

Scott E. Gillilan Innovation in Water & Land Conservation P: 406.581.1597 E: scott@gairesources.com P.O. Box 1176 FedEx: 808 West Babcock Ave. Bozeman, Montana 59715

RESUME OF SCOTT E. GILLILAN

EDUCATION

MS, Hydrology, Oregon State University, Corvallis, OR, 1989

BS, Biology, Lewis and Clark College, Portland, OR, 1984

PROFESSIONAL AFFILIATIONS

Fellow (2009), Kinship Conservation Foundation *Past Chair,* Association of Montana Floodplain Managers *Member,* Union of Concerned Scientists

EXPERTISE

- River, Stream, Riparian, Wetland Restoration Design, Permitting and Construction
- Technical Oversight, Construction Inspection, Peer Review, Expert Witness
- Applied Basin, Watershed, Channel Fluvial Investigations and Hydrology
- Floodplain Management and Flood Hazard Investigations
- Applied Strategies for Hydrologic Resilience
- Conservation Property Assessment, Due Diligence, Management and Planning
- Conservation Land Acquisition, Value Creation, Management and Advisory Services
- Aquatic Resource Inventory and Management
- Composting and Soil Building Solutions for Agriculture, Reclamation and Restoration

Mr. Gillilan has been engaged in the aquatic and land restoration sciences since 1984 and professionally consulting in the field for 30 years. As a design/builder on hundreds of projects totaling tens of millions of dollars and hundreds of miles of rivers, he is widely recognized as an innovative leader in the field. Matching client objectives and budgets with site constraints and opportunities is a key skill and includes his ability to rapidly assess the unique elements of every project setting, be that wildland or urban, and match those to project guiding images and project budgets to produce optimized outcomes. He thrives as a manager and contributor on collaborative teams as he is conversant in all relevant engineering, project management, natural science and regulatory issues affecting project outcomes. He is respectful of and interested in all parties interests and needs. Clients include private landowners, agencies, NGO's, attorneys and investment groups. He believes that every project is an opportunity to innovate.



Mr. Gillilan is also the author of numerous papers on natural channel design and restoration, international river restoration standards, and floodplain management. He has experience with every facet of surface hydrology, geomorphology, aquatic ecology and flood hazard analysis, water rights, salmonid fishery enhancements, wetlands and land reclamation. He seeks solutions that integrate optimized land management strategies with principals of conservation investment, ecosystem service markets, wildlife habitat creation, fluvial geomorphology, ecologic and social integrity, and quality engineering practice.

Other current interests include adapting current restoration techniques for basin's affected by climate change including prioritization of resiliency-based projects. He is also skilled in the identification of market-driven mechanisms to add value to landscapes that are undervalued, degraded or ecologically important by harnessing emerging markets in renewable energy, ecotourism, cultural revitalization, sustainable building systems and communities, limited development and new models for private equity investment.

EXPERT WITNESS EXPERIENCE

Mr. Gillilan was retained by the US Department of Justice in 2015 and 2016 as an expert witness in United States v. Joseph David Robertson in Federal District Court. The defendant was found guilty for violations of the Clean Water Act, specifically dredging and filling wetlands without authorization. Mr. Gillilan's testimony included identifying the subject violation was to Waters of the US and costs for site reclamation and restoration.

Mr. Gillilan is currently retained by Smith & Lowney PLLC, Seattle, WA as an expert witness for Daniel and Shavonne Tonnes (plaintiffs) v. US Golden Eagle Farms (defendants), a case currently before US District Court, Western District of Washington at Seattle. His services to-date have included: 1) assessment of site conditions and provision of an opinion that defendants actions were in violation of the Clean Water Act; 2) detailed field investigation of damages to plaintiffs property; 3) monitoring of site conditions over two years; 4) preparation of an expert witness report documenting project history and negligent actions undertaken by defendants; 5) preparation of an expert declaration supporting a motion for preliminary summary judgement and; 6) sworn deposition before defendant's counsel.

CAREER HIGHLIGHTS

1999 to Present. Principal of Gillilan Associates, Inc.

• Full service aquatic assessment, restoration, mitigation and hydrologic resilience services.

1999 to 2004. Principal and Co-founder of Earth Systems, LLC

- Applied composting solutions for reclamation/remediation projects.
- Sustainable agriculture/water quality project development.

1997 to 1999. Principal and Co-founder of Confluence Consulting, Inc.

- Extensive aquatic resource project development, design and construction management throughout the U.S.; award winning projects.
- Project manager for several large natural channel relocation projects.

1990 to 1997. Senior Project Manager/Designer, Inter-Fluve, Inc.

- Member, Board of Directors, 1996 to 1997.
- Principal designer and manager of channel restoration and construction projects.

<u>1987 to 1989. Graduate Research Assistant, Oregon State University</u>

- Thesis evaluated temporal and physical aspects of woody debris loading in two SE AK anadromous salmonid spawning streams.
- Fluvial channel mapping and anadromous fisheries investigations

1986 to 1987. Research Assistant, Howard Hughes Medical Institute.

• Researcher on the International Human Genome Mapping Project

1984 to 1986. Watershed Technician, US Forest Service, Clearwater NF, Pierce, Idaho.

• Hydrologic and fisheries assessments and wildlife monitoring.

PUBLICATIONS

Gillilan, S., Boyd, K., Hoitsma, T. and M. Kauffman, (2005). Challenges in developing and implementing ecological standards for fluvial restoration projects: a practitioner response to Palmer et al. (2005), J. of Applied Ecology, **42**, 223-227.

Gillilan, S. E. and C. Boyer. 1998. Flood protection vs. avoidance issues concerning gravel bed rivers. Wetlands Engineering & River Restoration Conference, American Society of Engineers, Denver, CO.

Gillilan, S.E. 1998. (Discussion) Environmental hydraulics: new directions for the 21st century: Journal of Hydraulic Engineering. J. of Hydraulic Engineering. Vol. 124: p. 135.

Gillilan, S.E. 1997. (Book Review) *Upstream: Salmon and Society In the Pacific Northwest.* Coastal Management Journal. Vol. 25:227-228.

Gillilan, S.E. 1996. Use and misuse of channel classification systems. Stream Notes: October 1996.

Gillilan, S.E. 1996. Utilizing geomorphic analogs for design of natural stream channels. <u>In</u>: Proceedings of the 1996 North American Water and Environment Congress. Amer. Soc. Civil Eng. (ed. C. Batha), pp.2799-2804. ASCE, New York, NY.

Gillilan, S.E. 1995. Gaining perspective on aquatic habitat restoration. Land and Water 39:30-33.

Gillilan, S.E. and D.E. Miller. 1992. Handbook for Reclamation of Placer Mined Stream Environments in Western Montana. Prepared for Environmental Protection Agency, Helena, MT.

ORIGINAL SEMINARS AND SHORT COURSES

<u>Instructor/Course Developer</u>: *Floodplain Management and Permitting for Administrators and Elected Officials*. Miles City, Great Falls, Missoula, MT, March 2007

Instructor/Course Developer: "Upper Yellowstone River Dynamics Workshop", Livingston, MT, February 2000.

Instructor/Course Developer: Design of Natural Stream Channels, Inter-Fluve, 1997-98.

<u>Instructor/Course Developer</u>: *Applied Fluvial Geomorphology for Stream Habitat Design and Restoration*, Wetlands Training Institute, July 1996.