# SIMON J. MARKS

My background has inspired a desire to contribute toward natural resource management that strikes a careful balance between satisfying the anthropogenic and environmental resource requirements of today with those of the future. With my budding skills in research, hydrology, and statistical analysis, I am applying myself in water resource science as a graduate student. Taking great pride in my work, I hold myself, peers, and collaborators to high standards, while also exuding a calmness to minimize unnecessary stress.



# **EDUCATION**

current 2019

#### M.S., Environmental Sciences and Management

California Polytechnic State University

San Luis Obispo, CA

- · Thesis: Estimating evapotranspiration of a mountain meadow encroached by conifers using sap flow measurements
- · Expected June 2021

2019 2015

#### B.S., Environmental Management and Protection (minor statistics)

California Polytechnic State University

San Luis Obispo, CA

- · Concentration: Watershed management and hydrology
- · Summa cum laude



# RESEARCH EXPERIENCE

current 2019

#### **Graduate Research Assistant**

Dr. Chris Surfleet's Lab

- California Polytechnic State University
- · Primarily working with sap flow field data to quantify evapotranspiration of a conifer encroached meadow near Chester, CA
- · Managed maintanance of field instruments at meadow restoration study sites and developed R scripts designed to streamline compilation and temporal aggregation of field data
- · Performed regression analysis (MLR) to study hydrologic and suspended sediment effects of forest roads at the Capar Creek Experimental Watershed

2018 2018

#### Summer Undergraduate Researcher

Dr. Chris Surfleet's Lab

- California Polytechnic State University
- · Completed sub-surface soil sampling, performed soil particle size distribution lab analysis, and computed soil hydraulic properties in support of meadow restoration research- presented results with a poster at an on campus research symposium to conclude the summer
- · Cleaned and analyzed storm event peak flow and sediment discharge data collected at the Caspar Creek Experimental Watershed needed for distributed hydrology soil vegetation model (DHSVM) development

#### CONTACT

- **S**imarks@calpoly.edu
- github.com/simarks
- in linkedin.com/in/sjmarks97

#### RELEVANT SKILLS

R
ArcMap
Microsoft Excel
SAS
LaTeX
Git

The source code used to create this resume is available on github.com/sjmarks/datadriven\_cv.

Last updated on 2021-02-14.



### INDUSTRY EXPERIENCE

2017 2017

#### Natural Resource Damage Assessment Intern

California Department of Fish and Wildlife

Sacramento, CA

- · Worked within the Office of Spill Prevention and Response on tasks related to injury assessment and environmental sampling including development of environmental reports, field documentation, checklists, and operating procedures
- · Created an instructional 'how to' video detailing field procedures when collecting environmental samples following a deleterious material spill event



# ♣☐ TEACHING EXPERIENCE

current 2019

#### Watershed Processes and Management

Cal Poly NRES Dept.

San Luis Obispo, CA

- TA and lectured portions of the course laboratory
- · Covered (all field based) streamflow measurement, stream channel and riparian assessment, road erosion hazard rating, and water quality measurement

2018 2016

#### Supplemental Workshops in Science Facilitator

Cal Poly Student Academic Services

San Luis Obispo, CA

- · Facilitated medium to large groups of undergraduate students, providing supplemental instruction in biology and chemistry university
- · Promoted a sense of community encouraging communication and increasing collaboration between students



#### ACADEMIC PUBLICATIONS

2020 2020 Hydrologic and suspended sediment effects of forest roads using statistical analysis and DHSVM modelling

Under-Review (copy available upon request.)

· Authored with Chris Surfleet of the California Polytechnic State University San Luis Obispo NRES Dept.

#### AWARDS AND HONORS

2019

**Hull Graduate Assistantship** 

2019

Cal Poly San Luis Obispo Dean's List

2015 2018

Association of Environmental Professionals (AEP) Scholarship