

Ron Freeman
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JUN 08 2000
WESTONE-WILKINSON
ASSOCIATES, INC.

MEMORANDUM OF UNDERSTANDING

Between

U.S. Department of the Interior
U.S. Fish and Wildlife Service

and

The Lower Colorado River Authority

for

THE PURPOSE OF PROVIDING SURFACE WATER FOR RESIDENTS IN WESTERN TRAVIS AND NORTHERN HAYS COUNTIES

I. BACKGROUND AND OBJECTIVES

1. The Lower Colorado River Authority (LCRA) is a conservation and reclamation district organized in the State of Texas with statutory authority and responsibility to provide water service to the portion of the Colorado River watershed lying generally within the Central Texas region and below (*i.e.*, LCRA's water service area).

2. LCRA, as part of its mission within its statutory district, has the authority and responsibility to take measures to protect and benefit the environment.

3. The mission of the U.S. Fish and Wildlife Service (USFWS) is to work with others to conserve, protect, and enhance fish, wildlife and plants and their habitats for the continuing benefit of the American people. The USFWS's major responsibilities are for migratory birds, endangered and threatened species, certain marine mammals, and freshwater and anadromous fish.

4. USFWS leads the federal effort to protect and restore animals and plants that are in danger of extinction both in the United States and worldwide. Under Section 2(c)(2) of the Endangered Species Act, it states that it is a "policy of Congress that Federal Agencies shall cooperate with the State and local agencies to resolve water resource issues in concert with the conservation of endangered species."

5. In fulfillment of its statutory mission, LCRA is proposing to construct a treated surface water pipeline (the "Water Pipeline") in western Travis and northern Hays counties to alleviate demand on inadequate water supplies from the area aquifers.

6. Due to recent drought conditions, an emergency condition exists in the area that can be served by the Water Pipeline. Municipal and domestic water supply wells are currently becoming unreliable due to draw down of the area aquifers. If predicted drought conditions continue, public health, safety and welfare will suffer from the lack of an adequate water supply.

7. Because of the emergency condition that currently exists LCRA believes that it is necessary to initiate construction of the Water Pipeline immediately. USFWS agrees to expedite section 7 consultation to ensure Endangered Species Act compliance for the Water Pipeline.

8. LCRA anticipates completion of the environmental impact study identified in paragraph III. 2., below, prior to completion of construction of the Water Pipeline, making information from the study available prior to actually initiating service to New Development. Therefore, LCRA will delay service to New Development, until the earlier of (i) 90 days after the date on which the environmental impact study is complete or (ii) January 1, 2002.

II. DEFINITIONS

1. Water Pipeline means the treated water transmission line that will serve customers in western Travis and northern Hays counties, as generally shown in Exhibit A, to the extent such service is to the recharge and contributing zones of the Barton Springs segment of the Edwards Aquifer.

2. Existing Development means a) any area served or to be served by the Water Pipeline pursuant to an agreement with LCRA executed on or prior to the effective date of this MOU; b) any house, commercial business, building, or other structure or improvement that exists or the construction of which has commenced on or prior to the effective date of this MOU; or c) any platted lot or approved residential development containing platted lots that has readily available electric utility service and direct access to an existing street or road on or prior to the effective date of this MOU.

3. New Development means a) any area, not existing development, served by the Water Pipeline pursuant to an agreement with LCRA executed after the effective date of this MOU; b) any house, commercial business, building, or other structure or improvement, not qualifying as Existing Development, that comes into existence or the construction of which commences after the effective date of this MOU; or c) any platted lot or approved development not qualifying as Existing Development.

III. AREAS OF COOPERATION AND PROCEDURES

1. LCRA agrees to participate, with the U.S. Army Corps of Engineers (Corps), in a formal section 7 consultation, as outlined in the Endangered Species Act, on the impact of pipeline construction and service to Existing and New Development with USFWS prior to initiation of pipeline construction.

2. LCRA agrees, with USFWS oversight, to commission and complete by October 1, 2001 an environmental impact study, the initial scope of which is shown in Exhibit B, to evaluate the impacts of New Development served by the water pipeline on water quality and the Barton Springs Salamander.

3. LCRA agrees to provide treated water service through the Water Pipeline only after completion of section 7 consultation. Water service to New Development will be provided only in conformity with the water quality protection measures approved by USFWS as part of section 7 consultation, unless USFWS has independently determined that the New Development will be in compliance with the Endangered Species Act.

4. The environmental impact study identified in paragraph 2 will fully evaluate the water quality protection measures approved during section 7 consultation, which measures may be modified with USFWS approval based on the environmental impact study, within 90 days following completion of the study.

5. After completion of section 7 consultation, USFWS if requested to do so by LCRA will provide written assurance to the Texas Water Development Board or other interested parties that the construction of, and the supply of water from, the Water Pipeline, as subject to the terms of this MOU, does not violate the Endangered Species Act.

6. Local governments are encouraged to initiate an effort to develop a regional solution for water quality protection in the Barton Springs watershed that will assure that New Development will be in compliance with the Endangered Species Act with respect to the Barton Springs Salamander. If such a regional solution, acceptable to USFWS, is developed, LCRA may provide service to New Development in compliance with approved regional standards, without the necessity of completing the environmental impact study identified in paragraph 2.

7. During section 7 consultation with the Corps, LCRA will submit as part of its project description and biological assessment the water quality protection measures attached as Exhibit C. USFWS, as part of its biological opinion, will review these water quality protection measures for New Development to be served from the Water Pipeline.

8. LCRA reserves the right, following section 7 consultation, to determine that it will not construct the water pipeline. If LCRA determines not to construct the water pipeline, this memorandum of understanding will be of no further force and effect and LCRA will be under no obligation to complete the environmental impact study.

IV. GENERAL PROVISIONS

1. The effective date of this Memorandum of Understanding (MOU) shall be the date of the latter signature below, and it shall remain in effect until the capacity of the Water Pipeline is committed and fully in service.

2. This MOU is a contract between the parties, made by LCRA under the authority of section 13 of the Lower Colorado River Authority Act, Section 2, Chapter 7, Acts of the 43rd Leg., 4th Called Session, 1934, as amended.

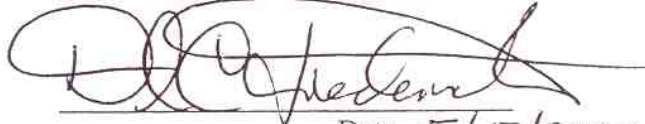
3. This MOU may be modified only upon the written agreement of both parties.

4. This MOU is binding upon successors in interest to LCRA and USFWS during the term of the MOU.

5. This MOU is subject to all valid rules, regulations and laws applicable hereto passed or promulgated by the United States of America, the State of Texas or any governmental body or agency having lawful jurisdiction or any authorized representative or agency of any of them. The parties agree that their obligations under this MOU shall include, and are conditioned upon, compliance with requirements made under said laws, and any rules and regulations issued pursuant thereto. Each party represents, warrants, covenants and agrees that it has full power and authority to enter into this agreement and that it has taken all requisite action provided by law.


6. The provisions of this MOU are severable, and if any provision or part of this MOU or the application thereof to any person or circumstance shall ever be held by any governmental agency or court of competent jurisdiction to be invalid or unconstitutional for any reason, the remainder of this MOU and the application of such provision or part of this MOU to other persons or circumstances shall not be affected thereby. However, if upon invalidation of any part of this MOU, either party believes that the purposes of the MOU have been frustrated, the parties agree to utilize best efforts to develop new provisions that will achieve the purposes of the MOU. If the parties cannot agree on new provisions, either party may cancel this agreement by 30 days written notice to the other party. Provided, however, if the MOU is cancelled, LCRA's ability to serve Existing Development shall survive cancellation of the MOU.

U.S. Fish & Wildlife Service


Date 5/17/2000

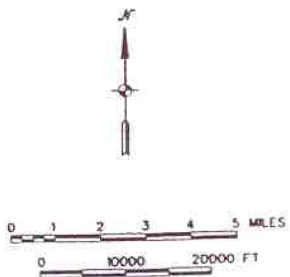
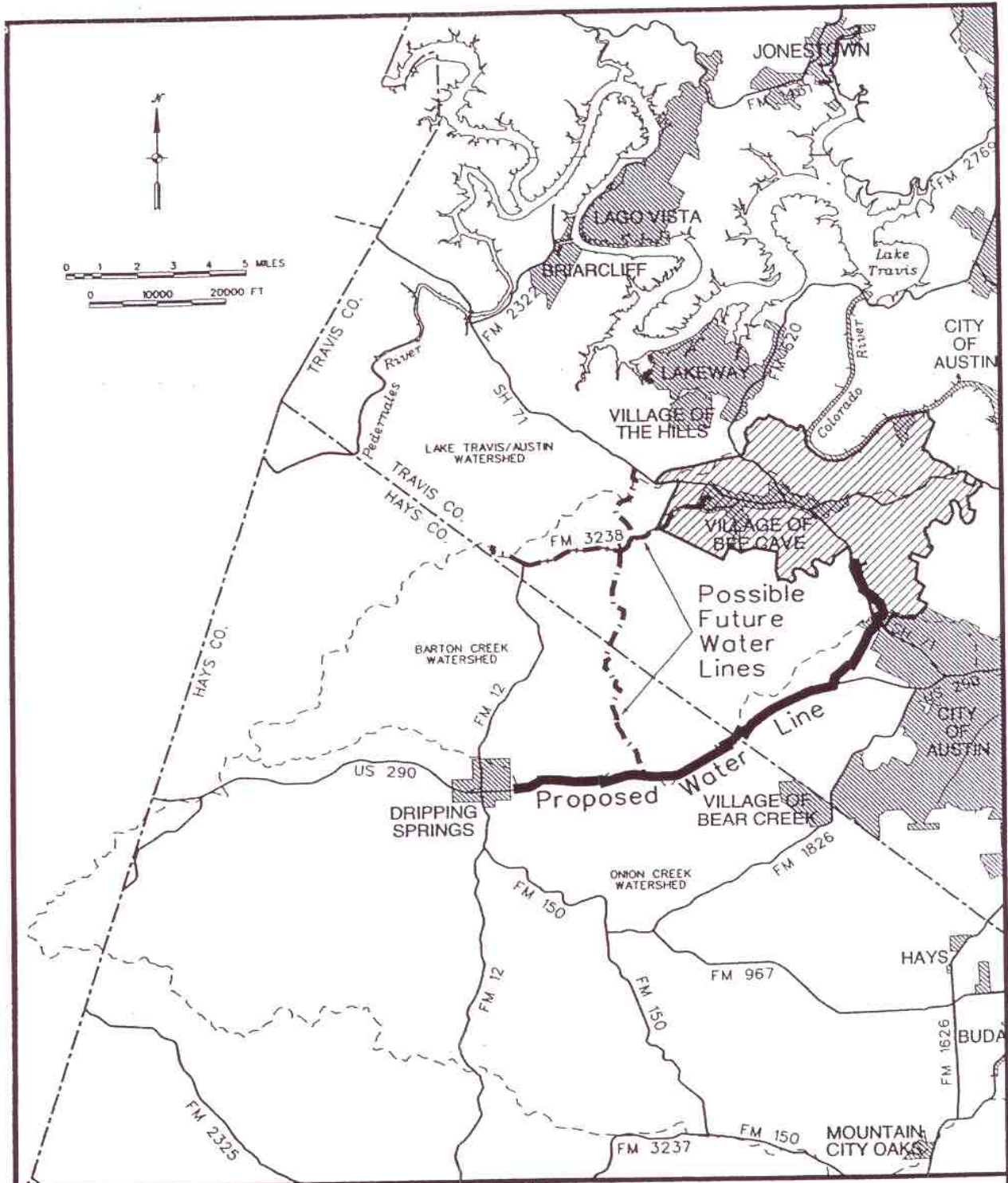
David C. Frederick
Supervisor

Lower Colorado River Authority


Date 29 May 00

Joseph J. Beal, P.E.
General Manager










-  Existing Service Area
-  Proposed Water Line
-  Possible Future Water Lines
-  Watershed Boundary
-  Incorporated City Area (City of Austin, Planning Dept., 1999)

EXHIBIT A

LOWER COLORADO RIVER AUTHORITY



Scale: See Bar Scale

Date: 5-16-2000

EXHIBIT "B"

PRELIMINARY SCOPE OF WORK LCRA WEST TRAVIS/HAYS COUNTY WATER TRANSMISSION LINE PROJECT

- 1.0 GENERAL INFORMATION
 - 1.1 PURPOSE AND NEED
 - 1.2 PROJECT DESCRIPTION

- 2.0 EXISTING ENVIRONMENT
 - 2.1 GEOLOGICAL ELEMENTS
 - 2.1.1 Physiography
 - 2.1.2 Geology
 - 2.1.3 Energy and Mineral Resources
 - 2.1.4 Soils
 - 2.1.5 Prime Farmland

 - 2.2 HYDROLOGICAL ELEMENTS
 - 2.2.1 Surface Water
 - 2.2.2 Ground Water
 - 2.2.3 Edwards Aquifer Recharge and Contributing Zones

 - 2.3 FLOODPLAINS AND WETLANDS
 - 2.3.1 Floodplains
 - 2.3.2 Wetlands and Jurisdictional Waters

 - 2.4 CLIMATIC ELEMENTS
 - 2.4.1 Climate
 - 2.4.2 Air Quality

 - 2.5 BIOLOGICAL ELEMENTS
 - 2.5.1 Vegetation
 - 2.5.2 Fish and Wildlife
 - 2.5.3 Endangered and Threatened Species
 - 2.5.3.1 Plant Species
 - 2.5.3.2 Fish and Wildlife Species

- 2.6 HISTORICAL OR ARCHEOLOGICAL RESOURCES
 - 2.6.1 Regional Overview
 - 2.6.2 Records Review and Results

- 2.7 SOCIAL AND ECONOMIC CONDITIONS
 - 2.7.1 Population
 - 2.7.1.1 Current Data
 - 2.7.1.2 Existing Population
 - 2.7.1.3 Future Population Without Project

 - 2.7.2 Social Characteristics
 - 2.7.2.1 Social Characteristics of Population
 - 2.7.2.2 Housing Characteristics

 - 2.7.3 Economics
 - 2.7.3.1 Leading Economic Sectors
 - 2.7.3.2 Labor Force and Employment
 - 2.7.3.3 Personal Income

 - 2.7.4 Financial Conditions

 - 2.7.5 Community Need

- 2.8 LAND USE, LAND USE PLANNING AND CONTROLS
 - 2.8.1 Current Land Use
 - 2.8.1.1 Urban Development
 - 2.8.1.2 Agriculture
 - 2.8.1.3 Parks and Recreation
 - 2.8.1.4 Transportation
 - 2.8.1.5 Residential
 - 2.8.1.6 Schools
 - 2.8.1.7 Water Service

 - 2.8.2 Land Use Controls
 - 2.8.2.1 TNRCC
 - 2.8.2.2 The City of Dripping Springs
 - 2.8.2.3 The City of Austin/Travis County

2.8.2.4 Hays County

2.8.3 Land Planning

2.9 OTHER PROGRAMS AND PROJECTS

3.0 ALTERNATIVES EVALUATION

3.1 ALTERNATIVE WATER SUPPLY SOURCES

3.2 PIPELINE ROUTING

3.3 NO PROJECT ALTERNATIVE

4.0 EVALUATION OF POTENTIAL IMPACTS

4.1 GEOLOGICAL ELEMENTS

4.1.1 Physiography

4.1.2 Geology

4.1.3 Energy and Mineral Resources

4.1.4 Soils

4.1.5 Prime Farmland

4.2 HYDROLOGICAL ELEMENTS

4.2.1 Surface Water

4.2.2 Ground Water

4.3 FLOODPLAINS AND WETLANDS

4.3.1 Floodplains

4.3.2 Wetlands and Jurisdictional Waters

4.4 AIR QUALITY

4.5 BIOLOGICAL ELEMENTS

4.5.1 Vegetation

4.5.2 Fish and Wildlife

4.5.3 Endangered and Threatened Species

4.6 HISTORICAL OR ARCHAEOLOGICAL RESOURCES

4.6.1 Direct Impacts

4.7 SOCIAL AND ECONOMIC CONDITIONS

- 4.7.1 Population
- 4.7.2 Social Characteristics
- 4.7.3 Economic Characteristics

- 4.7.4 Financial Conditions
- 4.7.5 Community Need

4.8 LAND USE, LAND USE PLANNING AND CONTROLS

4.9 OTHER PROGRAMS AND PROJECTS

4.10 SECONDARY IMPACTS ASSOCIATED WITH THE PROJECT

4.10.1 Social and Economic Conditions

- 4.10.1.1 Population
- 4.10.1.2 Economic Characteristics
- 4.10.1.3 Financial Conditions

4.10.2 Land Use

- 4.10.2.1 Residential
- 4.10.2.2 Commercial/Industrial

4.10.3 Surface Water

- 4.10.3.1 Floodplains
- 4.10.3.2 Water Quality

4.10.4 Groundwater

- 4.10.4.1 Groundwater Demand
- 4.10.4.2 Groundwater Availability
- 4.10.4.3 Changes to Stream Base Flow
- 4.10.4.4 Edwards Aquifer Recharge
- 4.10.4.5 Groundwater Quality
- 4.10.4.6 Mitigation of Impacts

4.10.5 Evaluation of Water Quality Protection Scenarios

- 4.10.5.1 Existing Rules and Regulations
- 4.10.5.2 Current Water Quality Measures (Exhibit C to MOU)
- 4.10.5.3 Non-Degradation Measures (Attached as an appendix hereto)

4.10.6 Ecological Resources

4.10.6 Cultural Resources

- 5.0 PROJECT BENEFICIARIES, NON-BENEFICIARIES, AND PUBLIC ACCEPTABILITY
- 6.0 AGENCY COORDINATION/PUBLIC COMMENTS
- 7.0 UNAVOIDABLE ADVERSE IMPACTS
- 8.0 FUTURE OF THE ENVIRONMENT WITHOUT THE PROJECT
- 9.0 SHORT-TERM ENVIRONMENTAL LOSSES VERSUS LONG-TERM GAINS
- 10.0 REFERENCES

Appendix to Scope of Work

Water Quality Protection Measures (To be Analyzed in the Environmental Impact Study)

1. Buffer Zones.

Buffer zones (undisturbed natural areas) must be established for the stream drainage system and for sensitive environmental features within the Barton Springs watersheds. Buffer zones must remain free of construction, development, or other alterations. The number of roadways crossing through buffer zones must be minimized and constructed only when necessary to safely access property that cannot otherwise be accessed. Alterations that may take place within buffer zones include utilities, fences, public and private parkland and open space. Golf course development may not take place within a buffer zone.

A. Each stream, with a definable stream channel having a bed and bank, must have an undisturbed native vegetation buffer on each side of the stream as follows:

- ▶ Streams draining more than 640 acres (one square mile) must have a minimum buffer of 300 feet from centerline on each side of the stream.
- ▶ Streams draining less than 640 acres but more than 320 acres must have a minimum buffer of 200 feet from centerline on each side of the stream.
- ▶ Streams draining less than 320 acres must have a minimum buffer of 100 feet from centerline on each side of the stream.

B. Natural drainage channels lacking a bed and a bank but having a contributing drainage area greater than 40 acres must have a minimum buffer of 50 feet from the centerline on each side of the channel.

C. Sensitive environmental features must have a minimum buffer of 150 feet around the feature (radius). If the drainage to a feature is greater than 150 feet in length, then the minimum buffer must be 300 feet (radius). Sensitive environmental features include caves, sinkholes, faults, fractures, springs, seeps, or any area that holds water or supports mesic vegetation for sustained periods.

2. Low-impact development designs.

Recharge zone development must be limited to no more than 15% impervious cover in the upland zone. Contributing zone development must be limited to no more than 20% impervious cover in the upland zone. The upland zone includes all land and waters not included in a buffer zone or in improved, golf course turf areas.

Preservation of large, undisturbed upland areas through the use of innovative site design techniques that, for example, cluster development is encouraged. Lot averaging, which Hays County allows, encourages clustering. A cluster development should be located such that overland flow across preserved upland areas is maximized. Cluster development should also incorporate design principles that: reduce roadway widths; reduce residential street lengths using alternate street layouts that increase the number of homes per unit length; reduce residential street right-of-way widths; minimize

the use of residential street cul-de-sacs using alternative turnaround designs; use vegetated channels instead of curb and gutters; and use subdivision designs that incorporate, where appropriate, narrower lot frontages. Additional recommendations for low impact designs include the use of non-toxic building materials, water conservation, rainwater harvesting, wastewater recycling, and xeriscape.

3. Provisions for increased development intensity.

Onsite development intensity may be increased if additional land is acquired offsite. Such offsite land must be located in upland areas, and in the same watershed and aquifer zone as the development.

In the recharge zone, development may be allowed up to a maximum of 30% on-site impervious cover of the upland zone (developed site) when sufficient offsite land is provided. Such offsite land must be maintained in an undeveloped condition in perpetuity such that the effective impervious cover (developed land plus offsite land) does not exceed 10% impervious cover. In the contributing zone, development may be allowed up to a maximum of 35% on-site impervious cover of the upland zone when sufficient offsite land is provided. Such offsite land must be maintained in an undeveloped condition in perpetuity such that the effective impervious cover does not exceed 15% impervious cover. Improved, golf course turf areas must be excluded from the uplands area calculation and cannot be used to calculate allowable impervious cover. The required offsite acreage may be reduced when more sensitive land can be preserved; however, this consideration will be made only on a case-by-case basis.

Offsite land must be maintained in an undeveloped condition in perpetuity. Conservation easements or deed restrictions must be used to insure their permanent protection. Offsite lands must also have provisions made for third-party management, which could include a property owner, home-owners association, river authority, municipality, county or land trust. Offsite land should be in large contiguous areas and used to augment existing conservation and parkland efforts, to the greatest extent practical.

4. Stormwater quality treatment.

The stormwater management goal is to prevent degradation of the aquifer and surface waters by demonstrating compliance with specific non-degradation performance standards. Compliance with the non-degradation standards will be demonstrated by meeting the following two requirements.

- ▶ The development will not result in an increase in annual average stormwater pollutant loads over pre-development conditions for discharges from the site.
- ▶ The development will control streambank erosion by detaining post-development runoff to pre-development bankfull levels for discharges from the site.

Development with 10% or more on-site impervious cover in the uplands zone must utilize permanent, structural best management practices. Developments with less than 10% impervious cover may use vegetative buffers or other appropriate measures to meet the goal of non-degradation.

Compliance with the non-degradation standard will be presumed by demonstrating that post-development annual average pollutant loads are no greater than pre-developed loads for total suspended solids, total phosphorous and, for multi-family or commercial sites, oil & grease. This determination is to be made using the calculation procedures outlined in the Lower Colorado River Authority's Nonpoint Source Pollution Control Technical Manual, Third Edition (July 1998); note, however, that the required average annual removal efficiency will be 100% of any load over the pre-development level instead of the usual 70-75% removal standards. Capture volumes specified in the Nonpoint Source Pollution Control Technical Manual will need to be adjusted accordingly to meet the goal of non-degradation. Upon approval, alternative methodologies may also be used to demonstrate compliance.

Development with 10% or more on-site impervious cover must also protect against streambank erosion. Streambank erosion protection will be accomplished by capturing and detaining the 1-year, 3-hour storm event, and releasing it over a 24-hour or greater period.

5. Construction-related erosion and sedimentation controls.

Development must incorporate an erosion control plan in accordance with the temporary best management practices of the Nonpoint Source Pollution Control Technical Manual. Temporary erosion and sedimentation controls plans must also be applied to individual lots as they are developed through plat note or through other appropriate mechanisms.

6. Maintenance plans.

Plans for maintenance of structural water quality and erosion controls must be prepared and implemented in accordance with the Nonpoint Source Pollution Control Technical Manual. Documentation should be provided that insures that sufficient annual funding exists to properly maintain stormwater treatment facilities.

7. Environmental education.

An educational program must be implemented to inform the public about the sensitivity of the aquifer and their potential impacts on water quality. The developer or owner of the project must include within the development plans an environmental educational program for residential, industrial, and/or commercial developments. Topics may include information about endangered aquatic species, karst geology, best management practices, buffer zone maintenance, fertilizer application, pesticide use, organic gardening, and disposal of hazardous household chemicals. Materials used should be obtained from the Service, TNRCC, American Water Works Association, National Ground Water Association, Water Environment Federation, or from another appropriate source. Development of kiosks, displays, video, and/or other media to present material covering a variety of non-point source pollution control topics should be encouraged. Alternative educational efforts, such as site-specific recharge feature displays and educational nature trails should also be encouraged. Similarly, all developments should include an integrated pest management plan to minimize exposure of stormwater runoff to chemicals (fertilizers, herbicides and pesticides).

EXHIBIT "C"

Water Quality Protection Measures

1. Buffer Zones. Buffer zones (undisturbed native vegetation buffer) should be established for the stream drainage system and sensitive environmental features within the Barton Springs zone. Buffer zones should remain free of construction, development, or other alterations. The number of roadway crossings of stream buffer zones should be minimized and constructed only when necessary to provide access to property that cannot otherwise be safely accessed. Other alterations that may take place within buffer zones include utilities, fences, and public and private parks and open space.

A. Each stream, with a definable stream channel having a bed and bank, should have an undisturbed native vegetation buffer on each side of the stream as follows:

i. streams draining greater than one square mile (640 acres) of area should have a minimum buffer of at least 300 feet from centerline of the waterway on each side of the stream;

ii. streams draining less than one square mile, but more than $\frac{1}{2}$ square mile, should have a minimum buffer of at least 200 feet from centerline on each side of the stream;

iii. streams draining less than $\frac{1}{2}$ square mile should have a minimum buffer of at least 100 feet from centerline on each side of the stream.

B. Natural drainage channels lacking a bed and a bank but having a contributing drainage area greater than 40 acres should have a minimum buffer of 50 feet from the centerline on each side of the channel.

C. Sensitive environmental features should have a minimum buffer of 150 feet (radius). If the drainage to a feature is greater than 150 feet in length, then the minimum buffer should be 300 feet (radius). Sensitive environmental features include caves, sinkholes, faults, fractures, springs, seeps, or any area that holds water or supports mesic vegetation for sustained periods.

2. Low-impact development designs. Development in the recharge zone should be limited to less than or equal to 15% impervious cover in the upland zone. Development in the contributing zone should be less than or equal to 20% impervious cover in the upland zone. The upland zone includes all land and waters not included in a buffer zone.

3. Provisions for increased development intensity. Development in the recharge zone may be increased to no more than 30% on-site impervious cover of the upland zone (developed site) when sufficient off-site land is provided and maintained in an undeveloped condition in

perpetuity such that the effective impervious cover (developed land plus off-site land) does not exceed 10% impervious cover. Development in the contributing zone may be increased to no more than 35% onsite impervious cover of the upland zone (developed site) when sufficient off-site land is provided and maintained in an undeveloped condition in perpetuity such that the effective impervious cover (developed land plus off-site land) does not exceed 15% impervious cover. This land should be provided in the same watershed (Barton, Little Barton, Bear, Little Bear, Slaughter, Onion, or Williamson) as the development and the same aquifer zone (recharge or contributing) as the development. The amount of additional acreage needed to avoid impacts may be less if more sensitive land is preserved; however, this would have to be assessed by the Service on a case-by-case basis.

4. Construction-related erosion and sedimentation controls. Development should incorporate an erosion control plan in accordance with the temporary best management practices of the Edwards Aquifer Rules (Texas Water Code, Chapter 213) and Technical Guidance Manual on Best Management Practices (June 1999, TNRCC, RG-348).

5. Stormwater quality treatment. Development with 10% or more on-site impervious cover in the uplands zone should provide permanent best management practices to meet the performance standards of the Edwards Aquifer Rules and Technical Guidance Manual. These rules require implementation of best management practices to remove 80% of the increase in total suspended solids load resulting from development. In addition, the vegetative swales non-structural best management practice should be applied below structural controls to further reduce dissolved materials, where structurally practical.

Development with 10% or more on-site impervious cover should also provide streambank erosion control by capturing and detaining the 1-year, 3-hour storm event (See Technical Guidance Manual on Best Management Practices, June 1999, TNRCC, RG-348) and releasing it over a 24-hour or greater period.

Developments with less than 10% impervious cover should use the vegetative swales and filter design measures in the Edwards Aquifer Technical Guidance Manual to convey stormwater off of the site and meet the performance standards of the Edwards Rules.

6. Maintenance plans. Plans for maintenance of structural water quality and erosion controls should be prepared and implemented in accordance with the Edwards Aquifer Rules. In addition, all developments should employ the non-structural best management practices to the maximum extent practical.

7. Environmental education. Educational efforts should be implemented to inform the public about the sensitivity of the aquifer and their potential impacts to the water quality. The developer or owner of the project should include within the development plans an environmental educational program for residential, industrial, and/or commercial developments in the Barton Springs zone. Topics could include the Barton Springs salamander, karst geology, best management practices, buffer zone maintenance, fertilizer application, pesticide use, organic gardening, and disposal of hazardous household chemicals. Materials used should be obtained

from the Service, TNRCC, American Water Works Association, National Ground Water Association, Water Environment Federation, or other sources, as approved by the Service. Development of kiosks, displays, video, and/or other media to present material covering a variety of non-point source pollution control topics should be encouraged. Alternative educational efforts, such as site-specific recharge feature displays and educational nature trails should also be encouraged. Similarly, all developments should encourage integrated pest management plans to minimize exposure of stormwater runoff to chemicals (fertilizers, herbicides, pesticides, etc.).