Watershed Protection Ordinance (WPO) Summary of Proposed Code Improvements

Per Council Resolution No. 20110113-038

Key Acronyms: EHZ: Erosion Hazard Zone

BSZ: Barton Springs Zone IA: Imagine Austin Comprehensive Plan

CWQZ: Critical Water Quality Zone IC: Impervious Cover

DA: Drainage Area WQTZ: Water Quality Transition Zone

1. Creek Protection

Resolution: "Improve stream buffer requirements, including critical headwater areas, to protect water quality and reduce erosion, flooding, and long-range costs for infrastructure maintenance."

- Extend minor "headwaters" stream buffers to 64 acres of drainage citywide
- Standardize drainage area (DA) thresholds for stream buffers citywide:
 - o **64 acres** for minor ("headwaters") waterways
 - o **320 acres** for intermediate waterways
 - o **640 acres** for major waterways
- Simplify CWQZ buffer widths for Suburban watersheds:
 - o 100 ft. for minor ("headwaters") waterways
 - o **200 ft.** for intermediate waterways
 - o **300 ft.** for major waterways
- Eliminate Water Quality Transition Zone (WQTZ) buffers in Suburban watersheds
- Use Gross Site Area basis for impervious cover in Suburban watersheds (instead of net site area)
- Allow "buffer averaging" in Suburban watersheds to reduce the width of buffers by up to one-half if the overall amount of area protected remains the same
- Clarify that created or irrevocably altered roadside ditches do not create a CWQZ
- Revise allowed uses in the CWQZ:
 - Allow under certain conditions (e.g., in Suburban watersheds, outside of EHZ):
 - Flexible roadway crossings for IA centers & corridors
 - Hard-surfaced trails
 - Sustainable urban agriculture / community gardens
 - Parallel utility lines (e.g., wastewater infrastructure)
 - Green water quality controls
 - o Prohibit:
 - Small single-family lots (< 5,750 square feet)
 - Managed portion of golf courses
- Add Critical Environmental Feature (CEF) protections:
 - Expand definition to include faults, fractures & seeps
 - o Require perimeter fencing & natural state for CEF buffers
- Require Erosion Hazard Zone (EHZ) protections
 - No improvements (including utility lines) are allowed within the erosion hazard zone unless protective works are provided
 - Development must not result in additional erosion impacts to other properties

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2. Floodplain Protection

Resolution: "Promote, encourage and/or require the preservation and restoration of floodplains and stream buffers as well as the beneficial re-purposing of mining quarries."

- Adjust approach to protect and enable the recovery of degraded waterways.
- Prohibit floodplain modifications in the CWQZ unless:
 - Necessary to protect public health and safety
 - Provides a significant, demonstrable environmental benefit as determined by a functional assessment of floodplain health
 - Necessary for development permitted in the CWQZ (e.g., road crossings)
- In addition to these exemptions, allow floodplain modification **outside of the CWQZ** if a functional assessment of floodplain health determines the area to be in poor or fair condition
- Require restoration of floodplain health on-site where feasible
- Provide off-site **mitigation options** where on-site restoration is infeasible
- Ordinance will be accompanied by Floodplain Modification Criteria as an emergency rule

3. Development Patterns & Greenways

Resolution: "Explore opportunities to encourage a development pattern that better protects public and private property, preserves floodplains, creeks and open spaces, and provides access and connectivity with greenways and trails."

- Improve and expand **PUD zoning elements** for "superior" environmental protection
- Improve the existing **transfers of development rights** sections to allow for increased flexibility and protection of additional environmental resources
- Expand the **Redevelopment Exception** (Council Resolution 20121213-066):
 - Extend Barton Springs Zone (BSZ) redevelopment rules to Water Supply Rural and Water
 Supply Suburban watersheds
 - Extend to residential uses other than single-family residential or duplex in the BSZ and Water Supply watersheds
 - o Prohibit additional non-compliance with required stream and CEF buffers
- Allow community gardens and hard-surface (multi-use) trails in the CWQZ (see above)
- Allow small (less than 5,000 square feet) roadway projects without on-site water quality controls or impervious cover limits (e.g., for minor intersection improvements, bike lanes, etc.)
- Establish limits for diversions of stormwater between watersheds to protect natural drainage patterns and topography

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4. Improved Stormwater Controls

Resolution: "Improve permanent stormwater controls to better moderate runoff and help reduce streambank erosion."

- Require water quality controls for new development or redevelopment exceeding 5,000 square feet of impervious cover (rather than 20 percent of net site area)
- Allow potential for combining ("stacking") water quality and flood controls
- Require all water quality controls to be accessible for maintenance and inspection
- Require maintenance plan and inspections by registered engineer, with annual reporting, for all subsurface water quality controls
- Remove code barriers to incentivize green stormwater infrastructure (see CWQZ above)

5. Mitigation Options

Resolution: "Explore better ways to regulate the modification of floodplains, including options for off-site mitigation for developments in areas that are planned for higher density developments."

- New options for mitigation of floodplain modifications (see above)
- New options for mitigation of redevelopment in Water Supply watersheds (see above)

6. Simplify Regulations & Maintain Development Opportunity

Resolution: "Simplify development regulations where possible and minimize the impact of any changes on individual and collective abilities to develop land."

- Several of the provisions listed above were designed to fulfill this goal, including eliminating the WQTZ, converting to gross site area, allowing buffer averaging, allowing green stormwater controls with the CWQZ, and allowing potential for stacking of water quality and flood controls
- Eliminate the **Boundary Street Deduction**
- Numerous clarifications & corrections of existing code

7. Coordinate with Regional Partners

Resolution: "Work in coordination with Travis County and neighboring communities to develop the above changes."

- Coordinate regulations with new Travis County Water Quality Rules
- Input from Travis County and LCRA in Watershed Protection Ordinance

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Items to be considered in Phase 2 of Watershed Protection Ordinance Hydrology and Green Stormwater Infrastructure Fall 2013

- Limit stormwater runoff volume (e.g., through requirement for infiltration or re-use on-site)
- Rain gardens for single-family residential subdivisions
- Alternatives (rain gardens?) for SOS compliance
- Rainwater harvesting for water conservation and water quality
- Using green roofs as irrigation area for rainwater harvesting
- Porous pavement for non-pedestrian surfaces (e.g., parking lots)
- Flood detention credit for water quality controls
- Impervious cover credit for rainwater harvesting catchment and/or tank areas
- Volumetric Flood Detention (add to Drainage Criteria Manual as option)
- Other related items as identified by stakeholders

Items to be considered in Phase 3 of Watershed Protection Ordinance Imagine Austin Land Development Code Revision

- Align stream crossing provisions with new connectivity requirements
- Evaluation of mitigation options for centers and corridors

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