



# 2022 Environmental Code Amendments Phase 1

Codes and Ordinances Joint Committee

August 17, 2022



# Objective



- Respond to portion of Resolution 20220609-061 that requires staff to bring forth an ordinance related to environmental protection in September amending Title 25
- Key subject areas
  - Stormwater
  - Landscape
  - **Water Resource Protection**
  - **Colorado River Protections**
  - Previously identified minor code amendments and other amendments that meet the objectives of the resolution
  - **Incentivize Missing Middle**



# O Progress So Far



- Internal Watershed Protection Dept (WPD) technical staff
- Input from other departments including
  - Development Services Department
  - Austin Water
  - Austin Transportation
  - CoA Project Connect Office
  - Housing and Planning
  - Law
- Environmental Commission Workgroup 7/25/2022
- Environmental Commission Update 8/3/2022



# Next Steps



- 9/6/2022 Environmental Commission
- 9/13/2022 Planning Commission
- 9/29/2022 City Council

Phase 2: Greenfield Detention Requirements and Urban Slope **Protection** 

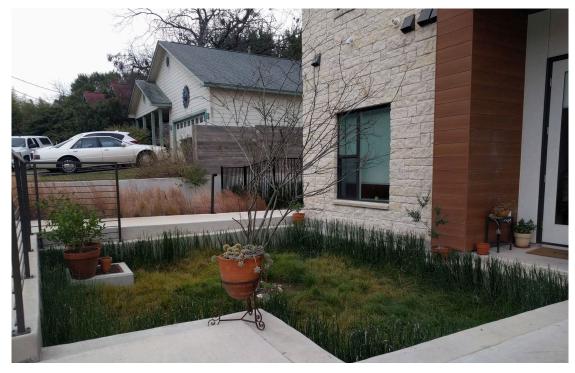
- **September & October Commissions**
- **November City Council**





"1. Establish criteria that prioritize when green stormwater methods should be required or incentivized over conventional stormwater controls"

VS



Rain garden



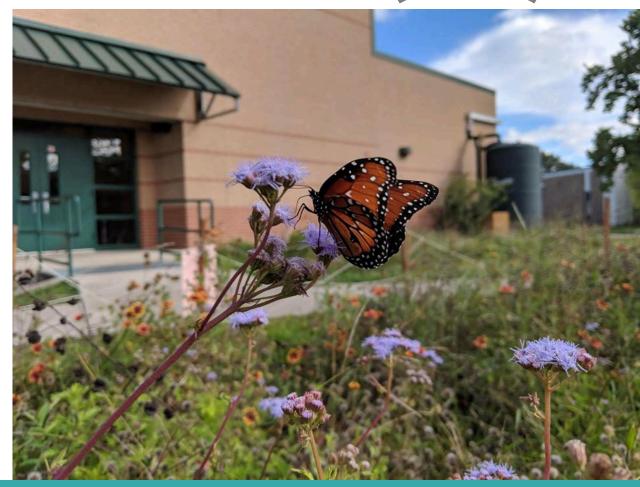
Conventional Stormwater Control (Sedimentation & Filtration Pond)





# Benefits of Green Stormwater Infrastructure (GSI)

- Improved ecosystem services
- Improved stormwater infiltration
- Soil health
- Wildlife habitat
- Heat island mitigation
- Water conservation
- Aesthetic value







### GSI Timeline

- 2012: Imagine Austin approved
- 2013: Watershed Protection Ordinance approved
- 2014: Phase 2 of the Watershed Protection Ordinance
  Austin Water Resource Planning Task Force
- 2015: Green Infrastructure Working Group WPD CodeNEXT Team
- 2016: Development and approval of draft code language
   Natural & Built Environment Prescription Paper
- 2017: GSI proposal included in CodeNEXT





### GSI Timeline



• 2017: Original GSI proposal include in Draft 1 and 2 of CodeNEXT

> Revised GSI proposal developed for inclusion in Draft 3

> Council Resolution for Green Infrastructure/GSI

- 2018: CodeNEXT process ended by City Council
- 2019: Council adopts policy direction to guide LDC Revision

GSI proposal revised for inclusion in public draft

- 2020: LDC Revision halted after District Court ruling
- 2022: New Council Resolution from City Council (20220609-061)







"1. Establish criteria that prioritize when green stormwater methods should be required or incentivized over conventional stormwater controls"

- Adopt LDC Rewrite 2<sup>nd</sup> Reading Recommendation
- Code Amendments
  - Require GSI for sites with less than 90% impervious cover
  - Carve outs for sites that treat existing impervious cover with an area greater than 10 acres or for sites that may generate highly contaminated runoff
  - Allow administrative variance with conditions
- Future Environmental Criteria Manual (ECM) amendments to more clearly define GSI
- Consider improvement to sedimentation/filtration pond design standards





"2. Require surface parking lot stormwater to enter pervious parking lot islands, landscaped medians, and perimeter landscapes as a method of water quality and require that pavement be graded to allow runoff to enter planting areas"

- Staff do not recommend requiring all landscape areas to serve as water quality controls for water quality treatment requirements
- Remove requirement that all parking lot landscape areas be protected by a 6" curb (LDC 25-2-1007 Parking Lots)
- Remove stormwater irrigation requirement (LDC 25-2-1008 Irrigation Requirements)
- Require applicants to drain stormwater to landscape areas where possible (LDC 25-8-185 Overland Flow)





"5. Allow cisterns to be sized beyond the required storm capture amount and remove requirement for stormwater release so that they can supply irrigation needs throughout the year"

- Land Development Code and Environmental Criteria Manual already allow cisterns to be sized beyond required storm capture amount = no code amendment necessary
- ECM update to continue investigating emerging technology, including smart controls, to determine release requirements for water quality
- Continued close collaboration between Austin Water and WPD staff



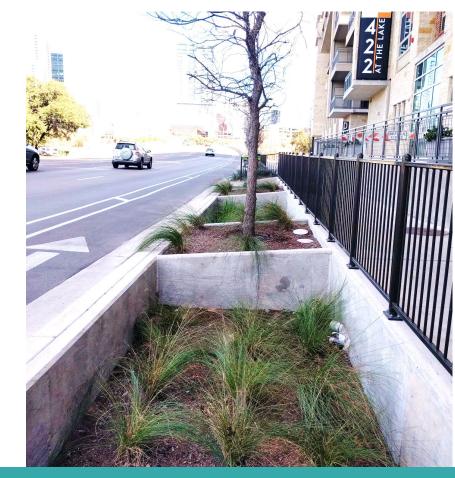
### What is Functional Green?



"3. Implement Functional Green requirements for properties with more than 80% allowable impervious cover"

Functional Green Landscape is based on the ecosystem service value created by landscape. It is intended to improve ecological balance, replenish native vegetation, and enhance public health, safety, and welfare.

The Functional Green Score measures the total amount of ecosystem services provided by the landscape elements proposed for a development site. Landscape plans are required to reach a total target Functional Green Score based on the assigned value per square foot area of each landscape element in relation to the area of the site.





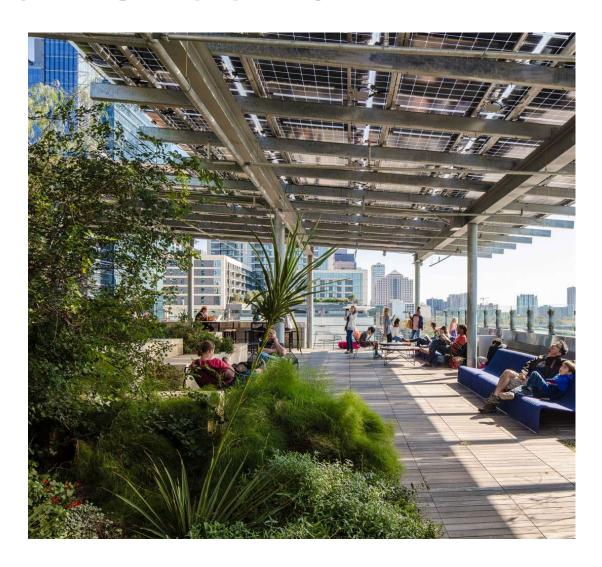
### What is Functional Green?



Required number of points based on site area for high impervious sites.

#### Landscape elements may include:

- Existing or newly planted trees
- Shrubs, ornamental grasses, perennial forbs, groundcovers
- Turf areas maintained for aesthetic or athletic uses
- Vegetated wall
- Irrigation with alternative water sources
- Vegetated roof
- Rain gardens
- Porous pavement
- Suspended pavement system (for improved urban tree health)
- Pollingtor resources
- Publicly accessible green space adjacent to ROW or public sidewalk





### Functional Green



"3. Implement Functional Green requirements for properties with more than 80% allowable impervious cover"

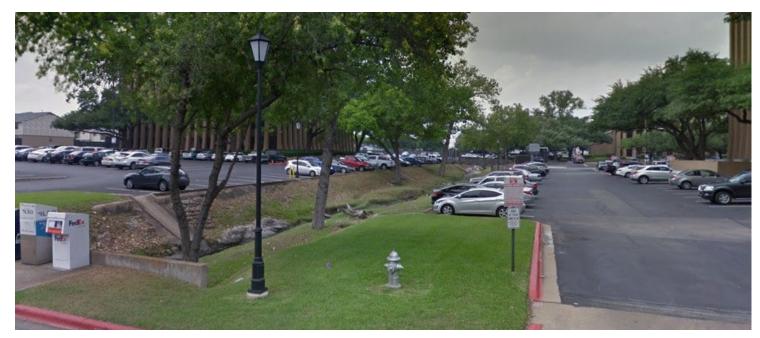
- Uphold previous recommendation from LDC rewrite 2<sup>nd</sup> reading with minor edits
- New Landscape Section in LDC 25-2-1009
- Applies to Central Business District and Downtown Mixed-Use zoning districts and other sites with greater than 80% allowable impervious cover



### Water Resource Protection



"7. Prohibit in-channel detention ponds, except for capital projects or private/public partnerships where no other alternative is feasible"



Example of existing in-channel detention pond

#### Draft Recommendation

• LDC code amendment to 25-8-261(F) which allows in-channel detention and wet ponds







"8. Require projects to relocate replaced or upsized wastewater pipes outside of the inner half of the critical water quality Zone...

10. Require utility easements to meet the same standards as utility pipes within creeks and creek buffers"

- Code amendment to LDC 25-8-261(D) relating to utility lines in Critical Water Quality Zones
- Code amendment to LDC 25-8-261(E) relating to utility lines running parallel to Critical Water Quality Zones in urban and suburban watersheds

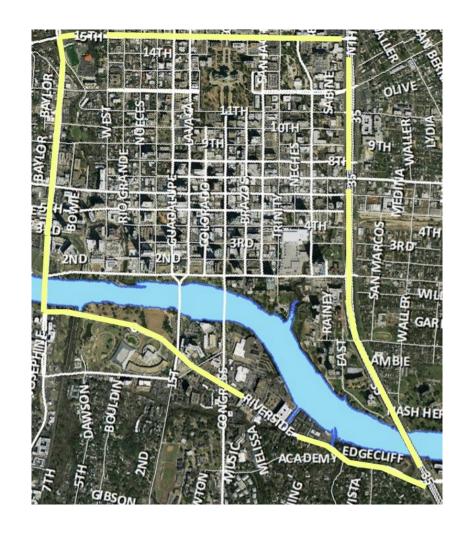


### Water Resource Protection



"9. Provide wetland protections and buffers equally along Lady Bird Lake to help stabilize and prevent erosion along the shoreline"

- Code amendment to LDC 25-8-282(A) **Wetland Protection**
- Retain existing exemptions for wetlands bounded by I-35, Riverside Dr, Barton Springs Rd, Lamar, and 15th Street but carve out the wetlands associated with Lady Bird Lake.





# Colorado River Protections



"The City Council directs the City Manager to evaluate the effectiveness of existing Critical Water Quality Zone and Erosion Hazard Zone buffers on the Colorado River downstream of the Longhorn Dam and to propose protections that will provide adequate protections to the river that will ensure a healthy riparian corridor to stabilize the riverbank and protect property from erosion"

#### Existing LDC requirements include:

- Erosion Hazard Zone analysis within 100' of the Ordinary High Water Mark (OHWM)
- Critical Water Quality Zone (CWQZ) established at 200'-400' feet depending on 100-year floodplain
- No special consideration for stormwater discharge on highly erodible bank of the Colorado River



# Colorado River Protections



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- Code amendment to LDC 25-7-32 Director Authorized to Require Erosion Hazard Zone Analysis — expanded to 400' from Ordinary High Water Mark (OHWM)
- Code amendment to LDC 25-8-92 Critical Water Quality Zones Established to expand CWQZ to 400' from OHWM
- Code amendment to LDC 25-8-261(E) to require new stormwater outfalls to discharge in drainages located upstream of the Colorado River
- Update City of Austin Property Profile viewer to show estimated location of OHWM





"11. Address current environmental code inconsistencies and other minor code revisions in Chapters 25-7 and 25-8 that staff have previously identified and reviewed as part of the Code Next and the Land Development Code revision process.

The City Council initiates other code amendments, as necessary, to accomplish the goals of this Resolution. The City Council expects that these code amendments will use the previous staff work and, where appropriate, adhere as closely as possible to the language and intent of the ordinances previously drafted and reviewed through the proposed revision of the Land Development Code."





- Update to correct department names and accountable officials
- Minor reorganization of certain sections
  - Minor revisions to titles to improve readability
  - 25-2 Landscape streetyard tree requirements consolidated with other streetyard landscape requirements
  - 25-8 Division 1 Critical Water Quality Zone Restrictions renamed Waterway and Floodplain
  - 25-8 Floodplain modification criteria moved directly after Critical Water Quality Zone
  - 25-2-1179(B) Bulkhead wave abatement requirements moved to 25-8-261(C)
  - Move lake fill/land capture & lake dredge requirements to 25-8-261(C)
- Minor edits to improve clarity without changing intent
  - Edits to floodplain modification language
  - Edits to roadside ditch exemption
- Exempt rainwater harvesting cisterns from impervious cover calculations





- Streamline and clarify process for redevelopment exceptions in Urban, Suburban, Water Supply Suburban, and Water Supply Rural watersheds
- Minor edits to Barton Springs Zone redevelopment exception to allow GSI when sedimentation/filtration ponds are currently required
- Update Environmental Resource Inventory requirement to remove certain (WQTZ, EA Contributing Zone, DWPZ) triggers and add requirement for upland ponded areas previously identified in GIS
- Update street crossing requirements to use language consistent with ASMP





- Allow Critical Environmental Feature variances to be approved at staff level except when mechanized pedestrian access is proposed within 500' of Lake Austin
- Allow SCM retrofits in floodplain and within 50' of a CEF to address existing drainage issues
- Clarify the existin subdivision requirements related to CEFs
- Remove code language that explicitly allows wetlands to serve as water quality controls





- Update cut/fill restrictions to allow cut/fill in excess of 4' for construction of street or driveway necessary to provide primary access with conditions
- Remove 25-8-367 Relocation of Shoreline Between Tom Miller Dam and Longhorn Dam
- Simplify Endangered Species Notification





### Incentivize Missing Middle

"The initiated ordinances will ensure that, for the same environmental impact as a single-family home, the City does not disincentivize small-scale missing middle housing projects"

- Clarify which elements apply to single family residential

   (ex: impervious cover definitions, erosion/sedimentation
   control, waterway protections for lots platted after May 18,
   1986, clearing of vegetation, cut, fill)
- Adopt similar process requirements as proposed in LDC Rewrite





### Incentivize Missing Middle

- Allow up to 11 units (unless more allowable via Affordability Unlocked program) on existing single family lots to be exempt from full site plan review process
- Same environmental requirements as those that apply to single family residential
- Impervious cover limit of 45%
- Site limit up to 0.5 acres
- Administrative variance option for lots with waterway setbacks that were established after platting





### Incentivize Missing Middle

- Require Small Project Site Plan Applications for qualifying projects
  - Established review process with existing fee structure for partnering departments
  - No notice
  - Faster review time



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