

Public Participation Plan

Upper San Marcos Coordinating Group



PREPARED IN COOPERATION WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY AND
U.S. ENVIRONMENTAL PROTECTION AGENCY

The preparation of this report was financed through the River Systems Institute and grants
from the Texas Commission on Environmental Quality.

Spring 2012

Contents

Purpose of a PPP 3

The Need for Public Participation 3

Background of Spring Lake and the Upper San Marcos Watershed 3

Background of the Upper San Marcos Coordinating Group 5

Dissemination of and Access to Information 6

Deliverables 6

Ground Rules 7

Goals of the Committee 7

Partners..... 8

Purpose of a PPP

Increasingly, public participation in decision making is vital to the success of community projects. This public participation plan (PPP) shows how the San Marcos Coordinating Group will communicate and engage the community in an ongoing effort to develop a Spring Lake Watershed Characterization and Management Recommendations Report. Stakeholder input during this project will be gathered on the Spring Lake Watershed and its potential nutrient sources. It is anticipated that this stakeholder work will be a precursor to the development of a Watershed Protection Plan wherein stakeholder input will be gathered on the Upper San Marcos Watershed. As part of the collaborative process, the River Systems Institute will work with stakeholders and partners to create a vision, goals, and action items that incorporate the environmental, economic, and social values of stakeholders and partners. The River Systems Institute will also work with stakeholders and partners to reconcile different values and viewpoints of the various participants in order to arrive at mutually acceptable management recommendations.

The Need for Public Participation

Public participation is both functional for planning and meaningful to the public (Miskowiak, 2004). Not only do local citizens have a right to say what happens in their community, they can add anecdotal evidence to coincide with scientific data. Many people in the community have lived there for many years and can testify to changes they have seen throughout that time. In addition, public participation is fast becoming a vital component of any environmental planning effort.

Another aspect of public participation to consider is the incredible influence the public has. People talk to one another, and can stop a project in its tracks if they decide not to support it. Ultimately, the public has the final say in what they want to happen in their community. Getting public buy-in early in the process is essential. A public that is an educated part of the process will help build success. Community involvement will also help to build trust. If the community is part of this effort to gather information and make informed decisions, they will own their efforts and likely be more supportive of watershed based programs.

It is pertinent to emphasize that this project will provide information that can be used for future decision making. No one will be required to implement the management strategies recommended through the stakeholder processes.

Background of Spring Lake and the Upper San Marcos Watershed

The San Marcos River is an ecologically unique spring-fed ecosystem located along the margin of the Edwards Plateau in central Texas. Spring Lake, located in the City of San Marcos, is the headwaters of the San Marcos River where artesian spring water from the Edwards Aquifer emerges into the lake from approximately 200 openings. This spring system is the second-most productive in the state. The importance of the springs has become evident during

recent droughts. During portions of the 1996 drought, the San Marcos and Comal Springs combined accounted for 70% or more of flows in the Guadalupe River reaching Victoria and nearly 40% of flows that reached the San Antonio Bay.

Spring Lake is a horseshoe-shaped water body with two main regions: the Spring Arm and the Slough Arm. Most of the hydrological inputs to Spring Lake occur from spring openings in the Spring Arm. Sink Creek, the lake's only significant surface water tributary, discharges into the Slough Arm of the lake.

Due to the relatively large spring water influence, Spring Lake and the upper river reaches are characterized by clear water, abundant and productive macrophytes and a relatively large number of endemic and native species. However, the potential sensitivity of the headwaters to environmental perturbation, and the limited geographic range of many of the spring-adapted organisms, have led to the designation of a large number of federally- and state-listed taxa in the headwaters of the San Marcos River. The San Marcos salamander (*Eurycea nana*), Texas wild rice (*Zizania texana*), the fountain darter (*Etheostoma fonticola*), the Comal Springs riffle beetle (*Heterelmis comalensis*), and the Texas Blind Salamander (*Typhlomolge rathburni*) are all present in the headwaters, and the Edwards Aquifer immediately below Spring Lake and are listed by US Fish and Wildlife Service as endangered or threatened. The Guadalupe Roundnose minnow (*Dionda nigrotaeniata*) and the Bigclaw River Shrimp (*Macrobrachium carcinus*) also occur in the headwaters, and have been identified by the Texas Comprehensive Wildlife Conservation Strategy as species of "high priority" for conservation.

In addition to the high ecological value of the San Marcos River headwaters, the area also has substantial economic and cultural value for central Texas. Spring Lake and the upper river lie within the Texas State University campus and serve as a focal point for the campus and the City of San Marcos. Thousands of people visit the upper San Marcos every year for recreational activities such as swimming, tubing and kayaking, and glass bottom boat rides in the headwaters. While the exact number of recreational users of the San Marcos River and its headwaters is unknown, approximately 125,000 people per year take part in the various programs at the Aquarena Center on Spring Lake, and the City of San Marcos also estimates that two city parks in the upper section of the river receive more than 600 recreational visitors per day on a typical summer day (e.g., not 4th of July weekend). In addition, there have been major archeological finds of prehistoric human artifacts and animal remains in Spring Lake. Further downstream from Spring Lake, the San Marcos River supplies drinking water for a number of communities in the San Marcos – Guadalupe River drainage, including the cities of San Marcos (49,000 residents) and the City of Victoria (60,000 residents). Water quality and quantity is of principal concern to communities below the San Marcos River – Guadalupe River confluence because they are highly dependent upon the San Marcos River contribution to river flows, especially during relatively dry periods.

Texas State University and the City of San Marcos have taken significant measures to protect the water quality of Spring Lake. The University, a public institution, currently owns the land the lake sits on and acts as a steward to protect the lake's current state. The City has put in place special ordinances to ban swimming and boating in the lake to protect the endangered species habitat in the lake. Additionally, the City partners with the University to monitor water quality in the lake (bacterial testing). The City has acquired, and will preserve, 251 acres of land

from a developer who had planned to build a conference facility immediately upstream of Spring Lake. The stormwater from this property flows directly into Spring Lake and Sink Creek, just upstream of the lake. The City has a land development ordinance to protect the Edward's Aquifer Recharge Zone, water quality in the Aquifer, and the springs. The most current plans for local action include a Watershed Protection Plan that will begin in the next few years.

Background of the Upper San Marcos Coordinating Group

The Upper San Marcos Coordination Group was initiated by the River Systems Institute at Texas State University – San Marcos in 2009 to assist community stakeholders, local organizations, and various agency partners who are working collectively to bridge diverse perspectives, interests, and resources to provide input into the development of a watershed characterization and the resulting recommendations for the management of nutrients and other identified nonpoint source pollutants in the watershed.

The group is comprised of members from the City of San Marcos, Hays County, the River Systems Institute, the San Marcos River Foundation, San Marcos River Rangers, San Marcos Greenbelt Alliance, Edwards Aquifer Research and Data Center, the Guadalupe Blanco River Authority the United States Geologic Survey and others.

The main goal for this project is to ensure that the long-term integrity and sustainability of the San Marcos watershed is preserved and that water quality standards are maintained for present and future generations. A core belief is that good water quality is essential to all, and that protection of water resources is an individual as well as governmental responsibility.

Because the fate of endangered species, watershed function and growth in the Upper San Marcos Watershed are inextricably linked, the River Systems Institute initiated in June 2009 a planning process to develop an integrated, adaptive management plan for the Upper San Marcos Watershed in collaboration with the City of San Marcos, Hays County, and conservation NGO's.

Spring Lake has never been consistently monitored to collect the data necessary to assess the water body for the Texas CWA'305(b) Water Quality Inventory and CWA'303(d) List, despite the varied research projects conducted by faculty and students at Texas State University.

Until the initiation of the Spring Lake Watershed Characterization and Management Recommendations project, there had not been an attempt to obtain high-resolution quality assured event-based data in order to target nutrient inputs to the lake or determine the influence of various sources of water on the algae and turbidity of the lake. What is known is that despite the system's high ecological, economic and cultural value, Spring Lake and the upper San Marcos River have recently experienced increased turbidity and major algal blooms following substantial rainfall events and the associated increases in surface and subsurface flows. While there is an obvious and sometimes persistent deterioration of water quality during and after periods of high surface and ground water inputs to the lake, the relative pollutant load contributions of these sources in the watershed is unknown. Thus, determination of the relative nutrient and sediment inputs to the lake from the various hydrological sources is critical for the management and preservation of the lake. In particular, determination of inputs of phosphorus (P) are of greatest concern because productivity of the

lake is extremely phosphorus limited due to the low levels of immediately bioavailable phosphorus (<5 µg orthophosphate - P/L) relative to the high levels of bioavailable nitrogen (~1600 µg NO₃²⁻ - N/L).

The planning process identified several key objectives for the management plan: to enhance communication and coordination among participating organizations; to reduce or eliminate sources of pollution that enter the river directly from the land via runoff or through aquifer recharge; to maximize spring flow throughout the watershed; and to implement research, education, stewardship and service programs throughout the Upper San Marcos Watershed and the aquifer systems that supply it.

In January 2010, the collaborating entities formalized their intentions by signing a Memorandum of Understanding to promote and develop a watershed protection plan for the Upper San Marcos Watershed (USMWPP). The basis of this formalization was twofold. First, it met the necessary requirements of the grant, yet it also built the network of stakeholders needed for the initiation and continuation of a Watershed Protection Plan for the San Marcos River. The group anticipates an increasingly urgent need for formal coordination as several local and regional planning processes transition to implementation in the near future. These include the: Edwards Aquifer Habitat Conservation Plan, Federal Municipal Storm Water Program (pertains to each participating institution), and the San Marcos Observing System.

These programs establish regional and local strategies for aquifer and endangered species management that depend on local implementation. For example, pumping within the Upper San Marcos Watershed can reduce spring flow at the San Marcos' River's source, impact regional pumping restrictions during drought conditions; or high sediment loads from construction can threaten endangered wild rice. By aligning university, city, county and local NGO stewardship activities with these regional strategies the USMWPP will serve as a necessary and effective implementation program.

Dissemination of and Access to Information

1. Information available for public on River Systems Institute website.
2. A brochure/flyer will be created that condenses the major issues and findings from the Upper San Marcos Characterization report into a more manageable and easily understood format
3. Monthly Stakeholder Meetings
4. Public meetings
5. There is an open door policy: anyone requesting information, meetings, and more can have an audience via email, phone or in person. RSI Staff are available.

Deliverables

- Watershed Characterization – Phase 1: Data Inventory
- Watershed Characterization – Phase 2: Data Collection and Analysis Report
- Management Measures Report
- Revised/refined watershed goals & targets

- Watershed Characterization and Management Measures Report
- Letter of Approval from the Stakeholder Group
- Documentation of presentations to relevant officials and the public submitted

Ground Rules

1. Be open to new concepts and be respectful of other points of view.
2. There will be no audio or visual recording of meetings: minutes of meetings will be a brief overview of topics discussed and will be emailed to the group and placed on the RSI website.
3. All Committee members agree to make an effort to attend all Watershed Committee meetings. We do recognize that members may have other obligations and are unable to attend. In this case:
 - a. If members are unable to attend a meeting, they should send a replacement
4. Committee Decisions:
 - a. Committee will approve recommendations by consensus
 - b. If consensus cannot be reached, then recommendations will be decided by 2/3 majority.
5. The Committee will make recommendations based on information they have gathered and on input from stakeholders
 - i. Subcommittee recommendations will be accepted based on Watershed Committee consensus with final approval from the Watershed Committee Chair.

Goals of the Committee

1. Recruit New Members
 - Citizens of San Marcos
 - Chamber of Commerce members
 - City Council and City Manager
 - Business Owners on the Square
 - Landowners
 - along the San Marcos River
 - along the Sessoms, Willow and Sink Creeks
 - Developers
 - Special interest groups
 - Environmental organizations
2. Watershed Characterization Review and Input
3. Management Recommendations Review and Input
4. Provide Recommendations on Future Work Towards Developing a Watershed Protection Plan

Partners

City of San Marcos
Edwards Aquifer Authority
Guadalupe-Blanco River Authority
Hays County
River Systems Institute
San Marcos Greenbelt Alliance
San Marcos River Foundation
Texas Stream Team
Texas Parks and Wildlife
Texas State University – San Marcos
Texas Commission on Environmental Quality