

## CAROLYN A. F. ENQUIST

[carolynenquist@gmail.com](mailto:carolynenquist@gmail.com), [cenquist@usgs.gov](mailto:cenquist@usgs.gov), [cenquist@arizona.edu](mailto:cenquist@arizona.edu)

*LinkedIn & ResearchGate accounts available*

### PROFESSIONAL STATEMENT & SUMMARY

For over two decades, I have worked at the nexus of biodiversity conservation practice, natural resource management, science translation, fire ecology, and climate science. My professional experience includes leadership roles at NGOs, universities, and federal institutions that includes oversight of multimillion-dollar, partnership-based programs focused on climate science and adaptation. These roles have largely focused on leading the development and implementation of strategic frameworks and actionable science plans. Throughout my career, I have tailored each of my positions to directly address the urgent challenges that land managers, rightsholders, the public, and other interested parties face across the western U.S. and beyond. As a reflection of my commitment to these issues, I founded the Southwest Adaptation Forum to bring these groups together in 2018 and co-hosted the event again in 2021 and 2022.

Over the past 15 years, I have developed and led participatory workshops on vulnerability assessment, adaptation planning, and scenario planning. Such experiences underpinned my enthusiasm for co-developing a special issue of *Frontiers in Ecology and the Environment* (2017) on the topic of Translational Ecology. I incorporate this approach in all aspects of my work to foster the deep and authentic partner relationships that cultivate the buy-in and trust needed to co-develop just and equitable responses to climate change. This process serves an important pathway for building broad-scale climate resilience. I am passionate about the pursuit of such transformative adaptation, which is at the heart of my career goals, to support the well-being of the earth's human and non-human inhabitants.

### EDUCATION

- Ph.D. Biology, Ecology Program. 2002. University of New Mexico, Albuquerque.
- M.S. Biology, Ecology Program, with distinction. 1998. University of New Mexico.
- B.A. International Relations/French. 1990. Mount Holyoke College, South Hadley, MA.
  - Junior Year Abroad program in Montpellier, France.

### PROFESSIONAL EXPERIENCE

March 2022-present, 40 hours/week:

**Director (Acting)**, U.S. Geological Survey Southwest Climate Adaptation Science Center (SW CASC), U.S. Geological Survey, Tucson, AZ.

As the Acting Director of the SW CASC, my primary goals have been to (1) build diverse partnerships across the region that promote innovative climate-adapted conservation at scale, and (2) develop and grow an integrated science portfolio that directly supports these partnerships. Duties include:

- Strategic oversight of the implementation of the new Strategic Framework, including operations, budget, science priorities, financial award process, human capital (i.e., recruitment, hiring and supervision), and the administration of the 5-year university hosting award agreement with the University of Arizona and members of the university consortium (UCLA, UC-San Diego's Scripps Institution of Oceanography, UC-Davis, Desert Research Institute, University of Utah, Colorado State University).

- Oversight of communications and science applications initiatives, including partnership building and outreach, and re-constitution of an Advisory Committee.
- Additional duties include those outlined under SWCASC Deputy Director, below.

September 2021-2023, 5-10 hours/week:

**Lead Author**, *5<sup>th</sup> National Climate Assessment*. Southwest chapter, wildfire section.

January 2019-January 2022, 5-15 hours/week:

**Lead Author**, *Intergovernmental Panel on Climate Change 6<sup>th</sup> Assessment Report (IPCC AR6) Working Group II on Impacts, Vulnerability & Adaptation*.

USGS representative on the North America chapter (Chapter 14); serves as lead on documenting the status and emergent trends of adaptation efforts across the continent.

August 2014-November 2018, October 2019-March 2022, 40 hours/week:

**Deputy Director**, *U.S. Geological Survey Southwest Climate Adaptation Science Center (SW CASC), U.S. Geological Survey, Tucson, AZ*.

- Led overall operations, managed \$3-5M annual budget, broader staff supervision, research agenda development & execution, financial award process, and strategic planning for the SW CASC as part of the 8-region Climate Adaptation Science Center Network.
- Led, co-developed, coordinated, and executed strategic and scientific research plans, and program reviews to ensure research priorities meet the needs of managers from natural resource agencies and affiliated programs.
- Supervised program staff and scientists focused on tribal partner engagement, partnership development, research management, scenario planning and climate adaptation.
- Provided oversight on University of Arizona hosting agreement and consortium of six regional member universities on behalf of the USGS.
- Identified research goals, outputs, and objectives to advance the SW CASC Science Agenda, including evaluation and selection of research proposals for funding projects designed to produce actionable science.
- Cultivated and coordinated projects and activities to engage a diversity of stakeholders and partners across the Southwest and throughout the U.S.
- Negotiated cooperative agreements and research grants with academic institutions and federal agencies to leverage existing resources in support of the development and implementation of collaborative initiatives and programs.
- Launched and led the organization of the inaugural Southwest Adaptation Forum (SWAF) in 2018 and next iterations of the gathering in 2021 (virtual gathering) and in-person in 2022 that focused on building a cross-sector network of climate adaptation practitioners.
- Led national-scale scientific working groups, symposia, and sessions consisting of experts on topics and issues, including the implications of ecological drought, the theory and practice of scenario planning, foundations of translational ecology, coordination and collaboration among climate science entities to promote the advancement of climate change science.
- Represented the SW CASC, National Climate Adaptation Climate Science Center, and USGS at regional, national, and international meetings and conferences focused climate change science, adaptation, and biodiversity conservation.

November 2018-September 2019, 40 hours/week:

**Director (Acting)**, *Department of the Interior South Central Climate Adaptation Science Center (SC CASC), U.S. Geological Survey, Norman, OK*.

- Worked closely with SC CASC university director and USGS deputy director to coordinate and implement Center priorities as interim-federal director, including oversight of operations,

project solicitation process, staff supervision, negotiation & launch of Cycle 2 of university hosting agreement with university staff from the University of Oklahoma.

July 2010-August 2014, 40 hours/week:

**Director, Science & Applications**, USA National Phenology Network, The Wildlife Society (2010-2013), The University of Arizona (2014), Tucson, AZ.

- Led and coordinated team in the development and implementation of science priorities for a national biodiversity information delivery organization consisting of 12 staff members, including the facilitation of phenology and climate-related research across broader community.
- Prepared proposals, negotiated and managed cooperative agreements and partnerships with natural resource agencies and organizations, including the US Fish & Wildlife Service, USDA Forest Service, DoD Environmental Sciences and Applied Systems Branch; secured over \$400,000 in funding.
- Led and served on national working groups and task forces developing technical reports on ecological science, adaptation, and monitoring indicators for the National Climate Assessment.
- Led working group for the northeastern region of the Forest Service to develop implementation methods for phenology-related work to facilitate achievement of climate change and monitoring related goals.
- Advised government agencies and multi-stakeholder groups in the development of climate change-related goals and objectives, including vulnerability assessment and adaptation efforts by presenting complex concepts and findings via briefing high-level officials and by organizing and facilitating interagency forums, workshops, and National Conservation Training Center-sponsored courses.
- Published research results in peer-reviewed information sheets and journals.
- Communicated research results relative to the role of phenology in climate science, adaptive management, and public engagement at national workshops, conferences and webinars.
- Participated in programmatic reviews and evaluations by analyzing issues, identifying obstacles, and developing solutions designed to achieve science goals.

2008-Present, volunteer hours as requested:

**Adjunct Assistant Professor**, University of Arizona, School of Natural Resources & the Env, 2008-present.

- Provided ongoing consultation and interaction with faculty, staff and students via graduate seminars and meetings related to conservation science and natural resource planning, with emphasis on climate change adaptation, phenology, and how science informs decision-making.

2006-2010, 40 hours/week:

**Conservation Scientist/Climate Change Ecologist**, The Nature Conservancy in New Mexico.

- Proposed and launched the Southwest Climate Change Initiative (SWCCI), a collaboration consisting of NGOs, universities, and federal agencies with a goal of providing guidance and recommendations for multi-stakeholder groups in climate change assessment, adaptation planning and strategy implementation at landscape to regional scales.
- Designed and implemented spatially-explicit climate change and landscape assessments relative to forests, shrublands, woodlands, grasslands and other conservation and management priorities in New Mexico and the southwestern U.S.
- Served on 3 long-term (2+ years) national working groups developing novel climate change adaptation techniques and synthesizing the state of the knowledge relative to principles, theories, and techniques to address complex interdisciplinary problems.
- Presented complex scientific findings at national and regional conferences.
- Communicated and facilitated use of information and new methods via multi-stakeholder workshops across the Southwest.

- Published research results in peer-reviewed reports and journals.
- Secured \$250,000 in funding for research and proactive outreach efforts.

2001-2005, 40 hours/week:

**Conservation Science Specialist**, *The Nature Conservancy in Arizona, Tucson, AZ.*

- Co-designed and implemented ecological assessment and inventory of semi-arid grasslands in Arizona.
- Developed novel methods and techniques for prioritizing conservation planning and action;
- Published research results in peer-reviewed reports and journals.
- Contributed to conservation and management plans and ecoregional assessments based on key concepts and theories related to ecological science and collaborative adaptive management.

2001, 40 hours/week:

**Botanical Research Technician**, *University of Arizona, Department of Ecol. & Evol. Biology, 2001.*

- Conducted experiments and long-term monitoring in plots established for studying the ecology of desert winter annuals located on Tumamoc Hill, Tucson.
- Supervised and trained field assistants.

1996-1998, 20 hours/week:

**Biological Scientist**, *USDA Forest Service Region 3, Remote Sensing Unit. 1996-98.*

- Developed ecological computer models and vegetation classification maps utilizing GPS, GIS, and remote sensing platforms.
- Performed landscape-level vegetation change detection analyses using time series of satellite imagery.
- Assisted in interpretation of ecological modeling and analysis output for implementation in forest plans.

1994-1996, school year, 20 hours/week.

**Graduate Student Researcher**, *University of New Mexico, Department of Biology, Albuquerque. 1994-96.*

- Designed and implemented long-term monitoring protocol for detecting vegetation changes in 16-hectare plot consisting of secondary tropical dry forest vegetation, Santa Rosa National Park, Costa Rica.
- Generated a GIS-based multi-scenario approach for modeling and forecasting the impacts of climate change on the tropical forests of Costa Rica.

1993-1994, school year, 20 hours/week:

**Student GIS Technician**, *Earth Data Analysis Center (EDAC). University of New Mexico, Albuquerque, NM.*

- Created, edited and manipulated digital spatial database to generate complex vegetation & resource maps.

1993-1994, summer hire, 40 hours/week:

**Interpretive Park Ranger**, *National Park Service, Petroglyph National Monument, Albuquerque, NM 1993-94.*

- Developed and conducted cultural and natural history programs for park visitors.

1992-1993, summer hire, 40 hours/week:

**Naturalist-Interpreter**, *City of Colorado Springs Parks and Recreation Department, 1992-1993.*

- Developed & conducted natural history programs on Rocky Mountain ecosystems for schools & public.

1991-1992, 20 hours/week:

*Intern (paid), Office of U.S. Senator Timothy Wirth of Colorado, Washington, D.C. 1991-92.*

- Researched environmental legislation for senate office and constituency. Wrote environmental briefs and environmental policy letters for constituents and decision makers.

1990-1991, 40 hours/week:

*Conservation Summit Co-Coordinator, National Wildlife Federation, Washington, D.C. 1990-91.*

- Planned and implemented national environmental education conferences for NWF members.

## PAPERS & TECHNICAL REPORTS

### *Climate Change Science and Adaptation*

National Science and Technology Council Fast Track Action Committee on Climate Services. March 2023. *A Federal Framework and Action Plan for Climate Services*. I was one of three USGS representatives (by invitation) of 50+ U.S. federal agency authors.

([https://www.whitehouse.gov/wp-content/uploads/2023/03/FTAC\\_Report03222023\\_508.pdf](https://www.whitehouse.gov/wp-content/uploads/2023/03/FTAC_Report03222023_508.pdf))

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- Hicke, J.A., S. Lucatello, L.D., Mortsch, J. Dawson, M. Domínguez Aguilar, **C.A.F. Enquist**, E.A. Gilmore, D.S. Gutzler, S. Harper, K. Holsman, E.B. Jewett, T.A. Kohler, and K.A. Miller, 2022: *North America*. In: *Climate Change 2022: Impacts, Adaptation and Vulnerability*. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 1929–2042, doi:10.1017/9781009325844.016.
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- Berrang-Ford, L., A.R. Siders, A. Lesnikowski, ... **C.A.F. Enquist**, et al. 2021, *Nature Climate Change*. A systematic global stocktake of evidence on human adaptation to climate change.
- Crausbay, S., J. Betancourt, J. Bradford, J. Cartwright, W. Dennison, J. Dunham, **C.A.F. Enquist**, et al. 2020. Unfamiliar territory: emerging themes for ecological drought research and management, *One Earth*, 3(3): 337-53.
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- Enquist, C.A.F.** and S.T. Jackson. 2016. Ensuring Coordination Among Regional Climate Science Programs, National Adaptation Forum, St. Louis, MO, 14 May 2015. *Eos, Meeting Reports*, 25 January 2016.
- Gerst, K.L., J. L. Kellermann, **C.A.F. Enquist**, A.H. Rosemartin, E.G. Denny. 2015. Estimating the onset of spring from a complex phenology database: trade-offs across geographic scales. *International Journal of Biometeorology*. 1-10. DOI 10.1007/s00484-015-1036-4.
- Staudinger, M.D, S. L. Carter, M. S. Cross, N.S. Dubois, J. E. Duffy, **C. Enquist**, R. Griffis, J. Hellmann, J. Lawler, J. O'Leary, S.A. Morrison, L. Sneddon, B. A. Stein, L. Thompson, W. Turner. 2013. Biodiversity in a changing climate: a synthesis of current and projected trends in the U.S. *Frontiers in Ecology and the Environment* 11: 465-464.

- Stein, B.A., A. Staudt, M. S. Cross, N. Dubois, **C. Enquist**, R. Griffis, L. Hansen, J. Hellman, J. Lawler, E. Nelson, A. Pairis. 2013. Preparing for and managing change: climate adaptation for biodiversity and ecosystems. *Frontiers in Ecology and the Environment* 11: 502-510.
- Fleishman, E., J. Belnap, N. Cobb, **C. Enquist**, K. Ford, G. MacDonald, M. Pellant, T. Schoennagel, L. Schmit, M. Schwartz, S. van Drunick, A. Westerling, A. Keyser, and R. Lucas. Review Editor: J. Sabo. 2013. Natural Ecosystems. Chapter 8, in: *Assessment of Climate Change in the Southwestern US*. In: Gregg Garfin, Angela Jardine, Robert Merideth, Mary Black, and Jonathan Overpeck (eds.) Island Press.
- Schwartz, M.D., **C.A.F. Enquist**, E.G. Denny. 2013. Phenological implications of warming temperatures and extreme climatic events. *Eos* 94 (10): 99.
- Cross, M.S., P.D. McCarthy, G. Garfin, D. Gori, **C. Enquist**. 2013. Accelerating climate change adaptation in vulnerable landscapes across the southwestern United States. *Conservation Biology* 27:4-13.
- Leicht-Young, S.A., **C.A.F. Enquist**, J.F. Weltzin. 2013. Observed changes in phenology across the USA: A regional review for the 2013 National Climate Assessment. [A series of eight information sheets for each of 8 NCA regions. USGS internal reviewed]
- Cross, M., E. Zavaleta, D. Bachelet, M. Brooks, **C. Enquist**, E. Fleishman, L. Graumlich, C. Groves, L. Hannah, L. Hansen, G. Hayward, M. Koopman, J. Lawler, J. Malcolm, J. Nordgren, B. Petersen, E. Rowland, D. Scott, S. Shafer, R. Shaw, and G. Tabor. 2012. The Adaptation for Conservation Targets (ACT) framework: A tool for incorporating climate change into natural resource management. *Environmental Management*. 50:341-351.
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- Lawson, D.M., K.R. Hall, L. Yung, C.A.F. **Enquist**. 2017. Building translational communities of practice: insights from the field. *Frontiers in Ecology and the Environment* 15: 569-577.

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- Mellin, T., Krausmann, W, Clark, K., and **C.A. F. Enquist**. 1998. Assessing gross changes in vegetation types associated with Mexican spotted owl habitat. *Technical report*, USDA Forest Service.

*Papers in preparation:*



- Enquist, C.A.F., H.D. Safford, T. Wall. *In prep.* The importance of human dimensions in interpreting, managing, and responding to current and future fire. Invited paper for special issue entitled, *Principles of Fire Ecology*.
- Enquist, C.A.F., E. Gilmore, P. Ezcurra, S. Gruza, A. Pairis. *In prep.* Accelerating climate adaptation across North America.
- AA Tarancón, CAF Enquist, A Thode, B Satink-Wolfson, N Cooley, A Walker, BR Middleton, M Hunter, Rachael Loehman<sup>1,9</sup>, Courtney Peterson<sup>1,10,11</sup>, Ron W. Goode<sup>12</sup>, Margo Robbins<sup>13</sup>, Frank K. Lake<sup>14</sup>, Melvin Hunter, Jr.<sup>15</sup>, Jere Classay<sup>16</sup>, John Galvan<sup>17</sup>, Mary Huffman<sup>18</sup>, Lindsey Quam<sup>19</sup>, Christopher Marks<sup>20</sup>, Rachel Novak<sup>21</sup>, Melodie Lopez<sup>22</sup>, Jonathan W. Long. *In prep.* Breaking Down Barriers to Bringing Fire Back to the Land. *Target Journal: Fire Ecology*

## ORGANIZED WORKSHOPS & SYMPOSIA

- Invited Session Chair and Speaker (upcoming).* Session on International Cooperation (cross-border cooperation on training, best-practices, and standards). E-poster presentation entitled: *An emerging framework for adapting to changing fire regimes: Reimagining science, management, and culture* (co-authored with Dr. Molly Hunter of the Joint Fire Science Program); oral presentation entitled: *Climate-adapted fire risk management: An integrated portfolio approach for the southwestern USA*. **8<sup>th</sup> International Wildland Fire Conference (Wildfire 2023)**, Porto, Portugal, May 2023.
- Organizer and Facilitator (upcoming).* Accepted Oral Presentation entitled: *Indigenous adaptation leadership, action and research: Cultivating multi-level relationships and recognizing multi-dimensional sovereignty*. **7<sup>th</sup> Adaptation Futures International Conference**, Montréal, Canada, October 2-6, 2023.
- Co-organizer and Facilitator. Keynote Panel.* Partnerships in Fire Management: Supporting Indigenous Leadership in Cultural Burning (Hosted by the SWFireCAP Round Table on Cultural Fire). International Association of Wildland Fire, Pasadena, CA, May 2022. Notably, this session was recorded and broadcast on the Canadian podcast called [Good Fire](#), hosted by Dr. Amy Christensen.
- Co-Convener and Co-Organizer.* The third Southwest Adaptation Forum (SWAF) brought together climate adaptation professionals from throughout the SW, with a special focus on Tribes in New Mexico and the interior SW, Indian Pueblo Cultural Center, Albuquerque, October 2022.
- Lead Convener, Round Table on Climate-Adapted Refugia, Natural Areas Conference, Duluth, MN, September 2022.*
- Co-organizer.* Association of Fire Ecology Annual Meeting. Full day session of talks, panel discussions, and Fire Circle Discussion entitled, *Science to Action: The Nexus of Climate and Fire*. December 2021.
- Co-Convener and Co-organizer.* The second (virtual) Southwest Adaptation Forum (SWAF), brought together climate adaptation professionals from throughout the SW, with a special focus on Tribal entities, to learn from one another, April 2021.
- Lead Organizer and Co-Convener.* Southwest Practitioners Adaptation Network (SPAN), launch meeting, brought together climate adaptation professionals from the vicinity of Las Vegas, NV, February 2020.
- Founder, Lead Organizer and Co-Convener.* The inaugural Southwest Adaptation Forum (SWAF), brought together climate adaptation professionals from throughout the SW, and leading national thought leaders to build, cultivate, and sustain a regional network of cross-sectoral adaptation professionals, October 2018.
- Primary Convener.* AGU Fall 2018 session entitled: Science to Action: Empowering ecologists to engage in translational ecology to support effective environmental decision-making, December 2018.
- Co-Convener, American Geophysical Union 2015, 2016.* Effective Stakeholder Engagement for Climate Change Adaptation and Science-to-Action sessions.
- Lead Organizer, Natural Areas Conference 2016, Davis California, Forest Management in the Face of Climate Change and Widespread Forest Mortality and Die-off (primary focus on CA, but also national perspectives)*

*Lead Organizer*, Biennial Conference of Natural Resource Managers in the Colorado Plateau and the Southwest, Flagstaff, Arizona, 2015. *Forest Management in the Face of Climate Change and Widespread Forest Mortality and Die-off (focus on SW-only)*

*Lead Organizer*, National Adaptation Forum 2015. Effective Coordination and Collaboration between National and Regional Climate Adaptation Programs.

*Co-organizer and Moderator*, Ecological Society of America Annual Meeting 2013, Organized Oral Session entitled, "Implications of climate change for ecosystem processes in the southwestern U.S."

*Lead Organizer and Facilitator*, *Climate Adaptation Workshops*: Camp Pendleton Marine Corps Base, San Diego, CA (May 2014), Detachment Fallbrook Naval Weapons Installation San Diego, CA (Aug. 2013), Flagstaff, AZ (May 2010), Gunnison, CO (December 2009), Jemez Mountains, NM (April 2009), Albuquerque, NM (October 2007). Workshop reports (2007-2010): [http://nmconservation.org/projects/new\\_mexico\\_climate\\_change/](http://nmconservation.org/projects/new_mexico_climate_change/)

*Lead Organizer and Facilitator*, National Science Foundation Research Coordination Network workshop on behalf of the USA National Phenology Network, Milwaukee, WI, May 2012.

## INVITED WORKING GROUPS & TRAININGS

*Invited member*, White House Office of Science and Technology Policy (OSTP), Fast Track Action Committee (FTAC) on Climate Services in the Federal Government, November 2022-present.

*Invited member*, the inaugural (2020) Science Advisory Committee for the National Areas Association.  
Chair: Dr. Reed Noss.

*Lead Author*, IPCC WGII AR6, Chapter 14 – North America; fourth lead authors meeting, November 2020 in Antigua, Guatemala. *CANCELED DUE TO COVID-19; remaining meetings were held virtually.*

*Lead Author*, IPCC WGII AR6, Chapter 14 – North America; third lead authors meeting, January 2020 in Faro, Portugal.

*Lead Author*, IPCC WGII AR6, Chapter 14 – North America; second lead authors meeting, July 2019 in Katmandu, Nepal.

*Lead Author*, IPCC WGII AR6, Chapter 14 – North America; first lead authors meeting, January 2019 in Durban, South Africa. *DID NOT ATTEND DUE TO GOVERNMENT SHUT-DOWN.*

*Co-convenor & organizer*. Pilot Translational Ecology short course training for post-doctoral researchers and graduate students from the SW CASC consortium of universities.

*Co-convenor and organizer*. The Theory and Practice of Translational Ecology. National Center for Ecological Analysis and Synthesis, Santa Barbara, CA. November 2015.

*Co-convenor and organizer*. Theory and Practice of Scenario Planning. Center for Climate Adaptation Science and Solutions, University of Arizona, April 2015.

*Monitoring Team*, Conservation Roundtable, Led by Simon Roosevelt & CEOs of 16 NGOs (Sept '12-April '13)

*Lead Author*, National Climate Assessment (NCA3), Biodiversity, Adaptation, Indicators technical input teams (Jan'12-Aug'13)

*Lead Author*, Southwest Climate Assessment, Natural Ecosystems technical working group (Aug '11-Aug '12)

*Vulnerability Assessment Trainer*, National Conservation Training Center, Shepherdstown, WV (May 2012+)

*Working Group Member*, committee of national experts assembled by the National Wildlife Federation to compile and distribute guidance for conducting climate change vulnerability assessments, 2/2009-3/2011.

*Working Group Member*, National Center Ecological Analysis and Synthesis (NCEAS) and Wildlife Conservation Society (WCS) working group on Climate Change Impact Assessment and Adaptation for Conservation Planning in the Inter-Mountain West. 2007-2009.

*Working Group Member*. Contributing author for Synthesis and Conclusions chapter in U.S. Climate Change Science Program's report: *Preliminary review of adaptation options for climate-sensitive*

*ecosystems and resources, Synthesis Assessment Product 4.4, coordinated by the U.S. Environmental Protection Agency representatives, 2007-2008.*  
*Working Group Member, Bosque forest working group, Forest Guild workshop on climate change in forests of the Southwest, Albuquerque, NM, November, 2008.*

## INVITED TALKS

- Speaker, Department of Ecology, UC-Davis, Boundary Spanning Workshop. Translational Ecology. February 2023.*
- Speaker, USDA Forest Service Region 5, The SW Climate Adaptation Center and Partnership-centered Engagement in California. February 2023.*
- Speaker, University of Arizona Department of Hydrology and Atmospheric Sciences, Weekly Departmental Seminar, Inside the IPCC Working Group II Report: Implications for the Southwest. November 2022.*
- Speaker, IPCC, University of California College of Law, California-China Center, Inside the IPCC Working Group II Report: Implications for California. April 2022.*
- Panelist and Speaker, USGS Workshop. Fire Science and Management in an Uncertain Future. April 2021.*
- Panelist and Speaker, Joint Fire Science Program Workshop, Co-production and translational ecology for fire science. October 2019.*
- Speaker, World Symposium on Climate Change Communication, Translational Ecology. Manchester, UK, February 2017.*
- Panelist and Speaker, National Research Council of the National Academy of Sciences. Landscape Conservation Cooperatives. May 2017.*
- Speaker, American Geophysical Union 2014. Climate Adaptation for Forest Management: Lessons Learned.*
- Speaker, National Conservation Training Center course on Climate-Smart Conservation, case study presentation: "Adaptation planning in southern CA: Navy Installation Fallbrook," Tucson, May 2014.*
- Speaker, Organized Symposium entitled "Predicting synergistic impacts under climate change," The Wildlife Society (TWS) Annual Meeting, organized by the USDA Forest Service, talk entitled "Phenology for wildlife conservation and climate adaptation," Milwaukee, WI, October 2013.*
- Speaker, Organized Oral Session entitled "Heralding Change: How Can Plant Phenology be Used to Facilitate Sustainable Natural Resources Management," Ecological Society of America (ESA) Annual Meeting, talk entitled "Using phenology as a tool for resource management and climate change adaptation," Austin, TX, August 2011.*
- Speaker, Organized Oral Session on Climate Change Vulnerability Assessment, George Wright Society Annual Meeting, talk entitled "Application of an integrated climate change assessment and adaptation framework for conservation planning and management in the southwestern USA," New Orleans, LA, March 2011.*
- Speaker & Panelist, Climate Change session, WWF & UA Conference on River Restoration in the Southwest, talk entitled "Phenology monitoring to track environmental variation and climate change: the USA-National Phenology Network," Tucson, AZ, December 2010.*
- Speaker, Organized Oral Session on Climate Change & Conservation Planning, Ecological Society of America (ESA) Annual Meeting, talk entitled "Application of an integrated climate change assessment and adaptation framework for conservation planning and management in the southwestern USA," Albq, NM, August 2009.*
- Panel Speaker, "Adaptation 2009: Safeguarding Fish, Wildlife, and Natural Systems in the Face of Climate Change," convened by the National Council for Science and the Environment and National Wildlife Federation, Feb. 18-19, 2009: DECLINED INVITATION.*
- Panel Speaker, U.S. Fish & Wildlife Service's Regions 2 & 8 and U.S. Geological Services Central and Western Regions Conference on "Effects of Climate Change on Fish, Wildlife, and Habitats in the*

Arid and Semiarid southwestern U.S.: Putting Knowledge and Science into Action." Tucson, AZ, August 19-20, 2008.

*Speaker*, State of the Knowledge on Climate Change Impacts in the Southwestern U.S. USDA Forest Service Regional Leadership Team Meeting, Albuquerque, NM, May 2007.

*Panelist*, City of Tucson work group meeting focused on implications of climate change for habitat conservation plans and the Endangered Species Act. August 2008.

## SELECTED MEDIA ARTICLES & COVERAGE

Hunter, M, B. Brunson, K. Dante Woods, C. Enquist, J.K Hiers, S. Goodrich. Reimagining Science, Management, and Culture: An emerging framework for adapting our response to changing fire regimes. *Wildfire Magazine*, Quarter 3, issue 31:3, October 2022.

<https://www.iawfonline.org/article/reimagining-science-management-and-culture-an-emerging-framework-for-adapting-to-changing-fire-regimes/>

Gardner, J. Drier Warning: University of Arizona Scientists Contribute to New International Climate Report. *Tucson Weekly*, March 31, 2002. <https://www.tucsonweekly.com/tucson/drier-warning-university-of-arizona-scientists-contribute-to-new-international-climate-report/Content?oid=32174059>

Enquist, C. A Budding Partnership: The USA National Phenology Network and the Landscape Conservation Cooperatives. *The Wildlife Professional* Fall 2011, p. 35.

Enquist, C., T. Crimmins, L. Marsh. The USA-Phenology Network: A partner for tracking environmental change in the Southwestern U.S. and beyond. *Restoring Connections, A Newsletter of the Sky Island Alliance*, Volume 14, Issue 2, Summer 2011, p 12.

Leatherman, Courtney. Interview with Carolyn Enquist. *Nature Conservancy*, Autumn 2009, pp. 24-25.

Aldous, Peter. Climate maps offer hope of sanctuary. *The New Scientist*. August 9, 2008, pp. 8-9.

## AWARDS & FUNDING

*Best paper award*: World Symposium on Climate Change Communication, Manchester, U.K. February 2017: *Empowering Ecologists to engage in translation, engagement and communication*.

*Partnership negotiation*, U.S. Fish & Wildlife Service, \$400K to the USA National Phenology Network.

*Recipient*, Rodney Johnson/Katherine Ordway (RJ/KOSE) fund: "*Regional Impacts Assessment and Beyond: Implementing a Climate Change Adaptation Framework for Conservation Planning & Management at Local Scales*," (\$150K); in early 2009, this launched the Southwest Climate Change Initiative (SWCCI), consisting of collaborators from four TNC state chapters (NM, AZ, CO, UT), USFS-R3, the University of Arizona, the University of Washington, and the Wildlife Conservation Society.

*Recipient*, Wildlife Conservation Society (WCS)/Doris Duke Foundation Wildlife Action Opportunities fund, March 2007 (\$75K); in late 2006, this launched TNC-NM's state-wide climate change vulnerability assessment in support of the New Mexico Department of Game & Fish's Comprehensive Wildlife Conservation Strategy, or state wildlife action plan.

*Finalist*, Society for Conservation Biology's David H. Smith Post-Doctoral Fellowship in Conservation Research, December 2005.

## PROFESSIONAL DEVELOPMENT TRAINING

- Federal Grants & Cooperative Agreements (Management Concepts, Feb. 2023)
- Workshop for Supervisors (DOI University, Management Concepts, January 2023)
- Virtual Leadership in Uncertain Times (The Grove, LLC, August 2020)
- Leadership 101 & 202 courses (USGS, July 2018 and August 2020; DOI University, June '16)
- Working with Tribes (Seventh Generation, LLC, January 2020)
- Structured Decision Making (National Conservation Training Center)

*C.A.F. Enquist, April 2023*

- Conflict Resolution (Relational Advantage, Inc.)
- Leadership Development (Conservation Impact)
- Project Management (The Nature Conservancy)
- Negotiation Skills (The Nature Conservancy)

## OTHER SKILLS

*Software (working knowledge):* ArcGIS, JMP statistics, Miradi Conservation Planning package, and working knowledge of remote sensing, UNIX and R.

*Foreign Languages:* French; working knowledge of Spanish.

*References available upon request.*