

RYAN PEEK

I have worked in many rivers and aquatic systems in California, and continue to strive to find ways to apply research to conservation management. I am particularly interested in using a confluence of disciplines such as genomics, hydrology, ecology, and geomorphology to better understand current and future impacts to our freshwater ecosystems.

I am a strong advocate for open science, and education; and giving voices, training, and space for folks who support and foster a supportive community with diverse questions and views.



EDUCATION

2018
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2014

Ph.D., Ecology (with certificate in Conservation Management)

UC Davis

📍 Davis, CA

- Population genetics of a sentinel stream-breeding frog (*Rana boylei*)

2010
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2008

M.S., Biology

University of San Francisco

📍 San Francisco, CA

- Thesis: Landscape Genetics of Foothill Yellow-Legged Frogs (*Rana boylei*) in regulated and unregulated rivers: Assessing connectivity and genetic fragmentation

2002
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1998

B.S., Wildlife, Fish & Conservation Ecology

UC Davis

📍 Davis, CA

- Emphasis in Behavioral Ecology



SELECTED POSITIONS

2021
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2018

Post-doctoral Researcher

Center for Watershed Sciences

📍 UC Davis

- Data scientist and aquatic ecologist. Linking ecological indicators to functional flows in California river. Conservation genomics of threatened and endangered frogs in CA, NV, and AZ to inform conservation management.
- Analysis of floodplain foodwebs for salmon to better understand connectivity and seasonality for management.
- Research and functional flow analysis on how to link ecological bioassessment data with environmental flow management.

2011
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2002

Fish & Wildlife Biologist

Stillwater Sciences

📍 Davis CA

- Field and Project Manager, conducted research in aquatic, terrestrial, and riparian ecosystems. Assisted in the development of restoration, conservation, and management strategies in various watersheds throughout California and Oregon for amphibian and fisheries related projects.
- Extensive experience completing watershed analyses. Successfully worked independently and collaboratively on various projects including leading field crews, managing budgets, conducting meetings, analyzing data, and writing comprehensive reports.
- Watershed Experience: Alameda Creek (San Francisco Public Utilities Commission), Upper American River (Sacramento Municipal Utility District), South Fork Feather River (South Feather Water & Power), Yuba River (North, Middle, and South) (CH2MHill), Napa River and Floodplain (US Army Corp of Engineers), Santa Clara River (California State Coastal Conservancy), McKenzie River (Eugene Water and Electric Board), Upper Merced River (Merced Alliance), Butte Creek and West Branch Feather River (PG&E), McCloud and Pit Rivers (PG&E)

CONTACT

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🐦 [riverpeek](https://twitter.com/riverpeek)

🔗 github.com/ryanpeek

🔗 ryanpeek.org

🏠 [https://orcid.org/0000](https://orcid.org/0000-0002-9577-6885)

-0002-9577-6885

LANGUAGE SKILLS

R

Bash

Python

CSS

Javascript

OPEN SOURCE CONTRIBUTIONS

All projects available at github.com/ryanpeek/<name>

www.r4wrds.com: R course for water resources data science

{aggiedown}: R package for writing dissertations at UC Davis

R-DAVIS: grad course in data science and visualization




mapping-in-R-workshop: R short course for spatial/GIS topics

MORE INFO

See full CV at ryanpeek.org/cv for complete list of positions & publications.


Made w/ [pagedown](https://pagedown.net).

Source code:
github.com/ryanpeek/cv
Last updated on 2021-07-23.

- 2010
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2009
- Biological Science Technician**
USDA Forest Service, Pacific Southwest Research Station  Davis, CA
- Developed and designed website on ecology, river regulation and conservation of the foothill yellow-legged frog (*Rana boylei*), including GIS synthesis and development of a distribution map showing over 6,000 records from multiple sources (http://gis.fs.fed.us/psw/topics/wildlife/herp/rana_boylei/).
 - Conducted 1-D RHABSIM modeling and analysis. Coordinate field research, data collection, and writing.
- Research Assistant II**
UC Berkeley  Berkeley, CA
- As part of a California Energy Commission study of regulated flow effects on foothill yellow-legged frog (*Rana boylei*) breeding habitat, led field research crews for extensive field data collection.
 - Collaborated with Sarah Yarnell and Amy Lind on field methodology and integrating graduate research with the grant research.
- 2001
- Biological Science Technician**
National Park Service  Sequoia & Kings Canyon, CA
- Part of a 2-person backcountry crew working on a federally threatened Sierra/Mountain yellow-legged frog (*Rana sierrae*) conservation and restoration project during the initial year of the project.
 - This position involved extensive backpacking and hiking experience while living in remote and rugged terrain at 10,000-12,000 feet for multiple weeks at a time. Required the ability to work independently, efficiently, and safely.
 - Conducted amphibian surveys of mountain lakes and identified amphibian species in larval and adult stages, habitat assessment, data collection, and non-native fish removal.








SELECTED WRITING

- 2020
- [Drawing Boundaries with DNA to Improve Conservation](#)**
California Water Blog
- Story about using genetics to draw boundaries for conservation management
- 2019
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2015
- [The Aggie Brickyard. A Student Run Magazine](#)**
Co-Founder & Design Editor  UC Davis
- 2016
- [Cue the Frogs! Water signatures, environmental cues and climate change](#)**
California Water Blog
- Story about environmental cues for amphibians in rivers
- 2015
- [Time Lapse Photos Expose Nature in the Raw](#)**
California Water Blog
- Story about using game cameras to monitor the environment



SELECTED PUBLICATIONS

- 2021
- [Actinemys marmorata \(Northwestern Pond Turtle\) Feeding on Dicamptodon tenebrosus \(Coastal Giant Salamander\)](#)**
Northwestern Naturalist, 102 (3).
- Peek, R.A., S.J. Kupferberg, A.C., Catenazzi, P. Georgakakos, M. E. Power
- 2021
- [Flow regulation associated with decreased genetic health of a river-breeding frog species](#)**
Ecosphere, 12 (5).  DOI: 10.1002/ecs2.3496
- Peek, R.A., S.M. O'Rourke, M.R. Miller.

- 2020 | **Understanding community assembly rules in managed floodplain food-webs**
Ecosphere, 12 (2).  DOI: 10.1002/ecs2.3330
• Corline, Nicholas J., Ryan A. Peek, Jacob Montgomery, Jacob V.E. Katz and Carson A. Jeffres.
- 2020 | **A functional flows approach to selecting ecologically relevant flow metrics for environmental flow applications**
River Research and Applications, 36 (2), 318-324.  DOI: 10.1002/rra.3575
• Yarnell, S. M., Stein, E. D., Webb, J. A., Grantham, T., Lusardi, R. A., Zimmerman, J., Peek, R. A., Lane, B. A., Howard, J., & Sandoval-Solis, S.
- 2019 | **Hybridization between two sympatric ranid frog species in the northern Sierra Nevada**
Molecular Ecology, 28 (20), 4636–4647.  DOI: 10.1111/mec.15236
• Peek, R., M. Bedwell, S. O'Rourke, G. Wengert, C. Goldberg, M. Miller.
- 2016 | **Missing the boat on freshwater fish conservation in California.**
Conservation Letters 10(1), 77–85.  DOI: 10.1111/conl.12249
• Grantham, T., K. Fesenmeyer, R. Peek, E. Holmes, A. Bell, R. Quiñones, N. Santos, J. Howard, J. Viers, P. Moyle.



SERVICE & LEADERSHIP

- 2021 |
2015 | **Coordinator**
Davis R-Users Group
• <https://d-rug.github.io/>
- 2021 |
2016 | **Software & Data Carpentry Instructor**
Carpentries
• <https://carpentries.org/instructors/>
- 2021 |
2016 | **Data Lab Affiliate**
UC Davis Data Lab
• <https://datalab.ucdavis.edu/affiliated-students-and-postdocs/>
- 2021 |
2020 | **National Center for Ecological Analysis and Synthesis (NCEAS) workgroup**
Bay Delta Science Program
• Collaborative multi-agency and academic workgroup formed to focus on data synthesis of long-term trends in the San Francisco Estuary food webs critical to supporting multiple endemic fish species of conservation concern.
- 2020 |
2019 | **Center for Watershed Science Executive Committee**
UC Davis
• Liaison between researchers and academic faculty conducting research, representative for represents postdocs and non-academic senate researchers.