

Jessica Fox

Electric Power Research Institute

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Jessica Fox is a Program Manager at the Electric Power Research Institute (EPRI), where she leads efforts on water quality trading, ecosystem services, sustainability and related work. Ms. Fox is a thought leader on environmental credit stacking, water quality trading, and species conservation banking. Ms. Fox created and manages the EPRI Ohio River Basin Water Quality Trading Project, which is the world's first interstate trading program for nutrients. Under Ms. Fox's leadership, the project has addressed critical social, scientific, and economic issues and become a model project in the United States (<http://wqt.epri.com>). Her projects on ecosystem services focus on creating a business case for considering ecosystem services in day-to-day corporate decision making, including using models, cost-benefit considerations, and executive perspectives. Ms. Fox also leads EPRI's Energy Sustainability Interest Group, a collaborative forum for electric power company sustainability managers to strategically advance critical issues related to the sustainable generation and distribution of electricity; this effort includes over 40 electric utilities and is the largest collective group in the industry addressing sustainability.

Ms. Fox has hosted and facilitated numerous workshops and has authored or coauthored over 40 reports and other publications. She is a trained meeting facilitator and conflict resolution mediator, a Certified Ecologist by the United States Ecological Society of America, and a Certified Habitat Steward by the National Wildlife Federation. She also interacts with a wide variety of energy and environmental stakeholders, including the U.S. Environmental Protection Agency, the U.S. Department of Agriculture, the U.S. Fish and Wildlife Service, and environmental groups, among many others.

Ms. Fox's scientific background in conservation genetics, sustainable development, sustainable agriculture, human genome mapping and sequencing, and molecular biology laboratory techniques provide strong scientific foundations for understanding complex environmental challenges and innovative methods for addressing them. Scientific credibility combined with proven success at teambuilding, conflict resolution, and fundraising allows Ms. Fox to execute complex, multifaceted projects.

Professional Experience

Electric Power Research Institute, Palo Alto, CA, 2002 – present
Program Manager

GeneMachines, San Carlos, CA 2000 – 2002
Product/Project Manager

Incyte Genomics, Palo Alto, CA, 2000
Independent Consultant

Stanford Human Genome Center, Palo Alto, CA, 1998-2000
Research Scientist

Bureau of Land Management, Medford, OR, 1997
Conservation Biology Intern – Invasive Weed Management

Shaffer Lab University of California at Davis, Davis, CA, 1994-1997
Conservation Genetics Research Assistant

Education

M.S., Biological Sciences, Stanford University, CA, 2002

B.S., Biological Sciences, University of California, Davis, CA, 1997

Certifications, Affiliations and Honors

Certified Ecologist, United States Ecological Society of America, 2004

Certified Habitat Steward by National Wildlife Federation

Trained “Master Facilitator,” Leadership Strategies, 2010

Advisory Board, Issues in Ecology, Publication of Ecological Society of America (2011 to Present)

Advisor to Sustainable Accounting Standards Board (SASB), USA (2012 to Present)

Organizational Stakeholder (via EPRI) to Global Reporting Initiative (GRI) (2012 to Present)

Steering Committee Member, Ohio River Basin Alliance (2011 to 2012)

Developer and teacher of elementary school ecosystem services curriculum in the San Francisco Bay Area

EPRI Performance Recognition and/or “EPRI Chauncey” Awards: 2002, 2009, 2011 and 2012

Publications

J. Fox and T. Maki, “The Challenge of Sustainable Electricity,” *Natural Gas & Electricity*, Vol. 28, No. 7, p. 1, February 2012.

J. Fox, R. C. Gardner, and T. Maki, “Stacking Opportunities and Risks in Environmental Credit Markets,” *The Environmental Law Reporter*, Vol. 41, No. 2, February 2011.

J. Fox, “Biodiversity Protection and Mitigation,” *Stetson Law Review*, Vol. 38, No. 2, Winter 2009.

N. Carrol, J. Fox and R. Bayon, editors, Book: *Conservation and Biodiversity Banking: A Guide to Setting Up and Running Biodiversity Credit Trading Systems*, Earthscan, Sterling VA, 2008.

J. Fox, “Getting Two for One: Opportunities and Challenges in Credit Stacking,” *Conservation and Biodiversity Banking: A Guide to Setting Up and Running Biodiversity Credit Trading Systems*, Earthscan, Sterling VA, 2008.

D. Fleisher and J. Fox, “Pitfalls and Challenges in Conservation Banking,” *Conservation and Biodiversity Banking: A Guide to Setting Up and Running Biodiversity Credit Trading Systems*, Earthscan, Sterling VA, 2008.

J. Fox, G.C. Daily, B. Thompson, K.M.A. Chan. A. Davis, and A. Nino-Murcia, “Conservation Banking,” *The Endangered Species Act at Thirty: Conserving Biodiversity in Human-dominated Landscapes*, ed. J. M. Scott, D. D. Goble, and F. W. Davis, Island Press, Washington, D.C., 2006.

J. Fox, “The Value of Your Eco-Assets,” *Electric Perspectives*, Pp. 18-26, March/April 2006.

J. Fox, "Convert Natural Resource Liabilities into Business Assets," *Biocurrents*, Edison Electric Institute, October 2005.

J. Fox and A. Nino-Murcia. "Status of Species Conservation Banking in the U.S.," *J. Conservation Biology*, Vol. 19, No.4, Pp. 996-1007, August 2005.

M. Bauer, J. Fox, and M. Bean, "Landowners Bank on Conservation: the U.S. Fish and Wildlife Service's Guidance on Conservation Banking," *The Environmental Law Reporter*, Vol. 34, No. 8, Pp. 10717-10722, August 2004.

J. Fox, "Conservation Banking: Moving Beyond California," Invited article by Forest Trend's *Ecosystem Marketplace*, 2004: <http://www.ecosystemmarketplace.com/news/article.feat.019.php>.

J. Logan (Fox), "Extraction, Polymerase Chain Reaction, and Sequencing of a 440 Base Pair Region of the Mitochondrial Cytochrome Oxidase I Gene from Two Species of Acetone-preserved Damselflies (Odonata: Coenagrionidae, Agrionidae)," *Environmental Entomology*, Vol 28, No. 2, Pp. 143-147, April 1999.

J. Logan (Fox), "Effects of Water Pollution on Odonates in Coto Brus, Costa Rica," *Argia* (the new journal of the Dragonfly Society of the Americas, an affiliate of the Societas Internationalis Odonatologica), Vol. 2, Pp. 32-33, 1999.

Select EPRI Publications

Energy Sustainability Interest Group: 2012 Summary, EPRI Report 3002000153, February 2013.

Impact of Key Electric Power Industry Regulatory Issues on Opportunities in Water Quality Trading, EPRI Report 1023764, December 2012.

Offset Credit Stacking, Background Paper for the EPRI Greenhouse Gas Emissions Offset Policy Dialogue Workshop #13, November 2012. [http://eea.epri.com/pdf/ghg-offset-policy-dialogue/workshop13/Background-Paper EPRI-Offsets-W13 Credit-Stacking Final Locked.pdf](http://eea.epri.com/pdf/ghg-offset-policy-dialogue/workshop13/Background-Paper%20EPRI-Offsets-W13%20Credit-Stacking%20Final%20Locked.pdf)

Energy Sustainability Interest Group: Third Quarter 2012 Summary. EPRI Report 1026716, October 2012.

Implementation of the Watershed Analysis Risk Management Framework (WARMF) Watershed Model for Nutrient Trading in the Ohio River Basin—Analysis of Scioto, Muskingum, and Allegheny Watersheds, EPRI Report 1025820, July 2012.

Energy Sustainability Interest Group: Second Quarter 2012 Summary, EPRI Report 1025838, July 2012.

Ohio River Basin Trading Project: Designing for the Electric Power Industry, EPRI Fact Sheet 1025817, June 2012.

A Case Study of Supply Chain Sustainability in the Electric Power Industry, EPRI Report 1024962, May 2012.

Energy Sustainability Interest Group: First Quarter 2012 Summary, EPRI Report 1025511, May 2012.

Energy Sustainability Interest Group: 2011 Summary, EPRI Report 1024963, March 2012.

U.S. National Opinion Survey on Stacking Environmental Credits, EPRI Report 1024803, December 2011.

Sustainability Priorities in the Electric Power Industry: What Sustainability Reports are Communicating to the Public and Shareholders, EPRI Report 1024556, October 2011.

Barriers and Solutions for Farmer Participation in the Ohio River Basin Water Quality Trading Program, EPRI Report 1023642, September 2011.

Ohio River Basin Trading Project, EPRI Newsletter 1024550, September 2011.

Use of Models to Reduce Uncertainty and Improve Ecological Effectiveness of Water Quality Trading Programs, EPRI Report 1023610, August 2011.

Water Disclosure in the Electric Power Industry, EPRI Report 1023279, June 2011.

Ohio River Basin Trading Project Agricultural Stakeholder Listening Workshops, Sardinia, Ohio, October 14th, 2010, EPRI Report 1023133, April 2011.

Ohio River Water Quality Trading Pilot Program: Business Case for Power Company Participation, 2008, EPRI Report 1018861, October 2010.

The Ohio River Basin Trading Project: Designing for Wastewater Treatment Facilities, EPRI Fact Sheet 1021677, October 2010.

The Ohio River Basin Trading Project: Designing for Agriculture, EPRI Fact Sheet 1021452, October 2010.

Ohio River Basin Trading Project Soil and Water Conservation District (SWCD) Informational Meeting—Columbus, Ohio, July 6, 2010, EPRI Report 1021539, September 2010.

Ohio River Basin Trading Project Listening Sessions—Wabash River Watershed, Indiana, March 8-9, 2010, EPRI Report 1021543, September 2010.

Ohio River Basin Trading Project Joint Session: Air, Water, Climate, March 15, 2010 – Orlando, Florida, EPRI Report 1021502, August 2010.

Modeling Nutrient Trading in the Ohio River Basin: Theoretical and Practical Considerations. EPRI Report 1018691, March 2009.

Water Quality Trading Pilot Programs—Review of Catawba River Basin, Chesapeake Bay, and Ohio River Pilot Projects, EPRI Report 1015409, August 2007.

Water Quality Trading for Nitrogen: The Foundation for a Pilot Project. EPRI Report 1014646, May 2007.

Water Quality Trading Opportunities for Electric Power Companies. EPRI White Paper 1013193, March 2006.

Ecological Assets in Business: Dispatches from EPRI Solutions Multi-industry Workshop. May 2006. Project manager, primary researcher, and contributing author.

Removing Barriers to Investing in Markets for Ecosystem Services: The Non-governmental Organization Perspective. EPRI Solutions Report, March 2006. Project manager and contributing author.

Inventory Process Documentation Report and Inventory Management Plan for FirstEnergy's Greenhouse Gas Emissions Inventory, June 2005. Project manager and contributing author.

Inventory Process Documentation Report and Inventory Management Plan for PNM's Greenhouse Gas Emissions Inventory, April 2005. Project manager and contributing author.

Conservation Banking as a Business Opportunity: Identifying Hotspots for Species Credit Trading. Prepared for EPRI, July 2003. Primary researcher and writer.

Ecological Asset Assessment Report of Right-of-ways on Hawaii Island: the Business Value of Rare Species. Report prepared for Hawaii Electric Light Company, Inc., February 2004. Principal author and researcher.

Ecological Asset Assessment Report of Right-of-Ways on Oahu: the Financial, Ecological, and Business Value of Rare Species in Utility Right-of-ways. Report prepared for Hawaiian Electric Company, Inc., March 2003. Principal author and researcher.

Restoring Manufactured Gas Plant Sites for Ecological Value. Final Report, prepared for Alliant, April 2002. Contributor and primary researcher.

Ecological Asset Assessment of a Small Parcel in California: the Value of T&E Species on Corporate Surplus Property. Prepared for Pacific Gas & Electric, October 2002. Contributor and primary researcher.

Ecological Asset Value Development Report, American Electric Power Recreation Lands, OH. Final Report, prepared for American Electric Power, October 2002. Contributor.

Ecological Asset Value Development Report. Final Report, prepared for Entergy, December 2002. Contributor.

Select Hosted and Facilitated Meetings

Co-host, EPRI Offset Credit Stacking Workshop, Washington D.C., November 2012. 100 attendees. <http://eea.epri.com/ghg-offset-policy-dialogue.html#tab=1>

Host and facilitator, EPRI Energy Sustainability Interest Group Spring 2013 Workshop, San Francisco, CA, April 2013. 60 attendees

Host and facilitator, EPRI Energy Sustainability Interest Group Fall 2012 Workshop, Columbus, OH, September 2012. 50 attendees

Host and facilitator, EPRI Energy Sustainability Interest Group Spring 2012 Workshop, Irwindale, CA, May 2012. 50 attendees

Host and facilitator, EPRI Ecological Assets in Business Workshop. Palo Alto, CA, March 2006. 100 attendees.

Select Professional Presentations

“Offset Credit Stacking: Introduction and Overview,” EPRI Offset Credit Stacking Workshop, Washington D.C., November 2012.

“Water Resource Protection—Lessons Learned,” 2012 Utility Environmental Benchmarking Forum III, Nashville, TN, October 2012.

“Addressing the Challenge of Sustainable Electricity,” Presentation to California Public Utilities Commission, San Francisco, CA, August 2012.

“Ohio River Basin Water Quality Trading Project Update,” Webcast, July 2012.

“Ohio River Basin Water Quality Trading Project,” Agriculture Leader Briefing, April 2012.

“Ohio River Basin Trading Program for Wastewater Treatment Plants,” Webcast, February 2011.

“Ohio River Basin Trading Project,” Briefing, Washington D.C., April 2009.

“Water Quality Trading in the Ohio River Basin: A Regional Multi-Credit Project,” Webcast, April 2009.

“Regional Water Quality Trading in the Ohio River Basin,” Presentation to Ohio River Valley Water Sanitation Commission (ORSANCO) Commissioners, February 2009.

“Modeling Nutrient Trading in the Ohio River Basin: Theoretical and Practical Considerations,” EPRI Water Advisory Council meeting, February 2009.

“Existing Ecosystem Service Markets: Who’s Using Them, How Accessible Are They, and Are They Improving Environmental Conditions?” Invited Presentation at Symposium 19: Ecosystem Services in Decision Making, Ecological Society of America Meetings, San Jose, CA, August 2007.

Moderator of the Biodiversity Session at the 2006 Katoomba Meetings, “Making the Priceless Valuable: Jumpstarting Environmental Markets,” Portland, OR, June 2006. Invited by Forest Trends.

Expert Panel Speaker at the special breakout session, “Biodiversity Offsets Markets & Practice: Salmon Offsets?” at the Katoomba Meetings. June 2006.

“The Experience of Species Conservation Banking in the United States,” Conservation Roundtable, Willamette Watershed. Defenders of Wildlife, Portland, OR, May 2006. Invited Presentation.

“Business Opportunities in the Millennium Ecosystem Assessment Findings,” Ceres Conference, Oakland, CA, April 2006. Invited by World Resources Institute.

“Species Conservation Banking: Lessons Learned,” The Wildlife Society Meetings, Western Region, February 2006. Invited by California Department of Fish and Game.

“Eco-assets: Business Friendly Options for Protecting Natural Resources,” Edison Electric Institute, Biology Task Force Meeting, St. Pete Beach, FL, November 2005. Invited Presentation.

“Market-based Incentives for Restoration,” West Virginia University – Revitalizing Communities Through Integrated Restoration, Morgantown, WV, October 2005. Invited Presentation.

Fox. Eco-assets: Business Friendly Options for Protecting Natural Resources. International Conference on Ecology and Transportation (ICOET), August 2005. San Diego, CA.

“Making Money Protecting Endangered Species,” University of California at Santa Barbara, Bren School of Environment, May 2005. Invited Presentation.

“The Growth of Species Banking in the United States,” National Mitigation Banking Associate Conference, Charlotte, N.C., April 2005.

“Species Conservation Banking – New Strategies for Protecting Species,” University of Georgia, Partners Along the Fall Line Conference, Savannah River Ecological Lab, Georgia, March 2005. Invited Presentation.

“Species Conservation Banking – New Strategies for Protecting Species,” Transportation Research Board Meeting, Washington D.C., January 2005. Invited Presentation.

“Species Conservation Banking: A Solution to the Conservation-Development Conflict,” Ecological Society of America Conference, Portland, OR, August 2004.

“Species Bank and Trade Programs as a Market-based Incentive for Recovery of T&E Species: Indiana Bat Case Study,” Ecological Society of America Conference, Savannah, GA, August 2003.

“Is Conservation Banking an Incentive to Protect Species?” Stanford Law School, Palo Alto, CA, January 2003. Invited Presentation.