Developing a Unified Methodology for Road/Stream Crossing and Erosion Inventories in the St. Joe River Watershed

- Conceptual Approach -

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Watershed managers, planning agencies and others concerned about soil erosion lack readily available tools to record, estimate and collectively track soil losses from eroding streambanks and road-stream crossings. Although many groups may collect qualitative information on standardized field forms provided by a state agency, rarely is sufficient information gathered or made available to estimate the tons of sediment added to our streams and rivers from these areas. These constraints inhibit our collective planning and management abilities to prioritize needs for erosion controls identified in road-stream crossing inventories generated by: Clean Water Act Section 319 projects, road commissions, drain commissions, conservation districts or others. Furthermore, they greatly limit our ability to identify erosion contributions related to watershed-wide sedimentation problems, as well as improvement, dredging and road, bridge or culvert maintenance needs.

The overall goal of St. Joe River watershed management planning efforts in this regard is to develop a useful approach for road-stream crossing inventories that meets the needs of the groups collecting information and allows for erosion loss estimates. This approach would be tested on two critical subwatersheds in the St. Joe River basin. The adopted approach will be accessible through the project website (www.stjoeriver.net) to allow others to build upon a watershed database initiated with data from the two subwatersheds.

PRELIMINARY IMPLEMENTATION STRATEGY:

- Form a technical subcommittee (~3 meetings through August 2003)
- Review existing forms and identify needs for quantifying soil losses using physical data collected at each site
- Review quantification methods for calculating soil losses for stream banks
- Finalize a utilitarian set of data needs and calculation methodologies
- Identify other custom forms with additional information needs pertinent to others
- Test apply new format in existing and new settings (Rocky River, Hog Creek, other)
- Develop a web-based tracking strategy using the new format and test case data
- Present approach to Steering Committee for input and feedback in September 2003
- Conduct a mini-workshop at next watershed-wide meeting to introduce approach and web tracking