

Curriculum Vitae – October 2020

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Professional Preparation

Harvard University, Physics, B.A. magna cum laude, 1982

University of Washington, Atmospheric Sciences, Ph.D., 1995

Appointments

- 6/2010- present. Research Scientist III, CIRES, University of Colorado, Boulder, CO. Currently affiliated with the CIRES Western Water Assessment and NOAA Physical Sciences Laboratory
- 3/1998- 5/2011. Research Scientist II, CIRES, University of Colorado, Boulder, CO
- 5/1997-2/1998. Research Scientist I, CIRES, University of Colorado, Boulder, CO
- 5/1995-5/1997. Research Associate, CIRES, University of Colorado, Boulder, CO

Selected Peer-reviewed Publications

Barsugli, J. J., B. Livneh, A. Heldmeyer, I. Rangwala, A. J. Ray, C. F. Dewes, J. M. Guinotte, S. Torbit (2020), Projections of mountain snowpack loss for wolverine denning elevations in the Rocky Mountains. *Earth's Future*, in press. doi:10.1029/2020EF001537

Status: Accepted within Year 2020

Murray, D., A. Hoell, M. Hoerling, J. Perlwitz, X.-W. Quan, D. Allured, T. Zhang, J. Eischeid, C. Smith, J. Barsugli, J. McWhirter, C. Kreutzer and R. S. Webb (2020), Facility for Climate Assessments (FACTS) – A Community Resource for Assessing Weather and Climate Variability. *Bull. Amer. Met. Soc.*,

Switanek, M. B., J. Barsugli, M. Scheuerer, T. M. Hamill (2020), Present and past sea surface temperatures: a recipe for better seasonal climate forecasts.. *Weather and Forecasting*, 35 (4) 1221-1234, doi: 10.1175/WAF-D-19-0241.1

Hobbins, M; J. Barsugli (2020), Climate Change: Threatening the vigor of the Colorado River., *Science*, 367 (6483) 1192-1193, issn: 0036-8075, doi: 10.1126/science.abb3624

Kirchhoff, C. J., J. J. Barsugli, G. L. Galford, A. V. Karmalkar, K. Lombardo, S. R. Stephenson, M. Barlow, M, A. Seth, G. L. Wang, A. Frank (2019), Climate assessments for local action, *Bull. Amer. Met. Soc.*, 100 (11) 2147-2152, doi: 10.1175/BAMS-D-18-0138.1

Hoerling, M., J. Barsugli, B. Livneh, J. Eischeid, X. Quan, A. Badger, (2019), Causes for the Century-Long Decline in Colorado River Flow , *J. Climate*, 32 (23) 8181-8203, [doi: 10.1175/JCLI-D-19-0207.1](https://doi.org/10.1175/JCLI-D-19-0207.1)

Hobbins, M.T., I. Rangwala, J.J. Barsugli, C.F. Dewes, (2018) Extremes in evaporative demand and their implications for drought and drought monitoring in the 21st Century. *Extreme Hydrology and Climate Variability: Monitoring, Modeling, Adaptation and Mitigation*, edited by Melesse A.M., W. Abtew, G. Senay , Elsevier

Sofaer, H. R., J. J. Barsugli, C. S. Jarnevich, J. T. Abatzoglou, M. K. Talbert, B. W. Miller and J. T. Morisette, 2017: Designing ecological climate change impact assessments to reflect key climatic drivers. *Glob. Change Biol.*, 23 (7) 2537-2553, doi: 10.1111/gcb.13653

Guentchev, G. S., R. B. Rood, C. M. Ammann, J. J. Barsugli, K. Ebi, V. Berrocal, M. S. O'Neill, C. J. Gronlund, J. L. Vigh, B. Koziol and L. Cinquini, 2016: Evaluating the Appropriateness of Downscaled Climate Information for Projecting Risks of Salmonella. *Int. J. Environ. Res. Public Health*, 13 (3), doi: 10.3390/ijerph13030267

Livneh, B. , J. S. Deems, B. Buma, J. J. Barsugli, D. Schneider, N. P. Molotch, K. Wolter and C. A. Wessman, 2015: Catchment response to bark beetle outbreak and dust-on-snow in the Colorado Rocky Mountains. *J. Hydrol.*, 523 196-210, doi: 10.1016/j.jhydrol.2015.01.039

Barsugli, J. J., et al., 2013: The Practitioner's Dilemma: How to Assess the Credibility of Downscaled Climate Projections. *Eos Trans. AGU*, 94 (46) 424-425

Deems, J. S., T. H. Painter, J. J. Barsugli, J. Belknap, B. Udall, 2013: Combined impacts of current and future dust deposition and regional warming on Colorado Basin snow dynamics and hydrology. *Hydrol. Earth Syst. Sci.*, 17 (11) 4401-4413.

Barsugli, J. J., K. Nowak, B. Rajagopalan, J. R. Prairie and B. Harding, 2009: Comment on "When will Lake Mead go dry?" by T. P. Barnett and D. W. Pierce. *Water Resour. Res.*, 45 , Art. No. W09601, doi: 10.1029/2008WR007627

Assessment Reports

Lukas, J., K. Wolter, and J. Barsugli (2020), Weather and Climate Forecasting. *Colorado River Basin Climate and Hydrology: State of the Science*, 254-286, edited by Lukas, J. and E. Payton , Western Water Assessment, University of Colorado Boulder., Art. No. 7

Ray, A. J., J. J. Barsugli, B. Livneh, C. F. Dewes, I. Rangwala, A. Heldmyer, J. Stewart, 2017: Future snow persistence in Rocky Mountain and Glacier National Parks: An analysis to inform the USFWS Wolverine Species Status Assessment. A Report to the U.S. Fish and Wildlife Service Region 6, 54 pp.

Walker, S., A. J. Ray, J. J. Barsugli, 2016: Glacier and Runoff Changes: ISR Review and Study Request. NOAA National Marine Fisheries Service Request for Information or Study, 40 pp.

Wooster, J., J. Gange, A. J. Ray., J. J. Barsugli, 2016: Effects of La Grange Hydroelectric Project Under Changing Climate. NOAA National Marine Fisheries Service Request for Information or Study, 36 pp.

Lukas, J., J. Barsugli, N. Doesken, I. Rangwala, K Wolter, 2014: Climate Change in Colorado: A Synthesis to Support Water Resources Management and Adaptation, 2nd Edition., University of Colorado, Boulder, CO. pp. 108

Cayan, D., M. Tyree, K. E. Kunkel, C. Castro, A. Gershunov, J. Barsugli, A. J. Ray, J. Overpeck, M. Anderson, J. Russell, B. Rajagopalan, I. Rangwala, and P. Duffy, 2013: Future Climate: Projected Average, in Assessment of Climate Change in the Southwest United States: A Report Prepared for the National Climate Assessment, edited by G. Garfin, A. Jardine, R. Meredith, M. Black, S. LeRoy, Island Press, 101-125, May 2013.

Lukas, J., K. Wolter, K. Mahoney, J. Barsugli, N. Doesken, W. Ryan, I. Rangwala, B. Livneh, E. Gordon, M. Hoerling and G. Kiladis, 2013: Severe flooding on the Colorado Front Range, September 2013: A preliminary assessment. University of Colorado, Boulder, CO. pp. 4

Vogel, J., E.S. Gordon, J. Brislawn, E. LoDolce, J. Barsugli, D. Mills, and K. Carney, 2012: Boulder County Climate Change Preparedness Plan. Stratus Consulting, Boulder, CO, May 3, 2012. 157 pp.

Neely, B., R. Rondeau, J. Sanderson, C. Pague, B. Kuhn, J. Siemers, L. Grunau, J. Robertson, P. McCarthy, J. Barsugli, T. Schulz, and C. Knapp, 2011: Gunnison Basin: Vulnerability Assessment for the Gunnison Climate Working Group. The Nature Conservancy, Colorado Natural Heritage Program, Western Water Assessment, and University of Alaska-Fairbanks. Project of the Southwest Climate Change Initiative.

Ray, A. J., J. J. Barsugli, K. E. Wolter, J. Eischeid, 2010: Rapid Response Climate Assessment to Support the FWS Status Review of the American Pika. NOAA Earth System Research Lab Report, Boulder, CO. pp. 47

Barsugli, J.J., C. Anderson, J.B. Smith, and J.M.Vogel, 2009: Options for Improving Climate Modeling to Assist Water Utility Planning for Climate Change. Water Utility Climate Alliance White Paper, pp. 146

Ray, A. J., J. J. Barsugli, K. B. Averyt, K. E. Wolter, M. P. Hoerling, N. Doesken, B. Udall, R. S. Webb, 2008: Climate Change in Colorado: A Synthesis to Support Water Management and Adaptation. Colorado Water Conservation Board Report, University of Colorado, Boulder, CO. pp. 52