

## **Central Wimberley Wastewater Stakeholder Committee:**

### **Recommendations to Wimberley City Council in response to mission statement provided by Council**

*Nov. 20, 2013*

The Central Wimberley Wastewater Stakeholder Committee makes the following recommendations based upon objectives designed to take into consideration the following:

- Potential financial burden on the owners within Central Wimberley
  - The area recognized as Central Wimberley is generally described as follows: Beginning at the confluence of the Blanco River and Cypress Creek, then bounded to the south by the Blanco River to Ranch Road 12; then following Deer Creek as it runs parallel to the extension of Ranch Road 3237 to a point where Deer Creek intersects with RR 3237 (the Old Kyle Highway) as it turns west; then continuing on the north boundary of RR 3237 taking in Deer Creek Nursing Home and all of the Blue Hole Regional Park; from there following the most northerly boundary of the Blue Hole Regional Park to Cypress Creek; then following Cypress Creek in a southerly direction as it meanders through the Blue Hole Regional Park, and the Wimberley downtown square continuing on until it connects to the Blanco River, the Point of Beginning. The area comprises approximately 275 acres of land, of which 125 acres is made up of Blue Hole Regional Park, leaving a balance of approximately 150 acres comprising the business and residential portion of this area.
- The fact that there already exists a permitted wastewater treatment facility available for use (Aqua Texas), with available property for effluent disposal
- The desire to have a treatment plant in Blue Hole for watering purposes, as specified in the Blue Hole Master Plan
- Separation of the need for collection system from the location of treatment plant
- The need to show unity from the Stakeholder Committee
- A fall back alternative in the event that Objective II is not achievable
- The quality of treated effluent should be at the highest level so that it is beneficial to the community from an environmental standpoint
- The treatment plant would be under the control and authority of the City
- The City as a whole should have an interest in protecting our waterways
- The City can incorporate its wastewater system effectively into a master plan and provide for alternatives to handling future growth
- Establish a means for reuse of effluent along Winter's Mill Parkway

#### **Objective I: Collection System**

- A wastewater collection system should be constructed within Central Wimberley

- The cost of the collection system should be capped at an amount that ensures the cost does not exceed the cost estimates (including the projected contingency amount) of Alan Plummer Associates, Inc. by 10%
- Construction of the collection system would not begin until Objective II has been accomplished or is underway
- The capital cost of the collection system would be financed by a loan with the Texas Water Development Board and paid through assessments, impact fees or rates charged to the owners of property within Central Wimberley
- The design of the collection system should be a gravity flow system and capable of sending effluent either to Aqua Texas or a city plant

### **Objective II – Treatment Plant**

- The city should proceed with the design and construction of a 5-5-2-1 treatment plant with an approved discharge permit (not to exceed 75,000 gallons per day), including odor control, a reuse system, and 500,000 gallons of storage within Blue Hole to minimize the chances of discharge
- Support for the Blue Hole Treatment Plant should come from the community, therefore the cost of the treatment plant and the associated infrastructure, and discharge permit should be paid by ad valorem taxes only if funding cannot be obtained by the city through sales tax revenue, donations, and/or grants
- The Blue Hole Treatment Plant should be permitted at 75,000 gallons per day with ultimate capacity not to exceed 100,000 gallons per day because of the sensitivity of park area where the plant is located
- All fees for securing any permits, including the discharge permit, and any legal and other fees associated with obtaining the permits should be paid for by city funds, not the owners within Central Wimberley

### **Oversight**

- Collection: An oversight committee comprised of owners of property within Central Wimberley would be appointed by the City Council to work directly with the city administration in resolving issues related to the construction, including the design phase, bidding phase, construction phase of the collection system, vetting the costs and coordinating with the administration in terms of the connection fees, impact fees, and rates
- Treatment: An oversight committee comprised of members within the City of Wimberley should be appointed by the City Council to oversee and work with the administration in the design, planning and funding for the Blue Hole Treatment Plant as well as coordinate with the collection system oversight committee representing the owners within Central Wimberley in establishing connection fees, impact fees, and rates

### Alternative Position in the Event Objective II is Not Accomplished

- In the event that construction costs for city treatment and reuse systems exceed the engineer's estimate (including contingency, relocation of plant within Blue Hole, and Winter's Mill reuse line) by more than 10%, if the City's expanded 5-5-2-1 plant permit is denied, or the City fails to commit the funds necessary to construct the treatment plant, the City shall negotiate with Aqua Texas to send the planned capacity to Aqua for wholesale treatment
- The oversight committee of property owners within Central Wimberley would assist the city administration in negotiating the best available contract with Aqua Texas and determine the feasibility of a complete or phased in approach

### System Recommendation

- Option 1 from APAI (expand city's Blue Hole wastewater treatment plant capacity to 75,000 gallons per day; acquire Texas Pollutant Discharge Elimination System Permit, and allow for reuse of effluent through spray irrigation) with two modifications:
  - Extend a reuse line to Winter's Mill Parkway unless an agreement with appropriate agencies cannot be reached prior to construction
  - Relocate the Blue Hole Plant to the location outlined in the Blue Hole Master Plan
- Amend City of Wimberley Code of Ordinances to:
  - Limit any future expansion of Blue Hole plant to a maximum of 100,000 gallons per day
  - Require any expansion of Blue Hole plant to be accompanied by a pro rata increase in reuse capacity (drip or spray)
  - Require a two month notice period prior to any future change in capacity of Blue Hole plant
  - Notify citizens on the city website of any discharge event
  - Prohibit the sale of detergents exceeding 0.5% phosphorous to reduce nutrient load in waste stream
- Allow owners with a recently permitted system to defer hook up for up to seven (7) years for an engineered system and five (5) years for a conventional system from date of installation. Would avoid rates and impact fees prior to that time, but still pay assessment and/or tax.
- As a second phase to this project, the City should initiate a process to expand Aqua Texas' service area to currently un-served areas on the north side of Cypress Creek. This process shall not begin in any capacity until Option I of the project is finalized, confirmed, and under construction.

## Funding Recommendation

- **Rates:** (A) Allocate partial capital costs to rates to incentivize water saving / help reduce impact fees; (B) Provide a lifeline rate to homesteads with financial need
- **Impact Fees:** Keep (relatively) low and/or offer payment plan for up to 5 years
- **Property Tax:** The cost of the treatment plant and the associated infrastructure, and discharge permit should be paid by ad valorem taxes only if funding cannot be obtained by the City through sales tax revenue, donations, and/or grants
- **Assessment within Central Wimberley Service Area:** As necessary to supplement rates and impact fees
- **Decommissioning and Service Line Expenses:** Roll decommissioning of septic tanks and installation of services lines into TWDB loan (note: recommend a max. amount of public funds per LUE). Seek grants, if available.

## Ancillary Recommendations

- Initiate a water quality outreach program to: (A) inform citizens of Wimberley's existing water quality ordinances and associated buffer zones, open space, and natural area protections such as the unanimously adopted Water Quality Protection Ordinance (2011-005); (B) engage citizen input on needed revisions or updates to said ordinances and policies; and (C) educate the public as to best practices (from development to household habits) for protection of the water quality of the Wimberley Valley
- The City should identify and certify the number of on-site sewage facilities operated along both sides of Cypress Creek and the Blanco River within Wimberley. An effort should be made to partner with Woodcreek to identify all on-site sewage facilities located along all waterways to identify potential problem areas. Thereafter, the City should implement and conduct periodic inspections and recertification of such systems every 3 to 5 years. Additionally by identifying inadequate systems, the City would be able to begin to locate areas of multiple failed systems. Funding source will need to be identified.
- Enhance water quality testing program for pollutant loading (e.g., e. coli, nitrates, phosphorus) such that progress may be monitored, and additional areas of critical need may be identified. Prior to plant start-up, establish a base line of quality conditions including downstream segments potentially impacted by effluent discharge. Funding source will need to be identified.
- Inform the Downtown Master Planning process with the maximum capacity limitations of the City plant sited on Blue Hole as it relates to growth within the Central Wimberley service area and develop procedures to limit speculation on LUEs
- Educate citizens, particularly those within the service area, of the maximum capacity limitations of the Blue Hole Plant and that the cost of securing capacity for wastewater treatment today is not guaranteed to be the same as it may be in the future.
- Encourage the City Council and Planning and Zoning to maintain existing policies that preserve the village character of Central Wimberley such as: shallow setbacks, concealed surface parking, prohibited drive-thrus, etc. while promoting increased pedestrian connectivity

- Pursue additional grant funding opportunities for an expanded reuse program, including possible pipes into Central Wimberley area, etc.
- Animal waste deposited in or near waterways can contribute significant pollutant loading to streams and creeks. The city should examine the impact that bats under the bridge, deer, turkey, ducks, and livestock are having on the levels of e-coli in Cypress Creek.
- The City should provide accessible recycling centers or drop off locations for the disposal of hazardous household items, including paint and other hazardous materials.

### Rationale for System and Funding Recommendation

- Acknowledges the need to address both sides of the creek without delaying solution for the area of most critical need
- City-controlled system (and pipes in Phase 2) gives citizens direct recourse for service, rate, or operational issues
- Phase 2 would develop a partnership with Aqua Texas to bring north side of Wimberley onto sanitary sewer
- Ensures the highest quality effluent is produced in some quantity
- Enables Wimberley to take a leadership role in reuse
- Positions Wimberley to pursue additional reuse applications in the future (e.g., Winters Mill)
- Protects limited water supplies by reducing aquifer draw of Blue Hole
- Consistent with Comprehensive Plan and the Blue Hole Master Plan
- Allows for limited future system growth, without changing the objective of maximum reuse, minimum discharge, and high quality effluent
- Achievable within existing funding mechanisms; efficient use of funds per LUE | 1000 gallons
- Reduce the upfront burden on users hooking onto the system
- Engages community in the beginnings of a comprehensive solution to protect water quality
- Encourages good planning practices for the City
- Establishes proactive measures to educate the public and help monitor the progress of the City's efforts
- This proposal meets the parameters of the mission statement: *"high quality, efficient, affordable, and reliable wastewater system to serve central Wimberley that values local environmental and community interests."*