**Greater Rio Grande Watershed Alliance Project Proposal Template**

* All proposals are due to the GRGWA Technical Committee by **June 30, 2012.** Only proposals turned in by this date will be considered for 2012 funding.
* GRGWA Technical Committee members (Mike Matush, Susan Rich, Terrell Treat, Jim Wanstall, Jill Wick, and Joe Zebrowski) are available to assist with proposal development.

**Project name**: Bosque Farms North Restoration Project (New 2012) (Priority 4)

**Project type(s)**: Initial treatment

**Project proponent** (SWCD): Valencia Soil & Water Conservation District (VSWCD)

**Project location**: This project is located along the east corridor of the Middle Rio Grande Bosque between the river and the levee and drain to the east in Bosque Farms, Valencia County, New Mexico. It is approximately 2 miles in from the Los Lunas access gate to the Middle Rio Grande Conservancy District (MRGCD) levee road.



*Map needs modification for treatment delineation – initial treatment entire site exclusive of the SW Willow Flycatcher stopover site designated by the MRGCD that should will also be shown as part of the project area.*

**Landowner(s)**:

The landowner, the Middle Rio Grande Conservancy District has not formally reviewed and supported this project but the VSWCD intends to submit this proposal to their planner, Yasmeen Najmi immediately for their consideration.

**How is this site accessed**? Locked MRGCD gates; VSWCD has an access key and loaner keys can be obtained from MRGCD for term of contract work or in the case of NM Forestry Inmate Work Crew work to be done , they do have keys for access to the Bosque.

**Project objective(s): Initial treatment** removal of primarily older decadent salt cedar (and Russian olive) within project boundary except for SW Willow Flycatcher stopover designation along east or levee side of identified project area.

**Size of project**: 33 acres total acres – 20 acres of initial treatment for total area.

**Current site description:** This riparian area’s vegetation community as defined by the landowner, MRGCD is vegetative type 31 or Cottonwood and willow tree canopy with a mulberry and dense intermediate aged salt cedar understory layer. The site has a recreational trail for foot, bicycle and horse traffic running through it parallel and closer to the river side and there are likely jetty jacks within the site though not specifically identified yet.

Project site climate conditions for this southern portion of the Middle Rio Grande watershed include average winter temperatures of 32 degrees F( 0 degrees C) and to more than 100 degrees F (37 degrees C) in the summer. The frost free period is from June through September (120 days). Precipitation is < 8 inches (10 cm) per year generally with continued drought conditions in recent years. The majority of precipitation, 70-80% falls in the summer as ‘monsoonal’ thunderstorms with moisture derived from the Gulf of Mexico or Gulf of California. The winter precipitation comes in the form of snow and frontal rainstorms. Natural processes indicate generally that summer storms can contribute significantly to late summer and fall discharges, but peak runoff usually occurs in late spring (May – June) due to snowmelt (Anderholm, Radell, and Ritchey 1995)1 but this irrigated river system is largely influenced by regulated flows from Cochiti Dam.

Generally, hydrology for the area shows ***v***ariable connectivity of groundwater to river flow. Most areas have a shallow water table; within 2 to 6 feet of the surface. We do not know connectivity of groundwater to river flow at this site.

Currently, plant communities includenative and altered (salt cedar and Russian olive invasive dominant) riparian and grassland shrub communities of the Middle Rio Grande Bosque (riparian) corridor. Wildlife species of interest for the bosque sites within our District include the SW Willow Flycatcher, Yellow Billed Cuckoo, and the Rio Grande Wild Turkey where more open sites.

The wildlife habitatofthe Middle Rio Grande is recognized as a major migratory flyway as well as host to resident wildlife in the Bosque. There are some designated SW Willow Flycatcher stopover sites within the Bosque areas of Valencia County. This VSWCD project site is specifically noted by MRGCD for significant nesting and stopover use. Rehabilitation of the Bosque to native plant communities will support increased use by a more diverse population of migratory birds as well as a more diverse and abundant resident wildlife population. Also, overall health of the watershed would be improved by a more diverse understory of native shrubs, grasses and forbes. For post treatment wildlife shelter, VSWCD utilizes snags and woodpiles whenever possible. The MRGCD allowance for snags is 3 per acre. While woodpiles are best mid size (ex. 10’ diameter and 5-6’ height - this size is not appropriate for areas within this plan due to fire concerns of wildland urban interface areas) thus smaller piles, 3-4 per acre for identified more open treated areas where the understory has not yet been re-established adequately will be utilized and more ‘living’ piles could be built.Thus far identified depredation concerns do not appear significant for this site.

Soils and their conditionwithin the Middle Rio Grande floodplain generally speaking are as follows: predominant mixed alluvial land fluvaquents, riverwash, Brazito Sandy Clay Loam, and Pajarito Loamy Fine Sand (reference NRCS Soils surveys). Riverwash (Rw) and mixed alluvial land-fluvaquents predominant on most sites. Also the extent of salt loading in some areas from Salt cedar stands needs to be addressed more carefully for successful restoration of native plant communities.

**If this is a re-treatment or re-vegetation project, describe work that has been done previously and when it was completed**: There is no known previous work on this site most likely because of the MRGCD stopover/nesting designation for the SW Willow Flycatcher (SWWF) and thus this consideration will be the most important for this proposed project.

**Desired site condition**: Where 20 acres initial treatment conducted, the more open upper canopy will allow for more rigorous understory layer growth of planted and natural recruits of native shrubs and mid story trees. Mulberries in this area are healthy and full of fruit for wildlife forage and will be left alone. The eastern border of the project area designated for SW Willow Flycatcher stopover will be identified and a 50 foot buffer of whatever is existing habitat surrounding this stopover area will be added to that area to be left alone. Removal of dead and down with minimal mulch left on the forest floor to allow for natural recruitment of native understory plants and floor cover during re-treatment of the site and subsequent planted native shrub additional mid canopy tree willows.

**Justification**: This site is significantly dense enough to warrant some removal of dead and down and control of invasive salt cedars even with a large portion (1/3 of site) to be left untouched as a stopover SW Willow Flycatcher designation. As the severe dry conditions endure across New Mexico, these bosque remnants initially designated to be left alone to preserve important habitat could pose a significant fire risk and should be evaluated for a carefully planned and executed compromise that allows fire fuels reduction and some effort to transition out of salt cedar dominant areas of SWWF habitat into the native and preferred habitat by the SWWF of Cottonwood and coyote willow dominant vegetation (Wang Yong, D. M. Finch, 1997) for nesting and stopover.

Also there is a maintained trail from Los Lunas all the way through this site. We are not yet familiar with who is maintaining this trail but there is clearly foot, horse, and trail bike traffic through here This community of recreational users is different than what VSWCD sees anywhere else and thus it is a highly visible site for public awareness of bosque restoration efforts though not near any major roads or intersections.

**Is this project adjacent or near previous restoration projects**?

Though not VSWCD projects, there does appear to be significant restoration from Los Lunas continuously to this 33 acre site along this eastside Middle Rio Grande Bosque corridor in Bosque Farms and then following north to the levee gate for Isleta, it is more open and possibly managed for dead and down by MRGCD – certainly significantly less of a fire risk.

**Is there any baseline data (vegetation, ground water monitoring, etc.)** The VSWCD has not yet identified any monitoring data for this site but there might be some data related to the designation as a SWWF stopover site. There is also a BEMP monitoring site that was put in north of this site in February 2012 which may offer some information attributable to this site.

**How and by whom will the project be maintained?** This will need to be discussed with the MRGCD Planner regarding their expectations for this area but of course VSWCD assumes initial responsibility to ensure careful management of this recognized stopover/nesting site is maintained while rehabilitating to preferred SWWF habitat as much as possible.

SWCD board member/representative signature date