



Risk and Return on Investment Tool (RROIT, Version 1.0)

Sample Output Risk Maps

The Tool will look at riverine (or fluvial) and groundwater flooding, as well urban (or pluvial) flooding due to stormwater and sanitary systems surcharging due to extreme weather. Direct impacts included in the Tool are cost to repair roadways, bridges, critical infrastructure and buildings (see Figure 1). The Tool will consider deficiencies under existing conditions and estimate indirect impacts resulting from direct flood impacts, e.g. in-stream erosion, emergency response needs, shelter needs, health impacts, legal risk, and additional waste management, to name a few. The Tool will provide priority flood risk area mapping based on the Total Damages (direct and indirect) borne by the public and private sectors in the study area (see Figure 2). The Tool will draw on datasets that reflect the vulnerability of populations and structures that may experience flooding in order to quantify flood risk.



Figure 1: Flooded Areas (Riverine Flooding)

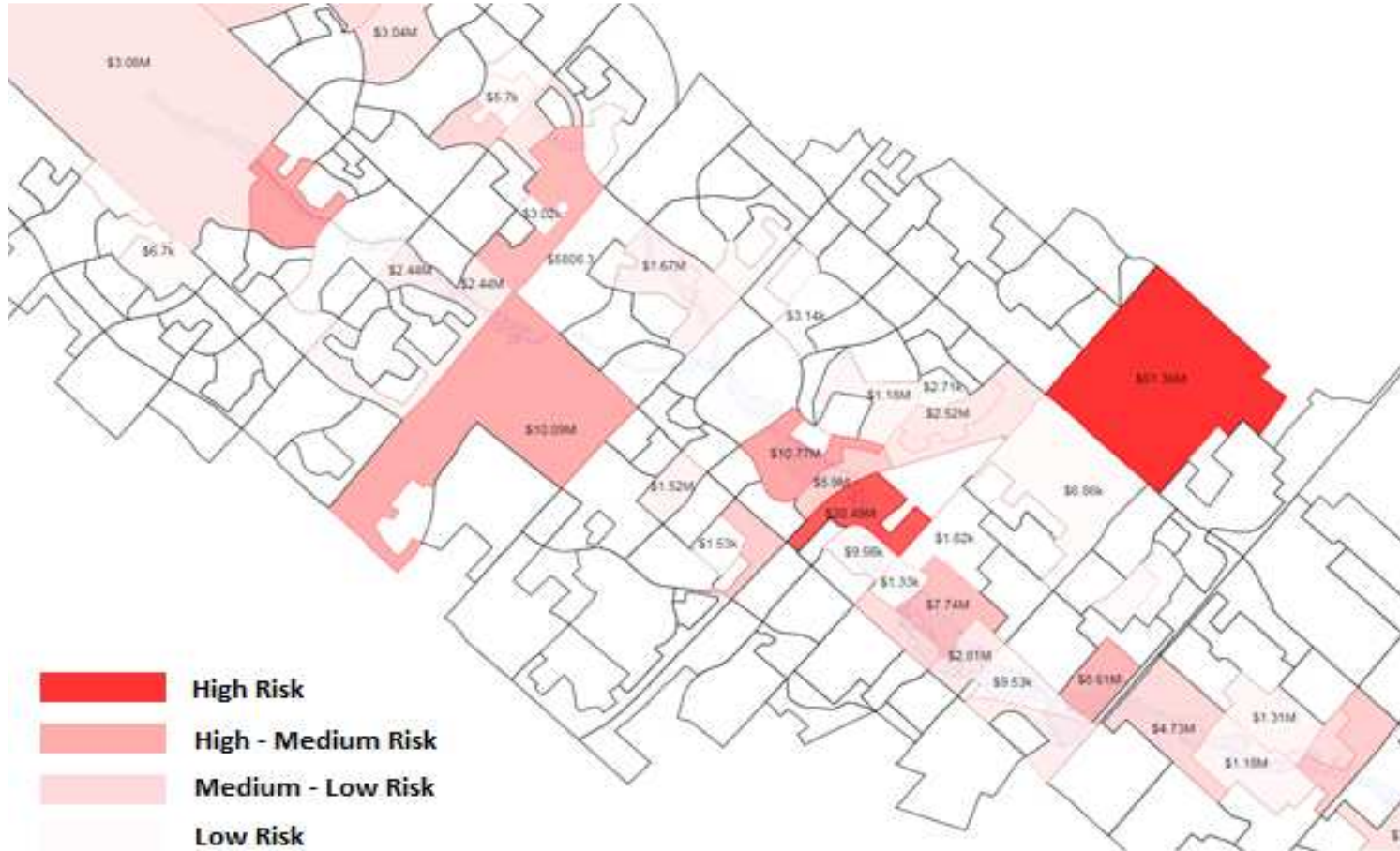


Figure 2: Priority Flood Risk Areas