance Computing: slurm to submit and monitor jobs, and optimizing performance

PROFESSIONAL AFFILIATIONS

Canadian Society for Hydrological Sciences (CSHS)
Canadian Water Resources Association (CWRA)
Canadian Geophysical Union (CGU)
American Geophysical Union (AGU)

REFEREED JOURNAL PUBLICATIONS

Werner, A.T., M.A. Schnorbus, R.R. Shrestha, A.J. Cannon, F.W. Zwiers, G. Dayon and F. Anslow, 2019. *A long-term, temporally consistent, gridded daily meteorological dataset for northwestern North America*. Nature Scientific Data, 6 (180299) 1-16, doi: 10.1038/sdata.2018.299.

Hiebert, J., A. Cannon, **A. Schoeneberg**, S. Sobie and T. Murdock, 2018: *ClimDown: Climate Downscaling in R*. Journal of Open Source Software, 3, 22, 360, doi:10.21105/joss.00360.

Islam S. U. and S. J. Déry and **A.T. Werner**, 2017: *Future Climate Change Impacts on Snow and Water Resources of the Fraser River Basin, British Columbia*. J. Hydrometeor., 18, 473–496, doi: 10.1175/JHM-D-16-0012.1.

Kumar, S., F. Zwiers, P.A. Dirmeyer, D.M. Lawrence, R. Shrestha, and **A.T. Werner**, 2016. *Terrestrial Contribution to the Heterogeneity in Hydrological Changes under Global Warming*. Water Resour. Res., 52, 3127–3142, doi:10.1002/2016WR018607.

- Werner, A.T.** and A.J. Cannon, 2016. *Hydrologic extremes – an intercomparison of multiple gridded statistical downscaling methods*, Hydrol. Earth Syst. Sci., 20, 1483-1508, doi:10.5194/hess-20-1483-2016, 2016.
- Arora, V.K., Y. Peng, W.A. Kurz, J.C. Fyfe, B. Hawkins, and **A.T. Werner**, 2016. *Potential near-future carbon uptake overcomes losses from a large insect outbreak in British Columbia, Canada*. Geophys. Res. Lett., 43, 2590-2598, doi:10.1002/2015GL067532.
- Werner, A.T.** and Cannon, A.J., 2015. *Hydrologic extremes – an intercomparison of multiple gridded statistical downscaling methods*, Hydrol. Earth Syst. Sci. Discuss., 12, 6179-6239, doi:10.5194/hessd-12-6179-2015.
- Werner, A.T.**, Prowse, T.D., Bonsal, B.R. *Characterizing the Water Balance of the Sooke Reservoir, British Columbia over the Last Century*. Climate 2015, 3, 241-263.
- Shrestha, R.R., M.A. Schnorbus, **A.T. Werner** and F.W. Zwiers, 2014. *Evaluating hydro-climatic change signals from statistically and dynamically downscaled GCMs and hydrologic models*. Journal of Hydrometeorology, 15, 844-860. doi: 10.1175/JHM-D-13-030.1.
- Peng, Y., Arora, V. K., Kurz, W. A., Hember, R. A., Hawkins, B. J., Fyfe, J. C., and **Werner, A. T.**, 2014. *Climate and atmospheric drivers of historical terrestrial carbon uptake in the province of British Columbia, Canada*. Biogeosciences, 11, 635-649, doi:10.5194/bg-11-635-2014.
- Schnorbus, M., **A. Werner**, and K. Bennett, 2014. *Impacts of climate change in three hydrologic regimes in British Columbia, Canada*. Hydrological Processes, 28(3): 1170-1189, DOI: 10.1002/hyp.9661.
- Werner, A.T.**, M.A. Schnorbus, R.R. Shrestha and H.D. Eckstrand, 2013. *Spatial and temporal change in the hydro-climatology of the Canadian portion of the Columbia River Basin under multiple emissions scenarios*. Atmosphere-Ocean, 51(4): 357-379.
- Bürger, G., S. Sobie, A. Cannon, **A. Werner**, and T. Murdock, 2012. *Downscaling extremes - an intercomparison of multiple methods for future climate*. Journal of Climate, 25(12): 4366-4388.
- Shrestha, R.R., M.A. Schnorbus, **A.T. Werner**, and A.J. Berland, 2012. *Modelling spatial and temporal variability of hydrologic impacts of climate change in the Fraser River basin, British Columbia, Canada*. Hydrological Processes, 26(12): 1840-1860.
- Bennett, K.E., **A.T. Werner** and M.A. Schnorbus, 2012. *Uncertainties in hydrologic and climate change analyses in headwater basins of British Columbia*, Journal of Climate, 25(17): 5711-5730.
- Bürger, G., T.Q. Murdock, **A.T. Werner**, S.R. Sobie, and A.J. Cannon. 2012. *Downscaling extremes - an inter-comparison of multiple statistical methods for present climate*. Journal of Climate, 25(12): 4366-4388.
- Picketts, I.M., **A.T. Werner**, T.Q. Murdock, J. Curry, S.J. Dery and D. Dyer, 2012. *Planning for climate change adaptation: lessons learned from a community-based workshop*. Environmental Science & Policy, 17: 82-93.
- Bürger, G., J. Schulla and **A.T. Werner**, 2011. *Estimates of future flow, including extremes, of the Columbia River headwaters*. Water Resources Research, 47(W10520): 1-18.
- Allen, D., P.H. Whitfield and **A. Werner**, 2010. *Groundwater Level Responses in Temperate Mountainous Terrain: Regime Classification, and Linkages to Climate and Streamflow*. Hydrologic Processes, 24(23): 3392-3412.

- Beckers, J., B. Smerdon, T. Redding, A. Anderson, R. Pike and **A.T. Werner**, 2009. *Hydrologic Models for Forest Management Applications: Part 1: Model Selection*. Streamline, 13(1): 35-44.
- Beckers, J., R. Pike, **A.T. Werner**, T. Redding, B. Smerdon, and A. Anderson, 2009. *Hydrologic Models for Forest Management Applications: Part 2: Incorporating the Effects of Climate Change*. Streamline, 13(1): 45-54.
- Dawson, R., **A.T. Werner**, and T.Q. Murdock, 2008, *Cariboo-Chilcotin: Climate Change Analysis*, LINK - FORREX Forum for Research and Extension in Natural Resources, Volume 10 – Issue 3, Fall 2008.

PEER REVIEWED REPORTS

- Schoeneberg, A.T.**, Schnorbus, M.A., 2020. *Exploring the Strength and Limitations of PCIC's CMIP5 Hydrologic Scenarios*. Pacific Climate Impacts Consortium, University of Victoria, Victoria, BC, Canada. 42 pp.
- Schoeneberg, A.T.**, Sun, Q., and Schnorbus, M.A., 2021. *Future Design Flood Values in the Upper Fraser River Basin Using the CanESM2-LE*. Pacific Climate Impacts Consortium, University of Victoria. 49 pp.
- Climate Projections for the BC Northeast Region*, Fraser Basin Council, June 2019, 46 pp. Contributing author, **Areli Schoeneberg**. Chapter 6 – Hydrology. https://www.fraserbasin.bc.ca/Library/CCAQ/fbc_ne_climatereport_web.pdf
- White, T., J. Wolf, F. Anslow, **A. Werner**, *Indicators of Climate Change for British Columbia 2016 Update, Indicators: Timing and Volume of River Flow*. British Columbia. Ministry of Water, Land and Air Protection, 57 pgs.
- D. W. van der Kamp, G. Bürger and **A. T. Werner**, 2013: *Evaluation of the monthly drought code as a metric for fire weather in a region of complex terrain, and uncertainties in future projections*. The Pacific Climate Impacts Consortium, Victoria, British Columbia, Canada, 16 pp.
- Hamlet, A.F., M. Schnorbus, **A. Werner**, M. Stumbaugh and I. Tohver, 2013. *A Climate Change Scenario Inter-comparison Study for the Canadian Columbia River Basin: Summary Overview*, 13 pp.
- Hamlet, A.F., M. Schnorbus, **A. Werner**, M. Stumbaugh and I. Tohver, 2013. *A Climate Change Scenario Inter-comparison Study for the Canadian Columbia River Basin: Technical Report*, 66 pp.
- Werner, A.T.**, 2011. *BCSD Downscaled Transient Climate Projections for Eight Select GCMs over British Columbia, Canada*. Pacific Climate Impacts Consortium, University of Victoria, Victoria, BC, 63 pp.
- Schnorbus, M.A., K.E. Bennett, **A.T. Werner** and A.J. Berland, 2011. *Hydrologic Impacts of Climate Change in the Peace, Campbell and Columbia Watersheds, British Columbia, Canada*. Pacific Climate Impacts Consortium, University of Victoria, Victoria, BC, 157 pp.
- Murdock, T.Q. and **A.T. Werner**, 2011. *Canadian Columbia Basin Climate Trends and Projections: 2007-2010 Update*. Pacific Climate Impacts Consortium, University of Victoria, Victoria, BC, 43 pp.
- Schnorbus, M., K. Bennett and **A.T. Werner**, 2010. *Quantifying the water resource impacts of mountain pine beetle and associated salvage harvest operations across a range of*

- watershed scales: Hydrologic modelling of the Fraser River basin*. Information Report: BC-X-423, Natural Resources Canada, Canadian Forestry Service, Pacific Forestry Centre, Victoria, BC, 64 pp.
- Werner, A.T.**, H.K. Jaswal and T.Q. Murdock, 2009. *Climate Change in Dawson City, YT: Summary of Past Trends and Future Projections*. Pacific Climate Impacts Consortium, University of Victoria, Victoria BC, 40 pp.
- Picketts, I.M., **A.T. Werner** and T.Q. Murdock, 2009. *Climate change in Prince George: summary of past trends and future projections*. Pacific Climate Impacts Consortium, University of Victoria, Victoria BC, 48 pp.
- Rodenhuis, D.R., K.E. Bennett, **A.T. Werner**, D. Bronaugh and T.Q. Murdock, 2009. *Climate Overview 2007: Hydro-Climatology and Future Climate Impacts in British Columbia*, July 2009.
- Bennett, K.E., **Werner, A.T.** and M. Schnorbus, 2009, *Uncertainties in Hydrologic and Climate Change Impact Analyses in a Headwater Basin of the Peace River Watershed*, Hydrology Research, Special Issue from the 17th NRB Conference, 15 pp.
- Dawson, R., **A.T. Werner**, and T.Q. Murdock, 2008, *Preliminary Analysis of Climate Change in the Cariboo-Chilcotin Area of BC*, Integrated Land Management Bureau, Pacific Climate Impacts Consortium, University of Victoria, Victoria, BC.
- Werner, A.T.**, 2007. *Seasonality of the Water Balance of the Sooke Reservoir, BC, Canada*. Masters of Science Thesis, Water and Climate Impacts Research Centre, Department of Geography, University of Victoria, Victoria, BC, Canada.
- Werner, A.T.** and T.Q. Murdock, 2007. *Summary Report: Changes in Past Hydro-climatology and Projected Future Changes – For the City of Whitehorse*, Pacific Climate Impacts Consortium, University of Victoria, Victoria, BC.
- Murdock, T.Q., D. Bronaugh and **A.T. Werner**, 2007. *Preliminary Analysis of BC Climate Trends for Biodiversity*, Pacific Climate Impacts Consortium, University of Victoria, Victoria, BC.
- Bennett, K.E., T.Q. Murdock and **A.T. Werner**, 2007. *Greater Vancouver Regional District Historical and Future Rainfall Analysis Update*, Pacific Climate Impacts Consortium, University of Victoria, Victoria, BC.
- Murdock, T., J. Fraser, and C. Pearce (Editors), 2007. *Preliminary Analysis of Climate Variability and Change in the Canadian Columbia River Basin: Focus on Water Resources*. Contributing authors: **Werner, A.**, K. Bennett, J. Runnells, R. Lee, D. Rodenhuis, and B. Menounos.

BOOK CHAPTERS

- Pike, R.G, K.E. Bennett, T. Redding, A.T. Werner, D. Spittlehouse, R.D. Moore, T.Q. Murdock, J. Beckers, B. Smerdon, K. Bladon, V. Foord, D. Campbell, and P. Tschaplinski. 2010. *Chapter 19: Climate Change Effects on Watershed Processes in BC*. In *Compendium of Forest Hydrology and Geomorphology in British Columbia*. R.G. Pike et al. (editors). B.C. Ministry of Forests and Range, Research Branch, Victoria, B.C. and FORREX Forum for Research and Extension in Natural Resources, Kamloops, B.C. Land Management Handbook 66, pgs 699-747.
- Beckers, J., B. Smerdon, and M. Wilson. (A.T. Werner Reviewer) 2009. *Review of hydrologic models for forest management and climate change applications in British Columbia and*

Alberta. FORREX Forum for Research and Extension in Natural Resources, Kamloops, BC FORREX Series 25.

Werner, A.T. contributing author in: Walker, I.J. and Sydneysmith, R. (2008): British Columbia; in *From Impacts to Adaptation: Canada in a Changing Climate 2007*, edited by D.S. Lemmen, F.J. Warren, J. Lacroix and E. Bush; Government of Canada, Ottawa, ON, p. 329-386.

SELECT PRESENTATIONS (since 2007)

Schoeneberg, A. T. “PCIC Hydrologic Data Portals.” June 11th 2020. Part of the “Agriculture Climate Data series for BC (ACARN) A Deep Dive into Weather Station Data, Historical & Streamflow Data. Climate Data for BC Agriculture: Weather stations, historical data and streamflow.” https://www.bcacarn.com/rushmore_event/webinar-series-climate-weather-data-for-agriculture-adaptation/.

Schoeneberg, A. T. “From Snowmelt to Streamflow: Data Portals for Future Hydrologic Conditions.” June 25th 2020. <https://www.youtube.com/watch?v=Ek3ZdON9caM&feature=youtu.be>. Part of the “Accounting for Climate Change Impacts in the Design of Resource Road Stream Crossings”, a webinar series led by FPIInnovations. <https://www2.gov.bc.ca/gov/content/industry/natural-resource-use/resource-roads/climate-adaptation>.

Schoeneberg, A. T. “Climate driven Streamflow Changes in the Northeast.” February 17th 2021. Part of the “Northeast BC: Resilience, Climate and the Future” webinar led by the Fraser Basin Council.

Schoeneberg, A. T. and M. A. Schnorbus. “Future Summer Streamflow: Refining Presentation of Results to Improve Utility in Water Use Planning (poster)”. Theme: Climate Change Impacts on People Place and Systems. Topic: Hydrology and Water Resources. Northwest Climate Science Conference, April 6-8th 2021.

M. H. Mahoudi, M.R. Najafi, **A. (Werner) Schoeneberg** and M.A. Schnorbus. Changes in extreme daily temperature and precipitation over Western Canada based on a large ensemble of climate change simulations, Joint Meeting of the CGU-CSSS-CIG-CSAFM-ESSSA, Niagara Falls, Canada, 2018.

M. H. Mahoudi, M.R. Najafi, **A. (Werner) Schoeneberg** and M.A. Schnorbus. Changes in extreme daily temperature and precipitation over Pacific Northwest based on a large ensemble of climate change simulations and their relations to teleconnection signals, AGU Fall Meeting, Washington, D.C., 2018.

A. (Werner) Schoeneberg, M.A. Schnorbus and M.R. Najafi. Assessment of Climate Change Impact on Streamflow Extremes in Mountainous Regions using a Coupled Hydrology-Glacier Model, Session H54A: Advances in Process-Based Hydrologic Modeling III. AGU Fall Meeting, San Francisco, 2016.

M.R. Najafi, A. Cannon, M. Schnorbus, **A. Werner**, F. Zwiers. Coauthor: Future Changes in Precipitation and Temperature Extremes in Western Canada. 50th CMOS Congress and Joint CGU Annual Meeting, 2016.

A. (Werner) Schoeneberg, M.A. Schnorbus and R.R. Shrestha. Presented: Hydrologic Modelling over Large Spatial Scales and Long Time Horizons: Future Streamflow in the Columbia River Basin, Session #222: Advances in Hydrologic Modelling. CWRA 69th National Conference.

- A. (Werner) Schoeneberg**, M.A. Schnorbus and M.R. Najafi. Presented: Assessment of Climate Change Impact on Streamflow Extremes in Mountainous Regions using a Coupled Hydrology-Glacier Model, Session H54A: Advances in Process-Based Hydrologic Modeling III. AGU Fall Meeting, 2016.
- A.T. Werner**, S. Dery and E. Wood. Hosted Session: Quantifying and Communicating Uncertainties in Changes to Hydrologic Extremes – H42B Oral Session and H34E Posters, AGU / CGU Joint Assembly 2015.
- A.T. Werner**, A. Cannon, M. Schnorbus and R. Shrestha. Oral Presentation: Sources of Uncertainty in Replicating Hydro-climatic Extremes Presented – H34E-0172, AGU / CGU Joint Assembly 2015.
- A.T. Werner** and K. Whan. Hosted Session: Hydro-climatic Extremes at Regional Scales: Effects of Climate Variability and Change, and Land Surface Processes, CMOS Whistler 2015.
- A.T. Werner**, S. Kumar, M.A. Schnorbus and R.R. Shrestha. Presented: Trends in Hydrological Extremes as Modelled Using Two Gridded-Climatological Datasets, CMOS Whistler 2015.
- S. Kumar, F.W. Zwiers, P. Dirmeyer, D.M. Lawrence, R.R. Shrestha and **A.T. Werner**, 2015. Robust and Heterogeneous Hydrological Changes under Global Warming, AGU, San Francisco, Abstract #60102, Final Paper##: GC53B-1199.
- M.R. Najafi, S. Kumar, F. Zwiers, N. Gillet, M. Schnorbus, A. Cannon, R. Shrestha and **A. Werner**. Anthropogenic Influence on Multi-Decadal Changes in Hydrology of Western Canada. Poster AGU, San Francisco, US, December 2014.
- S. Kumar, M.R. Najafi, M. Schnorbus, R. Shrestha and **A. Werner**. Asymmetry in hydrologic response to climate change in Western North America: A Land-Atmosphere Interaction Perspective. Poster GC11D-0589 AGU, San Francisco, US, December 2014.
- Werner, A.T.**, M.A. Schnorbus, R.R. Shrestha and A.J. Cannon. Session 2C9.5 ID 6583: Uncertainty in simulating hydrologic extremes using statistically downscaled climate data. CGU, Saskatoon, Saskatchewan, May, 28 2013.
- Werner, A.T.**, M.A. Schnorbus, and A.J. Cannon. Session GC34B: Uncertainty in downscaling extremes from multiple gridded observations and statistical methods. AGU, San Francisco, California, December, 5 2012.
- Van Der Kamp, D. G. Bürger, and **A.T. Werner**. On the use of a simple monthly fire weather index as a metric for both historical and future wildfire severity in British Columbia. PCIC Program Advisory Committee, May 24 2012.
- Y. Peng, V. Arora, B. Hawkins, J. Fyfe, W. Kurz, and **A. Werner**, Predicting carbon storage for British Columbia on seasonal to decadal timescales, PICS Forum, Victoria, BC, June 2012.
- Schnorbus, M.A., **A.T. Werner** and R.R. Shrestha, 2011. Impact of projected climate change within two hydrologic regions in British Columbia, Canada. AGU Fall Meeting, 5-9 December 2011, San Francisco, California
- Werner, A.T.**, M.A. Schnorbus, G. Burger, R. Shrestha, J. Schulla, K.E. Bennett and A.J. Berland, 2011. Streamflow projection uncertainties in the major watersheds of British Columbia, Canada. WCRP Open Science Conference 2011, Denver, Colorado, Session C43: Water Resources and the Hydrological Cycle Over Land, Th234A.

- Werner, A.T.** and R.R. Shrestha, “From climate change scenarios to streamflow projections: multiple pathways for predicting change.” Canadian Society for Hydrologic Sciences, August 23, 2011.
- Werner, A.T.**, Session Chair: Application of Climate Model Results to Regional Adaptation. CMOS June 2011.
- Werner, A.T.**, H. Eckstrand, A. Berland and G. Bürger, BCSD Downscaled Transient Climate Projections for Eight Select GCMs over British Columbia, Canada. Session 4C2: Validation of empirical-statistical downscaling methods in a varying climate system. CMOS, Victoria, BC, Canada, June 9 2011.
- Werner, A.T.**, T.Q. Murdock, G. Bürger, H. Eckstrand and J. Hiebert, Regional Climate Model projections for decision-making in the upper Columbia Basin, presented at the 2011 American Meteorological Society (AMS) Meeting, Seattle, USA, 22-27 Jan.
- Werner, A.T.**, K.E. Bennett, M.A. Schnorbus and A.J. Berland, 2011. Sensitivity of Projected Streamflow Changes to Future Scenarios in Three Hydrologic Regimes in BC, (poster) presented at the 2011 American Meteorological Society (AMS) Meeting, Seattle, USA, 22-27 Jan.
- Schnorbus, M.A., K.E. Bennett and **A.T. Werner**, 2011. Quantifying the Hydrologic Impacts of Mountain Pine Beetle and Salvage Harvest in the Fraser River Basin, British Columbia, Canada, (poster) presented at the 2011 American Meteorological Society (AMS) Meeting, Seattle, USA, 22-27 Jan.
- Bürger, G., T. Murdock and **A.T. Werner**, *Downscaling extremes with EDS, TreeGEN, and BCSD*, GC51A-0748 Poster presented at 2010 Fall Meeting, AGU, San Francisco, Calif., 13-17 Dec.
- Moore, R.D., G. Jost, V. Radic, F. Anslow, A. Jarosch, G.K.C. Clarke, B. Menounos, R. Wheate, T. Murdock, and **A.T. Werner**, *Past and future contributions of glacier melt to Columbia River streamflow*, C14B-05 presented at 2010 Fall Meeting, AGU, San Francisco, Calif., 13-17 Dec.
- Bennett, K.E., M. Schnorbus, **A.T. Werner**, and A.J. Berland. *Climate Change Impacts to Hydro Power Reservoir Systems in British Columbia, Canada: Modelling, Validation and Projection of Historic and Future Streamflow and Snowpack*, Abstract C13C-07 presented at 2010 Fall Meeting, AGU, San Francisco, Calif., 13-17 Dec.
- Beckers, J., T. Redding, A. Anderson, R. Pike and **A. Werner**, *Review of Hydrologic Models for Forest Management Applications*, 2010, CSHS 3 session, presented at the 2010 63rd Annual CWRA Conference, Vancouver, BC, 15-18 June.
- Werner, A.**, Bennett, K. and M. Schnorbus, *2050 Streamflow Impacts in Coastal vs. Interior Basins, British Columbia, Canada, 2010*, CSHS 4 session, presented at the 2010 63rd Annual CWRA Conference, Vancouver, BC, 15-18 June.
- Fleming, S., R. Moore, G. Clarke, **A. Werner** and F. Weber, *Projections of Columbia River inflows to Mica dam under potential future trajectories of climate and glacier change*, 2010, CSHS 4 session, presented at the 2010 63rd Annual CWRA Conference, Vancouver, BC, 15-18 June.
- Moore, R.D., G. Jost, V. Radic, F. Anslow, A. Jarosch, G.K.C. Clarke, B. Menounos, R. Wheate, T. Murdock, and **A.T. Werner**, *Past and future contributions of glacier melt to Columbia River streamflow*, presented CMOS-CGU Congress, Ottawa, Ontario, May 31 – June 4, 2010.

- Werner, A.T.**, Bennett, K.E. and M.A. Schnorbus, *Sensitivity of Projected Streamflow Changes in a Small Coastal Hybrid Watershed to Selected GCMs, Emissions Scenarios, Model Runs and Downscaling Approaches*, presented CMOS-CGU Congress, Ottawa, Ontario, May 31 – June 4, 2010.
- Bennett, K.E., **A.T. Werner**, M. Schnorbus, *Uncertainties in Hydrologic and Climate Change Impact Analyses in Headwater Basins of British Columbia*, presented CMOS-CGU Congress, Ottawa, Ontario, May 31 – June 4, 2010.
- Whitfield, P.H., D. Allen, and **A.T. Werner**, 2010. *Climate, Streamflow, and Groundwater Interactions in the Canadian Cordillera*, presented CMOS-CGU Congress, Ottawa, Ontario, May 31 – June 4, 2010.
- Rodenhuis, D.R., A.T. Werner, Picketts, I.M., and T.Q. Murdock, Community Climate Change Adaptation Based on Past Trends and Future Projections, poster - AGU Conference, December 2009, San Francisco, USA.
- Rodenhuis, D.R. and **Werner, A.T.** *Hydro-Climatology and Future Climate Impacts in British Columbia*. CCCma Lunchtime Seminar Series, November 15 2007.
- Werner, A.T.** and T.Q. Murdock. *Biodiversity-Related Climate & Hydrological Trends & Projections*. Central Interior Ecoregional Assessment Meeting, November 19 2007.
- Werner, A.T.** *Past Hydroclimatology and Future Climate Impacts for the City Of Whitehorse*, City Of Whitehorse Sustainability Charrette, October 23rd 2007.

REFERENCES

Available on request