



# Application

Abridged

Due February 5, 2016 by

5:00pm

SWIFT@twdb.texas.gov

By submitting this abridged application, you understand and confirm that the information provided is true and correct to the best of your knowledge and further understand that the failure to submit a complete abridged application by the stated deadlines, or to respond in a timely manner to additional requests for information, may result in the withdrawal of the abridged application without review.

GENERAL INFORMATION				
<b>Name of Entity</b>		<b>County</b>	<b>Regional Water Planning Area</b>	
Upper Guadalupe River Authority		Kerr	J	
Entity Contact Information				
<b>Contact Person</b>	<b>Name</b>	Raymond (Ray) L. Buck, Jr.		
	<b>Title</b>	General Manager		
<b>Mailing Address</b>		125 Lehmann Dr.		
		Ste. 100		
		Kerrville, TX 78028		
<b>Phone Number</b>	(830) 896-5445	<b>Fax Number</b>	(830) 792-6763	
<b>Email Address</b>	rbuck@ugra.org			

PROJECT DESCRIPTION				
<b>Name of Project</b> <i>(As it appears in the 2016 regional water plan)</i>		Construction of Off-Channel Surface Water Storage (J36)		
<b>Where can the project be found in the most recent Regional Water Plan?</b>	<b>Project described on page:</b>	<b>Page 5A-33, Section 5A-13.</b>	<b>Capital costs listed on page:</b>	<b>5-12</b>

Please attach a list of all water systems served by the proposed project.

<b>Phase(s) Applied For</b>	<input checked="" type="checkbox"/> Planning <input type="checkbox"/> Acquisition <input type="checkbox"/> Design <input type="checkbox"/> Construction
<b>Population Served When Fully Operational</b>	55,989

Description of Proposed Project
See <b>ATTACHMENT A</b>

<b>Emergency</b> <i>(select all that apply)</i>	<input type="checkbox"/> Applicant/entity's water supply will last less than 180 days. <input checked="" type="checkbox"/> Water supply need occurs earlier than anticipated in the State Water Plan. <input type="checkbox"/> Applicant has received or applied for Federal emergency funding. <input type="checkbox"/> None of the above.
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<b>Agricultural Efficiency Project?</b>	<input type="checkbox"/> Yes	Efficiency improvement achieved by implementing the project <i>(Please provide an attachment showing the basis for your calculation.)</i>	
	<input checked="" type="checkbox"/> No	<input type="checkbox"/> <1% <input type="checkbox"/> 1%-1.9% <input type="checkbox"/> 2%-5.9% <input type="checkbox"/> 6%-9.9%	<input type="checkbox"/> 10%-13.9% <input type="checkbox"/> 14%-17.9% <input type="checkbox"/> ≥18%

**Household Cost Factor**  
*(Household Cost Factor for SWIFT prioritization is calculated by dividing the service area's average residential water bill by its annual median household income. For regional projects, these should represent the combined service areas of all participating entities.)*

<b>Estimated average annual residential water bill:</b>	\$880	<b>Annual Median Household Income:</b>	\$41,120 (population weighted average of census tracts 9601 and 9608)
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<b>The proposed project addresses:</b>	<input checked="" type="checkbox"/> Conservation	<b>Annual Volume of Water Produced/Conserved by the Project</b> <i>(in acre-feet per year)</i>	9,423 (Table 5-2 2016 PRWP)
	<input checked="" type="checkbox"/> Water Loss <input type="checkbox"/> N/A		

<b>Readiness to Proceed</b> <i>(select all that apply)</i>	<input type="checkbox"/> Preliminary planning or design work (30% of total project) has been completed or is not required.
	<input type="checkbox"/> Applicant is prepared to begin implementation or construction within 18 months of application deadline.
	<input type="checkbox"/> Applicant has acquired all water rights associated with the proposed project, or none will be required.

**ESTIMATED COSTS**

<b>Estimated Project Costs</b>	Low-interest Loan	\$
	Deferred Loan	\$ 250,000
	Board Participation	\$
	Local Contribution	\$
	Other:	\$
	<b>Total Estimated Project Costs</b>	\$ 250,000

<b>Anticipated Commitments</b> <i>Attach proposed schedule for multi-year commitments</i>	<input checked="" type="checkbox"/> One-Time Commitment	<input type="checkbox"/> Multi-Year Commitments
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**ATTACHMENT A**  
**Description of Proposed Project**  
**SWIFT Abridged Application of the**  
**Upper Guadalupe River Authority**

**Introduction and Summary**

The proposed project is Management Strategy J36 in the 2016 *Plateau Region Water Plan* (Region J). The project is named **Construction of Off-Channel Surface Water Storage** (the “Project”). The Project is needed to meet increasing water demand in Kerr County, and to provide a reliable source of supply to existing users in Eastern Kerr County where groundwater levels are declining. The SWIFT funding requested in this Abridged Application is for planning activities necessary to provide the Upper Guadalupe River Authority (UGRA) and its partner agency, Kerr County (the “County”), with the analyses, studies and data necessary for both entities to confirm the Project concept and submit necessary water rights applications to the Texas Commission on Environmental Quality (TCEQ). The UGRA application to TCEQ will be for an amendment to an existing permit (Permit No. 5394D), and the County application will be for a new appropriation permit. Collectively, the two applications will authorize UGRA and the County to divert surface water from the Guadalupe River and store it in an off-channel storage reservoir for later treatment and distribution.

In August 2015 a water availability study was completed by Arcadis, Inc. for UGRA and the County. That study found that, on average during the period of record, over 3,000 acre-feet of water per year can be withdrawn from the Guadalupe River while maintaining environmental flows and honoring senior water rights. However, surface water is not available during drought; therefore the supply must be firmed up with storage.

A preliminary evaluation of the study area revealed an opportune potential storage option in a quarry that a large sand and gravel mining company is scheduled to ‘mine out’ adjacent to the Guadalupe River. The quarry is located near potential diversion points. UGRA proposes to use the SWIFT planning funds to analyze the quarry as a potential storage site and to obtain data and information needed for the TCEQ permit applications. It is important to note that the Project will be a regional facility with the ability to serve users throughout Kerr County.

The planning tasks to be accomplished with SWIFT funding include:

- Project management and coordination with TWDB and TCEQ
- Analysis and estimation of the firm yield of the off-channel storage site, based on the results of the 2015 water availability study, and additional information that will be gathered during this task
- Confirmation of the project description and conceptual design, and assessment of environmental issues and permit requirements
- Preparation of a preliminary Project cost estimate and unit cost of water

**Need and Justification for the Project**

Provides Service to a Growing Population.

Kerr County is a rapidly growing area of the Texas Hill Country. The Project has the potential to serve a significant number of users; however the regional water supply planning process did not adequately account for the need in much of the County (see page 2.2 of 2016 *Plateau Region Water Plan*). The water demand projections (e.g. Table 2-2) depict water demand for “County-Other” as equally distributed throughout the rural portion of the County;

whereas in reality, population and water demand are often concentrated in smaller areas, such as unincorporated communities, subdivisions and mobile home parks (especially in Eastern Kerr County).

Provides Assistance to Diverse Urban and Rural Populations.

The Project has the potential to serve both the urbanizing and the rural portions of Kerr County. Due to its location, the County has unreliable surface water and limited ground water resources. For example, groundwater levels in Eastern Kerr County are in decline. Due to the hydrogeology of the area, the Trinity Aquifer and related formations are not as productive in the eastern portion of the County as they are in the western areas. The declining water levels put existing users at risk.

Is A True Regional Project.

The Project is a regional management strategy. In order to protect groundwater resources and to provide for current and future water needs, UGRA and the County have partnered on this surface water project in order to allow conjunctive use of surface water and groundwater in Eastern Kerr County. The proposed water supply project is envisioned to consist of an off-channel surface water storage component, with the ability to be integrated with other regional strategies defined in the *Plateau Region Water Plan* (e.g. an aquifer storage and recovery (ASR) project; run of the river diversion and flood scalping diversion; as well as treatment and distribution facilities).

Meets A High Percentage of Water Needs.

The Project has the potential to meet a significant portion of the County's future water demand. The Project has a Final Prioritization Score of 936.00, the second highest in Region J. In addition, the Project can alleviate unreliable water supplies for rural users in Eastern Kerr County where groundwater levels are declining.

**Schedule**

UGRA and the County are ready to proceed immediately with the Project planning effort discussed above. The SWIFT-funded planning can be completed within one year from entering into a funding agreement with the TWDB.

**Estimated Costs**

The estimated cost for the SWIFT-funded planning effort is allocated as follows:

<b>Task</b>	<b>Description</b>	<b>Estimated Cost</b>
1	Project Management and Coordination	\$14,000
2	Analysis and Estimation of Firm Yield	\$42,000
3	Confirmation of Project Description, Conceptual Design, and Environmental and Permitting Assessments	\$84,000
4	Preparation of Cost Estimates	\$60,000
	Subtotal	\$200,000
	Contingency (25%)	\$50,000
	<b>Total</b>	<b>\$250,000</b>

**From:** [Ray Buck](#)  
**To:** [SWIFT](#)  
**Cc:** [Tammy Thompson](#); [Blumberg, Fred \(Fred.Blumberg@arcadis.com\)](#)  
**Subject:** UGRA Application for SWIFT funding  
**Date:** Thursday, January 28, 2016 9:07:35 AM  
**Attachments:** [UGRA SWIFT Application\\_OCS\\_Final.pdf](#)

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Please see attached Abridged SWIFT Application ('Application') submitted by the Upper Guadalupe River Authority. For our records, please provide acknowledgement of receipt. In the event more information is required or an alternative submittal process is required, please contact me at the number below.

Sincerely,  
Ray Buck

*Raymond L. Buck, Jr.*  
General Manager  
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