



OKC Development Codes Update

Green Infrastructure
4/27/2022

Why Change the Code Now?

Development Codes Update Project



Planokc

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Our land plan
for the future

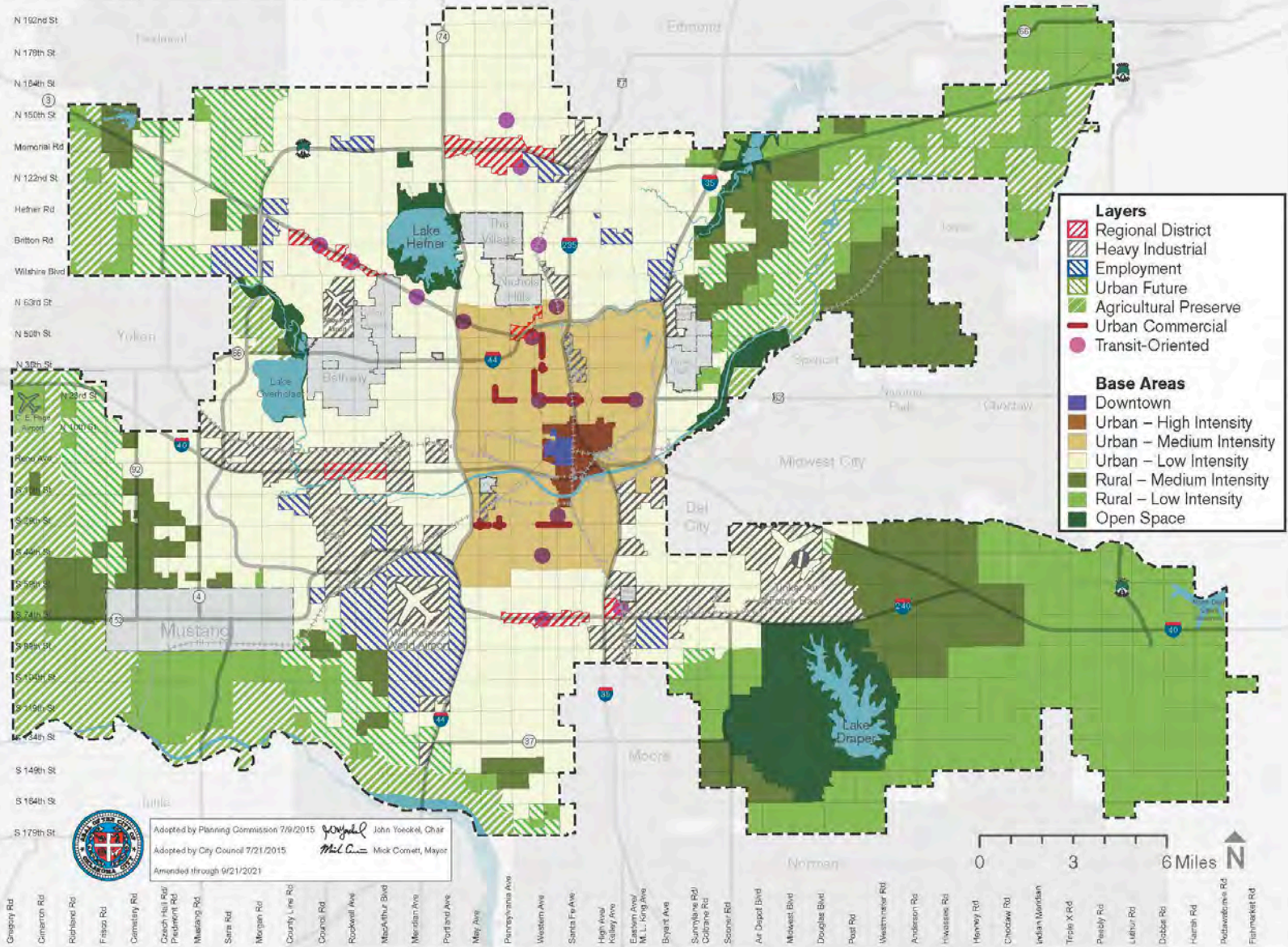


planokc LUTAS



“The LUTAs are oriented around a spectrum of development intensities – from undeveloped Open Space, to the high intensity of Downtown.”
 - *planokc Development Guide*

LAND USE TYPOLOGY AREAS (LUTAs)



planokc desired outcomes

Desired planokc outcomes

Integrate uses while ensuring compatibility

Allow increased densities where appropriate

Mitigate negative impacts of compact development

Integrate residential unit types and sizes

Improve transportation system connectivity

Increase walkability

Revise parking standards + prohibit new surface parking downtown

Facilitate cluster/conservation subdivisions

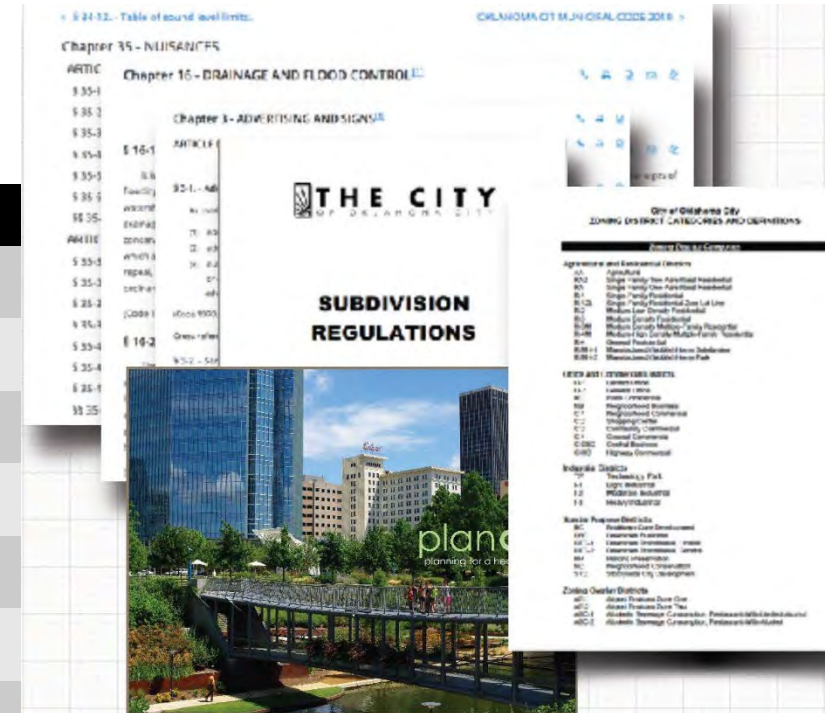
Ensure adequate and quality open space and streetscapes

Preserve environmental/water quality + reduce flood risk

Increase landscaping amount and quality

Establish citywide design regulations to ensure functional and aesthetic minimums

Establish/Improve design standards



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Base zone standards lack character definition

TABLE 6100.2: AGRICULTURAL AND RESIDENTIAL ZONING DISTRICTS BULK STANDARDS

BULK	R-1ZL ^{1, 10}	R-2 ¹	R-3 ¹
Minimum Lot Width	Single-Family: 40 ft Single-Family Corner Lots: 50 ft Other: 100 ft	Single-Family: 50 ft Two-Family: 50 ft or 1du/30 ft Other: 100 ft	Single-Family: 50 ft Two-Family: 50 ft or 1du/30 ft Other: 100 ft
Maximum Height ^{5, 6}	2½ stories or 35 ft	2½ stories or 35 ft	2½ stories or 35 ft
YARDS (Additional applicable yard regulations are found in Section 59-12100.3)			
Front Yard	25 ft ⁸	25 ft ⁸	25 ft ⁸
Side Yard	Single-Family: Zero ft from one interior lot line and 10 ft from opposite line Corner Side Yards: 10 ft	Interior Side Yards: 5 ft Corner Side Yards: 15 ft Interior Lot Line of Individual Structures that Coincides with the Party Wall Separating the Units: 0 ft	Interior Side Yards: 5 ft Corner Side Yards: 15 ft Interior Lot Line of Individual Structures that Coincides with the Party Wall Separating the Units: 0 ft
Rear Yard	10 ft	10 ft	10 ft

• Homogeneity of Districts

- Single-family is allowed in multiple districts thereby:
 - denying the opportunity for other (much needed) housing types;
 - diluting the variations necessary to distinguish district character
- Minimal or no differences in the bulk or placement of buildings despite where you are in the City
 - limits available development forms in the City

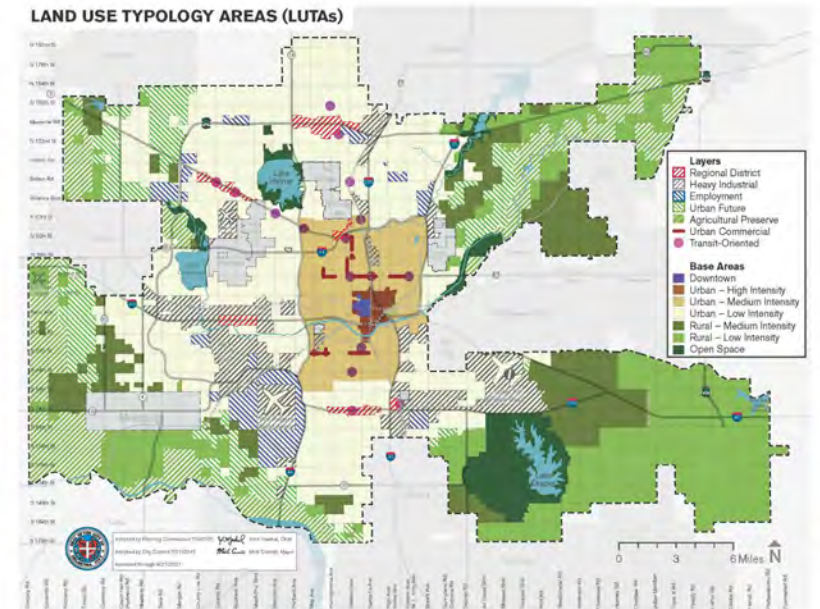
Base zones are not tailored to character context

TABLE 10600.2: PARKING REQUIREMENTS FOR USE CATEGORIES		
TABLE 10600.2 I: RETAIL ¹		
For the first 12,000 sf GLA		1 space/200 sf GLA
From 12,001 to 48,000 sf GLA		1 space/225 sf GLA
From 48,001 to 120,000 sf GLA		1 space/300 sf GLA
Over 120,001 sf GLA		1 space/325 sf GLA
8200.12	Multiple-Family Residential	
	Per Efficiency and One Bedroom Unit	1.5/du
	Per Two or More Bedroom Unit	2/du
8200.13	Senior Independent Living	0.5/du
8200.14	Single-Family Residential	2/du + garage
8200.15	Three- and Four-Family Residential	2/du
8200.16	Two-Family Residential	2/du + garage

- **Parking requirements** are the same on SW 119th and as they are on NW 19th
- **Doesn't look at:**
 - How wide are the streets? Would you walk or drive?
 - How close are jobs and shopping and transit? Can you walk/bus there?
 - Affordability of units (if you don't need a car total monthly costs are lower)
 - Need in sensitive areas for less pavement

New LUTA Zone Approach

Backbone of the new code



Proposed Districts

LUTA	Proposed Districts	Current District(s) in relation to intensity
RL , Rural: Low Intensity & AP, Agricultural Preserve	RL-AR , Agricultural Residential RL-RC , Rural Commercial	AA, RC
RM , Rural: Medium Intensity	RM-SF , Single-Family RM-RC , Commercial Services	RA-2, RA, RC
UL , Urban: Low Intensity	UL-SF , Single-Family UL-MR , Mixed Residential	R-1, R-MH-1, R-1Z, R-2, R-3, R-4
	UL-MX , Mixed Use UL-NC , Neighborhood Convenience UL-OI , Office and Institutional UL-GC , General Commercial UL-LI , Light Industry	O-1, O-2, C-1, C-3, C-4, C-HC, I-1, I-2
UM , Urban: Medium Intensity	UM-SF , Single-Family UM-MF , Multi-Family	R-1, R-2, R-3, R-3M, R-4
	UM-NB , Neighborhood Business UM-PO , Professional Office UM-MX , Mixed Use UM-LI , Infill Industry	O-1, O-2, NB, C-1, C-3, C-CBD, I-1

Proposed Districts

LUTA	Proposed Districts	Current District(s)
UH , Urban: High Intensity	UH-OF , Office UH-OM , Office Mixed UH-BC , Bricktown UH-DT , Downtown UH-MH , Mixed High	O-1, O-2, BC, DBD, DTD-1, DTD-2
UC , Urban Commercial	UC-MS , Main Street UC-CC , Commercial Corridor	NB, C-1, C-2, C-3, C-CBD
RD , Regional District TO , Transit-Oriented District	RD-RC , Retail Center RD-AC , Activity Center	C-3, C-4
DT , Downtown TO , Transit-Oriented District	DT-CB , Central Business DT-MR , Mid-Rise DT-HR , High-Rise	DBD, DTD-1, DTD-2
EM , Employment District	EM-TP , Technology Park EM-BP , Business Park EM-IP , Industrial Park	TP, I-1, I-2
HI , Heavy Industry	HI , Heavy Industry	I-3



Chapter 59

NEW section

“Development Standards”

Reorganizes Landscaping and Screening and Site Development Standards

Development Standards –Topics Related to Green Infrastructure

Amenity Space	Establishes dedication and improvement standards for a continuum of amenity space from rural open space to urban plazas, with defined typologies, credits and specifications.
Fences and Screening	Establishes standards for the design of fences and screening.
Green Development	Includes standards for: <ul style="list-style-type: none">• rainwater harvesting, roof gardens, and similar items currently described as use units (and may count toward stormwater management requirements),• environmentally sensitive areas, including forest protection, riparian buffers and aquifer protection standards per planokc• solar and green energy,• building materials, and• building orientation, and• related standards to be discussed.
Landscaping & Tree Preservation	Simplifies landscaping preservation regulations, with modifications for urban situations and development context.
Stormwater Management	Carries forward general standards for stormwater management and flood protection for development, with any modifications needed for context and to implement low impact design (LID) policies in planokc.



Chapter 16

Drainage and Flood Control

Ordinance and Drainage Criteria Manual

Drainage Ordinance Revisions –Topics under discussion

DRAINAGE ORDINANCE REVISIONS

DETENTION

Changes: on-site detention, fee-in-lieu of detention, multi-frequency outlet structure design and individual lot requirement

DRAINAGE CHANNELS

Changes: open drainage channel 50-year changes to 100-year storm event

DRAINAGE CRITERIA MANUAL

Changes: storm sewer criteria moved to Drainage Criteria Manual

STORM SEWER SYSTEMS

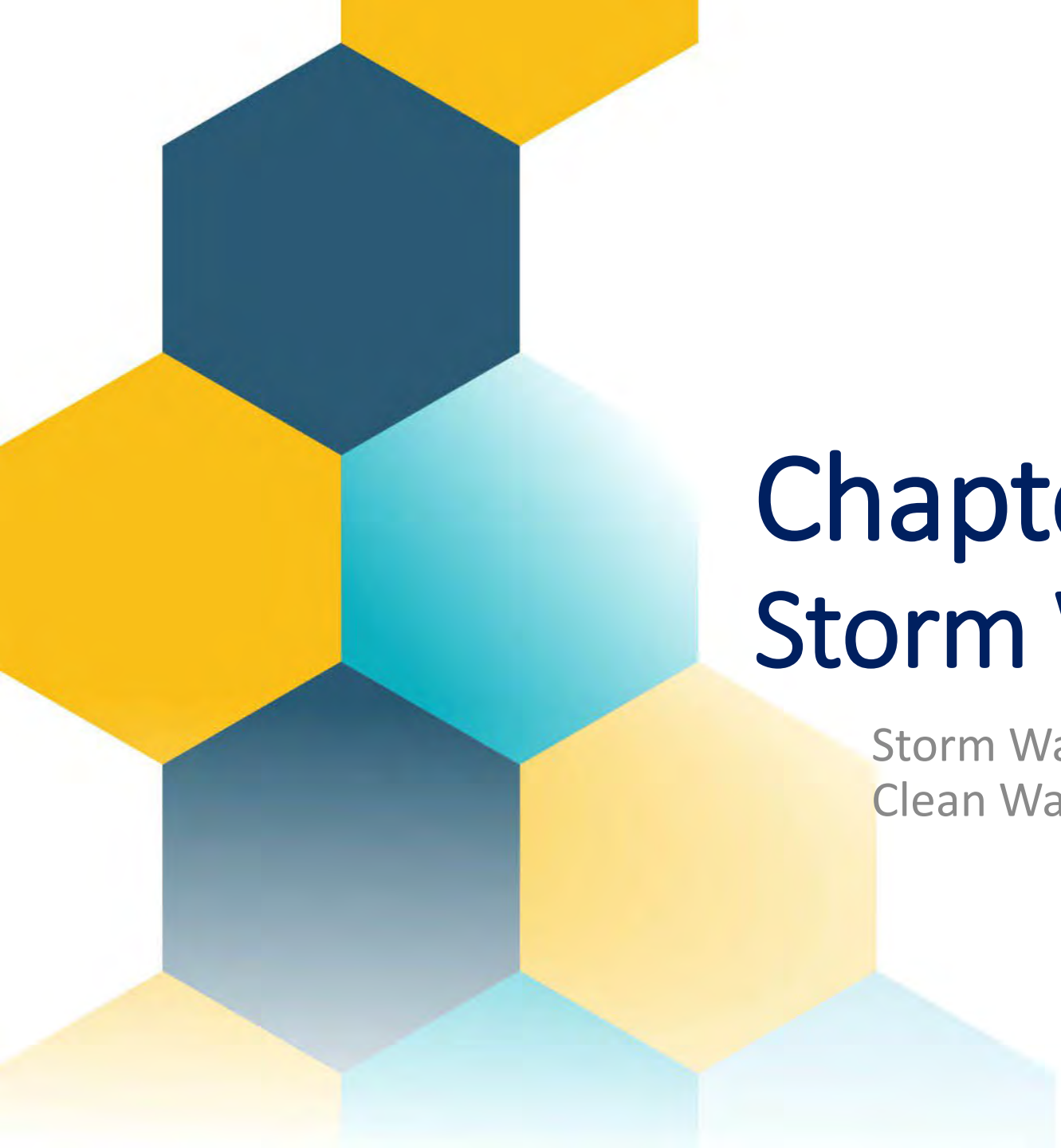
Changes: on-grade storm sewer system 10-year changes to 25-year storm event

PUBLIC VS PRIVATE STORM SEWER SYSTEMS

Changes: definition of private systems, review, approval, inspection, development site

FLOODPLAIN ACTIVITY PERMIT

Changes: FEMA certificate requirements



Chapter 57

Storm Water Quality

Storm Water Quality Management Plan for the federal
Clean Water Act

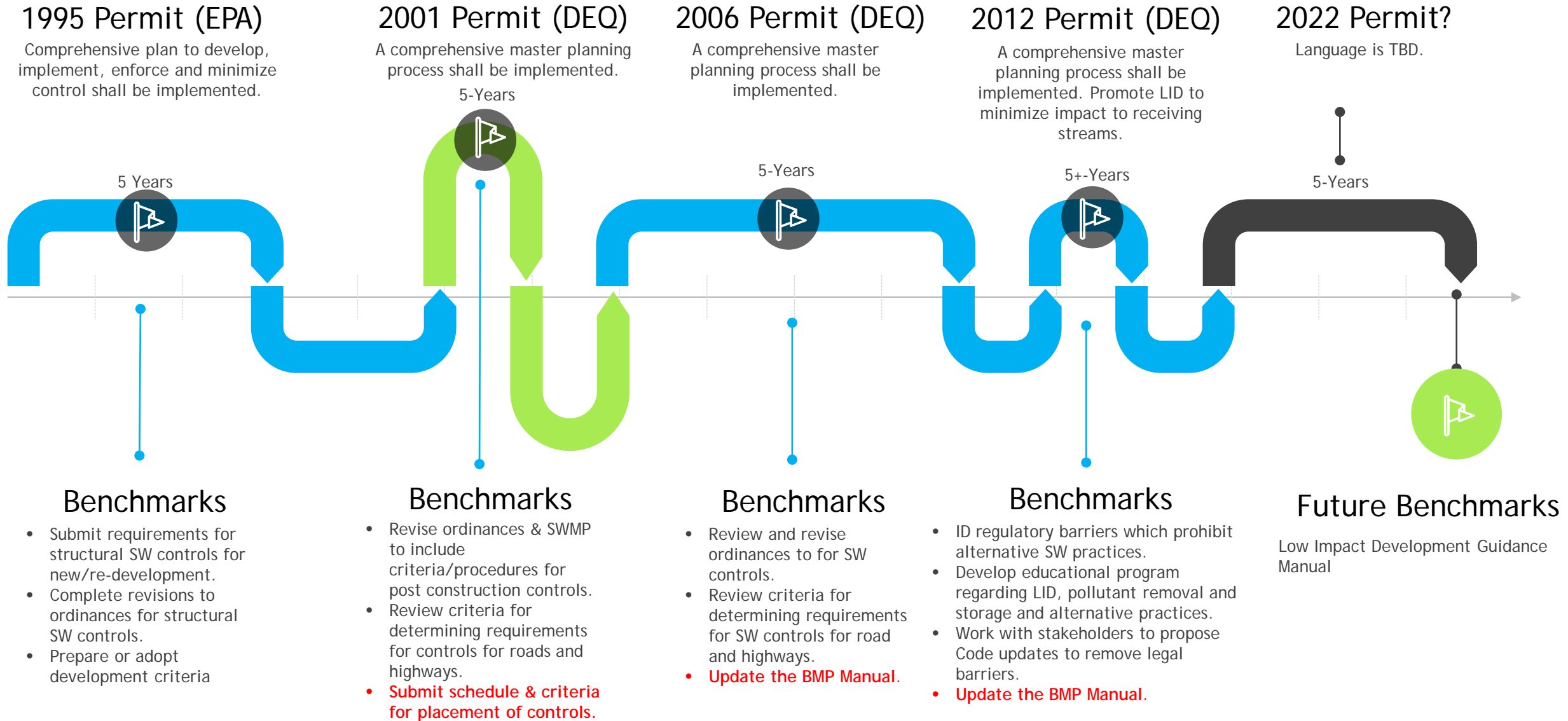
Storm Water management–

Population growth and the development of urban/urbanized areas are major contributors to the amount of pollutants in runoff as well as the volume and rate of runoff from impervious surfaces. Together, they can cause changes in hydrology and water quality that can result in habitat modification or loss, increased flooding, decreased aquatic biological diversity, and increased sedimentation and erosion. The

Stormwater permitting for land disturbing activities (construction and sediment control / erosion)	<ul style="list-style-type: none">• Utilities, Industrial, commercial and institutional facilities• Residential subdivisions• Demolition of structures• Best Management Practices (BMP)
Monitoring of storm drain system	<ul style="list-style-type: none">• Identify pollutants, structural defects, isolate blockages• Identify utility line leaks and illegal discharges• Access levels of contamination and clean-ups in the Oklahoma and North Canadian River
Monitoring of impaired watersheds	<ul style="list-style-type: none">• Implementation of watershed plans for water bodies declared impaired by the state, including Lake Thunderbird• Best Management Practices for development under an impaired watershed plan

OKC 2021 Storm Water Quality Annual Report

Areas of New Development and Re-Development



Total Maximum Daily Loads

- Pollution limitations for waterways (in example – Lake Thunderbird (nutrients) or North Canadian River (pathogens – *E. coli* or *Enterococci*).
- Discharge of a pollutant into any water for which a TMDL or watershed plan in lieu of a TMDL for that pollutant has been either established or approved by the DEQ or EPA is prohibited, unless your discharge is consistent with that TMDL or watershed plan. You must incorporate any limitations, conditions, monitoring and other requirements applicable to your discharges into your SWMP to ensure that the wasteload allocation, load allocation and/or the TMDLs associated implementation plan will be met within any timeframes established in the TMDL or watershed plan.



Impaired Waters Designation (source: OKC MS4 Permit Part II,B, Area Specific SWMP Requirements

- If you (the permit holder) discharge to water identified on the latest CWQ 303(d) list, you must include all necessary BMPs that will ensure that the impairment caused by the identified pollutants in your receiving waters will, in future discharges, not cause, have reasonable potential to cause, or contribute to an in-stream exceedance of water quality standards. You must consider the following in revising your SWMP.

E – You must choose BMP's from EPA menu or select others that can be used for managing the identified pollutants in your discharges.



Other considerations:

Flooding: National Flood Insurance Program	<p>The City has the lowest ranking for Community Rating System (CRS). We could improve our scores and decrease flood insurance rates by:</p> <ul style="list-style-type: none">• Prohibiting fill of wetlands and other natural areas• Enacting streamside buffers and setbacks• Protecting natural functions like critical habitat and open space networks• Requiring floodplains to be preserved in common areas, instead of split up between lots• Allowing cluster development that protects natural areas• Maintain large lot zoning in FEMA floodplain areas
Flooding: Repetitive Loss Properties	<p>Areas of the city where repeated flood insurance claims have occurred such as Lightening Creek.</p>
Adaptokc (Urban Heat Island, etc. reasons for GI)	<p>Identifies the need for:</p> <ul style="list-style-type: none">• Low-Impact Development Manual for architects, engineers, developers, landscape architects, and planners• Watershed Master Plans: Inform cost-effective planning decisions for LID siting and optimize the use of public land for water quality benefits• Rainwater harvesting, roof gardens, and similar items currently described as use units, but may contribute to required stormwater management mechanism
planokc	<p>Environmentally sensitive areas, including forest protection, riparian buffers and aquifer protection standards per planokc</p>



How can Chapter 59 and 16 work together?

Make Storm Water Quality control easier

Current Requirements: Open Space

- Residential Open Space (0-30% Rural, 3.2% Urban)
- Residential Park Development Fees, discounts for opening park to public
- Landscaping / Buffers (Residential/Commercial)
- Detention / Retention (Residential/Commercial)



Current Requirements: Landscaping issues

- Requirements for shade trees
- Increase parking lot island and street tree soil volumes or wells
- Incentives for xeriscape, edible trees
- Significant tree definitions and measurements from caliper to DBH
- Use mature tree height in regulations
- Point system needs review
- Trees and utilities conflicts/placement

Landscaping	require minimum percentage of shade trees to be included in landscape; clarify "evergreen planting" to delineate between trees, shrubs, or a combination of both; increase minimum dimensions of parking lot island to 8-feet in any direction or add minimum soil volume requirement based on anticipated size of tree canopy; do we need a list of evergreen trees?
Tree Preservation	develop list based on species and size (diameter at breast height) to be codified as significant trees. Preference for large species trees as effective stormwater mitigation with small or medium species thereafter
Landscaping	Revise the landscape ordinance to include irrigation system design installation and irrigation contractor registration, certification, and/or training requirements
Landscaping	Ensure that landscape requirements do not use a lot of water, xeriscaping incentives? Add xeriscape definition, could also apply to parking lot points
Landscaping	Discuss changing definition for "significant tree" from caliper to DBH, the measure that arborists use to measure trees, possibly dbh of at least 8 inches
Landscaping	Change 59-11150 G. to say that removal or pruning of public trees (trees in the ROW) cannot be done without Parks Dept Review/establish permitting process from Parks? Could slow down utility repairs?
Landscaping	Change 59-11250 A. to center the point system around size of trees at maturity, not size of tree at planting, provide more points for large trees over the use of small or medium trees for better stormwater benefits, ex. Large Tree-mature height of 40 feet or greater; Medium Tree-mature height btw 25-40 feet; Small tree mature height less than 25 feet; Ornamental tree-multi-stem specimen trees with a mature height of less than 20 feet. Significantly more points for large trees

Green Infrastructure ideas

Preserve



Gather



Play



Proposed: Amenity Space

- Context-based
- Right-sized
- Defined
- Illustrated
- Flexible
- Placemaking



Amenity Space Examples





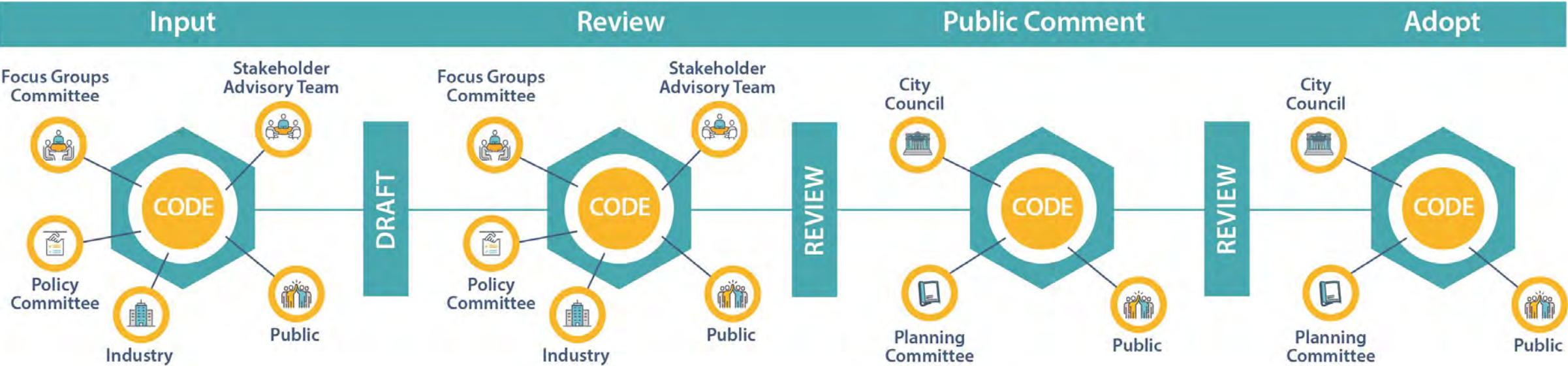
Discussion

Green Infrastructure Approaches to Drainage,
Stormwater Quality and Urban Environments

Next Steps

- **Stay informed:** Sign up for emails at [Development Codes Update | City of OKC](https://okc.gov/codeupdate) (okc.gov/codeupdate) Scroll to Planning and click Code Update box.

Process and Input





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<https://www.okc.gov/departments/planning/current-projects/development-codes-update>

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<https://www.okc.gov/departments/public-works/new-drainage-ordinance-revision-and-drainage-criteria-manual>

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<https://www.okc.gov/departments/public-works/divisions/storm-water-quality>