## Implementation Plan for One TMDL for Bacteria in Guadalupe River Above Canyon Lake UGRA Bacteria Reduction Plan

Management Measure	2023 Update
1.0 Reduce bird feeding at Louise Hays Park and	UGRA continues monthly surveys to track
Kerrville-Schreiner Park	recreator and waterfowl presence at
	Louise Hays Park and Kerrville-Schreiner
	Park.
1.1 Public Education	UGRA staff continues to spread the public
	service announcement "Don't Feed the
	Ducks" on radio programs, social media
	posts, newspaper articles, and
	presentations. In 2016, UGRA partnered
	with the City of Kerrville Parks and
	Recreation staff to develop and install
	"Don't Feed the Ducks" signage at city
	riverside parks. UGRA has purchased
	replacements and additional signs when
	necessary.
2.0 Reduce number of birds roosting and nesting	UGRA continues monthly surveys of
on bridges directly over the study area waterways	roosting and nesting along the Highway
	16 bridge. In 2013, bird exclusion netting
	was installed along the Highway 16
	bridge and UGRA staff routinely inspects
	the bridge netting from the ground. In
	2023, UGRA staff made needed repairs to
3.0 Manage the waterfowl population at Louise	the netting. UGRA continues monthly surveys to track
Hays Park and Kerrville-Schreiner Park	recreator and waterfowl presence at
They's Fark and Kerry me Sememer Fark	Louise Hays Park and Kerrville-Schreiner
	Park.
4.0 Reduce human contributions through ongoing	UGRA partnered with Kerr County
lateral sewage line re-placement, sewer	Environmental Health Department
inspection and rehabilitation, ongoing septic	(KCEHD) to develop and print
system plan review and registration, mapping of	homeowners' guides for proper OSSF
the priority OSSF area, and an education program	usage and maintenance. UGRA continues
for OSSF owners.	to print and distribute these guides.
	UGRA staff continues to include OSSF
	topics in presentations and invites
	KCEHD staff when appropriate.
4.1 City of Kerrville Wastewater Infrastructure	The City of Kerrville continues to
	maintain and improve the system in
	accordance with their <u>Water and</u>
	Wastewater Master Plan

2023 Implementation Tracking Report

4.2 On Site Sewage Facilities	KCEHD continues to be the Designated Representative in charge of enforcing OSSF rules and regulations.
5.0 Implement an education program for pet owners and install pet waste stations at public parks.	UGRA staff continues to spread the theme " <u>pick up after your pet</u> " on radio programs, social media posts, newspaper articles, and presentations.
5.1 Pet Waste Stations	Starting in 2010, UGRA partnered with Kerr County and the City of Kerrville to install pet waste stations at riverside parks and along the River Trail. There are currently 46 pet waste stations across the county with informational signage. There are plans to replace a significant amount of signage in 2024.
5.2 Public Education	UGRA staff continues to spread the theme "pick up after your pet" on radio programs, social media posts, newspaper articles, and presentations. In addition to the signs at each station, there are two large educational signs at Flat Rock Park.
6.0 Reduce contributions from general urban	UGRA staff continues to spread
runoff through street sweeping, river clean ups,	information about urban runoff on radio
and storm water education programs.	programs, social media posts, newspaper articles, and presentations.
6.1 Street Sweeping	The City of Kerrville continues to conduct routine street sweeping.
6.2 Storm Drain Marking Program	Stormdrain markers were placed in 90 locations throughout the watershed in 2017. The condition of existing markers will be spot checked in the future.
6.3 Trash Removal	UGRA continues to host an annual River Clean Up. In 2023, there were 549 volunteers who collected 8,110 pounds of trash from the watershed. To accompany this main event, there was an "On Your Own" river clean up where 59 volunteers conducted cleanups at 7 locations. UGRA staff also conducted regular crossing cleanups throughout the year where 2,518 pounds of trash were collected from 13 high priority sites.

6.4 Public Education	UGRA staff continues to spread
	information about <u>urban runoff</u> on radio
	programs, social media posts, newspaper
	articles, and presentations. UGRA and
	Kerr County partnered together to fund
	litter patrols with licensed peace officers
	at popular river crossings during the
	summer to promote the message, "Pack it
	inpack it out". In 2023, UGRA
	launched the Water Resources
	Preservation Grant Program (WRPGP) to
	help address runoff by promoting the
	installation of Green Stormwater
	Infrastructure through cost share funding
	up to \$150,000.
7.0 Preserve riparian areas through education of	UGRA staff continues to spread
riparian area structure and function and	information about riparian areas on radio
restoration efforts	programs, social media posts, newspaper
	articles, and presentations. UGRA's new
	WRPGP encourages riparian protection
	and restoration by prioritizing projects
	that include riparian areas.
7.1 Public education	UGRA staff continues to spread
	information about <u>riparian areas</u> on radio
	programs, social media posts, newspaper
	articles, and presentations. UGRA's new
	WRPGP provides additional resources
	about riparian areas for developers.

7.2 Healthy Creeks Initiative	UGRA continues to participate in the <u>Healthy Creeks Initiative</u> . In 2023, delays at TPWD and difficulties getting access to the databases postponed the start of the Healthy Creeks Initiative Arundo management program from May to July. Staff reviewed most of the Kerr County parcels in the program and surveyed enough properties to make up the two days of spraying Kerr County received. The spraying season was shortened by winds and wildfires in other counties. Previously treated parcels were given priority this season and those surveyed and not treated from last year were treated this year. Staff continues to flag properties for future outreach, but no new parcels were added this year. Communication towards the end of this summer suggested that the admin complications will be improved for next year.
7.3 Feral Hogs	Kerr County is one of the few places in Texas that encourages removal of <u>feral</u> <u>hogs</u> by paying a bounty upon each hog removed. The Feral Hog Management program is supported by Kerr County and UGRA. In 2023, almost 1,900 hogs were removed in Kerr County and since the beginning of this unique program over 11,300 hogs have been removed. As a continuation of that program, UGRA and Kerr County own two traps that are operated by a local trapper on private properties.
8.0 Promote green infrastructure to reduce stormwater runoff	UGRA staff continues to spread information about <u>urban runoff</u> on radio programs, social media posts, newspaper articles, and presentations. In 2023, UGRA launched the WRPGP to help address runoff by promoting the installation of Green Stormwater Infrastructure through cost share funding up to \$150,000.

8.1 Rainwater Harvesting	UGRA continues its <u>Rainwater Harvesting</u>
	Rebate Program, where applicants who
	install or upgrade their rainwater
	harvesting system, can receive a rebate up
	to \$500. In 2023, 46 rebates were fulfilled
	for over \$17,000. To promote rainwater
	harvesting in all parts of the community,
	UGRA has a Rainwater System Grant
	Program where nonprofit organizations,
	schools, and public entities can receive up
	to \$15,000 to install or improve their
	rainwater harvesting system. In 2023, a
	recipient of this grant was the Hunt
	Volunteer Fire Department.
8.2 UGRA EduScape	The UGRA EduScape continues to be an
-	educational asset as a demonstration
	landscape. Three in person tours of the
	EduScape were held in 2023 and many
	visitors stopped by for a self-guided tour.
	This year was the second year of a severe
	drought for the Hill Country and the
	drought-tolerant landscaping survived
	through significant water restrictions.