



United States Department of the Interior

FISH AND WILDLIFE SERVICE
10711 Burnet Road, Suite 200
Austin, Texas 78758



January 12, 2021

In Reply Refer to:
ES-AUESFO/2021-I-0247

Ms. Clover Clamons
Section Director, Natural Resource Management
Environmental Affairs Division
Texas Department of Transportation
125 East 11th Street
Austin, TX 78701-2483

Dear Ms. Clamons:

This responds to your request of October 6, 2020, in which the Texas Department of Transportation (TxDOT) proposes to initiate informal programmatic consultation. In your request, TxDOT proposes to perform routine and predictably occurring activities related to transportation improvements within the range of the Houston toad (*Anaxyrus=Bufo houstonensis*), a species listed pursuant to the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). Work would occur within Bastrop, Lee, Brazos, Burleson, Leon, Milam, Robertson, Austin, Colorado, and Lavaca counties, Texas. Projects authorized under this informal programmatic consultation may occur within Houston toad federally designated critical habitat. TxDOT has submitted documentation to the U.S. Fish and Wildlife Service (Service) requesting our concurrence that projects described in this informal programmatic consultation may affect, but are not likely to adversely affect the Houston toad. TxDOT has also requested Service concurrence that projects described in this informal programmatic consultation will not result in the destruction or adverse modification of Houston toad federally designated critical habitat.

Section 7 of the Act requires that all Federal agencies consult with the Service to ensure that the actions authorized, funded, or carried out by such agencies do not jeopardize the continued existence of any threatened or endangered species or destroy or adversely modify designated critical habitat of such species. The Federal Highway Administration (FHWA) assigned TxDOT as their non-federal representative for all section 7 consultations associated with National Environmental Policy Act (NEPA) Categorical Exclusions to TxDOT in a

Memorandum of Understanding (MOU) dated December 9, 2019. Therefore, TxDOT is the designated non-federal representative associated with this proposed informal programmatic consultation (23 U.S.C. 326).

Since 2013, TxDOT has conducted informal consultations with the Service on 11 highway projects within the range of the Houston toad in Texas. The consultations were for projects with minor disturbances outside of the existing road footprint. Typical projects included the modernization of roads, including; resurfacing, seal coats, restoration, rehabilitation, reconstruction, adding shoulders, or auxiliary lanes, and installing safety/traffic operation improvements, such as adding safety end treatments, bridge rails, or traffic signs.

DESCRIPTION OF THE ACTION

TxDOT actions eligible to be included under this informal programmatic consultation include routine transportation improvement activities that meet the following criteria:

- the action has a federal nexus;
- the action is located entirely within existing TxDOT Right of Way (ROW),
- the action is located in or adjacent to potential Houston toad habitat (as determined by Buzo 2008 or a subsequent replacement, and the Service's Habitat Characteristics of the Houston Toad (Service 2020b), but is not known to be occupied by the Houston toad;
- the action does not involve acquisition of new ROW within 200 feet of potential Houston toad habitat, and;
- the action does not involve removal of canopy trees with diameter at breast height greater than four inches in Houston toad habitat or riparian areas of water features within the existing ROW.

Descriptions of each transportation improvement category are included in TxDOT's October 6, 2020, consultation request letter, are identified as either low or high risk to the Houston toad, and are summarized below. TxDOT would also conduct a desktop analysis for potentially suitable Houston toad habitat that may be in or adjacent to projects authorized under this informal programmatic. This initial desktop analysis would utilize a 1,300-meter (Vandewege et al. 2013) buffer around the project area, and would rely on the Buzo (2008) model habitat variables that include; deep sandy friable soil, canopy over, and distance to water. These transportation improvements would be covered under this programmatic consultation, as long as they do not exceed any requirements detailed in the October 6, 2020, letter, and all proposed conservation measures are fully implemented. These types of projects may result in small amounts of vegetation removal typically found within Houston toad habitat, or may result in minor, temporary disruption of normal breeding, foraging, or dispersal behavior due to construction activities. These activities may include, soil and vegetation disturbance, grading, operation of heavy machinery, vehicles, and other activities necessary to complete projects

detailed below.

The TxDOT has identified low and high risk project activities to be covered by this programmatic consultation. All work under this programmatic consultation, regardless of classification as a low or high risk project, would be completed on either existing roadway or within existing and generally maintained TxDOT ROW. Projects considered under this programmatic will not require the acquisition on new ROW. If the Houston toad were found within a project area, work would immediately stop, and remain suspended until guidance is received from the Service. Projects that may be considered under this programmatic consultation include:

Low risk project activities – Low risk is defined as limited to the existing roadway and the roadway’s front slope, and will require no more than six months to complete. Low risk activities would occur outside of the Houston toad breeding season from July 1 to December 31. Low risk projects are shorter in duration than high risk project activities and include:

- Road resurfacing, including but not limited to seal coats and overlays
- Rehabilitating the existing pavement
- Metal beam guard fence and bridge rail installation/replacement
- Installation/replacement of traffic pavement markings
- Miscellaneous activities including adding or replacing signs, and constructing/rehabilitating driveways or turnouts

High risk project activities – High risk is defined as generally involving soil disturbance beyond the existing roadway, and include “wet” work projects in or adjacent to waterways. High risk projects require at least 6 months of time to complete, but will not exceed 18 months. High risk projects are of longer duration than low risk activities, and may overlap with the Houston toad breeding season (January 1 to June 30). High risk activities include:

- Roadway widening that does not add capacity
- Culvert extensions and the installation of safety end treatments
- Bridge construction or replacement, on the same or adjacent alignment
- Ditch clearing

Transition from a Low Risk to High Risk project activity – A Low Risk project activities, as described above, will be reevaluated as, and considered a High Risk activity if any of the following conditions apply:

- The project is implemented during, or overlaps with the Houston toad breeding season (January 1 - June 30);
- includes any work occurring at night,

- Allotted project completion time for a Low risk project will be exceeded due to circumstances outside of TxDOT's control, or;
- Houston toad occupancy is determined within five kilometers (3.1 miles) of a TxDOT project ROW, and that project is adjacent to suitable habitat as described in the Service's Habitat Characteristics of the Houston Toad (*Anaxyrus=Bufo houstonensis*), September 2020 document (Service 2020b).

Voluntary Conservation Measures

TxDOT will implement Low risk, High risk, and General voluntary conservation measures to minimize potential impacts to the Houston toad. Low and High risk measures are implemented situationally depending on a projects classification (i.e., low risk projects require low risk measures, and high risk projects require high risk measures). General voluntary conservation measures are implemented regardless of project classification as low or high risk. The measures are as follows:

General Voluntary Conservation Measures

- TxDOT, in coordination with the Service will hold a Houston toad programmatic consultation kickoff training with TxDOT environmental and applicable TxDOT District personnel. The target audience for this event will be biologists and project managers working in counties with known Houston toad occupancy. The meeting will discuss Houston toad biology and distribution, Houston toad identification, work stop and reporting procedures, the rationale for and consequences of proper implementation of this programmatic consultation's avoidance and minimization measures, and dedicate time for discussion of participant's questions. This training will be updated and provided every two years.
- No trees with a diameter at breast height (dbh) of 4 inches or greater will be removed from areas within 200 feet of suitable Houston toad habitat, or from the riparian area of water features in suitable Houston toad habitat.
- If limited trimming of canopy tree branches is necessary to facilitate equipment access within the ROW, all trimmed branches will be removed and disposed of outside of the ROW daily. Trimmed branch disposal areas will not be in suitable Houston toad habitat.
- As part of the preconstruction conference, TxDOT environmental staff will meet with the construction contractor and staff to explain the rationale for the conservation measures, the proper implementation of those measures, and the consequences to the project from failing to ensure full compliance with the measures. The importance of immediately reporting any toad sightings and proper on-site waste management to reduce the potential of attracting Houston toad's predators such as raccoons will be presented.
- Proposed locations for Project Specific Locations (PSLs) such as staging areas, equipment storage, contractor parking, or fill material borrow sites must be approved by District environmental staff before the contractor may move into the selected site. PSLs

cannot be placed within 200 feet of any suitable Houston toad habitat. In the event there is no practical alternative to placement of a PSL beyond 200 feet of suitable Houston toad habitat, that PSL and the methods for managing ingress and egress from that PSL must be approved in writing by the Service.

Toad identification and work-stop conditions for all projects under this programmatic:

- If any species of toad is found in the project area during construction, construction activities will be immediately suspended, a photograph will be taken and sent to TxDOT environmental staff, and construction activities will remain suspended until identification can be confirmed. If TxDOT environmental staff are unable to properly identify the species, work will remain suspended until a Service permitted 10(a)(1)(A) Houston toad biologist confirms the species is not a Houston toad. If the species in the project area is confirmed to be a Houston toad, work would remain suspended until guidance is received from the Service.

Low Risk Project Voluntary Conservation Measures

- No work will occur within the project area where suitable Houston toad habitat is adjacent to the project ROW during the Houston toad breeding season (January 1- June 30) as described in the Service's Habitat Characteristics of the Houston Toad (*Anaxyrus=Bufo houstonensis*), September 2020 document (Service 2020b). TxDOT will add additional notation to plan sheets for projects using this programmatic consultation to inform the contractor of this limitation.
- All work adjacent to Houston toad habitat will be conducted during daylight hours from one hour after sunrise to one hour before sunset.

High Risk Project Voluntary Conservation Measures

- For projects where suitable habitat (Service 2020b) exists in or adjacent to a TxDOT project area, and the best available information indicates no known Houston toad occupancy within five kilometers (3.1 miles) of the project area within the last 20 years, TxDOT commits to complete three years of acoustic monitoring of the project area following the Service's Section 10(a)(1)(A) Scientific Permit Requirements for Conducting Houston Toad Presence/Absence Surveys (2020). The best available information includes use of Texas Natural Diversity Database (TXNDD) records, publications, TxDOT and other audio logger data, Houston toad researcher information, other resource agency data, and discussions with the Service. The most recent Houston toad survey protocol will be followed if or when the Service revises or changes the September 2020 version. Auditory monitoring will begin as soon as possible.
- This multi-year monitoring will be conducted at sites selected based on habitat suitability and will be coordinated with the Service. The results of the multi-year survey efforts will be transmitted annually to the Service in accordance with reporting requirements of this consultation.

- No work will occur within the project area where suitable Houston toad habitat (Service 2020b) is adjacent to the project ROW during the Houston toad breeding season (January 1- June 30) unless the project area has been separated from adjacent suitable habitat by the installation of Amphibian and Reptile Exclusion Fence (AREF). AREF would be installed prior to the beginning of Houston toad breeding season (January 1). AREF specifications are shown in TxDOT's Special Specification 5116 Amphibian and Reptile Exclusion Fence document and is included as Attachment A of the October 6, 2020, consultation request letter. To impede Houston toads from entering the project area and to direct toads away from those areas AREF will be placed, where possible, 200 feet beyond areas identified as suitable Houston toad habitat. In areas where it is not possible to extend the AREF for 200 feet (i.e., terminal ends at driveway breaks and roadway intersections), it will be extended to the maximum feasible distance and terminate with the J-Hook as shown in Attachment A. AREF will be installed according to the specifications shown in Attachment A so that posts and additional wire fence supports face the inside (work side) of the project boundary and the fabric side faces the suitable Houston toad habitat. AREF will be clearly marked to distinguish it from sediment control fence placed for stormwater management.
- TxDOT District environmental staff will review and approve the placement and installation of the AREF in coordination with the Service. TxDOT will add additional notation to the plan sheets for projects using this programmatic consultation to inform the contractor of this limitation.
- For bridge repairs and rehabilitation projects with suitable habitat adjacent to both sides of the ROW, the AREF will connect on both sides of the ROW with a continuous extension of the AREF between the two ROW AREF alignments. The connecting AREF will be placed 10 linear feet up gradient of the ordinary high water mark of the water feature being bridged. If this configuration is not feasible, a solution will be coordinated and reviewed by the Service.
- The AREF will be inspected and maintained daily from January 1 to June 30 in areas adjacent to suitable Houston toad habitat, and weekly during the remainder of the year, or after a storm event to ensure the exclusion of Houston toad. A 24-hour work stoppage would occur following a cumulative rain event of 2 inches or more within the previous 48 hours as shown on National Weather Service's cumulative precipitation website (<https://water.weather.gov/precip/>). Rain gauge(s) located on-site at area(s) of construction would be used to determine rainfall amounts and confirm two inches of rainfall within 48 hours.
- If the integrity of AREF is compromised by natural or construction related impacts, work in the area will stop until the AREF is restored to original design specifications. The project area must be inspected by a Service 10(a)(1)(A) permitted biologist to ensure no Houston toads entered the project area prior to work resuming.

- Following the completion of construction, disturbed areas would be smoothed to avoid the creation of undesirable breeding sites within the ROW. All disturbed areas would be revegetated according to the Austin or Yoakum districts' Specification Item 164 Permanent Rural Seed Mix for sandy soils (Attachment B), and in compliance with Executive Order 13112 on Invasive Species and the Executive Memorandum on Beneficial Landscaping. The Austin and Yoakum district seed mixes are comprised of natives suited for their respective regions. TxDOT's Bryan district will utilize either the Austin or Yoakum seed mixes for sandy soils. No mat or sod forming grasses will be used (i.e., seed mixes do not contain Bermuda grass).
- Pre-project mowing within existing and maintained TxDOT ROW will only be performed during the Houston toad non-breeding season (July 1-December 31).
- A TxDOT construction inspector will be on site regularly to ensure that the conservation measures are being implemented and followed.

Project Activities Not Included in this Consultation

This consultation is not intended to cover all types of TxDOT actions related to Houston toads. A project involving any of the following activities or conditions must seek individual section 7 consultation or Service project specific approval that compliance with the conditions of this programmatic consultation satisfy the project's consultation requirement:

- removal of canopy trees in suitable Houston toad habitat or from the riparian areas of water features;
- acquisition of new ROW containing Houston toad habitat or within 200 feet of Houston toad habitat;
- an increase in traffic volume (added capacity), or;
- requires additional efforts to avoid and minimize adverse effects to the Houston toad or its designated Critical Habitat beyond those specified in this programmatic consultation.

ANALYSIS

Adult and juvenile Houston toads have the potential to disperse through or occur within TxDOT project areas when operating in or near suitable Houston toad habitat. Given the known distance a juvenile may disperse over time, the risk of toads dispersing through or occupying TxDOT project areas increases when both the project area and suitable breeding habitat occur within 1,300 meters of each other (Vandewege et al. 2013). The risk of encountering toads at projects occurring within this 1,300 meter buffer increases when operating within the Houston toad breeding season (January 1 - June 31); this is because adult Houston toads may be traveling to and from potential breeding sites, and juvenile toads may be dispersing outward from their natal ponds. Factors such as proximity of the action to suitable habitat, habitat condition, interconnectedness of habitat, and presence of natural and manmade features acting as dispersal

corridors may also increase or decrease the potential for encountering the Houston toad. Other factors to consider that may also increase encountering Houston toad within a project area include working at night or after significant precipitation events at any time of the year within the 1,300 buffer containing suitable Houston toad habitat.

TxDOT understands the risks of operating in suitable Houston toad habitat. To avoid and minimize impacts to the Houston toad, TxDOT will conduct a desktop analysis to identify suitable Houston toad habitat in or adjacent to the project area prior to project implementation. The desktop analysis will extend out to 1,300 meters beyond any project specific action area, include the use of geospatial tools, and will rely on the Buzo (2008) model parameters deep sandy friable soil, canopy cover, and distance to water to identify potential habitat. TxDOT will also include all soils characterized as deep sandy, friable soil in the habitat assessment to avoid issues presented by soil-type naming conventions, and to address potential model limitations. TxDOT will then ground-truth identified potential suitable habitat areas within 200 feet of a project limit by way of field reconnaissance surveys.

TxDOT has also committed to conducting multi-year Service protocol acoustic surveys where potentially suitable habitat exists in or adjacent to a TxDOT project area. These acoustic surveys will be performed in areas where the best available information indicates no known Houston toad occupancy documented within 3.1 miles of the project area in the preceding 20 years. This monitoring effort will be conducted at selected sites based on habitat suitability, will be coordinated with the Service, and will follow 10(a)(1)(A) Scientific Permit Requirements for Conducting Houston Toad Presence/Absence Surveys (Service 2020a). Information gathered during this process will ensure TxDOT is properly implementing the appropriate avoidance and minimization measures by identifying if any potential breeding occurred the year leading up to project implementation. Survey efforts will help determine if breeding was attempted and the potential for juveniles to occur in, or disperse through, the project area within that year. Negative audio logger surveys do not infer lack of species presence. TxDOT may not be able to survey all potential breeding ponds due to right of entry from landowners adjacent to the project area's ROW. All collected data will be used to help inform future consultations in the area.

CONCLUSION

TxDOT will ensure all suitable Houston toad habitat is adequately surveyed and delineated, and will implement the appropriate avoidance and minimizations measures based on project classification as a "low" or "high" risk project. We note that high risk projects may occur within the Houston toad breeding season or within 3.1 miles of documented Houston toad occurrence. However, high risk projects will require the use of additional avoidance and minimization measures to include the use of exclusion fencing, daily monitoring and maintenance of exclusion fencing, use of Service permitted biological monitors, and stop work authority by any employee or contractor upon discovery of any toad within the project area.

We also note all projects authorized under this programmatic consultation will occur within preexisting, disturbed, and generally maintained TxDOT ROW. Project locations authorized under this programmatic consultation are not considered typical Houston toad habitat (Service

2020b) where the species would be expected to occur. In those areas where projects are adjacent to suitable habitat, TxDOT will implement conservation measures to avoid and minimize potential impacts to the species. However, TxDOT understands the species remains unpredictable during the breeding season and has the potential to disperse through these areas when suitable habitat is located within the vicinity of a project (i.e., 1,300 meters); if this were to occur, TxDOT would immediately stop work and seek guidance from the Service before any work would be allowed to continue.

Therefore, based on the information provided and TxDOT's proposed avoidance and minimization measures, the Service has determined any potential consequences that may result in take to the Houston toad as a result of this informal programmatic consultation will be discountable (i.e., extremely unlikely to occur) or insignificant (i.e., not meaningfully measured or detected as effects), because:

- (1) All work will be conducted on existing road surfaces or within existing and maintained TxDOT ROW that is not considered typical Houston toad habitat (Service 2020b);
- (2) will not require the acquisition of new ROW within suitable Houston toad habitat, and therefore will not require the removal of Houston toad habitat; and
- (3) despite all work occurring either on existing road surface or within existing and maintained TxDOT ROW, all work will require conservation measures, described above, that would avoid and minimize impacts to the Houston toad;

After reviewing the provided information, the Service concurs with TxDOT's conclusion that the projects associated with this Houston toad informal programmatic consultation may affect, but are not likely to adversely affect the Houston toad. Given the same information, the Service concurs with TxDOT that projects authorized under this informal programmatic consultation will not result in the destruction or adverse modification of Houston toad federally designated critical habitat. Our decision is based on the description of the action and full implementation of all avoidance and minimization measures as described within the October 6, 2020, request for consultation and within this letter.

No further endangered species consultation will be required unless: 1) the identified action is subsequently modified in a manner that causes an effect on a listed species or designated critical habitat; 2) new information reveals the identified action may affect federally protected species or designated critical habitat in a manner or to an extent not previously considered; or 3) a new species is listed or critical habitat is designated under the Act that may be affected by the identified action. If new effects are identified in the future, the project proposal should be resubmitted to our office for further consideration.

REPORTING

By September 30 of each year, TxDOT will provide the Service with a list of projects completed under this Houston toad programmatic consultation. The list will include the project name with description of activities, project location in a shapefile or similar format, copies of the Houston toad habitat assessment, and confirmation that all VCMs were implemented, including a discussion of relevant BMPs, documentation of all events where a Houston toad is observed in a project area, and results of that year's auditory surveys. TxDOT and the Service will meet on an

annual basis, or as needed to discuss the effectiveness of this programmatic consultation and update consultation procedures or conservation measures as necessary. This consultation is subject to review and renewal after five years from the date of this concurrence letter.

We appreciate TxDOT's effort to conserve the Houston toad. If you have any questions, comments, or need additional information, please contact Ms. Donna Anderson at (713) 212-1505 and refer to consultation 02ETAU00-2021-I-0247.

Sincerely,

Adam Zerrenner
Field Supervisor, Austin ESFO

Chuck Ardizzone
Field Supervisor, Clear Lake ESFO

cc: Mark Fisher, TxDOT Environmental Affairs Division, Austin, TX (electronic)

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