Riparian Areas Inventory Utilizing RBDM v3.1
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Riparian areas are complex, dynamic and diverse zones along aquatic and terrestrial ecosystems. The location of riparian areas between upland and aquatic systems is becoming increasingly important for watershed management serving as ecological reserves and biological corridors. Delineating riparian areas is a challenge for resource managers and decision makers due to variation in riparian definition, geospatial data used, and mapping methodologies. Here we present a cost effective and robust inventory workflow to consistently map the geographic extent and composition of riparian areas on a watershed and national forest scale utilizing the geospatial capabilities of ArcGIS for Desktop and open source geospatial data. This approach recognizes the dynamic and transitional natures of riparian areas by accounting for hydrologic, geomorphic and vegetation data as inputs into the delineation process. The new workflow results would offer accurate riparian floodplain mapping, quantify riparian areas, quantifying wetlands types and extent that associated with the floodplain, riparian soil profile, and riparian land use/cover layers for further riparian areas change analysis and assessment. Such results would aid watershed management and planning to improve protection and restoration projects and restore valuable riparian functionality and biodiversity.