

# BRIAN C CHAFFIN

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## EDUCATION

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- Ph.D.** 2014     **Oregon State University**, Corvallis, OR  
Geography, College of Earth, Ocean and Atmospheric Sciences  
Dissertation Title: *Reallocating Resources, Rebuilding Community: The Klamath Basin Restoration Agreements and the Emergence of Adaptive Governance*  
- *Geographic Information Science (GIScience) Graduate Certificate*  
- *Water Conflict Management and Transformation Graduate Certificate*
- M.S.** 2010     **University of Idaho**, Moscow, ID  
Environmental Science, Environmental Science Department  
Thesis Title: *Collaborative Watershed Groups in the Pacific Northwest: Group Metrics, Measures of Success, and Group Needs*
- B.S.** 2004     **University of Idaho**, Moscow, ID  
Resource, Recreation & Tourism, Department of Conservation Social Sciences

## RESEARCH & TEACHING INTERESTS

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U.S. water law & policy, adaptive water governance, adaptive management, environmental law, climate change mitigation & adaptation, environmental justice, political ecology, collaborative conservation, tribal & indigenous natural resource management, complex systems theory & analysis, ecological resilience, Panarchy theory, the American West

## PROFESSIONAL RESEARCH & TEACHING APPOINTMENTS

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- Assistant Professor of Water Policy & Governance** (2015-present)  
Department of Society & Conservation, W.A. Franke College of Forestry & Conservation  
University of Montana, Missoula, MT
- Postdoctoral Research Associate** (2014-2015)  
National Academies-National Research Council Research Associateship Program (NRC-RAP)  
National Risk Management Research Laboratory  
U.S. Environmental Protection Agency, Cincinnati, OH
- Lecturer**, Environmental Science (2013-2014)  
Environmental Science Department, University of Idaho, Moscow, ID
- Graduate Research Fellow/U.S. EPA STAR Fellow** (2011-2014)  
College of Earth, Ocean and Atmospheric Sciences  
Oregon State University, Corvallis, OR
- Teaching Assistant**, Geography (2010-2011)  
Geosciences Department, Oregon State University, Corvallis, OR
- Teaching Assistant**, Environmental Science (2008-2010)  
Environmental Science Department, University of Idaho, Moscow, ID
- Field Research Technician**, Snow Hydrology (2009)  
Department of Forest Resources, University of Idaho

## PEER-REVIEWED PUBLICATIONS

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- Chaffin, B.C.**, Floyd, T.M., Albro, S.A. 2019. Leadership in informal stormwater governance networks. *PLOS ONE* 14(10): e0222434. <https://doi.org/10.1371/journal.pone.0222434>
- Allen, C.R., Angeler, D.G., **Chaffin, B.C.**, Twidwell, D., and Garmestani, A.S. 2019. Resilience reconciled. *Nature Sustainability* 2: 898-900.
- Garmestani, A.S., Ruhl, J.B., **Chaffin, B.C.**, Craig, R.K., van Rijswick, H.F.M.W, Angeler, D.G., Folke, C., Gunderson, L.H., Twidwell, D., and Allen, C.R. 2019. Untapped capacity for resilience in environmental law. *Proceedings of the National Academy of Sciences* 116(40): 19899-19904.
- Jones, K. Abrams, J., Belote, T., Beltran, B., Brandt, J., Carter, N., Castro, A., **Chaffin, B.C.**, Metcalf, A., Roche-McNally, G., Wallen, K., and Williamson, M. 2019. The American West as a social-ecological region: Drivers, dynamics and implications for nested social-ecological systems. *Environmental Research Letters*. [Online] <https://iopscience.iop.org/article/10.1088/1748-9326/ab4562>
- Wyborn, C., Datta, A., Montana, J., Ryan, M., Leith, P., **Chaffin, B.C.**, Miller, C. and van Kerkhoff, L. 2019. Co-Producing Sustainability: Reordering the Governance of Science, Policy, and Practice. *Annual Review of Environment and Resources* 44: 319-346.
- Higuera, P.E., Metcalf, A.L., Miller, C., Buma, B., McWethy, D.B., Metcalf, E.C., Ratajczak, Z., Nelson, C.R., **Chaffin, B.C.**, Stedman, R.C. and McCaffrey, S. 2019. Integrating Subjective and Objective Dimensions of Resilience in Fire-Prone Landscapes. *BioScience* 69(5): 379-388.
- Chaffin, B.C.**, and M. Scown. 2018. Social-ecological resilience and geomorphic systems. *Geomorphology* 305: 221-230.
- Cosens, B.A., L. Gunderson, and **B.C. Chaffin**. 2018. Introduction to the special feature Practicing Panarchy: Assessing legal flexibility, ecological resilience, and adaptive governance in regional water systems experiencing rapid environmental change. *Ecology and Society* 23(1): 4. <https://www.ecologyandsociety.org/vol23/iss1/art4/>
- Allen, C.R., H. Birge, D.G. Angeler, C.A. Arnold, **B.C. Chaffin**, D.A. DeCaro, A.S. Garmestani, and L.H. Gunderson. 2018. Quantifying uncertainty and trade-offs in resilience assessments. *Ecology and Society* 23(1): 3. <https://www.ecologyandsociety.org/vol23/iss1/art3/>
- Gosnell, H., **B.C. Chaffin**, J.B. Ruhl, C.A. Arnold, R.K. Craig, M.H. Benson, and A. Devenish. 2017. Transforming (perceived) rigidity in environmental law through adaptive governance: a case of Endangered Species Act implementation. *Ecology and Society* 22(4): 42. <https://www.ecologyandsociety.org/vol22/iss4/art42/>
- Chuang, W.C., A. Garmestani, T.N. Eason, T.L. Spanbauer, H.B. Fried-Petersen, C.P. Roberts, S.M. Sundstrom, J.L. Burnett, D.G. Angeler, **B.C. Chaffin**, and L. Gunderson. 2018. Enhancing quantitative approaches for assessing community resilience. *Journal of Environmental Management* 213: 353-362.
- Scown, M.W., J.E. Flotemersch, T.L. Spanbauer, T. Eason, A.S. Garmestani, and **B.C. Chaffin**. 2017. People and water: exploring the social-ecological condition of watersheds of the United States. *Elementa: Science of the Anthropocene* 5: 64. <https://www.elementascience.org/articles/10.1525/elementa.189/>
- Chaffin, B.C.**, and H. Gosnell. 2017. Beyond mandatory fishways: federal hydropower relicensing as a window of opportunity for dam removal and adaptive governance of riverine landscapes in the United States. *Water Alternatives* 10(3): 819-839. <http://www.water-alternatives.org/index.php/alldoc/articles/vol10/v10issue3/383-a10-3-9/file>
- Baird, T., **B.C. Chaffin**, and D.J. Wrathall. 2017. A disturbance innovation hypothesis: perspectives from human and physical geography. *The Geographical Journal* 183(2): 201-208.

- DeCaro, D.A., **B.C. Chaffin**, E. Schlager, A.S. Garmestani and J.B. Ruhl. 2017. Legal and institutional foundations of adaptive environmental governance. *Ecology and Society* 22(1): 32. <http://www.ecologyandsociety.org/vol22/iss1/art32/>.
- Gunderson, L., B.A. Cosens, **B.C. Chaffin**, C.A. (Tony) Arnold, A.K. Fremier, A.S. Garmestani, R. Kundis Craig, H. Gosnell, H. E. Birge, C.R. Allen, M.H. Benson, R.R. Morrison, M.C. Stone, J.A. Hamm, K. Nemecek, E. Schlager and D. Llewellyn. 2017. Regime shifts and panarchies in regional scale social-ecological water systems. *Ecology and Society* 22 (1): 31. <http://www.ecologyandsociety.org/vol22/iss1/art31/>
- Chan N.W., R. Roy, and **B.C. Chaffin**. 2016. Water governance in Bangladesh: an evaluation of institutional and political context. *Water* 8(9): 403. <http://www.mdpi.com/2073-4441/8/9/403>
- Chaffin, B.C.**, A.S. Garmestani, L.H. Gunderson, M.H. Benson, D.G. Angeler, C.A. Arnold, B. Cosens, R.K. Craig, J.B. Ruhl, and C.R. Allen. 2016. Transformative environmental governance. *Annual Review of Environment and Resources* 41: 399-423.
- Chaffin, B.C.**, W.D. Shuster, A.S. Garmestani, B. Furio, S. Albro, M.M. Gardiner, M. Spring, and O.O. Green. 2016. A tale of two rain gardens: Barriers and bridges to adaptive management of urban stormwater in Cleveland, Ohio. *Journal of Environmental Management* 183(2): 431-441.
- Chaffin, B.C.**, A.S. Garmestani, D.G. Angeler, D.L. Herrmann, C.A. Stow, M. Nyström, J. Sendzimir, M.E. Hopton, J. Kolasa, and C.R. Allen. 2016. Biological invasions, ecological resilience and adaptive governance. *Journal of Environmental Management* 183(2): 399-407.
- Herrmann, D.L., K. Schwartz, W.D. Shuster, A. Berland, **B.C. Chaffin**, A.S. Garmestani, and M.E. Hopton. 2016. Ecology for the shrinking city. *BioScience* 66(11): 965-973. <https://academic.oup.com/bioscience/article/66/11/965/2754227>
- Cosens, B., and **B.C. Chaffin**. 2016. Adaptive governance of water resources shared with Indigenous peoples: the role of law. *Water* 8 (3): 97. <http://www.mdpi.com/2073-4441/8/3/97/html>
- Chaffin, B.C.**, R.K. Craig, H. Gosnell, and A.S. Garmestani. 2016. Institutional networks and adaptive water governance in the Klamath River Basin, USA. *Environmental Science & Policy* 57: 112-121.
- Chaffin, B.C.** and L.H. Gunderson. 2016. Emergence, institutionalization and renewal: rhythms of adaptive governance in complex social-ecological systems. *Journal of Environmental Management* 165(1): 81-87.
- Benson, M.H., C.D. Lippitt, R. Morrison, B. Cosens, J. Boll, **B.C. Chaffin**, A.K. Fremier, R. Heinse, D. Kauneckis, T.E. Link, C.E. Scruggs, M. Stone, and V. Valentin. 2015. Five ways to support interdisciplinary work before tenure. *Journal of Environmental Studies and Sciences* 6(2): 260-267.
- Green, O.O., A.S. Garmestani, C.R. Allen, J.B. Ruhl, C.A. Arnold, L.H. Gunderson, N.A.J. Graham, B. Cosens, D.G. Angeler, **B.C. Chaffin**, and C.S. Holling. 2015. Barriers and bridges to the integration of social-ecological resilience and law. *Frontiers in Ecology and the Environment* 13(6): 332-337.
- Chaffin, B.C.**, R.L. Mahler, J.D. Wulforst, and B. Shafii. 2015. The role of agency partnerships in collaborative watershed groups: lessons from the Pacific Northwest experience. *Environmental Management* 55(1): 56-68.
- Chaffin, B.C.**, R.K. Craig, and H. Gosnell. 2014. Resilience, adaptation, and transformation in the Klamath River basin social-ecological system. *Idaho Law Review: Natural Resources & Environmental Law Edition* 51(1): 157-193.
- Cosens, B., L.H. Gunderson, and **B.C. Chaffin**. 2014. The adaptive water governance project: assessing law, resilience and governance in regional socio-ecological water systems facing a changing climate. *Idaho Law Review: Natural Resources & Environmental Law Edition* 51(1): 1-27.

**Chaffin, B.C.**, H. Gosnell, and B.A. Cosens. 2014. A decade of adaptive governance scholarship: synthesis and future directions. *Ecology and Society* 19(3): 56.  
<http://www.ecologyandsociety.org/vol19/iss3/art56/>.

**Chaffin, B.C.**, R.L. Mahler, J.D. Wulforst, and B. Shafii. 2012. Collaborative watershed groups in three pacific northwest states: a regional evaluation of group metrics and perceived success. *Journal of the American Water Resources Association* 48(1): 113-122.

## BOOK CHAPTERS

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**Chaffin, B.C.**, H. Gosnell, and R.K. Craig. 2018. The emergence of adaptive governance in the Klamath River basin. In *Practical Panarchy for Adaptive Water Governance*, B. Cosens and L.H. Gunderson, eds., pp. 83-97. Cham, Switzerland: Springer.

Gosnell, H., **B.C. Chaffin**, J.B. Ruhl, C.A. Arnold, R.K. Craig, M.H. Benson, and A. Devenish. 2018. Finding flexibility in section 7 of the Endangered Species Act through adaptive governance. In *Practical Panarchy for Adaptive Water Governance*, B. Cosens and L.H. Gunderson, eds., pp. 183-202. Cham, Switzerland: Springer.

Gunderson, L.H., B. Cosens, and **B.C. Chaffin**. 2018. Trajectories of change in regional-scale social-ecological water systems. In *Practical Panarchy for Adaptive Water Governance*, B. Cosens and L.H. Gunderson, eds., pp. 229-241. Cham, Switzerland: Springer.

Allen, C.R., H. Birgé, D.G. Angeler, C.A. Arnold, **B.C. Chaffin**, D.A. DeCaro, A.S. Garmestani, and L.H. Gunderson. 2018. Uncertainty and trade-offs in resilience assessments. In *Practical Panarchy for Adaptive Water Governance*, B. Cosens and L.H. Gunderson, eds., pp. 243-268. Cham, Switzerland: Springer.

DeCaro, D.A., **B.C. Chaffin**, E. Schlager, A.S. Garmestani, and J.B. Ruhl. Theory and research to study the legal and institutional foundations of adaptive governance. In *Practical Panarchy for Adaptive Water Governance*, B. Cosens and L.H. Gunderson, eds., pp. 269-288. Cham, Switzerland: Springer.

**Chaffin, B.C.** 2016. What is the primary cause of conflict in the Klamath River basin? In *Natural Resource Conflicts: From Blood Diamonds to Rainforest Destruction (Vol. 2)*, M. Burnett, ed., pp. 579. Santa Barbara, CA: ABC-CLIO.

**Chaffin, B.C.** and H. Gosnell. 2015. Measuring Success in Adaptive Management Projects. In *Adaptive Management of Social-Ecological Systems*, C. Allen and A. Garmestani, eds., pp. 85-105. Dordrecht, Netherlands: Springer.

## NON-REFEREED PUBLICATIONS

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Cosens, B., L.H. Gunderson, and **B.C. Chaffin**. 2017. Assessing law, resilience and governance in basin scale water systems facing changing climate: the adaptive water governance project. American Bar Association (ABA) International Environmental Law Committee Newsletter, pp. 34-38.

van der Geist, et al. 2016. Loss and damage and livelihood resilience: 5 key insights from the 2016 resilience academy and 5 recommendations for the 5 year work plan on loss and damage. United Nations University, Institute for Environment and Human Security.

## GRANTS, SCHOLARSHIPS & FELLOWSHIPS

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### *External Awards*

2019-2023      Co-PI: RII Track-2 FEC: Resilience informatics for the convergence of critical capacities to address regional-scale environmental change. NSF EPSCoR (\$3,953,265); Twidwell, D. (PI, UNL); Allen, C.R. (co-PI, UNL); Banerjee, S. (co-PI, UNL); Floyd, T. (co-PI, UM). OIA #1920938

- 2019-2022 Co-PI: Recasting the disproportionate impacts of climate change extremes (DICE). Swedish Formas (9,994,574 SEK / \$1,017,382 USD); Boyd, E. (PI, Lund University); Scown, M. (co-PI, Lund/Utrecht Universities).
- 2017-2020 PI: RII Track-4: Governing social-ecological transformation across working landscapes. NSF EPSCoR (\$213,723); Chaffin (PI). OIA #1738857
- 2017-2019 Co-PI: Satellite-guided hydro-economic analysis for integrated management and prediction of the impact of droughts on agricultural regions. NASA EPSCoR (\$750,000); Maneta, M. (PI); Ewing, S. (co-PI); Jencso, K. (co-PI); Kimball, J. (co-PI); Maxwell, B. (co-PI).
- 2016-2021 Co-PI: UM BRIDGES: Bridging divides across the food, energy, and water nexus. National Science Foundation Research Traineeship Program (NSF NRT) (\$2,999,930); Yung, L. (PD); Wilcox, A. (APD); Ballantyne, A. (co-PI); Eby, L. (co-PI).
- 2016-2017 PI: Network governance for green infrastructure for stormwater management in midwestern U.S. cities. Cleveland Botanical Garden subaward from the Great Lakes Protection Fund (GLPF) Award 949.01 (\$14,154); Floyd, T. (co-PI)
- 2014-2015 Research Associateship Program, National Academies-National Research Council (\$53,000)
- 2011-2014 Science to Achieve Results (STAR) Graduate Fellowship, U.S. Environmental Protection Agency (\$126,000)
- 2012 Stephen K. Hall Water Law & Policy Scholarship, Association of California Water Agencies (\$7,000)

### ***Internal Awards***

- 2018-2021 PI: Adaptive water governance, river science, and hydropower development policy in Zambia. University Grant Program, University of Montana (\$5,000)
- 2017-2018 PI: Developing coupled natural and social science approaches to largescale river system research. University Grant Program, University of Montana (\$8,000)
- 2016-2017 PI: The role of Native American tribes in transforming river basin governance in the U.S. west. University Grant Program, University of Montana (\$4,919)

## **PROFESSIONAL PRESENTATIONS**

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### ***Invited Presentations***

"Resilience, Governance, and Food-Energy-Water Policy in the Klamath River Basin, USA." Seminar sponsored by the Department of Geographical and Sustainability Sciences, Public Policy Center, and Sustainable Water Development Graduate Program at the University of Iowa. Iowa City, IA, 28 September 2018.

"Adaptive Governance: the convergence of resilience thinking and environmental management for the Anthropocene." Adaptive Capacity and Resilience in the New Arctic Workshop, October 15-17, 2019. Anchorage, AK, 15 October 2018.

"Changing Snowpack and Implications for Montana Water Policy." Save the Snow Summit, University of Montana Western. Dillon, MT, 15 March 2019.

"Overview of Water Policy Considerations for Irrigation Efficiency." Workshop on Irrigation Efficiency, May 8-9, 2019. USGS Montana Water Center, Bozeman, MT, 8 May 2019.

"The Role of Networks in Transformative Conservation [Keynote]". INSAKA Conference, June 18-20. Johannesburg, South Africa, 18 June 2019.

"Resilience, governance, and food-energy-water nexus policy in the Klamath River basin." *Center for Environmental Research, Education and Outreach Seminar Series*, Washington State University, Pullman, WA, 12 April 2018.

"Montana stream access into the future." *Montana Stream Access Law Symposium*. University of Montana Alexander Blewett III School of Law, Missoula, MT 9 March 2018.

"Social-ecological resilience, environmental governance, and geomorphology." *48<sup>th</sup> Annual Binghamton Geomorphology Symposium*, Texas State University, San Marcos, TX, 15 October 2017.

"Green infrastructure for urban stormwater management: investigation of professional GI networks in Cleveland, Ohio, USA as a potential source of transformative capacity." Lund University Center for Sustainability, Lund, Sweden, 18 Aug 2017.

"Evolving environmental governance in the Klamath River basin, USA." *The Grainger River Center Lecture Series*, Duke University, Durham, NC, 13 January 2017.

"The geography of adaptive governance." *47th Annual South Dakota State University Geography Convention*, Brookings, SD, 18 March 2016.

"The emergence of adaptive governance: negotiating tradeoffs between ecosystem services in the Klamath River basin." *Portland State University School of Environment Seminar Series: Ecosystem Services: Practices, Policies, Politics*, Portland, OR, 14 Jan 2016.

"Transformation in water governance: from urban stormwater management to rural water rights negotiations." *Geography Department Seminar Series*, Virginia Polytechnic Institute and State University, Blacksburg, VA, 10 Apr 2015.

"Reallocating water, rebuilding community: law, agriculture, and fisheries management in the Klamath River Basin." Heritage University, Toppenish, WA, 2 Mar 2015.

### **Conference Papers**

"Montana Water Policy: constraints, opportunities, and future approaches." *Water for Agriculture Symposium*, University of Montana. Missoula, MT, 14 May 2019

"Governance for navigating social-environmental regime shifts across working landscapes." *SESYNC Boundary Spanning Symposium*, Annapolis, MD, 11 Jun 2018.

"Beyond the next regime: environmental law and the capacity for SES transformation." *Resilience 2017*, Stockholm, Sweden, 23 Aug 2017.

"Adjudication and Tribal Water Rights Settlements as Acts of Climate Adaptation." *American Association of Geographers Annual Meeting*, Boston, MA, 7 Apr 2017.

"Analyzing Governance to Inform Water Security: Implementing Resilience Assessment Methods at the Basin Scale." *INSAKA 2016*, Kafue, Zambia, 15 Jun 2016.

"Tribes, Hydropower and Re-negotiating River Ecology in the American West." *American Association of Geographers Annual Meeting*, San Francisco, CA, 30 Mar 2016.

"Transformative Environmental Governance: Guiding hydrologic change in North America toward social-ecological sustainability." *Transformations 2015*, Stockholm, Sweden, 5 Oct 2015.

### **Panels**

"Innovative Graduate Education in the Society-Natural Resource Nexus." *International Symposium on Society and Resource Management*, Snowbird, UT, 18 Jun 2018.

"Debating the big questions in adaptive governance research." Individual presentation title: "The potential of adaptive governance to destabilize dominant power relations and unlock social-ecological traps."

*Resilience 2017*, Stockholm, Sweden, 23 Aug 2017.

### **Organized Sessions**

"Transformations in coupled human and natural systems." *Ecological Society of America Annual Meeting*, Portland, OR, 10 Aug 2017. Co-conveners: Garmestani A.S., Allen C.R.

"UNTAPPED: Fresh voices in water resources geography." *American Association of Geographers Annual Meeting*, Boston, MA, 5 Apr 2017. Co-convenor: Petersen-Pearlman, J.

"New voices in water resources geography." *American Association of Geographers Annual Meeting*, San Francisco, CA, 31 Mar 2016. Co-convenor: Petersen-Pearlman, J.

## **TEACHING**

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**Assistant Professor**, Resource Conservation, University of Montana

*Field Studies in Conservation*, NRSM 215 (25-30 students), Fall 2016-17, 2019

*Innovations at the Food-Energy-Water Nexus Seminar*, NRSM/GEO 594 (24 students), Fall 2017

*Advanced Water Policy*, NRSM 427 (~40 students), Spring 2016-19, Fall 2019

*Natural Resources Policy & Administration*, NRSM 422 (~70 students), Spring 2016-19

*International Water Governance* (Grad), NRSM 595 (5 students), Fall 2016

*FLoW Seminar: Faculty Lecturing on Water*, NRSM 494/594 (33 students), Fall 2016

**Lecturer**, Environmental Science, University of Idaho

*Environmental Science Professional Seminar*, ENVS 400 (20 students), Spring 2014

*International Environmental Issues*, ENVS 225 (40 students/team taught), Spring 2013-14

## **NON-ACADEMIC EMPLOYMENT**

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**Wilderness River Ranger**, USDA Forest Service, Nez Perce National Forest, ID, Summer 2010

**Wholesale Account Manager**, Northwest River Supplies, Moscow, ID, 2004-2009

**Wilderness Rafting/Fishing Guide**, Idaho River Journeys, Salmon, ID, Summers 2001, 2003-present

**Policy Review Assistant**, Kern River Outfitters, Wofford Heights, CA, Spring 2004

**Associate Director of Conservation**, Philmont Scout Ranch, Cimarron, NM, Summer 2002

## **SYNERGISTIC ACTIVITIES**

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**Workshop Facilitator/Presenter**. Climate Change and Implications for Water Policy Workshop. USFS International Programs/University of Montana. Quito, Ecuador, 1-5 May 2017. Participants included ~25 protected area managers from across South America.

**Invited Panelist**. COMPASS Water Policy Research Briefing. 26-27 Oct 2017. Served as part of a 5-member team of water researchers selected to formally brief US Senate/House staffers, and select groups of scientists, managers, and administrators from USDOJ, USDA, USGCRP, and OMB.

**Institutional Steering Committee Member** (2015-present), PNW-COSMOS (Pacific Northwest Circle of Success: Mentoring Opportunities in STEM) an NSF-AGEP (Alliance for Graduate Education and the Professoriate) Transformation Grant to increase and support regional Native American student enrollment in Ph.D. programs

**Participant** (2015-2017) *Resilience Academy 2015-2017: Enhancing Resilience to Minimize Loss and Damage—Providing Knowledge for the UNFCCC*. Dhaka, Bangladesh. Funded by United Nations University, Munich Re Foundation, and International Centre for Climate Change and Development, Independent University, Bangladesh.

**Participant/Lead-Klamath Basin Assessment** (2013-2018) *Social-Ecological System Resilience, Climate Change, and Adaptive Water Governance*. National Socio-Environmental Synthesis Center (SESYNC) Collaboration funded by an NSF award to the University of Maryland. PIs: B. Cosens

(University of Idaho); L.H. Gunderson (Emory University) <http://www.sesync.org/project/water-people-ecosystems/adaptive-water-governance>

## PROFESSIONAL AFFILIATIONS

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American Association for the Advancement of Science (AAAS), 2016-present  
Association of American Geographers (AAG), 2010-present  
Gamma Theta Upsilon International Geographic Honors Society, 2014-present  
International Association for Society and Natural Resources (IASNR), 2011-2014, 2017-present  
IUCN–Commission on Ecosystem Management (CEM), Resilience Thematic Group, 2015-present

## ACADEMIC LEADERSHIP

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### *University of Montana*

W.A. Franke College of Forestry and Conservation, Graduate Committee  
W.A. Franke College of Forestry and Conservation, Sustainability Committee

### *Publication Peer-Review*

*Colorado Critical Review; Current Opinion in Environmental Sustainability; Ecology & Society; Environmental Governance & Policy; Environmental Science & Policy; Global Environmental Change; Hydrology and Earth System Sciences; Journal of Environmental Management; Journal of the American Water Resources Association; PLOS ONE; Public Administration; Sustainability; Water Alternatives*

### *Editorial Boards*

*Colorado Critical Review*  
*Ecology & Society (associate editor)*

## COMMUNITY SERVICE

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2018            **Facilitator**, Frenchtown Community Advisory Group (CAG)  
U.S. EPA-sanctioned CAG to coordinate public comment on initial investigation of the Frenchtown mill site for potential inclusion on the national priorities list (superfund)

2013-present   **President, Board of Directors**, The Redside Foundation, Inc., Boise, ID  
Non-profit Organization. [www.redsidefoundation.org](http://www.redsidefoundation.org)

2010-2013      **Founding Executive Director**, The Redside Foundation, Inc., Boise, ID

## AWARDS

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2018            Olen Paul Matthews and Kathleen A. Dwyer Fund for Water Resources Research Award.  
Water Resources Specialty Group, American Association of Geographers (AAG).

2011            Outstanding Geography Teaching Assistant, Oregon State University

## RELEVANT TRAININGS & PROFESSIONAL DEVELOPMENT

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2019            Summer Institute for Scientific Teaching (MOSI). 10-13 Jun 2019; funded by NSF and Howard Hughes Medical Institute

2017            Indigenous Student Mentoring Program (IMP). PNW-COSMOS (NSF-AGEP funded).  
University of Montana (13.5 hours, 9 total learning modules of 1.5 hours each)

2013            Geography Faculty Development Alliance Workshop (GFDA), University of Colorado,  
*Association of American Geographers (7 days/NSF-funded)*