

Clara Beckett
Bastrop County Commissioner

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April 24, 2015

Honorable Chairman and Members of the Committee,

On September 4th, 2011, many lives were changed forever in Bastrop County and the State of Texas and touched many lives throughout the Country. All hoping that Hurricane Lee would bring desperately needed rainfall and relief to the drought of record in Central Texas, he only brought the final blow to the perfect storm; a 30 mile per hour hot wind. Emergency personnel, and everyone in the region was anticipating the worst. Numerous fires broke throughout central Texas during this time. The fire first called into the Bastrop County Sheriff's 911 office at 2:21pm from a resident of the neighborhood known as Circle D was dispatched to the Bastrop Fire department. The fire suppression effort never remotely stood a chance and the quick decision making of emergency personnel saved many lives. What became known as the Bastrop County Complex Fire caused the immediate evacuation of thousands of our residents and resulted in the destruction of 1677 residential dwellings, the most destructive fire in Texas History and the third most destructive in U.S. history. There were 34,000 acres of the Lost Pines forest that succumbed to the massive fire. The entire burn area also occurred entirely within federally designated Critical Habitat of the Houston Toad.

The President of the United States signed the Major Disaster Declaration, FEMA-4029-DR-TX on September the 9th 2011. Six hundred firefighting personnel on the ground assisted by an aerial attack for a fire which was not declared 100% contained until October 11th, 2011. All residents were given the authorization to re-enter the still smoldering area on day 14. Given the speed and intensity of the fire and the density of residential development, I personally presumed many deaths had occurred. The fire resulted in the death of 2 souls. The attached Fire Progression Map illustrates the massive speed and intensity of the initial ignition as well as two later ignitions.

During the emergency response period of fire suppression, the Endangered Species Act (ESA) was given due consideration. Each morning and evening at the Incident Command Center, shift briefings by the Unified Command (Federal, State and Local) included instruction and guidance to personnel in an effort to heighten awareness of the potential presence of the endangered Houston toad on the ground. Fortunately, the ESA did not prove to hamper the firefighting

efforts. However, after the fire fighters left and the fire was declared contained, compliance with the ESA proved to be our greatest challenge and challenges were varied, unique and abundant. The fact that the majority of the fire occurred on private property and occurred entirely within Federally Designated Critical and Potential habitat of an endangered species presented what I and many others in Bastrop County refer to as, the disaster within the disaster. This fire was unlike any that FEMA, The State of Texas or our rural County had ever dealt with. The threats to public safety were vast. Homes that survived the fire and public roadways were now threatened by tens of thousands of pine trees burned by the fire that remained standing and at any time could fall and destroy property and take lives. Piles of rubble, including rock and brick veneer, needed to be removed to prevent vectors for snakes and rodents.

The Disaster declaration was amended numerous times, the last being on November 3rd of 2011, and provided for Individual Assistance (IA) and Public Assistant (PA). The PA was approved for eligible applicants for 75% financial reimbursement for all eligible activities authorized by the Robert T. Stafford Disaster Relief and Emergency Assistance Act, P.L. 93-288, as amended.

Bastrop County was determined to be eligible along with two utility providers. In anticipation of the approval of Public Assistance, specifically, debris removal, Bastrop County went to work immediately performing damage assessments, procuring temporary debris management sites, environmental clearances and hiring a qualified monitoring company as well as a qualified debris removal contractor. Bastrop County officials meticulously followed all local, state and federal procurement laws, as assuring compliance was critical to the mission. The cost of the debris removal was estimated to be \$20 million and Bastrop County would be responsible for paying 100% of those costs up front and we were fully aware that we could ill afford to do anything that would put the eligibility of 75% reimbursement from FEMA at risk. Bastrop County's 25% responsibility was crippling to our fund balance and cash flow was an incredible challenge.

The ESA requires either an informal or formal Section 7 consultation with any federal agency-in this case- FEMA and must conclude that the proposed activities funded by FEMA have "no affect" or "are not likely to adversely affect" or "Is likely to adversely affect" a federally endangered species. A finding of "is likely" results in a formal consultation that would have completely halted any and all debris removal operations, if and until mitigation measures and a complex plan could be developed. This would have been unfathomable. FEMA initially made a finding of "no affect" for approval of the use of temporary debris management sites and the USF&WS concurred.

Debris removal work began in earnest on November 7th and was focused on dangerous tree removal within the County Rights-of-Way that could fall onto the more than 100 miles of public

roads within the burn area. Subsequently, FEMA requested additional informal consultation with the USF&WS on November 7th and again on December 13th of 2011, providing more details of the activities on the ground. The letter of December 13th stated in part: "Due to the emergency nature of the event and the threat to public health and safety, the County of Bastrop needs to proceed in an expeditious manner to remove this material to previously designated sites." And concluded in that request a finding of "no affect". The concurrence from the USF&WS of FEMA's finding was not ever received. On the heels of the breeding season of the Houston Toad a meeting was held January 10th of 2012 at the Joint Field Office of FEMA. There was grave concern expressed by the USF&WS and local biologists that activities going forward would result in an "adverse effect" on the Houston Toad unless we could develop intense avoidance and minimization measures. On January 27th FEMA proposed, in consultation with the USF&WS and local biologists, an extensive set of avoidance and minimization measures for all activities as well as a detailed Houston Toad Monitoring Plan. The USF&WS sent their concurrence letter to FEMA on February 1, 2012. From that day forward all debris removal activities would be conducted under this intense set of procedures and/or similar variations as deemed necessary as work activities varied in nature. We continued to work within these parameters on all projects moving forward which involved any federal dollars and are still today working with these procedures on Recovery projects. The avoidance and minimization measures established in this informal Section 7 consultation, set a monstrous challenge before the county and its contractors. What seemed to me, on the day the fire occurred up until this time to be the biggest challenge I and others would face in our lifetimes, just got monumentally more difficult. It felt like the blow to the chest I felt when I was 8 years old and shot my grandfather's double barrel shot gun only that pain simply left a bruise for a few days. This new set of circumstance has left its mark to this day. The January 27, 2012 and the February 1, 2012 letter to initiate consultation from FEMA to the USF&WS and the concurrence from the USF&WS letter are attached. The consultations where updated again in January of 2013 and again in June of 2013 and further avoidance and minimization measures where added.

Bastrop County and our citizens have an intense understanding of the ESA and history of compliance. Bastrop County is a Section 10 permit holder with a Habitat Conservation Plan for the Houston Toad and are intimately familiar with the purpose and need for minimization and avoidance measures that reasonably assure compliance with the ESA while facilitating necessary county functions. We successfully implemented our permit many years before the fires occurred and for over 10 years and have had full-time staff dedicated to protecting the species and assuring compliance with all aspects of our permit. We work with thousands of landowners who also participate in the Habitat Conservation Plan on a voluntary basis. The plan took many years to develop and I believe was developed with solid thought and the best science available. The County was intimate involved for many years during its development.

In complete contrast, the consultation between the USF&WS and FEMA that was implemented for the remaining duration of our disaster had no accountable elected official from Bastrop County input. As a result, no consideration, to my knowledge, was given to the practicality of the measures of the plan, the extent to which it would delay Bastrop County in our efforts and what “affect” delays could potentially present to the health and safety of the public or provide any real scientific evidence that would reasonably conclude the measures were necessary.

A team of biologists, as regulated and determined to be qualified, by the Houston Toad Monitoring Plan and subsequent updates to the Plan, were deployed and the debris removal proceeded under the newly established avoidance and minimization measures and as updated. As stated in the letter of concurrence from the USF&WS, “Implementation of these measures is a condition of federal funding”. It was very clear to me that whatever the document said is what we had to do regardless of anything. If the USF&WS and FEMA concurred that Bastrop County had to implement these measures we had absolutely no other options. Essentially every tree that was cut/fell/picked up/hailed and every pile of rubble that was picked up and hauled was inspected by qualified Houston Toad monitor prior to any work proceeding. Frustrations were intense and the debris removal contractor was under great distress from a production stand point. The original contract for debris removal was for a duration of 12 months. The contractor at the end of the 12 month period requested an additional \$2 million to complete the project via increased unit price costs. Bastrop County was forced, due to state procurement law, to re-bid the entire remaining work items and a contract was awarded to a second contractor. This caused a further 2 month delay in debris removal operations.

Bastrop County and its debris removal contractors ultimately:

Cut 53,000 trees which equated to a volume of about 530,000 cubic yards of vegetative debris. By way of a physical comparison this volume would cover a football field 300 FT in height.

Removed/consolidated and hauled for re-cycling 100,000 tons of rubble, covering the size of a football field 45 feet in height.

From the beginning of the operations on November 7 2011 through Feb 1, 2012 under the initial consultation the county cut and removed 14,367 trees. From February 2nd, 2012 through July 31st, 2013 the county cut and removed 35,785 trees under the strict avoidance and minimization measures and updated measures. If one calculates the trees per calendar day and compares the production rates for the time frames referenced above. The project was delayed 311 days. This is a conservative estimate as the month of January 2012, during the initially cutting, was the wettest month in Bastrop County in the proceeding 4 years. The initial ramp-up also effected the initial production numbers. My strong belief is that the debris removal operations could have been completed close to one year earlier than it did. I also believe that every elected official in Bastrop County, staff and FEMA personnel on the ground would agree that the Toad Monitoring significantly delayed completion.

311 days when a family is concerned for their safety due to a burnt tree standing 75 feet tall on an adjacent abandoned property is an eternity to them. 311 days were trees could fall into the over 100 miles of county roads within the burn area is an eternity to the public and the county personnel tasked with keeping the public safe as well as the removal. I personally expected tragedy every day the debris removal was prolonged. Many trees did fall onto structures, fences and roadways; however, and most assuredly by the grace of God, we escaped any additional loss of life. There are many stories that I could share with the Committee about the human stresses that I personally witnessed and the delay to so many wishing to move on with their lives and many stories I am sure I never knew or heard about. The standing dead trees where a constant reminder to fire victims, survivors, neighbors, friends and my constituents of the fire and the continued dangers to residents. It was also a constant reminder of the environmental destruction. At the end of the day, it is my belief that the delays ironically proved to be an impediment to environmental recovery. Removing this clear threat to human safety and health should have been the first and foremost priority, but I can tell you first hand it was not. The protection of the Houston Toad was clearly the first priority.

Bastrop County had a population of approximately 74,000 people at the time of the fire. The decision to rebuild for the 1700 households that were destroyed, for many, hinged upon how long it would take to make the neighborhoods safe. There were also over 1000 homes that remained intact within the burn area. We estimated that this number of households was approximately 11% of the total population of Bastrop County. Everyone knew someone affected. The quicker we could get these trees removed the quicker the emotional, ecological and economic recovery could begin. The 1000 dwellings and the people living within the burn area needed to be immediately protected. Many families were so concerned for their safety the decision was made to have the father remain at the house, to protect the contents, while the mother and children stayed with friends or family, others simply had no choice but to remain in their homes and pray for the best. Please see the attached picture that I personally took on April 11th of 2013, 19 months after tree removal had commenced. This is one example of the many families that contacted me concerned with trees on adjacent properties threatening their safety and welfare. Delay was the worst case scenario, yet in order to comply with the ESA, we were forced to endure it. County elected officials, county staff, our contractors and, I believe, even FEMA personnel, were dismayed and frustrated with the tree removal process. The electric utility company and their staff were similarly frustrated. With the very limited resources of Bastrop County, we knew that every detail of compliance with local, state and federal law and processes must be adhered to. I believe that under similar circumstance where debris removal did not involve this intense ESA compliance element, the process would be a significant challenge for any city or county in the country and we are a very small jurisdiction with limited staff. I often felt and compared the feeling I had to trying to breathe through a coffee straw.

I have chosen to not, in detail, enumerate the significant direct and indirect costs of compliance, which many would certainly agree was unacceptable. The direct and indirect costs to the federal government and Bastrop County was well into the millions.

While the ESA is understandably not free and the protection of endangered species is our responsibility as a society, it is my conviction that change must happen. Under the conditions of a Presidential Federally Declared disaster and the eligibility for FEMA IA and PA, authorized under the authority of the Stafford Act and by definition the activities funded by the federal government must present a “threat to public health and safety”, compliance with the ESA must take a temporary back seat to removing those threats. We simply cannot continue to enforce a federal law that impedes the removal of clear and immediate threats to human life.

Respectfully Submitted,

Clara Beckett
Bastrop County Commissioner

Attachments:

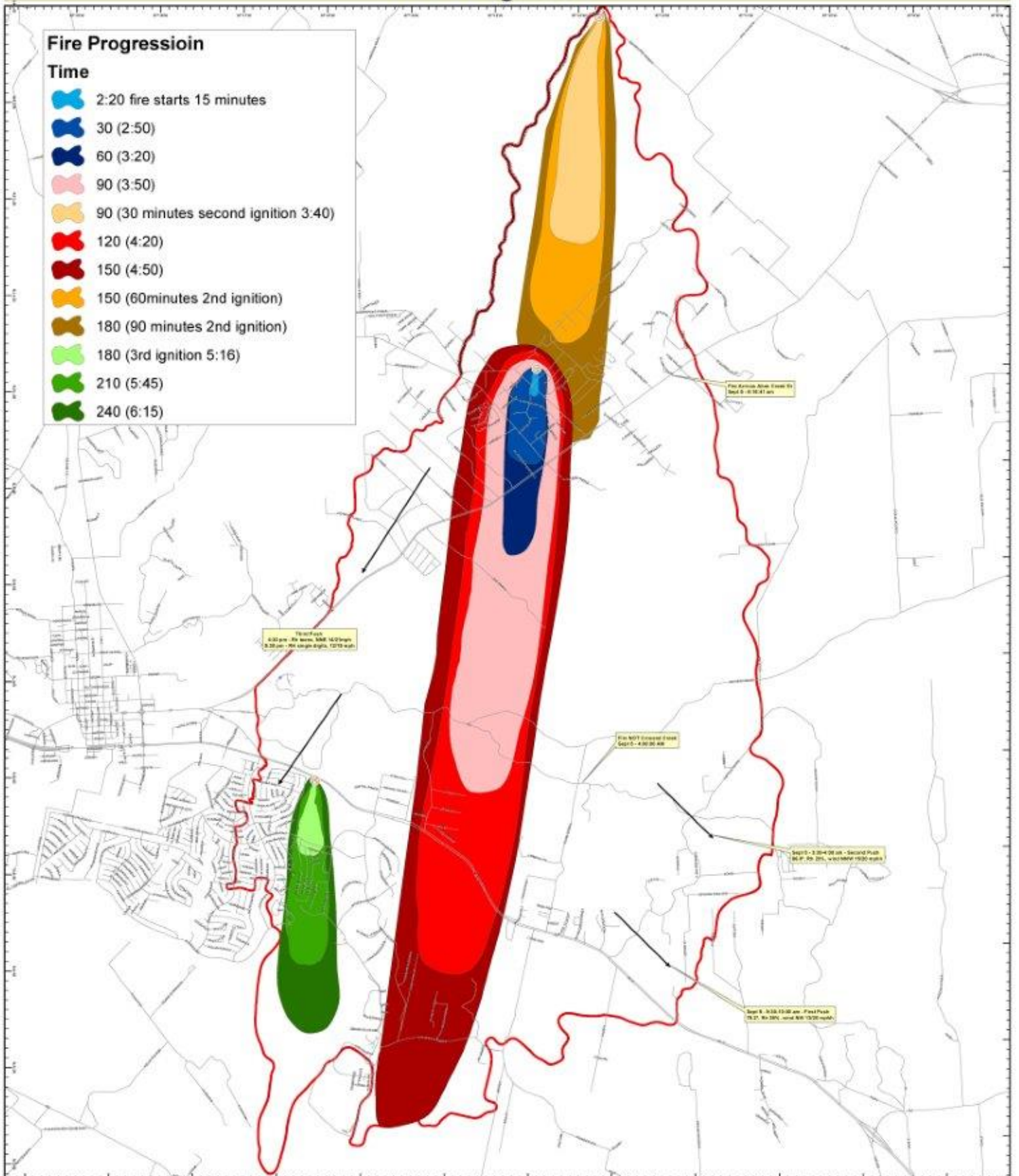
Fire Progression Map
Jan 27th FEMA Consultation Request
Feb 2nd USF&WS Concurrence
Picture of a Child

Bastrop Complex Fire Fire Progression

Fire Progression

Time

-  2:20 fire starts 15 minutes
-  30 (2:50)
-  60 (3:20)
-  90 (3:50)
-  90 (30 minutes second ignition 3:40)
-  120 (4:20)
-  150 (4:50)
-  150 (60 minutes 2nd ignition)
-  180 (90 minutes 2nd ignition)
-  180 (3rd ignition 5:16)
-  210 (5:45)
-  240 (6:15)



First Peak
4:00 pm - 4h storm, 600-1400 mph
3-20 mph - 100 mph winds, 12" to 18" rain

Fire Arrival Area - Creek St
Start 5:16:41 am

Fire NOT Contained - Creek
Start 4:30:00 AM

Start 5:16:41 am - Second Peak
6:15:00 AM - 100 mph winds, 1000 mph

Start 6:15:00 am - First Peak
7:15:00 AM - 100 mph winds, 1000 mph

-  Fire Origin
-  Fire Perimeter
-  Completed Line Break
-  Streets



This product is for informational purposes only and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.



FEMA

January 27, 2012

Ms. Edith Erfling
Field Supervisor
U.S. Fish and Wildlife Service
17629 El Camino Real, Suite #211
Houston, TX 77058

Dear Ms. Erfling:

This letter is to initiate informal consultation between the Federal Emergency Management Agency (FEMA) and your office regarding ongoing work associated with the recovery from the Bastrop County Complex Fire, which was included as part of the major disaster declaration FEMA-4029-DR-TX. This letter has been revised to capture discussions between FEMA and your office on January 20, 2012, and following a site visit in Bastrop with Jeff Hill of the U.S. Fish and Wildlife Service (USFWS) on January 25, 2012. It also follows an initial consultation letter, dated November 7, 2011, that was submitted to the Austin Ecological Services Field Office and a subsequent letter, dated December 13, 2011, regarding FEMA's "no effect" determination for the impact of debris removal activities to the federally endangered Houston toad (toad; *Bufo houstonensis*) in Bastrop County. In addition, on September 19, 2011, FEMA requested and on September 23, 2011, received USFWS concurrence on proposed debris disposal sites within Bastrop County.

As environmental conditions change and the toad is likely to become more active in Bastrop County, and as FEMA's emergency work activities are going beyond the initial predicted timeframe for completion, FEMA is requesting informal consultation with your office. Per conversations with Adam Zerrenner, Field Supervisor at the Austin Ecological Services Field Office, FEMA is to consult with the Clear Lake Ecological Services Field Office regarding the toad and FEMA work in Bastrop County.

Realizing that FEMA Public Assistance and Individual Assistance efforts were proceeding into the toad chorusing season, FEMA arranged for a meeting on January 10, 2012, among FEMA program and environmental staff; applicants, including Bastrop County and Bluebonnet Electric Cooperative; the Texas Division of Emergency Management; USFWS; Texas Parks and Wildlife Department (TPWD); and representatives from Texas State University, to discuss ongoing FEMA-eligible activities, toad emergence and breeding activity status, potential mitigation measures, and consultation approaches under the Endangered Species Act.

FEDERAL ACTIONS INCLUDED IN THIS CONSULTATION

Approximately 95 percent of the burn area associated with the Bastrop County Complex Fire is located within designated critical habitat for the toad. Therefore, much of the FEMA-eligible work under various funding authorities is taking place within toad critical habitat. A map has been included that shows the burn area, the designated critical habitat for the Houston toad, and the temporary debris staging sites being utilized by Bastrop County and Bluebonnet.

Individual Assistance

Under FEMA's Individual Assistance Program, approximately 73 temporary housing units with associated temporary electric poles have been placed on residential lots within Bastrop County to provide short-term housing for those impacted by the wildfire. Most of the units are located in the Circle D-KC Estates area north of Bastrop, with others located just south of Bastrop State Park and in Tahitian Village. No additional units are anticipated to be placed within the burn area. These units will be decommissioned and removed from residential sites within various timeframes depending on the homeowners' needs. This consultation covers removal of units beginning in January 2012 and through the end of toad breeding season, June 1, 2012. FEMA approximates that between 5 and 10 units will be removed during this timeframe. Removals will be conducted during daylight hours. FEMA will make separate determinations for removals that continue from June 1, 2012, through the remainder of the year and into early 2013. Removals after June 1, 2012 are therefore not included in this consultation.

Public Assistance

Under FEMA's Public Assistance program, eligible applicants, including Bastrop County, Bluebonnet Electric Cooperative, and TPWD, have requested federal funding assistance for eligible emergency work related to recovery from the fire. Debris on or along roadways may impede the safe passage of emergency vehicles and local traffic, and debris piles on public and private property may also provide habitat for vectors of disease. Therefore, FEMA intends to provide assistance for eligible Private Property Debris Removal (PPDR) and removal of burned, dead, hazardous trees and other debris from public rights-of-way (ROW) in Bastrop County. Most of this work is being conducted along Highway 21, Highway 71, within the Circle D-KC Estates, and within Tahitian Village (see enclosed map).

The PPDR operation in Bastrop County includes removing burned, dead, and hazardous trees within 50 feet of the home and/or driveways. In some limited cases, debris crews will need to remove small quantities of building rubble if it impedes the entrance of debris removal equipment along entrance driveways. As of this date, FEMA projects that approximately 650 home owners will request assistance with debris removal on private property in total. Work has been completed on many of these sites, and at this time FEMA is estimating that about 200 of these 650 sites still need to be worked. Trees are being hand cut and skidded to driveway areas. Contractors are using bobcats, bucket trucks, and self-loading trucks with grapple hooks to remove the debris. Heavy equipment is remaining on driveways. The PPDR operation is running 7 days a week and work is being conducted only during daylight hours. The application

period for PPDR will remain open through February 19, 2012, and PPDR work is estimated to conclude by the end of March 2012.

In addition, some private property owners clean their property and move disaster-generated debris such as brush and vegetation and building components and contents to the public road ROW. FEMA and its applicants have little to no control over when the debris is brought to the roadsides. Most ROW debris is being removed from the roadway via self-loading trucks with grapple hooks. Heavier construction and demolition debris must be removed with front end loader equipment. Dead, burned trees within road ROWs have also accumulated and are a potential hazard. Arborists are making determinations of which trees are dead and marking them for contractors to remove; trees deemed at least partially alive are marked and will be re-evaluated at a future date. Trees are being hand cut. There should be little to no heavy trucks or equipment leaving roadways onto undisturbed ground for tree removal activities along ROWs. As of the date of this letter, most ROW work is complete and FEMA crews are responding to debris as it is periodically brought to the ROW by property owners. Finally, stump grinding within the public ROW may become an eligible FEMA-reimbursement activity if the stumps are determined to pose a safety issue. Stumps would be ground down to be level with the adjacent grade and would not be excavated or otherwise mechanically removed. The ROW debris clearing operation is running 7 days a week and work is being conducted only during daylight hours.

All PPDR and ROW debris will be taken to one of the five previously approved debris sites or will be recycled. Heavy equipment is removed from private property and the public ROW at the conclusion of each work day.

Bluebonnet Electric Cooperative is also working to remove debris inside and outside of its maintained utility ROWs. Some of this work, including removal of debris in the ROW that presents a safety hazard and threat to continued electric service, is eligible for FEMA reimbursement. According to Bluebonnet, FEMA-funded tree cutting within the ROW is complete and removal of debris on the ground is about 70 percent complete within the maintained ROW. Heavy equipment is being used to collect and haul the debris, and equipment will remain within the maintained ROW during the workday. Heavy equipment is removed from Bluebonnet ROWs at the conclusion of each work day. This work is estimated to be completed by the end of March, 2012. Bluebonnet is also conducting tree removal, tree trimming, and above-ground reconnection of electricity service to structures on private property where trees present a threat to the provision of electric service. Trees are being hand cut and hauled off site via equipment that will remain on roadways and driveways. Some of this work may also be eligible for FEMA reimbursement. It is difficult to estimate a completion date for work on private property as customers call in on their own timeframe for this service. Bluebonnet's operation is running 5 days a week and work is being conducted only during daylight hours.

TPWD is conducting work within Bastrop State Park. Some debris removal activities at the park will be reimbursable through FEMA. Specifically, TPWD is conducting hazardous tree removal along park roadways using fella-bunchers, skidders, loaders, and chippers. Equipment is operating either on the roadways, or within immediately adjacent roadside cutting areas. Larger trees are being sent to a mill to be used for lumber and the remainder of the vegetative debris is

being chipped on site and used for erosion control in the park. Hazardous tree removal is reportedly 50 percent complete as of January 11, 2012, and TPWD estimates that it will be completed by the end of February, 2012. TPWD has prioritized work such that they are moving away from known toad habitats as chorusing season approaches. Therefore, the remaining tree removal work is likely to be in areas of the park that are uninhabited by the toad and where toads have not been documented in the last 6 years. The TPWD debris clearing operation is running up to 7 days a week and work is being conducted only during daylight hours. In addition to implementing the best management practices (BMPs) developed by the USFWS (2011a and 2011b), TPWD is conducting real-time monitoring for toad emergence throughout the project area as work proceeds.

Consultation on permanent work repair projects, such as culvert replacement and building reconstruction under the FEMA Public Assistance Program will be conducted as necessary on an individual basis at a future date and is not included in this consultation.

HOUSTON TOAD STATUS IN PROJECT AREA

The toad depends on healthy and mature forest ecosystems with mixed species composition, significant canopy cover, an open understory layer with a diverse herbaceous component, and breeding areas (ephemeral wet-weather ponds and other water features, such as stock tanks, creeks, streams, wetlands, seeps, and springs) with shaded edges. They are most commonly found within the surrounding upland habitat adjacent to breeding sites. The toad uses drainages and riparian areas for dispersal and movement. The edges of breeding ponds are used by emerging juvenile toadlets after they metamorphose from their larval (tadpole) stage (USFWS, 2011a).

This species is inactive during hot, dry seasons and during the coldest months. Most breeding occurs from February to April, when the minimum air temperature is above 14 C. Breeding has been reported as late as June. Breeding habitat consists of a body of water supporting the reproductive and larval toad life stages. Eggs and larvae develop in shallow water. For successful breeding, water must persist for at least 60 days. Larvae hatch in 4 to 7 days and metamorphose in 3-9 weeks, depending on the water temperature. This species locally migrates between breeding and non-breeding habitats. The adjacent uplands support adults year round and provide patch connectivity outward from the ponds for juvenile dispersal (USFWS, 2011c). The toad tends to occupy areas with 60 percent to 100 percent canopy cover (Forstner *et al.* 2011). Upland forests in the Lost Pines area of Bastrop County serve as occupied and dispersal habitat for the Houston toad and cover/shade is a necessity to facilitate distribution without desiccation (LPRT 2011).

Bastrop County has been surveyed consistently from year to year since the 1970s. By 2003, Dr. Michael Forstner of Texas State University estimated the number of Houston toads in Bastrop County to be between 100 and 200 individuals. The 2011 Houston toad breeding/survey season ended May 2011 with only six Houston toads detected in Bastrop State Park, two Houston toads detected on the Griffith League Ranch in Bastrop County, one Houston toad detected south of the Texas State Highway 290 corridor in Bastrop County, one Houston toad detected in Austin

County, one Houston toad detected in Lavaca County, and one Houston toad detected on Cade Lakes in Burleson County (USFWS 2011c). No reproductive events were observed during the 2011 breeding season, despite extensive survey attempts (Forstner and Dixon 2011).

Prior to the Bastrop County Complex Fire, the Houston toad range in Bastrop County was in poor condition as a result of what is speculated to be the worst 1-year drought on recorded history for this area (LPRT 2011). Approximately 41 percent of the high suitability habitat for the Houston toad within Bastrop County was moderately to heavily burned (Forstner *et al.* 2011). Though the toad may have adapted strategies to survive wildfire events, the extent of the impact of the Bastrop County Complex Fire on toad survival and population numbers is not yet known. FEMA is currently working with Dr. Forstner and is being advised of toad emergence and activity through his monitoring efforts throughout Bastrop County.

AVOIDANCE AND MINIMIZATION MEASURES

The following avoidance and minimization measures will be implemented within the burn area for the FEMA-funded activities described above in order to minimize impact to the toad. These measures have been adapted from the USFWS BMPs (2011a, 2011b); the Lost Pines Habitat Conservation Plan (LPHCP; 2007) and the Bastrop Utilities Habitat Conservation Plan (2005); and discussions at the January 10, 2012 meeting discussed above; and subsequent phone calls and meetings with the USFWS onsite in Bastrop. Implementation of these measures will be a condition of federal funding.

Individual Assistance Projects

- For any removal of temporary housing units from the date of this consultation and through the end of breeding season, June 1, 2012, FEMA will deploy a Houston toad monitor that is a qualified biologist and that will be permitted in identifying, locating, handling, removing, and transporting the Houston toad. Monitors will work in accordance with the attached Houston Toad Monitoring Plan. Should a toad be encountered during removal of a unit, work must cease immediately, the biological monitor will secure and relocate the toad; and the U.S. Fish and Wildlife Service's Clear Lake Ecological Services Office will be contacted at (281) 286-8282.

Public Assistance Projects

- FEMA will deliver an introductory training course on Houston toad life cycle and habitat requirements for FEMA staff, the applicants, and key personnel of the debris removal work crews. Estimated delivery of this training is the week of January 30, 2012, with additional sessions to follow as necessary.

- For work conducted from the date of this consultation and through the end of breeding season, June 1, 2012, FEMA will deploy a team of Houston toad monitors that are qualified biologists and that will collectively be permitted in identifying, locating, handling, removing, and transporting the Houston toad. Monitors must work in accordance with the attached Houston Toad Monitoring Plan. Should a toad be encountered during debris activities, work must cease immediately, the biological monitor will secure and relocate the toad; and the U.S. Fish and Wildlife Service's Clear Lake Ecological Services Office will be contacted at (281) 286-8282.
- For PPDR, cut trees must be removed from the site in this order of priority:
 - Cut trees will be loaded and hauled away at the end of the work day and no logs will be left behind;
 - Cut trees will be stacked on hard surfaces (concrete/caliche driveways or structural foundations);
 - Cut trees will be kept off natural ground via staging on horizontal support structures to minimize the creation of artificial toad habitat. If other logs are used to serve as horizontal supports, a toad monitor must inspect the logs that are in contact with the ground for the presence of toads before those logs can be removed.
- To minimize the creation of toad habitat in non-desirable locations such as rights-of way (ROW), every effort will be made to remove debris piles within 48 hours of the debris being deposited.
- Debris piles will be, to the greatest extent possible, either hand loaded and/or grapple hook loaded.
- Any mulch, chips, or other woody debris from tree removal that is left on site must cover the forest floor in no more than a 1 to 2-inch layer.
- Soil disturbance, clearing, and operation of heavy equipment (for example, tractors, large trucks, bulldozers, skidders) will not occur within a 200-foot distance from potential Houston toad breeding sites and riparian areas at any time of year. These may include ephemeral wet weather ponds and other water features, such as stock tanks, creeks, streams, drainages, wetlands, seeps, and springs.
- For trees that pose an immediate safety threat and that occur within 200 feet of a potential Houston toad breeding site (ponds, stock tanks, creeks, streams, wetlands, seeps, and springs that are within or immediately adjacent to a forested area) or riparian area, tree removal activities must be conducted in consultation with a qualified Houston toad monitor and removal activities cannot begin until that monitor is on site. Trees must be hand cut.

- Hand cutting can occur within a 200-foot radius of a potential Houston toad breeding site between July 1 and December 31 (outside of the Houston toad breeding season and emergence period) without a Houston toad monitor.
- The number and size of entry and exit points for heavy equipment to move into and out of forested areas will be kept to the minimum needed for conducting safe and effective tree and debris removal operations, while also minimizing soil disturbance.
- Streams, riparian zones, wetlands, and areas near potential Houston toad breeding sites will not be used for staging equipment or refueling. Equipment must be stored, serviced, and fueled at least 200 feet away from these sensitive areas.
- Gasoline- and diesel- fueled field equipment must be inspected daily for signs of fuel or hydraulic leaks; such leaks must be repaired promptly and measures will be taken to prevent soil contamination. All hazardous materials related to construction or maintenance activities will be properly contained, used, and/or disposed of.
- Clearing for all utility lines and other structures will be limited to the minimum amount that allows for the safe completion of a particular project. Hand-clearing of vegetation will be used when practical. The use of track equipment for clearing will be minimized.
- Following debris removal activities, the applicants will ensure that equipment used on undisturbed ground has not resulted in potential artificial breeding sites. For example, large tire ruts will be smoothed so as not to create an undesirable breeding pond along a ROW.

In addition to being subject to the conditions above, some activities, such as those on participating private property sites or within the Bluebonnet Electric Cooperative permitted area, must also comply with habitat conservation plans (HCPs) that are already in place, including the Lost Pines Habitat Conservation Plan (LPHCP; 2007) and the Bastrop Utilities Habitat Conservation Plan (2005). While some of the PPDR work will occur on property/landowners enrolled in the county's LPHCP which are covered for incidental take; others are not enrolled. For instance, under their HCP, which covers routine repair, emergency repair, and maintenance of aboveground distribution lines within the permitted area, Bluebonnet distributes a Houston toad information brochure to contractors and landowners that are involved in maintenance work.

DETERMINATION

Toad emergence and breeding is triggered, in part, by rainfall and warm nighttime temperatures. FEMA is communicating regularly with Dr. Forstner at Texas State University to remain informed of his team's monitoring efforts in toad habitat. FEMA is working under the assumption that weather conditions conducive for toad emergence and breeding could materialize any day now, and the toad could begin emerging and breeding very soon.


Upon emergence, there is potential for adult toads to be present among debris piles that are being removed on ROWs and private property. Temporary debris piles, especially brush and vegetative debris, may provide "artificial" habitat for the toad. It is less likely that the toad would shelter within larger construction and demolition debris. There is also potential for toads to seek shelter under temporary housing units that have been installed at residential lots given that the forested habitat no longer provides adequate shade or cover for the toad after the fire. In addition, some tree removal and trimming activities may reduce the already compromised overstory that provides shaded habitat for the local migration of the toad. However, tree removal and trimming activities being funded by FEMA are restricted to dead or severely damaged trees that pose a threat to human safety. The use of debris removal equipment on undisturbed ground may create unsuitable and artificial habitat for the toad by creating ponding areas. Measures are being taken to minimize the work that is conducted immediately adjacent to breeding areas (ephemeral wet-weather ponds, creeks, streams, wetlands, seeps, and springs) during chorusing season.

Based on a review of the Houston toad and its habitat requirements; the assumption that adult toad population numbers are likely low in the project area based on recent past population surveys and uncertainty about survivorship following the fire; the emergency nature of the work to be conducted; the duration and location of work; the implementation of required avoidance and minimization measures, including extensive monitoring by qualified biologists; the additional implementation of various conservation measures under applicable HCPs; and meetings and conversations with USFWS staff and Houston toad specialists, FEMA has determined that the federally funded work described above may affect, but is not likely to adversely affect the Houston toad in Bastrop County.

Furthermore, FEMA contends that the "no action" alternative of leaving the debris along roadsides may result in an adverse effect to the toad by providing undesirable habitat and encouraging toads to occupy high risk areas along roadways. Creating habitat in these areas might contribute to direct mortality due to roadway traffic (USFWS 2011c).

FEMA requests your concurrence with this effect determination and input on any additional conservation measures required to ensure accuracy of this determination. Thank you for your attention and assistance. Should you have any questions, please contact FEMA Environmental Specialist, Dorothy Weir at Dorothy.Weir@fema.dhs.gov or at 940-435-9275.

Sincerely,


Kevin Jaynes, CHMM
Regional Environmental Officer
FEMA Region 6

CC: Kevin Hannes, Federal Coordinating Officer, FEMA-4029-DR-TX
LaToya Leger, Environmental Advisor, FEMA-4029-DR-TX

Karri Dubois, Public Assistance Officer, FEMA-4029-DR-TX
Susan Tompkins, Human Services Branch Director, FEMA-4029-DR-TX

Attachments:

Map of FEMA Project Area in Bastrop County, Texas
Houston Toad Monitoring Plan

REFERENCES

Forstner, M. R. J. 2003. Final: Biology/ecology of the Houston Toad (*Bufo houstonensis*). Report submitted to Bastrop County, Texas.

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SWCA Environmental Consultants. 2005. Final Environmental Assessment/Habitat Conservation Plan For Issuance of an Endangered Species Act Section 10(a)(1)(B) Permit For Incidental Take of the Houston Toad (*Bufo houstonensis*) by Aqua Water Supply Corporation, Lower Colorado River Authority, Bluebonnet Electric Cooperative, Inc., and Austin Energy During the Routine Maintenance and Repair of Facilities and Installation of New Facilities in Portions of Bastrop and Lee Counties, Texas. Available online at http://www.fws.gov/southwest/es/Documents/R2ES/Bastrop_Utilities_Houston_Toad_FINAL_EA_HCP.pdf. Accessed January 13, 2012.

USFWS (U.S. Fish and Wildlife Service). 2011a. Post-Wildfire Clean-Up and Response in Houston Toad Habitat Best Management Practices. Available online at http://www.fws.gov/southwest/es/Documents/R2ES/Fire_CleanUp_and_Response_BMPs20110924.pdf. Accessed January 13, 2012.

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Ms. Edith Erfling
January 27, 2012
Page 10

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Wallace, D., V. Farrallo, D. Buzo, and M.R.J. Forstner. 2011. Abstract. Prioritizing the remaining Houston toad habitat remnants for conservation in the face of ongoing fragmentation and wildfire. Annual meeting of the Texas Herpetological Society, 22 October, 2011, The University of Texas, Austin, Texas.



FEMA

Houston Toad Monitoring Plan
for
Activities Covered in FEMA Letter Dated January 27, 2012
Bastrop County, Texas, FEMA-DR-4029-TX
(Revised March 15, 2012)

Monitor Qualifications: Monitors will hold a 10(a)(1a) permit. Individually, they must be able to locate and identify wild Houston toads. Collectively they must be able to handle, remove, and transport wild Houston toads and be federally permitted and permitted within the State of Texas to do so. The monitors will be prepared to initiate monitoring activities immediately and will be appropriately equipped to conduct the activities described above. As of March 15, 2012, fourteen toad monitors are rotating daily to fulfill the need to have six monitors in the field in Bastrop on any given day. Two of the monitors hold permits to locate and identify wild Houston toads. Twelve of the monitors are permitted to handle, remove, and transport wild Houston toads.

Monitor Hierarchy: Houston toad monitors will be directed by FEMA Task Monitor, Dorothy Weir. Lead monitors, in order of authority, are Mike Forstner, James Dixon, Jake Jackson, and Jim Bell. The lead monitors hold permits that allow them to handle and relocate the toad. These monitors will have supervisory authority over the other monitors regarding decisions in the field.

Number of Monitors: Fourteen toad monitors will be working on a rotational basis in Bastrop County on FEMA-related operations. FEMA has the capacity to fund six toad monitors on any given day. On average, two toad monitors will work with Bluebonnet Electric Cooperative and four monitors will be assigned to Bastrop County to assist in debris removal along rights-of-way (ROW) and on private property. These monitors will also be tasked as needed to oversee removal of temporary housing units and to assist with site visits to proposed FEMA permanent work projects within critical habitat in Bastrop County. At this time, debris removal work in Bastrop State Park is complete or near completion and Greg Creacy has been monitoring per the February 1, 2012 consultation as approved by USFWS. The number of FEMA-funded monitors working in the field on a given day can be increased or decreased pending recovery effort success and speed of completion. FEMA will coordinate additional individual monitors and their qualifications through the USFWS Clear Lake Ecological Services Field Office.

Work Hours: Monitors will work when the debris crews are working, which is dependent on weather conditions and availability of personnel and equipment. At this time, Bastrop County debris operations run 6 days a week. At this time, Bluebonnet operations run 7 days a week. Work is only conducted during daylight hours, which averages about 10-12 hours a day. Precise scheduling will be contingent on field activities. Daily work assignments will be coordinated with FEMA Public Assistance and Environmental staff, the applicants, and their contractors.

Work Duration: Monitors will work through breeding season until FEMA operations included in the January 27, 2012, consultation letter are completed, or until such time in the year that FEMA is able to make a “no effect” determination for debris removal activities. Monitors began work in the field on February 2, 2012, when there was an initial indication of toads chorusing in the wild. The period of performance for monitoring can be shortened and/or extended depending on duration of FEMA operations.

Work Plan and Prioritization: Monitors will be engaged with work being done by Bastrop County (debris removal along rights-of-way (ROWs) and on private property); Bluebonnet Electric Cooperative (debris removal along utility ROWs and tree removal at private property); Texas Parks and Wildlife Department (debris removal along ROWs within Bastrop State Park); and by FEMA’s Individual Assistance Program for the removal of individual temporary housing units at residential sites. Work schedules for the biological monitors will be based on daily situational input from FEMA staff and work crews. Applicant implementation of the avoidance and minimization measures in the February 1, 2012, consultation letter, including adherence to this Houston Toad Monitoring Plan, is a condition of federal funding. Monitors will accompany work crews according to the following list of prioritized FEMA activities:

- **Private Property Debris Removal (PPDR):** Debris crews will initially focus PPDR efforts in neighborhoods with higher toad probability. In particular, areas north of Highway 21 in the Circle D-KC Estates will be worked as soon as possible. Areas to the south and east of Bastrop State Park will be the secondary focus area. Areas to the south of Highway 71 are a third priority and Tahitian Village is the last priority. Toad monitors can advise, assist, and provide oversight regarding the prioritization of work based on their expertise on known toad locations.

PPDR sites that are ready to cut have been assigned a monitoring level of effort of easy, medium, or hard, which enables the County to schedule cut sites appropriately. PPDR crews work 5 properties per day on average. Each morning, the Houston toad monitor will arrive at their assigned PPDR site and conduct monitoring for toads and potential toad habitat based on the cut plan for that site, which is determined by the County’s contractor. The toad monitors are available to provide guidance to the County on how best to implement conditions that are specific to toad habitat. If no habitat is present, PPDR is cleared to commence and must commence that day or the following day, or the clearance becomes null.

- If potential toad habitat is discovered at the site, the toad monitor will inspect the debris for toads.
 - If no toads are identified in the potential habitat on the site, including any small amount of building rubble that may need to be removed to allow the entrance of equipment, work can proceed in line with the conditions in the consultation letter. If ground contact debris that creates toad sheltering habitat is left overnight at the PPDR site, the site clearance becomes null and the site has to be monitored for toad presence again before work commences.

- If a toad is located, if permitted to do so, the monitor will secure and relocate the toad according to protocols associated with their permit. If the monitor is only permitted for survey, they will call another FEMA assigned monitor that is permitted for handling and relocation of the Houston toad, and that monitor will come to the site immediately to secure and relocate the toad. The U.S. Fish and Wildlife Service's Clear Lake Ecological Services Field Office will be contacted at (281) 286-8282. If ground contact debris that creates toad sheltering habitat is left overnight at the PPDR site, the site clearance becomes null and the site has to be monitored for toad presence again before work commences.

For trees that pose an immediate safety threat and that occur within 200 feet of a potential Houston toad breeding site (field-verified ponds, stock tanks, creeks, streams, wetlands, seeps, and springs that are within or immediately adjacent to a forested area) or riparian area, tree removal activities must be conducted in consultation with a qualified Houston toad monitor and removal activities cannot begin until that monitor is on site. Potential breeding sites are likely to increase following periods of heavy rains. **Therefore debris crews should remain aware that tree removal cannot begin within 200 feet of a potential breeding site until a toad monitor is on site and has evaluated and cleared the project area.** Lead monitors will assist in the identification of potential Houston toad breeding sites and prioritization of tree removal in proximity to potential Houston toad breeding sites.

Removal of Debris and Hazardous Trees Along Rights of Way: For Bastrop County, much of this work has been completed and work will be sporadic. As required, the Bastrop County toad monitors will survey any ROW debris and will assist with and provide oversight regarding prioritization of its removal. The debris contractor will alert the toad monitors to the location of ROW debris. The toad monitor will evaluate and pre-clear debris removal work in certain areas or pre-clear the removal of specific debris piles based on their knowledge of toad habitat and toad activity throughout the burn area. Once pre-clearance has been completed, debris work can continue without the presence of toad monitor during the removal operation, provided that the monitor determines the site is clear and that debris pickup occurs during the same work day. If the site is examined by a monitor and the debris cannot be removed until the following day, the inspection process must be reinitiated.

FEMA-funded removal of debris on the ground within Bluebonnet ROWs is estimated to be complete by March 31, 2012. The toad monitor assigned to Bluebonnet will determine which areas of Bluebonnet's remaining ROW debris areas are located in higher probability toad areas. Bluebonnet will work to remove debris in those areas as soon as possible. The toad monitor will evaluate and pre-clear debris removal work in certain areas or pre-clear the removal of specific debris piles based on their knowledge of toad habitat and toad activity throughout the burn area. Once pre-clearance has been completed, debris work can continue without the

presence of toad monitor during the removal operation, provided that the monitor determines the site is clear and that debris pickup occurs during the same work day. If the site is examined by a monitor and the debris cannot be removed until the following day, the inspection process must be reinitiated. Bluebonnet is continuing to receive customer requests to cut and remove hazardous trees along power lines at private property sites. These requests are likely to continue through the summer of 2012. Toad monitors are accompanying Bluebonnet cut crews to these sites to monitor for toad presence and potential habitat through the duration of the existing consultation.

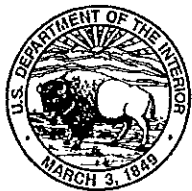
Hazardous tree removal along ROWs in Bastrop State Park is estimated for completion by early March 2012. The Texas Parks and Wildlife Department (TPWD) has prioritized work such that they are moving away from known toad habitats. Therefore, the remaining tree removal work is likely to be in areas of the park that are uninhabited by the toad and where toads have not been documented in the last 6 years. FEMA toad monitors will periodically confer with TPWD to observe operations and review future work sites. FEMA monitors will become involved at particular cutting sites if they determine it is necessary based on known toad locations within the park. The FEMA monitoring effort will complement real-time monitoring that is already being conducted by TPWD biologists.

For all applicants, for trees or debris that pose an immediate safety threat and that occur within 200 feet of a potential Houston toad breeding site (field-verified ponds, stock tanks, creeks, streams, wetlands, seeps, and springs that are within or immediately adjacent to a forested area) or riparian area, tree and debris removal activities must be conducted in consultation with a qualified Houston toad monitor and removal activities cannot begin until that monitor is on site. Potential breeding sites are likely to increase following periods of heavy rains. **Therefore debris crews should remain aware that tree removal cannot begin within 200 feet of a potential breeding site until a toad monitor is on site and has evaluated and cleared the project area.** Lead monitors will assist in the identification of potential Houston toad breeding sites and prioritization of tree removal in proximity to potential Houston toad breeding sites.

Removal of Temporary Housing Units: FEMA's Environmental Planning and Historic Preservation (EHP) section will be alerted several days prior to the scheduled removal of any temporary housing unit and will schedule a toad monitor, permitted to handle, remove, and transport the Houston toad, to inspect the site for toad habitat or toad activity immediately prior to and during removal. For any removal of temporary housing units from the date of this consultation and through the end of breeding, emergence, and dispersal season, August 31, 2012, FEMA will deploy a Houston toad monitor that is a qualified biologist and that will be permitted in identifying, locating, handling, removing, and transporting the Houston toad. Should a toad be encountered during removal of a unit, work must cease immediately, the biological

monitor will secure and relocate the toad, and the U.S. Fish and Wildlife Service's Clear Lake Ecological Services Field Office will be contacted at (281) 286-8282.

Documentation: Monitors will be equipped with GPS units so that if they encounter a toad, they can record its exact location. Monitors will handle and relocate toads in accordance with their 10(a)(1a) permits. Should a toad be encountered during work, Jeff Hill or Edith Erfling of the U.S. Fish and Wildlife Service's Clear Lake Ecological Services Field Office will be contacted at (281) 286-8282, at extensions x241 and x228 respectively.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Division of Ecological Services

17629 El Camino Real, Suite 211

Houston, Texas 77058

281/286-8282 / (FAX) 281/488-5882



In Reply Refer To:
FWS/R2/CLES/
21430-2012-I-
0108-R002

March 5, 2013

Kevin Jaynes
U.S. Department of Homeland Security
FEMA Region 6
800 North Loop 288
Denton, Texas 76209-3698

Dear Mr. Jaynes:

Thank you for your letter dated January 2, 2013, continuing consultation pursuant to Section 7 of the Endangered Species Act for the Federal Emergency Management Agency's (FEMA) recovery operations related to the Bastrop County Complex Fire. FEMA's initial consultation request regarding these activities commenced on January 18, 2012. Earlier consultation activities were described in FEMA letters dated November 7, 2011 and December 13, 2011, and related to other aspects of FEMA's recovery actions in Bastrop and surrounding counties as part of the major disaster declaration FEMA-4029-DR-TX. Extensions of the January 18, 2012 consultation were completed with our concurrence letters to FEMA dated June 25, 2012 and November 20, 2012. The recovery operations considered herein occur within Bastrop County, Texas.

As described in the January 2, 2013 request, the project includes removal of hazard trees (as identified therein) from qualifying private property and public rights-of way based upon an assessment of risk to life and property, and the removal of temporary housing units within the fire-impacted area. Based on your current letter and accompanying "Houston Toad Monitoring Plan", FEMA determined that the recovery operations may affect, but are not likely to adversely affect the federally endangered Houston toad *Bufo houstonensis*. This determination is based on the following information:

1. For all hazard tree removal activities and removal of temporary housing, FEMA will deploy a team of Houston toad monitors that is collectively permitted in identifying, locating, handling, removing, and transporting the Houston toad. FEMA will submit all monitors names and qualifications to the United States Fish & Wildlife Service (Service) for approval to ensure that the monitors understand Houston toad biology, identification, and are properly permitted. Monitors will work in accordance with the attached "Houston Toad Monitoring Plan." Should a Houston toad be encountered during debris removal activities, work must cease immediately. The biological monitor will secure and, if permitted to do so, relocate the Houston toad, or will call a monitor that is permitted to do so. The Service's Clear Lake Ecological Services Field Office will be contacted at (281) 286-8282.

2. Debris piles will be, to the greatest extent possible, either hand loaded and/or grapple hook loaded. A permitted Houston toad monitor must be consulted prior to the removal of FEMA-eligible debris piles.
3. If new work crews are added to the operation, the sub-applicants must notify FEMA so FEMA can provide introductory training on Houston toad characteristics, life cycle, and habitat requirements with the assistance of the permitted Houston toad monitors before the crews begin work. Training will also include a review of the work conditions outlined in this agreement. New crews must be trained prior to starting work.
4. For tree cutting activities, the preferred order of priority for removal of cut trees from the site is:
 - Cut trees will be loaded and hauled away at the end of the work day and no logs will be left behind;
 - Cut trees will be stacked on hard surfaces (concrete/caliche driveways or structural foundations);
 - Cut trees will be kept off natural ground via staging on horizontal support structures to minimize the creation of artificial toad habitat. If other logs are used to serve as horizontal supports, a toad monitor must inspect the logs that are in contact with the ground for the presence of Houston toads before those logs can be removed.
5. Any mulch, chips, or other woody debris from tree removal that is left on-site must cover the forest floor in no more than a 1 to 2-inch layer.
6. Trees that occur within 200 feet of a potential Houston toad breeding site (ponds, stock tanks, creeks, streams, wetlands, seeps, and springs that are within or immediately adjacent to a forested area) or riparian area must be hand cut. Any soil disturbance, clearing, or operation of heavy equipment within 200 feet of a potential breeding site must be approved by a Houston toad monitor. The sub-applicant must notify FEMA when working within 200 feet of a potential breeding area and must have a Houston toad monitor on-site prior to commencing such work.
7. The number and size of entry and exit points for heavy equipment to move into and out of forested areas will be kept to the minimum needed for conducting safe and effective tree and debris removal operations, while also minimizing soil disturbance.
8. In the event that oil drums or other potential hazardous materials are encountered at a site and are within 200 feet of a potential Houston toad breeding area, and which may be disturbed as a result of the federal action, the sub-applicant shall properly handle, remove, manage, and dispose of those materials and any toxic waste prior to the start of work in that vicinity in accordance with the requirements and to the satisfaction of the governing local, state, and federal agencies.
9. Streams, riparian zones, wetlands, and areas near potential Houston toad breeding sites will not be used for staging equipment or refueling. Equipment must be stored, serviced, and fueled at least 200 feet away from these sensitive areas.
10. Gasoline- and diesel- fueled field equipment must be inspected daily for signs of fuel or hydraulic leaks; such leaks must be repaired promptly and measures will be taken to prevent soil

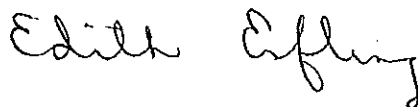
contamination. All hazardous materials related to construction or maintenance activities will be properly contained, used, and/or disposed of.

11. Clearing for all utility lines and other structures will be limited to the minimum amount that allows for the safe completion of a particular project. Hand-clearing of vegetation will be used when practical. The use of track equipment for debris removal will be minimized.
12. Following debris or temporary housing removal activities, the sub-applicants will ensure that equipment use and debris removal activities have not resulted in the creation of potential artificial breeding sites. For example, large tire ruts will be smoothed so as not to create an undesirable breeding pond.
13. Under no circumstances will stumps be removed mechanically (i.e., excavated or pushed).

Based on the aforementioned information, the Service concurs that the hazard tree removal operations and temporary housing removal activities as described in the January 2, 2013 consultation letter are not likely to adversely affect the Houston toad. This concurrence is based upon a review of the Service's files, our multiple site inspections in Bastrop County since the fire, communications with species experts and others, and is contingent upon the implementation of the avoidance and minimization measures herein. In the event the project changes or additional information on listed or proposed species becomes available, the project should be reanalyzed for effects not previously considered.

Our comments are provided in accordance with the provisions of the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.). If you have any questions, or need additional information, please contact Staff Biologist Mr. Jeff Hill or myself at 281/286-8282.

Sincerely,



Edith Erling
Field Supervisor



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Division of Ecological Services
17629 BI Camino Real, Suite 211
Houston, Texas 77058
281/286-8282 / (FAX) 281/488-5882



In Reply Refer To:
FWS/R2/CLBS/
21430-2012-I-0042

February 1, 2012

Mr. Kevin Jaynes
U.S. Department of Homeland Security
FEMA Region 6
800 North Loop 288
Denton, Texas 76209-3698

Dear Mr. Jaynes:

Thank you for your letter dated January 27, 2012, continuing consultation pursuant to Section 7 of the Endangered Species Act for FEMA's recovery operations related to the Bastrop County Complex Fire. Our consultation regarding these activities commenced on January 18, 2012 with FEMA's initial consultation request. Earlier consultation activities were described in FEMA letters dated November 7, 2011 and December 13, 2011 and related to other aspects of FEMA's recovery actions in Bastrop and surrounding counties as part of the major disaster declaration FEMA-4029-DR-TX. The recovery operations considered herein occur within Bastrop County, Texas.

Based on the scope of the January 27, 2012 request, the project includes removal of debris (as defined therein) from public rights-of way and qualifying private property, based upon an assessment of risk to life and property, and the removal of temporary housing units within the fire-impacted area. Based on your January 27, 2012 letter, FEMA determined that the recovery operations may affect, but are not likely to adversely affect the federally endangered Houston toad *Bufo houstonensis*.

As stated above, FEMA has determined that the proposed project may affect, but is not likely to adversely affect the Houston toad. This determination is based on the following information:

1. For any removal of temporary housing units from the date of this consultation and through the end of breeding season, June 1, 2012, FEMA will deploy a Houston toad monitor that is a qualified biologist and that will be permitted in identifying, locating, handling, removing, and transporting the Houston toad. Monitors will work in accordance with the attached Houston Toad Monitoring Plan. Should a toad be encountered during removal of a unit, work must cease immediately, the biological monitor will secure and relocate the toad and the U.S. Fish and Wildlife Service's Clear Lake Ecological Services Office will be contacted at (281) 286-8282.

2. FEMA will deliver an introductory training course on Houston toad life cycle and habitat requirements for FEMA staff, the applicants, and key personnel of the debris removal work crews. Estimated delivery of this training is the week of January 30, 2012.
3. For work conducted from the date of this consultation and through the end of breeding season, June 1, 2012, FEMA will deploy a team of Houston toad monitors that are qualified biologists and that will collectively be permitted in identifying, locating, handling, removing, and transporting the Houston toad. Monitors must work in accordance with the attached Houston Toad Monitoring Plan. Should a toad be encountered during debris activities, work must cease immediately, the biological monitor will secure and relocate the toad and the U.S. Fish and Wildlife Service's Clear Lake Ecological Services Office will be contacted at (281) 286-8282.
4. For Private Property Debris Removal (PPDR), cut trees must be removed from the site in this order of priority:
 - o Cut trees will be loaded and hauled away at the end of the work day and no logs will be left behind;
 - o Cut trees will be stacked on hard surfaces (concrete/caliche driveways or structural foundations);
 - o Cut trees will be kept off natural ground via staging on horizontal support structures to minimize the creation of artificial toad habitat. If other logs are used to serve as horizontal supports, a toad monitor must inspect the logs that are in contact with the ground for the presence of toads before those logs can be removed.
5. To minimize the creation of toad habitat in non-desirable locations such as rights-of way (ROW), every effort will be made to remove debris piles within 48 hours of the debris being deposited.
6. Debris piles will be, to the greatest extent possible, either hand loaded and/or grapple hook loaded.
7. Any mulch, chips, or other woody debris from tree removal that is left on site must cover the forest floor in no more than a 1 to 2-inch layer.
8. Soil disturbance, clearing, and operation of heavy equipment (for example, tractors, large trucks, bulldozers, skidders) will not occur within a 200-foot distance from potential Houston toad breeding sites and riparian areas at any time of year. These may include ephemeral wet weather ponds and other water features, such as stock tanks, creeks, streams, drainages, wetlands, seeps, and springs.
9. For trees that pose an immediate safety threat and that occur within 200 feet of a potential Houston toad breeding site (ponds, stock tanks, creeks, streams, wetlands, seeps, and springs that are within or immediately adjacent to a forested area) or riparian area, tree

removal activities must be conducted in consultation with a qualified Houston toad monitor and removal activities cannot begin until that monitor is on site. Trees must be hand cut.

10. Hand cutting can occur within a 200-foot radius of a potential Houston toad breeding site between July 1 and December 31 (outside of the Houston toad breeding season and emergence period) without a Houston toad monitor.
11. The number and size of entry and exit points for heavy equipment to move into and out of forested areas will be kept to the minimum needed for conducting safe and effective tree and debris removal operations, while also minimizing soil disturbance.
12. Streams, riparian zones, wetlands, and areas near potential Houston toad breeding sites will not be used for staging equipment or refueling. Equipment must be stored, serviced, and fueled at least 200 feet away from these sensitive areas.
13. Gasoline- and diesel- fueled field equipment must be inspected daily for signs of fuel or hydraulic leaks; such leaks must be repaired promptly and measures will be taken to prevent soil contamination. All hazardous materials related to construction or maintenance activities will be properly contained, used, and/or disposed of.
14. Clearing for all utility lines and other structures will be limited to the minimum amount that allows for the safe completion of a particular project. Hand-clearing of vegetation will be used when practical. The use of track equipment for clearing will be minimized.
15. Following debris removal activities, the applicants will ensure that equipment used on undisturbed ground has not resulted in potential artificial breeding sites. For example, large tire ruts will be smoothed so as not to create an undesirable breeding pond along a ROW.
16. The consultation is limited spatially to Bastrop County and temporally as described in the FEMA consultation request dated January 27, 2012.
17. Tree stump grinding will be conducted only if determined by FEMA to be a safety concern and under no circumstances will stumps be removed mechanically (i.e., excavated or pushed).
18. All PPDR and ROW debris will be taken to one of the five previously approved debris sites or will be recycled.

Based on the aforementioned information, the U.S. Fish and Wildlife Service (Service) concurs that the debris cleanup operations and temporary housing removal activities as described in the January 27, 2012 consultation letter are not likely to adversely affect the Houston toad. This concurrence is based upon a review of the Service's files, our site inspection on January 25, 2012, communications with Dr. Michael Forstner at Texas State University and others, and is contingent upon the implementation of the avoidance and minimization measures. In the event

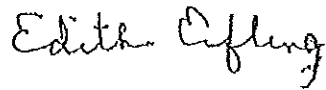
Mr. Jaynes

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the project changes or additional information on listed or proposed species becomes available, the project should be reanalyzed for effects not previously considered.

Our comments are provided in accordance with the provisions of the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.). If you have any questions, or need additional information, please contact Staff Biologist Mr. Jeff Hill or myself at 281/286-8282.

Sincerely,

A handwritten signature in cursive script that reads "Edith Erling".

Edith Erling
Field Supervisor

cc: Paige Najvar, Austin ES

