City of Boerne	AGENDA ITEM SUMMARY District Impacted 1 = Wolosin 2 = Woolard 3 = Scott 4 = Fowler 5 = Macaluso All				
AGENDA DATE	July 9, 2019				
DESCRIPTION	DISCUSSION OF POTENTIAL REVISIONS TO CITY ORDINANCES RELATING TO STORMWATER RUNOFF AND LOW IMPACT DEVELOPMENT.				
STAFF'S RECOMMENDED ACTION (be specific)	No Action. Discussion only				
CONTACT PERSON	Laura Talley, Planning and Community Development Director				
SUMMARY	At the June 25 th City Council meeting, Council requested that Staff put together a committee too discuss stormwater runoff and low impact development. The committee members will include two Council members, Dr. Macaluso and Ty Wolosin. As a start to this endeavor, staff would like direction regarding Council's desire to update ordinances to possibly incorporate more stringent standards for stormwater runoff.				
	As Ms. Solis advised Council, making changes to ordinances that are unduly restrictive without any supporting documentation can be considered in legal terms as a "taking", defined as:				
	Regulatory taking is a situation in which a government regulation limits the uses of private property to such a degree that the regulation effectively deprives the property owners of economically reasonable use or value of their property.				
	Understanding what we provide in our current ordinances is important in making a determination as to how Council would like to proceed and in determining what modifications the Council considers to be most urgent. Stormwater runoff is addressed by our current ordinances in different ways.				
	Subdivision Ordinance: In our Subdivision Ordinance we have a couple of different scenarios for handling stormwater runoff, the runoff of rainfall from a site. Two things are covered in the ordinance: managing the runoff quantity and quality . These are two very separate issues.				

Article 3, Section 06., Low Impact Development Facilities, of our ordinance addresses **quality** of runoff. The intent of our current ordinance is for a development to produce less pollutants and/or to treat a total of 70% of TSS/pollutants that would be contained in runoff from the site. This is accomplished through a variety of LID features/filters/systems or devices. Examples of these are demonstrated in the SARA LID guidelines, which are not requirements for development. The City of Boerne has its own version of the SARA guidelines and they are virtually the same. Neither Boerne's nor SARA's document is all inclusive regarding techniques, devices and options that can be used. LID is an emerging field of study and new techniques/devices/options may be considered. The City requires that a developer use some type of LID features as identified in the Boerne LID guidelines, but no enforcement measures currently exist.

Low Impact Development: LID is an approach to land development (or re-development) that works with nature to manage storm water as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat storm water as a resource rather than a waste product. Methods prescribed by the Boerne/SARA guidelines for Low Impact Development design may be incorporated into the development of a site. These methods are outlined in the Boerne/SARA LID Technical Guidance Manual outlining standard practice for design and implementation.

Low Impact Development (LID): a sustainable land planning and engineering design approach to managing stormwater runoff as close as possible to the source.

Low Impact Development Strategies: Structural stormwater best management practices (BMPs) and planning techniques that are intended to closely model predevelopment hydrologic conditions by reducing impervious surfaces and infiltrating, evaporating, and storing stormwater runoff using native or improved soils, vegetation, and bioengineering

<u>Article 6, Drainage and Flood Hazards</u> addresses managing runoff **volume**. The volume is managed using devices that reduce the amount of flow, speed of flow and level of contaminants entering both natural and manmade storm water systems. This section specifically addresses detention and how those facilities that allow the most efficient storm water solutions to integrate highperformance flood protection. Stormwater management is required to be designed and constructed to prevent adverse conditions from arising on property adjoining and downstream of the subdivision site. Adverse conditions include increases in peak flows, water surface elevations and flow velocity. <u>Article 6, Section 06., Protection of</u> <u>Surface Water Supplies</u>, addresses **volume and quality/filtering** runoff into any surface water supply (the lake). The protected "Zone" is determined by percent of slope nearest the lake. See below:

TABLE 6-11: WIDTH OF WATER SUPPLY PROTECTION ZONE					
Percent Slope	Zone Width (feet)				
0 – 2.5%	60				
>2.5 - 5.0%	70				
>5.0 - 7.5%	80				
>7.5 – 10.0%	90				
>10.0%	100				

Allowable uses within the "Zone" include the following: fences that don't obstruct water, necessary utility crossings, limited parks usage (trails), stormwater features and certain street crossings. Stormwater features within the "Zone" shall capture and isolate at least the first ½ inch of rainfall (first flush). Vegetated swales and/or overland flow dispersion must be used before the runoff comes to and then leaves this capture area. By today's terms, this is LID.

State law does not require either LID or detention, but the City of Boerne ordinances require both. Sections 3.06 and 6.06 of the ordinance currently apply to any development in the city limits and in the ETJ of Boerne.

Zoning Ordinance:

In addition to the Subdivision Ordinances that regulate runoff, the Zoning Ordinance also provides buffers from streams. These may only be applied in the city limits. These regulations require that development provide a buffer from a stream based on the drainage area. The larger the drainage area, the larger the setback. Zone 1 does not allow any disturbance other than a trail, while Zone 2 allows limited disturbance (picnic tables and plantings).

Drainage Area (Acres)	Setback Zone 1	Setback Zone 2	Total Setback Width	
> 35 acres and less than 200 acres	20'	15'	35'	
> 200 acres and less than 1500 acres	30'	20'	50'	

		> 1500 acres	50'	50'	100'	
	Staff is asking for direction from Council regarding their expressed desire to commence with an update of the ordinances. We'd like to determine the areas of concern to be addressed, the priority of potential modifications, the expected timeline of this project and staff time/budget allocations once it is determined how best way to proceed.					
COST						
SOURCE OF FUNDS						
ADDITIONAL INFORMATION						

This summary is not meant to be all inclusive. Supporting documentation is attached.