STAFF REPORT

Date: July 2, 2019

To: Flood Risk Reduction Strategy Task Force

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Subject: Flood Risk Reduction Strategy Introduction

Comprehensive Water Resources Management Plan and Flood Risk Reduction Strategy

In September of 2018, City Council adopted the 2018 Comprehensive Water Resources Management Plan (CWRMP). Within this document, a plan for creating a Flood Risk Reduction Strategy (FFRS) is outlined.

The CWRMP identified and characterized flooding problems throughout the city and laid out an incremental approach to flood protection over a generational time frame. The plan involved a suite of tools and actions to modify flood risk, modify susceptibility to flood risk, and/or reduce impacts of flooding with implementation activities including new capital infrastructure investments, programmatic approaches (such as development /redevelopment permit review), and regular operation and maintenance of stormwater systems.

The Flood Risk Reduction Strategy will modify the CWRMP and could consider a wide range of policy and technical approaches such as; increased service levels, new technology, new infrastructure improvements, new programs and ways of doing business, or private improvements to address flooding.

In order to fully explore these options within a local context, the Morningside neighborhood was selected as the focal geography that will frame the creation of the FRRS. The task force and staff can investigate various policies, technologies and infrastructure and consider their cost, effect and fit with community values.

The Flooding Problem Defined:

Flooding has historically been considered a technical problem, requiring a technical solution. The reality is that land ownership, space, legislation, and hydrology are interwoven with values about problem ownership, water stewardship, service tradeoffs, and transferring risk. What was once considered purely a technical problem may be more of a mix of a technical, scientific, political, and social one. This type of problem requires a different set of strategies, skill sets, and tools.

		Values	
		Consensus	Disagree
Knowledge	Consensus	**Technical**	**Political**
	Disagree	**Scientific**	**Social**

Timothy M. Gieseke. Shared Governance for Sustainable Working Landscapes

The Flooding Problem - Morningside Neighborhood Context:

Weber Pond is a constructed stormwater pond built in the late 1960s. At the time of construction, the pond was sized to accommodate a 2-percent-annnual chance (50-year) storm event. Currently, a 1-percent-annual chance (100-year) storm event is standard practice.

An increasing impervious trend in the Morningside neighborhood also contributes to increased flood risk. Nearly one million square feet of impervious surfaces (structures, driveways, patios, swimming pool decks, etc.) have been added since 1950. This equates to about 14% of the total size of occupied parcels in the Morningside neighborhood (2019, City of Edina staff).

Service level expectations from the community have also increased.

- Land use: "We want homes, driveways, patios, walkways, pools, trees, parks, roads and more."
- Drainage: "Drain the land, make it useable. Dry the soils so we can build homes and grow grass."
- Stormwater management: "Make the water flow away quickly in planned areas that do not erode or back water on to my property."
- Flood management: "Protect lives and property."

Finally, climatologists indicate that large, intense rainfall events are occurring more frequently and climate change predictions indicate large rainfall events (such as 50-year or 100-year events) will become more extreme in the future. With the update to the CWRMP, the most recent precipitation frequency estimates were incorporated into the City's flood model which showed increased flood risk throughout the City. It should be noted that this data only brings us to current climate conditions and does not provide protection for additional future risk caused by climate change.

Task Force Goals:

Based on Council and community feedback, the Morningside neighborhood was selected as the focal geography for the creation on the FRRS. The task force is charged with supporting and providing recommendations to inform the development of this strategy. This should:

- Incorporate local challenges, opportunities, knowledge, and community values
- Incorporate voices from throughout the City of Edina. While the Morningside neighborhood has been identified as a focal geography for case study, strategies and outcomes ought to be scalable city-wide.
- Identify action steps for building community capacity to address flood risk and resiliency in Edina.

Recommendations made by the FRRS Task Force will be considered for adoption by the City Council and incorporated as an amendment to the CWRMP.

Key questions

Where do we go next? Where should we focus our effort?
What tradeoffs are we willing to make?
What does success look like?
Who do we involve and how?