

John C. Stella

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EDUCATION

University of California, Berkeley	Environmental Science, Policy and Management	Ph.D., 2005
Dissertation advisors: Drs. John J. Battles and Joe R. McBride		
Title: "A field-calibrated model of pioneer riparian tree recruitment for the San Joaquin Basin, CA"		
University of California, Berkeley	Environmental Science, Policy and Management	M.S., 1998
Yale University	Architecture	B.A., 1988

APPOINTMENTS

Associate Professor, Dept. of Forest and Natural Resource Management, SUNY-ESF, 2013–present
Assistant Professor, Dept. of Forest and Natural Resource Management, SUNY-ESF, 2006–2013
Adjunct Assistant Professor, Dept. of Geography, Syracuse University, 2009–present
Faculty Fellow, Collegium de Lyon, École Normale Supérieure, Lyon, France, 2013–2014
CALFED Science Program Post-Doctoral Research Fellow, University of California, Berkeley, 2006
Senior Ecologist / Project Manager, Stillwater Sciences, Berkeley, CA, 1998–2006
Doctoral Student Researcher, University of California, Berkeley, 2000–2005

RESEARCH GRANTS

National Science Foundation GSS-1660490. *Linking Basin-Scale, Stand-Level, and Individual Tree Water Stress Indicators for Groundwater-Dependent Riparian Forests in Multiple-Use River Basins*. 2017–2020. J.C. Stella (PI), M.B. Singer (PI, UCSB), and D.A. Roberts (PI, UCSB). \$449,982.

National Science Foundation EAR-1700517. *Collaborative Research: Impacts of Dynamic, Climate-Driven Water Availability on Tree Water Use and Health in Mediterranean Riparian Forests*. 2017–2020. J.C. Stella (PI), M.B. Singer (PI, UCSB), K. Caylor (Co-PI, UCSB). Total budget, ESF share: \$53,787; total \$450,353

Strategic Environmental Research and Development Program (SERDP). *Understanding and assessing riparian habitat vulnerability to drought-prone climate regimes on Department of Defense bases in the southwestern USA*. 2018–2022. M.B. Singer (PI, UCSB), J.C. Stella (PI), K. Caylor (Co-PI, UCSB) and D.A. Roberts (Co-PI, UCSB). ESF share \$348,623; total \$1,704,236,

European Union COST Program. *CONVERGES: Knowledge conversion for enhancing management of European riparian ecosystems and services*. 2017-2021. S. Dufour (PI), J.C. Stella (Collaborator) and 33 others.

USDA Cooperative State Research Service. *The effects of Riparian Management Zone delineation on timber value and ecosystem services in diverse forest biomes across the United States*. 2017–2018. R. Germain (PI) and J.C. Stella (Co-PI). \$63,274.

National Science Foundation EAR-1024820. *Collaborative Research: Quantifying Feedbacks between Fluvial Morphodynamics and Pioneer Riparian Vegetation in Sand-Bed Rivers*. 2010–2015. J.C. Stella (PI), A.C. Wilcox (PI, U. Montana), and A.F. Lightbody (PI, UNH). SUNY-ESF share: \$205,680 ; total: \$650,000.

U.S. Geological Survey. *Responses of floodplain vegetation to sediment dynamics and feedbacks*. 2015. J.C. Stella (PI). \$10,000.

The Nature Conservancy/ESSA Technologies. *Riparian wood recruitment analysis for bank migration scenarios on the Middle Sacramento River, CA*. 2015. J.C. Stella (PI). \$37,925.

- Centre National de la Recherche Scientifique, Observatoire Homme Milieux (CNRS, France). *Ecosystem service of carbon sequestration associated with riparian management strategies on the old Rhône River.* 2015. V. Matzek and J.C. Stella (PI's). \$11,100.
- European Institute for Advanced Study (EURIAS). *Common challenges and opportunities in riparian zone management along large, Mediterranean-climate rivers.* 2013–2014. J.C. Stella (PI). \$75,000.
- Centre National de la Recherche Scientifique, Observatoire Homme Milieux (CNRS, France). *Riparian forest composition and structure in former Girardon engineering structures of the old Rhône River, France.* 2014. J.C. Stella (PI). \$16,000.
- USDA Forest Service, Northeastern States Research Cooperative. *Quantifying Beaver Impacts on Adirondack Forest Communities at a Landscape Scale.* 2012–2014. J.C. Stella (PI), E. Bevilacqua (Co-PI) and J. Frair (Co-PI). \$87,850.
- USDA Cooperative State Research Service. *Beaver Influence on Vegetation Structure and Avian Diversity at Local and Landscape Scales.* 2013–2015. S. McNulty (PI), J.C. Stella (Co-PI). \$52,000.
- SUNY-ESF, Research Seed Grant. *A New Tool for Restoration Ecology: Stable Carbon Isotopes in Tree Rings as Indicators of Ecosystem Change.* 2010–2011. J.C. Stella (PI) and M. Teece (Co-PI). \$8,000.
- Western Caucus Pooled Fund. *Riparian Study Development for the Lower Yuba River.* 2010–11. South Yuba River Citizens League. Travel and meeting coordination funding for J.C. Stella. \$7,000.
- USDA Cooperative State Research Service. *Restoring Small, Ephemeral Wetlands in Forested Landscapes in New York State.* 2009–2012. J.P. Gibbs, J.C. Stella (Co-PI). \$89,850.
- Centre National de la Recherche Scientifique (CNRS, France). *Programme International de Coopération Scientifique: Contrôles géomorphologiques et dynamique des ripisylves dans les rivières à méandres de piémont (étude comparée de l'Ain et du Sacramento).* 2009–2011. H. Piégay (PI) and G.M. Kondolf (PI). International research funding for J.C. Stella. Total for all collaborators: \$120,000.
- CALFED Science Fellows Program. *Modeling physical drivers and age structure of cottonwood forest habitat: an integrated systems approach.* 2008–2010. J.C. Stella (PI) and A.K. Fremier. \$228,750.
- USDA Cooperative State Research Service. *Quantifying riparian zone structure and function to guide management of the northern hardwood forest ecosystem.* 2008–2011. J.C. Stella (PI). \$82,000.
- SUNY-ESF, Research Seed Grant. *Elemental stoichiometry and ecosystem health of Onondaga Creek.* 2008. J.C. Stella (PI) and K.E. Limburg. \$8,000.
- CALFED Science Fellows Program. *Effects of river regulation and climate on sustainability of Fremont cottonwood (*Populus fremontii*) forests in California's Central Valley.* 2006–2008. J.J. Battles (PI) and J.C. Stella. \$228,750.
- NSF Doctoral Dissertation Improvement Grant. *Developing a predictive understanding of recruitment and survival of pioneer riparian trees on regulated rivers.* 2003. J.C. Stella (doctoral fellowship), with J.J. Battles (PI). \$11,950.
- CALFED Science Fellows Program. *A mechanistic model to evaluate and improve riparian restoration success.* 2003–2004. J.C. Stella (doctoral fellowship), with J.J. Battles (PI). \$93,491.
- CALFED Ecosystem Restoration Program. *A mechanistic approach to riparian restoration in the San Joaquin Basin.* 2002–2003. Research grant #1999-B152 awarded to Stillwater Sciences (Project developed by J.C. Stella; data collection used for dissertation research). \$289,666.

PUBLICATIONS

Peer-Reviewed Articles Published, in Press, and in Review (*indicates student contributor)

- Thorel, M., H. Piégay, C. Barthélémy, B. Räßple*, C-R Gruel*, P. Marmonier, T. Winiarsky, J-P Bedell, F. Arnaud*, G. Roux, **J.C. Stella**, G. Seignemartin*, A. Tena-Pagan, V. Wawrzyniak*, D. Roux-Michollet, B. Oursel, S. Fayolle, C. Bertrand*, E. Franquet. (*in press*) Socio-environmental stakes associated with process-based restoration strategies in large rivers: should we remove novel ecosystems along the Rhône (France)? *Regional Environmental Change*
- Räßple, B.*, H. Piégay, **J.C. Stella**, D. Mercier*. 2017. What drives riparian vegetation establishment in river channels at patch to corridor scales? Insights from annual airborne surveys (Drôme River, SE France). *Ecohydrology* DOI: [10.1002/eco.1886](https://doi.org/10.1002/eco.1886)

- Kui, L. *, **J.C. Stella**, P.B. Shafroth, P.K. House, A.C. Wilcox. 2017. The long-term legacy of geomorphic and riparian vegetation feedbacks on the dammed Bill Williams River, Arizona, USA. *Ecohydrology* DOI:[10.1002/eco.1839](https://doi.org/10.1002/eco.1839)
- Ledford, S.H.*, L.K. Lautz, P.G. Vidon, **J.C. Stella**. 2017. Impact of seasonal changes in stream metabolism on nitrate concentrations in an urban stream. *Biogeochemistry* DOI:[10.1007/s10533-017-0336-7](https://doi.org/10.1007/s10533-017-0336-7)
- Diehl, R.M., A.C. Wilcox, **J.C. Stella**, L. Kui*, L. Sklar, A. Lightbody. 2016. Fluvial sediment supply and pioneer woody seedlings as a control on bar-surface topography. *Earth Surface Processes and Landforms* DOI:[10.1002/esp.4017](https://doi.org/10.1002/esp.4017)
- Hultine, K.R., K.C. Grady, T.E. Wood, S.M. Shuster, **J.C. Stella**, T.G. Whitham. 2016. Climate change perils for dioecious plant species. *Nature Plants*. DOI:[10.1038/nplants.2016.109](https://doi.org/10.1038/nplants.2016.109)
- Ledford, S.H.*, L.K. Lautz, **J.C. Stella**. 2016. Hydrogeologic processes impacting storage, fate, and transport of chloride from road salt in urban riparian aquifers. *Environmental Science and Technology* 50: 4979–4988 DOI:[10.1021/acs.est.6b00402](https://doi.org/10.1021/acs.est.6b00402)
- Kui, L. * and **J.C. Stella**. 2016. Fluvial sediment burial increases mortality of riparian tree seedlings but induces compensatory growth response in survivors. *Forest Ecology and Management*, 366. DOI: [10.1016/j.foreco.2016.02.001](https://doi.org/10.1016/j.foreco.2016.02.001)
- Bywater-Reyes, S. *, A.C. Wilcox, **J.C. Stella**, and A.F. Lightbody. 2015. Flow and scour constraints on uprooting of pioneer woody seedlings, *Water Resources Research*, 51. DOI:[10.1002/2014WR016641](https://doi.org/10.1002/2014WR016641)
- Dixon, M.D. and **J.C. Stella**. 2015. Temporal variability in hydrology modifies the influence of geomorphology on wetland distribution along a desert stream: a commentary on Dong et al. 2015. *Journal of Ecology*. DOI:[10.1111/1365-2745.12499](https://doi.org/10.1111/1365-2745.12499)
- Bishop, D.A. *, C.M. Beier, N. Pedersen, G.B. Lawrence, **J.C. Stella**, T.J. Sullivan. 2015. Regional growth decline in sugar maple (*Acer saccharum*) and potential causes. *Ecosphere*. DOI:[10.1890/ES15-00260.1](https://doi.org/10.1890/ES15-00260.1)
- Manners, R., A.C. Wilcox, L. Kui*, A. Lightbody, **J.C. Stella**, L. Sklar. 2015. When do plants modify fluvial processes? Plant-hydraulic interactions under variable flow and sediment supply rates. *Journal of Geophysical Research – Earth Surface*. DOI:[10.1002/2014JF003265](https://doi.org/10.1002/2014JF003265)
- Kui, L. *, **J.C. Stella**, A. Lightbody, A.C. Wilcox. 2014. Ecogeomorphic feedbacks and flood loss of riparian tree seedlings in meandering channel experiments. *Water Resources Research*. 50, DOI: [10.1002/2014WR015719](https://doi.org/10.1002/2014WR015719)
- Dufour, S., M.K. Hayden*, **J.C. Stella**, H. Piégay, J.J. Battles. 2014. Maintaining channel abandonment processes increases riparian plant diversity within fluvial corridors. *Ecohydrology*. DOI: [10.1002/eco.1546](https://doi.org/10.1002/eco.1546)
- Riddle, J., N. Pedersen, **J.C. Stella**, D.L. Leopold. 2014. Shifting climate sensitivity and contrasting growth trends in *Juniperus* species growing together at opposite range margins. *Tree-Ring Research* 70:101–111. DOI:[10.3959/1536-1098-70.2.101](https://doi.org/10.3959/1536-1098-70.2.101)
- Stella, J.C.**, J. Riddle*, H. Piégay, M. Gagnage*, M-L. Trémélo. 2013. Climate and local geomorphic interactions drive patterns of riparian forest decline along a Mediterranean Basin river. *Geomorphology*. DOI:[10.1016/j.geomorph.2013.01.013](https://doi.org/10.1016/j.geomorph.2013.01.013)
- Stella, J.C.**, P. Rodríguez-González, S. Dufour, J. Bendix. 2013. Riparian vegetation research in Mediterranean-climate regions: common patterns, ecological processes, and considerations for management. *Hydrobiologia* 719:291–315. DOI: [10.1007/s10750-012-1304-9](https://doi.org/10.1007/s10750-012-1304-9)
- Eallonardo, A. S. *, D.J. Leopold, J.D. Fridley and **J.C. Stella**. 2012. Salinity tolerance and the decoupling of resource axis plant traits. *Journal of Vegetation Science*. DOI:[10.1111/j.1654-1103.2012.01470.x](https://doi.org/10.1111/j.1654-1103.2012.01470.x)
- Singer, M.B., **J.C. Stella**, S. Dufour, L.B. Johnstone*, H. Piégay, and R.J.S. Wilson. 2012. Contrasting water uptake and growth responses to drought in co-occurring riparian tree species. *Ecohydrology*. 6: 402–412. DOI:[10.1002/eco.1283](https://doi.org/10.1002/eco.1283)
- Beier C.M., **J.C. Stella**, M. Dovçiak, S.A. McNulty. 2012. Local climatic drivers of changes in phenology at a boreal-temperate ecotone in eastern North America. *Climatic Change* 115:399–417. DOI: [10.1007/s10584-012-0455-z](https://doi.org/10.1007/s10584-012-0455-z)

- Schifman, L.A.* , **J.C. Stella**, M. Teece and T.A. Volk. 2012. Plant growth and water stress response of hybrid willow (*Salix* spp.) among sites and years in central New York. *Biomass & Bioenergy* 36: 316–326. DOI:[10.1016/j.biombioe.2011.10.042](https://doi.org/10.1016/j.biombioe.2011.10.042)
- Stella, J.C.**, M.K. Hayden*, J.J. Battles, H. Piégay, S. Dufour, and A.K. Fremier. 2011. The role of abandoned channels as refugia for sustaining pioneer riparian forest ecosystems. *Ecosystems* 14: 776–790. DOI:[10.1007/s10021-011-9446-6](https://doi.org/10.1007/s10021-011-9446-6)
- Harper, E.B., **J.C. Stella**, A.K. Fremier. 2011. Global sensitivity analysis for complex ecological models: a case study of riparian cottonwood population dynamics. *Ecological Applications* 21: 1225–1240. DOI:[10.1890/10-0506.1](https://doi.org/10.1890/10-0506.1)
- Downs, P.W., M.S. Singer, B.K. Orr, Z.E. Diggory, T.C. Church, and **J.C. Stella**. 2011. Restoring ecological integrity in highly regulated rivers: The role of baseline data and analytical references. *Environmental Management* 48:847–864. DOI:[10.1007/s00267-011-9736-y](https://doi.org/10.1007/s00267-011-9736-y)
- Stella, J.C.**, and J.J. Battles. 2010. How do riparian woody seedlings survive seasonal drought? *Oecologia* 164:579–590. DOI:[10.1007/s00442-010-1657-6](https://doi.org/10.1007/s00442-010-1657-6)
- Stella, J.C.**, J.J. Battles, J.R. McBride, B.K. Orr. 2010. Riparian seedling mortality from simulated water table recession, and the design of sustainable flow regimes on regulated rivers. *Restoration Ecology*. 18(S2): 284–294. DOI:[10.1111/j.1526-100X.2010.00651.x](https://doi.org/10.1111/j.1526-100X.2010.00651.x)
- Rodríguez-González, P.M.* , **J.C. Stella**, F. Campelo, T. Ferreira, A. Albuquerque. 2010. Subsidy or stress? Tree structure and growth in wetland forests along a hydrological gradient in southern Europe. *Forest Ecology and Management* 259: 2015–2025. DOI:[10.1016/j.foreco.2010.02.012](https://doi.org/10.1016/j.foreco.2010.02.012)
- Stella, J.C.**, J.J. Battles, B.K. Orr, J.R. McBride. 2006. Synchrony of seed dispersal, hydrology and local climate in a semi-arid river reach in California. *Ecosystems* 9:1200-1214. DOI:[10.1007/s10021-005-0138-y](https://doi.org/10.1007/s10021-005-0138-y)

Book Chapters and Conference Proceeding Papers (*indicates student contributor)

- Orr, B.K., A.G. Merrill, Z.E. Diggory, **J.C. Stella**. 2017. Use of the biophysical template for riparian restoration and revegetation in the Southwest. In: Ralston, B.E., and Sarr, D.A., Eds. Case studies of riparian and watershed restoration in the southwestern United States—principles, challenges, and successes. U.S. Geological Survey Open-File Report 2017-1091, 116 p. DOI: [10.3133/20171091](https://doi.org/10.3133/20171091)
- Sabater, S., X. Timoner, G. Bornette, M. de Wilde, J.C. Stromberg, **J.C. Stella**. 2016. The biota of intermittent rivers and ephemeral streams: algae and vascular plants. In *Intermittent Rivers: Ecology and Management* (T. Datry, N. Bonada and A. Boulton, Eds.). Elsevier, San Diego. DOI:[10.1016/B978-0-12-803835-2.00016-4](https://doi.org/10.1016/B978-0-12-803835-2.00016-4)
- Stella, J.C.**, H. Piégay, J.D. Riddle, C. Gruel*, B. Räßle*. 2015. Riparian forest impacts and dynamics on large rivers managed for multiple uses; insights from the Sacramento (California, USA) and Rhône (France). Proceedings of the Second Integrative Sciences and Sustainable Development of Rivers (IS Rivers) Conference, Lyon, France, 22–26 June 2015.
- Räßle, B.* , K. Michel, H. Piégay, R. Dunford, D. Mercier*, **J.C. Stella**. 2015. Caractéristiques et dynamique de la végétation riveraine sur la rivière Drôme: analyses à partir d'images aériennes de très haute résolution. Proceedings of the Société Hydrotechnique de France (SHF) annual congress. Paris, France, April 2015.
- Bendix, J., and **J.C. Stella**. 2013. Riparian Vegetation and the Fluvial Environment: A Biogeographic Perspective. In *Treatise on Geomorphology 12: Ecogeomorphology* (D. Butler and C. Hupp, Eds.). Elsevier, San Diego. DOI [10.1016/B978-0-12-374739-6.00322-5](https://doi.org/10.1016/B978-0-12-374739-6.00322-5)
- Stella, J.C.**, J.D. Riddle, J.J. Battles, M.K. Hayden*, and A.K. Fremier. 2012. Riparian forest dynamics on a large, regulated river (California, USA): impacts and implications for management. Proceedings of the Integrative Sciences and Sustainable Development of Rivers (IS Rivers) Conference, Lyon, France, 26–28 June 2012. <http://www.graie.org/ISRivers/actes/pdf2012/1B109-237STE.pdf>
- Skorko, K.* , A. Lightbody, L. Kui*, **J.C. Stella**, A.C. Wilcox. 2012. Hydraulic and topographic response of sand-be rivers to riparian vegetation presence and patterns: field-scale laboratory methods and results. *Proceedings of the Hydraulic Measurements and Experimental Methods Conference (HMEM 2012)*. Snowbird, UT.

Stella, J.C., J.C. Vick, B.K. Orr. 2004. Riparian vegetation dynamics on the Merced River. *The Wilderness Society Riparian Floodplains Conference Proceedings*. Sacramento, CA. March 2001.

Stella, J.C. 1998. The Greywacke Cover-up. *Soil Survey Horizons* 39(4): 127-130.

Applied Research Reports and Non-Peer Reviewed Articles

Wilcock, P., **J.C. Stella**, D. Orth and Atkins Environmental. 2012. Senior scientific review of Trinity River Restoration Program, Fiscal Year 2013 Preliminary Science Workplan. Provided to the Trinity Management Council (U.S. Bureau of Reclamation and Partners).

Stella, J.C.. 2012. Senior scientific review of Platte River Recovery Implementation Program, Directed Vegetation Research. Nebraska Community Foundation, Inc.

Stella, J.C. 2011. Yuba River Riparian Study: Cottonwood Limiting Factors Analysis. Prepared for Yuba County Water Agency. Yuba River Development Project, FERC Project No. 2246.

Stillwater Sciences. 2006. Restoring recruitment processes for riparian cottonwoods and willows: a field-calibrated predictive model for the lower San Joaquin Basin. Prepared for CALFED Bay-Delta Ecosystem Restoration Program, Sacramento, California. Prepared by Stillwater Sciences and Dr. **J.C. Stella**, in conjunction with Dr. J.J. Battles and Dr. J.R. McBride, Department of Environmental Science, Policy, and Management, University of California, Berkeley.
(<http://www.stillwatersci.com/resources/2006riperecruitbrochure.pdf>)

Stillwater Sciences. 2006. Merced River Ranch revegetation experiment. Prepared by Stillwater Sciences, Berkeley, California, for CALFED, Sacramento, California.
(http://merced.stillwatersci.com/pdf/10/Tech%20Memo_10_Reveg%20Expt_compiled.pdf)

Stillwater Sciences. 2002. Merced River corridor restoration plan. Prepared by Stillwater Sciences, Berkeley, California for CALFED Bay-Delta Program, Sacramento, California
(<http://www.stillwatersci.com/resources/2004mercedrestoplan.pdf>)

Stillwater Sciences. 2001. Merced River Restoration Plan Phase II. Volume II: Baseline evaluations; geomorphic and riparian vegetation investigations. Prepared by Stillwater Sciences, Berkeley, CA for CALFED Bay-Delta Ecosystem Restoration Program, Sacramento, CA.
(<http://www.stillwatersci.com/resources/2001mercedrestov2.pdf>)

HONORS AND AWARDS

Faculty Fellowship, European Institute for Advanced Study (EURIAS), Lyon France 2013–2014

Schubert Prize, Dept. of Environmental Science, Policy and Management, UC Berkeley, 2005

Colman Fellowship in Watershed Management, UC Berkeley, 2000, 2003

ESPM Departmental Fellowships, UC Berkeley, 1996, 1997, 2000

INVITED PRESENTATIONS AND SPECIAL SESSIONS

Stella, J.C. (invited), 2017. Defining groundwater-dependent ecosystems and assessing critical water needs for their foundational plant communities. Invited presentation at the American Geophysical Union Fall Meeting, New Orleans, LA. December 2017.

Stella, J.C. (invited special session panelist), 2017. Approaches and tools for assessing dependence and vulnerability of GDE plant communities. Putting Policy into Practice: Achieving Sustainable Groundwater Management for People and Nature. Annual Meeting of the Ecological Society of America, Portland, OR, August 2017.

Stella, J.C. (conference organizing committee). 2017. Confluence to Influence: Preserving and enhancing the multiple functions and services of riparian zones in a changing climate. Davis, CA. 17–19 October, 2017.

Stella, J.C. (invited panelist). 2015. 11th Annual Berkeley River Restoration Symposium. Berkeley, CA. 5 December 2015.

Stella, J.C. (invited panelist). 2015. El Nino Climate Summit. University of California, Davis. 5 December 2015

- Stella, J.C. (invited presenter).** 2015. Hydrologic Analysis for Ecosystem Restoration. Presentations on behalf of The Nature Conservancy for the U.S. Army Corps of Engineers. Hydrologic Engineering Center, Davis, CA. 18-19 November 2015.
- Stella, J.C. (invited moderator).** 2015. Panel on Climate Challenges for the Sacramento–San Joaquin watershed. Southwest Climate Summit. Landscape Conservation Cooperative — Southwest Region. Sacramento, CA. 2–3 November 2015.
- Stella, J.C. (conference scientific committee).** Second I.S. Rivers conference (Integrative sciences and sustainable development of rivers). Lyon, France. 22–26 June, 2015
- Stella, J.C. (co-organizer),** with H. Piégay and R. Luster. 2015. Synthesizing riparian science and management challenges on large, multi-use rivers: cross-system lessons from Europe and North America. Second I.S. Rivers conference (Integrative sciences and sustainable development of rivers). Lyon, France. 22–26 June, 2015
- Stella, J.C. (invited)** 2015. Riparian vegetation and fluvial interactions at multiple scales. Symposium on aquatic-terrestrial linkages. Umeå, Sweden, March 2015.
- Stella, J.C. (co-organizer),** with H. Piégay, G.M. Kondolf, D. Roux-Michollet (co-organizers). 2014. International workshop on large river management, Rhône and Sacramento rivers. Collaborative exchange among managers and scientists with the California Department of Water Resources, The Nature Conservancy, U.S. Fish and Wildlife Service, American Rivers, and the French Water Agency (Agence de l'eau), and the French National Center for Scientific Research (CNRS). Berkeley, CA. 14-17 December 2014.
- Stella, J.C. (special session convener),** H. Piégay, G. David, and B. Eaton (co-conveners). 2014. River-Floodplain Connectivity: Interactions among Riparian Vegetation, Fluvial Wood, Stream Morphodynamics and Biogeochemical Cycles. American Geophysical Union Fall Meeting, San Francisco, CA, December 2014.
- Stella, J.C. (invited)** 2014. Riparian forest dynamics and management challenges on Mediterranean-climate rivers. Restoring the West Conference, Utah State University. Logan, UT, October 2014
- Stella, J.C. (special session organizer),** K. Holl, V. Matzek, and M. Dixon (co-organizers). 2014. Connecting mountains to the sea: riparian research and management challenges in large river systems. Annual Meeting of the Ecological Society of America, Sacramento, CA, August 2014.
- Stella, J.C. (invited)** 2014. Développement et enjeux de la gestion des ripisylves sur les grands fleuves (Riparian forest development and management challenges on large river floodplains). Café Fluvial, École Normale Supérieure de Lyon. Lyon, France, June 2014
- Stella, J.C. (invited)** 2014. Populus nigra growth and water use under a changing climate: insights from stable isotopes in tree rings. Institut National de la Recherche Agronomique d'Orléans and University of Tours. Orleans, France, May 2014
- Stella, J.C. (invited)** 2014. Trends in water use and growth for riparian trees undergoing climatic drying. Instituto Superior de Agronomia, Universidade de Lisboa. Lisbon, Portugal, March 2014
- Stella, J.C. (invited)** 2014. Trends in water use efficiency, and tradeoffs between growth and function for riparian trees undergoing climatic drying. Department of Geography, University of Rennes. Rennes, France, February 2014
- Stella, J.C. (invited)** 2013. Un fleuve durable? Managing large rivers for human and ecosystem needs: the case of the Middle Rhône. Collegium de Lyon Seminar Series, École Normale Supérieure de Lyon. Lyon, France, October 2013
- Stella, J.C. (invited)** 2013. Recent advances in quantifying plant and geomorphic feedbacks in alluvial rivers. Earth Sciences Department, University of New Hampshire. Durham, NH, April 2013
- Stella, J.C. (invited),** J. Riddle, J.J. Battles. 2012. Coevolution of floodplain and riparian forest dynamics on large, meandering rivers. Invited oral presentation at the American Geophysical Union Fall Meeting, San Francisco, CA, December 2012.
- Stella, J.C. (invited)** 2012. Emerging issues in riparian science in arid regions. Center for Watershed Sciences, University of California, Davis. Davis, CA, December 2012

- Stella, J.C. (invited instructor).** 2012. Partnering with Beaver in Stream Restoration Short Course, Utah State University, Logan, UT, October 2012
- Stella, J.C. (invited)** 2012. Riparian forest dynamics on the Sacramento River (California, USA): impacts and implications for management. Research briefing for U.S. Fish and Wildlife Service personnel, Willows, CA. July 2012.
- Stella, J.C. (invited)** 2012. Com'Eau Labo Workshop - Better communication and collaboration between managers and scientists: discussions about current practices in France and the United States IS Rivers International Conference (Integrative Sciences and Sustainable Development of Rivers), Lyon, France, June 2012.
- Stella, J.C. (invited)** 2011. Réponse des ripisylves à une modification du régime hydrologique : diagnostic et propositions de restauration (Riparian forest response to modified riparian hydrological regimes: diagnosis and proposals for restoration). Colloque 13: Réhabilitation des hydrosystèmes: enjeux scientifiques et nouvelles perspectives (“Symposium 13: Rehabilitation of hydrosystems: scientific issues and new perspectives”). Entretiens Jacques Cartier 2011. Montreal, Canada, October, 2011.
- Stella, J.C. (invited instructor).** 2011. Partnering with Beaver in Stream Restoration Short Course, Utah State University. Loga, UT September 2011.
- Stella, J.C. (invited)**, J. Riddle*, H. Piégay, 2011. Dendroecology as an indicator of riparian function and drivers of meso-scale ecosystem impacts. International Association of Vegetation Science Meeting, Lyon, France, June 2011.
- Stella, J.C. (invited)**, J. Riddle*, H. Piégay, M. Teece, 2011. Integrating tree-ring and stable carbon isotope analysis to measure riparian ecosystem function, integrity, and meso-scale hydrogeomorphic impacts. Seventh Symposium for European Freshwater Sciences, Girona, Spain, June – July, 2011.
- Stella, J.C. (special session organizer)**, J. Bendix, H. Piégay, and P. Downs (co-organizers). Non-equilibrium drivers in Mediterranean climate river and riparian ecosystems. American Geophysical Union Fall Meeting, San Francisco, CA, December 2010.
- Stella, J.C. (invited).** 2010. INECOL/SUNY-ESF research collaboration workshop. Presentation on professional research program and FNRM discipline areas. Instituto de Ecología, A.C. (INECOL), Xalapa, Mexico. March 15, 2010.
- Stella, J.C. (special session organizer)**, A.K. Fremier. S. Dufour, and H. Piégay (co-organizers). Ecological Processes on Abandoned Riparian Floodplains. Annual Meeting of the Ecological Society of America, Albuquerque, NM, August 2009.
- Stella, J.C. (invited)** 2009. A river runs through it: modeling and restoring riparian forests on dynamic floodplains. Invited speaker, Bowdoin College Biology Seminar Series. Brunswick, ME. Sept. 2009.
- Stella, J.C. (invited)** 2009. Abiotic Controls on Riparian Forest Development at Leaf to Landscape Scales. Invited speaker, Syracuse University Biology Seminar Series. Syracuse, NY. February, 2009.
- Stella, J.C. (invited)** 2007. Scaling from the leaf to the floodplain: Linking physiology studies with life history traits to restore streamside forests in arid regions. IGERT Biogeochemistry and Environmental Biocomplexity Seminar, Cornell University. Ithaca, NY. October, 2007.
- Stella, J.C. (invited)** 2007. Quantitative approaches to restoring streamside forests in a water-limited ecosystem. Department of Geography Symposium, Syracuse University. Syracuse, NY. September, 2007.
- Stella, J.C. (invited)** 2006. Quantitative approaches to riparian restoration in California (USA). River Restoration International Symposium. Madrid, Spain. September, 2006.
- Stella, J.C. (special feature)** 2003. Research featured in Forests Round the Bend, a special issue on riparian restoration efforts on the Sacramento River. Science-In-Action Newsletter, CALFED Bay-Delta Program. Sacramento, CA

PROFESSIONAL SERVICE

Boards of directors

- *The Nature Conservancy*, Western and Central New York Chapter. 2015–present.
- *Onondaga Earth Corps*, Syracuse, NY. 2016–present.

- *Town of DeWitt Urban Tree Committee*, DeWitt, NY. 2015–2016
- *The Star Foundation* private philanthropy, EIN 256761169. 2001–present.

Editorial roles and conference planning

- Subject Matter Editor, *Ecological Applications*, Ecological Society of America (2016–present)
- Editorial Advisory Board member, *Riparian Ecology and Conservation* (2012–present)
- Conference planning committee, *Confluence to Influence: Preserving and enhancing the multiple functions and services of riparian zones in a changing climate*. Davis, CA. (Oct. 2017)
- Conference scientific committee, *2015 I.S. Rivers Conference — Integrative sciences and sustainable development of rivers*. Lyon, France (June 2015)
- Special session convener, *American Geophysical Union Annual Meeting* (2010, 2014) and *Ecological Society of America Annual Meeting* (2009, 2014)

Journal reviews for

Ecological Applications; Water Resources Research; Frontiers in Ecology and the Environment; BioScience: Ecohydrology; Global Change Biology; River Research and Applications; Hydrobiologia; Forest Ecology and Management; Earth Surface Processes and Landforms; Riparian Ecology and Conservation; Ecoscience; Wetlands; Ecological Restoration; Environmental Management; Journal of the American Water Resources Association

Proposal reviews for

- National Science Foundation
- French National Network of Institutes of Advanced Study (RFIEA)
- Northeastern States Research Cooperative (USDA Forest Service)
- USDA Cooperative State Research Service Grant Program

Technical reviews for:

- Trinity River Restoration Program, Technical Review for FY13 Preliminary Science Workplan
- Platte River Recovery Implementation Program, Directed Vegetation Research Study. 2011.
- Yuba River Development Project, FERC Relicensing Project No. 2246. 2011.
- USGS Geomorphic and Sediment Transport Laboratory. Project for monitoring vegetation change on the central Platte River, NE. 2007.
- CA Regional Water Quality Control Boards. Proposed Stream and Wetlands Protection Policy for North Coast and San Francisco Bay Regions. 2006.
- CA Dept. of Fish and Game. Protocol for quantitative studies of riparian restoration effectiveness. 2004.
- CA Dept. of Water Resources. Robinson Reach revegetation and monitoring plan, Merced River, CA. 2002.

PROFESSIONAL AFFILIATIONS

Ecological Society of America
 American Geophysical Union
 Society for Ecological Restoration
 Society of Wetland Scientists