

Risk and Return on Investment Tool (RROIT)

Example Tool Output Results

The Tool identifies properties at risk of riverine (or fluvial) and groundwater (alluvial) flooding, as well as, urban (or pluvial) flooding due to stormwater and sanitary systems surcharging under various storm events (Figure 1). The Tool also identifies critical infrastructure at risk of erosion (Figure 2). Direct damage costs included in the Tool include costs to repair roadways, bridges, critical infrastructure and buildings as well as indirect costs relating to additional waste management, business disruption, residential displacement and vehicle damages. The Tool provides priority mapping to inform planning and outreach priorities as well as mapping to help prioritize asset investment (Figure 3).

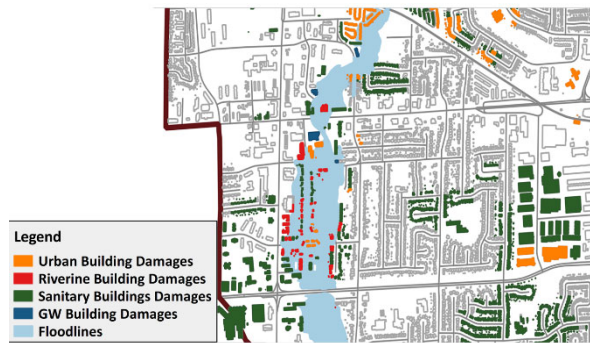


Figure 1: Flooded Areas

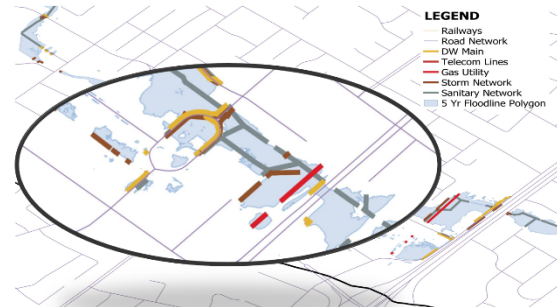


Figure 2: Identifying Critical Infrastructure at Risk

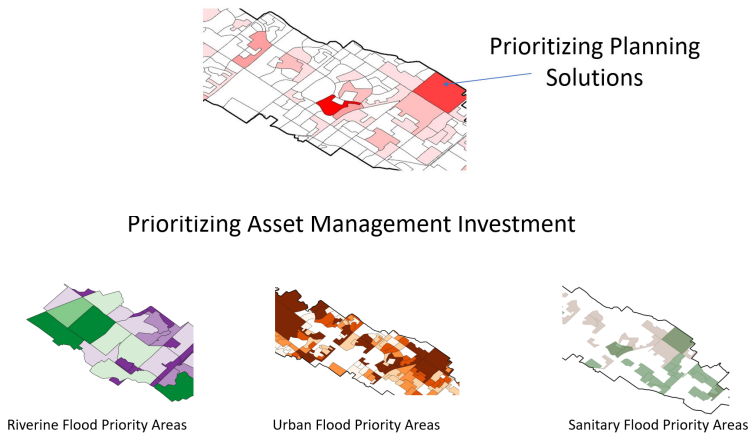


Figure 3: Prioritizing Investment Using a Risk Based Approach