Advancing Interdisciplinary Research Training & Workshop Agenda

Delta Science Program

DELTA STEWARDSHIP COUNCIL

Part I: Training – October 14, 2022

10:00-10:10 **Welcome & Overview** –Dr. Jessica Rudnick (California Sea Grant & Delta Stewardship Council) and Dr. Laurel Larsen (Delta Stewardship Council & U.S. Geological Service)

10:10-10:20 **Participant Discussion** – Participants will share their experiences with interdisciplinary work in the Sacramento-San Joaquin Delta.

Moderator: Dr. Jill Harris, Delta Science Program

10:20- 10:45 **Keynote** – Social Science 101: A quick guide to how social science research can mitigate roadblocks to natural resource management

Presenter: Dr. Edy MacDonald, New Zealand Department of Conservation

Dr. MacDonald has a strong background in behavioral science, with an emphasis in behavior change across environmental challenges. Her work has taken her across the globe, from Africa to Asia, having spent 15 years working in New Zealand for government agencies. At New Zealand's Department of Conservation, she founded the social science team and championed the use of behavioral research to guide policy and environmental management decisions. Projects varied from

mitigating the impact of domestic cats, human-dolphin interactions, reducing the spread of Kauri Dieback disease by forest visitors, and understanding public attitudes towards novel genetic tools for pest control. Edy recently returned to California and is now working on climate change mitigation.

10:45-11:45 **Case Studies** – Social scientists from around the country will present case studies highlighting the value of integrated social-ecological approaches and overcoming barriers to interdisciplinary teamwork.

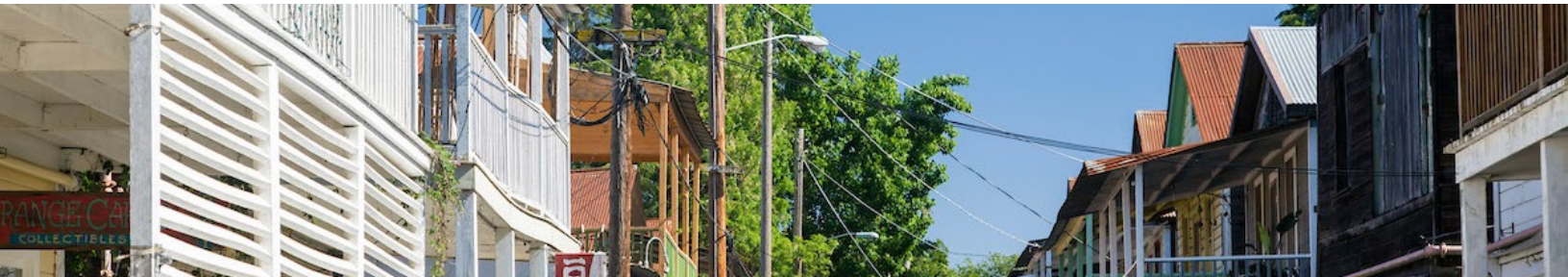
Moderator: Dr. Jessica Rudnick

Case Study #1 – Barriers and bridges to integrated water management (One Water solutions) in urban areas across the U.S.: Results from transdisciplinary participatory research conducted through the Urban Water Innovation Network

Presenter: Dr. Jessica Bolson, Department of Earth and Environment at Florida International University (FIU)

Dr. Bolson's research investigates the use of climate information in water resource decision-making across scales, emphasizing applied aspects of political ecology. She is currently conducting participatory research through the transdisciplinary Urban Water Innovation Network into transitions toward integrated water resource management across urban areas in the United States. Her research combines qualitative and quantitative methods, including online surveys, expert interviews, and decision simulations to explore ways in which practitioners and communities are shifting toward more holistic water management practices. While conducting her research, she also studies the process of team science seeking to improve connections across social, natural, and physical scientists.

Dr. Bolson is also a member of the Resilient 305 collaborative in Miami Dade County, a participatory research program working to understand what is needed to build resilience in the region from varied perspectives. Bolson received her B.A. in Environmental Sciences from Barnard College, her M.A. in Climate Studies from Columbia University, and a Ph.D. in Ecosystem Science and Policy from the University of Miami. She currently teaches courses in U.S. Environmental Policy and Climate Policy at FIU.



Case Study #2 – Increasing motivation and promoting persistence in farmer conservation

Presenter: Dr. Robyn S. Wilson, School of Environment and Natural Resources at Ohio State University

Dr. Wilson's current research focus is on adaptation to climate-exacerbated hazards (e.g., wildfire, algal blooms), and what motivates and constrains different land use and land management decisions on private and public lands. Dr. Wilson is currently serving as the past-President of the Society for Risk Analysis and is a member of the National Academies of Science, Engineering and Medicine (NASEM) Resilient America Roundtable and the U.S. Environmental Protection Agency Board of Scientific Counselors Social and Community Science Subcommittee. She is a former member of the NASEM Board on Environmental Change and Society, and the EPA Chartered Science Advisory Board. Dr. Wilson received her B.A. in Environmental Studies with Honors from Denison University, and her M.S. and Ph.D. degrees in Environment and Natural Resources from Ohio State University.

Case Study #3 – We shape the land: Fire governance and Indigenous climate justice

Presenter: Deniss Martinez, University of California, Davis

Ms. Martinez's research focuses on collaborative governance, Indigenous environmental justice, and fire management. Focusing on Indigenous self-determination and sovereignty, her dissertation aims to understand best practices in policy and collaboration by engaging the experiences of cultural fire practitioners and their collaborators throughout the state. A descendant of Tutunaku people, Ms. Martinez grew up away from home in Shasta and Karuk homelands. She has a B.S. in Evolution, Ecology, and Biodiversity as well as a M.S. in Ecology from UC Davis.

11:45-11:55 **Participant Discussion** – Participants will explore the question, "What are the barriers to, and opportunities for, interdisciplinary work in the Delta?"

Moderator: Dr. Jill Harris

11:55-12:00 **Closing** – Dr. Jessica Rudnick

Part II: Workshop – October 20, 2022

1:00-1:15 **Welcome** – Beck Barger (Delta Stewardship Council) and Rachael Klopfenstein (Delta Science Program)

1:15-1:45 **Collaborative Groups Overview** – Representatives from collaborative science groups in the Delta will present their roles in the Delta and support for interdisciplinary research.

Moderator: Rachael Klopfenstein

Presenter: Dr. Lisa Wainger, Delta Independent Science Board

Presenter: Dr. Steve Culberson, Interagency Ecological Program

Presenter: Alex Thomsen, Wetlands Regional Monitoring Program

Presenter: Bruce DiGennaro, Collaborative Science and Adaptive Management Program

1:45-3:15 **Breakout Group Discussions** – Participants will join facilitated discussions around Science Action Agenda Management Needs (preferences selected upon registration).

1) Improve coordination of large-scale efforts across the system
2) Monitoring, model integration, and forecasting
3) Multi-benefit approaches to managing the Delta as a social-ecological system
4) Building and integrating knowledge on human behavior and processes
5) Acquiring new knowledge and synthesizing existing knowledge to support species recovery
6) Assessing and anticipating the impacts of climate change

3:15-3:50 **Report Outs & Discussion**

Moderator: Dr. Jill Harris

3:50-4:00 **Next Steps & Closing** – Henry DeBey, Delta Stewardship Council

Planning Committee

Co-Chairs:

Jessica Rudnick, California Sea Grant & Delta Stewardship Council

Rachael Klopfenstein, Delta Science Program

Beck Barger, Delta Stewardship Council

Jill Harris, Delta Science Program

Members:

Ajay Singh, California State University, Sacramento

Pam Rittelmeyer, University of California, Davis

Lindsay Correa, California Department of Water Resources

Steve Culberson, Interagency Ecological Program

For more information about the Bay-Delta Social Science Community of Practice, visit deltacouncil.ca.gov/bay-delta-social-science-community-of-practice.