

# Dr. Kevan B. Moffett

## *Hydrology, Ecohydrology, and Landscape Dynamics Research Group*

School of the Environment and College of Arts and Sciences

Washington State University Vancouver

<https://labs.wsu.edu/ecohydrology/>

### **EDUCATION**

- 2004-2010 Ph.D., Environmental Earth System Science (Hydrogeology), *Stanford University*  
Dissertation: Groundwater-vegetation-atmosphere interactions in an intertidal salt marsh
- 1998-2002 B.S., Environmental Engineering, *Yale University*  
Thesis: Comprehensive watershed assessment using a new GIS methodology in the Croton Watershed, a portion of the New York City drinking water supply system

### **EXPERIENCE**

- 2015-now Assistant Professor of Environmental Hydrology, School of the Environment  
*Washington State University Vancouver*
- 2015- now Adjunct Assistant Professor of Hydrogeology, Department of Geological Sciences  
*The University of Texas at Austin*, Jackson School of Geosciences
- 2012-2014 Assistant Professor of Hydrogeology, Department of Geological Sciences  
*The University of Texas at Austin*, Jackson School of Geosciences
- 2010-2012 Postdoctoral Scholar, Dept. Environmental Earth System Science  
*Stanford University*, School of Earth Sciences
- 2004-2010 PhD student, Research Assistant, Stanford Graduate Fellow, and Teaching Assistant  
*Stanford University*, School of Earth Sciences, Dept. Environmental Earth System Science
- 2001-2004 Engineer, GIS Specialist, and Modeler for New York City drinking water supply projects  
*Malcolm Pirnie, Inc.*, White Plains, NY, environmental engineering consultants
- 2000 Forestry preservation and research summer volunteer  
*Fundación Jatun Sacha*, Ecuador
- 1998 Medical physics research summer intern  
*The Cleveland Clinic Foundation*, Cleveland, OH

### **AWARDS AND RECOGNITIONS**

- 2017 Early Career Publication Award, 2016, *Ecohydrology*, Highly Commended Paper "Alternative stable states of tidal marsh vegetation patterns and channel complexity" by Moffett and Gorelick (in top 4 of the year), Wiley
- 2016 Editor's Citation for Excellence in Reviewing, 2015, *Water Resources Research*, American Geophysical Union
- 2014 nominee, Packard Fellowship in Science and Engineering
- 2012 Outstanding Achievement in Mentoring, *Stanford University Earth Sciences*
- 2004-2007 Graduate Fellowship, *Stanford University*
- 1998 U.S. National team member, International Physics Olympiad

### **RESEARCH THEMES, GRANTS, AWARDS, AND MENTORING**

#### **Research Themes:**

- Urban Ecohydrology
- Intertidal Ecohydrology and Ecogeomorphology
- Post-wildfire Ecohydrology
- Biophysics of Plant-Water Interactions

#### **Research Grants and Projects:**

see list at: <https://labs.wsu.edu/ecohydrology/research/>

#### **Research Mentoring**

see list of current and former advisees at: <https://labs.wsu.edu/ecohydrology/people/>

#### **Research Group Student Grants and Awards**

see list at: <https://labs.wsu.edu/ecohydrology/awards/>

## **CURRENT COURSES TAUGHT**

- Every Fall: **Natural Resources and Natural Hazards (ES 102) [PSCI]**  
*Introductory undergraduate course for non-majors or pre-majors: Water, energy, earth, air, and biological resources and physical dynamics in the context of human use and the Earth System; introduction to these resources via examples from natural hazards, e.g., hurricanes, tornados, floods, droughts, wildfires, landslides, sinkholes, earthquakes, heat waves, and pest/disease outbreaks.*
- Odd year Springs: **Water and the Earth (GEO 315)**  
*Mid-level undergraduate course in the School of the Environment BS degree core curriculum: Earth's hydrologic cycle, precipitation, surface water, groundwater, introduction to water quality, and human water use and sustainability. Includes laboratory.*
- Senior Seminar (ES 491)**  
*Upper-level undergraduate seminar given by weekly invited speakers on a range of topics in Environmental Sciences and Health/Biomedical Sciences.*
- Even year Springs: **Advanced Environmental Hydrology (ES 577)** (including AMS connection)  
*Graduate-level survey of physical hydrology, aimed at any School of Environment or similar student needing a rigorous but broad background or refresher in hydrology, from introductory fluid mechanics to nonlinear hydrodynamics and hydrogeology. Principles, dynamics, interactions, and calculations of water flow in the environment (rivers, lakes, groundwater, soil moisture, atmospheric boundary layer).*
- Any term (F/S/Su) upon request:  
**Special Problems (ES 499)** [undergraduate]  
**Special Projects or Independent Study (ES 600)** [graduate]  
**Master's Research (ES 700)**  
**Doctoral Research (ES 800)**

## **SERVICE**

### **Professional and Scholarly Organization Affiliations:**

- member American Geophysical Union
- member Geological Society of America
- member Coastal & Estuarine Research Federation
- member Society of Wetland Scientists
- member American Society Of Limnology & Oceanography

### **Professional Service:**

Peer reviewer of grants for: National Science Foundation, NIWR-USGS, etc.  
Peer reviewer of journal articles for numerous journals in: hydrology, earth sciences, estuarine and coastal science, ecosystems, global change, meteorology, and remote sensing.  
University and departmental service on various committees.  
Service to students on numerous MS and PhD committees at WSU and other universities.

### **Outreach Activities and Projects**

see list at: <http://labs.wsu.edu/ecohydrology/edu-outreach/>

## **PUBLICATIONS**

see list at: <https://labs.wsu.edu/ecohydrology/publications/>

## **PRESENTATIONS**

see list at: <https://labs.wsu.edu/ecohydrology/presentations/>