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May 18, 2022

Dear Mayor and Council Members,

We write to you today in enthusiastic support of item 90 from Council Members Tovo, Kitchen, Fuentes, Renteria, and Pool on Thursday's agenda. The measure will improve water quality and bring more nature to the city.

Water pollution continues to be a serious problem in Austin. At least seven dogs have died from exposure to toxic algae in area lakes playing in Lake Travis and Lady Bird Lake since 2019¹. According to the Watershed Protection Department, 36% of the city's creeks have levels of fecal bacteria that make them unsafe for swimming, wading, or fishing².

Austin is growing rapidly, and more and more of our city is being paved. Since 1997, Travis County has lost almost 30% of its open space³. In a two-year period, Austin lost 6% of our tree canopy⁴. Our growing concrete web of development prevents rainwater from soaking into the ground, forcing it to run over parking lots, roads, roofs, and even the compacted soil of many suburban yards before flowing into a creek or lake. Along the way, this runoff picks up not just poop from pets and wildlife, but also yard and garden fertilizers and wastewater from leaking septic systems. Both are also rich sources of the phosphorus and nitrogen that can cause algae to grow out of control.

Green spaces naturally absorb and cleanse runoff, but as we pave over our green areas, we lose our natural defenses. Fortunately, clever development can mimic these solutions with nature-based infrastructure, such as rain gardens and green roofs, that filter the water as it flows. These techniques allow rainwater to soak into the ground, slowing it down and filtering out pollution. Also known as green stormwater infrastructure and low-impact development, these projects are not only intuitive, but effective as well; environmental evaluations have shown that these solutions can reduce stormwater pollution by 52-85%⁵.

City staff have developed proposed changes to the landscape code to require nature-based infrastructure on commercial properties⁶. The Development Services Department has proposed a

https://app.box.com/s/cnjilbg728g0fh2emx490xcrypw4tiid

¹ B Bellinger (personal communication, July 6, 2021)

² "Could Austin creeks make people, pets sick? Fecal bacteria levels remain troubling, studies find," Austin American-Statesman, Mar. 7, 2022 https://www.statesman.com/story/news/2022/03/07/could-austin-creeks-sicken-studies-fecal-bacteria-levels-troubling/6880762001/

³ Travis County, Texas. "Texas lands trend database," n.d. https://data.txlandtrends.org/trends/county/Travis

⁴ Stephen Langford, "Go big and stay green," 2021. https://www.proudgreenbuilding.com/articles/go-big-and-stay - green-how-austin-is-juggling-growth-and-the-environment/

⁵ Gonzales-Meler et al. Ecological Society of America Annual Meeting 2010. "The effectiveness of green infrastructure at improving water quality: A literature review," 2010. https://www.researchgate.net/publication/267284038_The_effectiveness_of_green_infrastructure_at_improving_water_quality_A_literature_review

⁶ Proposed LDC Revision to the Zoning Code – January 31, 2020,



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Functional Green policy (23-3D-3110) which would require green infrastructure in urban settings where traditional landscape requirements are not possible as well as "tree islands" in surface parking lots which are graded to receive stormwater (23-3D-3050). These policies have already been vetted by staff and the boards and commissions. Item 90 would see that they are able to finally move forward.

Staff have said the code changes are "an important step toward restoring natural hydrology in the city. And perhaps most importantly, it is a relatively small change that can usher in a significant paradigm shift for stormwater treatment." They would also have a big impact on environmental quality in Austin. One study estimated that the Functional Green policy alone could reduce stormwater runoff volumes by 10 to 15%, reduce ambient air temperatures by 2 to 5 degrees, and capture 2000 tons of air pollutants every year⁸.

Item 90 will help the city make meaningful progress towards cleaning up our waterways⁹ and we hope you will support it.

Sincerely,

Luke Metzger Executive Director, Environment Texas

Becky Smith Texas Director, Clean Water Action

Sydney Garcia Executive Director, Save Barton Creek Association

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Lisa Arceneaux, P.E., CISEC, CPESC EA Environmental Co.

⁷ P. Abee-Taulli (Personal communication, March 13, 2020)

⁸ Garcia et al. "Quantifying ecosystem services of green infrastructure in Austin, Texas," 2019. https://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/18456/QuantifyingEcosystemServicesofGreenInfrastr uctureATX.pdf?sequence=1&isAllowed=v

⁹ Environment Texas Research and Policy Center. "Growing greener," 2017. https://environmenttexas.org/reports/txe/growing-greener