UPPER GUADALUPE RIVER AUTHORITY

Date: April 2014

FREQUENTLY ASKED QUESTIONS REGARDING UGRA WATER AND SEDIMENT CONTROL FACILITY PROGRAM

TO PERSONS INTERESTED IN UGRA'S WATER AND SEDIMENT CONTROL FACILITY PROGRAM:

1. What is UGRA'S Water and Sediment Control Facility Program?

The water and sediment control facility program is a cooperative program established by the Board of Directors of UGRA under which UGRA partners with public or private landowners to facilitate the construction of water and sediment control facilities on the Guadalupe River and its tributaries within Kerr County.

2. What is a water and sediment control facility?

A water and sediment control facility is a basin constructed by UGRA in order to temporarily capture and detain waters that contribute to the flow of the Guadalupe River and its tributaries. During significant rainfall or flow events, the basin captures and temporarily detains high flows, and allows the flows to be released in a controlled manner to protect water quality and control erosion.

3. What are the benefits of a water and sediment control facility?

A water and sediment control facility captures and temporarily retains high flows associated with rainfall and other high flow events. The basin allows the retained water to be released in a more controlled manner that would otherwise cause erosion and downstream property damage. Further, the basins capture sediments that would otherwise degrade downstream water quality.

From a landowner's perspective, the basin mitigates erosion and property damage that would otherwise be caused by high river flows. Many landowners also appreciate the benefits of retaining water on their properties for periods longer than would otherwise be the case in the absence of the basin.

4. What uses can a landowner make of the impounded water?

Stored water may be used as a water supply for one household (domestic use). It may also be used for watering livestock. It has become more common to use the stored water for general wildlife enhancement. Stored water also may be used to water a small single family garden; however, it may not be used to water orchards, pastures for grass, or any crop that will be sold commercially. Such uses would require a TCEQ water rights permit.

5. Who pays the costs of design, construction and maintenance of a water and sediment control facility?

Under UGRA's water and sediment control facility program, UGRA pays the costs of permitting, design and construction of the basin facilities. UGRA also pays the costs of preparing the contract between the landowner and UGRA.

Upon conveyance of a completed water and sediment control facility to a landowner after completion of construction, the landowner is responsible for repair and maintenance of the facility.

6. Who will construct the water and sediment control facility?

UGRA will enter into a contract with a qualified contractor for construction of each facility.

7. Who owns the water and sediment control facility?

Under the program, each water and sediment control facility is constructed by and owned by UGRA but is subsequently conveyed to the landowner by Bill of Sale after final completion of construction.

8. How does UGRA determine where to construct water and sediment control basins?

UGRA retains professional engineering consultants to evaluate prospective sites for construction of the water and sediment control basins. The selection is based on site characteristics and specifically whether construction of a facility at a specific location will achieve the program's intended benefits. The final determination as to whether and where to construct a facility is made by UGRA's Board of Directors in its sole discretion.

9. How does a landowner request consideration of his property as a prospective water and sediment control facility site?

Any landowner who desires UGRA to consider a site should contact UGRA's General Manager. The General Manager will gather information regarding the site and will present it to UGRA's professional engineer for consideration.

10. Does a landowner need to own both sides of the creek or draw to be considered eligible for participation in the program?

Yes. The structure will need to be located on a ranch property wholly owned by the landowner.

11. Is a landowner obligated to proceed with a project once the landowner requests consideration of a potential site by UGRA?

A landowner is not obligated to proceed with a project by requesting consideration of his property as a potential project site. A landowner is not obligated to proceed with a project until such time as UGRA and the landowner enter into a written contract.

In the event that UGRA desires to proceed with construction of a facility at a prospective site, the General Manager will present a proposed contract to the landowner. The contract sets forth the terms and conditions under which the project will proceed, generally consisting of the following: (i) UGRA will permit, design and construct the facility at its expense; (ii) the landowner will convey access to UGRA for site evaluation, design and construction purposes and for inspection purposes (typically through a lease or temporary easement); and (iii) upon completion of construction, UGRA will convey the completed facility to the landowner for ownership and maintenance.

Upon execution of the contract by both parties, the landowner is obligated to make his property available for the project in accordance with the contract. UGRA cannot spend public monies on a project without certainty that the project may be completed. UGRA may elect to terminate the contract if as a result of further site inspection, or other circumstances, it determines not to proceed with a project at any location on the landowner's property. Under such circumstances, UGRA's access rights will also terminate.

12. Will a water and sediment control facility affect upstream neighboring property owners?

If the presence of the structure creates an impoundment (whether temporary or permanent) that will extend upstream onto a neighboring property, then an inundation easement from the neighboring property owner would be required in order for the project to proceed. Other considerations might be whether the presence of the impoundment changes the base flood elevation upstream of the applicant's property boundary.

13. Are there any environmental concerns associated with construction of the facility?

As part of the site evaluation process, UGRA and its consulting engineers will evaluate the environmental impact and permitting requirements associated with the potential construction of a facility at any site. Potential concerns include the presence of endangered species or archeological artifacts at a site.

14. Will the water and sediment control facility be regulated by the Texas Commission on Environmental Quality (TCEQ)?

UGRA will generally proceed with construction of facilities that are exempt from permitting by TCEQ. The water and sediment control facilities are generally designed to have a capacity of less than 200 acre-feet and may be used for

domestic and livestock purposes only, and are therefore exempt from TCEQ water rights permitting requirements. Additionally, the sites and facility sizes (heights and pond volumes) are selected such that they do not create a high hazard potential to downstream habitations and road crossings.

15. How long will it take UGRA to construct the facility?

The construction generally occurs during the winter months to avoid disturbance of or any conflict with potential endangered bird species which might be located near the selected facility site. Although the length of construction will depend on site characteristics and the size of a facility, construction and revegetation generally occurs over a 3 to $3\frac{1}{2}$ month period.

16. Does the landowner have any obligations under the Program?

Yes. The landowner must make his property available to UGRA during site evaluation and construction of the facility, and for subsequent inspections by UGRA. After construction, the landowner is responsible for maintenance of the facility.

17. Is the landowner required to maintain the facility after construction?

Yes, the owner should maintain the facility on a regular basis. Recommended maintenance might include yearly mowing and trimming of vegetation on earthen structures and removal of small trees from the dam, spillways, and from around any concrete appurtenances.

18. Who does a landowner contact if a problem develops with the facility?

Typically, only minor maintenance issues can be expected to occur for the facility over time which should be addressed by the owner. However, it is not unusual for very large storm events to occur in the Texas Hill Country. In the event of a large storm event, the owner should observe the facility for any unusual conditions that might have occurred such as scouring, erosion, undermining, slumping, or overtopping. The owner may want to contact a qualified engineer to perform a site visit and make recommendations for repairs. The owner may also contact UGRA if any severe problems develop with a facility. UGRA may contact its consulting engineers to respond to questions or concerns, but is not obligated to repair or replace a facility.

19. What is the expected useful lifetime of the facility in regards to water and sediment control?

The useful lifetime of a facility for water and sediment control is directly related to the soil types, land forms and the agricultural practices used in the catchment watershed of the impoundment. Historically, the Natural Resources Conservation Service (NRCS) constructed many dams for the purpose of retarding floodwater and sediment catchment. The NRCS sediment pool was assumed to have a lifetime of 50 years before the pool would be assumed to be filled with sediment. Many of these NRCS dams are over 50 years in age and are still in service with additional sediment volume available. Removal of sediment may only be necessary if the pond's volume shows significant accumulation of sediment.

20. How is sediment removed from the facility?

Each facility is constructed with a gated low flow outlet of sufficient size and discharge capability to lower the pond level to allow access to mechanical equipment to remove accumulated sediment.

21. Are there any standard operation and maintenance procedures that I should use for the facility?

TCEQ has a document for dam owners: "Guidelines for Operation and Maintenance of Dams in Texas", which can be found on-line at: https://www.tceq.texas.gov/publications/gi/gi_357/index.html The document is a good resource for water and sediment control facility owners.

22. Does UGRA have a continued right to access a landowner's property after conveyance of a water and sediment control facility to the landowner?

Under UGRA's standard contract, UGRA has the right to enter a landowner's property for the duration of the contract (typically 20 years) to ensure that the facility is being properly maintained and is functional.

23. In the event the facility is destroyed by a storm or other event, is the landowner obligated to replace the facility.

UGRA's standard contract obligates a landowner to repair and maintain the water and sediment control facility. However, in the event the facility is destroyed due to a catastrophe, the landowner is not obligated to construct a new facility. Under such circumstances, UGRA may elect to replace the facility, but is also not obligated to do so.

24. How can I get more information about UGRA's Water and Sediment Control Facility Program?

Any person who desires more information about UGRA's Water and Sediment Control Facility Program should call Ray Buck, UGRA's General Manager.

25. Is it possible to inspect a facility that has previously been completed by UGRA?

Yes. UGRA completed a water and sediment control facility at the Kerr Wildlife Management Area, which is operated by the Texas Parks and Wildlife

Department and open to the public. Note that this project is a concrete buttress design. Earthen embankment facilities are also considered.