



## **CALIFORNIA UPLAND GAME PROGRAM GRANT AGREEMENT NUMBER: P1580061 – PROGRESS REPORT**

### **INTRODUCTION AND BACKGROUND**

**(a)** The Sacramento Valley has lost over 85% of its natural riparian ecosystem which provided habitat for a diverse number of plant and animal species along its reaches. In 1989, the Sacramento River National Wildlife Refuge (SRNWR) was formed and has been creating and implementing restoration projects along its 10,000 acres with the help of many partners, including the California Department of Fish and Wildlife (CDFW) and The Nature Conservancy (TNC). The SRNWR is very popular among outdoor recreational users, and hosted over 68,000 recorded visitors in 2014. The Sul Norte Unit is probably the most popular hunting unit for upland game bird hunters, and received over 6,000 visitors in 2014 alone.

The proposed project will restore 34 acres of invasive weed infested floodplain to native grasses on the Sul Norte Unit of the SRNWR located along the Sacramento River in Glenn County. Between 2000 and 2003, 390 acres of this Unit were restored, converting prune orchards to a variety of riparian and floodplain plant communities and habitats. Since that time, working with the National Wild Turkey Federation (NWTF), TNC and CA Duck Stamp funds, the Refuge has successfully implemented and assisted in the establishment of over 135 acres of native grasslands on the Sul Norte Unit. This Unit currently provides habitat for both resident and migratory upland game birds, including wild turkeys, pheasants, quail, and doves.

**(b)** Mt. Laguna, in the Cleveland National Forest (CNF), is an important area for several upland game birds including wild turkeys, California quail, mourning doves, and band-tailed pigeons. With an average precipitation amount of 12.2 inches per year, water can become a limiting factor for the many wildlife species inhabiting its ranges, especially during the peak dry months of summer and into fall. This lack of water has also recently been compounded by the severe drought that California has been experiencing over the last 4 years, making it difficult for all wildlife species to survive.

A natural spring along Pine Creek Rd on Mt. Laguna was tapped into several decades ago, and a pipe was installed underneath the road that fed into two upright concrete troughs. This may have originally been done to supplement water for cattle grazing in the area. However, the fill pipe from the spring has since become disconnected and no longer feeds the troughs. Also, the current troughs pose a danger to thirsty turkey poults and quail chicks by way of drowning since there is no way for them to escape if fallen into the troughs. The proposed project will repair this water source and benefit upland game birds and upland game bird hunters.



## ACTIVITIES

(a) The native grassland restoration on the Sul Norte Unit of the Sacramento River NWR will need to be delayed due to the record amount of winter and spring rains this year. The unit was underwater for six consecutive weeks and greatly delayed the required site preparation from the USFWS. Unfortunately, now the planting will have to occur in the Fall of 2018 instead as planned in 2017. Please see the attached letter from Joe Silveira, Refuge Manager at the Sacramento River NWR, detailing the need for delayed implementation.

(b) The upland game bird guzzler on the Descanso Ranger District of the Cleveland National Forest has been installed and this portion of the project has been completed. The guzzler was purchased from Rainmaker Wildlife Products and shipped down to Pine Valley, CA within close proximity to the project. Materials and supplies were purchased for all necessary implementation activities. On July 14<sup>th</sup>, 2017 NWTf staff and volunteers from the San Diego Chapter, along with Jeff Wells of the Cleveland National Forest, tapped into the spring and installed the wildlife guzzler. All parties helped to dig in the hole for the guzzler, plumb the pvc line from the spring into the guzzler, camouflage the visible portions, and conceal from the nearby two-track road. With the cut bank of the roadway and the brush, the guzzler is not visible in any way from the road. The existing concrete tanks were filled with rock to prevent any possible small mammal or juvenile upland game bird mortality.



Upland Game Stamp Costs								
		Location		Project Cost				
LINE ITEM BUDGET FOR:	Upper Pine Creek Guzzler Renovation	Cleveland National Forest		\$5,733.56				
PERSONNEL (GRANTEE STAFF):								
	Staff Title	Rate *		Unit				
	Regional Biologist	\$35.00	per hour	@	43	\$1,505.00		
	Benefits	30	percent	@	1	\$451.50		
	Mileage	\$0.540	per mile	@	2049	\$1,106.46		
TOTAL PERSONNEL EXPENSES:		\$3,062.96						
OPERATING EXPENSE:								
MATERIALS AND SUPPLIES:	Work/Item Description	Count	Units		Cost/Unit			
	Materials							
	Guzzler	1	guzzler	@	\$975.00	\$975.00		
	Shipping	1	ground	@	\$190.00	\$190.00		
	Guzzler Total					\$1,165.00		
	Supplies							
	3/4" PVC Pipe	20	feet	@	\$0.22	\$4.40		
	PVC Fittings	24	fittings	@	\$0.84	\$20.04		
	PVC Cement	1	pack	@	\$8.39	\$8.39		
	Sand	6	bags	@	\$3.35	\$20.10		
	Paint	3	cans	@	\$3.76	\$11.28		
	Gorilla Tape	1	roll	@	\$4.97	\$4.97		
	Gorilla Glue	1	bottle	@	\$4.97	\$4.97		
	Seal Tape	1	roll	@	\$2.97	\$2.97		
	Plumbers Caulk	1	tube	@	\$3.98	\$3.98		
	Subtotal					\$81.10		
	Tax	@ 8.25%				\$6.69		
	SUPPLIES TOTAL					\$87.79		
	MATERIALS AND SUPPLIES TOTAL					\$1,252.79		
	INDIRECT COSTS ON MATERIALS AND SUPPLIES PURCHASES				@ 20.18%	\$252.81		
	MATERIALS AND SUPPLIES TOTAL					\$1,505.60		
	TOTAL OPERATING EXPENSES:		\$2,670.60					
	TOTAL PERSONNEL & OPERATING EXPENSES:							
								\$5,733.56

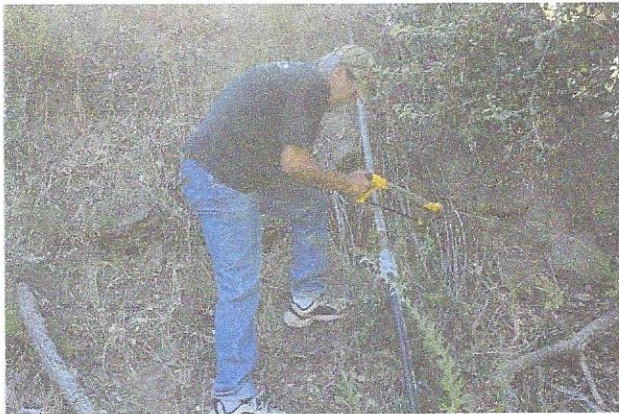




Previous outflow from the Spring



NWTf volunteers beginning excavation



Retrofitting the old plumbing



Nearly excavated to ground level



Using sand to bed and level the guzzler



Installed and concealed from the roadway





Water flowing in from the spring



Existing concrete tanks



Tanks filled with rocks for safety of small wildlife



## DISCUSSION

(a) The native grass and wildflower planting is now scheduled for Fall of 2018, and the USFWS will continue site prep. The NWTF will get an updated quote from Hedgerow Farms for an updated seed cost on the native seed mix, and purchase the seed next Fall.

(b) This portion of the grant is on track and going well. As anticipated, there was a greater cost to the NWTF in terms of staff time and mileage than written into the grant for the guzzler (b). Those increased costs will be added to NWTF's match for the project. The cost of the guzzler increased as well from the date the proposal was written in 2014 to the date of implementation. Something to keep in mind for future grant proposals. However, implementation went very smooth and all parties were very pleased with the outcome. This water source will help to provide water for upland game birds – with the potential to expand range in a water-limiting environment. This will also be beneficial to upland game bird hunters by expanding upland game bird ranges on public hunting lands.





## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Sacramento National Wildlife Refuge Complex  
752 County Road 99W, Willows, California 95988



July 26, 2017

Kevin Vella  
National Wild Turkey Federation  
District Biologist California/Nevada  
5341 Spreading Oak Ln  
El Dorado, CA 95623

Dear Kevin,

I am requesting a year delay in implementing the fall native grass/wildflower seed drilling at the Sacramento River NWR (Refuge) Sul Norte Unit Phase II Project (SUL). The delay is necessary due to extreme winter flooding at the Refuge. Flooding began in early January and continued, periodically, through the end of March (see attached photographs). Parts of the Refuge were under continuous flooding for six consecutive weeks. The Refuge, including SUL, took weeks to dry out preventing timely access for continued site preparation weed control. Additionally, we were only able to drill 13% of a 108-acre native grass/wildflower project at another unit of the Refuge. This resulted in an additional year of weed control at that site to prepare for top-priority seed drilling there—that seed remains in our storage shed and we must get it in the ground this fall.

Our plan is mow SUL next month and resume the site preparation weed control with the onset of fall germinating rains. Weed control will continue through late winter, spring, and summer 2018. We plan to drill the native grass/ wildflower seed at SUL after we treat the 2018 fall germinating weeds.

We are also planning to reseed about 2 acres of Sul Norte Native Grass/ Wildflowers Phase I and 8 acres of USFWS Project Native Grass/ Wildflower, contiguous to the south. These 9 acres, while clear of weeds prior to seed drilling, germinated black mustard and milk-thistle, typical broadleaved weeds that we treat post native grass germination, but could not due to the high proportion of native wildflowers. We plan to mow and treat these 9 acres along with the Phase II acres and reseed in Fall 2018.

I am going to review our SUL seed order and may suggest some minor changes to take advantage of species-specific weed suppression characteristics. We have experienced setbacks similar to this in the past and have managed to make adjustments, which have resulted in successful projects.

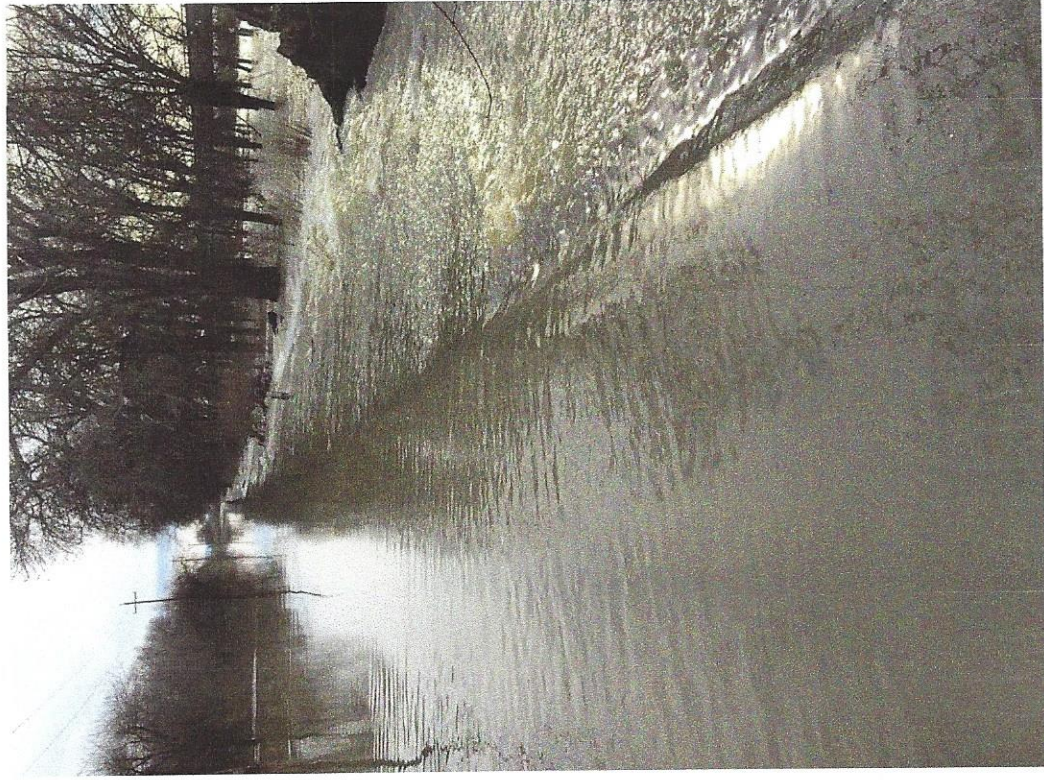
Contact me with any questions or concerns.

Sincerely,

Joe Silveira  
Wildlife Refuge Manager  
Sacramento River NWR



Sacramento River NWR Sul Norte-Codura Units  
Hiking Trail Access 1-10-2017



Sacramento River NWR Sul Norte-Codura Units Hiking Trail Access 3-21-2017

