Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	Disadvantages
ARTICLE 1. GENERAL PROVISIONS				
1. *Barton Springs Definition §25-8-1 (1)*	Barton Springs is not defined and potentially not clear.	Add definition.	Clarity.	None.
2. *Bluff Definition §25-8-1 (2)*	Term used to define itself.	Reword.	Clarity.	None.
3. *Canyon Rimrock Definition §25-8-1 (3)*	Term used to define itself.	Reword.	Clarity.	None.
4. *Cluster Housing Definition §25-8-1 (5)*	The original clarifying definition of cluster housing was inadvertently deleted from the Code, leaving use of this provision unclear.	Add original definition from Ordinance 851219-GG back into Code.	Clarify requirements to use cluster housing provisions for WS Rural watershed development; current code & criteria do not provide guidance.	None.
5. *Crest of a Bluff Definition §25-8-1 (4) [Deleted]*	No longer needed since term was deleted in 25-8-92 (A)(2).	Deleted definition of term no longer found in 25-8.	Clarity.	None.
6. *Critical Environmental Feature Definition §25-8-1 (6)*	Faults, fractures, and seeps are all regulated Critical Environmental Features (CEFs) but are not listed in the CEF Definition.	Add faults, fractures and seeps to definition.	Clarifies features subject to the requirements for CEF buffers in §25-8-281.	None.
7. *Director Definition §25-8-1 (7)*	The departmental director responsible for the enforcement of this chapter is not necessarily clear.	Add definition to clarify the director is that of the Planning & Development Review Department unless otherwise indicated.	Clarity.	None.
8. *Erosion Hazard Zone Definition §25-8-1 (8)*	Erosion Hazard Zones are a key technical consideration for engineering designs; the term and concept are not defined in the code.	Add definition. Methods to comply will be developed and published in the Drainage Criteria Manual (DCM) at the same time as the ordinance is adopted.	Clarity.	None.

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			Advantages	Disadvantages
9. *Faults & Fractures Definition §25-8-1 (9)*	Structure of definition (starting with "is limited to") was confusing.	Reword.	Clarity.	None.
10. *Impervious Cover Definition §25-8-1 (10)*	Definition needs adjustment to focus on infiltration of water into the ground; existing placement of definition is out of alphabetical order.	Reword and move into alphabetical order.	Clarity.	None.
11. *Multi-Use Trail Definition §25-8-1 (12)*	Term used in revisions (25-8-63 & 261) so needed definition. Current code allows "hiking, jogging, or walking trails and outdoor facilities" (25-8-261) but does not allow "multi-use trails," potentially making creation of hike-and-bike trails more difficult.	Add definition.	Clarifies and makes way for construction of trail systems called for in Imagine Austin Comprehensive Plan & Watershed Protection Master Plan. Concrete trails save roughly 90% on maintenance and offer alternatives to motorized transportation.	Potential damage to riparian zones with increased impervious surfaces & public use. Develop trail design criteria to address water quality & riparian concerns; place out of Erosion Hazard Zone. Some especially sensitive areas should be off-limits.
12. *Open Space Definition §25-8-1 (13)*	The term "open space" is used (e.g., 25-8-261) and needs to be defined to make its meaning clear.	Add definition to clarify what kind of uses are allowed within the critical water quality zone. Add multi-use trails. Limit golf courses to areas left in a natural state.	Clarity. Multi-use trails central to connectivity goals of Imagine Austin. Managed golf courses not appropriate near waterways; could seek variances & show protective measures provided.	Increased permitting costs & uncertainty for proposed golf course development in CWQZ. See trail discussion above.
13. *Descriptions of Regulated Areas §25-8-2*	Division of responsibilities between WPD & PDRD needs updating. Some watersheds need to have their names updated and/or be assigned to correct watershed classifications.	Correct/update text in section.	Clarity.	None.
14. *Descriptions of Regulated Areas §25-8-2 (D)(1)*	Barton Springs Zone needs to explicitly include Barton Creek.	Barton Springs Zone definition clarified to include Barton Creek watershed.	Clarity.	None.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	Disadvantages
15. *Descriptions of Regulated Areas §25-8-2 (D)(3)*	Existing text describing the Edwards Aquifer is confusing.	Edwards Aquifer definition cleanup.	Clarity.	None.
16. *Urban Watershed Exceptions §25-8-23*	Exceptions granted in 1991 Urban Watershed Ordinance are no longer relevant.	Delete section.	Simplifies code by deleting outdated sections.	None. Few to no known projects would apply.
17. *Condemnation and Accessibility Exceptions § 25-8-23 (A)(2)*	Director reference needed.	Specify Director of WPD to determine cases of condemnation and accessibility exceptions.	Clarity.	None.
18. *Limited Adjustment § 25-8-24 (B)*	Current code provides limited adjustment option to resolve potential takings issues in Barton Springs Zone. But option not available in other watersheds.	Extend limited adjustment citywide. Allows Council, in the case of a conflicting law, to adjust application of 25-8, Subchapter A, for a specific property. Requires that such modification provide maximum water quality protection.	Offers means of resolving takings grievances in addition to existing variance system.	None.
19. *Redevelopment Exception Applicability §25-8-25 (A)(1); 25-8-26 (A)(1); & 25-8-27 (A)(1)*	Need to clarify eligibility conditions for use of Redevelopment Exception options: under what conditions, if any, should a development be able to count unpermitted impervious cover toward its total IC area?	Require development built since January 1, 1992 to have been properly permitted in order to count towards use with the redevelopment exception options. 1992 is the year that the SOS Ordinance was adopted and the year following the Urban Watersheds Ordinance.	Strikes a balance allowing old developments prior to the SOS Ordinance era to redevelop and does not reward unpermitted impervious cover and other development after this time.	Some will want no unpermitted development to be counted and others will want all such development to count.
20. *Urban & Suburban Watersheds Redevelopment Exception: Applicability §25-8-25(A) & [Deleted] (A)(6)*	Expansion of BSZ Redevelopment Exception in BSZ & Water Supply watersheds warrants this older Exception be limited to Urban & Suburban watersheds.	Limit this Redevelopment Exception to Urban & Suburban watersheds. Clarify is a development option (choice).	Require the increased environmental benefits of the BSZ & Water Supply Redevelopment Exception options in these respective areas.	Original redevelopment exception was (occasionally) used in BSZ & Water Supply watersheds.

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21. *Urban & Suburban Redev. Exception: Traffic §25-8-25(B)(3)*	Traffic requirement based on year 2000 traffic counts which are difficult to verify.	Base the traffic count estimates on the most recent authorized use of the property.	Simplicity.	None.
22. *Urban & Suburban Redev. Exception: Existing Non-Compliance §25-8-25(B)(5)*	The original Redevelopment Exception focuses only on overall site impervious cover & water quality controls; increased non-compliance--such as reduced stream setbacks--would not be prevented.	Disallow increased non-compliance with Critical Water Quality Zone, Critical Environmental Feature, and wetlands restrictions.	Prevent further environmental degradation.	Potential loss of site development flexibility--but would always still be able use existing footprint.
23. *Urban & Suburban Redev. Exception: Erosion Hazard Zone §25-8-25(B)(6)*	Erosion Hazard Zone concerns are not directly addressed by this option.	Require the redevelopment be placed outside the Erosion Hazard Zone, unless protective works are provided.	Prevent public & private expense and environmental damage of construction in Erosion Hazard Zone.	Additional construction cost (counterbalanced by cost to repair if not properly designed).
24. *Urban & Suburban Redev. Exception: Erosion & Sedimentation Controls §25-8-25(C)*	The original Redevelopment Exception does not address construction-phase erosion & sedimentation controls.	Require erosion & sedimentation controls be the most up-to-date at the time of construction (as was done in the 2007 Barton Springs Zone Redevelopment Exception).	Increased environmental protection during the construction phase.	Potential increase in construction cost--but is expectation of projects.
25. *Barton Springs Zone Redevelop-ment Exception (BSZRE): Eligible Land Uses §25-8-26(A)*	Existing code limits the use of the BSZRE to those with existing commercial land, which greatly limits the applicability and use of this option.	Allow the use of the BSZRE to all properties exception single-family residential and duplex properties; clarify is applicable to the Barton Springs Zone.	Offer BSZRE to more properties such that more on-site water quality controls & off-site mitigation land be protected & more urban revitalization be enabled.	Some have expressed concern that land disturbance and increased activity on the redeveloped sites will outweigh the advantages of the on-site controls and off-site mitigation.

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26. *BSZRE: Remove Original Redev. Option for BSZ §25-8-26(C)*	See §25-8-393 (A), Item 20.	Strike reference to use of this section rather than 25-8-26 (since the latter now to be limited to Urban & Suburban watersheds).	Require the increased environmental benefits of the BSZRE options for redevelopment in the Barton Springs Zone.	Original redevelopment exception was (occasionally) used in BSZ watershed.
27. *BSZRE: Critical Water Quality Zone §25-8-26(E)(2)*	CWQZ development prohibition moved to §25-8-261 Critical Water Quality Zone Development. See item 77 below.	Rework references to Critical Water Quality Zone requirements, now consolidated in 25-8-261.	Clarity.	None. No change in regulations.
28. *BSZRE: Partial Site Can Use §25-8-26 (E)(6)&(7)*	BSZRE option requires the option be used for the "entire site;" unclear if can redevelop a portion of a site.	Allow this option to be used for a portion of a site rather than the entire site.	Increased flexibility & opportunity to use this option and associated benefits.	Will need to track during permitting process.
29. *BSZRE: Critical Water Quality Zone §25-8-26 (E)(6)(b)*	Director's approval of combination SOS & standard water quality controls not necessary.	Delete requirement that Director approval be required for proposed combination SOS & standard water quality controls.	Simplicity.	None.
30. *BSZRE: Erosion Hazard Zone §25-8-26 (E)(9)*	Erosion Hazard Zone concerns are not directly addressed by this option.	Require the redevelopment be placed outside the Erosion Hazard Zone, unless protective works are provided.	Prevent public & private expense and environmental damage of construction in Erosion Hazard Zone.	Additional construction cost (counterbalanced by cost to repair if not properly designed).
31. *BSZRE: Multifamily Units & Council Approval §25-8-26 (G)*	Projects proposing more than 25 multifamily units must receive Council approval, a potential barrier to small-scaled residential projects.	Allow projects to propose 25 net additional multifamily units without Council approval (rather than 25 total multifamily units).	Enable more potentially affordable housing choices & mixed use; reduced permitting cost.	Less direct oversight by Council.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
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32. *Redevelopment Exception in the Water Supply Rural and Water Supply Suburban Watersheds §25-8-27*	Barton Springs Zone Redevelopment Exception not available for use in Water Supply watersheds, thereby limiting redevelopment opportunities and not extending the on- and off-site environmental benefits of the BSZ Redev. Exception.	Add new section to extend equivalent of BSZ Redevelopment Exception to Water Supply Rural & Water Supply Suburban watersheds. Provisions the same except requirements for structural water quality controls and, for WS Suburban, impervious cover for mitigation is set to 40% to match this area's impervious cover code. Establish a Water Supply Mitigation Fund.	Offer benefits of on-site water quality controls & off-site mitigation and expanded redevelopment opportunity to an area with limited redevelopment options.	Some have expressed concern that land disturbance and increased activity on the redeveloped sites will outweigh the advantages of the on-site controls and off-site mitigation.
33. *Land Use Commission Variances §25-8-41*	Need to update section numbers to reflect changes; clarify that applicant has the burden of proof; added Barton Creek Water Quality Transition Zone; moved wastewater language from 25-8-361 (A).	Clarifies burden of applicant; consolidates land use commission variance from 25-8-361.	Clarity and consolidation.	None.
34. *Administrative Variances §25-8-42*	Current code distributes administrative variances throughout the Chapter. Need to clarify burden to establish findings. Need to add new material.	Consolidate all administrative variance references in the Administrative Variance section for clarity. All the same as current code except (B)(1) & (5), discussed below. Add provisions for interbasin transfers: (B)(9) & (D)(6).	Clarity.	None.
35. *Administrative Variances §25-8-42 (B)*	Environmental Officer (WPD staff) approves administrative variances & thus WPD should be specified as Director.	Specify Director of WPD may grant variances to several sections of 25-8A.	Clarity.	None.

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36. Administrative Variances: Critical Water Quality Zone (CWQZ) Buffers §25-8-42 (B)(1)	Currently code allows admin. variances to Article 7, Division 1, but that division does not prohibit development so development in critical is commission variance. Change to Article 7, Division 1 would change this to administrative.	Administrative variance requests for Critical Water Quality Zone must be shown to protect public health & safety or provide a significant, demonstrable environmental benefit as determined with a functional assessment of floodplain health.	Allows streamlined process for projects with significant, demonstrable public & environmental benefits.	Reduced public review of variances in the Critical Water Quality Zone--though conditions set out for the variance process, e.g., the functional assessment, to be developed with public stakeholder input for the Environmental Criteria Manual.
37. Administrative Variances: Critical Water Quality Zone (CWQZ) Buffers §25-8-42 (B)(2)	Current code allows administrative variances for development in the CWQZ in Urban Watersheds. Want to continue to encourage compact & connected development in the urban core but also want protections consistent with the WPO.	Continue use of administrative variance if development maintains a minimum 25 ft. setback, stays out of the erosion hazard zone (unless protective works provided), does not increase non-compliance, and restores vegetation.	Continue to offer facilitation of central development but with baseline protections for erosion & water quality.	None. Modest change; is mainly a clarification that the administrative variance exists but that a minimum buffer and EHZ requirements are needed.
38. *Administrative Variances: Structural Control Drainage §25-8-42 (B)(5)*	Currently can get an admin. variance for cut & fill for stormwater ponds but not associated drainageways.	Change to "for a water quality control or detention facility <u>and appurtenances for conveyance such as swales, drainage ditches, and diversion berms</u>"	Drainage works associated with admin. variances for pond cut & fill should be considered together.	None.
39. *Administrative Variances: Sections moved from other places in the code §25-8-42*	(B) (2) = current 262 (C); (B)(3)= current 281 (D); (D) (3) = current 281 (D); (D) 5= current 343 (B)	Moving/consolidating administrative variances into one section.	Consolidation.	None.
40. *Net Site Area §25-8-62(C)*	Existing code not clear that Net Site Area does not apply to Urban watersheds; need to also add not applicable to Suburban watersheds.	Add text to clarify that Net Site Area does not apply in Urban or Suburban watersheds.	Clarity. See §25-8-392(A) below for more discussion.	None. See §25-8-392(A) below for more discussion.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	Disadvantages
41. *Impervious Cover (IC) Calculations: Porous Pavement §25-8-63 (B)(8) [Deleted]; (C)(8) & (9)*	Credit for porous pavement unclear and may be given a new value; porous pavement fire lanes not given credit.	Clarify that porous pavement for pedestrian walkways does not count as impervious if designed in accordance with the ECM & not located over the recharge zone. Remove confusing 20% credit & replace in ECM with ability to use porous pavement as a water quality control for non-pedestrian pavement.	Porous pavement in suitable locations may help achieve watershed protection goals; clarifying could potentially help increase its use.	Potential massing implications due to alignment of zoning and watershed impervious cover definitions. Limited to pedestrian walkways so that larger-scale applications such as plazas and sport courts would not be exempt. Elimination of 20% credit may not be offset by advantages of using as water quality control.
42. *IC Calculations: Sidewalks in Public ROW §25-8-63 (C)(1)*	Sidewalks in public easements need to be treated the same as those in public rights-of-way for purposes of impervious cover calculations.	Add "or public easement" to exclusion for sidewalks in public right-of-way.	Sidewalks are a public benefit (heath; alternative, non-polluting transportation; etc.); provision of sidewalks in public easements will increase their use.	Exclusion of impervious cover from site totals does not mean these surfaces will not have environmental impacts. (Note: water quality criteria for sidewalks & trails to be proposed to address this issue.)
43. *IC Calculations: Trail Surfaces §25-8-63 (C)(2);*	Need to clarify that hard-surfaced trails (e.g., concrete, asphalt) are excluded from impervious cover for site calculations.	Specifically add publicly accessible, hard-surfaced multi-use trails to list of items excluded from impervious cover calcs. Note: need to develop new design criteria to address potential environmental impacts.	Hard-surface trails are much cheaper to install & maintain than soft surfaces (e.g., decomposed granite) & proper design can mitigate potential environmental impacts.	Exclusion of impervious cover from site totals does not mean these surfaces will not have environmental impacts. (Note: water quality criteria for sidewalks & trails to be proposed to address this issue.)
44. *IC Calculations: Water Quality & Detention Controls §25-8-63 (C)(3) & (4)*	Current code exempts water quality & flood controls from IC calculations; but subsurface controls installed beneath impervious cover should not receive an exemption.	Clarify that subsurface water quality & flood controls covered with impervious surfaces count as IC.	Remove potential loophole.	None.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	Disadvantages
45. *IC Calculations: Gravel §25-8-63 (C)(7)*	Current code does not distinguish between pervious gravel areas and those underlain with compacted base, which are functionally impervious.	Clarify that gravel areas to be counted as pervious must not be constructed with compacted base.	Encourage green infrastructure design elements; discourage use of hard linings that prevent infiltration of water and impair recharge & creek baseflow.	None.
46. *IC Calculations: Fire Lanes §25-8-63 (C)(9)*	Fire lanes are seldom driven upon & therefore a lower pollutant loading risk than standard parking surfaces; current code & Environmental Criteria Manual (ECM) count fire lanes with interlocking pavers to be impervious.	Allow fire lanes built using ECM specifications for interlocking pavers to not count against a site's impervious cover totals; require crash barriers to limit vehicular traffic.	Increased design & spatial flexibility; low risk to water quality or for clogging due to low use/pollutant loads on surface (similar to pedestrian surfaces).	Less pervious, vegetated cover on site.
47. *IC Calculations: Vegetated Parking Garages §25-8-63 (C)(10)*	§25-1-23 (Impervious Cover Measurement) includes a provision to place soil & vegetation on subsurface parking garages and not count them as impervious cover. This provision needs to be included in 25-8.	Move code provisions from §25-1-23 to §25-8-63 for clarity and ensure compatibility. Specify Director of WPD approves.	Conservative requirement to provide 4 feet of soil above garage ensures continued pervious function, despite structure below. Encourages placement of parking below grade.	Stringent soil-depth provision will likely be barrier to frequent use.
48. *IC Calculations: Commercial Design Standards §25-8-63 (D)*	25-2 Subchapter E allows internal porous pavement walkways to be exempted from impervious cover calculations; this is no longer needed since all such porous walkways are proposed as such under 25-8-63 (C)(8).	Remove redundant Commercial Design Standard credit. (Also change in 25-2.)	Clarity.	None.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	Disadvantages
49. *Commercial Impervious Cover §25-8-65*	Existing code not clear that impervious cover for commercial applications needs to be accounted for on a site-by-site basis; not clear how to handle very small roadway projects regarding impervious cover limits.	Add section for commercial impervious cover with requirements that plans for commercial development demonstrate overall compliance with impervious cover limits as phased development progresses. Exempt developments of less than 5,000 square feet of new IC; limited to road intersections, bike lanes, transit stops & low-water crossings.	Ensure that impervious cover limits are respected for multi-phased projects, including the roadway portion. Exempt very small projects for flexible implementation, i.e., focus on the significant additions of impervious cover.	Don't want to send message that new impervious cover has no impacts. Need to ensure cannot have successive sub-5,000 square foot projects collectively increase a site's impervious cover.
50. *Roadways ["Boundary Street Deduction"] §25-8-65 [Deleted]*	Current code requires a deduction of a site's internal impervious cover to account for adjacent roadway IC; but causes significant reductions in buildable area for some sites.	Eliminate boundary street deduction requirements.	Retains more buildable area on sites adjacent to roadways (logical location for higher IC); all such areas are required to meet own IC limits & provide on-site water quality controls. Reduces complexity. Avoids cases of extreme loss of impervious cover on a site due to unusual lot geometry.	Allows (small) increase in impervious cover in the Drinking Water Protection Zone. (Urban & Suburban watersheds not affected.)

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	**Disadvantages**
ARTICLE 2. WATERWAYS CLASSIFIED; ZONES ESTABLISHED				
51. *Waterway Classifications [Headwater Creek Buffers] §25-8-91*	Buffers only extend to waterways with greater than 320 and 128 acres of drainage in some watersheds. Results in up to a 50% reduction in the stream mileage protected compared to protections for Austin's best protected creeks. Six different systems exist across the City, adding to complexity & confusion.	Standardize drainage area thresholds for all waterway classifications citywide (except Urban): * Minor = 64-320 acres; * Intermediate = 320-640 acres; * Major = 640+ acres. Is system currently used in Water Supply Rural & majority of Barton Springs Zone.	Simplifies a complex system to use one strategy across entire jurisdiction. 64-acre threshold coincides with floodplain delineation & stream buffers elsewhere in City jurisdiction. Addresses Erosion Hazard Zone: esp. critical in prairie/clay creeks; is public safety issue; prevents costly infrastructure repair; prevents wastewater line construction directly in channel (key strategy for Bacteria TMDL); buffers on small streams (e.g., 64-acre drainage areas) correlated with stream health; doubles stream mileage protected; keeps streams out of pipes/straightened channels.	64-acre buffers provide constraint in highly urbanized areas (e.g., commercial & mixed use centers): may warrant mitigation system (see below) for limited areas of higher intensity development (e.g., Imagine Austin Comprehensive Plan sanctioned activity centers & corridors). Critical Water Quality Zone is barrier to road crossings, connectivity & water quality control placement (see methods to address below).
52. *Critical Water Quality Zones (CWQZs) Established: Fully Developed Floodplain Boundary §25-8-92 (A)*	Buffer section for Barton Springs Zone, Water Supply Rural & Water Supply Suburban needs to be distinguished from the Suburban watersheds (which now need a new, separate section (F)--see below).	Retain current widths in the Drinking Water Protection Zone (DWPZ), since these are adequate for erosion hazard & water quality protection. State the use of the 100-year Fully Developed Floodplain to help define the CWQZ buffer widths for classified waterways in the Barton Springs Zone, Water Supply Rural & Water Supply Suburban watersheds.	Clarity. Distinguish between classification systems. Western creek buffers are protective and do not need to be modified.	None.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	Disadvantages
53. *CWQZs Established: Exceptions for Public Roads §25-8-92 (A)(2) & (B)(5)*	Current practice does not apply stream buffers to waterways considered permanently altered (e.g., highway drainageways); but is not clear Code directive.	Exempt roadside drainageways that cannot be restored to natural conditions from Critical Water Quality Zone requirements.	Recognizes practical limitations of stream buffer application; codifies existing City policy; needs objective guidance on making determination	Some (esp. large) waterways may be in good condition or have good potential for restoration, compromising present or future ecological function; system should protect.
54. *CWQZs Established: Crest of Bluff §25-8-92 (A)(2) [Deleted]*	Current code exempts a "crest of a bluff" from Critical Water Quality Zone protections, exposing development in such a location to erosion hazards.	Delete the exception for crests of bluffs. Exemptions possible using variance process.	Provide erosion hazard protection to development on bluffs. Relatively few sites meet the full definition of bluff. Variance process available if reduced CWQZ warranted.	Potentially could push back the footprint of development from high bluffs; would need to use a variance to move it closer (with evidence that it would not cause Erosion Hazard issues).
55. *Established: Suburban Buffer Widths §25-8-92 (B)*	Suburban watersheds are poorly served by their current geometry: too narrow to protect water quality and from erosion hazards.	In Suburban watersheds, provide buffer width of 100, 200 & 300 feet for "minor," intermediate," & "major" waterways respectively to protect water quality and the Erosion Hazard Zone and provide a uniform system.	Similar to 64-acre §25-8-91 buffer lengths above: better stream & property protection, reduced long-term public & private expense to repair damage.	Wider width reduces developable footprint. (But counterbalancing with Gross Site Area & elimination of Water Quality Transition Zone buffer.)
56. *CWQZs Established: Buffer Averaging §25-8-92 (B)(4)*	Proposed new buffer system could be difficult to implement in some cases due to site-specific constraints.	Add buffer averaging option for Suburban watersheds to adjust width and add length to achieve same overall footprint of buffer.	Adds flexibility to buffer design to work around site-specific geographic & cultural features.	Must ensure key existing features (e.g., woodlands) are not eliminated while less valuable areas are extended protection.
57. *CWQZs Established: Urban Buffer Widths §25-8-92 (F)*	Urban buffer widths are adequate but should be based on the 100-year fully developed floodplain.	Retain current widths in the Urban watersheds, since it is not practical/feasible due to extent of existing development. But base the width variation on the 100-year fully developed floodplain, as is used for the western buffers, rather than the current 100-year FEMA floodplain.	Consistency. Note that FEMA & Fully Developed floodplains in the Urban watersheds are almost always coincident, so the change is slight.	None.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	Disadvantages
58. *Water Quality Transition Zone (WQTZ) §25-8-93*	Water Quality Transition Zones (WQTZs) constitute a second & less protective buffer beyond CWQZs in Suburban Watersheds: e.g., 30% IC is allowed. They are not as useful as the CWQZ buffers & their requirement adds complexity and limits flexibility for development.	Eliminate the Water Quality Transition Zone in Suburban Watersheds in exchange for other new requirements above (e.g., extend CWQZ to headwaters, etc.). Retain in the Barton Springs Zone, Water Supply Rural & Water Supply Suburban watersheds.	Provision of a more extensive CWQZ on smaller creeks is more valuable for water quality & erosion management than retaining the WQTZ on larger creeks.	Enables higher density on site nearer to creek in areas that currently require a WQTZ (note: would be considered an advantage from development perspective).
ARTICLE 3. ENVIRONMENTAL RESOURCE INVENTORY [~~ASSESSMENT~~]; POLLUTANT ATTENUATION PLAN				
59. *Environmental Resource Inventory §25-8-121*	Unrelated, federal Phase I Environmental Assessment requirements share the same name as existing City requirement, creating confusion.	Change the name to "Environmental Resource Inventory."	Clarity.	None.
60. *Environmental Resource Inventory §25-8-121 (B)(3)*	Requirements to justify storm drains problematic in urbanized settings where they may be necessary and avoid environmental damage.	Eliminate the storm drain justification requirement; add an ECM cross-reference. Better approaches exist to encourage green infrastructure than this requirement (which has had little practical impact).	Eliminate code conflicts; support Imagine Austin's "compact & connected" mandate.	None. But need to clarify that the original intent will be retained in other code & criteria provisions.
61. *Environmental Resource Inventory §25-8-121(D)*	Watershed Protection Dept. staff process administrative variances for components of the Environmental Resource Inventory & thus WPD should be specified as Director.	Specify Director of WPD may exclude information from Environmental Resource Inventory if determined unnecessary for scope & nature of development.	Conform with current practice.	None.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	Disadvantages
ARTICLE 4. MANAGEMENT PRACTICES; ENGINEER'S CERTIFICATION				
62. *Innovative Management Practices §25-8-151*	Section is currently used for dual purposes of reviewing innovative water quality controls and management practices for critical environmental features (CEFs). However, the current wording of this section does not treat these two purposes as separate.	Distinguish between innovative water quality controls and innovative management practices for CEFs. New section (A) speaks to water quality controls; existing section (now B) speaks to CEFs.	Clarity.	None.
63. *Innovative Management Practices §25-8-151 (B)*	Statement that "the City encourages innovative management practices" is well intentioned but is not an enforceable code provision.	Delete subjective language. The Land Development Code, as currently written, does not include statements of purpose.	Consistency.	Risks sending message that the City is not interested in innovation. Address in program implementation.
ARTICLE 5. EROSION AND SEDIMENTATION CONTROL; OVERLAND FLOW				
64. *Overland Flow §25-8-185*	Storm drain references problematic in urbanized settings where they may be necessary and avoid environmental damage. References to maintenance of overland flow does not apply to many sites.	Add the words "and restore" to acknowledge many sites need repair, not just preservation. Remove language prohibiting construction of enclosed storm drains [similar to §25-8-121 (B)(3)]. Other minor rewording.	Eliminate conflict with 25-7 Drainage chapter; low-impact drainage to be incentivized in other code & criteria sections.	None. But will need to clarify that the original intent will be retained in other code & criteria provisions.
65. *Fiscal Security for Erosion and Sedimentation Controls §25-8-186*	Fiscal security requirements for erosion and sedimentation controls are currently located in 25-7-65 (drainage chapter) but better belong in the 25-8 Environment chapter.	Move language from 25-7 into the Erosion and Sedimentation article of 25-8.	Clarity.	None. Text moved unchanged.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	Disadvantages
ARTICLE 6. WATER QUALITY CONTROLS				
66. *Structural Water Quality Controls: Threshold for When Controls Required §25-8-211 (B)&(C)*	Outside of the BSZ and Urban Watersheds, current code does not require permanent water quality controls ("ponds") on sites with less than 20% impervious cover (IC), no matter how much total IC is proposed. Projects with hydraulically connected impervious cover can have significant water quality impacts, even when under 20% IC unless controls are provided.	Require WQ controls for projects with over 5,000 square feet of IC. 5,000 is the requirement for water quality controls in the TCEQ Edwards Aquifer Rules, EPA requirements for federal projects, and existing Environmental Criteria Manual requirement for Urban watersheds.	Prevents large areas of hydraulically connected IC from creating problems; reduces public costs to repair downstream erosion & water quality problems created without controls; controls on low IC sites typically low cost; consistent with TCEQ Edwards Aquifer Rules; eliminates need for tiny water quality controls.	Minor increase in private cost to build certain projects. Minor off-site impacts by projects previously required to provide very small controls.
67. *Structural Water Quality Controls: Single-Family & Duplex Lots §25-8-211 (D)*	Currently not clear that water quality control requirements do not apply to individual single-family or duplex lots, but rather to the residential subdivision as a whole.	Clarify that the requirements do not require water quality controls on a single-family or duplex lot but apply to the residential subdivision as a whole.	Clarity.	None.
68. *Structural Water Quality Controls: Small Roadway Projects §25-8-211(E)*	It is disproportionately expensive & technically difficult to provide water quality controls for very small roadway projects, most of which provide other environmental benefits.	Exempt small roadway projects of less than 5,000 square feet of impervious cover from requirements for on-site water quality controls. Use same 5,000 threshold used for small site impervious cover (see §25-8-211 B&C above).	Reduction in high logistical & financial costs for very small controls with low environmental benefits.	Minor off-site impacts by projects previously required to provide very small controls.
69. *Water Quality Control Standards: Pond Accessibility §25-8-213(A)(3)*	Commercial ponds are being constructed that are not reasonably accessible either for City inspection or for private maintenance.	Add requirement that ponds must be accessible for maintenance and inspection. (Must design for needed equipment & personnel to reach pond, perform repairs, etc.)	Ensures that ponds continue to function properly over time. Removes burden of problematic access from future property owners/managers.	Limitation on design flexibility.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	Disadvantages
70. *Structural Water Quality Controls: Water Quality Volume Isolation §25-8-213(B)*	Current code requires the "isolation" of the water quality volume, making it difficult to combine flood and water quality volumes for space efficiency and reduced cost.	Delete the term "isolate" from this section; where appropriate, require isolation of the water quality volume in the Environmental Criteria Manual, but on a control-by-control basis.	Allow the "stacking" of water quality & flood capture volumes to reduce cost & increase space efficiency; increase WQ function for most storms; reduce complexity of designs.	Isolation of water quality volume originally done to avoid "re-suspension" of captured pollutants and to prevent damage to the WQ pond; but both concerns can be addressed using design criteria.
71. *Structural Water Quality Controls: Water Supply Rural §25-8-213(C)(3)*	Existing code for Water Supply Rural development relies on the 40% buffer zone for water quality control; with the new 5,000 square foot impervious threshold, this will no longer be necessary and the 40% buffer should be better protected to avoid damage.	Add provision to cap disturbance of the 40% buffer at 50% or less. (50% threshold taken from the Hill Country Roadway Ordinance.)	Reduce modifications & construction-phase damage in 40% buffer.	None. Should be sufficient space remaining to locate controls.
72. *Payment-in-Lieu of Water Quality Controls in Urban Watersheds: Director Approval §25-8-214(A)*	Watershed Protection Dept. staff administer the payment-in-lieu of on-site water quality control program & thus WPD should be specified as Director.	Specify Director of WPD to identify & prioritize water quality controls in the Urban watersheds, etc.	Conform with current practice.	None.
73. *Payment-in-Lieu of Water Quality Controls in Urban Watersheds: Criteria & Process §25-8-214(C)*	Current code does not refer to the Environmental Criteria Manual, which contains key information on the administration of this provision. The current requirement that the director accept or deny requests within 15 days is not practical due to the complexity of these requests.	Add a reference to the Environmental Criteria Manual. Delete the requirement to process within 15 days.	Clarity (reference to ECM). Pragmatism (processing time).	None.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	**Disadvantages**
74. *WQ Control Maintenance & Inspection: Subsurface Controls §25-8-231(D)&(E)*	Watershed Protection Dept. staff inspect & maintain water quality structural controls per code & thus WPD should be specified as Director.	Specify Director of WPD authorized to make arrangements for City vs. privately maintained WQ ponds & charge re-inspection fees for failed inspections. Spell out Drainage Criteria Manual.	Conform with current practice. Clarity.	None.
75. *WQ Control Maintenance & Inspection: Subsurface Controls §25-8-231(E)&(F)*	Construction of subsurface water quality (WQ) is not currently limited & results in facilities that are expensive, and difficult to inspect and maintain. City staff not equipped to inspect these systems.	Require maintenance plan and 3rd party inspections with annual reporting for all subsurface water quality controls. Add that City inspections not required (since will be done by 3rd party).	Control the quality of designs and ensure proper inspection & maintenance of subsurface controls.	Expense to property owners (though otherwise no maintenance assured); administrative cost to City.
76. *Dedicated Fund § 25-8-232*	Various items not clear.	Clarify is Finance Dept. to establish fund & role of Watershed Protection Department.	Clarity.	None.
ARTICLE 7. REQUIREMENTS IN ALL WATERSHEDS				
77. *Critical Water Quality Zone (CWQZ) Development Prohibited §25-8-261*	Current code prohibits development in the CWQZ (with noted exceptions) in locations scattered throughout Chapter 25-8: 25-8-391 (Suburban Watersheds); 25-8-422 (Water Supply Suburban); 25-8-452 (Water Supply Rural); and 25-8-482 (Barton Springs Zone).	Consolidate references to a single location in the CWQZ section: Development prohibited in the CWQZ except as noted.	Clarity.	None. No change in substance.
78. *CWQZ Development: Open Space §25-8-261(B)*	Current code defines uses permitted in the CWQZ (parks, golf courses, open spaces, etc.). Meaning of open space is not clear.	Define and better clarify "open space" in Definitions section 25-8-1(11); includes multi-use trails. See more discussion above in 25-8-1(11).	Clarity. Underscores open space as central land use in CWQZ & ability to locate trails in these areas.	None. Potential trail impacts to be addressed in trails criteria & requirements to place trails in outer half of CWQZ.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	Disadvantages
79. *CWQZ Development: WSR and BSZ Open Space §25-8-261(B)(1)*	Current Water Supply Rural (WSR) and Barton Springs Zone (BSZ) section limits uses in CWQZ, but does not specifically prohibit athletic fields; does not allow sustainable urban agriculture or community gardens.	Adjust text to speak to urban agriculture and community gardens. Change "hiking, jogging, or walking trails" to multi-use trails for consistency. Prohibit new athletic fields; allow existing fields to remain.	Promotes the goals of the Imagine Austin Comprehensive Plan & the Watershed Protection Master Plan. Develop design criteria to address water quality & riparian concerns. Consistency.	Potential damage to riparian zones with increased nutrient application & suppression of native riparian vegetation. Mitigate with proper design & setbacks from waterways; some especially sensitive areas should be off-limits.
80. *CWQZ Development: Master Planned Parks §25-8-261(B)(2)*	Current code allows master-planned parks (reviewed by Land Use Commission, approved by Council) in the Barton Springs Zone to include recreational development in the CWQZ; not an option for Water Supply Rural parks.	Expand option for use in Water Supply Rural parks.	Grants same exception that already exists in the Barton Springs Zone; squares with the fact that the Code is more restrictive for park uses within the BSZ and water supply rural watersheds.	None. Note: is rarely utilized provision.
81. *CWQZ Development: Trails §25-8-261(B)(3)*	Current code is not clear as to whether bicycle & pedestrian trails may be built in CWQZs.	Specify that hard-surfaced trails are permitted in CWQZs if (a) placed outside the Erosion Hazard Zone (EHZ); (b) built in accordance with the Environmental Criteria Manual (ECM); and (c) width is maximum 12 ft., unless Master Planned by Council. In Urban watersheds, trails must be out of 25 ft. buffer; elsewhere out of half-CWQZ.	Clarity. Aligns environmental code with City goals to improve connectivity via alternative transportation. Provides safeguards for creek: outside EHZ and ECM [or Transportation Criteria Manual] to require designs which account for stormwater runoff to mitigate erosion and other negative impacts.	Potential damage to riparian zones with increased impervious surfaces & public use. See Multi-Use Trail discussion above in 25-8-1(10).

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	Disadvantages
82. *CWQZ Development: Urban Agriculture & Community Gardens §25-8-261(B)(4)*	Not clear in current code whether urban agriculture (e.g., small, low-impact farms) or community gardens are allowed in the CWQZ.	Add new allowance for community gardens and sustainable urban agriculture in the "upper half" of Suburban CWQZs and beyond a 25-foot Urban setback. Must design in accordance with (new) criteria in the Environmental Criteria Manual (ECM). Structures larger than 500 square feet not allowed (obstruct flows, intrude in area intended for natural land cover).	Promotes the goals of the Imagine Austin Comprehensive Plan & the Watershed Protection Master Plan. Develop design criteria to address water quality & riparian concerns.	Potential damage to riparian zones with increased nutrient application & suppression of native riparian vegetation. Mitigate with proper design & setbacks from waterways; some especially sensitive areas should be off-limits.
83. *CWQZ Development: Athletic Fields in Urban & Suburban Watersheds §25-8-261(B)(5)*	No restrictions on athletic fields in the CWQZ; fields too close to waterways/in CWQZs can displace natural vegetation, compact soils, and otherwise impair proper riparian buffer function.	Require athletic fields in Urban watersheds to be min. 25 ft. from centerline of waterway; in Suburban watersheds min. 50 ft for minor, 100 ft. for intermediate, and 150 for major waterway. Combine with an administrative variance (25-8-42) to consider placing them closer if site conditions warrant.	Strikes a balance between watershed protection and community use of riparian areas.	Reduces full footprint of riparian buffer and its benefits.
84. *CWQZ Development: Barton Springs Zone Exceptions §25-8-261(C)*	Current code allows boat ramp dock, pier, wharf, or marina in Barton Springs Zone CWQZ.	Delete this exception. Also delete language about pedestrian & bicycle bridges. Clarification: the area downstream of the Barton Springs pool is designated as "Water Supply Suburban," not Barton Springs Zone.	Construction of boat ramp docks, piers, etc. not appropriate in BSZ. Bicycle/ pedestrian text redundant since these crossings now clarified to be allowed in all CWQZs.	If boat ramp docks, piers, etc. sought, will have to handle using master planned park provision or via variance. But is appropriate scrutiny for intrusive uses.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	Disadvantages
85. *CWQZ Development: Utility Line Crossings §25-8-261(D)*	Current code allows utility lines (e.g., wastewater lines) to cross CWQZs, but does not address future channel downcutting/erosion, the angle of crossing, or tying in to existing lines.	Specify "the most direct path" must be used to minimize utility line disturbance. Require erosion hazard zone assessments for utility crossings (depth component). Require line be outside of the Erosion Hazard Zone, unless protective works are provided. Allow lines to cross into (tie in to existing lines) or cross through CWQZs. Clarify refers to storm drain infrastructure too. Specify WPD Director must approve crossings in the Barton Springs Zone.	Prevention of future public and private costs & damage to infrastructure & waterways. Most utility lines already designed to cross using direct path. Tie-ins to existing lines avoids cost & disruption of relocating lines; must ensure tie-in out of Erosion Hazard Zone.	Additional construction cost to increase line depth (counterbalanced by cost to repair if not properly designed).
86. *CWQZ Development: Utility Line Location §25-8-261(E)*	Current code allows utility lines (e.g., wastewater lines) to cross CWQZs, but does not allow lines to run parallel to the waterway in the CWQZ.	Allow utility lines in the "upper half" of Suburban CWQZs and beyond a 50-foot Urban setback. Must also be outside of the Erosion Hazard Zone, unless protective works are provided, & outside of Critical Environmental Feature (CEF) buffers; also must avoid protected trees (address in Environmental Criteria Manual). Must also do riparian restoration or pay into mitigation fund.	Reduce cost & environmental impact of deep wastewater trenching. Area nearest creeks & environmentally sensitive features still off-limits.	More disruption near creeks than if excluded from CWQZ entirely. Potential damage mitigated by erosion hazard, Critical Environmental Feature, tree, and mitigation requirements.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	Disadvantages
87. *CWQZ Development: Detention Basins & WQ Controls §25-8-261(F)*	Current code permits on-line (in channel) detention basins to be built in CWQZs; but practice impairs waterway function & should be avoided where possible and, where necessary, need special design guidance.	Change "permitted" to "prohibited" for detention & wet ponds in the CWQZ unless certain conditions are met: must meet Floodplain Modification provisions and must be designed per the Drainage & Environmental Criteria Manuals.	Send message that on-line controls should be the exception, not the rule. Require adherence to protective design criteria to prevent damage to channel bed, banks, and flow regime and associated unsustainable repair costs.	Modest reduction in convenience of flood detention as conventionally designed.
88. *CWQZ Development: Floodplain Modifications Prohibited §25-8-261(G)*	Current code allows floodplain modification in the Critical Water Quality Zone (except in BSZ), an area that is environmentally sensitive and requires a high level of protection.	Disallow floodplain modification in the Critical Water Quality Zone in all watershed regulatory areas, except for cases of protecting public health & safety; providing significant, demonstrable environmental benefit; or where otherwise permitted (e.g., street & utility crossings).	Adequate riparian zone protection is a central pillar of watershed health. Exceptions should only be made to correct environmental damage or to protect health & safety due to existing problems.	Reduces convenience of flood detention and conveyance as conventionally designed. Note: Need to find other areas to capture flexibility than sensitive riparian areas.
89. *CWQZ Development: Detention Basins & WQ Controls §25-8-261(H)*	Current code does not allow water quality controls to be built in CWQZs; but some water quality controls are complementary to riparian areas under certain conditions.	Allow green water quality controls in the "upper half" of Suburban CWQZs, beyond a 50-foot Urban setback, outside the 100 year floodplain, & outside Erosion Hazard Zone, unless protective works are provided.	Adds flexibility to site design; more effective placement of WQ controls to help with baseflow enhancement; can help restore function and condition of buffer.	Need to make sure buffer not overly encroached--if too close, controls may be damaged by erosion/ flooding and/or will impair the functionality of the buffer.
90. *CWQZ Development: No Small Single-Family Lots in CWQZ §25-8-261(I)*	Current code does not prevent the inclusion of CWQZ areas in residential lots, contributing to alteration & vegetative clearing of riparian areas.	Disallow location of single-family lots less than 5,750 square feet in CWQZ buffers.	Avoid risks to both creeks & property owners; standard practice in recent past has been to exclude CWQZ from SFR lots (i.e., does not represent big change in practice).	Reduced design flexibility.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	Disadvantages
91. *CWQZ Street Crossings §25-8-262(B)(3)(a)*	Current code limits the frequency of minor stream crossings in CWQZs to every 1,000 feet; maximum block length in Subdivision Code 25-4-153 is 900 feet (without pedestrian transect).	Change minimum CWQZ street-crossing spacing requirement to 900 feet for 64-acre minor waterways in the DDZ.	Aligns several code provisions with minimal downside.	None: few to no additional bridge crossings (and potential for associated environmental disruption) anticipated with this change.
92. *CWQZ Street Crossings: Bicycle & Pedestrian Crossings §25-8-262(C)*	Current code is not clear as to whether bicycle and pedestrian trails may cross CWQZs.	Specify that multi-use trails are permitted in CWQZs.	Clarity. Aligns environmental code with City goals to improve connectivity via alternative transportation.	Potential damage to riparian zones with increased impervious surfaces & public use. See Multi-Use Trail discussion above in 25-8-1(10).
93. *CWQZ Street Crossings §25-8-262(D)*	Current code limits the frequency of stream crossings in all but Urban watersheds. This provision may conflict with the Imagine Austin Comprehensive Plan objective to facilitate connectivity and associated social and environmental benefits.	Add an option to allow street crossings within CWQZs within identified Imagine Austin Comprehensive Plan centers & corridors; crossing must maintain water quality & quantity of recharge in recharge & contributing areas of the Edwards Aquifer. Does not apply to the Barton Springs Zone.	Aligns with Imagine Austin goals to facilitate connectivity in designated centers & corridors.	None anticipated: street crossings are expensive and proposed infrequently.
94. *CWQZ Street Crossings §25-8-262(C) [Deleted]*	Current code provides an administrative variance to Street Crossings of CWQZs except in the Barton Springs Zone.	Maintain provision but move to Administrative Variance section 25-8-42(B)(2).	Consolidation.	None. No change in substance.
95. *Critical Environmental Features (CEFs) §25-8-281 (C)(1)(b)(3)*	Methods to calculate the geometry of CEFs is stated in the Environmental Criteria Manual but needs to be supported by Code.	Add a code reference to the Environmental Criteria Manual provisions to calculate CEF buffer geometry.	Clarity.	None.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	Disadvantages
96. *CEF Protections: Innovative Options §25-8-281(C)(3)(c)*	25-8-151 (Innovative Management Practices) includes a provision to enhance recharge; the CEF section needs to reflect this possibility.	Add a cross reference to 25-8-151 to 25-8-281.	Consistency.	None. Supports existing practice.
97. *CEF Protections: Protective Fencing §25-8-281(C)(4)*	Current code does not specify CEF buffer areas to be left in natural state & protected with fencing where needed.	Add language to require perimeter fencing for recharge features (caves, sinkholes) & requirement to leave buffer in natural state.	Strengthened CEF provisions to protect the features & the public.	Some additional cost to build & maintain fencing; no extra cost (possible savings) for leaving in natural state.
98. *CEF Protections: Owner Responsible §25-8-281(C)(5)*	Need clarification in the Environmental Criteria Manual (ECM) as to how preserve the water quality function of the buffer.	Add language to Code clarifying owner is responsible for CEF buffer maintenance per criteria in the ECM.	Codifies current practice.	None.
99. *CEF Protections: Void Mitigation §25-8-281(C)(5)*	Void mitigation addressed in the ECM but needs to be supported by Code.	Add language to Code matching the ECM requirements.	Codifies current practice.	None.
100. *CEF Protections: Administrative Variance §25-8-281 Deletion*	Current code provides an administrative variance to CEF protections except for locations at or within 500 feet of the shoreline of Lake Austin.	Maintain provision but move to Administrative Variance section 25-8-42(B)(3).	Consolidation.	None. No change in substance.
101. *Wetlands Protection: Area Clarification §25-8-282*	Current code references the "central business area" which is not defined. Watershed Protection Dept. staff process wetlands permitting & thus WPD should be specified as Director.	Add language denoting the area as bounded by IH-35, Riverside Dr, Barton Springs Rd, Lamar Blvd, & 15th Street, consistent with other references in 25-8 (e.g., 25-8-92(E). Specify Director of WPD.	Clarity.	None.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	**Disadvantages**
102. *Construction of a Building or Parking Area §25-8-302(B)(3)*	Current code requires hillside restoration with native vegetation; native options can be limited in availability and effectiveness.	Specify that hillside revegetation can use native or adapted plants and that guidance be provided in the Environmental Criteria Manual.	Added flexibility; ECM guidelines intended to prevent use of potentially harmful or invasive plants.	None on balance: risk of problems with non-native plants must be weighed against benefits of adapted plants.
103. *Spoil Disposal §25-8-343*	Current code provides an administrative variance to spoil disposal requirements.	Maintain provision but move to Administrative Variance section 25-8-42(B)(7).	Consolidation.	None. No change in substance.
104. *Wastewater (WW) Restrictions: CWQZs §25-8-361(A) [Deleted]*	Provision to prohibit wastewater lines in Critical Water Quality Zones (CWQZ) more logically belongs in CWQZ section. Two-year floodplain provision out of date.	Move provision to CWQZ section 25-8-261(D). Delete reference to the two-year floodplain: new requirements for Erosion Hazard Zone provide these protections.	Consolidation & clarity.	None. No change in substance.
105. *WW Restrictions: On-Site Systems over Edwards Aquifer §25-8-361(A) [Formerly (B)]*	Current code reference to on-site sewerage systems in the Edwards recharge area need to refer to the relevant Code section.	Refer to City Code Chapter 15-5 (Private Sewage Facilities).	Consistency.	None.
106. *WW Restrictions: Water Supply Rural §25-8-361(C) [Deleted]*	Reference to 40 percent buffer zone more logically belongs in Water Supply Rural Section.	Move provision to Water Supply Rural section 25-8-453(C)(2).	Consolidation & clarity.	None. No change in substance.
107. *Wastewater Restrictions §25-8-361(D),(E) & (G) [Deleted]*	Current code regulates some aspects of wastewater infrastructure that may conflict with State Law.	Remove or modify code to square with State requirements.	Original code no longer relevant. Remove for clarity.	None.
108. *Wastewater Restrictions §25-8-361(B)(4) [Formerly (F)]*	Construction of wastewater disposal systems too close to existing, established trees can cause damage to the trees and should be avoided.	Prohibit wastewater treatment with land application on the trunk of a protected tree (since such direct application can harm the tree).	Protect trees.	Minor reduction in convenience of wastewater application infrastructure.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	Disadvantages
109. *Wastewater Restrictions §25-8-361(B)(5) [Formerly (F)]*	Construction of wastewater disposal systems too close to Critical Environmental Features (CEFs) can cause damage to the features and should be avoided.	Prohibit wastewater treatment with land application inside CEF buffers.	Provide adequate distance between wastewater infrastructure and sensitive environmental features, such as karst features & springs.	Minor reduction in convenience of wastewater application infrastructure.
110. *Floodplain Modifications §25-8-364 [New]*	Regulation of floodplain modifications is a key element of watershed protection; current code and criteria lacks clarity and consolidation.	Add a section in 25-8 clarifying requirements for modifying floodplains. Prohibit floodplain modification except for cases protecting public health & safety; providing significant, demonstrable environmental benefit using a "functional assessment"; in an area outside the CWQZ in "fair" or "poor" condition; or where otherwise permitted (e.g., street & utility crossings). Sites proposing modification must be designed to accommodate both existing and fully-vegetated conditions; per practices described in the Drainage & Environmental Criteria Manuals; and must restore floodplain health or provide mitigation if restoration is infeasible. Functional assessments of floodplain health will be used to determine "significant, demonstrable environmental benefit." Mitigation provisions are outlined, both on- and off-site.	Provides approach to objectively evaluate existing floodplain health and provide incentives to preserve and methods to restore. Ensures future designs will enable full riparian vegetation and the many benefits provided. Allows flexibility of off-site mitigation where needed and appropriate.	Reduces development flexibility & complicates provision of flood mitigation as conventionally designed. Note: Need to find other areas to capture flexibility than sensitive riparian areas.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	**Disadvantages**
111. *Interbasin Diversions §25-8-365 [New]*	Rules concerning the transfer of runoff from one basin to another are not clear and are needed where development proposes to move runoff from a basin of one watershed classification to a different one.	Limit transfers to 20% of a site or 1-acre maximum, whichever is less. Allow administrative approval of transfers within the same watershed class. Require a Commission variance to move water from one watershed classification to another (e.g., from the Barton Springs Zone to an Urban Watershed).	Maintain natural drainage patterns with some flexibility within watershed classifications; clarifies & makes consistent the permitting process.	May require additional design & expense for some developments.
ARTICLE 8. URBAN WATERSHED REQUIREMENTS				
112. *Urban Watersheds Requirements Article 8 [New]*	Current code provides a special section for all watershed classifications except Urban Watersheds; this omission has led to gaps in protection and clarity.	Add "Urban Watershed Requirements" section to spell out that development is prohibited in the CWQZ and clarify impervious cover limits in the Uplands Zone & ETJ.	Clarifies requirements.	None.
ARTICLE 9. SUBURBAN WATERSHED REQUIREMENTS				
113. *Critical Water Quality Zone §25-8-392 [Deleted]*	CWQZ development prohibition moved to §25-8-261 Critical Water Quality Zone Development. See item 77 above.	Consolidate all references to prohibition of development in the Critical Water Quality Zone to 25-8-261.	Clarity.	None. No change in regulations.
114. *Water Quality Transition Zone §25-8-393 [Deleted]*	Water Quality Transition Zone setbacks proposed to be eliminated for Suburban Watersheds. See discussion in item 58 above: §25-8-93 Water Quality Transition Zone.			
115. *Uplands Zone: Gross Site Area Impervious Cover §25-8-392(A)*	Current rules use "Net Site Area" formula which is complex and complicates development on properties with stream buffers.	Use "Gross Site Area" basis for impervious cover calculations.	Reduces complexity of IC calculations; increases opportunities to develop properties with buffers, thus especially key with introduction of headwaters buffers.	For sites where IC increases, will decrease baseflow and increase reliance on structural controls to mitigate stormwater runoff impacts.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	Disadvantages
116. *Uplands Zone: Impervious Cover (IC) Limits §25-8-392(B)*	Not clear that Brushy Creek watershed includes the subwatersheds of South Brushy and Buttercup.	Clarify that Brushy Creek watershed includes the subwatersheds of Buttercup and South Brushy.	Clarification.	None.
117. *Uplands Zone: Impervious Cover (IC) Limits §25-8-392 (B)(5)&(C)(5)*	Impervious cover limit for mixed use projects is not clear; is included in the Environmental Criteria Manual but should also be in code.	Add mixed use impervious cover limit based on the ratio of ground-floor commercial vs. multifamily residential.	Clarification.	Method may be reevaluated during the Imagine Austin Comprehensive Plan code revisions.
118. *Transfer of Development Intensity: Impervious Cover Limits Apply §25-8-393(A)*	Current code does not clarify that impervious cover (IC) transferred from other areas to the Uplands must still respect Upland impervious cover limits.	Add text to clarify that Uplands impervious cover is subject to IC limits. (Note that IC levels are higher with transfers than without.)	Clarity.	None.
119. *Transfers: Critical Water Quality Zone §25-8-393(A)(1)*	Transfer option for Critical Water Quality Zone lacks important details & only option is to dedicate land to City.	Add option to allow land to be transferred to "another entity" (e.g., County or a land trust approved by the Watershed Protection Department). Clarify other details.	Clarity. Extend more options for transfers, which confer environmental & community benefits.	None.
120. *Transfers: Floodplains, Environmentally Sensitive Areas & Land Dedication §25-8-393 (A)(2) [New]*	Current code offers transfer credits to uplands if Critical Water Quality Zone (CWQZ) buffer areas are dedicated to the City fee simple; no option exists for floodplain or other environmentally sensitive areas outside the CWQZ.	Offer transfers of impervious cover for land dedicated to City in (a) 100-year floodplains or (b) environ-mentally sensitive upland areas (e.g., remnant prairies, woodlands), determined by environmental resource inventory, that are left in a natural state, accepted by the City or other entity, and not included in IC calculations elsewhere.	Protect key areas otherwise degraded by development pressure; incentivizes their protection and potential public use. Could serve a similar role to the Conservation Subdivision option used by Travis County.	Must ensure maintenance requirements for additional land can be met.
121. *Transfers: Parkland Dedication §25-8-393(A)(3)*	Parkland dedication option needs clarification.	Clarify transfers to be credited for Parkland Dedication must be dedicated fee simple.	Clarity.	None.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	Disadvantages
122. *Transfers: WQ Transition Zone Deleted §25-8-393(A)(2-4) [Deleted]*	Transfer sections for Water Quality Transition Zone buffers are no longer applicable: these buffers eliminated for Suburban Watersheds (see 25-8-93).	Delete these sections.	Consistency.	None.
123. *Transfers: CEF Buffer Transfers §25-8-393(A)(5) [Deleted]*	Current code allows increased impervious cover in the Uplands if land within Critical Environmental Features (CEF) buffers is left in an undisturbed state; but this is already the expectation.	Delete this section.	Consistency. Expectation is for all CEF buffers to remain in natural condition.	None.
124. *Transfers: Wastewater Disposal §25-8-393(A)(6) [Deleted]*	Current code allows increased impervious cover in the Uplands if land within wastewater irrigation areas is left in an undisturbed state; but does not provide public benefit.	Delete this section.	Seeking to emphasize transfer system to be for public and environmental benefit.	None.
125. *Transfer of Development Intensity: Transfer Proximity & Timing §25-8-393(B)*	Current code requires that transferred development intensity not be applied to tracts more than one (1) mile from the "sending" site and must be platted concurrently; these limitations may discourage some potential transfers.	Allow the transfer for development intensity within the same watershed classification; allow transfers on site plans (not just plats). Include processing & restrictive covenant requirements.	Encourage more use of transfers of development intensity to realize the benefits to the environment & community.	Some areas could see a much larger impact than others; could address by ensuring that the "receiving areas" are within Comp. Plan-approved centers & corridors. Requires additional administrative burden to track over time.
ARTICLE 10. WATER SUPPLY SUBURBAN WATERSHED REQUIREMENTS				
126. *Critical Water Quality Zone (CWQZ) §25-8-422 [Deleted]*	CWQZ development prohibition moved to §25-8-261 Critical Water Quality Zone Development. See item 77 above.	Consolidate all references to prohibition of development in the Critical Water Quality Zone to 25-8-261.	Clarity.	None. No change in regulations.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	Disadvantages
127. *Water Quality Transition Zone (WQTZ) §25-8-422(A)&(C)*	Current code prohibits the placement of WQ controls in WQTZs in Water Supply Suburban watersheds, despite the allowance of development in these areas.	Allow minor drainage facilities and water quality controls in the Water Quality Transition Zone over the recharge zone (language aligned with Barton Springs Zone). Allow water quality controls in the Water Quality Transitions Zone outside on the recharge zone.	Ensures that permitted development can receive on-site water quality treatment using structural controls.	None.
128. *Uplands Zone: Mixed Use Impervious Cover §25-8-423(C)*	Need to add mixed use to list of impervious cover limits.	Add mixed use impervious cover limit reference.	Clarity.	None.
129. *Transfers: Impervious Cover Limits Apply §25-8-424(A)*	Same as equivalent change for §25-8-393 (A), Item 118.	Add text to clarify that Uplands impervious cover is subject to IC limits. (Note that IC levels are higher with transfers than without.)	Clarity.	None.
130. *Transfers: Critical Water Quality Zone §25-8-424 (A)(1) & [Deleted] (2)*	Same as equivalent change for §25-8-393 (A)(1), Item 119, except can also consolidate section on transfers for Water Quality Transition Zones.	See Item 119 above; move Water Quality Transition Zone option to (A)(1) and delete (A)(2).	See above. Plus simplify.	None.
131. *Transfers: Parkland Dedication §25-8-454(A)(2)*	Same as equivalent change for §25-8-393(A)(3), Item 121.	Clarify transfers to be credited for Parkland Dedication must be dedicated fee simple.	Clarity.	None.
132. *Transfers: Golf Courses §25-8-424(A)(3) [Deleted]*	Current code allows increased impervious cover in the Uplands if golf courses in the water quality transition zone use native plants and minimize fertilizer use; but does not provide public benefit.	Delete this section.	Seeking to emphasize transfer system to be for public and environmental benefit.	None.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	Disadvantages
133. *Transfers: WQTZ Wastewater Disposal §25-8-424 (A)(4)&(6) [Deleted]*	Same as equivalent change for §25-8-393(A)(6), Item 124.	Delete these sections.	Seeking to emphasize transfer system to be for public and environmental benefit.	None.
134. *Transfers: CEF Buffer Transfers §25-8-424(A)(5) [Deleted]*	Same as equivalent change for §25-8-393(A)(5), Item 123.	Delete this section.	Consistency. Expectation is for all CEF buffers to remain in natural condition.	None.
135. *Transfer of Development Intensity: Transfer Proximity & Timing §25-8-424(B)*	Same as equivalent change for §25-8-393 (B), Item 125.	Allow the transfer for development intensity within the same watershed classification; allow transfers on site plans (not just plats). Include processing & restrictive covenant requirements.	Encourage more use of transfers of development intensity to realize the benefits to the environment & community.	Some areas could see a much larger impact than others; could address by ensuring that the "receiving areas" are within Comp. Plan-approved centers & corridors. Requires additional administrative burden to track over time.
ARTICLE 11. WATER SUPPLY RURAL WATERSHED REQUIREMENTS				
136. *Critical Water Quality Zone §25-8-452 [Deleted]*	CWQZ development prohibition moved to §25-8-261 Critical Water Quality Zone Development. See item 77 above.	Consolidate all references to prohibition of development in the Critical Water Quality Zone to 25-8-261.	Clarity.	None. No change in regulations.
137. *Water Quality Transition Zone (WQTZ) §25-8-452(A)(2) & (B)(3)*	Current code prohibits the placement of water quality controls in WQTZs in Water Supply Rural watersheds, despite the allowance of development in these areas.	Allow minor drainage facilities and water quality controls in WQTZ (language aligned with Barton Springs Zone) in Water Supply Rural watersheds.	Ensures that permitted development in WQTZs can receive on-site water quality treatment using structural controls.	None.
138. *Water Quality Transition Zone (WQTZ) §25-8-452(B)(4)*	Code unnecessarily permits parks and open space in the WQTZ; is already permitted in §25-8-451(B)(1).	Delete parks & open space reference (is covered by Article 7, Division 1 reference and therefore redundant).	Clarity.	None.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	Disadvantages
139. *Water Quality Transition Zone (WQTZ) §25-8-452(C)*	Current code requires that a Water Supply Rural lot that lies within a CWQZ must also include at least 2 acres in a WQTZ; leads to unnecessary variance requests.	Expand to two acre min. in WQTZ or upland area.	Eliminate unproductive variance requests.	None.
140. *Uplands Zone: Cluster Housing §25-8-453(C)(2) & (D)(2)*	Much of the original text describing the use and requirements of cluster housing was inadvertently deleted from the code, leaving use of this provision unclear.	Add text from commercial section to cluster housing section. Also clarify that the 40% required natural buffer shall receive runoff from developed areas.	Clarify requirements to use cluster housing provisions for WS Rural watershed development; current code & criteria do not provide guidance; ensure treatment of runoff.	None.
141. *Uplands Zone: 40 Percent Buffer §25-8-453(C)(2)*	Not clear that the 40 percent buffer must be located in the uplands and that the overland drainage received must come from the developed areas of the site.	Clarify that the 40 percent buffer is located within the uplands and must receive overland drainage from developed areas (e.g., impervious cover) of the site. Moved prohibition on wastewater disposal areas in the buffer from §25-8-361 (see 106 above).	Clarity.	None.
142. *Uplands Zone: Mixed Use Impervious Cover §25-8-453(D)*	Need to add mixed use to list of impervious cover limits.	Add mixed use impervious cover limit reference.	Clarity.	None.
143. *Transfers: Impervious Cover Limits Apply §25-8-454(A)*	Same as equivalent change for §25-8-393 (A), Item 118.	Add text to clarify that Uplands impervious cover is subject to IC limits. (Note that IC levels are higher with transfers than without.)	Clarity.	None.
144. *Transfers: Critical Water Quality Zone §25-8-454 (A)(1) & [Deleted] (2)*	Same as equivalent change for §25-8-393 (A)(1), Item 119, except can also consolidate section on transfers for Water Quality Transition Zones.	See Item 119 above; move Water Quality Transition Zone option to (A)(1) and delete (A)(2).	See above. Plus simplify.	None.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	**Disadvantages**
145. *Transfers: Parkland Dedication §25-8-454(A)(2)*	Same as equivalent change for §25-8-393(A)(3), Item 121.	Clarify transfers to be credited for Parkland Dedication must be dedicated fee simple.	Clarity.	None.
146. *Transfers: Golf Courses §25-8-454(A)(3) [Deleted]*	Current code allows increased impervious cover in the Uplands if golf courses in the water quality transition zone use native plants and minimize fertilizer use; but does not provide public benefit.	Delete this section.	Seeking to emphasize transfer system to be for public and environmental benefit.	None.
147. *Transfers: WQTZ Wastewater Disposal §25-8-454 (A)(4)&(6) [Deleted]*	Same as equivalent change for §25-8-393(A)(6), Item 124.	Delete these sections.	Seeking to emphasize transfer system to be for public and environmental benefit.	None.
148. *Transfers: CEF Buffer Transfers §25-8-454(A)(5) [Deleted]*	Same as equivalent change for §25-8-393(A)(5), Item 123.	Delete this section.	Consistency. Expectation is for all CEF buffers to remain in natural condition.	None.
149. *Transfer of Development Intensity: Transfer Proximity & Timing §25-8-454(B)*	Same as equivalent change for §25-8-393 (B), Item 125.	Allow the transfer for development intensity within the same watershed classification; allow transfers on site plans (not just plats). Include processing & restrictive covenant requirements.	Encourage more use of transfers of development intensity to realize the benefits to the environment & community.	Some areas could see a much larger impact than others; could address by ensuring that the "receiving areas" are within Comp. Plan-approved centers & corridors. Requires additional administrative burden to track over time.
ARTICLE 12. BARTON SPRINGS ZONE WATERSHED REQUIREMENTS				
150. *Critical Water Quality Zone §25-8-482 [Deleted]*	CWQZ development prohibition moved to §25-8-261 Critical Water Quality Zone Development. See item 77 above.	Consolidate all references to prohibition of development in the Critical Water Quality Zone to 25-8-261.	Clarity.	None. No change in regulations.

Description	Current Status/Concern	Proposed Improvement	Anticipated Impacts	
			Advantages	**Disadvantages**
151. *Water Quality Transition Zone (WQTZ) §25-8-482*	Language for water quality transition zone requirements differ slightly for Water Supply Suburban, Water Supply Rural, and Barton Springs Zone.	Align language as much as possible across the three sections.	Consistency.	None.
152. *Water Quality Transition Zone (WQTZ) §25-8-482(B)(5) [Deleted]*	Code unnecessarily distinguishes between vegetative filter strips and water quality controls.	Delete vegetative filter strip reference (is covered by "water quality control" and therefore redundant). Align text with other water supply sections for WQTZ.	Clarity.	None.
ARTICLE 13. SAVE OUR SPRINGS INITIATIVE				
153. *SOS Amendment §25-8-512*	Original SOS Ordinance was prohibited from repeal or amendment within two years of its effective date on August 10, 1992. This two year period has passed and is no longer relevant to code compliance.	Delete reference to date.	Clarity. Does not impact implementation of ordinance.	None.
154. *SOS List of Pollutants §25-8-514*	Current list of pollutants includes fecal coliform and fecal streptococci, both of which are no longer the bacteria constituents monitored (should be E. coli) & BOD, which is not a useful measure of stormwater quality.	Delete fecal coliform and fecal streptococci and replace with E. coli. Delete biochemical oxygen demand (BOD).	Reflect current science.	None.
155. *Application to Existing Tracts: Small Roadway Project Exemption § 25-8-516 (D)*	SOS impervious cover limits apply to all tracts. This creates feasibility issues for small roadway projects due to the unusual nature of road "tracts" & preventing constructive projects from being built.	Exempt roadway projects with less than 5,000 square feet of impervious cover. Is same threshold proposed for water quality controls in §25-8-211. (See Item 66 above.)	Significant increase in feasibility for small roadway projects with positive environmental benefits (e.g., bike lanes & intersection improvements to relieve congestion and idling).	Small impact on water quality (though will still be subject to construction-phase erosion & sedimentation controls).