RAINPROOFING NEW YORK CITY

HOW CAN I RAINPROOF? A QUICK GUIDE

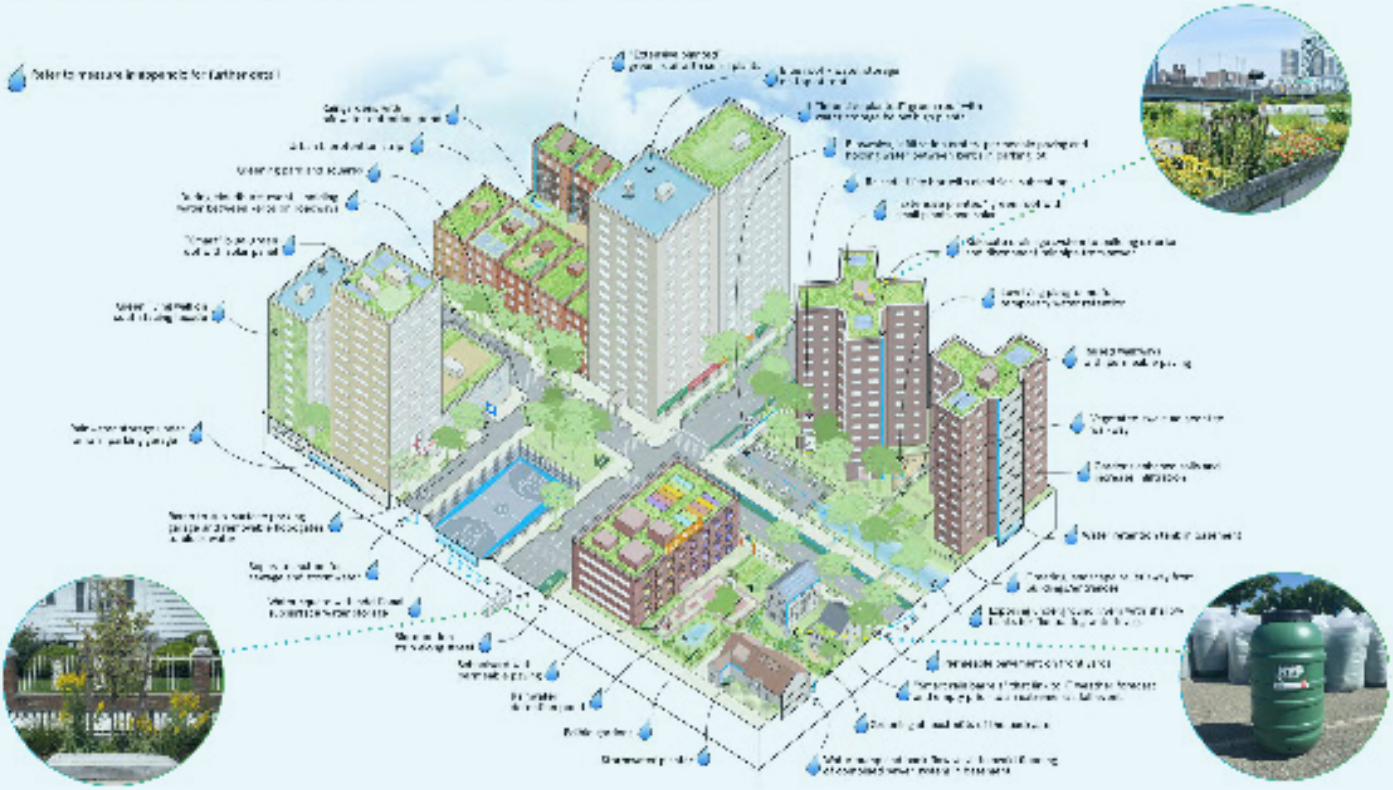
WHAT IS RAINPROOF NYC?

Rainproof NYC is a movement to help the city, and all of us who live here, adapt to heavier rainstorms, reduce flooding, and protect our neighborhoods. As storms grow more intense and our infrastructure strains to keep up, it's time we rethink how water moves through our city. That means greener streets, smarter buildings, and stronger communities, all working together to manage rain before, during, and after it falls.

This isn't just a government fix. **Rainproofing is something we all take part in, whether that's installing a rain barrel, supporting green infrastructure in your neighborhood, or simply understanding how your block handles water.**

Want to know how to help? Start by knowing your flood risk, discovering rain-friendly ideas for your home or building, and learning about what the city is doing to prepare. Visit Rainproof NYC to dive in. **Because the next big storm doesn't have to be a big disaster — not if we're ready.**

TOWARD A RAINPROOF NYC



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KEY THINGS TO KNOW

1. Many NYC neighborhoods were built on former wetlands or streams, **which still flood easily during heavy rain.**
2. Flooding gets worse when **rain falls faster than it can soak in** or when the **ground and waterways are already full.**
3. Climate change is causing stronger storms, making it **harder to manage rainwater and prevent pollution.**
4. NYC's sewers were built for limited rainfall, but **recent storms have far exceeded those limits.**
5. **Upgrading the sewers is expensive and limited by space,** since larger pipes and treatment plants don't fit underground.
6. Most rain falls on private property, and **if owners hold or reuse rainwater, it can reduce citywide flooding.**
7. Nature-based solutions like rain gardens and green roofs **reduce runoff, filter pollution, and make the city cooler.**
8. Green infrastructure needs **space in streets, parks, and neighborhoods** to support both people and nature.
9. **Rainproofing New York requires action before, during, and after storms,** with everyone playing a role.
10. We must live with water while protecting the most vulnerable, as **rainproofing is a long-term effort.**

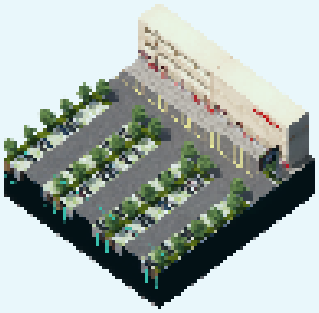
Solutions can look like...

BIOSWALES

BLUE GREEN INFRASTRUCTURE

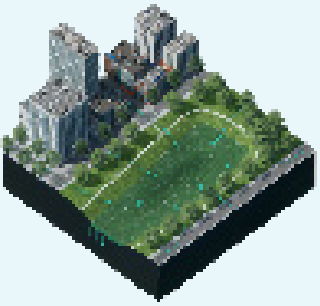
DAYLIGHTING RIVERS

DEPAVING SQUARES



GREEN PARKING LOTS

PERMEABLE SURFACES



RETENTION PONDS

SUNKEN WATER BASINS

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RAINPROOF GLOSSARY

BLUE-GREEN INFRASTRUCTURE (BGI): Stormwater management practices that connect urban hydrological functions (blue) with vegetation systems (green) and community priorities (multi-functional). BGI offers valuable solutions for urban areas facing the challenges of climate change and reduces the need for traditional gray infrastructure.

CLOUDBURST: A 'cloudburst' is a sudden, heavy downpour where a lot of rain falls in a short amount of time. Cloudbursts can cause flooding, damage property, disrupt critical infrastructure, and pollute New York's rivers and Harbor (NYC DEP). Note: "cloudburst" is often used interchangeably with "rainbomb," "extreme rainstorm," "extreme rainfall," or "extreme precipitation."

CO-BENEFITS: Co-benefits describe the added benefits of BGI in addition to the primary purpose of flood risk reduction and/or pollution prevention. Co-benefits of BGI can include improved air quality, recreational value, physical activity, micro-climate, traffic safety, biodiversity, and noise reduction.

CONVEYANCE SYSTEM: A system such as drainage pipes, streets, and blue belts that directs water flow to be retained or detained by permeable surfaces, detention sites, or retention sites.

DAYLIGHTING: An approach that exposes some or all of a previously buried river, stream, or stormwater drainage (American Rivers).

DETENTION SYSTEM: An integrated approach to store water temporarily during a high precipitation event, such as green roofs, green-blue roofs, park space, bioswales, berms, sunken basketball courts, and sunken playgrounds.

DESIGN STORM: A design storm is a defined rain event including potential climate factors, whose Intensity, Duration, and Frequency (IDF) are selected as a desired level of protection (Return Period) and design criteria for resilience planning.

GREEN INFRASTRUCTURE (GI): The range of measures that use plant or soil systems, permeable pavement or other permeable surfaces or substrates, stormwater harvest and reuse, or landscaping to store, infiltrate, or evapotranspirate stormwater and reduce flows to sewer systems or to surface waters (Water Infrastructure Improvement Act). Green infrastructure systems can reduce stormwater flooding.

HOUSING MOBILITY: The ability of residents to find and secure a home that improves their housing or neighborhood conditions.

Want to get more involved? Scan the QR code to join the Rainproof NYC Network. You'll receive updates on projects, workshops, and ways to connect with others working toward a stronger, more flood-ready city.

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HOW TO RAINPROOF YOUR NYC COMMUNITY

Rain in NYC isn't what it used to be. Streets flood faster. Basements back up. Sidewalks turn into rivers. The reason? **We built a city for yesterday's storms, but we're living in today's climate. As storms grow more intense and unpredictable, it's clear our infrastructure can't keep up.**

Many neighborhoods were built over wetlands and historic streams. When rain falls now, there's often nowhere for it to go. Our sewer systems, designed decades ago, weren't built for this volume of water, and there's simply no room underground for larger pipes.

When it rains, water hits our roofs, streets, and sidewalks, rushing into overworked sewers. Floodwater mixes with trash and pollution, spilling into waterways as the ground can't to absorb it fast enough. This cycle isn't inevitable. **We can live with water and build a safer city for all.**

STEPS YOU CAN TAKE:

1. **Make Rainproof Part of Everyday Community Life**
   Integrate rain readiness into existing community programs, from health outreach to block parties. You don't need a new event, just add a Rainproof lens to what you're already doing.

2. **Launch a Citywide "We Live in a Wet Place" Campaign**
   Create a clear communication strategy including art, stories, and science that helps New Yorkers understand flooding risks, how to stay safe, and how to live with water.

3. **Build a Rainproof NYC Toolkit for Everyone**
   Design printable and digital guides for renters, homeowners, and building managers. Share simple storm prep steps to prep for storms and translate materials into multiple languages.

4. **Celebrate Water and Nature**
   Support community-led programs like "Adopt an Underground Stream" or local "wet walks" to raise awareness. These programs can turn forgotten flood zones into places of learning.

5. **Engage the Public in Planning and Maintenance**
   Partner with community groups to train stewards who help maintain green infrastructure, like rain gardens and bioswales. These should be paid positions with resources and training.

6. **Make It Easy to Floodproof Homes**
   Provide guides and funding for floodproofing basements, installing rain barrels, and preparing multi-family buildings for storms. Target affordable housing, low-density communities, and vulnerable waterfront zones.