Greater Yellowstone Coordinating Committee

Project Completion Report
FY 2007

Unit: Shoshone National Forest
Project Name: Riparian Vegetation and Stream Channel Relationship Investigation – Strategic Planning Workshop
Project Description: Develop a science-based strategy for investigating the ecological interaction between riparian vegetation and stream types in Greater Yellowstone Area (GYA) valley bottoms.
GYCC Funding Received: $5,000 **Partner Funding/In-Kind Received: $0**
Status of the Project: The workshop was held in Cody, Wyoming April 17th and 18th, 2007. Most of the invited scientists were able to attend. A copy of the agenda is attached. A spreadsheet that displays attendee information and workshop costs is attached. The project will be moved forward as time and dollars permit.
Products that can be shared across the GYA: There are no products at this point other than draft meeting notes because this was a strategic workshop.
Project results: There are no project results at this point other than draft meeting notes because this was a strategic workshop. Excellent discussion on how to design and implement an investigation was held so the next step is to develop an investigation work plan and pursue funding. Work plan development will occur as time and dollars permit.
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Report Date: January 11, 2008
Submit to Virginia Kelly**:** vkelly@fs.fed.us 406-587-6704. Contact Virginia with questions.

Note: You may expand and reduce size of blocks.

Workshop Framework

From "*Watershed Management in the Greater Yellowstone Area: An Interagency Strategy"* there are four issues most important in the GYA at the present time:

1) *interagency cooperation on a watershed scale*
2) *watershed, riparian area, and geomorphic integrity*
3) *water quality protection and enhancement*
4) *water supply and water rights*

Within issue 2 the strategy document states:

The goal of watershed conservation is to sustain and restore watershed, riparian area, and geomorphic integrity. Land and stream types, and their dynamic equilibrium ranges, vary within and among landscapes due to variations in climate and geology. This variation must be taken into account as pressures on water resources and watersheds in the GYA increase. Dynamic equilibrium ranges can be defined by sampling reference land and stream types across the landscape and by comparing non-reference conditions with their representative reference counterparts.

Land management activities and uses have the potential to significantly affect sediment loading and transport, particularly because they are directly influenced by stream discharge. Riparian vegetation is a key component in overall stream/aquatic health and function. While there have been numerous efforts to characterize riparian communities and condition within the GYA, little work has been conducted to integrate this information with stream systems. To fully protect riparian area values such integration is critical.

To address this statement the strategy document recommends, among others, an action item to:

Better define the relationship between stream systems and riparian vegetation in the Greater Yellowstone Area.

The Greater Yellowstone Coordinating Committee, for which the strategy was written, has provided funding to conduct a workshop to develop a strategy for implementation of this action item. GYCC provided this funding because they recognize:

A major environmental and economic resource of the GYA, riparian areas exist in various states functionally and esthetically. Riparian vegetation is the most dynamic material supporting stream channel stability and riparian function. It also provides for most of stream channel resiliency. Yet, little is known about the ecology and physical interactions of riparian vegetation and stream channels in GYA valley bottoms.

Workshop Goal

Develop a science-based strategy for defining the ecological interaction between riparian vegetation and stream systems on public lands in the Greater Yellowstone Area (GYA). Design the strategy to provide three end-products:

1) *better integration of riparian area management across all public lands within the GYA*
2) *assists managers in assessing and monitoring current and desired conditions*
3) *focuses on immediate and most manageable riparian area issues*

Note: You may expand and reduce size of blocks.

Workshop Agenda

Tuesday - April 17th, 2007 – 1:00 to 5:00

Introductions, housekeeping, rules of engagement (15 minutes)

- Welcome participants, make introductions, discuss meeting room facility (parking, restrooms, kitchen), agree to expected behavior, validate agenda (Greg)

Project definition overview (15 minutes)

- Share PowerPoint® that summarizes the framework and goal (Greg)

Session 1 - Review and elucidate what is presently known about GYA riparian areas from a taxonomic, physiographic, structural, functional, hydrologic, and geomorphic context (45 minutes)

- Share, in list form, known existing inventories and databases (10 minutes – Michael)
- Brainstorm for additional information (inventories, databases, literature) that may exist; capture as bullets on individual flipcharts titled taxonomic, physiographic, structural, functional, hydrologic, geomorphic (10 minutes – Greg)
- Fine-tune brainstorm results; narrow brainstorm list down to those that can truly be useful in defining the relationship between stream systems and riparian vegetation in the Greater Yellowstone Area; capture by flagging pertinent flip chart bullets and striking through non-pertinent bullets (25 minutes – Greg and Michael)

Session 2 - Develop an outline on the way forward regarding additional scientific assessment needs necessary to provide insight on immediate and long-term management potentials and policy development (2 hours 45 minutes, including break)

- Informally discuss the physical and biological complexity of the ecosystem to inform all participants (45 minutes – Michael)
- Take afternoon break (15 minutes)
- As one group or small workgroups, discuss additional scientific assessment needs for defining the ecological interaction between riparian vegetation and stream systems; capture discussions on flipcharts; if done in small workgroups, select spokes person, present workgroup summaries, and consolidate summaries into an outline; identify/prioritize if assessment need is immediate or long-term (1 hour 45 minutes – Greg and Michael)

Wednesday - April 18th, 2007 – 8:00 to 12:00

Session 3 - Develop action items for agencies, universities, partners, and sponsors necessary to provide quantitative information needed to test process-based responses in GYA vegetation-stream ecology (3 hours 30 minutes, including break)

- As one group or small workgroups, develop potential action items for the assessment needs identified during Session 2; potential action items must be science based and, generally, application rather than theory driven; they must also be items that can be implemented and accomplished given expected budgets and workforce; capture discussions on flipcharts; if done in small workgroups, select spokes person, present workgroup summaries, and fine-tune summaries into an outline; identify quantitative information needs for each item on the final list (3 hours, including a 15 minute break – Greg and Michael)

Wrap-up and close-out (30 minutes)

- Review agenda to validate completion, discuss process for producing a strategy report, make assignments, acknowledge appreciation for participation, ask for meeting critique (Greg)