

# REQUEST FOR COMMENTS

**USDA Forest Service  
Uinta National Forest  
Heber Ranger District  
Wasatch County, Utah**

## **Strawberry River Restoration Phase III**

The Heber Ranger District of the Uinta National Forest is proposing to restore a reach of the Strawberry River. The stream reach proposed for restoration lies between the Bull Springs Road and approximately ½ mile upstream of Highway 40. Additionally, approximately ¼ mile of Hobble Creek and one mile of Spring Creek will be included. This section is situated on National Forest System lands, designated as “Strawberry Valley Management Lands.”

The project will be divided into three stages: (1) Bull springs to Spring Creek; Stage (2) Spring Creek to Hobble Creek, including Spring Creek; and (3) Hobble Creek to ½ mile upstream of Highway 40, including Hobble Creek. It is anticipated stages 1 and 2 will require at least two years of construction work and stage 3 one year. A stream restoration plan(s) consisting of a detailed description of restoration work will be prepared.

Stage 1 of the Strawberry River Project will consist of five key elements; 1) construction of temporary road, 2) bank stabilization, 3) grade control structure 4) off-channel or oxbow pond enhancement and/or construction, and 5) main channel realignment. Approximately, 2.3 miles of stream will be restored during Stage 1; this includes approximately 35 bank stabilization sites, 8-10 grade control structures, 8 oxbow pond enhancements, and two main-channel realignment locations. A detailed description of each element is listed below.

**Construction of temporary road:** A temporary road, approximately one mile long, will be constructed to provide access to rehabilitation sites between the Bull Springs road and Spring Creek. Road construction is tentatively scheduled to begin by July 1, 2008. Topsoil will be saved to use in reclaiming the area disturbed by construction.

**Bank stabilization:** The Strawberry River throughout the project area has and continues to suffer from variable rates of streambank erosion and degradation. The river is eroding laterally contributing fine sediments to the stream, increasing width to depth ratios, and hindering the recovery of vegetative cover. A combination of J-hook, cross vane, and root-wad/log structures will be used to reduce bank erosion by reducing velocity, velocity gradient, stream power, and shear stress along outside bends. Structures will be built using a combination of boulders logs and root wads. Additionally, coconut fabric will be used in disturbed areas to assist with reducing erosion and aid in the revegetation process. Willow clumps and willow cuttings will also be used throughout the project area to accelerate the recovery process.

**Grade control:** Grade control structures are designed to decrease shear stress, velocity along banks. These structures will establish grade control and reduce bank erosion, stabilize

width/depth ratios, while maintaining sediment transport capacity. Structures will be built using a combination of boulders logs and root wads.

**Oxbow pond:** Oxbow ponds play an important role in providing habitat for amphibians, fish, waterfowl, and aquatic invertebrates. Additionally, oxbow ponds provide habitat for beaver, muskrat, and other mammals. There are numerous opportunities within the project area to enhance and/or construct oxbow ponds utilizing the current topography and remnant stream channels. All areas will be revegetated with willow cuttings and seed mixtures listed above.

**Main channel realignment:** Channel realignment is designed to improve the sinuosity, maintain channel capacity, reduce bank stress, and improve aquatic habitat. Channel realignment locations were selected in those areas where the current channel is fairly straight and is putting excess stress on downstream bends.

The proper alignment and placement of rock and log vanes, root wads, and other structures will be based on accepted principles of applied fluvial geomorphology. In addition, only structures suitable for the stream type will be used. The restoration effort will focus on a number of techniques that have been proven to enhance the natural function of the stream (i.e., establish proper dimension, pattern and profile).

A single thread channel with meanders and proper channel sinuosity will be maintained. Rock and log vanes will be placed at critical locations to protect stream banks and allow riparian vegetation to reestablish. Vertical banks will be sloped to allow vegetative cover to establish. Willow clumps will be transplanted from other Strawberry Valley locations to positions along the newly sloped stream bank. In addition, willow clippings will be used to accelerate the re-establishment of a riparian community. Root wads and logs will also be used to protect stream banks and provide cover for trout. Plant (e.g., coconut) fiber will be used on outside bends of meanders to provide additional bank protection until vegetation becomes established. Sloped banks and other disturbed areas will be reseeded with species currently found in the area that are appropriate for the site including water requirements.

**Purpose and Need:** The Strawberry River throughout the project area has and continues to suffer from variable rates of streambank erosion and degradation. The river is eroding laterally contributing fine sediments to the stream, and increasing width to depth ratios. There is very little vegetative cover, and summer daytime water temperatures often reach sub-lethal levels for trout (22-23°C). A proper functioning riverine system could lead to increased recruitment of cutthroat trout and kokanee salmon into Strawberry Reservoir. Additionally, other aquatic and terrestrial organisms would benefit from a more natural, properly functioning system.

**Objectives:** The objectives of the Strawberry River Restoration Phase III project are to:

- Restore and maintain the natural dimension, pattern, and profile of the Strawberry River;
- improve upstream fish migration from Strawberry Reservoir;
- stabilize eroding banks;
- reestablish a more natural riparian plant community;
- reduce stream temperatures;

- reconnect river to historic flood plain;
- improve and increase complexity of aquatic habitat; and
- reduce fine sediment and improve spawning habitats.

**Anticipated Results:** The project will result in a proper functioning riverine system with natural stability and proper biological function. We anticipate, increased productivity from adult cutthroat trout and kokanee salmon, and improved rearing conditions for young-of-year fishes. Additionally, habitat surveys conducted on adjacent stream segments during 1997 indicate that increasing the amount of cover by 20% could yield a 13 lb/acre increase in trout biomass in this section of stream. It is anticipated that the project will increase the amount of cover by at least 20%, and will improve water quality. The project should also result in improved habitat for other aquatic organisms and the reestablishment of a healthy riparian is expected to benefit a wide variety of wildlife species, especially resident and migratory passerine birds.

The public is invited to comment on the proposed action. Only those who submit timely comments will be accepted as appellants. Each individual or representative from each organization submitting comments must either sign the comments or otherwise verify identity in order to attain appeal eligibility. Comments received in response to this solicitation, including names and addresses of those who comment, will be considered part of the public record for this project. Comments should include the information required pursuant to 36 CFR 215.6(a)(3).

Comments should be as specific as possible and have a direct relationship to the proposal. Please send written comments to: Julie King, District Ranger, Heber Ranger District, P.O. Box 190, Heber City, UT 84032; phone: (435) 654-0470; FAX: (435) 435-654-5772; or e-mail: [comments-intermtn-uinta-heber@fs.fed.us](mailto:comments-intermtn-uinta-heber@fs.fed.us). Comments need to be postmarked or received within 30 days beginning the day following publication of this notice in the *Provo Daily Herald*. Comments may also be delivered to the above address during regular business hours of 8:00 a.m. to 5:00 p.m., Monday-Friday, excluding federal holidays. Pursuant to 36 CFR 215, this legal notice provides an opportunity to comment on this proposal. You may contact Ron Smith at the Uinta National Forest Supervisor's Office, 88 West 100 North, Provo, UT 84061 or by calling (801) 342-5154 if you have any questions regarding this project.