



Considerations regarding flooding in New York City due to poor drainage - by William Gati

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Superstorm Ida caused flooding because street sweeping was cut down due to COVID-19, so trash on streets, dog poop, leaves, and garbage accumulated and were swept into the storm drain.

1. The illegal dumping into storm drains will, in time, cause clogs.
2. The increase of parking lots, roads, and pavement reduce storm water penetration and increases flooding.
3. Overloading, sudden rainfall, and high water tables cause subterranean flooding. Housing in low elevations, with concrete and pavement, are also culprits. All of this can cause flooding and backups.

Loss of Life: There were many deaths due to drowning throughout Queens this summer. Even though the city declared it an emergency, many people were caught blindsided.

Social Causes: Housing shortage and homelessness, real estate prices, economics, and desperation caused people to live in illegal cellar and basement apartments.

Why: The showers and sinks in unlawful basement apartments allow water to enter (enter where?) when the water table rises, and water has nowhere else to go. This causes flooding of the basement.

Responsibility: Landlords need to be proactive in preventing this. The Building Department needs to issue violations and provide enforcement to detract this from happening.

How to Prevent: Build housing on high elevations, with plenty of lawns, catchment area. Clean out the sewers and storm drains. Provide water level alarms and French drains.

Design Solutions: Provide two means of egress from the cellar, adhere to the NYC Building Code, escape hatch, out-swinging doors, legalization, backflow devices, traps, storm drains, dry wells, and prioritize life safety.

Design for maximum rainfall: City planners should not overdevelop the city. Consider down zoning and green suburbs. Engineers need to correctly size new catch basins and storm drains.

Green Initiatives: Use retention tanks, rainwater reuse for lawns, toilets, and green roofs.

Maintenance: Cleanout drainage grates curb inlets, drain guards catch basins, storm drains and sewer grates. This is often overlooked, but calling 311, Balkan Sewer and Drain Cleaning Services to initiate storm drain cleaning can really help. Complain and be proactive whenever you see large puddling near your property. Let's try to keep our rainwater flowing to the ocean and not inside our buildings.

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