

## ROBERT STABLER WEBB

Director, Earth System Research Laboratory and Physical Sciences Division  
Oceanic and Atmospheric Research National Oceanic and Atmospheric Administration  
325 Broadway (303) 497- 5942  
Boulder, CO USA 80305-3328 Robert.S.Webb@NOAA.gov

### **EDUCATION**

1990 **Ph.D.** Department of Geological Sciences, Brown University  
1985 **M.Sc.** Department of Geological Sciences, Brown University  
1981 **A.B.** Department of Earth Sciences, Dartmouth College

### **PROFESSIONAL APPOINTMENTS**

<b>Director, NOAA Earth System Research Laboratory</b>	2017 – Present Boulder, CO
<b>Director, Physical Sciences Division</b> NOAA Earth System Research Laboratory	2014 – Present Boulder, CO
<b>Chief, Climate Analysis Branch</b> NOAA Earth System Research Laboratory, Physical Sciences Division	2005 – 2014 Boulder, CO
<b>Physical Scientist</b> NOAA Climate Diagnostic Center	1999 – 2005 Boulder, CO
<b>Physical Scientist</b> NOAA National Geophysical Data Center Paleoclimatology Program	1992 – 1999 Boulder, CO
<b>National Research Council Research Fellow</b> NASA Goddard Institute for Space Studies	1990 – 92 New York, NY

### **PEER-REVIEW PUBLICATIONS OVER LAST 10 YEARS**

Kilbourne, K. H., T. M. Quinn, R. Webb, T. Guilderson, J. Nyberg, and A. Winter (2008), Paleoclimate proxy perspective on Caribbean climate since the year 1751: Evidence of cooler temperatures and multidecadal variability, *Paleoceanography*, 23, PA3220, doi:10.1029/2008PA001598

Lowrey, J.L., Ray, A.J., Webb, R.S. (2009). Factors influencing the use of climate information by Colorado municipal water managers. *Climate Research*, 40, 103–119, doi: 10.3354/cr00827

Shin, S.I., Sardeshmukh, P.D., and R.S. Webb (2010). Optimal Sea Surface Temperature forcing of North American Drought. *Journal of Climate*. DOI: 10.1175/2010JCLI3360.1

Kilbourne, K. H., T. M. Quinn, R. Webb, T. Guilderson, J. Nyberg, and A. Winter (2010), Coral windows onto seasonal climate variability in the northern Caribbean since 1479, *Geochem. Geophys. Geosyst.*, 11, Q10006, doi:10.1029/2010GC003171.

White, A., Colman, B., Carter, G., Ralph, F. M., Webb, R. S., Bandon, D. G., King, C. W., Neiman, P. J., Gottas, D. J., et al. (2012). NOAA's rapid response to the Howard A. Hanson Dam flood risk management crisis. *Bull. Amer. Meteor. Soc.*, 93, 189-207. doi:10.1175/BAMS-D-11-00103.1

McAfee, S. A., J. L. Russell, and R. S. Webb (2012). Influence of bias correction on simulated landcover changes, *Geophys. Res. Lett.*, 39, L16702, doi:10.1029/2012GL052808.

Hoerling, MP, JK Eischeid, XW Quan, HF Diaz, RS Webb, RM Dole, and D Easterling (2012). Is a Transition to Semi-Permanent Drought Conditions Imminent in the US Great Plains? *J Climate* 25 (24) 8380-8386.

Vano, JA, B Udall, DR Cayan, JT Overpeck, LD Brekke, T Das, HC Hartmann, HG Hidalgo, MP Hoerling, GJ McCabe, K Morino, RS Webb, K Werner, and DP Lettenmaier (2013). Understanding Uncertainties in Future Colorado River Streamflow. *Bull. Amer. Meteor. Soc.* 95 (1) 59-78.

- Dole, R, M. Hoerling, A Kumar, J Eischeid, J Perlwitz, XW Quan, G. Kiladis, R. Webb, D. Murray, M. Chen, K. Wolter and T. Zhang, 2013: The Making of An Extreme Event: Putting the Pieces Together, *Bull. Amer. Meteor. Soc.* **95** (3) 427-440.
- Webb RS, J Jasperse, P Rutten and FM Ralph (2014). Environmental Intelligence to support decision-making in California's Russian River Basin: A case study for wine, fish, water management, and the prediction of hydrologic events. *US CLIVAR Variations*, **12** (4) 8-12.
- Ray, AJ, and RS Webb (2016). Understanding the user context: decision calendars as frameworks for linking climate to policy, planning and decision-making. P 27-50 in: *Climate in Context: Lessons learned from the RISA Program*, A Parris et al., eds. Wiley & Sons.
- Jacox, M. G., M. A. Alexander, N. J. Mantua, J. D. Scott, G. Hervieux, R. S. Webb and F. E. Werner (2018) Forcing of multiyear extreme ocean temperatures that impacted California Current living marine resources in 2016 [in "Explaining Extreme Events of 2016 from a Climate Perspective"]. *Bull. Amer. Meteor. Soc.*, **99** (1), S27-S33, doi:10.1175/BAMS-D-17-0119.1.
- Webb, RS and FE Werner (2018). Explaining Extreme Ocean Conditions Impacting Living Marine Resources [in "Explaining Extreme Events of 2016 from a Climate Perspective"]. *Bull. Amer. Meteor. Soc.*, **99** (1), S7-10, doi.org/10.1175/BAMS-D-17-0265.1
- Webb, RS (2018). Wisdom, Climate, and Water Resources. P. 197-213 in: *Our Warming Planet Topics in Climate Dynamics*, C Rosenzweig, D Rind, A Lacis, and D Peters, Eds., Lectures in Climate Change: Volume 1. World Scientific, doi:10.1142/9789813148796\_0009
- Dole, RM, JR Spackman, M Newman, GP Compo, CA Smith, LM Harten, JJ Barsugli, RS Webb, et al. (2018). Advancing Science and Services during the 2015-16 El Niño: The NOAA El Niño Rapid Response Field Campaign, *Bull. Amer. Meteor. Soc.*, doi:10.1175/BAMS-D-16-0219.1

### **FIVE RELEVANT SCIENTIFIC REPORTS**

- Brekke, L.D., J.E. Kiang, J.R. Olsen, R.S. Pulwarty, D.A. Raff, D.P. Turnipseed, R.S. Webb, and K.D. White. 2009. Climate change and water resources management—A Federal perspective. *U.S. Geological Survey Circular 1331*. Reston, VA: U.S. Geological Survey.
- Central Valley Flood Protection Plan—Climate-Change Scope Definition Work Group Summary Report: California Department of Water Resources Flood Safe Report (2012).
- Hoerling, M., Eischeid, J., R.S. Webb (2013) Understanding and Explaining Climate Extremes in the Missouri River Basin Associated with the 2011 Flooding.
- Pegion, K., and R.S. Webb (2014) Seasonal Precipitation Forecasts Over the Missouri River Basin - An assessment of operational and experimental forecast system skill and reliability.
- Webb, R. S. and F. E. Werner (2016). Workshop Report: Ecosystem Tipping Points in the North Pacific: Identifying Thresholds in Response to Climate Change and Potential Management Strategies