## Partnerships and Nature-based Restoration in Mitigation Banking Projects

**Amy Chadwick** and David Patrick

Eco-Asset Holdings, Helena, MT, USA

The purpose of mitigation banking is to provide a means of replacing wetland or stream habitat that has been degraded or destroyed by development, infrastructure projects, or other permanent impacts. Such offsets are provided in advance and per high standards. Mitigation banking projects provide benefits at multiple levels by working in partnerships with landowners, engineering and other contractors, agencies, funding entities, and the ecosystem itself. For mitigation to provide an environmental benefit, impacted wetland and stream habitat must be replaced with habitat of equal or higher ecological function, yet for mitigation to be cost-effective, restoration costs must be considered. Adoption of nature-based restoration has allowed mitigation projects in Montana to restore systems to higher ecological function and to provide greater habitat complexity for aquatic and terrestrial species by keeping design and materials costs lower and by focusing on restoring natural processes rather than imposing a static design to the system. To sustain the mitigation banking business model, projects should aim for multiple bottom-line gains, with financial benefit to the banking entities and the landowner host, but also providing a real and significant benefit to degraded stream and wetland ecosystems and providing environmental outreach and education opportunities.

This presentation focuses on two stream and wetland mitigation banking projects, one on a prairie slope wetland system with ephemeral runoff within the Crow Reservation in eastern Montana, and one on a large perennial montane stream subject to ice scour in west-central Montana. Both projects utilize new designs to adapt to site-specific landscape, soil, and hydrologic profiles. The important role of partnerships to develop and monitor projects is also discussed.

Contact Information: Amy Chadwick, Eco-Asset Holdings, P.O. Box 58, Helena, MT, USA 59624, Phone: 406-250-4024, Email: achadwick@eco-asset.com