## AGENCY COORDINATION AND CORRESPONDENCE

TO: Heath McLane, U.S. Army Corps of Engineers, Fort Worth DistrictFROM: U.S. Fish and Wildlife Service, Austin Ecological Services OfficeCC: Tom Heger, Texas Parks and Wildlife Department, AustinSubject:Draft Comments of U.S. Fish and Wildlife Service onLeon Creek Interim Feasibility Report and Integrated Environmental Assessment

We have reviewed the draft Leon Creek Interim Feasibility Report, specifically the assumptions and projections about land use, land class, woodlands and grasslands, and habitat values for riparian species (HEP) and aquatics (RBPI). We generally agree with the preliminary assumptions/projections of current and future project conditions for these various resource categories.

We look forward to further discussion on the types of plans under consideration and their relative impacts, if any, to fish and wildlife resources. In general, we support non-structural measures to minimize flood damages, including buyouts, which typically lead to habitat enhancement in the 100-year floodplain and riparian corridor. In the Leon Creek watershed, structural measures such as channelization have been used on multiple creeks. This has resulted in losses of riparian woodland habitats, which have been typically replaced wooded creeks with mowed grasslands forming a broad trapezoidal ditch. Structural measures will vary in terms of their impacts to fish and wildlife habitats depending on the location, areal extent, and design. We would appreciate information on any flood damage reduction measures (including site selection) under consideration. We plan to convey information about areas that planners may want to select or alternatively avoid.

## **Endangered Species**

Depending upon the types and locations of future potential projects within the Leon Creek watershed, impacts upon federally listed species and their habitats should be carefully considered during the preliminary planning phases of specific projects. Impacts to listed species that cannot be avoided may need separate consultation under section 7 of the Endangered Species Act

## Bexar County Karst Invertebrates and their Critical Habitat

The following nine Bexar County, Texas, troglobitic invertebrate species were listed as endangered on December 26, 2000 (65 FR 81419): Cokendolpher cave harvestman (*Cicurina venii*), Robber Baron Cave harvestman (*Texella cokendolpheri*), vesper cave spider (*Cicurina vespera*), Government Canyon cave spider (*Neoleptoneta microps*), Madla's cave spider (*Cicurina madla*), Robber Baron cave spider (*Cicurina baronia*), beetle (no common name) (*Rhadine exilis*), beetle (no common name) (*Rhadine infernalis*), and Helotes mold beetle (*Batrisodes venyivi*). These are karst dwelling species of local distribution in north and northwest Bexar County.

Critical habitat units are shown in the attached map. **Please note** that not all caves with listed species were included in the critical habitat designation. Consequently, there are caves on Government Canyon State Natural Area that have listed species but do not have critical habitat associated with them. We recommend further coordination on this particular issue.

The principal, cave-containing rock units of the Edwards Plateau are the upper Glen Rose Formation, Edwards Limestone, Austin Chalk, and Pecan Gap Chalk (Veni 1988). The Edwards Limestone accounts for one-third of the cavernous rock in Bexar County and contains 60 percent of the caves, making it the most cavernous unit in the County. The Austin Chalk outcrop is second to the Edwards in total number of caves. In Bexar County, the outcrop of the upper member of the Glen Rose Formation accounts for approximately one-third of the cavernous rock, but only 12.5 percent of Bexar County caves (Veni 1988). In Bexar County, the Pecan Gap Chalk, while generally not cavernous, has a greater than expected density of caves and passages (Veni 1988).

Veni (1994) delineated six karst areas within Bexar County. The regions were named after places within their boundaries. These karst fauna regions are bounded by geological or geographical features that may represent obstructions to the movement (on a geologic time scale) of troglobites, which has resulted in the present-day distribution of endemic (restricted to a given region) karst invertebrates in the Bexar County area.

These areas have been delineated by Veni (1994) into five zones that reflect the likelihood of finding a karst feature that will provide habitat for the endangered Bexar County invertebrates based on geology, distribution of known caves, distribution of cave fauna, and primary factors that determine the presence, size, shape, and extent of caves with respect to cave development. These five zones are defined as:

Zone 1: Areas known to contain one or more of the nine endangered karst invertebrates;

Zone 2: Areas having a high probability of suitable habitat for the invertebrates;

Zone 3: Areas that probably do not contain the invertebrates;

Zone 4: Areas that require further research but are generally equivalent to zone 3, although they may include sections that could be classified as zone 2 or zone 5; and

Zone 5: Areas that do not contain the invertebrates.

Under contract with the Service, Veni (2002) re-evaluated and, where applicable, redrew the boundaries of each karst zone originally delineated in Veni (1994).

We will provide maps of areas supporting (or potentially supporting) endangered Bexar County karst invertebrates, including critical habitat, the karst zones as delineated by Veni (2002), and if appropriate information on specific caves.

Edwards (Balcones Fault Zone) Aquifer Dependent Species

The recharge zone for the Edwards aquifer covers part of the Leon Creek watershed. We recommend any structural measures in the recharge zone or nearby in the contributing zone be reviewed for potential impacts involving recharge of stormwater containing contaminants. These may include metals, nutrients, detergents, herbicides and pesticides. Certain watersheds currently have limited development. If recharge enhancement is a measure under consideration, we recommend thoroughly reviewing: (1) the current and potential development in that specific watershed to select sites that will maintain high quality recharge in the future and (2) the significance of potential hydrologic alteration of the waterways downstream.

## Golden-cheeked Warbler

We recommend that potential impacts to the GCWA be avoided wherever possible. We will also provide maps and GIS layers of oak-juniper woodlands. These woodlands are potentially suitable habitat for the GCWA.

There has been some discussion of the possibility of Leon Creek watershed project measures occurring in Government Canyon State Natural Area (GCSNA). GCSNA habitats were not assessed during our existing conditions field work (HEP and RBPI) in March 2008. Additional field work to assess these new areas would be useful for assessing current and future without (and potentially with) a project measure. A field visit to GCSNA would also help us to make a preliminary determination on potential impacts to federally listed species in Government Canyon SNA early in the project planning phase.

Another measure discussed last year was repairing – rebuilding the flood protection berm around the test cell facility near the Port of San Antonio. Our preliminary view is that repairing this mowed grass berm is a non-issue for fish and wildlife resources.

If you have any questions or comments, please contact Clayton Napier at 512 490-0057 ext. 235.

Thank you for your help in conserving our nation's trust resources.

Sincerely

Field Supervisor DRAFT Attachment

## References Cited Veni 1988 Veni 1994 Veni 2002

----- Forwarded by Clayton Napier/R2/FWS/DOI on 03/03/2009 02:09 PM -----

"Tom Heger" <Tom.Heger@tpwd.state.tx.us>

02/26/2009 10:21 AM

То

"McLane, Heath R SWF" <Heath.R.McLane@usace.army.mil>, <Patrick\_Connor@fws.gov>

cc

<Clayton\_Napier@fws.gov>, <Bill\_Seawell@fws.gov>, <Luela\_Roberts@fws.gov>, "Newman, Rob SWF" <Rob.Newman@usace.army.mil>

Subject

RE: Leon Creek study area projections

My 2¢:

## **Riparian Woodlands**

I believe your estimation of 20% decrease in acreage of riparian woodland to other habitats or development is reasonable to maybe a bit conservative. In the ordinance, the list of allowable developments within the regulatory 100-year floodplain includes utilities, parks, capital improvements, flood conveyance maintenance, floodplain reclamation of various kinds, parking lots, nonresidential construction, projects that are "in the best interest of the public". Together with individual "management" acts by adjacent residents, I believe there is a certainty of impacts over the next 50 years from fragmentation and direct loss of woodland.

I don't believe HSI values will increase or quite hold their own inside or outside the 100-year floodplain overall. Some of the items above, including citizen actions, frequently degrade woodlands without removing them. Factoring in fragmentation and invasive encroachment with urbanization, I believe it is probable that HSI values will decrease somewhat in many areas due to thinning, tree loss, loss of recruitment of desirable species, understory loss, etc. I believe degradation will out-pace maturation/improvement in most areas. Areas currently without woodlands are unlikely to develop them due to maintenance and/or urbanization.

## **Grasslands & Aquatics**

I agree with your assessments of these habitats.

Tom Heger TPWD



# United States Department of the Interior

FISH AND WILDLIFE SERVICE 10711 Burnet Road, Suite 200 Austin, Texas 78758 512 490-0057 FAX 490-0974 **NOV 1 3 2009** 



Colonel Richard J. Muraski, Jr. District Engineer U.S. Army Corps of Engineers (Attn: CESWF-PER-EE) P.O. Box 17300 Fort Worth, Texas 76102-0300

Dear Colonel Muraski:

This letter provides supplementary comments and planning assistance for the U.S. Army Corps of Engineers (USACE) on the draft Interim Feasibility Report and Integrated Environmental Assessment (IFRUEA) and draft Preliminary Alternative Analysis (PAA) for Leon Creek in Bexar County, Texas. Specifically, this letter provides supplementary information regarding Alternatives 13 and 14 of the PAA, which are proposed to be located in Government Canyon State Natural Area (GCSNA). It is our understanding that several other specific alternatives are being considered for GCSNA, but were not included in the draft PAA for review.

This planning assistance is provided, in part, by the U.S. Fish and Wildlife Service (Service), pursuant to the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.) and is intended to assist in the development of your report. It does not represent a final report of the Secretary of the Interior within the meaning of Section 2(b) of the Act. A complete final Fish and Wildlife Coordination Act report will be prepared after we have reviewed all available pertinent information during the planning process.

## Alternatives 13 and 14 of the PAA – Government Canyon State Natural Area

Based on information provided in the PAA, two alternative stormwater retention/detention facilities are currently being considered by the USACE for GCSNA. Alternative 13, the Halff Government Canyon Pond, would be located along Culebra Creek approximately 8,200 feet upstream of the park entrance. The dam would be approximately 60 feet tall with an approximate 350-foot weir, and would have approximately 5,600 acre-feet of storage. This configuration would allow the pond to drain in 36 hours following a 100-year flood event. Alternative 14, the AECOM Government Canyon Regional Storm Water Facility, was initially analyzed using the USACE's hydrology at the request of the local sponsor, the San Antonio River Authority (SARA). Alternative 14's dam is to be located farther upstream of Alternative 13, and has a dam height of 51 feet and a maximum storage of about 6,900 acre-feet.

As previously indicated in our March 13, 2009, draft Planning Aid Letter, the Service's primary concern with any proposed stormwater retention/detention facility alternatives within the boundaries of GCSNA is the potentially significant impacts to the federally-listed endangered



#### Colonel Richard J. Muraski, Jr.

golden-cheeked warbler (*Dendroica chrysoparia*)(GCWA) and several federally-listed Bexar County karst invertebrate species and their habitats. The Service recognizes that Alternatives 13 and 14 proposed for GCSNA are still early in the USACE's planning process and feasibility determinations. If feasibility determinations indicate more detailed alternative analysis is warranted, it is very likely that the size, scope, location, and many of the other determining factors for the current and proposed future alternatives may change considerably during that process. Future alternative analysis studies would likely include habitat assessments and presence/absence surveys for the GCWA and karst invertebrate species, which would provide much needed data to evaluate the specific potential impacts of individual projects on the species.

Because project alternatives are likely to change and detailed listed species locations and habitat determinations are very limited, the Service is providing the following general observations. In addition to our general concerns regarding potential impacts to GCWA's and their habitat that may result from any current or proposed future retention/detention facility in GCSNA, Alternative 13 is in close proximity to Government Canyon Bat Cave, which contains four known federally-listed species, the Government Canyon Bat Cave meshweaver (Cicurina vespera), Government Canyon Bat Cave spider (Neoleptoneta microps), Rhadine exilis (ground beetle – no common name), and *Rhadine infernalis* (ground beetle – no common name). Two of the species, the Government Canyon Bat Cave meshweaver and Government Canyon Bat Cave spider, are each known only from Government Canyon Bat Cave and one other karst feature. Flood water impounded by a detention structure in the area could directly adversely affect the cave itself and/or the surrounding surface community upon which the cave fauna depends. Because of the limited distribution of two of the species found in the cave, substantial adverse impacts from a floodwater detention structure due to possible inundation of the cave entrance or cave cricket foraging area around the entrance, as well as changes in surface and subsurface hydrology of the cave system could result in significant impacts to the listed cave species. Because of the limited distribution of these species, inundation of habitat could result in the Service making a determination of jeopardy to the species. Jeopardy is defined as engaging in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species (50 CFR §402.02). In addition to Government Canyon Bat Cave, a large area of karst zone 1 could be affected by current and/or future proposed impoundments. Other caves containing listed species may be present or discovered in this area after protocol level surveys are conducted and could be potentially impacted.

It is our understanding the Texas Parks and Wildlife Department (TPWD) does not support any proposed detention/retention facility construction within the boundaries of GCSNA. Because of the potential impacts to federally-listed species likely to result from the current alternatives, including the possibility of the project resulting in a jeopardy determination by the Service for listed karst invertebrates within Government Canyon Bat Cave and because of the other natural resources and recreational values in GCSNA, the Service supports TPWD's position on this issue.

Colonel Richard J. Muraski, Jr.

Thank you for your help in conserving our nation's trust resources. The Service appreciates the opportunity to assist the USACE Fort Worth District in ecosystem restoration projects like this one at Leon Creek. If you have any questions or comments please contact us at (512) 490-0057.

Sincerely, Adam Zerrennei **Field Supervisor** 

cc: Carter Smith, Texas Parks and Wildlife Department, Austin, Texas Tom Heger, Texas Parks and Wildlife Department, Austin, Texas Dierdre Hisler, Texas Parks and Wildlife Department, San Antonio, Texas Richard Mendoza, City of San Antonio, San Antonio, Texas Joy Nicholopoulos, U.S. Fish and Wildlife Service, Austin, Texas Dr. Benjamin Tuggle, U.S. Fish and Wildlife Service, Albuquerque, New Mexico



# United States Department of the Interior

FISH AND WILDLIFE SERVICE 10711 Burnet Road, Suite 200 Austin, Texas 78758 512 490-0057 FAX 490-0974



Colonel Richard J. Muraski, Jr. District Engineer U.S. Army Corps of Engineers (Attn: CESWF-PER-EE) P.O. Box 17300 Fort Worth, Texas 76102-0300

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Colonel Richard J. Muraski, Jr.

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Sincerely,

#### Adam Zerrenner Field Supervisor

cc: Carter Smith, Texas Parks and Wildlife Department, Austin, Texas Tom Heger, Texas Parks and Wildlife Department, Austin, Texas Dierdre Hisler, Texas Parks and Wildlife Department, San Antonio, Texas Richard Mendoza, City of San Antonio, San Antonio, Texas Joy Nicholopoulos, U.S. Fish and Wildlife Service, Austin, Texas Dr. Benjamin Tuggle, U.S. Fish and Wildlife Service, Albuquerque, New Mexico



23 August 2009

Rob Newman Chief, Planning Section CESWF-PER-PP P.O. Box 17300 Fort Worth, Texas 76102-0300

Re: Review of Draft Preliminary Alternative Analysis, Leon Creek Watershed Feasibility Study San Antonio, Bexar County, Texas, dated 3 August 2009

Dear Mr. Newman,

I have reviewed the 3 August 2009 version of the *Draft Preliminary Alternative Analysis, Leon Creek Watershed Feasibility Study, San Antonio, Bexar County, Texas.* My comments follow and are focused on the proposed dams for Government Canyon State Natural Area (GCSNA).

I have been involved with GCSNA in many capacities since 1992. I was one of leading organizers of the coalition that acquired GCSNA for purchase and protection by the partnership of the Texas Parks and Wildlife Department, Edwards Underground Water District (which ceded its deeded interest in GCSNA to its successor agency, the Edwards Aquifer Authority), and the City of San Antonio through San Antonio Water System. I served as Vice-President of the Government Canyon Natural History Association for six years and Advisory Board Member for three years. I initiated GCSNA's cave and karst research project and ran it for three years, continued to conduct and assist with research there until moving to New Mexico in 2007, and used it as field site for karst hydrogeology classes I taught from 1998 through 2005.

I believe the proposed dams for GCSNA are not the most effective options nor in the best longterm interests of the community. My concerns fall into three main categories: hydrology, urban planning, and endangered species.

**Hydrology.** The proposed locations for the Alternative 13 and 14 dams are across Government Canyon in the Edwards Aquifer Recharge Zone. The proposed dam for Alternative 14 would be about 120 m downstream of where the U.S. Geological Survey (USGS) gauged stream flow for several years. I do not have access to those data, but USGS staff told me water was usually recorded in that location only during large storms, only a small portion of the stream flow generated by most storms would flow off the recharge zone because it would instead enter the aquifer, and significant flows exited the recharge zone only during the largest storms. This is consistent with my observations of stream flow behavior, vegetation distribution, and recharge features in the canyon.

The draft analysis does not state which hydrologic model was used to estimate stream flows. Some models do not account for the high recharge rates of karst areas and those that try often underestimate those rates. My many years of observing stream flows and hydrogeologic features in Government Canyon, combined with oral reports of USGS monitoring data, suggest that the proposed dams would only hold significant water following the largest floods. During such events,

floodwaters from locations like GCSNA, which are often well upstream of areas needing protection, contribute relatively small amounts of the floodwaters affecting those areas.

**Urban planning.** Floodwaters have flowed from Government Canyon for many years, but have never been considered a serious problem until recently. Hydrologically, effectively nothing has changed at Government Canyon. Most of its watershed remains undeveloped and is protected from development. However, extensive urban development has resulted in higher percentages of impervious cover in downstream areas, considerable magnifying the effect of flooding. The U.S. Army Corps of Engineers is being asked to fix a problem created by poor urban planning. As each new neighborhood or development is constructed, it should be required to build flood retention basins that would eliminate the hydrologic effect of the impervious cover and maintain natural stream flows and flood conditions. The costs would be relatively small, and paid by the people buying those developed properties, not by the general public. While this point is somewhat philosophical, the U.S. Army Corps of Engineers is uniquely positioned to persuade local government agencies to control flooding with small structures designed to mitigate their impacts. These structures could often be designed as green space, park, or recreational areas to enhance the aesthetic and economic value of the area, rather than degrade increasingly rare undegraded spaces like GCSNA.

**Endangered species.** Two federally listed endangered species of bird occur in the GCSNA region. I know at least one is significantly present, but can't address the potential presence of either in the areas affected by the proposed dams. However, I can address the presence of the endangered karst invertebrates that occur in caves and associated underground spaces at GCSNA. My 2002 report for the U.S. Fish and Wildlife Service (*Delineation of hydrogeologic areas and zones for the management and recovery of endangered karst invertebrate species in Bexar County, Texas*) listed seven caves with endangered invertebrates and a total of five different endangered invertebrate species at GCSNA. Four of the five species occur in Government Canyon Bat Cave, located about 700 m downstream of the upper end of the Alternative 13 reservoir. The cave's entrance is on a hillside and the bottom of the cave extends to within about 10 m of the maximum reservoir elevation. While the cave will not be directly impacted by the dam, its fauna will likely be indirectly impacted.

The footprint of the proposed Alternative 14 dam is entirely in Karst Zone 1. The footprint of proposed Alternative 13 dam and the area to be flooded by both dams is in Karst Zone 1 and Zone 2. I delineated those zones for U.S. Fish and Wildlife Service in my above mentioned report and respectively defined them as areas where the listed invertebrate species are known to occur or have a highly probability of being present. While the listed invertebrates are primarily found in caves, they also occur in spaces far too small for human entry. There is no doubt they occur under much of the proposed reservoir areas. Further study and excavation of karst features in those areas may categorically prove their presence by opening caves that could then be biologically surveyed. The greater frequency and duration of flooding would adversely impact the species below this flooded area, although the degree of impact is not yet clear. Consultation with U.S. Fish and Wildlife Service and potential studies and mitigation could significantly increase the cost of the flood control project.

I hope you find these comments helpful. If you need additional information, please contact me.

Cordially,

|en|<

George Veni, Ph.D. Executive Director

cc: Deirdre Hisler, Superintendent, GCSNA



4-B-3/1-2.7

September 23, 2009

Mr. Rob Newman Chief, Planning Section U.S. Army Corps of Engineers – Fort Worth District CESWF-PER-PP PO Box 17300 Fort Worth, Texas 76102-0300

# RE: Feasibility Studies in the Leon Creek Watershed by the U.S. Army Corps of Engineers (COE) and Bexar Regional Watershed Management (BRWM), Bexar County, Texas

Dear Mr. Newman:

The purpose of this letter is to clarify the position of the Edwards Aquifer Authority (Authority) regarding flood control feasibility studies being conducted in the Leon Creek Watershed, Bexar County, Texas. Specifically, the Authority wishes to comment on a study site being evaluated on Government Canyon Creek within Government Canyon State Natural Area (GCSNA).

Two flood control feasibility studies are being conducted in the Leon Creek Watershed. One study is being conducted by the COE with the San Antonio River Authority (SARA) as the local sponsor. The second study is being conducted by SARA, the City of San Antonio, and Bexar County as partners in the BRWM program. It is our understanding that these studies are intended to collect scientific data related to the feasibility of constructing dams or other facilities at various sites in the watershed. The Authority is interested in the feasibility study site in GCSNA because the site is located on the Edwards Aquifer Recharge Zone and because the Authority holds a conservation easement on a portion of GCSNA, including the area of interest in the referenced feasibility studies. The conservation easement agreement includes a covenant that gives the Authority the right to construct a recharge facility on the property if such a project is mutually agreeable to all parties of the easement agreement.

The Authority supports the collection of scientific data, given their potential to benefit all parties with an interest in the appropriate uses of GCSNA. The Authority also believes that the owner of GCSNA, Texas Parks and Wildlife, and those conducting the feasibility study must agree on the scope of the data collection activities to ensure that all important environmental considerations are addressed and to ensure a balanced evaluation of the site. Furthermore, please note that if the feasibility study concludes that a structure for recharge and flood control purposes is viable, it is the Authority's board of directors solely, which can decide if the Authority wishes to pursue the conservation easement covenant to construct a recharge structure at GCSNA.

Mr. Rob Newman September 23, 2009 Page 2 of 2

If you have questions regarding these comments, please contact Mr. John Hoyt, P.G., Assistant General Manager – Aquifer Management, at (210) 477-5136 or by e-mail at jhoyt@edwardsaquifer.org.

Sincerely,

Lea. Hory

Velma R. Danielson General Manager

VRD:JH/eb

for

cc: Edwards Aquifer Authority Board of Directors
Ms. Deirdre Hisler, Park Manager, GCSNA
Mr. Steve Graham, P.E., Assistant General Manager, SARA
Mr. Majed A. Al-Ghafry, Director of Public Works, City of San Antonio



#### DEPARTMENT OF THE ARMY FORT WORTH DISTRICT, CORPS OF ENGINEERS P. O. BOX 17300 FORT WORTH, TEXAS 76102-0300

February 1, 2008

Planning, Environmental, and Regulatory Division

Mr. F. Lawerence Oaks State Historic Preservation Officer Texas Historical Commission 1511 Colorado Street Austin, Texas 78701

Dear Mr. Oaks:

This letter is initiate consultation and to inform you that the U.S. Army Corps of Engineers (USACE) is conducting the Leon Creek Interim Feasibility Study to assess the potential of a multipurpose project for ecosystem restoration, flood damage reduction and/or recreation development within the Leon Creek Watershed located entirely in Bexar County. The non-Federal sponsor for the study is the San Antonio River Authority (SARA). The United States Geological Survey (USGS), Natural Resources Conservation Service (NRCS) and United States Fish and Wildlife Service (USFWS) have also been providing technical support.

The Leon Creek Interim Feasibility Study is a holistic watershed study being prepared in partial response to Guadalupe and San Antonio Rivers and Tributaries, Texas resolution adopted by the Committee on Transportation and Infrastructure, U.S. House of Representatives, House Resolution docket 2547 dated 11 March 1998, which reads as follows:

Resolved by the Committee on Transportation and Infrastructure of the United States House of Representatives, That, the Secretary of the Army is requested to review the report of the Chief of Engineers on the Guadalupe and San Antonio Rivers, Texas, published as House Document 344, 83<sup>rd</sup> Congress, 2<sup>nd</sup> Session, and other pertinent reports, with a view to determining whether any modifications to the recommendations contained therein are advisable at the present time, with particular reference to providing improvements in the interest of flood control, environmental restoration and protection, water quality, water supply, and allied purposes on the Guadalupe and San Antonio Rivers in Texas.

A full suite of alternatives will be considered during the feasibility study to address the aquatic resource problems, opportunities and needs including best management practices that could be implemented in the uplands. We will be in the process of developing alternatives in 2008 and it is anticipated that an environmental impact statement (EIS) will be required and will be integrated with the feasibility report which is scheduled to be released for public review in April 2009. A notice of intent to prepare an EIS will be prepared and published in the Federal Register in the near future.

A very general overview of existing archeological sites has been conducted since the feasibility study covers such a large area. Once more defined project areas are identified, more in-depth cultural surveys will be conducted to avoid impacts. With this letter, and in accordance with 36 CFR 800.1(c), we wish to initiate the Section 106 consultation process. If you have any questions or comments on this project, please feel free to contact Ms Ann Chancey at (817) 886-1719 or by mail at CESWF-PER-EC, PO Box 17300, 819 Taylor St, Fort Worth, Texas 76102-0300. Thank you for your cooperation in this matter.

Sincerely,

Marker. Harberg

William Fickel, Jr. Chief, Planning, Environmental, and Regulatory Division



#### DEPARTMENT OF THE ARMY FORT WORTH DISTRICT, CORPS OF ENGINEERS P. O. BOX 17300 FORT WORTH, TEXAS 76102-0300

February 1, 2008

Planning, Environmental, and Regulatory Division

Honorable Billy Evans Horse, Chairman Kiowa Tribe of Oklahoma Hwy 9 West Carnegie, OK 73015

Dear Chairman Evans Horse:

This letter is initiate consultation and to inform you that the U.S. Army Corps of Engineers (USACE) is conducting the Leon Creek Interim Feasibility Study to assess the potential of a multipurpose project for ecosystem restoration, flood damage reduction and/or recreation development within the Leon Creek Watershed located entirely in Bexar County. The non-Federal sponsors for the study is the San Antonio River Authority (SARA). The United States Geological Survey (USGS), Natural Resources Conservation Service (NRCS) and United States Fish and Wildlife Service (USFWS) have also been providing technical support.

The Leon Creek Interim Feasibility Study is a holistic watershed study being prepared in partial response to Guadalupe and San Antonio Rivers and Tributaries, Texas resolution adopted by the Committee on Transportation and Infrastructure, U.S. House of Representatives, House Resolution docket 2547 dated 11 March 1998, which reads as follows:

Resolved by the Committee on Transportation and Infrastructure of the United States House of Representatives, That, the Secretary of the Army is requested to review the report of the Chief of Engineers on the Guadalupe and San Antonio Rivers, Texas, published as House Document 344, 83<sup>rd</sup> Congress, 2<sup>nd</sup> Session, and other pertinent reports, with a view to determining whether any modifications to the recommendations contained therein are advisable at the present time, with particular reference to providing improvements in the interest of flood control, environmental restoration and protection, water quality, water supply, and allied purposes on the Guadalupe and San Antonio Rivers in Texas.

A full suite of alternatives will be considered during the feasibility study to address the aquatic resource problems, opportunities and needs including best management practices that could be implemented in the uplands. We will be in the process of developing alternatives in 2008 and it is anticipated that an environmental impact statement (EIS) will be required and will be integrated with the feasibility report which is scheduled to be released for public review in April 2009. A notice of intent to prepare an EIS will be prepared and published in the Federal Register in the near future.

A very general overview of existing archeological sites has been conducted since the feasibility study covers such a large area. Once more defined project areas are identified, more in-depth cultural surveys will be conducted to avoid impacts. With this letter, and in accordance with 36 CFR 800.1(c), we wish to initiate the Section 106 consultation process. In addition, if you have any information regarding Traditional Cultural Properties within the region, we respectfully request that you provide whatever information you can so that we make take them into consideration during the planning process. If you have any questions or comments on this project, please feel free to contact Ms Ann Chancey at (817) 886-1719 or by mail at CESWF-PER-EC, PO Box 17300, 819 Taylor St, Fort Worth, Texas 76102-0300. Thank you for your cooperation in this matter.

Sincerely,

Marke. Harberg

F-William Fickel, Jr. Chief, Planning, Environmental, and Regulatory Division



#### DEPARTMENT OF THE ARMY FORT WORTH DISTRICT, CORPS OF ENGINEERS P. O. BOX 17300 FORT WORTH, TEXAS 76102-0300

February 1, 2008

Planning, Environmental, and Regulatory Division

Honorable Wallace Coffey, Chairman ATTN: Ms. Ruth Toahty Comanche Nation 584 NW Bingo Rd HC 32 Box 908 Lawton, Oklahoma 73502

Dear Chairman Coffey:

This letter is initiate consultation and to inform you that the U.S. Army Corps of Engineers (USACE) is conducting the Leon Creek Interim Feasibility Study to assess the potential of a multipurpose project for ecosystem restoration, flood damage reduction and/or recreation development within the Leon Creek Watershed located entirely in Bexar County. The non-Federal sponsors for the study is the San Antonio River Authority (SARA). The United States Geological Survey (USGS), Natural Resources Conservation Service (NRCS) and United States Fish and Wildlife Service (USFWS) have also been providing technical support.

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William Fickel, Jr. Chief, Planning, Environmental, and Regulatory Division



#### DEPARTMENT OF THE ARMY FORT WORTH DISTRICT, CORPS OF ENGINEERS P. O. BOX 17300 FORT WORTH, TEXAS 76102-0300

February 1, 2008

Planning, Environmental, and Regulatory Division

Honorable Mark Chino, President, Mescalero Apache Tribe ATTN: Ms. Holly Houghten, Cultural Affairs Office 124 Chiricahua Plaza Mescalero, New Mexico 88340

#### Dear President Chino:

This letter is initiate consultation and to inform you that the U.S. Army Corps of Engineers (USACE) is conducting the Leon Creek Interim Feasibility Study to assess the potential of a multipurpose project for ecosystem restoration, flood damage reduction and/or recreation development within the Leon Creek Watershed located entirely in Bexar County. The non-Federal sponsor for the study is the San Antonio River Authority (SARA). The United States Geological Survey (USGS), Natural Resources Conservation Service (NRCS) and United States Fish and Wildlife Service (USFWS) have also been providing technical support.

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#### DEPARTMENT OF THE ARMY FORT WORTH DISTRICT, CORPS OF ENGINEERS P. O. BOX 17300 FORT WORTH, TEXAS 76102-0300

February 1, 2008

Planning, Environmental, and Regulatory Division

Honorable Anthony E. Street, President Tonkawa Tribe of Oklahoma 1 Rush Buffalo Road Tonkawa, OK. 74653

Dear President Street:

This letter is initiate consultation and to inform you that the U.S. Army Corps of Engineers (USACE) is conducting the Leon Creek Interim Feasibility Study to assess the potential of a multipurpose project for ecosystem restoration, flood damage reduction and/or recreation development within the Leon Creek Watershed located entirely in Bexar County. The non-Federal sponsor for the study is the San Antonio River Authority (SARA). The United States Geological Survey (USGS), Natural Resources Conservation Service (NRCS) and United States Fish and Wildlife Service (USFWS) have also been providing technical support.

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