Challenges In Developing And Implementing Ecological Standards For Aquatic Restoration Projects: A Practitioner View[AFS]

Scott Gillilan, Gillilan Associates, Inc., 205 Haggerty Lane, Suite 170, Bozeman, MT 59715, scott@gairesources.com

While the stated or implied goal of most aquatic restoration projects is to be ecologically effective, many in the restoration community question if these goals are being consistently achieved. In response, some in the academic community have proposed the establishment of ecological standards to evaluate projects. In this presentation, these standards are introduced and placed in context to the subset of restoration projects that principally involve the alteration of existing channel geomorphology. From the lessons of practice it is argued that a number of cultural and institutional factors impede ecologically effective restoration including (1) misuse of the term "restoration," (2) failure to create sound, ecologically-based guiding images at project inception and the related phenomenon of *image drift*, (3) a lack of risk tolerance leading to unnatural project hardening, (4) practitioner/sponsor inexperience and inflexibility, and (5) lack of commitment to monitoring. It is also suggested that more interaction needs to take place between practitioners and the academic community so that the lessons of practice are communicated and integrated into the emerging science of restoration. Although this interaction will advance the common goal of implementing more ecologically effective projects, it is noted that project participants outside the scientific community must also appreciate the challenges a project faces meeting higher standards. These challenges are not insignificant and include convincing project sponsors, practitioners and regulators of the need for standards in project generation, implementation, and monitoring on a project-by-project basis.