DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE
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FINDING OF NO SIGNIFICANT IMPACT FOR THE 4(d) RULE FOR THE
THREATENED GEORGETOWN SALAMANDER (Eurycea naufragia)

On February 24, 2014, the Service determined that both the Georgetown (Eurycea naufragia) and Salado salamanders (Eurycea chisholmensis) warranted being listed as “Threatened” under the Act (79 FR 10236). Concurrently, the Service published a proposal for a rule under the authority of section 4(d) of the Act for the Georgetown salamander (79 FR 10077) based on an Edwards Aquifer Recharge Zone Water Quality Ordinance approved by the City of Georgetown in December 2013.

Since the proposed 4(d) rule published, the City of Georgetown incorporated, and expanded upon, the language from the 2013 Ordinance in their Unified Development Code (UDC), the primary tool to regulate development in the City. The revised water quality regulations in UDC 11.07 and Appendix A were finalized on February 24, 2015. The Service published a revised proposed 4(d) rule on April 9, 2015 that will not prohibit take of the Georgetown salamander that is incidental to regulated activities that are conducted consistent with the water quality protective measures contained in Chapter 11.07 and Appendix A of the City of Georgetown’s UDC.

In compliance with the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (NEPA) (40 CFR 1500-1508; July 1, 1986) and the Department of the Interior’s (Departmental) regulations for implementing NEPA (43 CFR §46; October 15, 2008), we prepared an environmental assessment (EA) analyzing the effects of our proposed 4(d) special regulations. We evaluated two alternatives in the EA which are briefly described below. Full descriptions of these can be found in the final EA.

Preferred Alternative
This 4(d) rule would result in the implementation of all of the conservation measures found in Chapter 11.07 and Appendix A of the UDC. Therefore, for private entities and non-Federal government agencies, any take that occurred incidental to regulated activities that is consistent with the conservation measures contained in the Chapter 11.07 and Appendix A of the UDC would not be prohibited under the Act. Federal agencies would still be required to consult with the Service under section 7 of the Act to obtain incidental take coverage for any activities that may affect the Georgetown salamander. However, in many situations, the consultation with Federal agencies could be significantly streamlined and require considerably less time to complete if the agency incorporated the conservation measures found in the UDC into their proposed action. For any projects or activities that did not apply the conservation measures and would result in an act that would be otherwise prohibited under the general prohibitions under the Act for threatened species (50 CFR 17.31), the prohibitions at 50 CFR 17.31 would apply, and the Service would require separate authorization under either section 7 or 10 of the Act.

The following conservation measures would be required for all regulated activities conducted by private entities occurring within the corporate limits of the City of Georgetown and its ETJ (that
is, the action area) over the Edwards Aquifer Recharge Zone:

**Occupied Site Protection**

A no-disturbance zone (Red Zone) would be established in the stream or waterway that the spring drains directly into and extends 80 meters upstream and downstream from the approximate center of the spring outlet of an occupied site. The Red Zone would be bounded by the top of the bank and would not extend beyond any existing physical obstructions that prevent the surface movement of Georgetown salamanders, such as roadways, buildings, retaining walls, dams, and culverts. No regulated activities would be conducted within the Red Zone other than:

(a) Properly permitted maintenance of existing improvements;
(b) Scientific monitoring of water quality, population counts and related activities; and
(c) Fences above the normal high water mark of a stream if such fences complied with applicable floodplain regulations.

A minimal-disturbance zone (Orange Zone) would be established for the subsurface area that drains to the spring or springs at an occupied Site. Except as provided below, the Orange Zone would consist of that area within 300 meters of the approximate center of the spring outlet of an occupied site, except those areas within the Red Zone. The Orange Zone would not include pre-existing development or areas without the potential for containing Georgetown salamander habitat as determined by the geologic assessment based on site specific, hydro-geologic conditions, for instance, where the Edwards Aquifer is absent. No regulated activities would be conducted within the Orange Zone other than:

(a) Activities permitted in the Red Zone;
(b) Wastewater infrastructure installed roughly parallel to a stream provided that such infrastructure would be installed on the side of the stream opposite the occupied site and would be installed no closer than 7.62 meters (25 feet) from the bank of the stream;
(c) Subject to stream buffer limitations (see below) parks and open space development limited to trails, benches, trash cans and pet waste facilities; provided that trails would not be located within the ordinary high water mark of a stream and would be limited to trails for walking, jogging and non-motorized biking; and
(d) In addition to (a), (b), and (c) above, within the City limits, only single-family, detached (Residential Estate and Residential Low Density District) residential use, as defined in the City of Georgetown’s UDC, would be allowed. No construction of said dwelling units would be conducted within 80 meters of an occupied site.

**Unoccupied Spring Buffer and Stream Buffer Protection**

A spring buffer would be established within 50 meters (164 feet) of the approximate center of a spring outlet in the Edwards Aquifer Recharge Zone that is identified in a geologic assessment and not occupied by Georgetown salamanders. A stream buffer would be established for all streams in the Edwards Aquifer Recharge Zone that is identified in a geologic assessment. The boundaries of the stream buffer would vary according to the size of the watershed. No regulated activities would be conducted within the spring and stream buffers, with some exceptions given to routine maintenance to existing structures, flood control, and some utilities.

**Geological Assessments**

A geologic assessment would identify all springs on the subject property, or certify that no springs or streams exist on the subject property; and describe any spring and/or stream on the subject property, including determining the location of any spring outlet or stream. The geologic assessment must identify all occupied sites, Red Zones, and Orange Zones.
**Water Quality Protection**

For all regulated activities within the recharge zone, the following regulations would apply:

(a) Permanent structural water quality controls for a project would remove eighty-five percent (85 percent) of total suspended solids for the entire project and would be certified by a licensed professional engineer;

(b) No regulated activity could cause any increase in the developed flow rate for the 2-year, 3-hour storm;

(c) All development projects, including, but not limited to, individual home sites, would implement temporary best management practices (BMPs) to minimize sediment runoff;

(d) New roadways or expansions to existing roadways that provide a capacity of 25,000 vehicles per day that are located on the recharge zone would provide for spill containment as described in the Optional Enhanced Measures of the Edwards Aquifer Protection Program;

(e) All permanent BMPs with an overt physical presence would have signage that clearly identifies the purpose of the permanent BMP and the party responsible for maintenance; and

(f) Maintenance plans for permanent BMPs would be recorded in the official records of Williamson County.

The City would also adopt a Water Quality Management Plan for all areas within the recharge zone. Such management practices would include, but not be limited to, public education and outreach, hazardous waste education, integrated pest management, illicit discharge detection and elimination, construction-site storm-water runoff control, post-construction storm-water management, and pollution prevention for municipal operations including City and County maintenance activities in the ETJ.

**Adaptive Management Working Group**

An Adaptive Management Working Group (AMWG) would be established by the Williamson County Conservation Foundation (the “WCCF”) to review data on a regular basis and make recommendations for specific changes in management directions related to Appendix A of the UDC. The AMWG duties would include, but would not be limited to, development of an annual report regarding the preservation of the Georgetown salamander, continuous monitoring of the Georgetown salamander, assessment of research priorities, adaptive management of preservation of the Georgetown salamander and the effectiveness of achieving the above objectives.

Under this preferred alternative, regulated activities conducted by private entities would be reviewed and approved at the local level, likely by City of Georgetown or Williamson County staff. Because conservation measures would be applied consistently to all regulated activities and would be known by project proponents ahead of time, less time would be required by City of Georgetown or Williamson County for the review process. In addition, this alternative would result in more certainty for the regulated community regarding conservation requirements for projects occurring within areas occupied by the Georgetown salamander. This would provide the regulated community the opportunity to incorporate the required conservation measures and costs into project designs early in the planning phase. In the event that a project proponent chose not to comply with the UDC, the City of Georgetown or Williamson County would either 1) deny the associated building or construction permit, or 2) require the project proponent to obtain approval directly from the Service before approving the permit.

**No Action Alternative**
Under the no action alternative, no 4(d) rule would be promulgated for Georgetown salamander conservation under the Act. Thus, all prohibitions and exceptions for threatened wildlife provided under 50 CFR 17.31 and 17.32, which incorporate in large part the provisions of 50 CFR 17.21 and 50 CFR 17.22, would apply to the Georgetown salamander due to its "threatened" listing status. As a result, "take" of the Georgetown salamander would be prohibited under section 9 of the Act. Take, is defined in the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

To be protected from violating section 9 of the Act, anyone conducting activities (for example, development, recreation, research, etc.) that may result in take of the Georgetown salamander would need to obtain authorization from the Service prior to initiating those activities. For Federal agencies, that authorization would be obtained through a section 7 consultation with the Service. For private interests and non-Federal government agencies, incidental take would need to be permitted through section 10 of the Act.

Under section 10(a)(1)(b) of the Act, take of Georgetown salamanders by private or non-Federal government agencies could be authorized by the Service if such taking occurs incidentally during otherwise legal activities. Applicants for an incidental take permit would be required to develop and submit a "habitat conservation plan" that specifies the impacts that are likely to result from the taking and the measures the permit applicant will undertake to minimize and mitigate such impacts. The following criteria will need to be satisfied before an incidental take permit could be issued: (1) taking will be incidental; (2) the applicant will, to the maximum extent practicable, minimize and mitigate the impacts of the taking; (3) the applicant will ensure that adequate funding for the plan will be provided; (4) taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild; and (5) other measures, as required by the Service, will be met. This entire process (that is, approval of habitat conservation plan and issuance of incidental take permit) can take anywhere from 6 to 12 months to complete, and sometimes can take longer.

Under section 7 of the Act, Federal agencies would be required to consult with the Service for any project that may affect the Georgetown salamander. This process typically takes up to 135 days to complete. The consulting agency will be required to show the Service that they have minimized the level of take associated with their project by avoiding or minimizing impacts to the species and its habitats.

Under the no action alternative, each project would likely need to be reviewed and approved by the Service on a case-by-case basis. This would result in a level of uncertainty regarding the mitigation or minimization requirements that the Service would require of the applicants. In addition, as described above, there would be a considerable amount of time needed by the Service to review and approve projects that may impact the Georgetown salamander. However, this alternative may result in benefits to the Georgetown salamander in the form of additional mitigation and minimization of impacts to the species. Because there is currently some uncertainty as to the impacts that various projects and activities may have on the Georgetown salamander, this alternative would allow the Service to adapt mitigation and minimization measures to specific projects according to the needs of the species and available science at the time an application for an incidental take permit is submitted or consultation with a Federal agency is initiated.

**Determination**

The primary purpose of preparing an environmental assessment under NEPA is to determine
whether a proposed action would have significant impacts on the human environment. If significant impacts may result from a proposed action, then an environmental impact statement is required (40 CFR § 1502.3). Whether a proposed action exceeds a threshold of significance is determined by analyzing the context and the intensity of the proposed action (40 CFR § 1508.27).

Context refers to the setting of the proposed action and potential impacts of that action. The context of a significance determination may be society as a whole (human, national), the affected region, the affected interests, or the locality. Intensity refers to the severity of the impacts.

Under regulations of the Council of Environmental Quality (CEQ), which is responsible for ensuring compliance with NEPA, intensity is determined by considering 10 criteria (CFR 40 § 1508.27[b]): (1) beneficial and adverse impacts; (2) the degree of impacts on health and safety; (3) impacts on the unique characteristics of the area; (4) the degree to which the impacts would likely be highly controversial; (5) the degree to which the proposed action would impose unique, unknown, or uncertain risks; (6) the degree to which the proposed action might establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration; (7) whether the proposed action is related to other actions, which cumulatively could produce significant impacts; (8) the degree to which the proposed action might adversely affect locales, objects, or structures eligible for listing in the National Register of Historic Places; (9) the degree to which the proposed action might adversely affect an endangered or threatened species or its habitat, as determined to be critical under the ESA of 1973; and (10) whether the proposed action threatens a violation of Federal, state, or local law.

The context of short- and long-term impacts of the proposed 4(d) rule includes the springs and streams within the City of Georgetown in Williamson County, Texas, and its extraterritorial jurisdiction (ETJ). This includes all springs and streams in the watersheds within Georgetown and is not limited to the 17 known Georgetown salamander occupied sites. Impacts of the proposed 4(d) rule at these scales would be minor to moderate, at most.

1. Potential impacts to environmental resources, both beneficial and adverse, would be minor or moderate in all cases. Analyses of impacts of the proposed 4(d) rule on resources within the affected environment were conducted and discussed in Chapter 4 of the EA.

2. There would be no or negligible impacts to public health or safety from the proposed 4(d) rule.

3. There would be no or negligible impacts to unique characteristics of the area.

4. Potential impacts to the quality of the environment are not likely to be highly controversial.

5. The impacts do not pose any uncertain, unique, or unknown risks. The revised proposed 4(d) rule is regulatory in nature; as such, the nature of the potential impacts are negligible to minor in most cases. Implementation of the proposed action is expected to result in primarily beneficial impacts to the environment through the water quality protective measures it provides.

6. The proposed 4(d) rule is not a precedent-setting action with significant effects. The agency has finalized 4(d) rules for numerous other threatened species, and this action is consistent with the requirements of the Endangered Species Act. Therefore, this action is not
7. There would not be any significant cumulative impacts because when added to the past, present and reasonably foreseeable future actions, the effects would be minimal or even beneficial for all of the environmental parameters evaluated.

8. This 4(d) rule is not likely to affect sites, objects, or structures of historical, scientific, or cultural significance because any such potential impacts would be addressed by Federal and State laws enacted to protect and preserve these resources.

9. The proposed 4(d) rule would have beneficial impacts to the Georgetown salamander. As described in Chapter 4 of the final EA, some short-term minor adverse effects may result from the proposed action due to the continuation of development activities; however, the 4(d) rule will contribute to the conservation of the species through the water quality protective measures it provides.

10. The proposed 4(d) rule would not violate any Federal, state, or local laws. This action is consistent with the provisions of the Endangered Species Act and other relevant laws.

11. The Cumulative Effects that would occur within the action area under either Alternative are primarily associated with the projected human population growth and increase in developed lands. However, since the effects to each environmental parameter evaluated for both Alternative A and B do not reach the level of significance, the Cumulative Effects would also not be significant.

Documents used in the preparation of this Finding of No Significant Impact include: the final EA for the 4(d) special rule, our biological opinion, the February 2014 final Georgetown salamander listing rule (79 FR 10236), and the conservation measures found in Chapter 11.07 and Appendix A of the UDC.

Based on my review and evaluation of the enclosed EA, biological opinion, and other supporting documentation, I have determined that the proposed action is not a major Federal action that would significantly affect the quality of the human environment within the meaning of Section 102(2)(c) of the National Environmental Policy Act of 1969. Consequently, we will not prepare an environmental impact statement.

Dr. Benjamin Tuggle
Regional Director
Southwest Region

7/24/2015
Date