EXHIBIT A

Edwards Aquifer Recharge Zone Water Quality Ordinance

<u>General</u>

Section 1--Applicability

This Edwards Aquifer Recharge Zone Water Quality Ordinance (the "Ordinance") applies to all property within the corporate limits of the City and its extraterritorial jurisdiction (ETJ), to the extent allowable under State law, that is also within the recharge zone of the Edwards Aquifer, as that term is defined in Title 30, Texas Administrative Code § 213.3 and § 213.22. Whether property is within the recharge zone is determined by the most current official map of the relevant zone located in the Texas Commission on Environmental Quality office for Region 11.

Section 2--Definitions

The following words and phrases, when used in this Ordinance, shall have the meanings respectively ascribed to them in this section, except when the context otherwise requires:

"Bank" of a stream means the ordinary high water mark of a stream, not the floodplain boundaries, as determined by the appropriate authority.

"Best Management Practices (BMPs)", for this Ordinance only, has that meaning ascribed to it in Title 30, Texas Administrative Code § 213.3(5), as may be amended and as further defined herein.

"Development Engineer" means a professional engineer licensed by the State of Texas and designated to serve in the capacity of the Development Engineer for duties specified in the City Code of Ordinances and Unified Development Code.

"Geologic Assessment" means a report prepared by a geologist pursuant to Title 30, Texas Administrative Code § 213.5 and containing the additional information required by this Ordinance.

"Geologist" means a licensed professional geoscientist who has training and experience in ground water hydrology and related fields that enable that individual to make sound professional judgments regarding the identification of sensitive features. "Georgetown salamander" means a member of the species Eurycea naufragia.

"Licensed Professional Geoscientist" means a geoscientist who maintains a current license through the Texas Board of Professional Geoscientists in accordance with its requirements for professional practice.

"Occupied Site" means Garey Ranch Springs, Hog Hollow II Spring and any spring identified in one of the proposed critical habitat units proposed by the United States Fish and Wildlife Service on August 22, 2012 for the Georgetown Salamander. The locations of the Occupied Sites, including the Garey Ranch Spring site and the Hog Hollow II Spring site, are as shown on Exhibit A, attached hereto and incorporated herein.

"Recharge Zone" means that portion of the City and its ETJ that overlays the Edwards Aquifer Recharge Zone as defined in Title 30, Texas Administrative Code § 213.3, as may be amended.

"Regulated Activity" shall have that meaning ascribed to it by Title 30, Texas Administrative Code § 213.3(28), as may be amended.

"Spring" means any natural setting or location where ground water flows to the surface of the earth from underground frequently enough to support spring associated vegetation such as ferns, watercress and Texas sedge.

"Stream" means a flow of surface water sufficient to produce a defined channel or bed. A defined channel or bed is an area that demonstrates clear evidence of the passage of water.

Section 3--Geologic Assessment

(1) No person may commence any Regulated Activity within the area described in Section 1 until the Geologic Assessment has been accepted by the Development Engineer or his designee.

(2) The Geologic Assessment must contain all of that information required by Title 30, Texas Administrative Code § 213.5. Additionally, the Geologic Assessment must:

- (a) Identify all Springs and/or Streams on a site or certify that no Springs or Streams exist on the site;
- (b) Describe any Spring and/or Stream on a site, including determining the location of any Spring outlet or Stream;

- (c) For Occupied Sites identified in Section 2, delineate the No-Disturbance Zone and the Minimal-Disturbance Zone as described below.
- (d) All Red Zones, Orange Zones, and Spring Buffers, as described herein, shall be shown on all plats, Site Plan and infrastructure construction plans.

Occupied Site Protection

The purpose of Sections 4 and 5 are to establish minimum requirements for development in the corporate City limits or its ETJ that is located within the following defined zones: nodisturbance zone (Red Zone) and minimal-disturbance zone (Orange Zone).

Section 4—No-Disturbance Zone (Red Zone)

(1) A no-disturbance zone is established, hereinafter referred to as the "Red Zone" in the Stream or waterway that the Spring drains directly into and shall extend 80 meters upstream and downstream from the approximate center of the Spring outlet of an Occupied Site. The Red Zone shall be bounded by the top of the Bank and shall not extend beyond any existing physical obstructions that prevent the surface movement of Georgetown salamanders, such as roadways, buildings, retaining walls, dams, and culverts.

- (2) No Regulated Activities may 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 comply with applicable floodplain regulations

Section 5--Minimal-Disturbance Zone (Orange Zone)

(1) A minimal-disturbance zone, hereinafter referred to as the "Orange Zone," is established for the subsurface area that drains to the Spring or Springs at an Occupied Site. Except as provided below, the Orange Zone shall 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 shall 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.

- (2) No Regulated Activities may 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 is installed on the side of the Stream opposite the Occupied Site and is installed no closer than 25 feet from the Bank of the Stream;
- (c) Subject to Stream Buffer limitations, below, parks and open space development limited to trails, benches, trash cans and pet waste facilities; provided that trails shall not be located within the ordinary high water mark of a Stream and shall 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 Unified Development Code, will be allowed. No construction of said dwelling units shall be conducted within 80 meters of an Occupied Site. Within the ETJ, Title 30, Texas Administrative Code § 285 (c) (1) requires a minimum lot size of one acre per single family dwelling for properties within the Edwards Aquifer Recharge Zone if served by on-site sewage facilities. Developers are encouraged to avoid development within the Orange Zone whenever possible.

Spring Buffer and Stream Buffer Protection

The purpose of Sections 6 and 7 are to establish minimum requirements for development in the corporate City limits or its ETJ of non-Occupied Sites located within the Spring Buffers and Stream Buffers as provided herein.

Section 6—Spring Buffer

(1) A Spring Buffer is established within 50 meters of the approximate center of a Spring outlet of a non-Occupied Site in the Recharge Zone that is identified in a Geologic Assessment accepted by the Development Engineer. The Spring Buffer shall not include preexisting development or areas without the potential for containing Georgetown salamander habitat as determined by the Geologic Assessment based on site specific, hydro-geologic conditions.

(2) No Regulated Activities may be conducted within the Spring Buffer except for the following and subject to the stated restrictions:

(a) Activities permitted in the Red Zone;

- (b) Subject to Stream Buffer limitations, below, parks and open space development limited to trails, benches, trash cans and pet waste facilities; provided that trails shall not be located within the ordinary high water mark of a stream and shall be limited to trails for walking, jogging and non-motorized biking; and
- (c) Wastewater infrastructure installed roughly parallel to a stream provided that such infrastructure is installed on the side of the stream opposite the Spring and is installed no closer than 25 feet from the Bank of the Stream; provided that wastewater infrastructure shall not cross a Stream associated with a Spring within the Spring Buffer.

Section 7—Stream Buffer

(1) A Stream Buffer is established for all Streams in the Recharge Zone in non-Occupied Sites. The boundaries of the Stream Buffer are as follows:

(a) For Streams draining more than 64 acres and less than 320 acres, the boundaries of the Stream Buffer coincide with the boundaries of the FEMA 1% floodplain or a calculated 1% floodplain, whichever is smaller. In the absence of a FEMA floodplain and a calculated floodplain, the Stream Buffer under this subsection (a) shall be a minimum of 200 feet wide with at least 75 feet from the centerline of the Stream.

If a property owner only controls one side of a Stream, then the minimum buffer shall be 100 feet from the centerline of a Stream, or along the FEMA 1% floodplain or a calculated 1% floodplain, if available.

(b) For Streams draining more than 320 acres but less than 640 acres, the boundaries of the Stream Buffer coincide with the boundaries of the FEMA 1% floodplain or a calculated 1% floodplain, whichever is smaller. In the absence of a FEMA floodplain and a calculated floodplain, the Stream Buffer under this subsection (b) shall be a minimum of 300 feet wide with at least 100 feet from the centerline of the stream.

If a property owner only controls one side of a Stream, then the minimum buffer shall be 150 feet from the centerline of a Stream, or along the FEMA 1% floodplain or a calculated 1% floodplain, if available.

(c) For Streams draining 640 acres or more, the boundaries of the Stream Buffer coincide with the boundaries of the FEMA 1% floodplain or a calculated 1% floodplain, whichever is smaller. In the absence of a FEMA floodplain and a calculated floodplain, the Stream Buffer under this subsection (c) shall be a minimum of 500 feet wide with at least 200 feet from the centerline of the stream.

If a property owner only controls one side of a Stream, then the minimum buffer shall be 250 feet from the centerline of a Stream, or along the FEMA 1% floodplain or a calculated 1% floodplain, if available.

(2) No Regulated Activities may be conducted within the Stream Buffer other than those activities permitted in the Red Zone and the construction of the following improvements, subject to the stated restrictions (Regulated Activities for Stream Buffers within Occupied Sites are found in Section 4(2), above) :

- (a) Wastewater facilities, provided that wastewater utilities shall not be located below the normal high water elevation within the channel of a stream except at crossings of a stream;
- (b) Underground utilities other than wastewater facilities provided that such underground utilities may only be installed at Stream crossings, or at intervals no closer than 400 feet apart;
- (c) Parks and open space development limited to trails, benches, trash cans and pet waste facilities; provided that trails shall not be located within the ordinary high water mark of a Stream and shall be limited to trails for walking, jogging and non-motorized will be allowed within Stream Buffers.
- (d) Water quality or flood control systems, provided that measures are taken in the construction of such water quality or flood control systems to minimize the impact to the Stream Buffer;
- (e) Public projects that enhance or recharge the Edwards Aquifer, provide flood prevention, and similar capital improvements;
- (f) Remediation of altered floodplain to its natural limits;
- (g) Arterial, collector and local residential streets crossing a Stream provided that:

(i) A floodplain with a drainage area greater than 640 acres may only be crossed by arterial streets;

(ii) A floodplain with a drainage area between 320 acres and 640 acres may only be crossed by arterial and collector streets;

(iii) A floodplain with a drainage area up to 320 acres may be crossed by arterial, collector, or local residential streets; and

(iv) A street required for a secondary access or as required by the currently adopted fire code regulations is exempt from this subsection.

Water Quality Protection

Section 8—Water Quality Best Management Practices

For all Regulated Activities within the Recharge Zone, the following regulations apply:

- (a) Permanent structural water quality controls for a project shall remove eighty-five per cent (85%) of total suspended solids for the entire project and shall be certified by a licensed professional engineer.
- (b) No Regulated Activity shall 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, shall implement temporary 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 shall 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 shall have signage that clearly identifies the purpose of the permanent BMP and the party responsible for maintenance.
- (f) Maintenance plans for permanent BMPs shall be recorded in the Official Records of Williamson County.

Section 9—City Water Quality Management Plan

The City shall adopt a Water Quality Management Plan for all areas within the Recharge Zone. Such management practices will 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.

Section 10—Adaptive Management Working Group

(1) An Adaptive Management Working Group (AMWG) has been 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. The City Manager will appoint two City employees with appropriate technical expertise in the fields of planning and development and system engineering as members to the AMWG. The efforts of the AMWG will be led by WCCF staff.

(2) The AMWG duties include, but are not 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.

(3) In addition to the above duties, the AMWG is authorized to hear and make recommendations to the City Council regarding requests for variances from the terms of this Ordinance pertaining to Occupied Sites.

- (a) The AMWG shall recommend variances from the terms of this Ordinance pertaining to Occupied Sites, if the variance is not contrary to the objectives of this Ordinance and, due to special conditions, a literal enforcement of this Ordinance would result in unnecessary non-economic hardship to a property owner, so long as the spirit of this Ordinance is observed.
- (b) Additionally, the AMWG and the City shall make the following findings regarding all variance requests:

(i) The granting of the variance will not be detrimental to the preservation of the Georgetown Salamander.

(ii) The variance request is not granted as a result of the applicant's own actions.

(iii) The variance request is not granted because of economic or financial hardships incurred by the applicant.