Travis County Commissioners Court Agenda Request

Meeting Date: February 4, 2014
Prepared By: Anna Bowlin, Division Director of Development Services and Long Range Planning
Phone #: (512) 854-7561
Division Director/Manager: Steven M. Manilla, P.E., County Executive- TNR

Department Head: Steven M. Manilla, P.E., County Executive-TNR
Sponsoring Court Member: County Judge Samuel T. Biscoe

AGENDA LANGUAGE: Consider and take appropriate action on the proposed Watershed Protection Amendments to Title 30.

BACKGROUND/SUMMARY OF REQUEST:

On October 17, 2013 the Austin City Council passed a comprehensive amendment to the Watershed Protection Ordinance that is in effect inside the city limits.The City of Austin and Travis County TNR are requesting similar watershed protection amendments to Title 30, combined Travis County and City of Austin code in the ETJ. The purpose of the watershed protection amendments is to improve creek and floodplain protection, prevent unsustainable public expense on drainage systems, simplify development regulations where possible, and minimize the impact of any changes on an individual and collective abilities to develop land.

The Summary of Proposed Regulations:

Creek Protection:
One major cornerstone of the new amendment is the extension of the Critical Water Quality Zone (CWQZ) buffer to headwaters streams with 64 acres of drainage in the city's ETJ. This change will be most significant in the eastern suburban watersheds, which currently only protects streams up to 320 acres of drainage. In addition, a number of western watersheds currently only protect streams up to 128 acres of drainage. Another fundamental part of the amendment is the establishment of the erosion hazard zone and significant restrictions on development within this setback. Additional provisions ensure that improvements within the CWQZ, such as parks and trails, minimize disturbance to existing vegetation and drainage patterns.

Floodplain Protection:
Another major revision of the amendment is to adjust the approach to protecting and enabling the recovery of degraded waterways by strengthening rules for floodplain

design and modification. The proposed development will need to plan for fully vegetated natural floodplains rather than altered mowed floodplains. The floodplain modification will be prohibited within the CWQZ, except for public health and safety, significant environmental benefit, and development already permitted (e.g., road crossings). In addition to these exceptions, floodplain modification will be allowed outside of the CWQZ if a functional assessment of floodplain health determines the area to be in poor or fair condition. The modification must be offset through on-site restoration or off-site mitigation where restoration is infeasible.

Improved Stormwater Controls:
To improve structural stormwater controls, the amendment will revise the current impervious cover threshold for water quality controls from 20 percent of net site area to 8,000 square feet, require controls to be accessible for maintenance and inspection, require maintenance plans, and third-party inspections for subsurface controls. In addition, the amendment will remove the requirement for isolating the water quality volume from larger flood flows.

Mitigation Options:
The amendment will improve the existing limited transfers of development rights sections within the code to allow for increased flexibility and protection of additional environmental resources (e.g., floodplains).

Simplifying Regulations and Maintaining Opportunity:
One of the purposes of the amendments is to simplify development regulations where possible and minimize the impact of any changes on individual and collective abilities to develop land. In order to offset impacts from the new core protections of this amendment, a number of trade-off provisions are proposed for the eastern suburban watersheds, including:

- Using gross site area instead of net site area to calculate impervious cover.
- Eliminating the Water Quality Transition Zone.
- Allowing "buffer averaging" to reduce the width of buffers by up to 1/2 of the overall amount of area protected remains the same.
- Allowing additional uses within the upper half of the CWQZ, including green stormwater controls and utilities.

In addition to these offsets, a large number of clarifications and corrections of existing code and policy interpretations are proposed as well.

STAFF RECOMMENDATIONS:

The City of Austin has conducted an extensive stakeholder process to discuss this proposed code amendment. Travis County, along with a diverse group of over 200 stakeholders have been a part of the 2 year stakeholder process. The City of Austin has worked closely with Travis County during the development of the proposed ordinance to align with the County's water quality regulations whenever possible. The proposed Title 30 code amendments must be approved by both Travis County and the City of Austin prior to being included. TNR recommends this item.

ISSUES AND OPPORTUNITIES:

On January 21, 2014, during the public hearing on this proposed rule adoption, the Court requested an analysis of how the proposed changes affect housing affordability. Attached is a thorough analysis of that issue, recently prepared by the City of Austin's Neighborhood Housing and Community Development Division.

The analysis shows that some of the developable land would not be developed due to stream buffers. If the code amendments are adopted by the City of Austin, estimates show 11% of the available land will be affected. Additionally, the analysis shows that some development projects, particularly larger subdivision developments, could gain developable land since the code changes for eastern watersheds eliminate the "transition zone", allow for buffer zone averaging, allows for calculation of impervious cover based upon "gross site area" (instead of net site area), and the code includes an expanded list of acceptable land uses within stream buffers. The analysis also makes the point that up front development costs might be higher in some instances, but that long-term homeowner and public costs should be less costly, since development will be restricted in areas where erosion of stream banks is a known hazard. Notice of this public hearing was placed in the newspaper and on the Transportation and Natural Resources website.

FISCAL IMPACT AND SOURCE OF FUNDING:

No fiscal impact to Travis County.

ATTACHMENTS/EXHIBITS:

Proposed Watershed Protection Amendments to Title 30
Takings Impact Analysis
Order
Affordability Impact Statement

REQUIRED AUTHORIZATIONS:

Cynthia McDonald	Financial Manager	TNR	(512) 854-4239
Steven M. Manilla	County Executive	TNR	(512) 854-9429

Thomas Nuckols	County District Attorney Division Director	County Attorneys' Office	(512) 854-9415

CC:

Julie Joe	Attorney VII	County Attorneys' Office	(512) 854-9415
Tom Weber	Enviromental Program Manager	TNR	(512) 854-4629
Jon White	Natural Resources Enviromental Quality Division Director	TNR	(512) 854-7212
Matt Hollon	City of Austin	City ot Austin	(512) 974-2212

SM:AB:ab
1101 - Development Services Long Range Planning - Title 30 Code Amendment

ORDER OF THE TRAVIS COUNTY COMMISSIONERS COURT ADOPTING WATER QUALITY AMENDMENTS TO TITLE 30, TRAVIS COUNTY/CITY OF AUSTIN SUBDIVISION REGULATIONS

WHEREAS, Subchapter A, Chapter 232 of the Local Government Code authorizes Travis County to adopt reasonable specifications for drainage in a subdivision;

WHEREAS, Subchapter E, Chapter 232 of the Local Government Code authorizes Travis County to adopt subdivision regulations to promote health, safety, welfare, and orderly development;

WHEREAS, Chapter 573 of the Local Government Code authorizes Travis County to take any necessary or proper action to comply with the requirements of the storm water permitting program under the national pollutant discharge elimination system (Section 402, Federal Water Pollution Control Act (33 U.S.C.A. Section 1342));

WHEREAS, Subchapter I, Chapter 16 of the Water Code authorizes Travis County to adopt comprehensive floodplain management rules that it determines are necessary and appropriate; and

WHEREAS, Travis County's Municipal Separate Storm Sewer System ("MS4") permit sets out a broad mandate that requires Travis County to implement rules that:

(1) Cover its entire jurisdiction;
(2) Control construction sites disturbing more than one acre of land;
(3) Ensure developments adequately manage runoff after being built;
(4) Eliminate pollutant discharges into our storm sewers from industrial and commercial enterprises;
(5) Reduce pollutants in runoff from road construction; and
(6) Set out enforcement policies that will deter and correct violations;

WHEREAS, Travis County and the City of Austin, in fulfillment of the requirements of Chapter 242, Local Government Code, relating to the joint regulation of subdivisions in the city's extraterritorial jurisdiction (ETJ), adopted into their respective codes Title 30, Austin/Travis County Subdivision Regulations relating to plats, subdivision construction plans, and subdivision of land in the ETJ, which took effect on December 22, 2003; and

WHEREAS, the City of Austin has notified Travis County that the Austin City Council has adopted an ordinance to include certain water quality amendment s to Title 30, Austin/Travis County Subdivision Regulations;

WHEREAS, newspaper notice was published of proposed amendments to the Travis County Code, and although the regulations are exempt, the Commissioners Court prepared a takings impact assessment and published newspaper notice of it pursuant to Chapter 2007 of the Government Code;

WHEREAS, Travis County now desires to amend Title 30, Austin/Travis County Subdivision Regulations relating to water quality protection by adopting the attached amendments; and

NOW, THEREFORE:

1. The Commissioners Court finds that the adoption of the amendments to Title 30, Travis County/City of Austin Subdivision Regulations Code, that are attached hereto as Exhibit 1 (collectively, the "Amendments"):

   (A) will promote the health, safety, morals, and general welfare of the County and the safe, orderly, and healthful development of the unincorporated area of the County,

   (B) are necessary for planning and appropriate to protect public health and safety; and

   (C) are necessary and proper action to comply with the requirements of the storm water permitting program under the national pollutant discharge elimination system (Section 402, Federal Water Pollution Control Act (33 U.S.C.A. Section 1342)).

2. In continued fulfillment of the requirements of Chapter 242, Local Government Code, the Commissioners Court hereby adopts the Amendments as set forth in Exhibit 1 to be effectively immediately pursuant to Section 2.004 of the Travis County Code.

3. The Commissioners Court intends for the Amendments to be construed liberally to achieve their purpose.

4. If any portion of the Amendments or its application to any person or circumstance is held invalid or unconstitutional for any reason by a court of competent jurisdiction, that decision shall not affect the validity or constitutionality of the remaining portion of the Amendments. The Commissioners Court declares that it would have passed the Amendments, and adopted each section, clause, or phrase of the Amendments, independent of the elimination from the Amendments of any portion that may be declared invalid or unconstitutional. The provisions of the Amendments are declared to be severable.

Date of Order: _____

_____
Samuel T. Biscoe
County Judge

_____
Ron Davis
County Commissioner, Precinct 1

_____
Bruce Todd
County Commissioner, Precinct 2

_____
Gerald Daugherty
County Commissioner, Precinct 3

_____
Margaret Gómez
County Commissioner, Precinct 4

TAKINGS IMPACT ASSESSMENT:
WATER QUALITY PROTECTION AMENDMENTS TO
TITLE 30—TRAVIS COUNTY/CITY OF AUSTIN SUBDIVISION REGULATIONS

Overview

Pursuant to a legislative mandate set forth in Chapter 232 of the Local Government Code, Travis County (the "County") and the City of Austin (the "City") have adopted Title 30, Travis County/City of Austin Subdivision Regulations, a consistent and consolidated set of regulations that govern the development of subdivisions in the extraterritorial jurisdiction ("ETJ") of the City. County and City staff have conferred with both external and internal stakeholders from August 2011 to April 2012 to discuss potential changes to Title 30 to improve creek and floodplain protection; prevent unsustainable public expense on drainage systems; simplify development regulations where possible; and minimize the impact of any changes on the ability of individual and collective property owners to develop land. Based on the input received in stakeholder meetings, amendment revisions were drafted and presented to the stakeholder community and to citizen boards and commissions for review in 2013. The Austin City Council adopted the amendments on October 17, 2013 as part of City of Austin Ordinance No. 20131017-046. If the Travis County Commissioners Court adopts these amendments, they will take effect on the date set forth in the Court's order adopting the amendments.

Portions of the City of Austin ETJ that are within Travis County lie along the boundary of two ecological regions: the Edwards Plateau ("Hill Country") to the west and the Blackland Prairie to the east. The distinctive terrains and soils of these two regions pose unique challenges for the protection of creeks and floodplains. The Edwards Plateau features steep slopes, rugged canyons, and the caves and springs of the Edwards Aquifer. In addition, these western watersheds drain to the City and the County's principal sources of drinking water. In contrast, the Blackland Prairie features broad, alluvial floodplains as well as erosive clay soils and creek banks. Given these fundamental physical differences, the proposed amendments to watershed regulations for the eastern and western watersheds have been tailored to best fit the unique conditions of each ecological region.

Summary of Proposed Regulations

The purpose of the watershed protection amendments is to improve creek and floodplain protection, prevent unsustainable public expense on drainage systems, simplify development regulations where possible, and minimize the impact of any changes on individual and collective abilities to develop land.

- **Creek Protection**

One major cornerstone of the new amendment is the extension of the critical water quality zone buffer to headwaters streams with 64 acres of drainage in the City's ETJ. This change will be most significant in the eastern Suburban watersheds, which currently only protects streams up to 320 acres of drainage. In addition, a number of western watersheds currently only protect streams up to 128 acres of drainage. Another fundamental part of the amendment is the establishment of the erosion hazard zone and the prohibition on development within this setback. Additional provisions ensure that improvements within the critical water quality zone, such as parks and trails, minimize disturbance to existing vegetation and drainage patterns.

- **Floodplain Protection**

  Another major revision of the amendment is to adjust the approach to protecting and enabling the recovery of degraded waterways by strengthening rules for floodplain design and modification. Proposed development will need to plan for fully vegetated, natural floodplains rather than altered, mowed floodplains. Floodplain modification will be prohibited within the critical water quality zone, except for public health and safety, significant environmental benefit, and development already permitted (e.g., road crossings). In addition to these exceptions, floodplain modification will be allowed outside of the critical water quality zone if a functional assessment of floodplain health determines the area to be in poor or fair condition. Modification must be offset through on-site restoration or off-site mitigation where restoration is infeasible.

- **Improved Stormwater Controls**

  To improve structural stormwater controls, the amendment will revise the current threshold for water quality controls from 20 percent of net site area to 8,000 square feet, require controls to be accessible for maintenance and inspection, and require maintenance plans and third-party inspections for subsurface controls. In addition, the amendment will remove the requirement for isolating the water quality volume from larger flood flows.

- **Mitigation Options**

  The amendment will improve the existing, limited transfers of development rights sections within the Code to allow for increased flexibility and protection of additional environmental resources (e.g., floodplains).

- **Simplifying Regulations and Maintaining Opportunity**

  One of the purposes of the amendments is to simplify development regulations where possible and minimize the impact of any changes on individual and collective abilities to develop land. In order to offset impacts

from the new core protections of this amendment, a number of trade-off provisions are proposed for the eastern Suburban watersheds, including:

- Using gross site area (instead of net site area) to calculate impervious cover
- Eliminating the Water Quality Transition Zone
- Allowing "buffer averaging" to reduce the width of buffers by up to one-half if the overall amount of area protected remains the same
- Allowing additional uses within the upper half of the critical water quality zone, including green stormwater controls and utilities

In addition to these offsets, a large number of clarifications and corrections of existing code and policy interpretations are proposed as well.

DETAILED DISCUSSION OF AMENDMENTS

TAKINGS IMPACT ASSESSMENT

This takings impact assessment is prepared using the series of questions in the Private Real Property Rights Preservation Act Guidelines (the "Guidelines") promulgated by the Attorney General's Office under Chapter 2007, GOV'T CODE ANN. (the "Act"). The proposed action is Travis County's adoption of amendments to Title 30, Travis County/City of Austin Subdivision Regulations to manage, protect, and preserve the quality of water in those portions of the City of Austin's extraterritorial jurisdiction ("ETJ") that are located within the boundaries of Travis County and to align the water quality provisions of Title 30 with the water quality provisions that the County adopted on August 14, 2012 to Chapter 82 of the Travis County Code.

Guidelines Question 1: Is Travis County a governmental entity covered by the Act?

Yes.

Guidelines Question 2: Is the proposed action covered by the Act?

All of the amendments are exempt from the Act. The amendments are exempt under the following provisions of the Guidelines or the Act for the reasons indicated.

a. §2.18 of the Guidelines.

The procedural amendments and many of the substantive amendments impose no new burden on private real property. To the extent the amendments impose no new burdens, they will not result in a taking. Therefore, to the extent no new

burden is imposed, the amendments are not subject to the requirement in §2007.043 to perform a takings impact assessment.

b. §2007.003(b)(4) of the Act.

The substantive and procedural amendments are exempt under §2007.003(b)(4) because they are actions reasonably taken to fulfill obligations mandated by state and federal law. First, the U.S. Environmental Protection Agency ("EPA") and the Texas Commission on Environmental Quality ("TCEQ"), through the Texas Pollutant Discharge Elimination System ("TPDES") program, have mandated that Travis County, as an operator of a small municipal separate storm sewer system ("MS4"), regulate development that drains storm water into the County's MS4. In addition to mandating that Travis County require developers to implement construction phase and post-construction measures, EPA and TCEQ mandate that the County itself ensure ongoing maintenance of the MS4.

The County has authority under Section 573.002 of the Local Government Code to take any necessary or proper action to comply with the requirements of the stormwater permitting program under the national pollutant discharge elimination system (Section 402, Federal Water Pollution Control Act (33 U.S.C. Section 1342)), including:

(1) developing and implementing controls to reduce the discharge of pollutants from any conveyance or system of conveyance owned or operated by the county that is designed for collecting or conveying stormwater;

(2) developing, implementing, and enforcing stormwater management guidelines, design criteria, or rules to reduce the discharge of pollutants into any conveyance or system of conveyance owned or operated by the county that is designed for collecting or conveying stormwater.

Subchapter J of Chapter 16 of the Water Code requires the County to regulate development to mitigate the effects of development on flooding and thus ensure that flood insurance is available to all residents of the County. Most of the substantive measures imposed by the amendments are recognized not only as effective, practical, and ordinary measures to control the discharge of pollutants in urban storm water runoff, but are also recognized by the Federal Emergency Management Agency ("FEMA") as effective floodplain management techniques.

c. §2007.003(b)(5) of the Act.

The substantive and procedural amendments are exempt under §2007.003(b)(5) because they simply modify regulations that provide a unilateral expectation that does not rise to the level of a recognized interest in real property.

d. §2007.003(b)(11)(A) of the Act.

The substantive amendments dealing with development within stream buffers are partially exempt under §2007.003(b)(11)(A) because they regulate construction in legally designated floodplains.

e. §2007.003(b)(13) of the Act.

The substantive amendments are exempt under §2007.003(b)(13) because they respond to real and substantial threats to public health and safety, significantly advance that purpose, and do not impose a greater burden than is necessary. Travis County is amending Title 30, Travis County/City of Austin Subdivision Regulations to implement, in those portions of the City of Austin's extraterritorial jurisdiction that are located within Travis County, requirements of the federal Clean Water Act and Chapter 26, Texas Water Code, which require the reduction and elimination of discharge of pollutants. Many pollutants discharged from urban area sources pose potentially negative impacts on human health in reservoirs and streams used for swimming and wading. Some pollutants can be biomagnified and concentrated in the food chain and ultimately consumed by persons who fish in Travis County waters. Urban storm water in Travis County ultimately discharges into Lake Travis, Lake Austin, and the Colorado River downstream of Lady Bird Lake. From each of these water bodies, water is diverted for public drinking water use. The proposed amendments will safeguard the public health and safety by controlling and managing storm water discharges from the Travis County MS4.

Guidelines Questions 3 and 5: Does the proposed action result in a burden on private real property as that term is defined in the Act? How does it burden private real property?

The procedural provisions in the amendments do not impose any burdens on private real property. They specify a particular sequence in which a developer must obtain various approvals that are already required as part of the development process. Rather than restricting the land itself in any way, they simply provide greater order and structure to the process of receiving these approvals.

A. **"Covered Governmental Actions" Determined to Not Place a Burden on Property**

The following actions are provisions that will differ based on watershed classification in order to match the unique geology of the ecological region:

Blackland Prairie
As mentioned above, one of the core objectives of the amendments is to provide better creek protection in the eastern watersheds of the Blackland Prairie. Although the size of creek protected (64 acres of drainage) was made uniform within the City's corporate limits and in the City's ETJ, the geometry of the buffer (referred to as the Critical Water Quality Zone) was customized for the eastern watersheds to match the erosive nature of these creeks and soils. To help offset the impact of this change, a number of provisions were introduced to minimize the individual and collective ability to develop land. These provisions are designed to provide more flexibility than existing regulations, and thus would not impose a burden on private real property.

- **Buffer Averaging**
  This new option for Suburban watersheds allows sites to adjust the width of the buffer to achieve the same overall footprint of buffer. This adds flexibility to buffer design to work around site-specific geographic and cultural features.

- **Water Quality Transition Zone**
  The amendment proposes to eliminate the Water Quality Transition Zone (a secondary creek setback) in Suburban Watersheds. This will potentially enable higher impervious coverage on the site nearer to the creek in areas that currently require this secondary setback.

- **Gross Site Area**
  Current rules calculate impervious cover using a "Net Site Area" formula which is complex and complicates development on properties with stream buffers. This change reduces the complexity of impervious cover calculations and increases opportunities to develop properties with buffers.

- **Transfers of Development Rights**
  The amendment expands the existing options for transfers of development rights in Suburban watersheds to protect the unique features of the Blackland Prairie, including broad, alluvial floodplains and remnant prairies.
- **Parallel Utility Lines**
  The amendment will allow utility lines under certain conditions in the upper half of the Critical Water Quality Zone in Urban and Suburban watersheds.

This provides design flexibility and reduces the cost and environmental impact of deep wastewater trenching.

- **Green Stormwater Controls**
  The amendment will allow green water quality controls under certain conditions in the upper half of the Critical Water Quality Zone in Urban and Suburban watersheds. This provides design flexibility and allows more effective placement of water quality controls to help with baseflow enhancement.

Edwards Plateau

Several new provisions of the amendment outline separate requirements for the western watersheds to acknowledge the importance of protecting the County's water supply and the increased sensitivity of aquatic resources such as the Edwards Aquifer to pollution from urban runoff. While these additional measures are designed to provide increased environmental protection, several of these provisions also offer additional options and flexibility to development. The remaining provisions are consistent with current County requirements and thus do not impose an additional burden to private real property.

- **Redevelopment Exception**
  The Barton Springs Zone (BSZ) Redevelopment Exception was originally added as an option for projects in 2007 to achieve environmental protection while expanding redevelopment opportunity. It allows a redevelopment project to retain all of its existing impervious cover in exchange for providing an on-site water quality control and off-site land mitigation. The exception is being expanded under the amendment to allow more properties to potentially utilize this option. The exception is also being extended to the rest of the water supply watersheds.

- **Athletic Fields**
  Due to concerns with compaction and fertilizer use, athletic fields will not be allowed within the primary stream buffer in the Drinking Water Protection Zone. However, these western watersheds have a two-tiered buffer system, which allows space for athletic fields to set back into the secondary stream buffer further from the creek.

- **Water Quality Transition Zone**
  The language for water quality transition zone requirements differs slightly for the various watersheds. This language was aligned as much as possible for consistency. In addition, provisions were added to ensure that

permitted development within the water quality transition zone can also construct water quality controls within the buffer.

- **Natural Area Buffer**
  The amendment codifies the current policy that the required natural area buffer in Water Supply Rural areas is located within the uplands and must receive overland drainage from developed areas (e.g., impervious cover) of the site. A clarification will be added to allow more flexibility for placement of the buffer if a water quality control is provided.

- **Porous Pavement**
  The amendment codifies the current policy that porous pavement for pedestrian walkways does not count as impervious if not located over the Edwards Aquifer recharge zone. Since this credit is not allowed under current code over the recharge zone, there is no change in potential impact.

- **Street Crossings (Imagine Austin)**
  Current code limits the frequency of stream crossings. This provision may conflict with the Imagine Austin Comprehensive Plan objective to facilitate connectivity and associated social and environmental benefits. The amendment adds an option to allow additional street crossings within identified Imagine Austin Comprehensive Plan centers and corridors. The crossings must maintain the water quality and quantity of recharge in recharge and contributing areas of the Edwards Aquifer. Administrative variances are currently not allowed for additional street crossings in the Barton Springs Zone. This remains the case for crossings within Imagine Austin centers and corridors that fall within the Barton Springs Zone.

B. Actions in the Proposed Regulations Determined to Be "Covered Governmental Actions" and to Place a "Burden" on "Private Real Property"

Two of the Covered Governmental Actions in the amendment were determined to potentially place a burden on private real property: the new geometry for the buffers in the eastern watersheds and the new 8,000 square foot threshold for water quality controls outside of the Barton Springs Zone.

In Suburban watersheds, the amendment will establish buffer widths of 100, 200, and 300 feet for "minor", "intermediate," and "major" waterways respectively to protect water quality, preserve the Erosion Hazard Zone, and provide a uniform system.

The new amendment will require water quality controls for projects with over 8,000 square feet of impervious cover. This requirement is consistent with TCEQ

Edwards Aquifer Rules, EPA requirements for federal projects, and the existing City of Austin Environmental Criteria Manual requirement for Urban watersheds. The Barton Springs Zone will continue to require water quality controls for all development. Exceptions (no control required) are proposed for small roadway projects in the Barton Springs Zone.

Most of these requirements already exist in LCRA, those parts of Travis County that are outside the City of Austin ETJ, TCEQ, and other regulations, or are recognized as technical guidelines established for this specific geographical area and local hydrologic conditions. In particular, LCRA, the County (for those areas that are outside the City of Austin ETJ), and TCEQ already require construction and post-construction water quality controls. A material new burden is created to the extent that certain post-construction water quality control requirements have not previously applied in the City of Austin ETJ. However, the burden is not a severe one because requirements for permanent water quality controls are common in much of Travis County, required in general by TCEQ requirements, and have not impaired the economic viability of development of private real property.

With regard to waterway setback requirements, Travis County's existing requirements will expand to apply to subdivision development within the City of Austin ETJ, proposing expanded waterway setback requirements for the eastern watersheds of Travis County. Depending on site-specific facts for a given property, these setback requirements may result in either more land within a setback or less. Travis County's setback requirements impose a new burden, but it is minimal. The stream setbacks are based on and largely comprise the 100 year floodplain. Travis County's existing regulations already require that this floodplain be dedicated as a drainage easement, which severely restricts the amount of development that can occur there. Since the setbacks consist largely of floodplain, the new burdens imposed by the stream buffers do not extend to a very large area. Again, the burden is not a severe one because waterway buffers are common in much of Travis County and have not impaired the economic viability of development of private real property.

<u>Guidelines Questions 4 and 6: What is the specific purpose of the proposed action? How does it benefit society?</u>

One purpose of these proposed amendments is to implement a way to comply with the Travis County MS4 permit issued by the TCEQ. The permit specifies that Travis County must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to the MS4 from construction projects and to address storm water runoff from new development and re-development. The program must include the development and implementation of, at a minimum, an ordinance or regulatory mechanism to require erosion and sediment controls and controls on post-construction runoff. Additionally, the permit requires an

ordinance or other regulatory mechanism be utilized to prohibit and eliminate illicit discharges.

Additionally, the purpose of the proposed action is to amend Travis County's development regulations regarding the City of Austin ETJ to protect surface and ground water from the effects of development, to mitigate the effects of development on flooding, and to make Travis County's process for review and approval of subdivisions more effective and efficient. Also, the purpose of the proposed amendments is to provide the regulated community and the public a consolidated set of environmental quality requirements that apply to applications for Travis County development permits, preliminary plans, plats, and construction plans. The proposed amendments include requirements for the processing of the environmental review of applications as well as substantive, minimum environmental technical standards and guidelines that can be approved during the application process. The proposed amendments include requirements that will control, reduce, and eliminate the discharge of pollutants into the Travis County storm sewer system and water in the State through the proper management of storm water and drainage while achieving optimal management of floodplains to prevent loss of property and human life. In addition, the proposed amendments set forth prohibitions and standards that will eliminate the discharge of unauthorized waste or illicit discharges into the Travis County storm sewer system and water in the State.

a. Substantive Amendments

The substantive amendments impose storm water control and environmental protection requirements applicable to the construction and post-construction phases of development. The purpose of these amendments is to protect water quality from polluted runoff, to reduce pollutant discharges from development to the maximum extent practicable, and to mitigate flooding and environmental damage that can result from urban development.

1. Water Quality Measures for Construction Activities.

It is clear that storm water runoff from construction sites can negatively affect water quality in receiving water bodies. Moreover, the resulting sedimentation can inhibit the ability of those streams to convey storm water, resulting in increased flooding. Enabling County staff to enforce water quality requirements will substantially reduce the likelihood of future occurrences of storm water pollution from construction sites.

2. Setbacks.

The amendments would expand existing setback requirements to the City of Austin ETJ and revisions to waterway setbacks in eastern watersheds of Travis County, potentially limiting development around streams and environmentally

valuable features. Creating areas where storm water flows across undisturbed natural ground before entering and environmentally valuable features allows the storm water to be slowed and filtered, reduces the peak discharge flows, and prevents pollutants from contaminating these features. Thus, setbacks are a commonly used measure for protecting water quality and the environment. Moreover, FEMA recognizes setbacks as a measure that mitigates flooding in streams.

b. Procedural Amendments.

The amendments make certain changes to how Travis County processes and reviews applications for development approvals. The County has limited staff resources to perform that important function. The purpose of that function is to protect the general citizenry, other land owners, and the purchasers of subdivided land from the negative effects of poorly designed or constructed subdivisions. In recent years, development issues have become more complex. Both citizens of the County and state and federal agencies are placing greater demands on the County for a more effective, efficient, and thorough development review process. The County's processes need to be updated to address these issues. The procedural amendments require that an applicant submit environmental documentation to Travis County with a preliminary plan, final plat, construction plan, or development permit application.

Guidelines Question 7: Will the proposed action constitute a taking?

Even if the amendments are not exempt, they do not constitute a taking. Adoption of the amendments does not, in and of itself, eliminate all economic uses of any private real property. Whether application of the amendments to an individual development has that result can be determined only when the regulations are applied to the land as part of the development review process. However, it is highly unlikely that they will result in a taking. Clearly, the amendments are not a *per se* taking or denial of a fundamental attribute of ownership. First, the amendments do not involve any sort of physical invasion of or limitation on title to private real property. Current County, TCEQ, LCRA, the City of Austin, and other municipal regulations basically already require land owners to construct storm water control facilities for which land owners usually dedicate drainage easements. Thus, any new burden created by the amendments will be minimal. If such a dedication is required for a development, it will be roughly proportional to the impact of that development because the structure will only be required to have capacity to accommodate drainage for which that development is legally responsible.

Nor are the amendments a taking because they do not eliminate all economic uses of private real property or otherwise interfere with reasonable investment-backed expectations to the degree to be a taking. As noted above, the more significant material new burdens imposed are an expansion of current City of

Austin requirements related to environmental feature setbacks, cut and fill restrictions, and any part of the waterway setback that extends outside the 100 year floodplain. When analyzing the extent to which a regulation affects the economic viability of development of a given tract of land, one looks to the impact of the regulation on the entire tract. For large tracts of land, these requirements would restrict development on a small percentage of the tract. Moreover, the cut and fill restrictions and setbacks could actually add value to a tract because, through proper design, they can be incorporated into the development as aesthetic amenities. Moreover, in areas of Travis County affected by the amendments, projects have been and are being developed that must comply with city regulations that may be as strict or stricter than the requirements in the County's amendments. This indicates that the County's amendments will not have significant economic impacts. For a small tract of land having many slopes, environmental features, or streams, there is a greater possibility that these restrictions could have an economic impact. However, for some tracts of land affected by the setbacks, the amendments identify exceptions that may be approved so that the economic impact could be mitigated.

Though the amendments restrict property rights that would otherwise exist in their absence in that they obviously restrict certain development activities in certain areas, it cannot be said that the amendments reduce the fair market value of private real property by 25% or more. Whether the amendments would have that result can be determined only through the development review process where the restrictions are applied to an individual tract and the development proposed there. If there is an economic impact from the amendments, a variance is available to mitigate that impact.

Guidelines Question 8: Are there reasonable alternatives to the proposed action that would accomplish its purpose?

An alternative to the amendments would be to not adopt the proposed amendments. However, this alternative would put the County at risk of violating federal and state mandates and the clear responsibilities of a MS4 as stated in the MS4 permit and would result in an inadequate level of water quality and flood protection. The standards contained in the amendments reflect a balancing of, on the one hand, the interests of owners of private real property who want to develop their land and, on the other hand, the public and other land owners whose interests could be negatively affected by that development.

EXHIBIT 1

SECTION 1. Section 30-1-132 (*Easements and Alleys*), Subsection (A) is amended to read as follows:

(A) Easements for public utilities and drainage ways shall be retained in all subdivisions in the widths and locations determined necessary by the single office. All easements shall be dedicated to public use for the named purpose and shall be aligned to minimize construction and future maintenance costs [~~cost~~].

SECTION 2. Section 30-1-291 (*Application for Adjustment*) is amended to read as follows:

§ 30-1-291 APPLICATION FOR ADJUSTMENT.

(A) An application for an adjustment under Chapter 30-5, Subchapter A (Water Quality) [~~, Article[12] (Save Our Springs Initiative)~~] may be considered only in connection with the review of:

(1) a site plan;

(2) a subdivision; or

(3) other specific development project or proposal.

(B) An applicant may file an application for an adjustment with the director.

(C) An application for an adjustment must be on a form prescribed by the director and must include:

(1) the names and addresses of the applicant and the owner;

(2) the address and legal description of the property;

(3) proof that the applicant is either the record owner or the record owner's agent;

(4) identification of the section of Chapter 30-5, Subchapter A (*Water Quality*) [~~, Article 12 (Save Our Springs Initiative~~),] that, as applied to the development project or proposal, the applicant claims violates the United States Constitution, the Texas Constitution, or federal or state statute, and the provisions violated;

(5) a statement of the factual basis for applicant's claims;

(6) a legal brief supporting applicant's claims; and

(7) a description of the adjustment requested, and an explanation of how the adjustment is the minimum required to comply with the conflicting law and provides maximum protection of water quality.

SECTION 3. Section 30-1-292 (*Consideration of Application for Adjustment*) is amended to read as follows:

§ 30-1-292 CONSIDERATION OF APPLICATION FOR ADJUSTMENT.

This section prescribes the order of process for an application for adjustment.

(1) The city law department shall review an application for adjustment and advise the City Manager.

(2) The City Manager shall present the application and the City Manager's recommendation to the Council.

(3) The Council shall determine whether application of Chapter 30-5, Subchapter A (*Water Quality*) [~~, Article 12 (*Save Our Springs Initiative*)~~] to the applicant's development project or proposal violates the United States Constitution, the Texas Constitution, or federal or state statute. An affirmative determination requires a three-quarters vote of the City Council. If the Council does not make an affirmative determination, the application is denied.

(4) This subsection applies if the Council makes an affirmative determination under Subsection (3).

(a) The Watershed Protection [~~and Development Review~~] Department shall review the application and advise the City Manager.

(b) The City Manager shall present the application and the City Manager's recommendation to the Council at a public hearing.

(c) After a public hearing, the City Council shall:

(i) determine the minimum adjustment required to comply with the conflicting law and provide maximum protection of water quality; and

(ii) grant the adjustment.

SECTION 4. Section 30-2-132 (*Easements and Alleys*), Subsection (A) is amended to read as follows:

(A) Easements for public utilities and drainage ways shall be retained in all subdivisions in the widths and locations determined necessary by the single office.

All easements shall be dedicated to public use for the named purpose and shall be aligned to minimize construction and future maintenance costs [~~cost~~].

SECTION 5. Chapter 30-4 (*Drainage*) is repealed and replaced with a new Chapter 30-4 to read as in the attached and incorporated **Attachment 1**.

SECTION 6. Section 30-5-1 (*Definitions*) is amended to read as follows:

§ 30-5-1 DEFINITIONS.

In this subchapter:

(1) BARTON SPRINGS means the springs that comprise the Barton Springs complex associated with Barton Springs Pool, and includes Upper Barton, Old Mill, Eliza, and Parthenia springs

(2) BLUFF means [~~is limited to a bluff with~~] a vertical change in elevation of more than 40 feet and an average gradient greater than 400percent.

(3) [~~(2)~~] CANYON RIMROCK means [~~is limited to a rimrock with~~] a rock substrate that:

(a) has a gradient that exceeds 60 percent for a vertical distance of at least four feet; and

(b) is exposed for at least 50 feet horizontally along the rim of the canyon.

(4) [~~(3)~~] COMMERCIAL DEVELOPMENT means all development other than open space and residential development.

(5) CLUSTER HOUSING means a residential housing development that maximizes common open space by grouping housing units to minimize individual yards and has a maximum lot area of fifteen thousand (15,000) square feet for detached residential development.

[~~(4) CREST OF BLUFF is limited to a crest of a bluff that is described in Subsection (1). A crest coincides with a line along the top of a bluff beyond which the average slope has a gradient of not more than 50 percent for a distance of at least 40 feet.~~]

(6)[~~(5)~~] CRITICAL ENVIRONMENTAL FEATURES means [~~are~~] features that are of critical importance to the protection of environmental resources, and includes [~~include~~] bluffs, canyon rimrocks, caves, faults and fractures, seeps, sinkholes, springs, and wetlands.

(7) DIRECTOR, when used without a qualifier, means the director of the Planning and Development Review Department, or the director's designee.

(8) EROSION HAZARD ZONE means an area where future stream channel erosion is predicted to result in damage to or loss of property, buildings, infrastructure, utilities, or other valued resources.

~~(6) IMPERVIOUS COVER means roads, parking areas, buildings, swimming pools, rooftop landscapes and other impermeable construction covering the natural land surface.~~]

(9) [~~(7)~~] FAULTS AND FRACTURES means [~~is limited to~~] significant fissures or cracks in rock that may permit infiltration of surface water to underground cavities or channels.

(10) IMPERVIOUS COVER means the total area of any surface that prevents the infiltration of water into the ground, such as roads, parking areas, concrete, and buildings.

(11) MULTI-USE TRAIL means a facility designated for the [~~shared~~] use of pedestrians, bicycles, and/or other non-motorized users and associated bridges.

(12) OPEN SPACE means a public or private park, multi-use trail, golf cart path, the portions of a golf course left in a natural state, and an area intended for outdoor activities which does not significantly alter the existing natural vegetation, drainage patterns, or increase erosion. Open space does not include parking lots.

(13)([~~8~~)] OWNER includes a lessee.

(14)[(~~9~~)] POINT RECHARGE FEATURE means a cave, sinkhole, fault, joint, or other natural feature that lies over the Edwards Aquifer recharge zone and that may transmit a significant amount of surface water into the subsurface strata.

(15)[(~~10~~)] WATER QUALITY CONTROL means a structure, system, or feature that provides water quality benefits by treating stormwater run-off.

(16)[(~~11~~)] WETLAND means a transitional land between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water, and conforms to the Army Corps of Engineers' definition.

SECTION 7. Section 30-5-2 (*Descriptions of Regulated Areas*) is amended to read as follows:

§ 30-5-2 DESCRIPTIONS OF REGULATED AREAS.

(A) This section describes the watersheds, aquifers, and water zones that are regulated by this subchapter. A map of these areas is maintained by the

Watershed Protection Department and available for inspection at the offices of the single office.

(B) [~~Except as provided in Subsection (C), the~~] The Watershed Protection Department [~~single office~~] shall determine the boundaries of the areas described in Subsection (D).

(C) [~~The Council and commissioners court, acting jointly, shall determine the boundaries of the Edwards Aquifer recharge zone after receiving a recommendation from the single office.~~] For property within 1500 feet of a boundary, the Watershed Protection Department [~~single office~~] may require that an applicant provide a certified report from a geologist or hydrologist verifying the boundary location.

(D) In this subchapter:

(1) BARTON SPRINGS ZONE means the Barton Creek watershed and all watersheds that contribute recharge to Barton Springs, including those portions of the [~~Barton,~~] Williamson, Slaughter, Onion, Bear and Little Bear Creek watershed located in the Edwards Aquifer recharge or contributing zones.

(2) BARTON CREEK WATERSHED means the land area that drains to Barton Creek including Little Barton Creek watershed.

(3) EDWARDS AQUIFER is the water-bearing substrata that [~~also known as the Edwards and Associated Limestones Aquifer and~~] includes the stratigraphic rock units known as the Edwards Group [~~Formation~~] and Georgetown Formation.

(4) EDWARDS AQUIFER CONTRIBUTING ZONE means all land generally to the west and upstream of the Edwards Aquifer recharge zone that provides drainage into the Edwards Aquifer recharge zone.

(5) EDWARDS AQUIFER RECHARGE ZONE means all land over the Edwards Aquifer that recharges the aquifer, as determined by the surface exposure of the geologic units comprising the Edwards Aquifer, including the areas overlain with quaternary terrace deposits.

(6) SOUTH EDWARDS AQUIFER RECHARGE ZONE means the portion of the Edwards Aquifer recharge zone that is located south of the Colorado River and north of the Blanco River.

(7) SUBURBAN WATERSHEDS include all watersheds not otherwise classified as urban, water supply suburban, or water supply rural watersheds, and include:

(a) the Brushy, Buttercup, Carson, Cedar, Cottonmouth, Country Club, Decker, Dry Creek East [~~Dry~~], Elm Creek South, Gilleland, Harris Branch, Lake, Maha, Marble, North Fork Dry, Plum, Rattan, Rinard, South Boggy, South Fork Dry, South Brushy, Walnut, and Wilbarger creek watersheds;

(b) the Colorado River watershed downstream of U.S. 183; and

(c) those portions of the Onion, Bear, Little Bear, Slaughter, and Williamson creek watersheds not located in the Edwards Aquifer recharge or contributing zones.

(8) URBAN WATERSHEDS include:

(a) the Blunn, Buttermilk, East Boggy, East Bouldin, Fort, Harper Branch, Johnson, Little Walnut, Shoal, Tannehill, Waller, and West Bouldin creek watersheds;

(b) the north side of the Colorado River watershed from Johnson Creek to U.S. 183; and

(c) the south side of the Colorado River watershed from Barton Creek to U.S. 183.

(9) WATER SUPPLY RURAL WATERSHEDS include:

(a) the Lake Travis watershed;

(a) [~~and~~]the Lake Austin watershed, excluding the Bull Creek watershed and the area to the south of Bull Creek and the east of Lake Austin; and

(c) the Bear West, Bee, Bohl's Hollow, Cedar Hollow, Coldwater, Commons Ford, Connors, Cuernavaca, Harrison Hollow, Hog Pen, Honey, Little Bee, Panther Hollow, Running Deer, St. Stephens, Steiner, and Turkey Creek watersheds.

(10) WATER SUPPLY SUBURBAN WATERSHEDS include:

(a) the Bull, Eanes, Dry Creek North [~~Dry~~], Huck's Slough, Taylor Slough North, Taylor Slough South, and West Bull creek watersheds;

(b) the Lady Bird [~~Town~~] Lake watershed on the south side of Lady Bird [~~Town~~] Lake from Barton Creek to Tom Miller Dam;

(c) the Lady Bird [~~Town~~] Lake watershed on the north side of Lady Bird [~~Town~~] Lake from Johnson Creek to Tom Miller Dam; and

(d) the Lady Bird [~~Town~~] Lake watershed on the east side of Lake Austin from Tom Miller Dam to Bull Creek.

SECTION 8. Section 30-5-22 (*Urban Watershed Exemptions*) is deleted in its entirety and replaced with the following:

§ 30-5-22 APPLICABILITY.

This subchapter applies to a preliminary plan, final plat, or subdivision construction plan outside the city's zoning jurisdiction and inside the portion of the city's extraterritorial jurisdiction that is within Travis County.

SECTION 9. Section 30-5-23 (*Special* Exceptions) is amended to read as follows:

§ 30-5-23 SPECIAL EXCEPTIONS; LIMITED ADJUSTMENTS.

(A) Except as prohibited by Article 13[~~12~~] *(Save Our Springs Initiative*), a special exception from the requirements of this subchapter may be granted in accordance with Chapter 30-1, Article 9, Division 4 (*Special Exceptions).*

(B) If a three-quarters majority of the City Council concludes, or a court of competent jurisdiction renders a final judgment concluding that identified sections of this subchapter, as applied to a specific development project or proposal violate the United States Constitution or the Texas Constitution or are inconsistent with federal or state statutes that may preempt a municipal ordinance or the Austin City Charter, the City Council may, after a public hearing, adjust the application of this subchapter to that project to the minimum extent required to comply with the conflicting law. Any adjustment shall be structured to provide the maximum protection of water quality.

SECTION 10. Section 30-5-24(*Redevelopment Exception*) is deleted in its entirety.

SECTION 11. Section 30-5-41 (*Land Use Commission Variances*) is amended to read as follows:

§ 30-5-41 LAND USE COMMISSION VARIANCES.

(A) It is the applicant's burden to establish that the findings described in this Section have been met. Except as provided in Subsections (B) and (C), the land use commission may grant a variance from a requirement of this subchapter after determining that:

(1) the requirement will deprive the applicant of a privilege or the safety of property given to owners of other similarly situated property with approximately contemporaneous development;

(2) the variance:

(a) is not based on a condition caused by the method chosen by the applicant to develop the property, unless the development method provides greater overall environmental protection that is achievable without the variance;

(b) is the minimum change necessary to avoid the deprivation of a privilege given to other property owners and to allow a reasonable use of the property; and

(c) does not create a significant probability of harmful environmental consequences; and

(3) development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

(B) The land use commission may grant a variance from a requirement of [~~Section 30-5-393 *(Water Quality Transition Zone)*,~~] Section 30-5-422 [~~423~~] *(Water Quality Transition Zone)*, Section 30-5-452[~~453~~] *(Water Quality Transition Zone)*, or Article 7, Division 1 *(Critical Water Quality Zone Restrictions)* after determining that:

(1) the criteria for granting a variance in Subsection (A) are met;

(2) the requirement for which a variance is requested prevents a reasonable, economic use of the entire property; and

(3) the variance is the minimum change necessary to allow a reasonable, economic use of the entire property.

(C) The land use commission may not grant a variance from a requirement of Article 13[~~12~~] *(Save Our Springs Initiative)*.

(D) The land use commission shall prepare written findings of fact to support the grant or denial of a variance request under this section.

SECTION 12. Section 30-5-42 (*Administrative Variances*) is amended to read as follows:

§ 30-5-42 ADMINISTRATIVE VARIANCES.

(A) A variance under this section may not vary the requirements of Article 13 [~~12~~] *Save Our Springs Initiative).*

(B) The Watershed Protection Department director may grant a variance from a requirement of:

`(1) Section 30-5-261 (*Critical Water Quality Zone Development*), only if:

(a) necessary to protect public health and safety, or if it would provide a significant, demonstrable environmental benefit, as determined by a functional assessment of floodplain health as prescribed by the Environmental Criteria Manual,

(b) necessary to allow an athletic field in existence on {*the effective date of this ordinance*} to be maintained, improved, or replaced,

(c) necessary to allow an athletic field to be located in an area not otherwise allowed under Section 30-5-261 (B) (5), or

(d) necessary to allow a hard surfaced trail to be located in an area not otherwise allowed under Section 30-5-261(B) (3);

(2) Section 30-5-261 (*Critical Water Quality Zone Development*), for development within an urban watershed, only if the proposed development:

(a) is located not less than 25 feet from the centerline of a waterway,

(b) is located outside the erosion hazard zone, unless protective works are provided as prescribed in the Drainage Criteria Manual,

(c) does not increase non-compliance, if any, with Article 7, Division 1 (*Critical Water Quality Zone Restrictions*), Section 30-5-281 (*Critical Environmental Features*) or Section 30-5-282 (*Wetland Protection*), and

(d) restores native vegetation and soils if development is removed from the Critical Water Quality Zone;

(3) Subsection 30-5-262 (B) (*Critical Water Quality Zone Street Crossings*), only outside the Barton Springs Zone;

(4) Section 30-5-281 (*Critical Environmental Features*); [~~Subsection 30-5-423(C) *(Water Quality Transition Zone)*;~~]

(5) (~~2~~) Section 30-5-322 *(Clearing For A Roadway)*;

[~~(3) Subsection 30-5-343(A) *(Spoil Disposal)*;~~

~~(4) Article 7, Division 1 *(Critical Water Quality Zone Restrictions)*;~~]

(6)[(~~5~~)] Section 30-5-341 *(Cut Requirements)* or Section 30-5-342 *(Fill Requirements)*, for a water quality control or detention facility and appurtenances for conveyance such as swales, drainage ditches, and diversion berms; [~~or~~]

(7)[(~~6~~)] Section 30-5-341 *(Cut Requirements)* or Section 30-5-342 *(Fill Requirements)*, for a cut or fill of not more than eight feet in the desired development zone;

(8) Subsection 30-5-343(A) (*Spoil Disposal*);

(9) Section 30-5-365 (*Interbasin Diversion*).

(C) It is the applicant's burden to establish that the findings described in this Section have been met.

(D) The Watershed Protection Department director may grant a variance described in Subsection (B) only after determining that [~~:~~

~~(1)~~]development in accordance with the variance meets the objective of the requirement for which the variance is requested[~~;~~] and:

(1) [(~~2~~)] for property in the Barton Springs Zone, the variance will result in water quality that is at least equal to the water quality achievable without the variance; [~~and~~]

(2) for a variance from Section 30-5-261 (B) (5), that the proposed work on or placement of the athletic field will have no adverse environmental impacts;

(3) for a variance from Section 30-5-281, that the proposed measures preserve all characteristics of the critical environmental feature;

(4) for a variance from Section 30-5-341 or Section 30-5-342 [~~described in Paragraph (B)(6)~~], the cut or fill is not located on a slope with a gradient of more than 15 percent or within 100 feet of a classified waterway;

(5) for a variance from Section 30-5-343(A), use of the spoil provides a necessary public benefit. Necessary public benefits include:

(a) roadways;

(b) stormwater detention facilities;

(c) public or private park sites; and

(d) building sites that comply with Section 30-5-341 (*Cut Requirements*), Section 30-5-342 (*Fill Requirements*), and Chapter 30-4(*Drainage*); and

(6) for a variance from Section 30-5-365, there are no adverse environmental or drainage impacts.

(E) [~~(D)~~] The Watershed Protection Department director shall prepare written findings to support the grant or denial of a variance request under this section.

SECTION 13. Section 30-5-62 (*Net Site Area*) is amended to add a new Subsection (C) to read as follows:

(C) Net site area does not apply in the urban or suburban watersheds.

SECTION 14. Section 30-5-63 (*Impervious Cover Calculations*) is amended to read as follows:

§ 30-5-63 IMPERVIOUS COVER CALCULATIONS.

(A) Impervious cover is calculated in accordance with this Section and the Environmental Criteria Manual.

(B) Impervious cover calculations include:

(1) roads;

(2) driveways;

(3) parking areas;

(4) buildings;

(5) concrete;

(6) impermeable construction covering the natural land surface;

(7) for an uncovered wood deck that has drainage spaces between the deck boards and that is located over a pervious surface, 50 percent of the horizontal area of the deck; and

(8) [~~interlocking or permeable pavers, except up to 20 percent of the area of the pavers may be excluded in calculating impervious cover if the pavers are approved by the director for recharge enhancement under Section 30-5-151*(Innovative Management Practices)*; and~~

~~(9)~~]the portion of a site used for the storage of scrap and metal salvage, including auto salvage.

(C) Impervious cover calculations exclude:

(1) sidewalks in a public right-of-way or public easement;

(2) multi-use trails open to the public and located on public land or in a public easement;

(3) water quality controls, excluding subsurface water quality controls;

(4) detention basins, excluding subsurface detention basins;

(5)[~~(3)~~] drainage swales and conveyances;

(6)[~~(4)~~] ponds, pools, and fountains; [~~and~~]

(7) [~~(5)~~]) areas with gravel placed over pervious surfaces that are used only for landscaping or by pedestrians and are not constructed with compacted base;

(8) porous pavement designed in accordance with the Environmental Criteria Manual, limited to only pedestrian walkways and multi-use trails, and located outside the Edwards Aquifer Recharge Zone;

(9) fire lanes designed as prescribed by the Environmental Criteria Manual, that consist of interlocking pavers, and are restricted from routine vehicle access; and

(10) a subsurface portion of a parking structure if the director of the Watershed Protection Department determines that:

(a) the subsurface portion of the structure:

(i) is located within an urban or suburban watershed;

(ii) is below the grade of the land that existed before construction of the structure;

(iii) is covered by soil with a minimum depth of two feet and an average depth of not less than four feet; and

(iv) has an area not greater than fifteen percent of the site;

(b) the structure is not associated with a use regulated by Section 1.2.2 of Subchapter F of Chapter 25-2 (*Residential Design and Compatibility Standards*);

(c) the applicant submits an assessment of the presence and depth of groundwater at the site sufficient to determine whether groundwater will need to be discharged or impounded; and

(d) the applicant submits documentation that the discharge or impoundment of groundwater from the structure, if any, will be managed to avoid adverse effects on public health and safety, the environment, and adjacent property.

SECTION 15. Section 30-5-65 (*Roadways*) is deleted in its entirety and replaced with the following.

§ 30-5-65 COMMERCIAL IMPERVIOUS COVER

(A) This section applies to impervious cover calculations for commercial developments.

(B) An application for a commercial development must demonstrate that once fully constructed, the development will not exceed applicable maximum impervious cover limitations.

(C) Subsection (B) does not apply to an application for a commercial site development, including a roadway project, that will not exceed 8,000 square feet of new impervious cover. For the purposes of this Section, roadway improvements are limited to intersection upgrades, low-water crossing upgrades, additions for bicycle lanes, and additions for mass transit stops.

SECTION 16. Section 30-5-91 (*Waterway Classifications*) is amended to read as follows:

§ 30-5-91 WATERWAY CLASSIFICATIONS.

(A) This section classifies [~~the significant~~] waterways [~~in each watershed~~] according to drainage area.

(B) In all watersheds except urban[~~a suburban watershed~~]:

(1) a minor waterway has a drainage area of at least 64 [~~320~~] acres and not more than 320 [~~640~~] acres;

(2) an intermediate waterway has a drainage area of more than 320[~~640~~] acres and not more than 640 [~~1280~~] acres; and

(3) a major waterway has a drainage area of more than 640 [~~1280~~] acres.

[~~(C) In a water supply suburban watershed:~~

~~(1) a minor waterway has a drainage area of at least 128 acres and not more than 320 acres;~~

~~(2) an intermediate waterway has a drainage area of more than 320 acres and not more than 640 acres; and~~

~~(3) a major waterway has a drainage area of more than 640 acres.~~

~~(D) In a water supply rural watershed:~~

~~(1) a minor waterway has a drainage area of at least 64 acres and not more than 320 acres;~~

~~(2) an intermediate waterway has a drainage area of more than 320 acres and not more than 640 acres; and~~

~~(3) a major waterway has a drainage area of more than 640 acres.~~

~~(E) In the Barton Springs Zone:~~

~~(1) for the Barton Creek, Bear Creek, Little Barton Creek, Little Bear Creek, and Onion Creek watersheds:~~

~~(a) a minor waterway has a drainage area of at least 64 acres and not more than 320 acres;~~

~~(b) an intermediate waterway has a drainage area of more than 320 acres and not more than 640 acres; and~~

~~(c) a major waterway has a drainage area of more than 640 acres; and~~

~~(2) for the Slaughter Creek and Williamson Creek watersheds:~~

~~(a) a minor waterway has a drainage area of at least 128 acres and not more than 320 acres;~~

~~(b) an intermediate waterway has a drainage area of more than 320 acres and not more than 640 acres; and~~

~~(c) a major waterway has a drainage area of more than 640 acres.]~~

SECTION 17. Section 30-5-92 (*Critical Water Quality Zones Established*) is amended to read as follows:

§ 30-5-92 CRITICAL WATER QUALITY ZONES ESTABLISHED.

(A) In the water supply rural watersheds, water supply suburban watersheds, and Barton Springs zone, a [A] critical water quality zone is established along each waterway classified under Section 30-5-91 *(Waterway Classifications)*.

(1) The boundaries of a critical water quality zone coincide with the boundaries of the 100 year flood plain calculated under fully developed conditions as prescribed by the Drainage Criteria Manual, except:

(a) [~~(2)~~] for a minor waterway, the boundaries of the critical water quality zone are located not less than 50 feet and not more than 100 feet from the centerline of the waterway;

(b) [~~(a)~~] for an intermediate waterway, the boundaries of the critical water quality zone are located not less than 100 feet and not more than 200 feet from the centerline of the waterway;

(c) [~~(b)~~] for a major waterway, the boundaries of the critical water quality zone are located not less than 200 feet and not more than 400 feet from the centerline of the waterway; and

(d) [~~(c)~~] for the main channel of Barton Creek, the boundaries of the critical water quality zone are located 400 feet from the centerline of the creek.

(2) [~~(3)~~] Notwithstanding the provisions of Subsections (A) (1)[~~(2)~~](a), (b), and (c), a critical water quality zone does not apply to a previously modified drainage feature serving a public roadway right of way that does not possess any natural and traditional character and cannot reasonably be restored to a natural condition, as prescribed in the Environmental Criteria Manual[~~extend beyond the crest of a bluff~~].

(B) In the suburban watersheds, a critical water quality zone is established along each waterway classified under Section 30-5-91 (*Waterway Classifications*).

(1) for a minor waterway, the boundaries of the critical water quality zone are located 100 feet from the centerline of the waterway;

(2) for an intermediate waterway, the boundaries of the critical water quality zone are located 200 feet from the centerline of the waterway; and

(3) for a major waterway, the boundaries of the critical water quality zone are located 300 feet from the centerline of the waterway;

(4) The critical water quality zone boundaries may be reduced to not less than 50 feet from the centerline of a minor waterway, 100 feet from the centerline of an intermediate waterway, and 150 feet from the centerline of a major waterway if the overall surface area of the critical water quality zone is the same or greater than the surface area that would be provided without the reduction, as prescribed in the Environmental Criteria Manual.

(5) Notwithstanding the provisions of Subsections (B) (1), (2), and (3), a critical water quality zone does not apply to a previously modified drainage feature serving a public roadway right of way that does not possess any natural and traditional character and cannot reasonably be restored to a natural condition.

(C) Critical water quality zones are established to include the inundated areas that constitute Lake Walter E. Long, Lake Austin, Lady Bird Lake, and the Colorado River downstream of Lady Bird Lake.

(D) [~~(B)~~] Critical water quality zones are established along and parallel to the shorelines of Lake Travis, Lake Austin, and Lady Bird [~~Town~~] Lake.

(1) The shoreline boundary of a critical water quality zone:

(a) for Lake Travis, coincides with the 681.0 foot contour line;

(b) for Lake Austin, coincides with the 492.8 foot contour line; and

(c) for Lady Bird [~~Town~~] Lake, coincides with the 429.0 foot contour line.

(2) The width of a critical water quality zone, measured horizontally inland, is:

(a) 100 feet; or

(b) for a detached single-family residential use, 75 feet.

(E) [~~(C)~~] Critical water quality zones are established along and parallel to the shorelines of the Colorado River downstream of Lady Bird [~~Town~~] Lake.

(1) The shoreline boundary of a critical water quality zone coincides with the river's ordinary high water mark, as defined by Code of Federal Regulations Title 33, Section 328.3 (*Definitions*).

(2) The inland boundary of a critical water quality zone coincides with the boundary of the 100-year floodplain as delineated by the Federal Emergency Management Agency, except that the width of the critical water quality zone, measured horizontally inland, is not less than 200 feet and not more than 400 feet.

(F) [~~(D)~~] In an urban watershed, a critical water quality zone is established along each waterway with a drainage area of at least 64 acres. This does not apply in the area bounded by IH-35, Riverside Drive, Barton Springs Road, Lamar Boulevard, and 15th Street.

(1) The boundaries of the critical water quality zone coincide with the boundaries of the 100 year floodplain calculated under fully developed conditions as prescribed by the Drainage Criteria Manual; provided that the boundary is not less than 50 feet and not more than 400 feet from the centerline of the waterway.

(2) Notwithstanding the provisions of Subsection (F) (1), a critical water quality zone does not apply to a previously modified drainage feature serving a public roadway right of way that does not possess any natural and traditional character and cannot reasonably be restored to a natural condition. [~~Except as limited by Paragraph (3), for a waterway whose 100-year flood plain has been delineated by the Federal Emergency Management Agency:~~

~~(a) the boundaries of the critical water quality zone coincide with the boundaries of the floodplain as delineated by FEMA; or~~

~~(b) if the applicant has calculated the 100-year flood plain for the waterway and the city has approved the calculations, the boundaries of the critical water quality zone coincide with the boundaries of the calculated flood plain.~~

~~(2) Except as limited by Paragraph (3), for a waterway whose 100-year flood plain has not been delineated by the Federal Emergency Management Agency:~~

~~(a) the boundaries of a critical water quality zone are located 100 feet from the centerline of the waterway; or~~

~~(b) if the applicant has calculated the 100-year flood plain for the waterway and the city has approved the calculations, the boundaries of the critical water quality zone coincide with are the lesser of the boundaries of the calculated flood plain.~~

~~(3) The boundaries of a critical water quality zone are located not less than 50 feet and not more than 400 feet from the centerline of the waterway.~~]

SECTION 18. Section 30-5-93 (*Water Quality Transition Zones Established*), Subsection (A) is amended to read as follows:

(A) In the water supply rural watersheds, water supply suburban watersheds, and in the Barton Springs zone, excluding [~~Except for~~] Lake Austin, Lake Travis, and Lady Bird [~~Town~~] Lake, a water quality transition zone is established adjacent and parallel to the outer boundary of each critical water quality zone.

SECTION 19. The title of Chapter 30-5, Subchapter A, Article 3 is amended to read as follows:

ARTICLE 3. ENVIRONMENTAL RESOURCE INVENTORY [~~ASSESSMENT~~]; POLLUTANT ATTENUATION PLAN.

SECTION 20. Section 30-5-121 (*Environmental Assessment Requirement*) is amended to read as follows:

§ 30-5-121 ENVIRONMENTAL RESOURCE INVENTORY [~~ASSESSMENT~~] REQUIREMENT.

(A) An applicant shall file an environmental resource inventory [~~assessment~~] with the [~~single office~~] Watershed Protection Department for proposed development located:

(1) over a karst aquifer;

(2) within an area draining to a karst aquifer or reservoir;

(3) in a water quality transition zone;

(4) in a critical water quality zone;

(5) in a floodplain [~~flood plain~~]; or

(6) on a tract with a gradient of more than 15 percent.

(B) An environmental resource inventory [~~assessment~~] must:

(1) identify critical environmental features and propose protection measures for the features;

(2) provide an environmental justification for spoil disposal locations or roadway alignments;

(3) propose methods to achieve overland flow[~~and justify enclosed storm sewers; and~~];

(4) describe proposed industrial uses and the pollution abatement program; and

(5) be completed as prescribed by the Environmental Criteria Manual.

(C) An environmental resource inventory [~~assessment~~] must include:

(1) a hydrogeologic report in accordance with Section 30-5-122*(Hydrogeologic Report)*;

(2) a vegetation report in accordance with Section 30-5-123 *(Vegetation Report)*; and

(3) a wastewater report in accordance with Section 30-5-124 *(Wastewater Report)*.

(D) The Watershed Protection Department director [~~single office~~] may permit an applicant to exclude from an environmental resource inventory [~~assessment~~] information required by this section after determining that the information is unnecessary because of the scope and nature of the proposed development.

SECTION 21. City Code Section 30-5-122 (*Hydrogeologic Report*) is amended to read as follows:

§ 30-5-122 HYDROGEOLOGIC REPORT.

A hydrogeologic report must:

(1) generally describe the topography, soils, and geology of the site;

(2) identify springs and significant point recharge features on the site; [~~and~~]

(3) demonstrate that proposed drainage patterns will protect the quality and quantity of recharge at significant point recharge features; and[~~.~~]

(4) identify all recorded and unrecorded water wells, both on the site and within 150 feet of the boundary of the site.

SECTION 22. Section 30-5-125 (*Pollutant Attenuation Plan*) is amended to read as follows:

§ 30-5-125 POLLUTANT ATTENUATION PLAN.

An applicant proposing an industrial use that is not completely enclosed in a building shall provide a pollutant attenuation plan in accordance with the [~~Administrative and the~~] Environmental Criteria Manual [~~Manuals~~].

SECTION 23. Section 30-5-151 (*Innovative Management Practices*) is amended to read as follows:

§ 30-5-151 INNOVATIVE MANAGEMENT PRACTICES.

(A) An innovative water quality control is a practice that is not specifically prescribed in the Environmental Criteria Manual, but is designed to address the requirements of Article 6 (*Water Quality Controls*).

(B) [~~(A)~~] An innovative runoff management practice is a practice that is designed to address the requirements of [~~Article 6 *(Water Quality Controls)* and~~] Section 30-5-281 *(Critical Environmental Features)*, enhance the recharge of groundwater and the discharge of springs, and maintain the function of critical environmental features. [~~The city and county encourage innovative management practices.~~]

(C) A proposal for an [~~An~~] innovative water quality control or runoff management practice [~~proposal~~] must be reviewed and approved by the Watershed Protection Department director. Review and approval is based on:

(1) technical merit;

(2) compliance with the requirements of this title for water quality protection and improvement;

(3) resource protection and improvement;

(4) advantages over standard practices; and

(5) anticipated maintenance requirements.

SECTION 24. Section 30-5-185 (*Overland Flow*) is amended to read as follows:

§ 30-5-185 OVERLAND FLOW.

(A) Drainage patterns must be designed to:

(1) prevent erosion;

(2) maintain infiltration and recharge of local seeps and springs;

(3) attenuate the harm of contaminants collected and transported by stormwater; and

(4) where possible, maintain and restore overland sheet flow, maintain natural drainage features and patterns, and disperse runoff back to sheet flow.

[~~(B) Construction of an enclosed storm sewer or an impervious channel lining is prohibited unless the single office determines, based on engineering evidence, that an enclosed storm sewers or impervious channel lining is the preferred option. A conflict between the requirements of this subsection and another requirement of this title may be resolved by an appeal to the land use commission.~~]

(B) [~~(C)~~] The applicant shall design an enclosed storm drain [~~sewer~~] to mitigate potential adverse impacts [~~its harmful effect~~] on water quality by using [~~structural devices or other~~] methods to prevent erosion and dissipate discharges from outlets. Applicant shall locate [~~wherever practicable, and by locating~~] discharges to maximize overland flow through buffer zones or grass-lined swales wherever practicable.

SECTION 25. Section 30-5-211 (*Water Quality Control Requirement*) is amended to read as follows:

§ 30-5-211 WATER QUALITY CONTROL REQUIREMENT.

(A) In the Barton Springs Zone, water quality controls are required for all development.

(B) In a watershed other than a Barton Springs Zone watershed, water quality controls are required for development:

(1) located in the water quality transition zone;

(2) of a golf course, play field, or similar recreational use, if fertilizer, herbicide, or pesticide is applied; or

(3) if the total of new and redeveloped impervious cover exceeds 8,000 square feet[~~except as provided in Subsection (C), with impervious cover that exceeds 20 percent of net site area~~].

(C) ~~In an urban watershed:~~

~~(1) water quality controls are required in accordance with the Environmental Criteria Manual; and~~

~~(2)~~] All new development must provide for removal of floating debris from stormwater runoff.

(D) The water quality control requirements in this division do not require water quality controls on a single-family or duplex lot but apply to the residential subdivision as a whole.

(E) The water quality control requirements in this division do not require water quality controls for a roadway project with less than 8,000 square feet of new impervious cover. For the purposes of this Section, roadway improvements are limited to intersection upgrades, low-water crossing upgrades, additions for bicycle lanes, and additions for mass transit stops.

SECTION 26. Section 30-5-213 (*Water Quality Control Standards*) is amended to read as follows:

§ 30-5-213 WATER QUALITY CONTROL STANDARDS.

(A) A water quality control must be designed in accordance with the Environmental Criteria Manual.

(1) The control must provide at least the treatment level of a sedimentation/filtration system under the Environmental Criteria Manual.

(2) An impervious liner is required in an area where there is surface runoff to groundwater conductivity. If a liner is required and controls are located in series, liners are not required for the second or later in the series following sedimentation, extended detention, or sedimentation/filtration.

(3) The control must be accessible for maintenance and inspection as prescribed in the Environmental Criteria Manual.

(B) A water quality control must capture[~~, isolate,~~] and treat the water draining to the control from the contributing area. The required capture volume is:

(1) the first one-half inch of runoff; and

(2) for each 10 percent increase in impervious cover over 20 percent of gross site area, an additional one-tenth of an inch of runoff.

(C) The location of a water quality control:

(1) must avoid recharge features to the greatest extent possible;

(2) must be shown on the slope map, preliminary plan, site plan, or subdivision construction plan, as applicable; and

(3) in a water supply rural watershed, may not be in the 40 percent buffer zone, unless the control disturbs less than 50% of the buffer, and is located to

maximize overland flow and recharge in the undisturbed remainder of the 40 percent buffer zone.

(D) This subsection provides additional requirements for the Barton Springs Zone.

(1) Approval by the Watershed Protection Department director is required for a proposed water quality control that is not described in the Environmental Criteria Manual. The applicant must substantiate the pollutant removal efficiency of the proposed control with published literature or a verifiable engineering study.

(2) Water quality controls must be placed in sequence if necessary to remove the required amount of pollutant. The sequence of controls must be:

(a) based on the Environmental Criteria Manual or generally accepted engineering principles; and

(b) designed to minimize maintenance requirements.

SECTION 27. Section 30-5-214 (*Optional Payment Instead of Structural Controls in Urban Watersheds*) is amended to read as follows:

§ 30-5-214 OPTIONAL PAYMENT INSTEAD OF STRUCTURAL CONTROLS IN URBAN WATERSHEDS.

(A) The Watershed Protection Department director shall identify and prioritize water quality control facilities for the urban watersheds in an Urban Watersheds Structural Control Plan. The Environmental Board shall review the plan in January of each year.

(B) An Urban Watersheds Structural Control Fund is established for use in the design and construction of water quality control facilities in the urban watersheds.

(C) Instead of providing the water quality controls required under Section 30-5-211 *(Water Quality Control Requirement)*, in an urban watershed a developer may request approval to deposit with the city a nonrefundable cash payment, based on a formula established by the Council. The Watershed Protection Department director shall review the request and accept or deny the request based on standards in the Environmental Criteria Manual[~~not later than the 15th working day after its receipt~~].

(D) The Watershed Protection Department director shall deposit a payment made under this section in the Urban Watersheds Structural Control Fund.

SECTION 28. Section 30-5-231 (*Water Quality Control Maintenance and Inspection*) is amended to read as follows:

§ 30-5-231 WATER QUALITY CONTROL MAINTENANCE AND INSPECTION.

(A) In this section:

(1) COMMERCIAL DEVELOPMENT means all development other than Residential Development.

(2) COMMERCIAL POND means a required water quality control or appurtenance that receives stormwater runoff from a Commercial Development.

(3) ECM STANDARDS means the provisions in the Environmental Criteria Manual regarding maintenance of a required water quality control or appurtenance.

(4) RESIDENTIAL DEVELOPMENT means development of two dwelling units or less per lot.

(5) RESIDENTIAL POND means a required water quality control or appurtenance that receives stormwater runoff from a Residential Development.

(B) The record owner of a commercial development shall maintain the commercial pond serving the commercial development in accordance with the ECM standards, whether or not the commercial pond is located on the same property as the commercial development. The record owner shall provide the City proof of the right to access and maintain the commercial pond if it is not located on the same property as the commercial development.

(C) If more than one commercial development is served by a single commercial pond, the record owners of the commercial pond and all commercial developments served by the commercial pond shall be jointly and severally responsible for maintenance of the commercial pond in accordance with the ECM standards.

(D) The Watershed Protection Department director may authorize an alternative arrangement for maintenance of a residential or commercial pond [~~basin~~] in accordance with the Environmental Criteria Manual [~~DCM~~] standards. If an alternative arrangement is approved by the director, the City Attorney shall determine whether an agreement is necessary; the agreement must be approved by the City Attorney and filed of record.

(E) The City shall inspect each commercial pond that is not a subsurface pond at least once every three years to ensure that the commercial pond is being maintained in accordance with the ECM standards. If the commercial pond fails inspection

requiring an additional inspection, the Watershed Protection Department director may charge a re-inspection fee.

(F) The record owner of a subsurface commercial pond must provide the Watershed Protection Department with a maintenance plan and an annual report from a registered engineer verifying that the pond is in proper operating condition.

(G) [~~(F)~~] Until the City accepts a residential pond for maintenance, the record owner(s) of the residential pond and the residential development served shall maintain the residential pond in accordance with the ECM standards.

(H) [~~(G)~~] The City shall be responsible for maintenance of a residential pond only after the residential pond has been accepted for maintenance by the City. The City will accept the residential pond upon determining that it meets the requirements of the Environmental Criteria Manual and, if applicable, Section 25-8-234 *(Fiscal Security in the Barton Springs Zone)*.

SECTION 29. Section 30-5-232 (*Dedicated Fund*), Subsection (C) is amended to read as follows:

(C) The Watershed Protection Department director shall administer the fund, allocate the fund for appropriate projects, and report annually to the Council regarding the status of the fund and the monitoring and maintenance program described in this section.

SECTION 30. Section 30-5-233 (*Barton Springs Zone Operating Permit*) is amended to read as follows:

§ 30-5-233 BARTON SPRINGS ZONE OPERATING PERMIT.

(A) In the Barton Springs Zone, the owner or operator of a commercial or multifamily development is required to obtain an annual operating permit for the required water quality controls

(B) To obtain an annual operating permit, an applicant must:

(1) provide the Planning and Development Review Department with:

(a) a maintenance plan; and

(b) the information necessary to verify that the water quality controls are in proper operating condition; and

(c) pay the required, nonrefundable fee.

(C) The Planning and Development Review Department may verify that a water quality control is in proper operating condition by either inspecting the water quality control or accepting a report from a registered engineer.

(D) The Planning and Development Review Department shall issue an operating permit after determining that:

(1) the applicant has complied with the requirements of Subsection (B); and

(2) the water quality controls are in proper operating condition.

(E) The Planning and Development Review Department shall transfer an operating permit to a new owner or operator if, not later than the 30th day after a change in ownership or operation, the new owner or operator:

(1) signs the operating permit;

(2) accepts responsibility for the water quality controls; and

(3) documents the transfer on a form provided by the Planning and Development Review Department.

SECTION 31. Section 30-5-261 (*Critical Water Quality Zone Development*) is amended to read as follows:

§ 30-5-261 CRITICAL WATER QUALITY ZONE DEVELOPMENT.

In all watersheds, development is prohibited in a critical water quality zone except as provided in this Division. Development allowed in the critical water quality zone under this Division shall be revegetated and restored within the limits of construction as prescribed by the Environmental Criteria Manual.

(A) A fence that does not obstruct flood flows is permitted in a critical water quality zone.

(B) Open space [~~A public or private park, golf course, or open spaces, other than a parking lot,~~] is permitted in a critical water quality zone if a program of fertilizer, pesticide, and herbicide use is approved by the Watershed Protection Department director, subject to the conditions in this Subsection.

(1) In a water supply rural watershed, water supply suburban watershed, or the Barton Springs Zone, open space [~~park development~~] is limited to sustainable urban agriculture or a community garden if the requirements in subsection (B) (4) are met, multi-use trails, picnic facilities,[~~hiking, jogging, or walking trails~~]and outdoor facilities, excluding [~~and excludes~~] stables, [~~and~~] corrals for animals, and athletic fields.

(2) A[~~In the Barton Springs Zone, a~~] master planned park that is [~~reviewed by the land use commission and~~] approved by the Council may include recreational development other than that described in Subsection (B)(1).

(3) A hard surfaced trail that does not cross the critical water quality zone may be located within the critical water quality zone only if:

(a) designed in accordance with the Environmental Criteria Manual;

(b) located outside the erosion hazard zone, unless protective works are provided as prescribed in the Drainage Criteria Manual;

(c) limited to 12 feet in width unless a wider trail is designated in the Urban Trails Master Plan adopted by Council;

(d) located not less than 25 feet from the centerline of a waterway if within an urban watershed and not crossing the Critical Water Quality Zone; and

(e) located not less than 50 feet from the centerline of a minor waterway, 100 feet from the centerline of an intermediate waterway, and 150 feet from the centerline of a major waterway if within a watershed other than an urban watershed and not crossing the Critical Water Quality Zone.

(4) Open space may include sustainable urban agriculture or a community garden only if:

(a) in an urban watershed and located not less than 25 feet from the centerline of a waterway, or in a watershed other than an urban watershed and located not less than 50 feet from the centerline of a minor waterway, 100 feet from the centerline of an intermediate waterway, and 150 feet from the centerline of a major waterway;

(b) designed in accordance with the Environmental Criteria Manual; and

(c) limited to garden plots and paths, with no storage facilities or other structures over 500 square feet.

(5) In a suburban or urban watershed, open space may include an athletic field only if:

(a) the athletic field is in an urban watershed and located not less than 25 feet from the centerline of a waterway, or is in a suburban

watershed and located not less than 50 feet from the centerline of a minor waterway, 100 feet from the centerline of an intermediate waterway, and 150 feet from the centerline of a major waterway; and

(b) the owner of the athletic field submits to the Watershed Protection Department a maintenance plan to keep the athletic field well vegetated and minimize compaction, as prescribed in the Environmental Criteria Manual.

(C) Along Lake Travis, Lake Austin, or Lady Bird [~~Town~~] Lake:

(1) a boat dock, pier, wharf, or marina and necessary access and appurtenances, is permitted in a critical water quality zone; and

(2) approval by the Watershed Protection Department director of chemicals used to treat building materials that will be submerged in water is required before a permit may be issued or a site plan released.

(D) In the Barton Springs Zone:

~~(1) a boat dock, pier, wharf, or marina and necessary access appurtenances, or a pedestrian bridge, or bicycle or golf cart path, is permitted in a critical water quality zone; and~~

~~(2) approval by the director of chemicals used to treat building materials that will be submerged in water is required before a permit may be issued or a site plan released.~~]

(D)[~~(E)~~] A utility line, including a storm drain, is prohibited in the critical water quality zone, except as provided in subsection (E) or for a necessary crossing. A necessary utility crossing may cross into or through a critical water quality zone only if:

(1) the utility line follows the most direct path into or across the critical water quality zone to minimize disturbance;

(2) the depth of the utility line and location of associated access shafts are not located within an erosion hazard zone, unless protective works are provided as prescribed in the Drainage Criteria Manual; and

(3) in [~~In~~] the Barton Springs Zone, is approved [~~approval~~] by the Watershed Protection Department director[~~is required for a utility line crossing~~].

(E) In the urban and suburban watersheds, a utility line may be located parallel to and within the critical water quality zone if:

(1) in an urban watershed and located not less than 50 feet from the centerline of a waterway, or in a watershed other than urban and located not less than 50 feet from the centerline of a minor waterway, 100 feet from the centerline of an intermediate waterway, and 150 feet from the centerline of a major waterway;

(2) designed in accordance with the Environmental Criteria Manual;

(3) located outside the erosion hazard zone, unless protective works are provided as prescribed in the Drainage Criteria Manual; and

(4) the project includes either riparian restoration of an area within the critical water quality zone equal in size to the area of disturbance in accordance with the Environmental Criteria Manual, or payment into the Riparian Zone Mitigation Fund of a non-refundable amount established by ordinance.

(F) [~~Except in the Barton Springs Zone~~,] Detention [~~detention~~] basins and wet ponds [~~floodplain alterations~~] are prohibited [~~permitted~~] in the critical water quality zone unless [~~if~~] the requirements of Section 30-5-364 (*Floodplain Modification*), Chapter 30-4 (*Drainage*), and the other provisions of this subchapter are met.

(G) Floodplain modifications are prohibited in the critical water quality zone unless:

(1) the floodplain modifications proposed are necessary to protect the public health and safety;

(2) the floodplain modifications proposed would provide a significant, demonstrable environmental benefit, as determined by a functional assessment of floodplain health as prescribed by the Environmental Criteria Manual, or

(3) the floodplain modifications proposed are necessary for development allowed in the critical water quality zone under section 30-5-261 (*Critical Water Quality Zone Development*) or 30-5-262 (*Critical Water Quality Zone Street Crossings*).

(H) In the urban and suburban watersheds, vegetative filter strips, rain gardens, biofiltration ponds, areas used for irrigation or infiltration of stormwater, or other controls as prescribed by rule are allowed in the critical water quality zone if:

(1) in an urban watershed and located not less than 50 feet from the centerline of a waterway, or in a watershed other than urban and located no less than 50 feet from the centerline of a minor waterway, no less than 100 feet from the centerline of an intermediate waterway, and no less than 150 feet from the centerline of a major waterway;

(2) located outside the 100 year floodplain; and

(3) located outside the erosion hazard zone, unless protective works are provided as prescribed in the Drainage Criteria Manual.

(I) A residential lot that is 5,750 square feet or less in size may not include any portion of a critical water quality zone.

(J) For the purposes of calculating the centerline of a waterway in an urban watershed under this Section, the waterway must have a drainage area of at least 64 acres and be located outside the area bounded by Interstate 35, Riverside Drive, Barton Springs Road, Lamar Boulevard, and 15th Street.

SECTION 32. Section 30-5-262 (*Critical Water Quality Zone Street Crossings*) is amended by amending Subsection (C) and adding a new Subsection (D) to read as follows:

(C) [~~Except in the Barton Springs Zone, the director may vary the requirements of Subsection (B).~~]In all watersheds, multi-use trails may cross a critical water quality zone of any waterway.

(D) Notwithstanding subsections (A) and (B) and except in the Barton Springs Zone, a street or driveway may cross the critical water quality zone if the street or driveway is located in a center or corridor as identified on the growth concept map of the Imagine Austin Comprehensive Plan, as adopted by Ordinance No. 20120614-058, and if the proposed crossing:

(1) is necessary to facilitate the development or redevelopment of a designated corridor or center as recommended in the Imagine Austin Comprehensive Plan, Chapter 4 (*Shaping Austin: Building the Complete Community*), growth concept map and related definitions; and

(2) maintains the quality and quantity of recharge if located in a center or corridor designated as a sensitive environmental area in the Edwards Aquifer recharge zone, Edwards Aquifer contributing zone, or the South Edwards Aquifer recharge zone, as determined by the Watershed Protection Department director.

SECTION 33. Section 30-5-281 (*Critical Environmental Features*) is amended by amending Subsections (C) and (D) to read as follows:

(C) This subsection prescribes the requirements for critical environmental feature buffer zones.

(1) A buffer zone is established around each critical environmental feature described in this subchapter.

(a) Except as provided in Subsection (C)(1)(b), the width of the buffer zone is 150 feet from the edge of the critical environmental feature.

(b) For a point recharge feature, the buffer zone coincides with the topographically defined catchment basin, except that the width of the buffer zone from the edge of the critical environmental feature is:

(i) not less than 150 feet; [~~and~~]

(ii) not more than 300 feet; and

(iii) calculated in accordance with the Environmental Criteria Manual.

(2) Within a buffer zone described in this subsection:

(a) the natural vegetative cover must be retained to the maximum extent practicable;

(b) construction is prohibited; and

(c) wastewater disposal or irrigation is prohibited.

(3) If located at least 50 feet from the edge of the critical environmental feature, the prohibition of Subsection (C)(2)(b) does not apply to:

(a) a yard or hiking trail; or

(b) a recharge basin approved under Section 30-5-213 *(Water Quality Control Standards)* that discharges to a point recharge feature; or

(c) an innovative runoff management practice approved under Section 30-5-151 (*Innovative Management Practices*).

(4) Perimeter fencing with not less than one access gate must be installed at the outer edge of the buffer zone for all point recharge features. The fencing must comply with the Standard Specifications Manual.

(5) The owner must maintain the buffer zone in accordance with standards in the Environmental Criteria Manual to preserve the water quality function of the buffer.

(D) [~~The director may grant an administrative variance to a requirement of this section. An applicant for a variance must demonstrate that the proposed measures preserve all characteristics of the critical environmental feature.~~]When voids in the rock substrate are uncovered during development, the following protocol must be followed:

(1) construction in the area of the void must cease while the applicant conducts a preliminary investigation of the void as prescribed by the Environmental Criteria Manual.

(2) The applicant shall contact a City of Austin Environmental Inspector to schedule further investigation by the City of the void as prescribed by the Environmental Criteria Manual if the preliminary investigation indicates that the void:

(a) is at least one square foot in total area;

(b) blows air from within the substrate;

(c) consistently receives water during any rain event; or

(d) potentially transmits groundwater.

(3) Construction may only proceed after mitigation measures are reviewed and approved by the Watershed Protection Department.

SECTION 34. Section 30-5-282 (*Wetland Protection*) is amended to read as follows:

§ 30-5-282 WETLAND PROTECTION.

(A) Wetlands must be protected in all watersheds except in the area bounded by Interstate 35, Riverside Drive, Barton Springs Road, Lamar Boulevard, and 15th Street [~~central business area~~].

(B) Protection methods for wetlands include:

(1) appropriate setbacks that preserve the wetlands or wetland functions;

(2) wetland mitigation, including wetland replacement;

(3) wetland restoration or enhancement; or

(4) use of a wetlands for water quality controls.

(C) The Watershed Protection Department director may approve:

(1) the removal and replacement of a wetland; or

(2) the elimination of setbacks from a wetland that is proposed to be used as a water quality control.

SECTION 35. Section 30-5-302 (*Construction of a Building or Parking Area*), Subsection (B) is amended to read as follows:

(B) A person may construct a building or parking structure on a slope with a gradient of more than 15 percent and not more than 25 percent if the requirements of this subsection are met.

(1) Impervious cover on slopes with a gradient of more than 15 percent may not exceed 10 percent of the total area of the slopes.

(2) The terracing techniques in the Environmental Criteria Manual are required for construction that is uphill or downhill of a slope with a gradient of more than 15 percent.

(3) Hillside vegetation may not be disturbed except as necessary for construction, and disturbed areas must be restored with native and adapted vegetation as prescribed in the Environmental Criteria Manual.

(4) For construction described in this section, a cut or fill must be revegetated, or if a cut or fill has a finished gradient of more than 33 percent, stabilized with a permanent structure. This does not apply to a stable cut.

SECTION 36. Section 30-5-343 (*Spoil Disposal*) is amended by deleting Subsection (B) in its entirety and renumbering the remaining Subsections accordingly.

SECTION 37. Section 30-5-361 (*Wastewater Restrictions*) is amended to read as follows:

§ 30-5-361 WASTEWATER RESTRICTIONS.

(A) Wastewater treatment by land application is prohibited:

(1) on a slope with a gradient of more than 15 percent;

(2) in a critical water quality zone;

(3) in a 100-year floodplain;

(4) on the trunk of surveyed trees;

(5) in the buffer zone established around a critical environmental feature under Section 30-5-281 (*Critical Environmental Features*); or

(6) during wet weather conditions.

(B) A lot in the Edwards Aquifer recharge zone with private on-site sewage facilities must demonstrate compliance with City Code Chapter 15-5 (*Private Sewage Facilities*).

[~~(A) A wastewater line is prohibited in a critical water quality zone, except for a necessary crossing.~~

~~(1) The land use commission may grant a variance to the prohibition of this subsection. An applicant for a variance must provide an environmental assessment evaluating the effects of alternative sewer alignments.~~

~~(2) Except for a necessary crossing, a wastewater line in a critical water quality zone must be located outside the two-year flood plain unless approved by Council.~~

~~(B) For a commercial development in a water supply rural watershed, a wastewater disposal area may not be located in the 40 percent buffer zone.~~

~~(C) Development for a wastewater disposal system is not permitted in a critical water quality zone.~~

~~(D) A package wastewater treatment plant with a capacity of 5,000 gallons a day or more must provide at least:~~

~~(1) 100 days of storage capacity; or~~

~~(2) if using subsurface effluent disposal, 48 hours of storage capacity.~~]

SECTION 38. A new Section 30-5-364 is added to read as follows:

§ 30-5-364 FLOODPLAIN MODIFICATION

(A) Floodplain modification within a critical water quality zone is prohibited except as allowed under Section 30-5-261 (*Critical Water Quality Zone Development*).

(B) Floodplain modification outside a critical water quality zone is prohibited except as allowed in this section.

(C) Floodplain modification is allowed only if the modification proposed:

(1) is necessary to protect the public health and safety;

(2) would provide a significant, demonstrable environmental benefit, as determined by a functional assessment of floodplain health as prescribed by the Environmental Criteria Manual;

(3) is located within a floodplain area classified as in fair or poor condition, as determined by a functional assessment of floodplain health, prescribed by the Environmental Criteria Manual; or

(4) is necessary for development allowed under Section 30-5-261 (*Critical Water Quality Development*) or 30-5-262 (*Critical Water Quality Zone Street Crossings*).

(D) Floodplain modifications must:

(1) be designed to accommodate existing and fully-vegetated conditions;

(2) encourage sound engineering and ecological practices, prevent and reduce degradation of water quality, and encourage the stability and integrity of floodplains and waterways, as prescribed in the floodplain modification criteria in the Environmental Criteria Manual;

(3) restore floodplain health, or provide mitigation if restoration is infeasible, to support natural functions and processes as prescribed in the floodplain modification criteria in the Environmental Criteria Manual ; and

(4) comply with the requirements of Chapter 30-4 (*Drainage*), the Drainage Criteria Manual, and the Environmental Criteria Manual.

(E) If mitigation is required under this Section, it may be satisfied by:

(1) paying into the Riparian Zone Mitigation Fund a non- refundable amount established by ordinance;

(2) transferring in fee simple or placing restrictions on mitigation land approved by the Watershed Protection Department director and meeting the following conditions:

(a) located within the same watershed classification;

(b) in accordance with the procedures in Section 25-8-26 (*Redevelopment in the Barton Springs Zone*), Subsection (H) (3);

(c) dedicated to or restricted for the benefit of the City or another entity approved by the Watershed Protection Department director and which the City or other approved entity accepts; or

(3) a combination of the mitigation methods described in Subparagraphs (1) and (2), if approved by the Watershed Protection Department director.

SECTION 39. A new Section 30-5-365 is added to read as follows:

§ 30-5-365 INTERBASIN DIVERSION.

(A) Development may not divert stormwater from one watershed to another, except as authorized by this Section.

(B) A proposed diversion of less than 20% of the site based on gross site area or less than 1 acre, whichever is smaller, may be allowed if the applicant demonstrates that:

(1) existing drainage patterns are maintained to the extent feasible; and

(2) there are no adverse environmental or drainage impacts.

SECTION 40. A new Chapter 30-5, Subchapter A, Article 8 is added to read as follows, and the remaining Articles are renumbered accordingly:

ARTICLE 8. URBAN WATERSHED REQUIREMENTS.

§ 30-5-371 APPLICABILITY; COMPLIANCE.

(A) This article applies to development in an urban watershed.

(B) A person who develops in an urban watershed must comply with the requirements of this article.

§ 30-5-372 UPLANDS ZONE.

(A) This section applies to development in an uplands zone. Impervious cover limits in this section are expressed as percentages of gross site area.

(B) Maximum impervious cover for development outside the City's zoning jurisdiction is 80 percent.

SECTION 41. Sections 30-5-392 (*Critical Water Quality Zone*) and 30-5-393 (*Water Quality Transition Zone*) are deleted in their entirety.

SECTION 42. Section 30-5-394 (*Uplands Zone*) is renumbered as Section 30-5-392 and amended to read as follows:

§ 30-5-392[~~394~~] UPLANDS ZONE.

(A) This section applies to development in an uplands zone. Impervious cover limits in this section are expressed as percentages of gross[~~net~~] site area.

(B) This subsection applies in the extraterritorial jurisdiction and in the portions of the Lake, Rattan, Buttercup, South Brushy, and Brushy Creek watersheds that are in the zoning jurisdiction.

(1) Impervious cover for a single-family residential use with a minimum lot size of 5,750 square feet may not exceed:

(a) 45 percent; or

(b) if development intensity is transferred under Section 30-5-393 [~~395~~]*(Transfer Of Development Intensity)*, 50 percent.

(2) Impervious cover for a duplex or single-family residential use with a lot smaller than 5,750 square feet in size may not exceed:

(a) 55 percent; or

(b) if development intensity is transferred under Section 30-5-393 [~~395~~]*(Transfer Of Development Intensity)*, 60 percent.

(3) Impervious cover for a multifamily residential use may not exceed:

(a) 60 percent; or

(b) if development intensity is transferred under Section 30-5-393 [~~395~~]*(Transfer Of Development Intensity)*, 65 percent.

(4) Impervious cover for a commercial use may not exceed:

(a) 65 percent; or

(b) if development intensity is transferred under Section 30-5-393 [~~395~~] *(Transfer Of Development Intensity)*, 70 percent.

(5) Impervious cover for mixed use may not exceed

(a) the limits in subsection (B) (3) for the portion of the ground floor that is multifamily residential;

(b) the limits in subsection (B) (4) for the portion of the ground floor that is commercial; and

(c) impervious cover for the entire site shall be based on the ratios determined on the ground floor.

(C) This subsection applies in the portion of the zoning jurisdiction that is outside the Lake, Rattan, Buttercup, South Brushy, and Brushy Creek watersheds.

(1) Impervious cover for a single-family residential use with a minimum lot size of 5,750 square feet may not exceed:

(a) 50 percent; or

(b) if development intensity is transferred under Section 30-5-393 [~~395~~] *(Transfer Of Development Intensity)*, 60 percent.

(2) Impervious cover for a duplex or single-family residential use with a lot smaller than 5,750 square feet in size may not exceed:

(a) 55 percent; or

(b) if development intensity is transferred under Section 30-5-393 [~~395~~] *(Transfer Of Development Intensity)*, 60 percent.

(3) Impervious cover for a multifamily residential use may not exceed:

(a) 60 percent; or

(b) if development intensity is transferred under Section 30-5-393 [~~395~~] *(Transfer Of Development Intensity)*, 70 percent.

(4) Impervious cover for a commercial use may not exceed:

(a) 80 percent; or

(b) of development intensity is transferred under Section 30-5-393 [~~395~~] *(Transfer Of Development Intensity)*, 90 percent.

(5) Impervious cover for mixed use may not exceed

(a) the limits in subsection (C) (3) for the portion of the ground floor that is multifamily residential;

(b) the limits in subsection (C) (4) for the portion of the ground floor that is commercial; and

(c) impervious cover for the entire site shall be based on the ratios determined on the ground floor.

SECTION 43. Section 30-5-395 (*Transfer of Development Intensity*) is renumbered as Section 30-5-393 and amended to read as follows:

§ 30-5-393 [~~395~~] TRANSFER OF DEVELOPMENT INTENSITY.

(A) An applicant who complies with a provision of this subsection qualifies for the development intensity transfer described in the provision, subject to the requirements in subsection (B) and the impervious cover limitations in section 30-5-392 (*Uplands Zone*).

(1) The [~~For each acre of land in a critical water quality zone that an applicant dedicates in fee simple to the city or county, the~~] applicant may transfer 20,000 square feet of impervious cover to an uplands zone for each acre of land in a critical water quality zone:

(a) dedicated to the City, County, or another entity approved by the Watershed Protection Department director in fee simple and which the City or other approved entity accepts; or

(b) on which restrictions are placed to the benefit of the City, County, or other approved entity and which the City or other approved entity accepts; and

(c) the applicant does not include in impervious calculations elsewhere.

(2) The applicant may transfer 20,000 square feet of impervious cover to an uplands zone for each acre of land in an uplands zone:

(a) located either in the 100-year floodplain or in an environmentally sensitive area as determined by environmental resource inventory and approved by the Watershed Protection Department director; and

(b) dedicated to the City, County, or another entity approved by the Watershed Protection Department director in fee simple and which the City, County, or other approved entity accepts; or

(c) on which restrictions are placed to the benefit of the City, County, or other approved entity and which the City, County, or other approved entity accepts; and

(d) the applicant does not include in impervious calculations elsewhere.

(3) Land dedicated in fee simple to the City or County under this subsection may also be [~~to~~] credited toward the parkland dedication requirements of Chapter 30-2, Article 3, Division 5 *(Parkland Dedication)*.

[~~(2) For each acre of land in the water quality transition zone that an applicant leaves undeveloped and undisturbed and does not include in impervious cover calculations elsewhere, the applicant may transfer 20,000 square feet of impervious cover to the uplands zone.~~

~~(3) For each acre of land in a water quality transition zone that an applicant uses for a golf course or other recreational use, restores using predominantly native plants and grasses, and provides a plan for minimizing the use and effect of pesticides, herbicides and fertilizers, the applicant may transfer 17,000 square feet of impervious cover to an uplands zone.~~

~~(4) For each acre of land in a water quality transition zone that an applicant uses for wastewater disposal, the applicant may transfer 10,000 square feet of impervious cover to an uplands zone.~~

~~(5) For each acre of land in an uplands zone that is located in the buffer zone of a critical environmental feature and that an applicant leaves natural and undisturbed, the applicant may transfer 20,000 square feet of impervious cover to an uplands zone. The buffer area may be included in the net site area calculations for the uplands zone.~~

~~(6) For each acre of land in an uplands zone that an applicant uses for wastewater irrigation, restricts against future development, and leaves in a natural state, other than for necessary irrigation lines and tailwater control berms, the applicant may transfer 20,000 square feet of impervious cover to an uplands zone.~~

(B) An applicant who qualifies for a development intensity transfer under Subsection (A) must comply with requirements of this subsection to effect the transfer.

(1) For transfers between two subdivided tracts:

(a) An applicant may transfer development intensity to a receiving tract that is within the same watershed classification a the transferring tract [~~not more than one mile from the transferring tract~~]. This limitation does not apply if the transferring and receiving tracts are both owned by the applicant and are separated only by property that is also owned by the applicant.

(b) [~~(2)~~] An applicant must concurrently plat the transferring and receiving tracts and must transfer all development intensity at that time.

(c) [~~(3)~~] An applicant must note the development intensity transfer on the plats of the transferring and receiving tracts, in a manner determined by the single office.

(d) [~~(4)~~] An applicant must file in the deed records a restrictive covenant, approved by the City Attorney and county attorney, that runs with the transferring tract and describes the development intensity transfer.

(2) For transfers between two site plans

(a) An applicant may transfer development intensity to a receiving tract that is within the same watershed classification as the transferring tract. This limitation does not apply if the transferring and receiving tracts are both owned by the applicant and are separated only by property that is also owned by the applicant

(b) The transfer must be noted on the receiving and transferring site plans;

(c) An applicant must file in the deed records a restrictive covenant, approved by the City Attorney and county attorney, that runs with the transferring tract and describes the development intensity transfer.

(d) The transfer must occur before the receiving and transferring site plans are released.

(3) For transfers within a single site plan, an applicant must file in the deed records a restrictive covenant, approved by the City Attorney and the county attorney, that runs with the transferring tract and describes the development intensity transfer.

SECTION 44. Section 30-5-422 (*Critical Water Quality Zone*) is deleted in its entirety and the remaining sections renumbered accordingly.

SECTION 45. Section 30-5-423 (*Water Quality Transition Zone*) is amended to read as follows:

§ 30-5-422[~~423~~] WATER QUALITY TRANSITION ZONE.

(A) Development is prohibited in a water quality transition zone that lies over the South Edwards Aquifer recharge zone, except for:

(1) development described in Article 7, Division 1 *(Critical Water Quality Zone Restrictions)*; and

(2) minor drainage facilities or water quality controls that comply with Section 30-5-364 (*Floodplain Modification*) and the floodplain modification criteria in the Environmental Criteria Manual.

(B) In a water quality transition zone that does not lie over the South Edwards Aquifer recharge zone, the impervious cover of the land area of a site may not exceed 18 percent. In determining land area, land in the 100 year floodplain is excluded.

(C) Water quality controls [~~for development in an uplands zone or water quality transition zone~~] may [~~not~~] be located in a water quality transition zone that does not lie over the South Edwards Aquifer recharge zone.

SECTION 46. Section 30-5-424 (*Uplands Zone*) is amended to read as follows:

§ 30-5-423[~~424~~] UPLANDS ZONE.

(A) This section applies to development in an uplands zone. Impervious cover limits in this section are expressed as percentages of net site area.

(B) Impervious cover for a duplex or single-family residential use may not exceed:

(1) 30 percent; or

(2) if development intensity is transferred under Section 30-5-424[~~425~~]*(Transfer Of Development Intensity)*, 40 percent.

(C) Impervious cover for a commercial, [~~or~~] multifamily residential use, or mixed use may not exceed:

(1) 40 percent; or

(2) if development intensity is transferred under Section 30-5-424[~~425~~]*(Transfer Of Development Intensity)*, 55 percent.

SECTION 47. Section 30-5-425 (*Transfer of Development Intensity*) is amended to read as follows:

§ 30-5-424[~~425~~] TRANSFER OF DEVELOPMENT INTENSITY.

(A) An applicant who complies with a provision of this section qualifies for the development intensity transfer described in the provision, subject to the requirements in subsection (B) and the impervious cover limitations in section 30-5-423 (*Uplands Zone*).

(1) The [~~For each acre of land in a critical water quality zone that an applicant dedicates in fee simple to the city or county, the~~] applicant may transfer

15,000 square feet of impervious cover to an uplands zone for each acre of land in a critical water quality zone or water quality transition zone:

(a) dedicated to the City, County, or another entity approved by the Watershed Protection Department director in fee simple and which the City or other approved entity accepts; or

(b) on which restrictions are placed to the benefit of the City, County, or other approved entity and which the City or other approved entity accepts; and

(c) the applicant does not include in impervious calculations elsewhere.

(2) Land dedicated in fee simple to the City or County under this subsection may also be to credited toward the parkland dedication requirements of Chapter 30-2, Article 3, Division 5 *(Parkland Dedication)*.

[~~(2) For each acre of land in the water quality transition zone that an applicant leaves undeveloped and undisturbed and does not include in impervious cover calculations elsewhere, the applicant may transfer 15,000 square feet of impervious cover to the uplands zone.~~

~~(3) For each acre of land in a water quality transition zone that an applicant uses for a golf course or other recreational use, restores using predominantly native plants and grasses, and provides a plan for minimizing the use and effect of pesticides, herbicides and fertilizers, the applicant may transfer 12,750 square feet of impervious cover to an uplands zone.~~

~~(4) For each acre of land in a water quality transition zone that an applicant uses for wastewater disposal, the applicant may transfer 7,500 square feet of impervious cover to an uplands zone.~~

~~(5) For each acre of land in an uplands zone that is located in the buffer zone of a critical environmental feature and that an applicant leaves natural and undisturbed, the applicant may transfer 15,000 square feet of impervious cover to an uplands zone. The buffer area may be included in the net site area calculations for the uplands zone.~~

~~(6) For each acre of land in an uplands zone that an applicant uses for wastewater irrigation, restricts against future development, and leaves in a natural state, other than for necessary irrigation lines and tailwater control berms, the applicant may transfer 15,000 square feet of impervious cover to an uplands zone.~~]

(B) An applicant who qualifies for a development intensity transfer under Subsection (A) must comply with requirements of this subsection to effect the transfer.

(1) For transfers between two subdivided tracts:

(a) An applicant may transfer development intensity to a receiving tract that is within the same watershed classification as the transferring tract [~~not more than one mile from the transferring tract~~]. This limitation does not apply if the transferring and receiving tracts are both owned by the applicant and are separated only by property that is also owned by the applicant.

(b)[(~~2~~)] An applicant must concurrently plat the transferring and receiving tracts and must transfer all development intensity at that time.

(c) [(~~3~~)] An applicant must note the development intensity transfer on the plats of the transferring and receiving tracts, in a manner determined by the single office.

(d) [(~~4~~)] An applicant must file in the deed records a restrictive covenant, approved by the City Attorney and county attorney, that runs with the transferring tract and describes the development intensity transfer.

(2) For transfers between two site plans

(a) An applicant may transfer development intensity to a receiving tract that is within the same watershed classification as the transferring tract. This limitation does not apply if the transferring and receiving tracts are both owned by the applicant and are separated only by property that is also owned by the applicant.

(b) The transfer must be noted on the receiving and transferring site plans;

(c) An applicant must file in the deed records a restrictive covenant, approved by the City Attorney and county attorney, that runs with the transferring tract and describes the development intensity transfer.

(d) The transfer must occur before the receiving and transferring site plans are released.

(3) For transfers within a single site plan, an applicant must file in the deed records a restrictive covenant, approved by the City Attorney and county attorney, that runs with the transferring tract and describes the development intensity transfer.

SECTION 48. Section 30-5-452 (*Critical Water Quality Zone*) is deleted in its entirety and the remaining sections renumbered accordingly.

SECTION 49. Section 30-5-453 (*Water Quality Transition Zone*) is amended to read as follows:

§ 30-5-452[~~453~~] WATER QUALITY TRANSITION ZONE.

(A) Development is prohibited in a water quality transition zone that lies over the South Edwards Aquifer recharge zone, except for:

(1) development described in Article 7, Division 1 *(Critical Water Quality Zone Restrictions)*; and

(2) minor drainage facilities or water quality controls that comply with Section 30-5-364 (*Floodplain Modification*) and the floodplain modification criteria in the Environmental Criteria Manual.

(B) Development is prohibited in a water quality transition zone that lies outside the South Edwards Aquifer recharge zone, except for:

(1) development described in Article 7, Division 1 *(Critical Water Quality Zone Restrictions)*;

(2) streets;

(3) minor drainage facilities or water quality controls that comply with Section 30-5-364 (*Floodplain Modification*) and the floodplain modification guidelines of the Environmental Criteria Manual;

(4) [~~parks or open spaces; and~~

~~(5)~~] duplex or single-family residential development with a minimum lot size of two acres and a density of not more than one unit for each three acres, excluding acreage in the 100 year flood plain.

(C) A lot that lies within a critical water quality zone must also include at least two acres in a water quality transition zone or uplands zone.

[~~(D) Water quality controls may not be located in a water quality transition zone.~~]

SECTION 50. Section 30-5-454 (*Uplands Zone*) is amended to read as follows:

§ 30-5-453[~~454~~] UPLANDS ZONE.

(A) This section applies to development in an uplands zone. Density and impervious cover limits are based on net site area.

(B) For a duplex or single family residential use, density may not exceed:

(1) one unit for each two acres, with a minimum lot size of three-quarters acre; or

(2) if development intensity is transferred under Section 30-5-454 [455]*(Transfer Of Development Intensity)*, one unit for each acre, with a minimum lot size of one-half acre.

(C) This Subsection applies to [For a] cluster housing [use,].

(1) density may not exceed:

(a)[(1)] one unit for each acre; or

(b)[(2)] if development intensity is transferred under Section 30-5-454[455]*(Transfer Of Development Intensity)* two units for each acre.

(2) At least 40 percent of the uplands area of a site must be retained in or restored to its natural state to serve as a buffer. The buffer must be contiguous to the development, and must receive overland drainage from the developed areas of the site unless a water quality control is provided. Use of the buffer is limited to fences, utilities that cannot reasonably be located elsewhere, irrigation lines not associated with wastewater disposal, and access for site construction. A wastewater disposal area may not be located in the buffer.

(D) This subsection applies to a commercial, [or] multifamily residential use or mixed use.

(1) Impervious cover may not exceed:

(a) 20 percent; or

(b) if development intensity is transferred under Section 30-5-454[455] *(Transfer Of Development Intensity)*, 25 percent.

(2) At least 40 percent of the uplands area of a site must be retained in or restored to its natural state to serve as a buffer. The[, the] buffer must be contiguous to the development, and [the buffer] must receive overland drainage from the developed areas of the site unless a water quality control is provided. Use of the buffer is limited to fences, utilities that cannot reasonably be located elsewhere, irrigation lines not associated with wastewater disposal, and access for site construction. A wastewater disposal area may not be located in the buffer.

SECTION 51. Section 30-5-455 (*Transfer of Development Intensity*) is amended to read as follows:

§ 30-5-454[~~455~~] TRANSFER OF DEVELOPMENT INTENSITY.

(A) An applicant who complies with a provision of this section qualifies for the development intensity transfer described in the provision, subject to the requirements in subsection (B) and the impervious cover limitations in section 30-5-453 (*Uplands Zone*).

(1) The [~~For each acre of land in a critical water quality zone that an applicant dedicates in fee simple to the city, county, or another entity approved by the single office,~~] the applicant may transfer one single-family residential housing unit or 6,000 square feet of impervious cover for commercial or multifamily development to an uplands zone for each acre of land in a critical water quality zone or water quality transition zone:

(a) dedicated to the City, County, or another entity approved by the Watershed Protection Department director in fee simple and which the City, County, or other approved entity accepts; or

(b) on which restrictions are placed to the benefit of the City, County, or other approved entity and which the City, County, or other approved entity accepts; and

(c) the applicant does not include in impervious calculations elsewhere.

(2) Land dedicated in fee simple to the City or County under this subsection may also be credited toward the parkland dedication requirements of Chapter 30-2, Article 3, Division 5 *(Parkland Dedication)*.

[~~(2) For each acre of land in the water quality transition zone that an applicant leaves undeveloped and undisturbed and does not include in impervious cover calculations elsewhere, the applicant may transfer one single-family residential housing unit or 6,000 square feet of impervious cover for commercial or multifamily development to the uplands zone.~~

~~(3) For each acre of land in a water quality transition zone that an applicant uses for a golf course or other recreational use, restores using predominantly native plants and grasses, and provides a plan for minimizing the use and effect of pesticides, herbicides and fertilizers, the applicant may transfer 85 percent of a single-family residential housing unit or 5,100 square feet of impervious cover for commercial or multifamily development to an uplands zone.~~

~~(4) For each acre of land in a water quality transition zone that an applicant uses for wastewater disposal, the applicant may transfer 50 percent of a single-family residential housing unit or 3,000 square feet of impervious cover for commercial or multifamily development to an uplands zone.~~

~~(5) For each acre of land in an uplands zone that is located in the buffer zone of a critical environmental feature and that an applicant leaves natural and undisturbed, the applicant may transfer one single-family residential housing unit or 6,000 square feet of impervious cover for commercial or multifamily development to an uplands zone. The buffer area may be included in the net site area calculations for the uplands zone.~~

~~(6) For each acre of land in an uplands zone that an applicant uses for wastewater irrigation, restricts against future development, and leaves in a natural state, other than for necessary irrigation lines and tailwater control berms, the applicant may transfer one single-family residential housing unit or 6,000 square feet of impervious cover for commercial or multifamily development to an uplands zone.~~]

(B) An applicant who qualifies for a development intensity transfer under Subsection (A) must comply with requirements of this subsection to effect the transfer.

(1) For transfers between two subdivided tracts:

(a) An applicant may transfer development intensity to a receiving tract that is within the same watershed classification as the transferring tract [~~not more than one mile from the transferring tract~~]. This limitation does not apply if the transferring and receiving tracts are both owned by the applicant and are separated only by property that is also owned by the applicant.

(b) [~~(2)~~] An applicant must concurrently plat the transferring and receiving tracts and must transfer all development intensity at that time.

(c) [~~(3)~~] An applicant must note the development intensity transfer on the plats of the transferring and receiving tracts, in a manner determined by the single office.

(d) [~~(4)~~] An applicant must file in the deed records a restrictive covenant, approved by the City Attorney and county attorney, that runs with the transferring tract and describes the development intensity transfer.

(2) For transfers between two site plans

(a) An applicant may transfer development intensity to a receiving tract that is within the same watershed classification as the transferring tract. This limitation does not apply if the transferring and receiving tracts are both owned by the applicant and are separated only by property that is also owned by the applicant.

(b) The transfer must be noted on the receiving and transferring site plans;

(c) An applicant must file in the deed records a restrictive covenant, approved by the City Attorney and county attorney, that runs with the transferring tract and describes the development intensity transfer.

(d) The transfer must occur before the receiving and transferring site plans are released.

(3) For transfers within a single site plan, an applicant must file in the deed records a restrictive covenant, approved by the City Attorney and county attorney, that runs with the transferring tract and describes the development intensity transfer.

SECTION 52. Section 30-5-481 (*Applicability; Compliance*), Subsection (B) is amended to read as follows:

(B) A person who develops in the Barton Springs Zone must comply with the requirements of:

(1) this article; and

(2) Article 13[~~12~~] *(Save Our Springs Initiative)*.

SECTION 53. Section 30-5-482 (*Critical Water Quality Zone*) is deleted in its entirety and the remaining sections renumbered accordingly.

SECTION 54. Section 30-5-483 (*Water Quality Transition Zone*) is amended to read as follows:

§ 30-5-482[~~483~~] WATER QUALITY TRANSITION ZONE.

(A) Development is prohibited in a water quality transition zone that lies over the Edwards Aquifer recharge zone, except for:

(1) development described in Article 7, Division 1 *(Critical Water Quality Zone Restrictions)*; and

(2) minor drainage facilities or water quality controls that comply with the floodplain modification criteria [~~guidelines~~] of the Environmental Criteria Manual.

(B) Development is prohibited in a water quality transition zone that lies outside the Edwards Aquifer recharge zone, except for:

(1) development described in Article 7, Division 1 *(Critical Water Quality Zone Restrictions)*;

(2) minor drainage facilities or water quality controls that comply with Section 30-5-364 (*Floodplain Modification*) and the floodplain modification guidelines of the Environmental Criteria Manual;

(3) streets; and

(4) duplex or single-family residential housing with a minimum lot size of two acres and a density of not more than one unit for each three acres, excluding acreage in the 100 year floodplain. [~~; and (5) vegetative filter strips.~~]

SECTION 55. Section 30-5-512 (*Amendment*) is amended to read as follows:

§ 30-5-512 AMENDMENT.

This article [~~shall not be repealed or amended by City Council until two years after the effective date of the SOS ordinance, August 10, 1992. Thereafter, this article~~] may be repealed or amended only by an affirmative vote of a three-quarters majority of the City Council.

SECTION 56. Section 30-5-514 (*Pollution Prevention Required*), Subsection (A) is amended to read as follows:

(A) In the watersheds contributing to Barton Springs, no development nor any revision, extension, or amendment thereof, may be approved unless it is designed, carried out, and maintained on a site-by-site basis to meet the pollution prevention requirements set forth below for the life of the project. In order to prevent pollution, impervious cover for all such development shall be limited to a maximum of 15 percent in the entire recharge zone, 20 percent of the contributing zone within the Barton Creek watershed, and 25 percent in the remainder of the contributing zone. The impervious cover limits shall be calculated on a net site area basis. In addition, runoff from such development shall be managed through water quality controls and onsite pollution prevention and assimilation techniques so that no increases occur in the respective average annual loadings of total suspended solids, total phosphorus, total nitrogen, chemical oxygen demand, [~~biochemical oxygen demand,~~] total lead, cadmium, E. coli., [~~fecal coliform,~~] fecal streptococci, volatile

organic compounds, total organic carbon, pesticides, and herbicides from the site. For a given project, impervious cover shall be reduced if needed to assure compliance with these pollutant load restrictions.

SECTION 57. Section 30-5-516 (*Application to Existing Tracts, Platted Lots, and Public Schools*) is amended to add a new Subsection (D) to read as follows:

(D) This article does not apply to a roadway project with less than 8,000 square feet of new impervious cover. For the purposes of this Section, roadway improvements are limited to intersection upgrades, low-water crossing upgrades, additions for bicycle lanes, and additions for mass transit stops.

SECTION 58. Section 30-5-652 (*Fills at Lake Austin, Town Lake, and Decker Lake*) is amended to read as follows:

§ 30-5-652 FILLS AT LAKE AUSTIN, LADY BIRD [~~TOWN~~] LAKE, AND [~~DECKER~~] LAKE WALTER E. LONG.

(A) Approval by the Parks and Recreation Board is required to place fill in Lake Austin, Lady Bird [~~Town~~] Lake, or [~~Decker~~] Lake Walter E. Long.

(B) A person must file a written application with the Parks and Recreation Board for an approval under this section.

(C) This section applies to a development application that includes a proposal to:

(1) modify the shoreline of Lake Austin, Lady Bird Lake, or Lake Walter E. Long; or

(2) dredge in or along that lake.

(D) Before the single office may approve the development application, the single office must submit the development application to the Parks and Recreation Board.

(E) The board shall review and comment on:

(1) the navigational safety of the proposed development; and

(2) the effect of the development on the recreational and natural character of the lake.

(F) The board may develop specific criteria for determining:

(1) the navigational safety of a proposed development; or

_____ (2) the effect of a proposed development on the recreational and natural character of Lake Austin, Lady Bird Lake, or Lake Walter E. Long.

Attachment 1

Chapter 30-4

CHAPTER 30-4. DRAINAGE

ARTICLE 1. GENERAL PROVISIONS.

§ 30-4-1 Definitions
§ 30-4-2 Obstruction of Waterways Prohibited
§ 30-4-3 Duty to Maintain Unobstructed Waterways
§ 30-4-4 Standing Water Declared a Nuisance
§ 30-4-5 Computation of Stormwater Runoff

ARTICLE 2. DRAINAGE STUDIES; EROSION HAZARD ANALYSIS; FLOODPLAIN DELINEATION.

§ 30-4-31 Single Office Authorized to Require Drainage Studies
§ 30-4-32 Single Office Authorized to Require Erosion Hazard Zone Analysis
§ 30-4-33 Floodplain Maps, Delineation, and Depiction

ARTICLE 3. REQUIREMENTS FOR APPROVAL.

§ 30-4-61 Criteria for Approval of Development Applications
§ 30-4-62 Certificate of Professional Engineer Required for Certain Alterations and Improvements
§ 30-4-63 Approval by Single Office of Certain Permits and Certificates
§ 30-4-64 Design and Construction of Drainage Facilities and Improvements
§ 30-4-123 Enclosed Storm Sewers, Bridges, and Culverts

ARTICLE 5. RESPONSIBILITIES OF OWNER OR DEVELOPER.

§ 30-4-151 Stormwater Conveyance and Drainage Facilities
§ 30-4-152 Dedication of Easements and Rights-of-way
§ 30-4-153 Detention Basin Maintenance and Inspection

ARTICLE 1. GENERAL PROVISIONS.

§ 30-4-1 DEFINITIONS.

In this chapter:

(1) ADVERSE FLOODING IMPACT means an increase in flood risk or hazards.

(2) DEVELOPMENT APPLICATION means an application required under Title 25 for development, such as an application for subdivision, site plan, or building permit.

(3) DIRECTOR, when used without a qualifier, means the director of the Watershed Protection Department, or the director's designee.

(4) DRAINAGE EASEMENT means an easement or right-of-way for a drainage facility required by Section 25-7-152 (*Dedication of Easements and Rights-Of-Way*).

(5) EROSION HAZARD ZONE means an area where future stream channel erosion is predicted to result in damage to or loss of property, buildings, infrastructure, utilities, or other valued resources.

(6) FEMA means the Federal Emergency Management Agency.

(7) FEMA FLOODPLAIN means a special flood hazard area delineated on a flood insurance rate map.

(8) FLOOD INSURANCE RATE MAP means an official map of a community on which FEMA has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

(9) 100 YEAR FLOODPLAIN means the 100-year floodplain calculated under fully developed conditions as prescribed by the Drainage Criteria Manual.

(10) 25 YEAR FLOODPLAIN means the 25-year floodplain calculated under fully developed conditions as prescribed by the Drainage Criteria Manual.

(11) WATERWAY means a watercourse, drainage way, branch, creek, or stream including, but not limited to, the limits of the 100-year and 25-year floodplains.

§ 30-4-2 OBSTRUCTION OF WATERWAYS PROHIBITED.

Unless authorized by a subdivision construction plan approved under County Code Chapter 64 *(Regulations for Flood Management and Guidelines for Development Permits)*, or a development application approved under City Code Title 25, a person may not place, or cause to be placed, an obstruction in a waterway.

§ 30-4-3 DUTY TO MAINTAIN UNOBSTRUCTED WATERWAYS.

The person in control of real property traversed by a waterway shall keep the waterway free from an obstruction that is not authorized by a development application approved under Title 25 or County Code Chapter 64.

§ 30-4-4 STANDING WATER DECLARED A NUISANCE.

A pool of standing water in a waterway that is caused by an unauthorized obstruction in the waterway is declared to be a nuisance.

§ 30-4-5 COMPUTATION OF STORMWATER RUNOFF.

Stormwater runoff shall be computed on the basis of a fully developed contributing drainage area or watershed as determined under the Drainage Criteria Manual.

ARTICLE 2. DRAINAGE STUDIES; EROSION HAZARD ANALYSIS; FLOODPLAIN DELINEATION.

§ 30-4-31 SINGLE OFFICE AUTHORIZED TO REQUIRE DRAINAGE STUDIES.

(A) The single office may require the owner of real property to provide, at the owner's expense and as a condition for development application approval, a drainage study for the total area to be ultimately developed.

(B) The drainage study must be in accordance with the Drainage Criteria Manual.

(C) If a drainage study is required under this Section, the single office may not accept for review a development application for any portion of the proposed development until the single office has received the required drainage study.

§ 30-4-32 SINGLE OFFICE AUTHORIZED TO REQUIRE EROSION HAZARD ZONE ANALYSIS.

(A) The single office may require the owner of real property to provide, at the owner's expense and as a condition for development application approval, an analysis to establish the erosion hazard zone if the proposed development is:

(1) within 100 feet of the centerline of a waterway with a drainage area of 64 acres or greater; or

(2) located where significant erosion is present.

(B) The erosion hazard zone analysis must be in accordance with the Drainage Criteria Manual.

(C) If an erosion hazard zone analysis is required under this section, the single office may not accept for review a development application for any portion of the proposed development until the single office has received the required erosion hazard zone analysis.

§ 30-4-33 FLOODPLAIN MAPS, DELINEATION, AND DEPICTION.

(A) The director shall designate and maintain official floodplain maps.

(B) If an official floodplain map is not delineated, the owner of property to be developed shall calculate the boundaries of the 100-year floodplain in accordance with the Drainage Criteria Manual and submit the calculation to the single office for approval.

(C) If the single office determines that FEMA regulations require a submission to the agency of a request for a flood insurance rate map revision, the single office may require that the revision request to FEMA be submitted by the owner of property to be developed.

(D) A person who files a development application shall depict, as applicable:

(1) on a preliminary plan or subdivision construction plan:

(a) a 100-year floodplain;

(b) a FEMA floodplain; and

(c) a drainage easement or proposed drainage easement;

(2) on a final plat:

(a) a drainage easement; and

(b) a portion of a FEMA floodplain that is outside a drainage easement.

(E) If a portion of a FEMA floodplain is outside a drainage easement, the owner of property to be developed shall, on a final plat:

(1) identify the portion of the FEMA floodplain that is outside the drainage easement, including the community and panel number of the flood insurance rate map; and

(2) include a note that:

(a) refers the reader to federal and local regulations governing development in a FEMA floodplain;

(b) states that flood insurance may be required; and

(c) describes efforts to revise the flood insurance rate map.

ARTICLE 3. REQUIREMENTS FOR APPROVAL.

§ 30-4-61 CRITERIA FOR APPROVAL OF DEVELOPMENT APPLICATIONS.

(A) A development application may not be approved unless:

(1) the proposed development application demonstrates sufficient capacity for the design flood, as determined under the Drainage Criteria Manual;

(2) each proposed improvement is sufficiently strong to resist:

(a) external pressure caused by earth or building; and

(b) internal pressure or abrasion caused by water or debris;

(3) the proposed grades will not permit water to gather in a pool that may become stagnant, excluding variable pools in creek beds as a result of natural channel design;

(4) temporary and permanent measures to control erosion are sufficient to minimize siltation of the waterway, as determined under the Environmental Criteria Manual; and

(5) the proposed development:

(a) will not result in additional adverse flooding impact on other property;

(b) except as provided by Subsection (B), to the greatest extent feasible preserves the natural and traditional character of the land and the waterway located within the 100-year floodplain;

(c) except as provided by Subsection (C), includes on-site control of the two-year peak flow, as determined under the Drainage Criteria Manual and the Environmental Criteria Manual;

(d) will not result in additional erosion impacts on other property; and

(e) locates all proposed improvements outside the erosion hazard zone, unless protective works are provided as prescribed in the Drainage Criteria Manual.

(B) A development application that proposes floodplain modification shall comply with Section 30-5-364 (*Floodplain Modification*).

(C) A proposed development may provide off-site control of the two-year peak flow if the off-site control does not cause:

(1) an adverse water quality impact from increased in-stream peak flow; or

(2) streambank erosion.

§ 30-4-62 CERTIFICATE OF PROFESSIONAL ENGINEER REQUIRED FOR CERTAIN ALTERATIONS AND IMPROVEMENTS.

(A) The single office may not accept a plan or specification for a proposed alteration or improvement of a bed or bank of a waterway unless the plan or specification is accompanied by a certificate bearing the seal of a Texas professional engineer certifying that:

(1) the hydraulic and structural design is adequate; and

(2) the proposed alteration or improvement complies with the ordinances of the city and county, the Drainage Criteria Manual, and the laws of this state.

(B) Subsection (A) does not prohibit the single office from accepting a plan or specification for a minor alteration or improvement that, in the judgment of the single office, does not require certification by a Texas professional engineer.

§ 30-4-63 APPROVAL BY SINGLE OFFICE OF CERTAIN PERMITS AND CERTIFICATES.

If a development application requires the completion or partial completion of a drainage improvement before a building may be constructed on a lot, a building permit, certificate of compliance, or development permit may not be issued for the lot unless the single office approves the issuance.

§ 30-4-64 DESIGN AND CONSTRUCTION OF DRAINAGE FACILITIES AND IMPROVEMENTS.

The design and construction of a drainage facility or improvement must:

(1) be in accordance with the Drainage Criteria Manual; and

(2) provide for maintenance and protection from erosion in accordance with the Environmental Criteria Manual.

§ 30-4-65 ENCLOSED STORM DRAINS, BRIDGES, AND CULVERTS.

(A) The single office must approve the plans and specifications for a storm drain, bridge, or culvert.

(B) The county's Transportation and Natural Resources Department or the City Manager may inspect the construction of each storm drain, bridge, or culvert.

ARTICLE 4. RESPONSIBILITIES OF OWNER OR DEVELOPER.

§ 30-4-151 STORMWATER CONVEYANCE AND DRAINAGE FACILITIES.

(A) The owner or developer of property to be developed is responsible for the conveyance of all stormwater flowing through the property, including stormwater that:

(1) is directed to the property by other developed property; or

(2) naturally flows through the property because of the topography.

(B) Future upstream development shall be accounted for as determined under the Drainage Criteria Manual.

(C) If the construction or improvement of a storm drainage facility is required along a property line that is common to more than one property owner, the owner proposing to develop the property is, at the time the property is developed, responsible for each required facility on either side of the common property line.

(D) The responsibility of the owner proposing to develop the property includes the responsibility to dedicate or obtain the dedication of any right-of-way or easement necessary to accommodate the required construction or improvement of the storm drainage facility.

(E) If an owner of property proposes to develop only a portion of that property, a stormwater drainage facility to serve that portion of the property proposed for immediate development or use is required, unless the platting official determines that construction or improvement of a drainage facility outside that portion of the property to be developed is essential to the development or use of the property to be developed.

(F) The owner or developer shall provide adequate off-site drainage improvements to accommodate the full effects of the development. The city or county may assist the owner or developer in the acquisition of an interest in property necessary to provide an off-site improvement, if the owner or developer:

(1) by affidavit, certifies that a bona fide attempt to provide the off-site drainage improvements has not been successful; and

(2) provides an adequate guarantee that the owner or developer will:

(a) finance the entire cost of acquiring the necessary property interest; and

(b) retain full responsibility for construction of the required off-site improvement.

§ 30-4-152 DEDICATION OF EASEMENTS AND RIGHTS-OF-WAY.

(A) The owner of real property proposed to be developed shall dedicate to the public an easement or right-of way for a drainage facility, open or enclosed, and stormwater flow to the limits of the 100-year floodplain, as prescribed in the Drainage Criteria Manual.

(B) An easement or right-of-way required by Subsection (A) must be of sufficient width to provide continuous access for the operation, maintenance, or repair of a drainage facility as prescribed in the Drainage Criteria Manual.

(C) The owner of the property shall dedicate any additional easement or right-of-way that is necessary to allow continuous access for the operation, maintenance, or rehabilitation of a drainage facility.

(D) A part of a lot or tract of land that is located in an easement or right-of-way required by this section may be included as part of the area of the lot or tract of land in the calculation of density or impervious cover.

§ 30-4-153 DETENTION BASIN MAINTENANCE AND INSPECTION.

(A) In this section:

(1) COMMERCIAL DEVELOPMENT means all development other than Residential Development.

(2) COMMERCIAL BASIN means a required detention basin or appurtenance that receives stormwater runoff from a Commercial Development.

(3) DCM STANDARDS means the provisions in the Drainage Criteria Manual regarding maintenance of a required detention basin or appurtenance.

(4) RESIDENTIAL DEVELOPMENT means development of two dwelling units or less per lot.

(5) RESIDENTIAL BASIN means a required detention basin or appurtenance that receives stormwater runoff from a Residential Development.

(B) The record owner of a commercial development shall maintain the commercial basin serving the commercial development in accordance with the DCM standards, whether or not the commercial basin is located on the same property as the commercial development. The record owner shall provide the City proof of the right to access and maintain the commercial basin if it is not located on the same property as the commercial development.

(C) If more than one commercial development is served by a single commercial basin, the record owners of the commercial basin and all commercial developments served by the commercial basin shall be jointly and severally responsible for maintenance of the commercial basin in accordance with the DCM standards.

(D) Alternative maintenance arrangements are authorized as follows:

(1) The director may authorize an alternative arrangement for maintenance of a commercial basin in accordance with the DCM standards. If an alternative arrangement is approved by the director, the City Attorney shall determine whether an agreement is necessary; the agreement must be approved by the City Attorney and filed of record.

(2) The executive manager of the Travis County Transportation and Natural Resources Department may authorize an alternative arrangement for maintenance of a residential basin in accordance with the DCM standards. If an alternative arrangement is approved by the executive manager, the county attorney shall determine whether an agreement is necessary; the agreement must be approved by the county attorney and filed of record.

(E) The City shall inspect each commercial basin that is not a subsurface basin at least once every three years to ensure that the commercial basin is being maintained in accordance with the DCM standards, but will not inspect basins maintained by the County under Subsection (H). If the commercial basin fails inspection requiring an additional inspection, the director may charge a re-inspection fee.

(F) The record owner of a subsurface commercial basin must provide the Watershed Protection Department with a maintenance plan and an annual report from a registered engineer verifying that the basin is in proper operating condition.

(G) The record owner of a residential development shall maintain the residential basin serving the residential development in accordance with the DCM standards, whether or not the residential basin is located on the same property as the residential development. The record owner may assign maintenance responsibility to a duly established Homeowner's Association upon written approval by the executive manager of the Travis County Transportation and Natural Resources Department. The record owner of a subsurface residential basin must provide the

Travis County Transportation and Natural Resources Department with a maintenance plan and an annual report from a registered engineer verifying that the basin is in proper operating condition.

(H) The county shall maintain a detention basin or appurtenance that is an integral part of a county road.

(I) Section 30-5-231 *(Water Quality Control Maintenance and Inspection)* provides for maintenance of water quality controls.

AFFORDABILITY IMPACT STATEMENT
NEIGHBORHOOD HOUSING AND COMMUNITY DEVELOPMENT
CITY COUNCIL AGENDA: PENDING CASE NUMBER: C2O-2013-017

PROPOSED CODE AMENDMENT:	PROPOSED: WATERSHED PROTECTION ORDINANCE
IMPACT ON REGULATORY BARRIERS TO HOUSING DEVELOPMENT	☒ INCREASE ☐ DECREASE ☐ NO IMPACT THE PROPOSED ORDINANCE INCREASES REGULATORY BARRIERS BY CHANGING THE AREA OF DRAINAGE THAT REQUIRES STREAM BUFFERING IN SUBURBAN WATERSHEDS FROM 320 ACRES DOWN TO 64 ACRES, INCREASING THE ACREAGE IMPACTED BY NEW BUFFERING REGULATIONS. APPROXIMATELY 106,085 ACRES OF UNDEVELOPED LAND WILL BE SUBJECT TO NEW BUFFERING REQUIREMENTS. HOWEVER, ACCORDING TO WPD ANALYSIS, ONLY ABOUT 11% OF DEVELOPMENTS, OR ABOUT 13,000 ACRES, WOULD HAVE A POTENTIAL REDUCTION IN THE AMOUNT OF IMPERVIOUS COVER ALLOWED. UNDER THE SAME ANALYSIS, ABOUT 19% OF PROPERTIES, OR ABOUT 57,000 ACRES WOULD HAVE A POTENTIAL GAIN IN THE AMOUNT OF IMPERVIOUS COVER ALLOWED. AN ANALYSIS OF AHFC'S FRONTIER AT MONTANA SUBDIVISION SHOWED THAT AT LEAST 25 OF 81 LOTS WOULD HAVE BEEN WITHIN THE PROPOSED BUFFER. THEREFORE, A DIFFERENT LAYOUT, HOUSING PRODUCT, OR ENTIRE SITE WOULD HAVE HAD TO HAVE BEEN SELECTED TO MAINTAIN AN EQUIVALENT NUMBER OF AFFORDABLE UNITS. ON THE OTHER HAND, THE PROJECT'S DESIGN PLACED FENCES AND HOMES IN VERY CLOSE PROXIMITY TO THE CREEK BANKS, LEFT LITTLE ROOM FOR STABILIZING RIPARIAN VEGETATION, AND DID NOT PROVIDE TRAIL CONNECTIVITY, COMMUNITY OPEN SPACE, AND OTHER FEATURES AFFORDED BY MORE GENEROUS CREEK BUFFERS. THIS CASE STUDY UNDERSCORES THE COMPLEXITY OF THE DECISIONS TO BE MADE ABOUT SHORT AND LONG-TERM COSTS AND BENEFITS.
LAND USE / ZONING OPPORTUNITIES FOR AFFORDABLE HOUSING DEVELOPMENT	☐ INCREASE ☒ DECREASE ☐ NO IMPACT THE PROPOSED AMENDMENT WOULD ELIMINATE THE WATER QUALITY TRANSITION ZONE AND CALCULATE IMPERVIOUS COVER ON A GROSS SITE AREA BASIS FOR SUBURBAN

	WATERSHEDS. THIS MEANS LARGER SITES WOULD IN GENERAL HAVE MORE FLEXIBILITY TO ADD IMPERVIOUS COVER WITHIN THE UPLANDS TO OFFSET THE NEW BUFFER. OTHER PROVISIONS SUCH AS "BUFFER AVERAGING" AND ADDITIONAL USES WITHIN THE BUFFER (E.G., WATER QUALITY CONTROLS AND WASTEWATER LINES) PROVIDE DEVELOPMENT FLEXIBILITY AS WELL. SMALLER, INFILL TYPE DEVELOPMENTS COULD BE MORE NEGATIVELY IMPACTED AND WOULD NOT BE ABLE TO AS EASILY MITIGATE THE LOSS DUE TO THE SMALLER SITE AREA. AGAIN, IN OUR EXAMPLE OF AN ACTUAL DEVELOPMENT, 25 OF 81 LOTS COULD HAVE POTENTIALLY BEEN LOST BY THE ADDITIONAL BUFFERING REQUIREMENTS.
IMPACT ON COST OF DEVELOPMENT	☒ INCREASE ☐ DECREASE ☐ NO IMPACT THE PROPOSED EROSION HAZARD ZONE (EHZ) ANALYSIS COULD IMPACT COSTS TO DEVELOPMENT. THERE IS NO ANALYSIS OF EROSION POTENTIAL REQUIRED AT THIS TIME. THE EHZ ANALYSIS COULD BE STRAIGHTFORWARD AND COST $100-$200 FOR A LETTER TO BE GENERATED BY A CIVIL ENGINEER. IF THE ZONE REQUIRES ADDITIONAL ANALYSIS AND ARMORING, THE COST OF DESIGN AND INSTALLATION COULD BE A RANGE OF $1,000 - $20,000+ PER AREA DEPENDING ON THE MITIGATION NEEDED. THIS ANALYSIS AND POTENTIAL MITIGATION WOULD INCREASE DEVELOPMENT COSTS AND NEGATIVELY IMPACT HOUSING AFFORDABILITY. THE COST TO NOT PERFORM THIS ANALYSIS CAN LEAD TO SIGNIFICANT PUBLIC AND PRIVATE COSTS TO ADDRESS THE UNDERMINING OF FENCES, YARDS, AND STRUCTURES DUE TO STREAM CHANNEL EROSION. (SEE MORE DISCUSSION ON HISTORIC COSTS BELOW.)
IMPACT ON PRODUCTION OF AFFORDABLE HOUSING	☐ INCREASE ☒ DECREASE ☐ NO IMPACT A WPD ANALYSIS DEMONSTRATES, THE MAJORITY OF THE ACREAGE SUBJECT TO THE PROPOSED ORDINANCE WOULD SEE NO CHANGE OR A POTENTIAL INCREASE IN AVAILABLE IMPERVIOUS COVER ENTITLEMENTS. A WPD ANALYSIS OF 90 EXISTING S.M.A.R.T. HOUSING MULTI-FAMILY PROJECTS REVEALED ONLY 9 WOULD HAVE BEEN SUBJECT TO THE PROPOSED BUFFERS AND OF THOSE ONLY 2 HAD A

	PROPOSED BUFFER THAT WOULD HAVE SIGNIFICANTLY IMPACTED THE DEVELOPMENT. SOME AFFORDABLE DEVELOPMENTS COULD FACE A DECREASE IN HOUSING YIELD BY ADHERING TO THE PROPOSED TRIGGERS FOR THE BUFFERING. SMALLER INFILL PROJECTS WOULD BE MORE NEGATIVELY IMPACTED DUE TO SMALLER LAND AREA AVAILABLE TO RE-CONFIGURE. A POTENTIAL OUTCOME OF THE ORDINANCE WILL BE TO REDIRECT DEVELOPMENT AND DENSITY TO UPLAND AREAS AND PROPERTIES THAT ARE NOT ADJACENT TO SENSITIVE WATERWAYS AND FLOODPLAINS, WHICH IS AN OBJECTIVE OF THE IMAGINE AUSTIN COMPREHENSIVE PLAN.
ALTERNATIVE LANGUAGE TO MAXIMIZE AFFORDABLE HOUSING OPPORTUNITIES:	NHCD RECOMMENDS WPD CONSIDER INCORPORATING ADMINISTRATIVE VARIANCES TO THE ORDINANCE TO ALLOW DEVELOPMENTS FLEXIBILITY AND TO AVOID THE ADDITIONAL COSTS ASSOCIATED WITH OBTAINING BOARD AND COMMISSION VARIANCES.
OTHER HOUSING POLICY CONSIDERATIONS:	THE PURPOSE OF THE WATERSHED PROTECTION ORDINANCE IS TO IMPROVE CREEK AND FLOODPLAIN PROTECTION; PREVENT UNSUSTAINABLE PUBLIC EXPENSE ON DRAINAGE SYSTEMS; SIMPLIFY DEVELOPMENT REGULATIONS WHERE POSSIBLE; AND MINIMIZE THE IMPACT ON THE ABILITY TO DEVELOP LAND. IT ALSO SEEKS TO BETTER BALANCE THE ENVIRONMENTAL PROTECTION LONG AFFORDED TO WESTERN WATERSHEDS TO THOSE OF THE EAST. THESE EASTERN CREEKS ARE AMONG THE MOST EROSIVE IN AUSTIN'S JURISDICTION. THE CITY'S STREAM RESTORATION PROGRAM HAS SPENT OVER $30 MILLION TO REPAIR EROSION PROBLEMS—VIRTUALLY ALL OF WHICH WOULD HAVE BEEN PREVENTED HAD THE DEVELOPMENT PROTECTED BEEN ADEQUATELY SET BACK FROM CREEKS. AND THIS EXPENDITURE REPRESENTS ONLY A FRACTION OF THE REMAINING, UNRESOLVED PROBLEMS CREATED IN THE PAST.
	THE HEADWATERS BUFFERS AND EROSION HAZARD ZONE PROVISIONS OF THE ORDINANCE ARE CENTRAL TO IMPLEMENTING THESE COST-SAVING MEASURES. HOUSING PROJECTS BUILT IN CLOSE PROXIMITY TO EROSIVE CREEK BANKS WILL LIKELY CREATE BOTH NUISANCE FOR FUTURE HOMEOWNERS AS WELL AS POTENTIAL PUBLIC AND PRIVATE COSTS.

	WITH ALLOWANCES FOR TRAILS, COMMUNITY GARDENS, AND PARKS, STREAM BUFFERS ALSO SERVE AS A VALUABLE OPPORTUNITY TO PROVIDE CONNECTIVITY AND COMMUNITY OPEN SPACE FOR HOUSING PROJECTS. THIS HELPS TO IMPLEMENT THE HEALTHY AUSTIN AND GREEN INFRASTRUCTURE PRIORITY PROGRAMS OF IMAGINE AUSTIN, IN ADDITION TO SUSTAINABLY MANAGING OUR WATER RESOURCES.
DATE PREPARED:	September 12 ~~August~~ , 2013

DIRECTOR'S SIGNATURE: _____

ELIZABETH A. SPENCER