





stream length that was on the 2001 layer and the omitted stream lines are all 1st order. Small headwater streams and natural flow paths are often filled and replaced with storm and sewer pipes or damaged through dumping and receipt of increased stormwater volumes and flow frequency. The increased flow volume and velocity create erosive conditions, causing the channel to narrow and deepen and release sediment. As the channel deepens, shallow groundwater and soil moisture can begin to discharge to the channel, dropping the water table and ultimately reducing soil moisture conditions in the surrounding area. This affects the health of vegetation, especially woodlands. This is a common problem in urban parks where upstream storm sewers often discharge to parklands, creating dramatic incision, such as along Alley Creek in Queens. First Order streams can be protected through a well-vegetated riparian buffer, elimination of stormwater discharges and protection of their Zero Order tributaries. Zero order streams can be protected and their function retained by 1) providing them the same buffer protection afforded wetlands, 2) locating stormwater BMPs or bioretention systems immediately upstream of them, 3) or insuring that large upstream impervious areas are retrofitted and new developments are designed to retain and treat significant flows on site.

- Ponds and lakes, either built or naturally occurring, include all stationary and contained freshwater bodies. Lakes and ponds are found in all five boroughs. Prominent natural ponds include Kissena Lake in Queens, Van Cortlandt Lake in the Bronx, and Brooks and Clove Lakes in Staten Island. Built ponds include the Lake and other water bodies in Central Park and Prospect Lake in Prospect Park. The Jerome Park Reservoir is used to store the City's drinking water and regulate its flow to consumers.