# DRAFT - 3/10/04

# REGIONAL DEVELOPMENT/PRESERVATION PLAN FOR THE BARTON SPRINGS SEGMENT OF THE EDWARDS AQUIFER

(thus far recommended only by the author)

#### **STEP ONE**

# Adopt a Goal

# **Commentary**

It is recommended that you start at the beginning. What are we trying to do? What is the "Regional Planning Process" all about? Defining the objective at the onset will clarify and communicate what is being attempted and enable us to know when and if we succeed.

The goal of the Regional Planning Process is actually presupposed by the Regional Planning Process itself. The underlying idea or objective is to adopt a development plan that will assure the non-degradation of the water quality and quantity of the Aquifer. Therefore starting by articulating a measurable GOAL such as the ones suggested above is recommended.

# Proposals for a goal

Devise and implement a regional development/preservation management plan for the Watershed that will assure the long-term preservation of the quantity and quality of the Aquifer.

OR

Adopt a development/management plan specific to the Barton Springs Watershed for the long-term preservation of the Barton Springs segment of the Edwards Aquifer.

OR

Adopt a land use development/watershed preservation plan for the Barton Springs Watershed that will improve the water quality of the Barton Springs segment of the Edwards Aquifer for the 21<sup>st</sup> century.

OR

Adopt and implement a regional land use development plan for the Barton Springs Watershed that will assure non-degradation of the water quality of the Barton Springs segment of the Edwards Aquifer for the third millennium.

#### **STEP TWO**

# **Adopt the Measures**

Adopt the USFWS' Recommendations (the "Measures") already adopted by the USFWS\*, the LCRA\* and the City of Austin\* in their own intergovernmental agreements.

## **Commentary**

The Regional Planning Process cannot realistically expect thousands of "Stakeholders" or even the "Regional Plan Core Committee Members" (elected governmental officials) to develop the scientific expertise necessary to identify the measures required to achieve nondegradation water quality for development projects within the Watershed. Fortunately, that task has already been accomplished thereby sparing the Regional Planning Process from reinventing the wheel. The Regional Planning Process can accept and adopt the USFWS Measures because they (a) have already been accepted by many landowners and developers who have received USFWS letters of "non-taking" for their development projects; (b) the Measures already work for development in the Watershed; (c) our best science tells us they will work for the long-term water quality preservation envisioned by the GOAL; and (d) because the Measures have been agreed to by the Federal Government (USFWS), the state governmental entity charged with responsibility of providing utilities and water quality protection to the lower Colorado River (the LCRA) and the largest city within the Watershed (Austin). Instead of reinventing the wheel, the Regional Planning Process can save its time and money for the formulation, adoption and implementation of the Regional Plan (addressed in Steps Three, Four and Five).

By "Adopt the Measures," we mean adoption by the Stakeholders, the Core Committee and the Executive Committee. Additionally, before or after that occurs, the Measures can also be adopted by each of the representative local governmental entities within the Watershed. Those governmental entities do not have to wait for completion of the Regional Planning Process. Municipalities can individually adopt the Measures as their own regulatory controls or can adopt them in cooperation with one or more local governmental units under Texas Local

Agreement between LCRA and City of Austin, titled Hill Country Water Supply Corporation (Hill Country WSC) Wholesale Water Contract with the City of Austin (Attachment B)

<sup>\*</sup> Exhibit C of an agreement titled "Memorandum of Understanding between USFWS and LCRA for the Purpose of Providing Surface Water to Residents in Western Travis and Norther Hays Counties" dated September 1, 2000. (attachment A)

<sup>&</sup>lt;sup>+</sup> On November 27, 2002, the USFW published the "US fish and Wildlife Services Recommendations for Protection of the Water Quality of the Edwards Aquifer" and its accompanying "Background and Technical Guidence for fish and Wildlife Service Recommendation for the Protection of Water Quality of the Edwards Aquifer" but that revised version of the Measures has yet to be officially adopted by the USFWS of any other government entity. (Attachment C)

Government Code, Chapter 399, the "Regional Planning Commissions" authorized by the Texas Legislature in Senate Bill 873. The Counties of Hays and Travis could likewise adopt the Measures individually or, under Senate Bill 873, in concert with one another.

#### **STEP THREE**

## Visualize the Build Out

The Measures provide for, among other things, buffer zones, impervious cover limitations, low impact development engineering and construction and other BMPs which in turn make the modeling of future population densities possible and hence facilitate planning the Watershed's infrastructure. The Regional Planning Process should visualize the Watershed build out under the Measures and reduce that visualization to a regional plan expressed on a map.

#### Commentary

The Regional Planning Consultant, working in concert with the staffs of the Core Committees' respective governments, can provide the Stakeholders and the Core Committee with the modeling data necessary for the Regional Planning Process to plan (1) the size and general location of retail centers, (2) the utilities (water, wastewater and electrical) and (3) the roads necessary to develop the Watershed in conformance with the Measures. The Consultant can also coordinate the inclusion of other relevant planning data such as (4) open space areas (parks, preserves, and conservation easements) already created or planned by entities such as the Hill Country Conservancy, the Trust for Public Land, the Wildflower Center, the Nature Conservatory, the Conserve Water, Land and Heritage House Bill 895, and the Core Committee's respective governmental entities themselves. Inclusion of additional relevant planning data such as the financial feasibility of centralized water and wastewater infrastructure at various locations within the Watershed, alternative water and waste water systems for some areas of the Watershed, status of efforts to connect open space areas for extended trails, and the Regional Planning Process will have all the tools necessary to land use plan (map) the eventual build out of the Watershed.

#### Modeling/Planning Data

# (1) Size and location of retail centers

Retail center planners can readily calculate the sizing and spacing of retail centers under the Measures. The retail center planning process is further simplified by the fact that the Watershed already has two retail centers, Dripping Springs and Bee Cave. The spacing/sizing data may dictate a third retail center, maybe not. In any event existing retail centers may desire planning options specific to themselves and at variance to the Measures. We recommend accommodating the planning visions Dripping Springs and Bee Cave have for their respective futures and perhaps allow said municipalities impervious cover limitations exceeding the Measures, **provided that**:

(a) The future size of the municipalities are proportionately restricted to the ultimate build-out dictated by the Measures and are physically restricted by open space surrounding them.

(b) Any increase in impervious cover limitations beyond that of the Measures for the existing retail centers should be mitigated by open space. For example, if forty percent (40%) impervious cover is allowed in Dripping Springs proper (the maximum some believe to be mitigatable with structural controls and other BMPs) the difference between the forty percent (40%) and the percent allowed in the Contributing Zone under the Measures must be mitigated with additional open space. This should pose no problem because the people of Dripping Springs and Bee Cave want open space surrounding their towns and the sin qua non of the Regional Planning Process is to prevent Austin (and Dripping Springs) suburban sprawl from engulfing the Watershed. The sprawl of Austin and Dripping Springs must have termination points, least the entire Regional Planning Process is futile.

#### (2) Utilities

The financial feasibility of providing centralized water, wastewater and electricity under the Measures can readily be determined by the LCRA and other existing utility suppliers. It is anticipated that under the Measures there simply will not be enough rooftops to financially justify central water, wastewater and electricity for the entire Watershed. Therefore alternatives must be considered for certain areas of the Watershed. To that end we recommend serious consideration of David Venhuizen's "A Vision of Sustainable Water Resources Management System for Rock Creek and Similarly Situated Developments in the Texas Hill Country." (Attachment D)

# (3) Roads necessary to develop the Watershed in conformance with the Measures

Just as the Measures provide logical parameters for the spacing of retail centers, the Measures also provide the raw data necessary to know what road capacity will ultimately be necessary for the build-out of the Watershed. Combining that data with other relevant data (critical environmental features, existing developments, planned open space, connecting trails, etc.) and the Regional Planning Process, in cooperation with CAMPO can plan and map the Watershed's future roads.

#### (4) Open Space

Existing and planned open space (parks, preserves, conservation easements, etc.,) provide the Regional Planning Process with the final data or input necessary to create a Watershed development map. The Regional Planning Process need not limit its creativity. Care should be taken to assure the connection of open spaces to facilitate the "Walk for a Day" trail being promoted by the Hill Country Conservancy. To that end we also recommend that the Watershed be part of an eventual trail system for saddle horses and hikers as originally envisioned by Chief Justice William O. Douglas in his book <u>Farewell to Texas</u>. (Attachment E, chapter 11, The Hill Country) In addition perhaps the Hill County, already a Tour de France training area for the US Postal team and the home of Lance Armstrong, could have a Hill Country bicycle road. Such modes of transportation and recreation are completely compatible with the GOAL of long-term Aquifer preservation, will enhance tourism, and enhance the already existing "quality of life" features and appeal of the Hill Country.

#### STEP FOUR

# Adopt Common Legislative Agenda for Regional Authority

While the Stakeholders and the Core Committee are visualizing and mapping the Watershed's build-out, the Core Committee's respective governments can adopt the Measures and simultaneously direct their respective lobbyists to coordinate a common legislative "Regional Authority" agenda for the 2005 legislative session.

The common legislative agenda need consist of only the following:

- 1. Merging of the Barton Springs/Edwards Aquifer Conservation District ("BSEACD") and the Hays Trinity Groundwater Conservation District ("HTGHC") into a single water conservation district with jurisdiction specific to the Watershed of the Barton Springs segment of the Edwards Aquifer (Contributing and Re-Charge Zones);
- 2. Make the merger or replacement of the two district with a single district contingent on a popular vote;
- 3. Empower the district with the current regulatory missions of both it's predecessors, expand the mission to accommodate the GOAL, include the authorization for issuance of debt and the ability to tax and authorization to collect fees consistent with producing income which will adequately fund the operation of a new district;
- 4. Select the Board in such a fashion as to guarantee regional representation on the Board;
- 5. Sunset the process so that the election to approve the new district is held by a certain date, probably prior to the next regularly scheduled session of the legislature. BSEACD has an environmental and wild-life specific mission. If that needs to be expanded in the new district, add the language now, at the origin of the new district;

# Commentary

Approving the Measures can and should be done as soon as possible by each local government for their respective jurisdictions. However, most local governments lack the staff and resources to implement and enforce the Measures. Additionally, most local governments do not have the expertise or the funding for the ongoing monitoring and maintenance of water quality structural controls and other BMP requirements of the Measures. However, one governmental entity, the BSEACD, created 17 years ago under Chapter 36 of the Texas Water Code, is already the groundwater conservation district with a mandate to conserve, protect and enhance the groundwater resources of the Barton Springs segment of the Edwards Aquifer. The newly created HTGCD, which has a similar mandate for the Trinity formation with jurisdiction

roughly encompassing the Contributing Zone of the Aquifer, should be merged with the BSEACD so that the entire Watershed is under a single water conservation district. The merged or new BSEACD already has the expertise and would be given the authority to implement the Measures and assure the success of the Regional Plan and its GOAL via the legislature and the vote of the citizens within the Watershed. Merging the two water conservation districts into a single Regional Authority will result in one less governmental entity, elimination of duplication and hence overall cost savings. Additional cost savings will accrue to the Counties and Municipalities whose responsibility for oversight and regulation of Aquifer water quality related matters will become unnecessary.

However, the operational, monitoring and maintenance cost of the merged BSEACD or Regional Authority will have to be paid. It is believed that the citizens of the Watershed will be willing to pay the cost of overseeing Watershed development/Aquifer preservation. We believe the people want to retain current natural open space, agricultural and rural land uses of the Watershed and that they want to put an end to the developer/environmentalist war. In any case, the citizens of the Watershed should decide whether or not they want to tax themselves to accomplish the GOAL.

The Author offers the following as a possible "Preamble" to explain why a Regional Plan is necessary and timely.

#### **PREAMBLE**

- WHEREAS The Barton Springs segment of the Edwards Aquifer ("Aquifer") is an invaluable, irreplaceable, self-renewing natural resource of immeasurable economic, cultural, recreational, scientific and aesthetic value to the citizens of Hays and Travis Counties and the people of Texas; and,
- WHEREAS The Aquifer is a major ground water reservoir providing the sole source drinking water supply for more than 50,000 residents of southern Travis and Northern Hays Counties, is officially designated as a "Sole-Source Aquifer" by the US Environmental Protection Agency ("EPA") pursuant to the federal Safe Drinking Water Act, is known to be one of the most diverse ecosystems in the world and is the source of Barton Springs; and
- WHEREAS The Texas Commission on Environmental Quality (TCEQ), formally the Texas Natural Resources and Conservation Commission (TNRCC), has determined that the Barton Springs Aquifer is the major ground water supply in Texas most vulnerable to pollution, and the United States Geological Survey (USGS) data shows some deterioration in the water quality of the creeks that recharge the Aquifer, some of the Aquifer's wells and the water of Barton Springs; and,
- WHEREAS the most cost effective way to guarantee preservation of the Aquifer is to preserve the Aquifer Watershed's ("Watershed") current low intensity land use, specifically natural, open space, agricultural and rural land uses; and
- WHEREAS it is believed that the citizens of the Watershed want to preserve their rural, open space, agricultural tradition and want to end the bitterly divisive, ongoing developer/environmentalist war and will support a realistic long term preservation/development management plan; and
- WHEREAS the participation of the governmental entities which share jurisdiction and responsibility for the protection of water quality and for enforcement of development regulations within the Watershed will be necessary to accomplish a low intensity development/preservation management plan; and,
- WHEREAS Senate Bill 818, the Texas Clean Rivers Act, provides a framework within which all such governmental entitles can work in concert to conduct regional water quality assessments, such as the one needed for the Watershed, dealing with all water quality issues including review of wastewater discharges, non-point source pollution, nutrient loading, toxic materials, biological health or aquatic life, public education and involvement, local and regional pollution prevention efforts, significant regulatory and enforcement issues, and any other factor deemed significant and relevant to preserving the Aquifer; and,

- WHEREAS in 1997 the EPA listed the Barton Springs Salamander as an endangered species and the United States Fish and Wildlife Service (USFWS) working closely with water quality engineers and biologists have formulated comprehensive "Watershed Protection Measures" ("Measures") intended to achieve an objective "non degradation" of water quality for development projects with the Watershed and the USFWS strongly recommends their use to as to prevent liability for take under section 9 of the Endangered Species Act; and,
- **WHEREAS** The Lower Colorado River Authority ("LCRA") and the USFWS have agreed to and are abiding by the Measures in the Memorandum of Understanding for the Purpose of Providing Surface Water to Residents in the Western Travis and Northern Hays Counties.
- **WHEREAS** the LCRA and the City of Austin ("Austin") have already agreed to and are abiding by the Measures in a joint agreement pertaining to their respective utility jurisdiction within a small portion of the Watershed; and
- WHEREAS many landowners and developers have already secured letters from USFWS approving their respective developments under the Measures; and,
- WHEREAS the Measures impose impervious cover restrictions, require storm water quality structural controls, set backs and other "Best Management Practices" (BMPs) which in turn require oversight and ongoing monitoring and maintenance; and
- WHEREAS development/preservation management with its oversight, monitoring and maintenance is not free but rather an on-going cost of water quality preservation and species protection; and,
- **WHEREAS** the Measure's impervious cover limitations, set backs and other BMPs make modeling of developmental densities possible and hence facilitate infrastructure planning; and
- **WHEREAS** the Texas Legislature has authorized the creation of "Regional Planning Commissions" under the Texas Local Government Code, Ch. 391, "to encourage and permit local governmental units to:
  - 1.) join and cooperate to improve health, safety and general welfare of their residents; and,
  - 2.) plan for future development of communities, areas, and regions so that:
    - a.) the planning of transportation systems is improved;
    - b.) adequate street, utility, health, educational, recreational and other essential facilities are provided as the communities, areas, and regions grow;
    - c.) the needs of agriculture, business, and industry are recognized;
    - d.) healthful surroundings for family life in residential areas are provided;
    - e.) historical and cultural values are preserved; and
    - f.) efficient and economical use of the public funds in commensurate with the growth of the communities, areas, and regions; (§391.001) and,

WHEREAS the Texas Legislature has adopted Senate Bill 873 which grant counties with a population of 500,000 or more the same right as municipalities to enact ordinances for....

THEREFORE, BE IT RESOLVED that the undersigned Counties, Municipalities, and other governmental entities and non-profit organizations adopt the following goal ("GOAL") and its accompanying regional development/preservation plan:

# Hill Country Water Supply Corporation (Hill Country WSC) Wholesale Water Contract with the City of Austin

#### o 1988

 City of Austin entered into wholesale water contract to assist Hill Country WSC service area with failing wells and provide a reliable source of water for landowners experiencing well problems

#### o 1988-2003

- o Service area expanded over time. Hill Country WSC service area now covers approximately 11,000 acres.
- o Number of connections now totals approximately 1,000 customers.
- Local Contracted maximum level of water service of 2 million gallons per day. Historic peak month happened in June 2001 and water service totaled approximately 0.67 million gallons per day

#### o 2003-2004

- o January 31, 2003
  - City of Austin, Hill Country WSC and LCRA executed termination agreement of wholesale water service:
    - Hill Country to sell assets to LCRA
    - LCRA to provide retail water service to service area and use its own water supply. City of Austin would not provide wholesale water service.
    - LCRA to pay City of Austin \$1 million for early termination of contract. Contract provided 3-year notice. LCRA desired one-year notice.
    - City agreed not to protest sale and transfer of Hill Country to LCRA
    - LCRA agreed to take additional steps in handling new development in accordance with the May 2000 Memorandum of Understanding between US Fish and Wildlife Services and LCRA
    - LCRA agreed to continue to encourage regional water planning for water quality protection measures in northern Hays County
    - LCRA agreed to provide conservation education and evaluate water conservation incentives
    - LCRA agreed to provide additional information about goldencheeked warbler and black-capped vireo habitat to affected landowners within service area

#### o January 13, 2004

• Wholesale water service terminated from the City of Austin in accordance with the agreement.