

# Quinlan Smith

(760) 703-9693 | quinlan\_smith@bren.ucsb.edu | San Diego, CA | [LinkedIn](#)

## EDUCATION

---

**Master of Environmental Science and Management**, 3.95 GPA (June 2022)

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

Specialization: Conservation Planning | Focus: Eco-Entrepreneurship

Highlighted Courses: Conservation Planning, Landscape Ecology, Population Ecology, Western Water Policy, Remote Sensing, Advanced Data Analysis, Environmental Modeling, Financial Management & Accounting

**Associate in Science, Advanced Geographic Information Systems**, 3.873 GPA (May 2020)

**Palomar College**, San Marcos, CA

Honors/Awards: Certificate of Achievement in Advance Geographic Information Systems

**Bachelor of Arts in Film and Electronic Arts**, Magna Cum Laude, 3.926 GPA (June 2013)

**California State University, Long Beach**

## MASTER'S GROUP PROJECT

---

**Post Fire/Debris Flow Sediment Delivery and Systems Response. Using Science to Better Manage Sediment Accumulation/Redistribution in Santa Barbara County Coastal Watersheds (4/21–6/22)**

**Role**: Data Manager | **Client**: South Coast Habitat Restoration, Carpinteria, CA

- Predicted post-fire debris flow probability and magnitude utilizing spatially-explicit empirical models to make comparisons between moderate and severe conditions in three Montecito-area watersheds
- Developed sediment management recommendations that prioritized solutions with ecological and socio-economic benefits using modeling and cost-benefit analysis

## FIELD AND RESEARCH EXPERIENCE

---

**Wetlands Field and Lab Assistant (9/19–4/20)**

**San Onofre Nuclear Generating Station (SONGS) Mitigation Monitoring Program (UCSB)**, Carlsbad, CA

- Produced fish count using seining and enclosure trap procedures and collected marine invertebrate counts using quadrat and mud-core sampling methods to evaluate ecological function mitigation standards
- Identified collected invertebrate specimens utilizing microscopes and species identification keys
- Employed GNSS RTK technology to obtain positional and elevation data for water and air quality loggers, registered logger data onto project database using SQL protocols
- Utilized River Surveyor acoustic Doppler technology to measure discharge and bathymetric profiles of lagoon main channel to assess connectivity to the ocean
- Classified high resolution, multi-spectral drone imagery to measure vegetative coverage of lagoon with ArcGIS Pro for evaluation of vegetative coverage mitigation standards
- Produced visual reports of quantified class coverage for SONGS MMP Scientific Advisory Panel to analyze project standards, developed new protocols and file organization schemes for drone imagery

**Field and Lab Assistant (3/18–8/19, seasonally)**

**Pollinator Research (UC Cooperative Extensions, Agriculture and Natural Resources)**, San Diego, CA

- Produced data for instances of pollinator visitation on flowering plants in controlled research plots to evaluate pollinator use of horticultural plants
- Gathered pollen samples from lab-grown, pesticide-treated plants to determine the level of expression of chemical compounds potentially connected to colony collapse disorder in bees
- Utilized dichotomous keys to identify and catalog collected specimens for curation
- Entered data to Excel and provided logistical and manual support for planting/coordinating research plots

# Quinlan Smith

Page 2

## INTERNSHIP EXPERIENCE

---

### **Ecological Impact Assessment Intern – City of Santa Barbara Water Resources, (6/21–9/21)**

- Collaborated on a multidisciplinary team to conduct a comprehensive study of methodologies to assess the ecological impact of Santa Barbara, CA desalination operations on the local marine environment
- Produced a 70-page report including GIS figures that outlined the ecology off the coast of Santa Barbara and provided guidance to the city for assessing environmental impact of desalination

### **GIS Intern – Palomar College Arboretum, San Marcos, CA (3/18–5/18)**

- Geotagged individual plants within Palomar College's Arboretum using Collector for ArcGIS and recorded plant health, taxonomy, reproductive conditions, and attached photos
- Prepared and uploaded data to ArcGIS Online Map of the arboretum's collection for public release

## VOLUNTEER EXPERIENCE

---

### **Aquarium Volunteer – NOAA Southwest Fisheries Science Center, La Jolla, CA (2/18–2/19)**

- Prepared and supplied food to captive white abalone specimens
- Cleaned and maintained salt-water tanks
- Provided counts and measurements of juvenile abalone specimens spawned within the lab

### **Fishery Survey Volunteer – California Department of Fish and Wildlife, San Diego, CA (10/17–11/17)**

- Provided a count to estimate bluegill and large-mouth bass populations in Lake Murray, San Diego, CA
- Used electrofishing and netting methods to capture, record, and release fish safely

### **Lagoon Platoon Steward – San Elijo Lagoon Conservancy (The Nature Collective), Cardiff, CA (6/17–1/18)**

- Removed invasive species of plants such as European sea-rocket, Maltese star thistle, and mustard from California native restoration sites in the lagoon
- Collected blue-eyed grass, monkey flower, and other California native seeds for planting
- Germinated plants from seed and took part in large scale plantings of California natives at restoration sites

## PRESENTATIONS

---

Smith, Q. (2019). *Visualizing Flood Inundation Due to Sea Level Rise in the San Elijo Lagoon Using GIS*.

Presented at the 26th National Advanced Technological Education (ATE) Principal Investigators' Conference, Washington, D.C.

## SKILLS, AFFILIATIONS, & CERTIFICATIONS

---

**Computer:** esri ArcGIS Pro (ver 2.6) and ArcMap (ver 10.7), Proficient in R, Python, SQL, and Javascript programming languages, MS Office Suite (Word, PowerPoint, Excel), Adobe Suite (Photoshop, Illustrator, InDesign, Premiere, Acrobat Pro), Agisoft Metashape (PhotoScan) and related photogrammetric imagery processing software.

**Certifications:** FAA Part 107 licensed drone pilot (2019); Regional Occupational Program (ROP) certification in Graphic Design and Digital Videography

**Affiliations:** San Diego Mycological Society Member (2/20–Present)