PINCHOT INSTITUTE
FOR CONSERVATION

HFQLG Independent Science Panel

Overview

The Forest Service has contracted the Pinchot Institute for Conservation, which has assembled an *Independent Science Panel* to conduct a review of the HFQLG pilot project. Specifically, pursuant to the HFQLG Act the Independent Science Panel will:

> *. . .review and report on whether, and to what extent, implementation of the pilot project under this section achieved the goals stated in the Quincy Library Group-Community Stability Proposal, including improved ecological health and community stability. . .*

As required by the HFQLG Act the Institute formed a team composed of experts representing the range of expertise necessary to carry out the review. Our technical approach was developed based on the team's understanding of the requirements explained in the Request for Proposals and the HFQLG Act, as well as our experience offering science-based reviews. We anticipate that ongoing dialogue with the Forest Service, the Quincy Library Group, and other parties may result in adjustments to our approach, and we welcome these discussions. The review will proceed in four distinct phases.

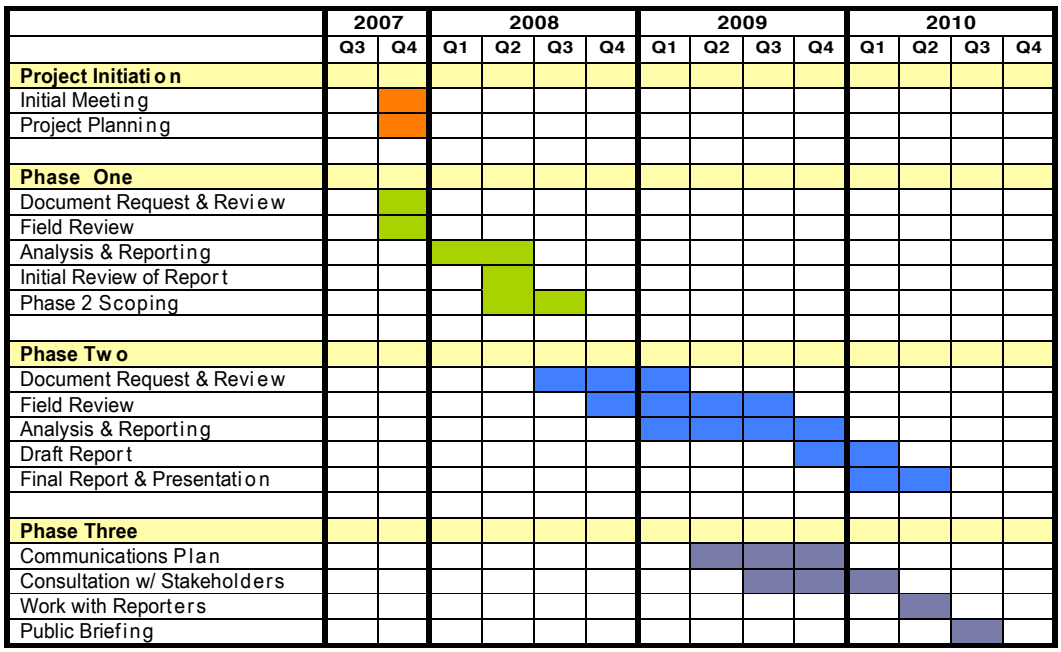
Initial Consultation will occur between the key USFS management staff associated with this project and several members of the Independent Science Panel. This brief phase will refine the project approach, establish timelines, and discuss project planning and logistics. Additionally an initial field review will allow the team to better understand the scope and context of science and management issues, and how these need to be analyzed for the review.

Phase One will be a comprehensive review of available data and monitoring approaches employed to date, for making recommendations to the Forest Service on any necessary changes. The full Independent Science Panel will spend time on each forest and consulting with key stakeholders.

Phase Two will begin upon completion of the HFQLG pilot project, and will involve a final detailed field review and comprehensive analysis of data and feedback. The findings will be compiled in a report to Congress.

Phase Three is designed to communicate the results to all interested parties. The Pinchot Institute team recommends that this "roll-out" phase involves up-front consultation with key parties associated with the HFQLG projects, followed with open briefings for all interested stakeholders.

Timeline for Independent Science Panel Review



HFQLG Independent Science Panel Members & Expertise

Al Sample, Ph.D. – (*President*, Pinchot Institute for Conservation) -- *Principal Investigator*.

Anthony S. Cheng, Ph.D. (Pinchot Senior Fellow, Colorado State Univ.) – *Co-Principal Investigator/Panel Facilitator/ Socio-economics*.

David Ganz, Ph.D. (TSS Consultants) – *Fire Ecology/ Forest Ecology/Silviculture*

Dennis Becker, Ph.D. (Univ. of Minnesota) – *Socio-economics*

Scott Cashen, M.S. (TSS) – Wildlife /Forest *Ecology/Silviculture*

John Gunn, Ph.D. (Round River Ecology) – *Wildlife /Forest Ecology/Silviculture*

Rocky Gutierrez, Ph.D. (Univ. of Minnesota) – *Wildlife/Forest Ecology/Silviculture*

Mike Liquori, M.S. (Sound Watershed Consulting) – *Hydrology/ Geomorphology/ Watershed Ecology*

Will Price, MFS. (Pinchot Institute) – *Hydrology/ Watershed Ecology & Team Coordinator*

Paul Rosenfeld, Ph.D. (SWAPE, UCLA) – *Soil Science/ Hydrology*

David Saah, Ph.D. (Univ. of San Francisco) – *Landscape Ecology/ Fire Ecology*

Key Contacts

Starr Dodd – Communications & *Media Contact*. stodd@pinchot.org, (202) 797-6582

Will Price – *Project Coordinator*. willprice@pinchot.org, (609) 921-2204

Independent Science Panel – Brief Bios

V. Alaric Sample, Ph.D.

Al has served as President of the Pinchot Institute for Conservation in Washington, DC since 1995. He is a Fellow of the Society of American Foresters, and a Research Affiliate on the faculty at the Yale School of Forestry and Environmental Studies. He specialized in resource economics and national forest policy as a Senior Fellow at the Conservation Foundation in Washington, DC, and later as Vice President for Research at the American Forestry Association. He has published widely in journals of resource policy, economics, law and organizational management. Sample has served on numerous national task forces and commissions, including the President's Commission on Environmental Quality task force on biodiversity on private lands, and as co-chair of the National Commission on Science for Sustainable Forestry. Other professional activities include serving as Chair of the National Capital Society of American Foresters, and as Chair of the board of directors for the Forest Stewards Guild. He currently serves on the Leadership Council, and as President of the alumni association, for the Yale School of Forestry and Environmental Studies. Sample earned his doctorate in resource policy and economics from Yale University (1989). He also holds an MBA and a Master of Forestry from Yale, and a Bachelor of Science in forest resource management from the University of Montana.

Antony S. Cheng, Ph.D.

Tony Cheng provides experience and expertise in collaborative learning and public involvement in land and natural resource decision-making. Tony's specific emphasis is on community-based approaches to collaborative stewardship of public lands, especially in the Rocky Mountains region of the Western U.S. Tony is an Assistant Professor of Forestry and Natural Resource Policy in the Department of Forest Sciences, Colorado State University (CSU). Prior to joining the faculty at CSU, he received his PhD in Forest Resource Policy from Oregon State University and a MS in Forest Resource Policy at University of Minnesota, and served as a Policy Research Fellow at the Forest Policy Center of American Forests, 1993-1994.

Dennis Becker, Ph.D.

Dennis Becker is an Assistant Professor of Environment and Natural Resource Policy in the Department of Forest Resources at the University of Minnesota. Dr. Becker conducts research on the social and economic impacts of forest restoration, biomass utilization, wildland fire management, and related natural resource policies. Dr. Becker services as a national social and economic auditor for forest certification, and as a past collaborator with the Greater Flagstaff Forests Partnership as Chair of the Utilization and Economics Team. He has also served as a collaborator and external science member of the USDA Forest Service Collaborative Forest Restoration Program on the Multi-Party Monitoring Team. He holds a Ph.D. in Natural Resources from the University of Idaho.

David Ganz, Ph.D.

David Ganz is a Fire Scientist with TSS Consultants. Dr. Ganz recently served as a regional facilitator for the Food and Agriculture Organization of the United Nations where he was involved in designing a multiyear project in forest resource conflict management. Dr. Ganz has a strong background in spatial fire modeling and the use of FARSITE and FlamMap. Dr. Ganz is currently serving as the Fire Domain Lead for the USFS's Biomass to Energy project which includes modeling the efficacy of SPLAT fuel treatments. In 1998, Dr. Ganz performed a detailed analysis of mitigation treatments to determine areas of highest fire hazard and the most appropriate methods to treat the areas of greatest concern in Strawberry Canyon. Under analysis was the use of Defensible Fuel Profile Zones (DFPZ) using roads and ridge tops as the center from which to apply treatments. He holds a Ph.D. in Environmental Science, Policy, and Management from the University of California, Berkeley.

Scott Cashen, M.S.

Mr. Cashen has 13 years of experience consulting on projects pertaining to wildlife and fisheries ecology, habitat restoration, special-status species, natural resource planning, and forest management. Because of his varied experience, Mr. Cashen is knowledgeable of the links between the various disciplines of natural resource management. Mr. Cashen has experience managing large-scale and high profile natural resources projects. These include the Mather Lake Regional Park Resource Management Plan, the San Mateo Creek Steelhead Restoration Plan, and the Placer County Vernal Pool Biodiversity Investigation. Mr. Cashen has performed extensive wildlife monitoring in the QLG area, including surveying for the northern goshawk and CA spotted owl as well as for mountain yellow-legged frogs and red-legged frogs. Mr. Cashen holds a B.S. in Resource Management from the University of California at Berkeley, and a M.S. in Wildlife and Fisheries Science from the Pennsylvania State University.

John Gunn, Ph.D.

John is an independent wildlife and forest ecology consultant working with non-profits, private landowners, and forest industry in New England and the upper Midwest. John has completed the SmartWood FSC assessor training and has been a team member on more than 25 FSC forest management annual audits and assessments throughout the northeastern United States and western Canada. John's current work with the non-profit Trust to Conserve Northeast Forestlands includes directing a group FSC forest management certificate in Maine, developing a forestry carbon protocol in the northeast, and working with the Maine Master Logger Certification Program to minimize impacts of timber harvesting on native biodiversity. He has a B.S. in Wildlife Management from the University of Maine and an M.F.S. from the Yale University School of Forestry and Environmental Studies. John completed a Ph.D. in Biology from the University of New Brunswick studying the landscape ecology of forest songbirds.

R. J. Gutiérrez, Ph.D.

Ralph (Rocky) Gutiérrez is the Gordon Gullion Endowed Chair in Forest Wildlife Research and Education in the Department of Fisheries, Wildlife, and Conservation Biology at the University of Minnesota. Dr. Gutiérrez has worked on forest wildlife for 36 years specializing in endangered species, game birds, and sustainable use of resources. He has extensive experience working with the spotted owl having a continuously active research program on this species since 1980. He has participated in many management and review teams specifically addressing the conservation of the spotted owl. He heads three major owl research projects in the central Sierra Nevada, California and is a member of the Sierra Nevada Adaptive Management Project science team. He holds a Ph.D. in Zoology from the University of California, Berkeley.

Mike Liquori, M.S.

Mike Liquori is a Watershed Hydrologist and Geomorphologist with a multi-disciplinary background in watershed ecology, environmental facilitation and restoration design. He has had direct responsibility for integrating scientific principles into operational management on over 820,000 acres of private forests in California, Oregon and Washington. He has participated in several scientific review panels representing timber companies, government agencies, and/or environmental groups. He has planned management strategies at the site, watershed, regional, and statewide scales, and has led management projects in restoration/mitigation design, watershed analysis, habitat conservation planning, monitoring & adaptive management. He has developed numerous stream and floodplain restoration and mitigation projects to manage sediment, improve fish & riparian habitat, and restore channel stability & integrity. He has been a principal investigator for studies in fluvial geomorphology, hydrology, riparian ecology, salmonid habitat, and BMP effectiveness, among others. He commonly negotiates with outside interests and has proven

facilitation skills, often developing out-of-the-box, win-win solutions among contentious parties. He has extensive technical, watershed-scale modeling, and GIS capabilities, which he has used to develop objective watershed-scale criteria for watershed stewardship and land-use planning. Mike has taught courses in Forest & Fisheries Interactions, River Ecology and Wildland Hydrology at the University of Washington.

Paul Rosenfeld, Ph.D.

Dr. Rosenfeld is an adjunct professor at UCLA's School of Public Health and the founder and environmental chemist for Soil, Water, Air Pollution. His focus is soil science, erosion control, fate and transport of environmental contaminants, risk assessment and ecological restoration. His project experience ranges from monitoring and modeling of pollution sources as they relate to human and ecological health. He performed his Masters Thesis at the University of California, Berkeley on the potential utilization of small diameter trees from the implementation of fire breaks in Sierraville, California. He holds a Ph.D. in Soil Chemistry from the University of Washington.

David Saah, Ph.D.

David Saah brings 11 years of experience in Landscape Ecology, GIS, and Remote Sensing to the Pinchot Science Panel. David is an Assistant Professor at the University of San Francisco. Dr. Saah consulting work includes: developing a hazard index for the San Jose Water Company, a Land Cover Land Use Change model for Placer County, and quantified potential outcomes of a proposed win/win green solution for an agricultural fertilization protocol in the Yaqui Valley, Mexico. His Ph.D. research provided a foundation for establishing a GIS for the Kruger National Park, South Africa, analyzing geomorphologic phenomena and the role of fire in riparian-savannah ecological transitions. Dr. Saah also has 11 years experience in nutrient analysis and biogeochemistry, working at NASA, Stanford and UC Berkeley. He holds a Ph.D. in Environmental Science, Policy, and Management from the University of California, Berkeley.