What You Need to Know about the Houston Toad, the Endangered Species Act and Bastrop County’s Lost Pines Habitat Conservation Plan

The Endangered Species Act
When Congress passed the Endangered Species Act (ESA) in 1973, it recognized that our rich natural heritage is of “esthetic, ecological, educational, recreational, and scientific value to our Nation and its people.” It further expressed concern that many of our nation’s native plants and animals were in danger of becoming extinct. The purpose of the ESA is to protect and recover imperiled species and the ecosystems upon which they depend.

The ESA makes it unlawful for a person to take a listed animal without a permit. Take is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct.” Through regulations, the term “harm” is defined as “an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.”

Section 10 of the ESA provides relief to landowners including private citizens, corporations, Tribes, States, and counties who want to develop property inhabited by listed species. Landowners can receive a permit to take such species incidental to otherwise legal activities, provided they have developed an approved habitat conservation plan (HCP). HCPs include an assessment of the likely impacts on the species from the proposed action, the steps that the permit holder will take to minimize and mitigate the impacts, and the funding available to carry out the steps. HCPs may benefit not only landowners but also species by securing and managing important habitat. Bastrop County has such an HCP, the Lost Pines Habitat Conservation Plan.
About the Lost Pines Habitat Conservation Plan

The basic foundation of the Lost Pines Habitat Conservation Plan (LPHCP) is that humans can coexist with the Houston toad. In fact, the long term preservation, restoration, enhancement, and management of toad habitat in Bastrop County is dependent on private landowners because the vast majority of known and potential habitat exists on private property.

In April 2008 Bastrop County was issued an “Endangered Species Incidental Take Permit” from the United States Fish and Wildlife Service (FWS) that covers approximately 124,000 acres within the county. This permit, which has a term of 30 years, and its associated LPHCP offer a simplified process for obtaining authorization for incidental take under section 10(a)(1)(B) of the ESA for a variety of activities and provides regulatory certainty for local landowners and other community interests. The permit allows Bastrop County to issue certificates of participation to landowners for harming the toad or its habitat while engaging in legal land development, agricultural or forestry practices, wildlife management, and certain other land-use activities.

Landowners can voluntarily participate in the county’s LPHCP in a variety of ways. Whether building a new home or business, developing a subdivision, or simply continuing with existing land-use activities, participation in the LPHCP provides the coverage necessary to ensure compliance with the ESA.

Endangered Species Act

The U.S. Fish and Wildlife Service administers the ESA for land-based species. Taking an endangered species violates the law, according to section 9(a)(1)(B) of the ESA. Because the ESA allows both the U.S. Attorney General and private citizens to seek an injunction to prevent the taking of an endangered species, landowners face the prospect of both government and private individual intervention. Planned activities that will result in a take, such as land development, generally require a permit from the FWS. Landowners and land buyers must be aware of the consequences of violating the take provisions of the ESA.

Incidental Take Permit

One mechanism created by the FWS to allow private landowners to comply with the ESA while making profitable use of their property is the incidental take permit (ITP). In Bastrop County, landowners may receive incidental take authorization by participating in the Lost Pines Habitat Conservation Plan.

Without an ITP, landowners who “take” a listed species may be subject to judicial action from federal agencies and private citizens alike.

Landowners face possible penalties under Section 9 of the ESA when property contains habitat of a listed species. Endangered and Threatened Animals of Texas, which can be found on the Texas Parks and Wildlife website, spells out management guidelines approved by the regional director of the FWS that allows landowners to avoid the permitting process.
This approval explicitly excuses landowners who follow the prescribed management guidelines from obtaining an ITP. For the Houston toad, these guidelines appear to preclude most if not all building activity. Any plan that fails to conform to the guidelines puts the property at high risk of incurring ESA penalties.

Landowners should consider taking proactive steps to determine their level of exposure to penalties by performing a self-assessment of conditions on their property. The self-assessment should answer the following questions:

- Are listed species in the area?
- What constitutes habitat for any listed species?
- Does the property contain habitat for any listed species?
- If yes, is the habitat occupied?
- Do current activities disturb the habitat?
- Are proposed activities likely to disturb the habitat?

### The Houston Toad and Its Habitat

Houston toads are generally brown and speckled, but individual coloration can vary considerably, with some appearing to be light brown and others almost black. They also may have a slightly reddish, yellowish or greyish hue. Their legs have darker bands across them, and there are two dark bands extending from each eye down to the mouth. A variable white stripe usually extends down the middle of the back, but can be absent, and there are irregular white streaks along the sides of the toad’s body. Their undersides are generally white with variable amounts of black speckling. In males the throat is black. Adult Houston toads are medium-sized (2 to 3.5 inches) with females larger and bulkier than males. As with most toads, they are stout-bodied animals with short legs and rough warty skin.

The Houston toad is a very secretive species and is seldom seen, except on warm, humid evenings during its breeding season (January-June, with a peak in February and March), when males call to attract females. Calling males at a breeding pond is known as a “chorus.” The chorus heralds the coming of spring. Echoing through the forest, the high clear trills sound much like the tinkling of small bells. Males vocalize by distending the vocal sac. When the sac is distended, the skin of the throat appears dark and bluish. Females of this species do not vocalize.

After adult and young toads leave the breeding pond, they forage across the landscape looking for insects and other invertebrates, traveling up to a mile within a 24-hour period. Because their skin is more-or-less permeable to water, toads become dormant to escape harsh weather conditions, such as winter cold (hibernation) and drought (aestivation). They seek protection during this time by burrowing into sand or hiding under rocks, logs, leaf litter, or in abandoned animal burrows. Even though the Houston toad secretes distasteful chemicals, adults and young are known to fall victims to predators as diverse as spiders, snakes, turtles, owls, raccoons, and other frogs.
The Houston toad depends on healthy and mature forest ecosystems with mixed species composition, significant canopy cover, an open understory layer with an herbaceous component, and breeding pools with shaded edges. Unmanaged forests in residential areas and forests that sustain other types of land uses, such as recreational or agricultural activities, can become less suitable as Houston toad habitat over time. Without active management, forests can become too dense and shaded, accumulate dangerous levels of burnable duff and debris, and be negatively impacted by cattle, pollutants, and vehicles. These and other changes may reduce the ability of forest ecosystems to provide quality Houston toad habitat by altering the toad’s food base and competitive environment, increasing the risk of catastrophic fires that could destroy large blocks of habitat, and reducing Houston toad reproductive success. Active management of existing forests and reducing negative impacts from various types of land uses within and adjacent to forested areas is essential to the long-term sustainability of Houston toad habitat. Judging from the Bastrop County deep sandy mosaics of breeding habitat and extrapolation from other species, Houston toads may be expected to disperse from their breeding habitat outward to 3 miles. Dispersal habitats are large and do not require deep sandy soils, but may well require some overstory components.

Residential and Commercial Construction in Houston Toad Habitat

Many people think that if they own property in endangered species habitat they cannot use their property as a home site or develop it for commercial use. Although participation in the LPHCP does restrict what can occur on property within Houston toad habitat, the LPHCP does permit limited residential and commercial development. Incidental take authorization must be pursued from the FWS for development that directly impacts more than one acre.

Mitigation fees from residential and commercial construction are used for Houston toad recovery efforts.

Participation in Bastrop County’s LPHCP provides an alternative to seeking permission for incidental take of the Houston toad from the FWS and ensures that a landowner is in compliance with the ESA. Mitigation fees collected by the county are put into a fund that eligible private landowners may use to restore and enhance Houston toad habitat.

*Single-family residential development or expansion:* The LPHCP covers incidental take of the Houston toad resulting from the construction and use (including home business use) of single-family residences, after payment of a mitigation fee or the recording of a Conservation Easement (CE). Single-family homes include traditional “stick and mortar” structures, manufactured homes, and cabins for private use. Other structures and improvements related to the residential use of a tract include the construction and use of garages, sheds, small barns, manufactured home pads, small guest houses, pools, tennis courts, driveways, paths, fountains, gardens, yards, septic systems, waterlines, other utilities, and similar features.

*Commercial and multi-family residential development or expansion:* The LPHCP also covers incidental take associated with the construction and use of small-scale commercial or multi-family residential developments. Like single-family residential construction, a mitigation fee or recording of a CE is required.
LPHCP Application Process

To receive incidental take authorization through Bastrop County’s LPHCP for new construction or expansion of existing development, landowners:\footnote{Fees current as of April 13, 2011.}

1. Complete a Construction Certificate Application
   • $120 application fee
2. Sign and record an Implementing Agreement (IA)
   • ~$40 recording fee
3. Pay a mitigation fee
   • $1,500 for one-half acre authorization
   • $3,000 for one acre authorization
   • Mitigation fee for expansion is based on the area of the expansion

For Construction Certificates issued for projects on single tracts or adjoining tracts under common ownership that contain at least five acres, participants have the option of paying the mitigation fee or waiving the mitigation fee and conveying a Conservation Easement on at least four acres to protect and manage habitat for the Houston toad in perpetuity.

Implementing Agreement or Conservation Easement?

An Implementing Agreement (IA) is a recorded legal document that requires land not impacted by development to remain in its natural vegetation state. Essentially, the IA requires that the landowner do no harm to Houston toad habitat, but it does not require active management of toad habitat. The IA is perpetual and binding upon any heirs and/or new owners of the property.

Like the Implementing Agreement, a Conservation Easement (CE) is perpetual and binding upon any heirs and/or new owners of the property. Unlike the IA, however, a CE requires active land management for the benefit of the Houston toad in accordance with an approved wildlife management plan. Since the land will be actively managed for the benefit of the Houston toad in perpetuity, the mitigation fee is waived.

The success of the county’s LPHCP is dependent on the participation of private landowners within the county. Participation in the LPHCP benefits county residents by providing assurances through the USFWS’s “No Surprises” policy, which states that no additional mitigation will be required as long as the landowner fully and completely implements the terms of the LPHCP.

Conservation Subdivisions

The opportunity to participate in the LPHCP through the use of its subdivision development guidelines is intended to encourage new subdivision developments that protect and maintain Houston toad habitat. In addition to protecting habitat for the toad, conservation subdivisions provide open spaces for residents of the subdivisions to use and enjoy.

Activities that are likely to result in incidental take and that may be covered by the LPHCP include vegetation clearing, road construction, installation of utilities, and the construction and use of...
temporary contractor offices and equipment yards. The LPHCP also covers vegetation clearing and the construction of temporary sales offices associated with the marketing of subdivided lots or property.

**Conservation Subdivision Design Options**

Generally, there are two types of Conservation Subdivision designs that are permitted under the LPHCP—low density, large-lot designs and higher density, clustered designs. Low density, large-lot designs require:

- 10-acre tract size minimum
- Subdivision infrastructure (e.g., paved roads, utility corridors) and community common areas (e.g., clubhouses, playing fields) may not exceed 10% of the total subdivision area
- Minimum lot size of 3 acres, with the average lot size being 5 acres
- Up to 20% of each lot used for single-family residential purposes
- Location of residential use area is at the discretion of the individual lot owner
- At least 80% of each individual lot must be permanently protected for the benefit of the Houston toad
- Individual lot owners are responsible for management of toad habitat areas

Higher density, clustered designs require:

- 20-acre tract size minimum
- All development included within a single, contiguous area
- Developed areas, including all subdivision infrastructure, may initially include no more than 20% of the total subdivision area; the developed area may increase to 30% over time, with provisions
- Single-family and multi-family residences
- One dwelling unit per 1 acre; over time, land added to the developed area may include one dwelling unit per 0.5 acre
- Property Owner’s Association is responsible for management of toad habitat areas

The requirements for permitting a Conservation Subdivision include the requirements for all subdivision development, which are outlined in Section 3.5.1 of the County of Bastrop Subdivision Regulations. In addition, however, Conservation Subdivisions require areas set aside and actively managed for the protection of the Houston toad.

Since the protection and management of Houston toad habitat is required, there is no mitigation fee for a Conservation Subdivision Certificate. There is, however, an application processing fee of $1,500 in addition to the standard subdivision application fees.

**Bastrop County Directives for LPHCP Implementation**

Bastrop County has adopted several policies to guide implementation of the LPHCP. These include:

- Undeveloped property to be enrolled in the LPHCP for wildlife management will have its entire acreage subject to a Wildlife Conservation Easement. In other words, a landowner will not have the option of designating a “disturbance area” prior to any land development.
- Ongoing Use of Previously Developed Land Certificates of Participation will be issued to landowners enrolled in the LPHCP for Wildlife Management at no cost, provided that they meet the requirements stated in the directive.
• Bastrop County, through the LPHCP, will not hold Wildlife Conservation Easements for landowners who decline incidental take coverage for new or expanded residential or commercial construction.
• The LPHCP will issue Construction Certificates at no cost to landowners holding expired Service-issued incidental take permits for residential or commercial construction unless the footprint of the development exceeds that authorized through the Service-issued incidental take permit.

Wildlife, Forestry and Agricultural Management
To participate in the LPHCP for wildlife, forestry or agricultural management, landowners must complete a Notice of Intent application. After approval of an application, a Notice of Receipt (NOR) is issued. NORs require annual re-application. The initial application fee is $100; annual renewals are $20 each uninterrupted year.

Wildlife Management
Landowners whose property is not already classified for 1-D-1 tax appraisal may qualify for appraisal as wildlife management land by conveying a Conservation Easement for wildlife management. House Bill 604, adopted by the Texas Legislature in 2007 and effective as of January 1, 2008, makes it possible for landowners to move from market value to a wildlife management tax valuation without the property first receiving an agricultural tax valuation.

Wildlife management activities covered by the LPHCP include:

• Controlling brush to create additional openings or clearings within post oak and pine forests to create more edge effect for wildlife
• Reforesting tame or native pastures where woody cover or browse is lacking for wildlife
• Prescribed burning to remove excess tree litter and understory vegetation to prevent the understory from becoming too thick and shading out desirable grasses, forbs and browse
• Strip disking to encourage the growth of forbs and other annual plants
• Planting food plots to supplement well-managed native habitats
• Overseeding tame pastures to provide additional forage for wildlife during winter months
• Protecting pond habitat and creating breeding ponds
• Controlling red imported fire ants

Water Management Zones
Water Management Zones (WMZs)—buffer areas immediately adjacent to stream channels or other water bodies, such as ponds, wetlands, springs or seeps—are a key component to habitat management for the Houston toad. Due to the importance of WMZs, certain practices within these areas are prohibited. There are additional limitations during the breeding season and the period when new toads emerge, which extends from January 1 through June 30.

Application Process
To participate in the county's LPHCP for wildlife management activities and receive a Notice of Receipt (NOR) for Wildlife Management, landowners:
1. Develop and implement a qualifying wildlife management plan
2. Complete a Wildlife Management Notice of Intent application that includes:
   - A copy of an unexpired Wildlife Management Plan that complies with the Wildlife Management Guidelines in the LPHCP
   - A map of the property showing the location of all water features and WMZs
3. Pay the application fee.

Forest Management
The Texas Forestry Best Management Practices address practices related to management planning, road construction and maintenance, timber harvesting, site preparation, planting, prescribed burning, chemical applications, and the use of Water Management Zones (WMZs). Due to the importance of WMZs, forestry practices within these areas are restricted to lessen the disturbance on these habitat sites.

The following forest management practices may not be implemented during the breeding and emergence period of the Houston toad (January 1 through June 30):

- Road construction and maintenance
- Site preparation for planting
- Timber harvesting within 300 feet of any WMZ
- Prescribed burning and making preparations for prescribed burns

Agricultural Management
Some existing agricultural land uses provide habitat for the Houston toad and others do not. Cropland, improved pastureland and existing hayland are not considered habitat for the Houston toad. Native grazing lands—rangeland, grazable woodland, and native pasture—are considered Houston toad habitat.

The conversion or removal of native vegetation communities is prohibited under the LPHCP and may be a violation of the ESA.

Regardless of the type of agricultural activity that took place on the land prior to approval of the LPHCP, landowners may receive authorization through the county’s permit for incidental take of the toad. Not covered, however, are impacts to toad habitat as a result of the conversion of native vegetation communities to intensive agricultural uses, which include the creation of new crop fields, seeding native grasslands with sod grasses, clearing woodlands or overstocking grazing/stocking to levels not consistent with the guidelines of the Natural Resources Conservation Service. In other words, coverage through the LPHCP may be obtained for agricultural uses in existence prior to April 21, 2008, but coverage will NOT be extended to lands converted to agricultural uses after that date. Landowners wishing to convert native vegetation communities to intensive agricultural uses must consult individually with the FWS.

Who to Contact for More Information
This document does not and is not intended to include everything one should know about the Endangered Species Act, the Houston toad, or the Lost Pines Habitat Conservation Plan.

For additional information, contact Bastrop County’s Lost Pines Habitat Conservation Plan Administrator at 512-332-7284, or the FWS Austin Ecological Field Services office at 512-490-0057.