

Lydia Bleifuss

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EDUCATION

Master of Environmental Science and Management (Expected June 2020)

Water Resources Management Specialization | Sustainable Water Markets (SWM) Fellow

Bren School of Environmental Science & Management – University of California, Santa Barbara (UCSB)

Employment: Water Supply & Demand Teaching Assistant, Environmental Studies Department (9/19-12/19)

Bachelor of Arts in Environmental Studies | Surface Water Conflicts Concentration (May 2016)

Lewis & Clark College – Portland, OR

Thesis: “Hydropower or Private Power: River Development in the Chilean Landscape” | Research Grants: \$5,400

MASTER’S WATER RESOURCES GROUP PROJECT

Climate Change Impacts to City of Santa Barbara Watershed Supplies (4/19–Present)

Role: Project Manager | Client: City of Santa Barbara Public Works Department

- Calibrate hydrologic model (ArcSWAT) to predict Santa Ynez River Watershed streamflow, specifically considering drought cycles and fire events, and analyze streamflow under 5 climate scenarios out to 2050.
- Manage a team of 4 including long-term project scoping and daily task delegation, develop positive communication with team and client to align deliverable expectations, and lead high quality analysis.

WATER RESOURCES EXPERIENCE

Groundwater Graduate Researcher–University of California, Santa Barbara. Santa Barbara, CA (1/20–Present)

- Gather groundwater monitoring data for 17 western states, synthesize with reproducible code in RStudio and generate ArcMap shapefiles to spatially contrast well levels with localized groundwater policy boundaries.
- Secured funding from Environmental Justice Fellowship to create research brief emphasizing groundwater access equity concerns as they relate to local policy implementation in disadvantaged communities.

Matilija Dam Ecosystem Restoration Researcher–Resources Legacy Fund. Ventura, CA (6/19–9/19)

- Analyzed surface and groundwater connections post-wildfire in the Ventura River Watershed utilizing historical data sets on acres burned, streamflow, well levels, and precipitation from 1950–2019.
- Distilled insights gathered from 16 interviews conducted with 24 experts in the field and produced 18-page report and 2-page brief on analysis complete with 4 ArcGIS maps and graphics generated with RStudio.

Watershed Program Volunteer–Central Colorado Conservancy. Salida, CO (9/17–7/18)

- Co-managed Upper Arkansas Basin water quality program; tested 7 Little Arkansas River sites biannually.
- Managed lab data considering 22 quality criteria, synthesized findings for the Watershed Restoration Specialist, and identified 3 additional Arkansas River tributaries to expand monitoring network.

Wild Rivers Program Intern–WildEarth Guardians. Denver, CO (6/17–9/17)

- Facilitated water banking dialogues with 4 San Luis Valley irrigators and senior water rights holders.
- Compiled Clean Water Act 303(d) listed section information for the Rio Grande and secured 2 University of Denver faculty members to advise graduate students on South Platte River quality monitoring.
- Coordinated logistics for 3 multi-day river trips to build relationships with donors and community members.

Waterway Researcher–Waterkeeper Alliance. Missoula, MT (Remote) (9/15–5/16)

- Co-wrote 14-page funding proposal regarding historical Southwestern U.S. water allocation, intersection of water quality and quantity in desert regions, and implications of climate change for vulnerable waterways.
- Investigated 19 river basins in South America compromised by pollution or over-allocation; condensed river-specific hazard information into interactive Google map to aid strategic programmatic development.

ADDITIONAL WATER EXPERIENCE

Colorado River Basin Data Coordinator – Martin & McCoy LLC, Tucson, AZ (Remote) (4/19–6/19)

River Equipment Specialist – Colorado Kayak Supply, Buena Vista, CO (5/17–9/18)

International Relations Coordinator – Futaleufú Riverkeeper, Futaleufú, Chile (Remote) (5/16–2/18)

River Guide, Trip Leader – Wilderness Aware Rafting, Buena Vista, CO (Seasonally May–August, 5/13–9/16)

SKILLS & PRESENTATIONS

Technical: RStudio; ArcGIS; ArcSWAT; Basins; WordPress; Microsoft Office (Word, Excel, PowerPoint, Access)

Presentations: *Dam Removal*, CA Water Policy Conf.; *Climate Change & Water Supply*, Sustainable Water Markets Conf.; *Modeling Santa Ynez River Basin*, Rincon Consultants; *Groundwater*, UCSB Env. Studies (all 2019–2020)