Ecosystem Planning & Restoration

Restoration Potential Assessment

Introduction

A GIS-based tool was developed to classify stream type and condition by evaluating the watershed condition and hydraulic parameters along with a desktop visual assessment and other data review.

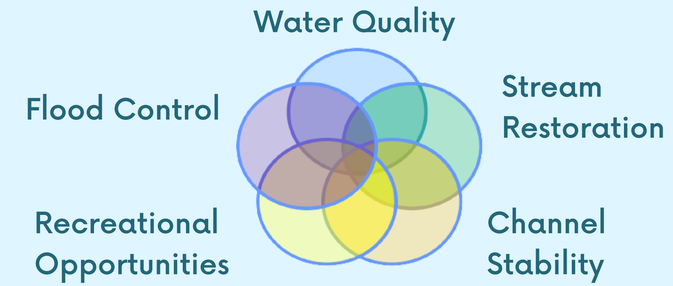
Background

The tool was developed for the San Antonio River Authority to support ongoing watershed master-planning efforts. The tool provides a high-level inventory and understanding of stream conditions within watershed-scale regions.

GIS Stream Potential Characterization

- Watershed Characterization
- Stream Classification
- Rosgen Classification (estimate)
  - Aerial photo, Topography, Soil Review

Holistic, Multi-Objective Planning



Preservation: stable and pristine condition
Rehabilitation: localized instabilities
Restoration: reach wide instability
NCD1: engineered with room for restoration
NCD2: engineered, no room for restoration

Summary

The results can be used for watershed management and as part of holistic, multi-objective planning activities. The parameters evaluated can be customized for a variety of stream and watershed assessments and planning initiatives.