Email: ryanrbart@ucsb.edu Website: http://www.ryanrbart.com

#### Education

2014	Ph.D.	Geography, University of California, Santa Barbara & San Diego State University
2008	M.S.	Geography, San Diego State University
2001	B.S.	Genetics, University of California, Davis

## Experience

2015-	Postdoctoral Scholar, Earth Research Institute, University of California, Santa Barbara
2014-2015	Postdoctoral Scholar, Department of Environmental Science, Policy and Management,
	University of California, Berkeley
2007-2012	Teaching Associate, Department of Geography, San Diego State University
2005-2007	Graduate Assistant, Department of Geography, San Diego State University
2001-2005	Marketing/Accounting, E-Babylon, Inc. Simi Valley, California

### **Publications**

#### In-Review

xx Anderson SE, **Bart RR**, Kennedy MC, MacDonald AJ, Moritz MA, Plantinga AJ, Tague CL, Wibbenmeyer M. Salience-driven Responses to Climate Change and their Consequences for (Mal)Adaptation. *Proceedings of the National Academy of Sciences*.

#### In-Print

- 9. **Bart RR**, Tague CL, Dennison PE. 2017. Modeling annual grassland phenology along the central coast of California. *Ecosphere*, 8(7):e01875.
- 8. **Bart RR**, Tague CL. 2017. The impact of wildfire on baseflow recession rates in California. *Hydrological Processes*, 31, 1662-1673.
- 7. **Bart RR**, Tague CL, Moritz MA. 2016. Effect of tree-to-shrub type conversion in lower montane forests of the Sierra Nevada (USA) on streamflow. *PLOS ONE*, 11(8):e0161805.
- 6. **Bart RR**. 2016. A regional estimate of postfire streamflow change in California. *Water Resources Research*, 52, 1465-1478.
- 5. **Bart RR**, Hope AS. 2014. Inter-seasonal variability in baseflow recession curves: The role of aquifer antecedent storage in central California watersheds. *Journal of Hydrology*, 519, 205-213.
- 4. Hope AS, **Bart RR**. 2012. Synthetic monthly flow duration curves for the Cape Floristic Region, South Africa. *Water SA*, 38(2), 191-200.
- 3. Hope AS, **Bart RR**. 2012. Evaluation of a regionalization approach for daily flow duration curves in central and southern California watersheds. *Journal of the American Water Resources Association (JAWRA)*, 48(1), 123-133.
- 2. Hope AS, Albers N, **Bart RR**. 2012. Characterizing post-fire recovery of fynbos vegetation in the Western Cape Region of South Africa using MODIS data. *International Journal of Remote Sensing*, 33(4), 979-999.
- 1. **Bart RR**, Hope AS. 2010. Streamflow response to fire in large catchments of a Mediterranean-climate region using paired-catchment experiments. *Journal of Hydrology*, 388, 370-378.

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# Teaching

## <u>Instructor</u> (number of sections in parentheses)

2014	<b>GEOG 101</b>	Physical	Geography,	Mesa	College (2)

2014 GEOG 120 Elements of Physical Geography, Cuyamaca College (1)

2012 GEOG 100 Introduction to Geography: Physical Elements, Southwestern College (1)

2010, 2011 GEOG 574 Water Resources, San Diego State University (2)

#### **Guest Class Lectures**

2016	ESM 237	Climate Change	Impacts a	nd Adar	otation I	<b>JCSB</b>
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ESM 232 Environmental Modeling, UCSB
 GEOG 409 Global Climate Change, SDSU

2007, 2012 GEOG 511 Hydrology and Global Environmental Change, SDSU

#### **Awards**

- 2012 McFarland Geography Scholarship (\$5030)
- 2012 Norma Sullivan Memorial Endowed Scholarship (\$800)
- 2011 McFarland Geography Scholarship (\$4200)
- 2007 Ned H. Greenwood Award (\$500)
- 2006 Alvena Storm Memorial Scholarship (\$750)

#### **Presentations**

#### **Professional Conferences**

- 2017 **Bart RR**, Tague C, Kennedy M, Hanan E. A Coupled Model for Simulating Future Wildfire Regimes in the Western U.S. *American Geophysical Union Fall Meeting*. New Orleans, Louisiana. December 2017.
- 2017 Hanan E, Tague C, **Bart RR**, Kennedy M, Abatzoglou J, Kolden C, Adam J. Effects of fire suppression under a changing climate in Pacific Northwest mixed-pine forests. *American Geophysical Union Fall Meeting*. New Orleans, Louisiana. December 2017.
- 2017 Tague CL, Burke W, Bart RR, Turpin E, Wood T, Gordon D. Communicating why land surface heterogeneity matters. *American Geophysical Union Fall Meeting*. New Orleans, Louisiana. December 2017.
- Bart RR, Tague C, Kennedy M, Hanan E. Development of a coupled model for investigating the effects of climate and forest management on wildfire regimes in the western U.S. *Columbia University Initiative on Extreme Weather and Climate: Fire Prediction Across Scale*. New York, New York. October 2017.
- 2017 Hanan E, Tague C, **Bart RR**, Kennedy M, Kolden C, Abatzoglou J, Adam J. Factors driving fire spread under a changing climate in Pacific Northwest mixed-pine forests. *Columbia University Initiative on Extreme Weather and Climate: Fire Prediction Across Scale*. New York, New York. October 2017.
- Tague CL, Moritz MA, **Bart RR**, Hanan EJ. Why subsurface features matter for managing forests, water and fire in the face of increasing drought frequency and severity. *AGU Chapman Conference on Extreme Climate Event Impacts on Aquatic Biogeochemical Cycles and Fluxes*. San Juan, Puerto Rico. January 2017.
- 2016 **Bart RR**, Tague C, Kennedy M, McKenzie D. Integrating fire effects into an ecohydrologic model for simulating fire regimes. *American Geophysical Union Fall Meeting*. San Francisco, California. December 2016.

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- 2016 Kennedy M, McKenzie D, Tague C, **Bart RR**. Ecohydrological projections of fire regimes: Balancing uncertainty and complexity to integrate cross-disciplinary simulation systems. *American Geophysical Union Fall Meeting*. San Francisco, California. December 2016.
- 2016 Tague C, Moritz M, Bart RR, Turpin E. Seeing the water in the trees: Challenges in estimating the impact of fuel treatments and fire on hydrology. CUAHSI Biennial Symposium. Shepherdstown, West Virginia. July 2016.
- 2015 **Bart RR**, Anderson S, Moritz M, Plantinga A, Tague C. An Integrated Model for Identifying Linkages Between the Management of Fuel Treatments, Fire and Ecosystem Services. *American Geophysical Union Fall Meeting*. San Francisco, California. December 2015.
- 2015 Tague C, Moritz M, **Bart RR**, Hanan E, Choate J, Kennedy M. Modeling the complex interactions among wildfire, fuel treatments and hydrology. *10th EARSeL Forest Fire Special Interest Group Workshop*. Limassol, Cyprus. November 2015.
- 2014 Baguskas S, **Bart RR**, Molinari N, Tague C, Moritz M. Potential effects of tree-to-shrub type conversion on streamflow in California's Sierra Nevada. *American Geophysical Union Fall Meeting*. San Francisco, California. December 2014.
- 2014 **Bart RR**. A Regional-Scale Estimate of Annual Streamflow Response to Fire in California. *American Geophysical Union Fall Meeting*. San Francisco, California. December 2014.
- 2014 Baguskas S, **Bart RR**, Molinari N, Tague C, Moritz M. Potential effects of tree-to-shrub type conversion on streamflow in California's Sierra Nevada. *Critical Zone Observatory (CZO) All Hands Meeting*. Fish Camp, California. September 2014.
- 2013 **Bart RR**. A Mixed Modeling Approach for Combining Post-Fire Streamflow and Erosion Change Results. *AGU Chapman Conference on Synthesizing Empirical Results to Improve Predictions of Post-wildfire Runoff and Erosion Response*. Estes Park, Colorado. August 2013.
- **Bart RR**. Fire effects on river flow recession rates in central California watersheds. *Association of American Geographers Annual Meeting*. Los Angeles, California. April 2013.
- 2012 **Bart RR**, Hope A. Effects of antecedent storage on inter-seasonal recession curve variability. *American Geophysical Union Fall Meeting*. San Francisco, California. December 2012.
- Hope A, **Bart RR**. Hydrologic significance of vegetation in Mediterranean-type climate regions. International Journal of Arts & Sciences Annual Conference. Aix-En-Provence, France. May 2012.
- 2012 **Bart RR**, Hope A. Seasonal controls on streamflow recession curves in southern California. *Association of American Geographers Annual Meeting*. New York, New York, February 2012.
- 2011 **Bart RR**, Hope A. Application of a meta-analytic technique for assessing the effects of fire on river flows in southern California. *Association of American Geographers Annual Meeting*. Seattle, Washington. April 2011.
- 2011 **Bart RR**. Meta-analysis in hydrology: an application for land-cover change experiments. *San Diego State University Student Research Symposium*, San Diego, California. March 2011.
- Hawtree D, Hope A, **Bart RR**. A comparison of IHACRES ensemble streamflow predictions in California's Mediterranean climate region. *European Geosciences Union General Assembly*, Vienna, Austria. May 2010.
- Hope A, Albers N, **Bart RR**. Monitoring post-fire recovery of shrublands in Mediterranean-type ecosystems using MODIS and TM/ETM+ data. *European Geosciences Union General Assembly*, Vienna, Austria. May 2010.
- 2009 Hope A, **Bart RR**, Albers N, Stow D. Resilience of Watershed Response to Land Cover/ Land Use Change in Mediterranean Climate Regions. *Association of Pacific Coast Geographers Annual Meeting*, San Diego, California. October 2009.
- 2009 Hope A, **Bart RR**, Fitch D, Hawtree D, Burvall A, Albers N, Stow D. Effects of Land-Cover Variability on River Flows in Mediterranean-Type Ecosystems. *HydroEco'* 2009 Conference, Vienna, Austria. April 2009.

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- 2008 **Bart RR**, Hope A, Hawtree D. Application of Existing Streamflow Gauge Networks and Remote Sensing for Use in Paired Watershed Experiments. *American Geophysical Union Fall Meeting*. San Francisco, California. December 2008.
- 2008 **Bart RR**. From Process Models to Paired Catchments. Workshop on Prediction of River Flow in Ungauged Catchments and Response to Land-Cover Land-Use Change in Mediterranean Climate Regions, Stellenbosch, South Africa. March 2008.
- 2007 **Bart RR**, Hope A. Impact of Fire on Streamflow in Southern California Watersheds. *American Geophysical Union Fall Meeting*. San Francisco, California. December 2007.
- Hope A, Burvall A, Hawtree D, Clark R, **Bart RR**. Partitioning river flow data to better understand and characterize uncertainties in hydrological modelling. *International Union of Geodesy and Geophysics Conference*. Perugia, Italy. July 2007.

#### Invited Colloquia

- 2015 **Bart RR**. River Flow Response to Fire in California. SDSU Geography Department Colloquia Series, San Diego, California. April 2015.
- 2015 **Bart RR**. Investigating the Effect of Type-Conversion on Streamflow in the Sierra Nevada. UCSB Biogeosciences (BGS) Seminar Series, Santa Barbara, California. April 2015.
- 2008 **Bart RR**. From Process Models to Paired Catchments. ARC-ISCW Hydrology Seminar, Agricultural Research Council, Pretoria, South Africa. March 2008.

## Manuscript Referee

AGU Geophysical Monograph Series
Ecohydrology
Ecological Processes
Hydrological Processes
Journal of the American Water Resources Association
Journal of Hydrology (3)
Nature Communications
Science
Water Resources Research (2)
Water

#### **Professional Affiliations**

American Geophysical Union Association of American Geographers

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