**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**: Los Lunas SW Bosque Project 2012 (Priority 5)

**Project type(s)**: Initial Treatment and re-treatment

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

**Project location** : Village of Los Lunas, Valencia County, NM, south of NM 6 or Main St. in Los Lunas at the Rio Grande bridge accessed on the west side MRGCD Levee Road.



Note: Map needs to be modified for delineation of treatment of project proposal.

**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**? This project is accessed on the west side MRGCD levee road south from Main St. in Los Lunas. The road is gated and accessible by permitted key. The District has keys and loaners can be arranged for contractors as needed. Also, the NM Forestry IWC has keys if they cooperate on this project.

**Project objective(s)**: This project is for initial treatment (removal) of primarily older decadent salt cedar (and Russian olive) within project boundaries for fire fuels reduction and return to a native understory, mid-story and floor cover for wildlife habitat that also minimizes fire fuels present by removal and mulching.

**Size of project**: 56 acres of initial treatment and one follow up re-treatment in following growing season.

**Current site description:** *Include the following: ecosystem type (riparian, upland, wetland), dominant vegetation, soils, hydrology, wildlife (if known), current land use, infrastructure within the project area (including fences and jetty jacks), and current problem areas or areas of concern (erosion issues, noxious weeds, etc.)*

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 (SWWF), Yellow Billed Cuckoo, and the Rio Grande Wild Turkey and more generally all migratory birds, and resident primarily dependent on these areas for food, nesting and shelter.

The wildlife habitatofthe Middle Rio Grande is recognized as a major migratory flyway as well as the primary home for most resident wildlife in the Middle Rio Grande Valley. There are some designated SW Willow Flycatcher stopover sites within the Bosque areas of Valencia County. This VSWCD project site is not specifically noted by MRGCD for significant nesting and stopover use but is nearby designated stopover sites. 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 prior to revegetation establishment, 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. This site is very dense with dead and down and decadent salt cedar that can deposit significant salt into the soil. Thus, site specific soil determinations need to be done for species selection in revegetation for native plant communities (for example, the desirable mid story Black Willow is not as salt tolerant as other species in revegetation efforts).

**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 done on this site.

**Desired site condition**: Where initial treatment conducted, the existing Cottonwood canopy will allow good enough light for healthy understory growth in the following ratio of preferred native understory and mid canopy species; 50% Golden currant, 20% wolfberry, 20% NM Olive (Stretchberry), and 10% black willow trees (following assessment of soil salinity). 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 will be left alone if present.

Removal of dead, down and cut salt cedars during initial treatment will leave minimal mulch on the forest floor to allow for natural recruitment of native understory plants and spread of existing yerba mansa patches. Snags on site and wildlife piles created will add shelter for ground wildlife. Coyote willow groves where present will be left with open space for spread and growth. Possible grass and forbes seeding in patches if depressed and wet areas found on forest floor to add to floor cover during re-treatment of the site and subsequent planting of native shrubs and additional mid canopy species selected for forage and other wildlife use values.

**Justification**: This project area runs along the wildland urban and agricultural interface of the densely populated areas of Los Lunas to the west and is significantly dense enough to warrant some removal of dead and down and control of invasive salt cedars for fire fuels reduction. This site is also south of designated stopover SW Willow Flycatcher areas and eventually can expand the area of suitable native habitat in the Middle Rio Grande migratory flyway preferred by the SWWF and other migrants. As the severe dry conditions endure across New Mexico, these Bosque remnants of dense decadent mature salt cedar and Russian olive are more at risk for start of catastrophic fires in the densely populated area of central Los Lunas. Fire fuels reduction and some effort to transition out of salt cedar dominant areas of SW Willow Flycatcher habitat into the native and preferred habitat of the SWWF of Cottonwood and coyote willow dominant vegetation (Wang Yong, D. M. Finch, 1997) for nesting and stopover are the concurrent benefits of treatment of these older woody invasives Bosque sites. Also this area is not readily accessed for recreational use and thus may be able to recover more quickly during subsequent work for return to a native habitat that minimizes the risk of catastrophic fires in the area.

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

This site is approximately 60-80 acres south of the VSWCD’s Los Lunas Bosque Bridge Project and is just south (adjacent to) a MRGCD habitat restoration project, all along the west side of the Middle Rio Grande River.

**Is there any baseline data (vegetation, ground water monitoring, etc.) available for this site**?

No there is not presently baseline data available for this site.

**How and by whom will the project be maintained?** The VSWCD will be responsible for ensuring the project is maintained during this proposal for initial treatment and some retreatment to re-vegetation of the area to a more suitable native habitat.

SWCD board member/representative signature date