

Marcos Robles
Conservation Scientist

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EDUCATION

Master of Science, Ecology, 1995, Colorado State University, Fort Collins, CO

Bachelor of Arts, Environmental Science, 1993, University of California at Berkeley, Berkeley, CA

EXPERIENCE

Aug 2006 – present: Conservation Scientist, The Nature Conservancy, Tucson AZ

Current role is to develop scientific knowledge so that conservation practitioners and land/water managers can sustain natural ecosystem resilience in a changing environment. Current projects include: climate change and wildfire impacts on river flows; climate change, drought and restoration effects on forest carbon. Past projects include: conservation priorities to guide transportation and renewable energy planning and mitigation; drought effects on grassland resilience; forest restoration and human water demand effects on river flow; Southwest Climate Change Assessment; ecoregional conservation geodatabase and map for the western United States and northwestern Mexico.

Jan 2005 – Jul 2006: Project Manager, NatureServe, Fort Collins CO

Developed conservation planning framework, facilitated stakeholder workshops and completed a Seamless Network of Protected Areas report to initiate landscape-scale partnerships between the National Park Service (NPS) and management agencies in neighboring jurisdictions in the southeastern United States.

Nov 2000 – Dec 2004: Senior Conservation Database Specialist, NatureServe, Arlington VA

Completed scientific analyses using comprehensive information of North American species biodiversity. Projects included: natural resource assessments of several National Parks; an analysis of at-risk species on private forest lands; provision of federally listed species data to the pesticide industry.

Sept 1995 – Feb 1999: Conservation Volunteer, United States Peace Corps, Guatemala

Promoted agroforestry and soil conservation practices to subsistence farmers and completed a preliminary inventory of tree, shrub, epiphyte and vine species in a sub-montane cloud forest threatened by slash and burn agriculture.

July 1994 – Feb 1997: Graduate Research Assistant, Colorado State University, Fort Collins CO

Completed analyses and published scientific articles quantifying changes in soil organic matter resulting from conservation management of former wheat agriculture fields in southeastern Wyoming.

PUBLICATIONS

- Robles MD, Turner DS, Haney JA. 2017. A century of changing flows: Forest management changed flow magnitudes and warming advanced the timing of flow in a southwestern US river. *PLoS ONE* 12(11): e0187875. <https://doi.org/10.1371/journal.pone.0187875>.
- Demaria EMC, Dominguez F, Hu H, von Glinski G, Robles M, Skindlov J, and Walter J. 2017. Observed hydrologic impacts of landfalling atmospheric rivers in the Salt and Verde river basins of Arizona, United States. *Water Resources Research*, 53. <https://doi.org/10.1002/2017WR020778>.
- Bodner GS and Robles MD. 2017. Enduring a decade of drought: Patterns and drivers of vegetation change in a semi-arid grassland. *Journal of Arid Environments* 136: 1-14. <https://doi.org/10.1016/j.jaridenv.2016.09.002>.
- Robles MD, Marshall RM, O'Donnell F, Smith EB, Haney JA, Gori DF. 2014. Effects of Climate Variability and Accelerated Forest Thinning on Watershed-Scale Runoff in Southwestern USA Ponderosa Pine Forests. *PLoS ONE* 9(10): e111092. <https://doi.org/10.1371/journal.pone.0111092>.
- Marshall RM, Robles MD, Majka DR, Haney JA. 2010. Sustainable Water Management in the Southwestern United States: Reality or Rhetoric? *PLoS ONE* 5(7): e11687. <https://doi.org/10.1371/journal.pone.0011687>.
- Robles MD, Flather CH, Stein SM, Nelson MD, and Cutko A. 2008. The geography of private forests that support at-risk species in the conterminous United States. *Frontiers in Ecology and the Environment* 6(6): 301-307.
- Robles MD and Burke IC. 1998. Soil organic matter recovery on Conservation Reserve Program fields in Southeastern Wyoming. *Soil Science Society of America Journal* 62: 725-730.
- Robles MD and Burke IC. 1997. Legume, grass, and Conservation Reserve Program effects on soil organic matter recovery. *Ecological Applications* 7(2): 345-357.
- Burke IC, Lauenroth WK, Vinton MA, Kelly RH, Epstein HE, Robles MD, Murphy KL, and Gill RA. 1997. Plant-Soil interactions in grasslands. *Biogeochemistry* 42: 121-143.
- Robles M and Chapin FS III. 1995. Comparison of the influence of two exotic species on ecosystem processes in the Berkeley Hills. *Madroño* 42(3): 349-357.

SCIENTIFIC REPORTS

- Robles MD and Enquist C. 2010. Managing changing landscapes in the Southwestern United States. The Nature Conservancy. Tucson, Arizona. 26 pp.
- Robles MD, Eckert GE, and Mehrhoff L. 2007. Seamless network of protected areas in the southeastern United States: Opportunities for partnerships in biodiversity conservation, invasive species control, and recreation. NatureServe, Arlington, Virginia.
- Robles MD, Madden CJ, Lara MR, Jones DL, and Butler MJ. 2005. Condition of the natural resources of Florida Bay, Everglades National Park: A state of the parks technical report. National Parks Conservation Association, Washington, D.C.
- Robles MD, Armentano T, DiResta D, Lara MR, Jones DL, Madden CJ, and Butler MJ. 2005. Condition of the natural resources of Biscayne National Park: A state of the parks technical report. National Parks Conservation Association, Washington, D.C.
- Robles MD, White RD, Petranka JW, Smith RK, and Capuano NA. 2003. Condition of the natural resources of Great Smoky Mountains National Park: A state of the parks technical report. National Parks Conservation Association, Washington, D.C.