

Clean Water Act Section 319(h) Nonpoint Source Pollution Control Program Project

Lampasas Watershed Assessment and Protection Project

Quarterly Report Number 3

Covering work accomplishments during July through September, 2008

prepared by

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Efforts this quarter focused on completing an approved QAPP, kicking off the project publically and initiating outreach activities.

Significant progress was made on outreach. Particularly vital to the project was to begin identifying key stakeholders. To that end staff met with several of the Soil and Water Conservation Districts, county extension agents, and State Representative Jimmy Don Aycock of Lampasas. In addition, project staff participated in the Lampasas Water Conference, making a formal presentation and having numerous informal conversations with community leaders and local water professionals.

Project staff employed a “listening session” approach to open dialog with watershed stakeholders. In these informal sessions with individuals or small groups, staff summarized the protection plan process, engaging stakeholders in a conversational-style information exchange. An important principle underlying listening sessions is the need to build rapport, mutual understanding and trust between project staff and key stakeholders.

Outreach materials including an informational brochure were created. A website design was created and development is in progress. Hosted by BREC at URL: www.LampasasRiver.org, information on the site is being developed such that messages are consistent across all media and fit into a comprehensive communications strategy which we are currently developing for incorporation into the outreach plan.

Project staff worked with Texas Agrilife Extension Service in conducting a Watershed Stewards workshop in Lampasas. One purpose of the workshop was to educate stakeholders to enable them to contribute to watershed protection planning process. The workshop, held in Lampasas on September 25, was conducted by Texas Agrilife Extension Service for approximately 60 stakeholders.

Completing the QAPP and having it approved was an important accomplishment this quarter, one which allows us to move forward with the technical analyses needed to identify water quality impairment sources. Note that in developing the QAPP, modifications in project boundaries were made to exclude those 12-digit subwatersheds directly contributing to Lake Stillhouse Hollow Reservoir.

Task 1: Lampasas River WPP Development and Project Administration

Subtask 1.1: Conduct quarterly meetings, or as appropriate, with project participants, and other interested parties to discuss project schedule, lines of responsibility, communication needs, and other requirements. (Start Date: Month 1; Completion Date: Month 36)

18% Complete – On-going

Subtask 1.2: Identify and recruit key stakeholders through public education and outreach. Organize stakeholder group. Prepare and distribute semi-annual newsletter to stakeholders. Develop and host watershed website. (Start Date: Month 1; Completion Date: Month 36)

- LWAPP Staff is finalizing a comprehensive outreach plan and communications strategy.
- Staff continued identifying and contacting likely members of the stakeholder committee and workgroups.
- Staff conducted “listening sessions” with stakeholders (both groups and individuals).

12% Complete – On-going

Subtask 1.3: Organize workgroups based on stakeholder recommendations. (Start Date: Month 1; Completion Date: Month 36)

- LWAPP staff worked on formation of the technical committee.
- Staff attended the monthly meeting of Cleanwater and assisted their educational outreach efforts. Cleanwater is a stakeholder group concerned with the water quality in Stillhouse Hollow Reservoir.
- Staff met with representatives from the Friends of Sulphur Creek; a stakeholder group in Lampasas concerned with the water quality in Sulphur Creek, a tributary to the Lampasas River.

12% Complete – On-going

Subtask 1.4: Conduct stakeholder meetings as appropriate (stakeholder/community driven), and conduct workgroup meetings according to project demands. (Start Date: Month 1; Completion Date: Month 36)

- Met with Mills County SWCD.
- Met with with Hill Country SWCD.
- Participated in Lampasas Water Conference.

12% Complete – On-going

Subtask 1.5: Prepare stakeholder and workgroup educational programs as requested. (Start Date: Month 1; Completion Date: Month 36)

- Hosted Watershed Stewards Workshop conducted by Texas Agrilife Extension Service.

15% Complete – On-going

Subtask 1.6: Develop Lampasas River WPP. (Start Date: Month 12; Completion Date: Month 36)

- No activity this quarter.
0% Complete – On-going

Task 2: Development of load duration curves for the Lampasas River Watershed

Subtask 2.1: Develop flow duration curves using historical stream-flow data. (Start Date: Month 10; Completion Date: Month 14)

- No activity this quarter.
5% Complete – On-going

Subtask 2.2: Develop LDCs to characterize pollutant loadings in the Lampasas River Watershed for all parameters of concern. Determine if and under what conditions bacteria levels exceed water quality standards. (Start Date: Month 10; Completion Date: Month 14)

- No activity this quarter.
5% Complete – On-going

Subtask 2.3: Calculate the load reductions necessary to meet water quality standards. (Start Date: Month 10; Completion Date: Month 14)

- No activity this quarter.
0% Complete – On-going

Task 3: Watershed inventory and geographic analysis of land use influencing *E. coli* migration and other NPS pollution within the Lampasas River Watershed.

Subtask 3.1: In order to develop and implement DQOs and QA/QC activities necessary to ensure environmental data of known and acceptable quality is generated through this project, a QAPP for Tasks 2-4 will be developed that is consistent with *EPA Requirements for Quality Assurance Project Plans (QA/R-5)* and the *Environmental Data Quality Management Plan for the TSSWCB*. (Start Date: Month 1; Completion Date: Month 8)

- Submitted QAPP to TSSWCB. Approved by EPA September 2008.
100% Complete –

Subtask 3.2: Classify current land use for the watershed using existing land use/land cover data utilizing most current imagery available. (Start Date: Month 11; Completion Date: Month 18)

- No activity this quarter.

5% Complete – On-going

Subtask 3.3: Verify classification of land use through ground-truthing of sub-sampled land units, and collection of available data. (Start Date: Month 11; Completion Date: Month 18)

- No activity this quarter.

0% Complete – On-going

Subtask 3.4: Delineate the Lampasas River Watershed into catchments using highest resolution digital elevation model available. (Start Date: Month 11; Completion Date: Month 18)

- Re-delineated project area to exclude 12-digit subwatersheds which directly contribute to Lake Stillhouse Hollow Reservoir.

5% Complete – On-going

Subtask 3.5: Compile all of feature class, raster, and tabular data into a comprehensive geo-database reflecting existing watershed conditions. (Start Date: Month 11; Completion Date: Month 18)

- No activity this quarter.

0% Complete – On-going

Task 4: Utilize Spatially Explicit Load Enrichment Calculation Tool (SELECT) for analysis of the Lampasas River Watershed.

Subtask 4.1: Compile and estimate the contribution of potential sources of *E. coli* and other parameters within the watershed. (Start Date: Month 19; Completion Date: Month 26)

- No activity this quarter.

0% Complete – On-going

Subtask 4.2: Allocate numbers of each potential source category, in a spatial context according to land use classification using GIS. (Start Date: Month 19; Completion Date: Month 26)

- No activity this quarter.

0% Complete – On-going

Subtask 4.3: Identify potential pollutant sources across the landscape based on proximity to hydrology, land use, and other factors using SELECT analysis. (Start Date: Month 19; Completion Date: Month 26)

- No activity this quarter.

0% Complete – On-going

Subtask 4.4: Utilize the hybrid statistical and process-based approach of SPARROW (SPAtially Referenced Regressions on Watershed Attributes) to quantify uncertainty in SELECT parameters. (Start Date: Month 19; Completion Date: Month 26)

- No activity this quarter.
0% Complete – On-going

Task 5: Facilitate implementation of the Lampasas River WPP.

Subtask 5.1: Work with stakeholders and workgroups to prioritize implementation activities based on consensus and continual watershed assessment and awareness. (Start Date: Month 18; Completion Date: Month 36)

- No activity this quarter.
0% Complete – On-going

Subtask 5.2: Assist stakeholders in identification and acquisition of resources necessary to proceed with watershed implementation and protection strategies, and in anticipation of future watershed needs. (Start Date: Month 18; Completion Date: Month 36)

- In response to stakeholder questions concerning brush management effects on water quantity and water quality, project staff reviewed the scientific literature and consulted with scientists from BREC, Agricultural Research Service, Tarleton State University and Texas A&M. Organized meeting among several scientists interested in applying for 2009 Conservation Innovation Grant to work with Lampasas watershed landowners on the adoption of promising brush management technologies and approaches.
5% Complete – On-going

Subtask 5.3: Identify metrics or other indicators which will be used to evaluate successful implementation or improvement of watershed health over time. (Start Date: Month 18; Completion Date: Month 36)

- Reviewed literature concerning socio-economic indicators as interim metrics of water quality improvements. Consultations with government and university experts are ongoing.
5% Complete – On-going

Activities Planned for Next Quarter

- With the approved QAPP, major activities next quarter will focus on technical activities detailed in Tasks 2 and 3.
- Plan communications strategy for project and integrate with outreach plan.
- Build up and edit website, develop reusable outreach materials including a PowerPoint presentation introducing the Lampasas River WPP, newsletter template, etc.
- Build a comprehensive stakeholder database.
- Continue stakeholder outreach activities.
- Establish media contacts.
- Finalize stakeholder steering committee composition. Coordinate and host organizational meeting.
- Initiate Technical Liaison outreach. Identify and organize technical committees and workgroups.
- Work with brush management workgroup to organize an informational workshop to be held in 2009.
- Complete and submit Quarterly Report Number 4 for work accomplished Oct.- Dec. 08