

## **Southwest Ecosystem Services Project (SwESP): Identifying Ecosystems Services based on Tribal Values.**

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### **Abstract**

USEPA Office of Research Development (ORD) new strategic focus is the measurement of benefits and services of ecosystem. The primary objective of the Ecosystem Services Research Program (ESRP) is to identify, measure, monitor, model and map ecosystem services and to enable their routine consideration in environmental management and decision making process. The aims of the ecosystem services approach includes increasing awareness and understanding of ecological process, exploring the value (intangible and monetary) of ecosystems, and investigating new mechanisms for recognizing and making better use of the value of functional ecosystems to human society. For example, the comparability and maintenance of wildlife and aquatic habitat is dependent on the development of a riparian area management strategy, which considers and adapts to certain basic ecological and economic relationships. These relationships are functions of riparian and terrestrial ecosystems, growth and reproduction of woody and herbaceous plant communities within the reach and watershed, consideration of the dependency of aquatic and terrestrial wildlife (i.e., fish, mammals, birds, amphibians, and reptiles) on riparian areas, hydrologic and geomorphic conditions and processes, soils, sediment, water quality and quantity, recovery rates, upland conditions, recreation and domestic uses. An ecosystem, or landscape, approach provides a comprehensive basis for identifying and evaluating current and historical land-use practices. Riparian function is heavily influenced by the condition of adjacent and upland ecosystems. Analyzing spatial relationships and short- and long-term trends can determine if goals and objectives are being met. It will also determine what changes are needed in moving the ecosystem towards the desired condition and developing and comparing management alternatives. The Southwest Ecosystem Services Program (SwESP) is proposing a collaborative research pilot in partnership with Tribes located in the southwest US to identify ecosystems services based on tribal values.