

# Year 2: Status of I-Plan Activities for Guadalupe River Above Canyon Lake

Stakeholders met in March 2014 to discuss and evaluate the progress of I-Plan implementation. The following tables summarize the status of activities for each measure described in the I-Plan.

## Abbreviations

BMPs	best management practices	OSSF	on-site sewage facilities
CWA	Clean Water Act	TCEQ	Texas Commission on Environmental Quality
NA	not applicable	TxDOT	Texas Department of Transportation
NPS	nonpoint source	TMDL	total maximum daily load
UGRA	Upper Guadalupe River Authority		

**Management Measures 1, 2, and 3: Reduce bird feeding at Louise Hays Park and Kerrville-Schreiner Park**  
**Install bird exclusion/deterrent devices on the Highway 16 and Loop 534 bridges over the water**  
**Manage the waterfowl population at Louise Hays Park and Kerrville-Schreiner Park**

Responsible Parties	Implementation Measure	Implementation Milestones	Current Status
UGRA, City of Kerrville	<ul style="list-style-type: none"> <li>Implement the public education campaign.</li> </ul>	<ul style="list-style-type: none"> <li>Number of signs installed</li> <li>Number of pamphlets distributed</li> </ul>	<ul style="list-style-type: none"> <li>Annual Easter press release issued in March 2013 urged citizens not to feed waterfowl.</li> <li>“Do Not Feed the Ducks” sign and information displayed at UGRA booth at six events.</li> </ul>
UGRA, TxDOT	<ul style="list-style-type: none"> <li>Install bird exclusion/deterrent devices.</li> </ul>	<ul style="list-style-type: none"> <li>Number of bird deterrent devices installed</li> <li>Funding match provided to complete installation of bird deterrent devices</li> <li>Reduction in the number of birds roosting as a result of bird deterrent devices</li> <li>Reduction in bird bacteria loading values</li> </ul>	<ul style="list-style-type: none"> <li>Exclusion netting installed over three spans of SH16 bridge.</li> <li>Matching funds provided by UGRA, TxDOT, and City of Kerrville.</li> <li>No birds roosted in the three spans where the exclusion netting was installed. Bacteria level reductions will be evaluated in the project summary report in August 2014.</li> </ul>
TxDOT	<ul style="list-style-type: none"> <li>Design traffic safety plan when installation of devices occurs.</li> </ul>	<ul style="list-style-type: none"> <li>Complete safety plan</li> <li>Safely installation of devices</li> </ul>	<ul style="list-style-type: none"> <li>TxDOT provided superb traffic control during installation of bird exclusion devices.</li> </ul>
Kerr County, City of Kerrville	<ul style="list-style-type: none"> <li>Remove waterfowl from Louise Hays Park and Kerrville-Schreiner Park.</li> </ul>	<ul style="list-style-type: none"> <li>Number of waterfowl successfully relocated to Kerr County Animal Control</li> </ul>	<ul style="list-style-type: none"> <li>Due to the closure of Louise Hays Park in August 2013, this measure has not yet been addressed but will be in Year 3. Park is due to open in 2015.</li> </ul>

Responsible Parties	Implementation Measure	Implementation Milestones	Current Status
<i>continued Measures 1, 2, and 3</i>			
UGRA	<ul style="list-style-type: none"> <li>Conduct animal surveys at local parks and where implementation measures have been installed.</li> </ul>	<ul style="list-style-type: none"> <li>Number of animal surveys and the reduction in the number of birds</li> <li>Reduction in the bacteria contributions per bird</li> </ul>	<ul style="list-style-type: none"> <li>24 animal surveys were completed.</li> <li>No waterfowl removals have been conducted since 2009 and flock sizes have increased slightly.</li> </ul>
UGRA	<ul style="list-style-type: none"> <li>Continue Water Quality Monitoring.</li> </ul>	<ul style="list-style-type: none"> <li>Number of water quality samples taken</li> <li>Percentage of water quality samples below contact recreation standard</li> </ul>	<ul style="list-style-type: none"> <li>101 samples collected.</li> <li>84 samples (83%) were below contact recreation standard.</li> </ul>

***Management Measure 4: Reduce human contributions through ongoing lateral sewage line replacement, sewer inspection, and rehabilitation, and ongoing septic system plan review and registration***

Responsible Parties	Implementation Measure	Implementation Milestones	Current Status
City of Kerrville	<ul style="list-style-type: none"> <li>Improve wastewater collection systems.</li> </ul>	<ul style="list-style-type: none"> <li>Amount spent to improve collection system</li> <li>Lateral feet of collection line system repaired or replaced</li> <li>Number of lift stations rehabilitated/improved</li> <li>Number of sanitary manholes replaced</li> <li>Number of broken customer cleanouts repaired</li> <li>Footage of gravity main inspected, smoked tested, and cleaned</li> </ul>	<ul style="list-style-type: none"> <li>\$7,120,038.22 spent on improvements.</li> <li>303 lateral feet of collection line repaired/replaced.</li> <li>Lift stations: 1 replacement, 1 replacement in progress, 9 improved/repaired.</li> <li>1 manhole replaced.</li> <li>0 manholes rehabilitated.</li> <li>0 city cleanouts replaced.</li> <li>25 broken customer cleanouts repaired.</li> <li>27,776 lateral feet inspected through CCTV camera</li> <li>175,798 lateral feet cleaned/vacuumed</li> <li>200 lateral feet root sawed</li> </ul>
Kerr County	<ul style="list-style-type: none"> <li>Continue OSSF plan review and registration.</li> </ul>	<ul style="list-style-type: none"> <li>Number of septic systems plans reviewed and registered</li> <li>Number of septic systems inspected, repaired or replaced</li> </ul>	<ul style="list-style-type: none"> <li>Rescheduled to Year 3.</li> </ul>
UGRA, Kerr County	<ul style="list-style-type: none"> <li>Distribute additional public information through public service announcements, brochures, or workshops as needed; possible distribution of the Homeowner's Septic Guide by realtors</li> </ul>	<ul style="list-style-type: none"> <li>Number of materials distributed</li> <li>Public reached through public service announcements or workshops</li> <li>Number of realtors distributing information</li> </ul>	<ul style="list-style-type: none"> <li>Rescheduled to Year 3.</li> </ul>

**Management Measure 5: Implement an education program for pet owners and install pet waste stations at public parks**

<b>Responsible Parties</b>	<b>Implementation Measure</b>	<b>Implementation Milestones</b>	<b>Current Status</b>
UGRA, City of Kerrville, Kerr County	<ul style="list-style-type: none"> <li>Install additional pet waste containers, signs, and collection bins if funding is available.</li> </ul>	<ul style="list-style-type: none"> <li>Number of pet waste containers installed</li> <li>Number of signs installed</li> <li>Number of collection bins installed</li> </ul>	<ul style="list-style-type: none"> <li>Rescheduled to Year 3.</li> </ul>
UGRA, Kerr County	<ul style="list-style-type: none"> <li>Evaluate results of areas with and without collection systems.</li> </ul>	<ul style="list-style-type: none"> <li>Percentage of change in people's behavior before and after installation of pet waste containers, signs, and collection bins</li> </ul>	<ul style="list-style-type: none"> <li>Pet waste stations continue to be used frequently and less pet waste is observed on the ground in the parks where the containers are located.</li> <li>UGRA monitors the waste collected at the 7 Flat Rock Park stations on a weekly basis. In Year 2, 1,032 pounds of pet waste was removed.</li> <li>In Year 2, Kerr County contributed 104 hours of staff time maintaining the stations.</li> </ul>

**Management Measure 6: Reduce contributions from general urban runoff through street sweeping, river clean ups, and storm water education programs**

<b>Responsible Parties</b>	<b>Implementation Measure</b>	<b>Implementation Milestones</b>	<b>Current Status</b>
City of Kerrville	<ul style="list-style-type: none"> <li>Conduct street sweeping.</li> </ul>	<ul style="list-style-type: none"> <li>Miles of streets swept</li> <li>Frequency of street sweeping</li> </ul>	<ul style="list-style-type: none"> <li>322 hours of street sweeping.</li> </ul>
UGRA	<ul style="list-style-type: none"> <li>Conduct up to 2 river cleanups.</li> </ul>	<ul style="list-style-type: none"> <li>Pounds of trash and debris removed</li> </ul>	<ul style="list-style-type: none"> <li>UGRA's Annual River Clean Up collected 6,830 pounds of trash with the help of 337 volunteers</li> <li>UGRA's routine crossing cleanup program removed 18,065 pounds of trash.</li> <li>Two community groups organized quarterly or monthly clean ups.</li> </ul>
UGRA	<ul style="list-style-type: none"> <li>Implement education program including educational kiosk, workshops, or educational materials.</li> </ul>	<ul style="list-style-type: none"> <li>Number of people viewing educational materials</li> <li>Number of people attending workshops</li> <li>Number of educational materials distributed</li> </ul>	<ul style="list-style-type: none"> <li>The kiosk was used at Riverside Nature Center and the Butt-Holdsworth Library. In total 1,371 modules were accessed in English and 216 in Spanish.</li> </ul>

***Control Action 1: Monitor and report E. coli concentrations from WWTFs***

<b>Responsible Parties</b>	<b>Implementation Measure</b>	<b>Implementation Milestones</b>	<b>Current Status</b>
WWTFs	<ul style="list-style-type: none"> <li>• Monitor and report bacteria data as required by individual wastewater permits to TCEQ</li> </ul>	<ul style="list-style-type: none"> <li>• Number of monitoring events submitted</li> <li>• Percentage of monitoring events below the water quality standard</li> <li>• Repairs or items corrected reported to TCEQ</li> </ul>	<ul style="list-style-type: none"> <li>• NA, Kerrville WWTF has zero contribution due to its downstream location and Hill Country Camp permit is not currently operational</li> </ul>