



MEMORANDUM

TO: Mayor and Council Members

THRU: Rey Arellano, Assistant City Manager
Chris Shorter, Assistant City Manager

FROM: Jorge L. Morales, P.E., CFM, Director, Watershed Protection Department
Lucia Athens, Chief Sustainability Officer, Office of Sustainability

DATE: July 17, 2020

SUBJECT: Update on Council Resolution No. 20170615-071 (Green Infrastructure)

The purpose of this memorandum is to provide an update on outcomes related to Council Resolution No. [20170615-071](#), which directed the City Manager to assess the City's progress toward achieving the vision, goals, policies, and actions relating to green infrastructure, as defined in the Imagine Austin Comprehensive Plan¹ and to identify and evaluate opportunities and strategies to further integrate and leverage the City's green infrastructure related programs and projects.

Staff provided two deliverables to Mayor and Council via a [memo on March 30, 2018](#): a report entitled *Green Stormwater Infrastructure: A Catalog of Infrastructure, Initiatives, and Next Steps* as well as a framework for the development of an Integrated Green Infrastructure Plan. Attached is a matrix that provides an updated status for each element of the Council Resolution.

Phase 1 of the framework for an Integrated Green Infrastructure Plan proposed to create a dynamic web portal to introduce the concept of green infrastructure and serve as a streamlined, user-friendly gateway to available data and resources. This phase has been completed with the launch of the Green Infrastructure web portal this June at <http://arcg.is/0HXLyH0>. The content was developed in partnership with multiple City departments, including Watershed Protection, Office of Sustainability, Parks and Recreation, Development Services, Austin Water, Public Works, and Planning and Zoning. The portal is divided into eleven major topics: Introduction, Urban Forest, Water Resources, Parks, Wildlands, Trails, Green Streets, Food, Habitat, Landscape, and Land Management. Using the ArcGIS Online Story Map format, the portal provides descriptions of key plans, programs, and regulations; maps of relevant data; links to additional resources; and ways for the community to get involved.

For Phase 2 of the framework, the City hired local environmental planning firm, Siglo Group, to prepare a data-rich inventory of the city's current green infrastructure and identify existing strengths and gaps. Data from multiple departments and external sources was compiled into a

¹ Imagine Austin defines green infrastructure as an interconnected system of parks, waterways, open space, trails, green streets, tree canopy, agriculture, and stormwater management features that mimic natural hydrology.

single resource, allowing staff to look holistically at the city's complete portfolio of green infrastructure and recognize synergies, additional needs, successes to grow, and challenges. The final work product will analyze green infrastructure assets and gaps with a new set of lenses; including equity, health, resilience, climate change, biodiversity, economy, smart development, and mobility and connectivity. A Green Infrastructure Atlas of maps is currently being finalized, based on a series of green infrastructure metrics and overlays as identified by a multi-departmental advisory group. The final date of completion for this project is pending.

Staff is compiling a list of external stakeholders to engage in this effort. We plan to invite a diverse group of stakeholders and partners to further integrate and leverage the City's green infrastructure related programs and projects.

The Office of Sustainability is spearheading an update to the Austin Community Climate Plan, first released in 2015 with the update to be completed in the fall of 2020. A notable addition to this version of the Climate Plan is a section for Natural Systems, which includes many green infrastructure related goals and recommendations. Specifically, this section provides strategies to protect, restore and expand our natural lands, working lands, tree canopy, and urban public lands while prioritizing equity, enhancing resilience, and maximizing co-benefits. Natural systems are one of the few ways to achieve "negative emissions" and are a unique strategy for climate change mitigation because they provide a variety of other benefits to communities related to health and wellness, quality of life, ecological health, safety and resilience.

For questions about related projects and next steps, please refer to the Single Point of Contact identified in the attached matrix.

cc: Spencer Cronk, City Manager
CMO Executive Team

Attachment:
Green Infrastructure Resolution Update Table

Green Infrastructure Resolution 20170615-071 List of Directives and Status Update

ID #	Directive	Description	Status	SPOC
1	LIST OF GREEN STORMWATER PRACTICES & WATER FORWARD COORDINATION	Develop a list of green stormwater infrastructure practices that can be utilized to achieve on-site beneficial use of stormwater that could optimize the use of rainwater and stormwater to augment potable water demand. Include how these strategies might be coordinated with Austin Water Forward efforts to fully leverage integrated beneficial reuse of stormwater and recognize management of this resource as a key to water security and resilience in Austin.	<p>COMPLETE</p> <p>Provided in Green Stormwater Infrastructure: A Catalog of Infrastructure, Initiatives, and Next Steps report.</p> <p>Based on Council adoption of the Water Forward Plan in November 2018, Austin Water staff created detailed workplans for the development of ordinances aimed at requiring larger new commercial and multifamily buildings to use alternative water, including water generated on-site, for both indoor and outdoor non-drinking water purposes. Austin Water began a community engagement process to inform the development of ordinance language and held public workshops during the summer of 2019 to gather input. Austin Water considered input from stakeholders and the Water Forward Task Force when developing ordinance changes that the utility ultimately submitted for inclusion in the Land Development Code Revision. Ordinance changes included: a mandatory water balance submittal for new commercial and multi-family development and expanded reclaimed water use and connection requirements; a regulatory framework for onsite systems and incentive program to be implemented in late 2020 or early 2021; and mandatory requirements for commercial and multi-family developments over 250,000 square feet to use reclaimed or onsite alternative water to meet non-potable demands, to be effective three years from the effective date of the Land Development Code Revision. Austin Water staff are currently working to develop the onsite reuse regulatory framework and are planning to hold public workshops to gather stakeholder input on the framework in Fall 2020. In addition, Austin Water staff is developing or has developed components of a suite of potential new alternative water incentives targeted at all customer classes from single-family residential to large commercial developments.</p> <p>Water Forward strategies can help support on-site vegetation, increase rainwater infiltration through use of rainwater and stormwater for on-site irrigation, and reduce potable water consumption. Staff from Austin Water and Watershed Protection will continue to work closely to determine the most effective ways to achieve these goals through coordination of departmental efforts.</p>	<p>Mike Kelly, P.E. Assistant Director Watershed Protection mike.kelly@austintexas.gov (512) 974-6591</p> <p>Marisa Flores-Gonzalez Water Resources Program Manager Austin Water marisa.flores@austintexas.gov (512) 972-0194</p>
2	LAND DEVELOPMENT CODE REVISION & FUNCTIONAL GREEN	Evaluate and test the proposed "Functional Green" standards in Exhibit A using different types of example projects to determine the most appropriate threshold(s) for the application of the tool as well as the estimated cost to the property owner of applying the tool; Evaluate and test the "On-Site Beneficial Reuse" standards in Exhibit A using different types of example projects to determine the most appropriate thresholds for application of the tool in commercial and residential. Determine the cost implications to the property owner of applying this tool to residential including both new development and remodels. Clarify the coordination of "Functional Green" and "On-Site Beneficial Reuse" tools in Exhibit A on projects as they are reviewed interdepartmentally by relevant departments and develop language to summarize the environmental elements integrated throughout the code, and citation of their locations in the code, to inform and achieve the natural and sustainable vision of Imagine Austin; Include the Environmental Commission as a review Board and Commission to provide recommendations to Council as it relates to aspects of the code with environmental impact.	<p>IN PROGRESS, ON HOLD</p> <p>The Green Stormwater Infrastructure: Catalog of Infrastructure, Initiatives, and Next Steps report provided a brief overview of the testing of appropriate thresholds for the Beneficial Use and Functional Green proposals included in the staff recommendation for the Land Development Code (LDC) Revision. The report also included a summary of residential cost implications for green stormwater infrastructure. Additional evaluation of the applicability and cost implications for both proposals was incorporated into the larger LDC Revision testing effort.</p> <p>The LDC Revision is currently on hold. Staff is working on finalizing criteria for Green Stormwater Infrastructure and Functional Green, pending the development of a new timeline for the review and adoption of the code.</p> <p>Multiple summaries of environmental elements integrated in the LDC Revision have been developed and distributed to the public, boards, commissions, and Council. The Environmental Commission reviewed the draft code and made recommendations to City Council.</p>	<p>Matt Hollon Planning Division Manager Watershed Protection matt.hollon@austintexas.gov (512) 974-2212</p>
3	GREEN STORMWATER INFRASTRUCTURE INVENTORY & PROGRAM COORDINATION	Implement the Environmental Commission recommendations for an inventory of all efforts at implementing GSI and establishment of a program that encourages increased use of GSI as well as to include continued collaboration with Austin Water's Water Wise program and Watershed Protection Department's storm water management, particularly in small-scale beneficial re-use programs.	<p>COMPLETE</p> <p>Provided in Green Stormwater Infrastructure: Catalog of Infrastructure, Initiatives, and Next Steps report. See Items #1 and #6 for more detail.</p>	<p>Mike Kelly, P.E. Assistant Director Watershed Protection mike.kelly@austintexas.gov (512) 974-6591</p>

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ID #	Directive	Description	Status	SPOC
4	IMAGINE AUSTIN GREEN INFRASTRUCTURE PRIORITY PROGRAM	Assess the City's progress toward achieving the vision, goals, policies, and actions relating to green infrastructure, as defined in the Imagine Austin Comprehensive Plan and to identify and evaluate opportunities and strategies to further integrate and leverage the City's green infrastructure related programs and projects.	<p>ONGOING</p> <p>Updates on the status of Imagine Austin actions as well as a summary of key highlights and challenges are provided every year via the Imagine Austin Annual Report. The Imagine Austin Year 5 Progress Report provided a deeper dive into progress on green infrastructure initiatives, including measuring key indicators.</p> <p>See Item #5 for additional information about green infrastructure planning.</p>	<p>Erin Wood Principal Planner Watershed Protection erin.wood@austintexas.gov (512) 974-2809</p>
5	INTEGRATED GREEN INFRASTRUCTURE PLAN	<p>Develop a Plan for an Integrated Green Infrastructure Plan as set forth in the Priority Program 4 "Short Term" Work Program in the Imagine Austin Comprehensive Plan. The work plan for development of an Integrated Green Infrastructure Plan shall:</p> <ul style="list-style-type: none"> • Be developed with consideration of the sub-tasks specified in the Priority Program 4 "Short Term" Work Program and other existing City plans relating to green infrastructure such as the Austin Parks Department Long-Range Master Plan, the Urban Forest Plan, the Community Climate Plan, the Urban Trails Master plan, Community Wildfire Protection Plan, and the Watershed Protection Master Plan; • Include tasks assessing critical gaps relating to green infrastructure policies and priorities, identifying and evaluating opportunities and strategies to further integrate the City's green infrastructure related policies and programs, and recommending solutions to address identified gaps. These tasks may relate to open space and parkland acquisition; integration of CodeNEXT recommendations pertaining to on-site stormwater management and beneficial re-use with the Water Forward Integrated Water Resources Plan; and improved management of public lands; • Include recommendations regarding the required resources, the process, and the timeline for the development of the Integrated Green Infrastructure Plan under the direction of the Imagine Austin Green Infrastructure Priority Program Implementation Team. Bring the work plan for the development of an Integrated Green Infrastructure Plan, including the report on the cost implications to property owners, to relevant Boards and Commissions for review and to City Council for approval by March 31, 2018. 	<p>IN PROGRESS</p> <p>Phase 1 of the Integrated Green Infrastructure Plan proposed to create a dynamic web portal to introduce the concept of green infrastructure and serve as a streamlined, user-friendly gateway to available data and resources. This phase has been completed with the launch of the Green Infrastructure web portal this June at http://arcg.is/OHXLyHO. The portal provides descriptions of key plans, programs, and regulations; maps of relevant data; links to additional resources; and ways for the community to get involved.</p> <p>Phase 2 of the Integrated Green Infrastructure Plan was originally envisioned to consist of a gap analysis and needs assessment report for the city's existing green infrastructure implementation strategies. City staff are working with local environmental planning firm, Siglo Group, to look holistically at the city's complete portfolio of green infrastructure and recognize synergies, additional needs, successes to grow, and problem areas to improve. The final report is planned for release in Summer 2020.</p> <p>Additionally, an update to the Austin Community Climate Plan, to be completed in the fall of 2020, will have a section for Natural Systems. This will include green infrastructure related goals and recommendations. Specifically, strategies to protect, restore and expand our natural lands, working lands, tree canopy, and urban public lands while prioritizing equity, enhancing resilience, and maximizing co-benefits.</p>	<p><u>Phase 1:</u> Erin Wood Principal Planner Watershed Protection erin.wood@austintexas.gov (512) 974-2809</p> <p><u>Phase 2:</u> Lucia Athens Chief Sustainability Officer Office of Sustainability lucia.athens@austintexas.gov (512) 974-7902</p>
6	CATALOG OF EXISTING GREEN STORMWATER INFRASTRUCTURE	Catalog of existing Green Stormwater Infrastructure initiatives and an integrated plan that further leverages cross departmental programs and evaluations and testing of "Functional Green" and "On-Site Beneficial Reuse", including the report on the cost implications to different housing types, by December 2017.	<p>COMPLETE</p> <p>Staff completed the catalog of existing green stormwater initiatives and plans for further leveraging cross-departmental programs, particularly the continued collaboration between Austin Water and Watershed Protection, in March 2018 as part of the Green Stormwater Infrastructure: Catalog of Infrastructure, Initiatives, and Next Steps report.</p>	<p>Mike Kelly, P.E. Assistant Director Watershed Protection mike.kelly@austintexas.gov (512) 974-6591</p>