LAND USE, ZONING, AND PUBLIC POLICY

CHAPTER 4

Under CEQR, a land use analysis characterizes the uses and development trends in the area that may be affected by a proposed project, and determines whether a proposed project is either compatible with those conditions or whether it may affect them. Similarly, the analysis considers the project's compliance with, and effect on, the area's zoning and other applicable public policies. For projects that do not involve a change in land use or zoning, an analysis may not be appropriate; however, a brief description of the existing land uses and zoning designations in the immediate area, the policies, if any, affecting the area, and any changes anticipated to occur by the time the project is constructed, may be appropriate in order to inform the analyses of other technical areas described in this Manual.

As with each technical area assessed under CEQR, it is important for an applicant to work closely with the lead agency during the entire environmental review process. In addition, the New York City Department of City Planning (DCP) often works with the lead agency during the CEQR process to provide information, recommendations and approvals relating to land use, zoning, and public policy. Section 700 further outlines appropriate coordination with DCP.

100. DEFINITIONS

110. LAND USE AND ZONING

111. Land Use

Land Use refers to the activity that occurs on land and within the structures that occupy it. Types of uses include residential, commercial, industrial, vacant land, and parks. DCP's Primary Land Use Tax Lot Output (PLUTO) database provides data on the following land use types: one- and two-family residential buildings, multi-family walk-up residential buildings, multi-family elevator residential buildings, mixed residential and commercial buildings, commercial and office buildings, industrial and manufacturing, transportation and utility, public facilities and institutions, open space and outdoor recreation, parking and loading facilities, and vacant land. Figure 4-1 shows a portion of a DCP Land Use map. Depending on the project, land uses can be aggregated into less-detailed groupings for analysis or other uses (a subset of heavy industry, for example) can be added.

112. Zoning

New York City's Zoning Resolution controls the use, bulk, parking and loading, and streetscape for development within the five boroughs, with the exception of "public park" as defined by the Zoning Resolution, which generally does not have a zoning designation. The Zoning Resolution, which is available on the Department of City Planning website, here, consists of zoning maps, showing the zoning district designation for every location in the city, and Articles (plus Appendices) of zoning text, which describe the specific zoning regulations that apply within these districts. Figure 4-2 (below) shows an example of the zoning maps.

The City is divided into three basic zoning districts: Residential (R), Commercial (C), and Manufacturing (M). The three basic categories are further divided into a range of individual zoning districts, denoted by number and letter combinations. In general, the higher the number immediately following the first letter (R, C, or M), the higher the density or intensity of land use permitted.

RESIDENTIAL DISTRICTS. A Residential District, designated by the letter R (e.g., R3-2, R5, R10A), is a zoning district in which residences and community facilities are permitted. These districts are characterized by a range of housing types, from detached single-family homes in R1 Districts to residential skyscrapers in R10 Districts.

COMMERCIAL DISTRICTS. A Commercial District, designated by the letter C (*e.g.*, C1-2, C3, C4-7), is a zoning district in which commercial and community facility uses are permitted. Residential uses may also be permitted in certain commercial districts. These districts are characterized by a range of business activities, from neighborhood retail and services in C1 Districts, to regional commercial areas with department stores and movie theaters in C4 Districts and potentially noxious activities such as gas stations and car repair in C8 Districts. Some C1 and C2 Districts are superimposed on a Residence District, indicating Commercial District "overlays," which are a type of Commercial District mapped on local commercial streets in Residencial Districts that accommodate neighborhood-oriented retail and services.

MANUFACTURING DISTRICTS. A Manufacturing District, designated by the letter M (e.g., M1-1, M2-2), is a zoning district in which manufacturing, other industrial, and many commercial uses are permitted, including light manufacturing in M1 Districts and heavy manufacturing in M3 Districts. Community facilities are limited or excluded, and new residential development is generally not allowed.

A district's first letter and number combination is often accompanied by either a numerical or letter suffix that indicates additional variations in permitted uses, bulk, streetscape, or parking/loading requirements. Suffixes with higher numbers indicate larger scale developments with lower parking requirements, while suffixes with lower numbers generally denote lower scale developments and higher parking requirements. A letter suffix at the end of a Residential or Commercial District designation denotes a "contextual district," where regulations exist to prioritize consistency in building form with the scale of the predominant building type in the area. Districts without a letter suffix are "non-contextual districts." Non-contextual districts generally have more permissive height and setback regulations. Each zoning district designation is subject to different use, bulk, parking/loading, and streetscape regulations.

USE REGULATIONS establish the range of permitted uses viewed as compatible with other uses in the area, and establish limitations on other uses that can occur in the area. The four broad categories of uses are residential uses, community facility uses, commercial uses, and manufacturing uses.

BULK REGULATIONS control the size and shape of a building. These rules set forth the amount of development that can take place on a property, including the amount of open area that needs to be provided on the zoning lot, and other regulations concerning, for instance, proximity to a lot line.

PARKING AND LOADING REQUIREMENTS specify the minimum number of off-street parking spaces required to support a particular use, and also the maximum number of spaces permitted. In addition, many zoning districts require commercial and manufacturing uses to provide off-street loading berths to accommodate trucks delivering or distributing goods.

STREETSCAPE REGULATIONS generally refer to design requirements and allowances that help ensure new buildings contribute to their neighborhoods. These rules include ground floor use regulations, street wall provisions – including glazing – and articulation allowances, planting requirements, and parking design requirements.

In addition to the three main zoning district categories, a property may also be located in a Special Purpose District that serves a diverse range of planning goals specific to the areas where the special district is mapped. Special purpose districts are generally created where area-wide conditions warrant modification of some generally applicable zoning provisions. A Special Purpose District may either modify or replace the use, bulk, parking/loading and streetscape regulations of the underlying zoning districts mapped within its boundaries.

If modifications to zoning regulations are needed for an action to proceed, either in the form of a special approval in the Zoning Resolution (i.e., a special permit or authorization) or a zoning text amendment to the



applicable regulations themselves, the NYC Planning Commission and often the City Council will need to consider the merits of the permission requested, which occurs through a public review process. Changes to the baseline zoning rules or grants of other permissions are discretionary actions.

Additional information on New York City's Zoning Resolution can be found at the Department of City Planning Website and in the Zoning Handbook, a guide to the Zoning Resolution. The Zoning Resolution should be consulted regarding the specific regulations applicable to a proposed project.

Figure 4-1
Sample of a Land Use Map

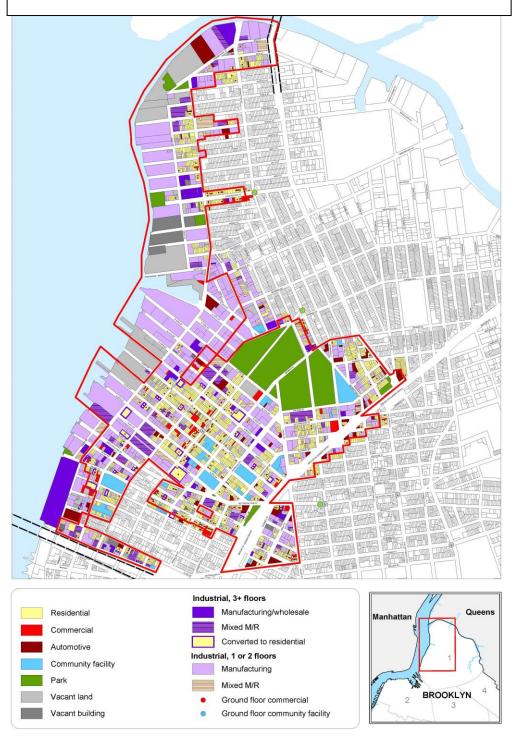
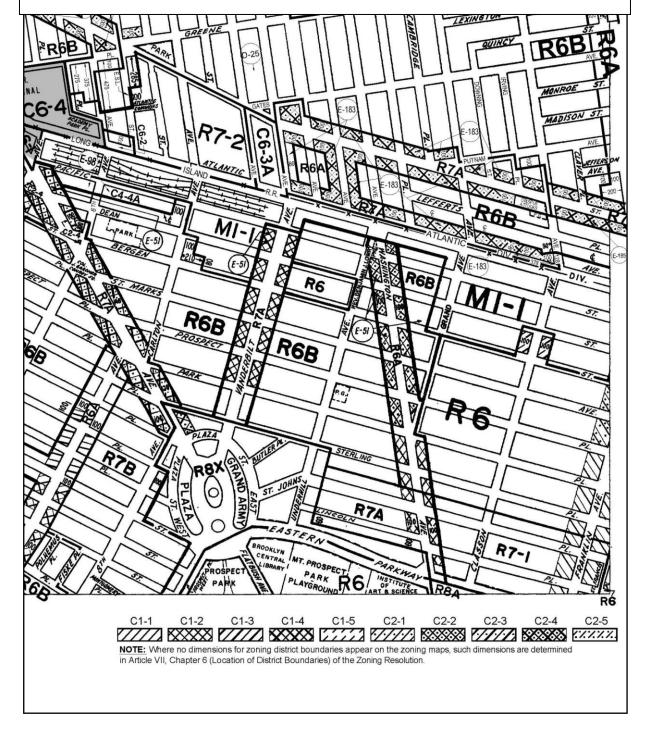


Figure 4-2
Sample of New York City Zoning Map



120. PUBLIC POLICY

Officially adopted and promulgated public policies also describe the intended use applicable to an area or particular site(s) in the City. These include, for example, Urban Renewal Plans, 197a Plans, Industrial Business Zones, the Criteria for the Location of City Facilities ("Fair Share" criteria), Solid Waste Management Plan, Business Improvement Districts, and the New York City Landmarks Law. Two other Citywide policies, the Waterfront Revitalization Program (WRP) and Sustainability, as defined by OneNYC, are discussed separately. The WRP is discussed separately under the Public Policy sections that follow, and guidance for conducting a sustainability (OneNYC) consistency assessment is provided in Part B of this Chapter. Some of these policies have regulatory status, while others describe general goals. They can help define the existing and future context of the land use and zoning of an area. These policies may change over time to reflect the evolving needs of the City, as determined by appointed and elected officials and the public.

121. Waterfront Revitalization Program

New York City's Waterfront Revitalization Program (WRP) is the City's principal Coastal Zone management tool and establishes a broad range of public policies for the City's coastal areas. The guiding principle of the WRP is to maximize the benefits derived from economic development, environmental conservation, and public use of the waterfront, while minimizing the conflicts among these objectives. The WRP was originally adopted by the City of New York in 1982 and revised locally in 2002 and again in 2013. A local waterfront revitalization program, such as New York City's, is subject to approval by the New York State Department of State with the concurrence of the United States Department of Commerce pursuant to applicable state and federal law, including the Waterfront Revitalization of Coastal Areas and Inland Waterways Act and the Federal Coastal Zone Management Act (see Section 710, below). The WRP establishes the City's Coastal Zone Boundary (CZB), (see Figure 4-3), and sets forth 10 categories of policies that are used to assess the consistency of a proposed project within the CZB with the WRP, which include: (1) residential and commercial redevelopment; (2) maritime and industrial development; (3) use of the waterways; (4) ecological resources; (5) water quality; (6) flooding and erosion; (7) hazardous materials; (8) public access; (9) scenic resources; and (10) historical and cultural resources. The ten policies are not presented in order of importance and are numbered only for ease of reference. As directed by the short and full EAS forms, for those projects that are located within the CZB, the preparation of the WRP consistency assessment should begin with a review of the WRP policies and completion of a NYC WRP Consistency Assessment Form (NYC CAF).

The WRP is informed by evolving waterfront planning best practices, community and partner agency input, and long-term waterfront studies, such as the comprehensive waterfront plan. The latest comprehensive waterfront plan, <u>Vision 2020: New York City's Comprehensive Waterfront Plan</u>, built on the policies of previous plans and set the stage for expanded use of the waterfront for parks, housing and economic development, and the waterways for transportation, recreation and natural habitats. The WRP incorporates waterfront policies in a manner consistent with the goals set forth in Vision 2020. Accordingly, the policies set forth in the WRP should be used as the basis for assessing a project's consistency with the Comprehensive Waterfront Plan.

The WRP consistency review includes consideration and assessment of other local, state, and federal laws and regulations governing disturbance and development within the Coastal Zone. Key laws and regulations include those governing waterfront public access, wetlands, flood management, coastal erosion and hazardous materials. Although the consistency review is independent from all other environmental sections and must stand on its own, it is supported and conducted with consideration of all the other technical analyses performed as part of the project's environmental assessment under CEQR.

COASTAL ZONE. Pursuant to federal statute, the Coastal Zone encompasses all land and water that impose a direct and significant impact on coastal waters. New York City's CZB (Figure 4-3) is set forth in the WRP and defines the geographic scope of the policies. All discretionary actions subject to CEQR that are located within the Coastal Zone must be assessed for consistency with the WRP. The CZB extends water-ward to the Westchester, Nassau County, and New Jersey boundaries, as well as to the three-mile territorial limit in the Atlantic Ocean. The CZB extends landward to encompass the following coastal features:

- Significant Maritime and Industrial Areas
- Significant Coastal Fish and Wildlife Habitats
- Special Natural Waterfront Areas
- Staten Island Bluebelts
- Tidal and freshwater wetlands
- Coastal floodplains and Flood Hazard Areas
- Erosion hazard areas
- Coastal Barrier Resources Act Areas
- Steep slopes
- Parks and beaches
- Visual access and views of coastal waters and the harbor
- Historic, archaeological, and cultural sites closely associated with the coast
- Special zoning districts

Federal lands and facilities are excluded from the Coastal Zone; however, in accordance with federal legislation, federal activities conducted on federal lands that may affect the resources within the Coastal Zone may be subject to consistency review with New York City's WRP. For a more precise description and delineation of the CZB please refer to the WRP.

The Coastal Zone should not be confused with the "Waterfront Area" as such term is defined in Article I, Chapter 2 of the NYC Zoning Resolution or the more limited areas of "waterfront blocks" or "waterfront lots" as such terms are defined in Article VI, Chapter 2 of the NYC Zoning Resolution. Similarly, while the Coastal Zone includes the 100-Year (see definition below) and 500-Year floodplains, it is not circumscribed by any floodplain geographies.

Figure 4-3 Coastal Zone Boundary



The following list contains definitions of terms and concepts that contribute toward a better understanding of the WRP policies and responses to the policies. It should be noted this list is not exhaustive.

ARTHUR KILL ECOLOGICALLY SENSITIVE MARITIME AND INDUSTRIAL AREA (ESMIA). The ESMIA on the West Shore of Staten Island promotes industrial development in concert with preservation and enhancement of ecological resources. The area is both well suited for a mix of maritime and industrial development—with large tracts of vacant, industrially zoned land, close proximity to the New York Container Terminal, connections to rail and highways, and access to deep water—and is home to among the most extensive concentrations of intact tidal wetlands in the city. WRP policies that are prioritized for the ESMIA are Policies 2.2 and 4.2.

BASE FLOOD OR 100-YEAR FLOOD OR 1% ANNUAL CHANCE FLOOD. A 100-year flood is one having a one percent (1%) chance of being equaled or exceeded in any given year. The Base Flood Elevation (BFE) is the elevation of the base flood, including wave height, as specified on FEMA Flood Insurance Rate Maps (FIRMs), relative to the National Geodetic Vertical Datum of 1929 (NGVD 1929) or North American Vertical Datum of 1988 (NAVD88). Within New York City, the NGVD 1929 elevation remains the datum for the effective Flood Insurance Rate Maps (FIRMs) in effect for flood insurance purposes, while NAVD88 is referenced as the datum for the preliminary Flood Insurance Rate Maps (PFIRMs) in effect for zoning and building code purposes, Additionally, Borough Datums may sometimes be used for reference. Datum conversions are provided below in Table 4-1.

In December 2013 and January 2015, respectively, FEMA released the Preliminary FIRMs for New York City and revisions thereto. The Preliminary FIRMs are the current, best available flood hazard data. The Preliminary FIRMs are maps to allow for public review of flood hazard risk before the issuance of effective FIRMs. FEMA developed a preliminary flood hazard data search tool, and the New York City Preliminary FIRM Data Viewer.

| Table 4-1 Conversion of Borough Datum to NGVD | | | | |
|---|------------------------------------|--|----------------------------------|--|
| | BOROUGH ELEVATIONS (IN FEET) | TO OBTAIN NGVD 29 EQUIVALENCY (IN FEET) | NGVD ELE- VATION (IN FEET) | TO OBTAIN NAVD 88 EQUIVALENCY (IN FEET) |
| BRONX | 7.392 | Add 2.608 | 10.000 | Subtract be- tween 1.03 and 1.083 |
| BROOKLYN | 7.453 | Add 2.547 | 10.000 | Subtract be- tween 1.093 and 1.119 |
| MANHATTAN | 7.248 | Add 2.752 | 10.000 | Subtract be- tween 1.104 and 1.109 |
| QUEENS | 7.275 | Add 2.725 | 10.000 | Subtract be- tween 1.086 and 1.106 |
| STATEN ISLAND | 6.808 | Add 3.192 | 10.000 | Subtract be- tween 1.027 and 1.109 |

BULKHEAD LINE. The proposed or actual bulkhead line most recently adopted by the U.S. Army Corps of Engineers (USACE) and DCP, as shown on the City Map.

EROSION. The loss or displacement of land along the coastline because of the action of waves, currents running along the shore, tides, wind, runoff of surface waters, groundwater seepage, wind-driven water or waterborne ice, or other impacts of coastal storms (as established under the State Erosion Hazard Areas Act).

COASTAL EROSION HAZARD AREAS. The erosion prone areas of the shore, as defined in Article 34 of the Environmental Conservation Law (ECL), and the implementation of its provisions in 6 NYCRR Part 505, Coastal Erosion Management Regulations, that: (a) are determined as likely to be subject to erosion within a forty-year period; and (b) constitute natural protective features (*i.e.*, beaches, dunes, shoals, bars, spits, barrier islands, bluffs, wetlands, and natural protective vegetation).

FLOODPLAINS. The lowlands adjoining the channel of a river, stream, watercourse, ocean, lake, or other body of standing water, which have been or may be inundated by floodwater (as established by the National Flood Insurance Act).

FREEBOARD. A factor of safety usually expressed in feet above a flood level for purposes of floodplain management. "Freeboard" tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, the hydrological effect of urbanization of the watershed, and climate change. New construction frequently incorporates freeboard on a discretionary basis while, in certain circumstances, the NYC Building Code mandates freeboard by requiring a Design Flood Elevation at a higher level than the Base Flood Elevation. See <u>Appendix G of the NYC Building Code</u> and <u>ASCE 24</u> for Flood-Resistant Construction regulations.

PIERHEAD LINE. The pierhead line is a legal boundary beyond which artificial structures may not be built into navigable waters. With respect to WRP, pierhead line means the proposed or actual pierhead line most recently adopted by the USACE and DCP as shown on the City Map.

PRIORITY MARINE ACTIVITY ZONES (PMAZs). Areas with concentrations of waterborne transportation uses that support the city's waterborne transportation and maritime activities. These areas are characterized by shorelines used for vessel docking, berthing, or tie-up, and where the maritime infrastructure—such as bulkheads, docks, piers, and fendering—is designed to support such uses. The WRP policy that is prioritized for PMAZs is Policy 3.5.

PUBLIC ACCESS. Any area of publicly accessible space on waterfront property. Public access also includes the pedestrian ways that provide an access route from a waterfront public access area to a public street, public park, public place, or public access area. The NYC Zoning Resolution and the WRP encourage public access to the waterfront (both visual access and, where appropriate, physical access to the shoreline).

RECOGNIZED ECOLOGICAL COMPLEXES (REC). Clusters of valuable natural features which are more fragmented than those in the SNWAs and are often interspersed with developed sites. These sites include protected parkland or sites identified as priority acquisition or restoration sites by local, state, and regional plans. Many are substantially environmentally deteriorated and require an active approach to restoration. The WRP Policy that is prioritized for the RECs is Policy 4.4.

SPECIAL AREA DESIGNATIONS. The WRP sets forth five (5) types of special area designations: the Special Natural Waterfront Areas (SNWAs), the Significant Maritime and Industrial Areas (SMIAs), the Arthur Kill Ecologically Sensitive Maritime and Industrial Area (ESMIA), the Priority Marine Activity Zones (PMAZs), and the Recognized Ecological Complexes (RECs). Maps depicting the boundaries of all of these area designations are in Part III of the WRP report and on DCP's website. Within each of these areas, certain priority policies set forth in the WRP are weighted more heavily over other

policies. Therefore, some policies may be more or less relevant in a consistency review depending on whether a proposed activity would occur in an area characterized as most appropriate for redevelopment, working waterfront uses, natural resource protection, or public use.

SIGNIFICANT COASTAL FISH AND WILDLIFE HABITATS (SCFWH). Per the NYS Waterfront Revitalization and Coastal Resources Act (Executive Law of New York, Article 42), NYSDEC recommends for designation by the Department of State areas it considers to be significant coastal fish and wildlife habitats. These are habitats that are essential to the survival of a large portion of a particular fish and wildlife population; that support populations of protected species; that support fish and wildlife populations that have significant commercial, recreational, or educational value; and/or that are types not commonly found in the state or region. For each designated SCFWH site, a habitat map and narrative are created to provide site-specific information. There are over 250 SCFWH sites designated statewide.

SIGNIFICANT MARITIME AND INDUSTRIAL AREAS (SMIA). A special area designation defined by the Waterfront Revitalization Program that contain portions of the coastal zone especially valuable as industrial areas due to locational requirements. The criteria used to delineate these areas generally include concentrations of M2 and M3 zoned land; suitable hydrographic conditions for maritime-related uses; presence of or potential for intermodal transportation, marine terminal and pier infrastructure; concentrations of water-dependent and industrial activity; relatively good transportation access and proximity to markets; relatively few residents; and availability of publicly owned land. The WRP Policy that is prioritized for SMIAs is Policy 2.1.

SPECIAL NATURAL WATERFRONT AREAS (SNWA). A special area designation defined by the Waterfront Revitalization Program that contain large areas with significant open spaces and concentrations of the natural resources including wetlands, habitats, and buffer areas described above. Each of the SNWAs has a combination of important coastal ecosystem features, many of which are recognized and protected in a variety of regulatory programs, including the Significant Coastal Fish and Wildlife Habitats, Coastal Erosion Hazards Areas, and Tidal and Freshwater Wetlands. The WRP Policy that is prioritized for SNWAs is Policy 4.1.

VISUAL CORRIDOR. Any area that provides a direct and unobstructed view to a waterway from a public vantage point within a public street, public park, or other public place.

WATERFRONT ZONING. The NYC zoning regulations adopted under Article VI, Chapter 2, (section 62-00) of the Zoning Resolution, guide development on the City's waterfront.

WATER-DEPENDENT USES. Uses that require direct access to a body of water to function or that regularly use waterways for transport of materials, products, or people. Common water-dependent uses include operational docking or mooring facilities, boating-related operations, marine waste and goods transfer facilities, and airports.

WATERFRONT-ENHANCING USES. A group of primarily recreational, cultural, entertainment, or retail shopping uses that, when located at the water's edge, add to the public use and enjoyment of the waterfront.

122. Sustainability

Large, publicly-sponsored projects are assessed for their consistency with OneNYC, the City's sustainability plan. Guidance for conducting this consistency review can be found in Part B (page 4-26) of this chapter.

In 2015, the City adopted wide-ranging sustainability policies through *OneNYC*: The Plan for a Strong and Just City (OneNYC), a blueprint for addressing the challenges of population growth, aging infrastructure, increasing inequality, and climate change. Like the 2007 PLaNYC report (updated in 2011), from which OneNYC builds, the core policies of OneNYC are aimed at promoting growth, sustainability and resiliency. The approach in OneNYC includes:

prioritizing equity as the guiding principle for the implementation of all inititatives; focusing on issues of sustainability from a regional perspective; and emphasizing leading by example through bringing City actions into compliance with OneNYC visions, goals, and inititatives. Projects can advance the visions, goals, and inititatives of OneNYC by implementing policies and practices recommended by the plan or through other related policies and practices.

200. DETERMINING WHETHER A LAND USE, ZONING, OR PUBLIC POLICY ASSESSMENT IS APPROPRIATE

210. LAND USE AND ZONING

A preliminary assessment, which includes a basic description of existing and future land uses and zoning, is generally appropriate for projects that would affect land use or would change the zoning on a site, regardless of the project's anticipated effects. This information is often essential for conducting environmental analyses in other technical areas, and helps provide a baseline for determining whether detailed analysis is appropriate. Examples of discretionary actions that may affect zoning or land use include zoning map changes, zoning text changes, zoning special permits, BSA variances or special permits, and park mapping actions.

220. PUBLIC POLICY

An assessment of public policy is often relevant to an assessment of land use and zoning. A project located within areas governed by public policies controlling land use, or that has the potential to substantially affect land use regulation or policy controlling land use, may warrant an assessment public policy. Examples include creation or modification of Urban Renewal Plans and projects that are located within the City's Coastal Zone or are areas covered by 197-a Plans.

221. Waterfront Revitalization Program

The WRP applies to discretionary actions within the designated Coastal Zone. As described above, this zone is delineated by the Coastal Zone Boundary maps set forth in the WRP, and is illustrated in Figure 4-3, above. A more detailed map and GIS files are located here. If the proposed project is located in the Coastal Zone, assessment of its consistency with the WRP is required pursuant to Chapter 4 of Title 62 of the Rules of the City of New York . For generic actions, the potential locations likely to be affected within the Coastal Zone Boundary should be considered.

222. Sustainability

Until sustainability goals are more clearly defined through the incorporation of initiatives into codes, regulations, and specific policies, there are few sustainability standards to apply appropriately in assessing a proposed project for the purposes of CEQR. As these initiatives become codified, privately sponsored projects would be presumed to comply with all codes and regulations in effect. However, to ensure that publicly sponsored projects align with the broader sustainability priorities and goals the City has set for itself, it is appropriate that the OneNYC initiatives (whether or not yet embodied in generally applicable codes or regulations) be considered in an environmental assessment for large publicly sponsored projects only, as these projects are often multifaceted and touch upon many of the elements addressed by OneNYC. If a publicly-sponsored project is, itself, implementing a OneNYC initiative, such as repairing or replacing aging infrastructure, a OneNYC/sustainability assessment would likely be inappropriate. The discussion below details how sustainability, as encouraged through the goals and initiatives of OneNYC, is considered in the environmental assessment of large publicly-sponsored projects.

300. Assessment Methods

Land use patterns are formed by various public policies, in concert with market forces for development. A change in land use on a single site is usually not enough to constitute a significant land use impact; however, such a change could create impacts in other technical areas such as traffic. In this case, a preliminary assessment may be conducted in order to characterize the land use changes associated with the proposed project to a level of detail sufficient to provide information to other technical areas. Often, the information provided in the project description is adequate to describe land use conditions for a preliminary assessment.

Changes in land use across a broader area, either because the project directly affects many sites or because the site-specific change is important enough to lead to changes in land use patterns over a wider area, generally warrant an analysis detailed enough to determine whether and where these changes might occur. Although changes in land use-such as the introduction of a new residential use in an industrial area with existing hazardous materials—could lead to impacts in other technical areas, significant adverse land use impacts are extraordinarily rare in the absence of an impact in another technical area. For example, a project affecting the market forces that shape development can also change land use; in this situation, a more detailed assessment of land use may be appropriate to supplement the socioeconomic conditions analysis (See Chapter 5, "Socioeconomic Conditions"). Technical analysis areas that often utilize land use information include socioeconomic conditions, neighborhood character, transportation, air quality, noise, infrastructure, and hazardous materials. A detailed land use description can be helpful when determining whether changes in land use could affect conditions analyzed in other technical areas.

Although the proposed project may be important enough to potentially affect land use over a broader area, the characteristics of the affected area are critical in determining impact significance. If, for example, a proposed project would be of a type generally expected to promote residential development in an area, but the surrounding area does not contain any underutilized sites zoned for residential use, the likelihood of redevelopment for a new use would be diminished. In short, the potential for land use change depends as much on conditions in the affected area as on the proposed project itself.

The geographic area to be assessed, the categories of land use, and level of detail by which such uses, zoning, and public policies are studied depend on the nature of the proposed project and the characteristics of the surrounding area. The assessment usually begins with selection of a study area.

310. STUDY AREA DEFINITION

311. Land Use and Zoning

The appropriate study area for land use and zoning is related to the type and size of the project being proposed as well as the location and neighborhood context of the area that could be affected by the project. Unless the project involves a large scale, high density development or is a generic project, the study area should generally include at least the project site and the area within 400 feet of the site's boundaries. A proposed project's immediate effects on an area of this size can be predicted with some certainty. When other, more indirect effects may also occur, a larger study area may be used.

These general boundaries can be modified, as appropriate, to reflect the actual context of the area by including any additional areas that would be affected by the project or excluding areas that would not be. For example, if a 0.25 mile radius from the project site is chosen as the general study area boundary, but that boundary would cut off portions of a block that is clearly part of the neighborhood, the study area can be expanded to include those portions. The study area does not have to be regular in shape. Such geographical and physical features as bodies of water, significant changes in topography, wide roads, and railroad easements often define neighborhood boundaries, and therefore, can be the appropriate delineation of the study area. Due to the specific characteristics of certain projects and the potential for geographically dispersed effects, even larger study areas may sometimes be appropriate. It should be noted, however, that using an inappropriately large study area can dilute or obscure a project's effects, particularly when those effects are localized in nature.

When determining the size of the land use and zoning study area, the study area boundaries of other technical areas to be analyzed should also be considered. The land use and zoning study area boundary can be adjusted to facilitate the data collection needs of other analysis study areas

For area-wide or generic actions, it may be appropriate to provide prototypical assumptions or groupings of information, instead of lot-by-lot descriptions typical of site-specific actions, because the extent of physical and geographic areas affected by these types of actions is large. In that case, development projections or a development scenario would determine the appropriate study area boundaries (see Chapter 2, "Establishing the Analysis Framework," for more information on establishing the development scenario).

312. Public Policy

The study area for public policy is generally the same as that used for land use and zoning. For projects that could affect the regulations governing an urban renewal area, the entire urban renewal area should be included within the study area.

312.1. Waterfront Revitalization Program

The study area for an assessment of the WRP is defined by the project site location and those areas and resources within the Coastal Zone that are likely to be affected by the proposed project. The study area may have to be enlarged for certain proposed projects to include resources that are part of a larger environmental system or to assess broader floodplain effects. For example, both natural drainage areas and potential erosion on down drift properties (those properties located in the direction of predominant movement of material along a shoreline) may extend beyond the typical study area for a proposed project.

320. PRELIMINARY ASSESSMENT

321. Land Use and Zoning

A preliminary assessment that includes a basic description of existing and future land uses, as well as basic zoning information, is provided for most projects, regardless of their anticipated effects. For most projects, the project description includes a detailed description of the zoning changes. Therefore, this section should provide further information on existing zoning and land uses, and describe any changes in zoning that could cause changes in land use. This information is essential for conducting the other environmental analyses and provides a baseline for determining whether detailed analysis is appropriate. The following information should be provided:

IDENTIFICATION OF THE AFFECTED SITES OR PROJECT AREA, depicted on a map that has tax lots, land uses, and zoning district boundaries delineated. Clearly show the boundaries of the directly affected area or areas, and indicate the study area boundary drawn as a radius from the outer boundaries of the project site.

PHYSICAL SETTING (both developed and undeveloped areas), including total affected area, water surface area, roads, buildings, and other paved areas.

PRESENT LAND USE, including existing residential, commercial, industrial, and community facility property, vacant land, and publicly accessible space. In each case, where appropriate, the number of buildings and their heights, the number of dwelling units, floor area, and gross square footage should be noted.

ZONING INFORMATION, including a description of existing and proposed zoning districts in the study area. A description or table comparing key elements of the existing and proposed zoning districts should be described. These elements can include permitted uses, maximum permitted Floor Area Ratio (FAR), building height and setback requirements, required open space or maximum lot coverage, front and side yard depths, minimum parking requirements, and other relevant zoning information.

Additionally, the preliminary assessment should include a basic description of the project facilitated by the proposed actions in order to determine whether a more detailed assessment of land use would be appropriate.

Often, a Reasonable Worst Case Development Scenario, developed using guidance in Chapter 2, "Establishing the Analysis Framework," is prepared to estimate development patterns created by the proposed project. If a development scenario is prepared, it should be referenced in the description of proposed development. The description of potential development should include the following information:

- A summary of the amount and type of development or changes in use resulting from the proposed project;
- Identification of sites owned or controlled by the project sponsor or applicant;
- A determination of whether the proposed project involves changes in regulatory controls that would affect one or more sites not associated with a specific development; If it does, identify the location of these sites; and
- For a project affecting a large area or multiple sites, a summary of expected development is typically adequate.

322. Public Policy

Similar to zoning, some assessment of public policy accompanies a land use assessment because such policies may help determine whether or where land uses might change as the result of a proposed project. In addition, some projects may affect other specific public planning efforts by changing land uses in the area.

A preliminary assessment of public policy should identify and describe any public policies, including formal plans or published reports that pertain to the study area. If the assessment concludes that the proposed project could alter or conflict with identified policies, a detailed assessment should be conducted.

322.1. Waterfront Revitalization Program

The NYC Planning Commission (CPC), acting in its capacity as the City Coastal Commission (CCC), reviews actions for consistency with the WRP as part of its existing review procedures pursuant to CEQR. When local actions are not subject to CPC approval, the CEQR lead agency should provide the DCP with its draft Environmental Assessment Statement (EAS) or draft Environmental Impact Statement (EIS) whichever is applicable, containing the agency's draft WRP consistency assessment and determination, at the earliest possible date, and ideally no less than thirty (30) days before issuance of a Negative Declaration, a Conditional Negative Declaration or, if the agency has prepared a draft EIS, a Notice of Completion. This is particularly important, as DCP may request additional information to assist in the evaluation of the proposed action, which the agency should promptly provide.

The first step in conducting a WRP consistency assessment is a preliminary assessment of the project's potential effects upon the achievement of WRP policies. The NYC WRP Consistency Assessment Form (NYC CAF) was developed by DCP to help an applicant and reviewing parties identify the extent to which the proposed project may have a promoting or hindering effect on the achievement of particular WRP policies. Note that the policies set forth in the WRP provide general goals for the City's waterfront as a whole and more specific goals for portions of the waterfront that have notable characteristics. Accordingly, the relevance of each applicable policy may vary depending upon the project type and where it is located. A policy may be considered applicable to a proposed project if its site, surroundings or the action itself involves activities or conditions that either promote or hinder that policy.

Further, the WRP sets forth five Special Area Designations. Maps depicting the boundaries of all of these area designations are included within Part III of the WRP. Within each of these areas, certain policies set forth in the WRP may be prioritized over other policies. Therefore, some policies may be more or less relevant in a consistency review depending on whether a proposed activity would occur in an area characterized as most appropriate for redevelopment, working waterfront uses, natural resource protection, or public use. For example, wetland restoration is a more relevant objective in areas mapped as Special Natural Waterfront Areas or Recognized Ecological Complexes, while the promotion of water-dependent

industry is more relevant along the working waterfront and in areas mapped as Significant Maritime and Industrial Areas. When a policy is not applicable or relevant to a proposed project and its location, the policy would not be considered in the project's consistency review.

Where the answers to a NYC CAF indicate that the proposed project does not have any potential effect on any particular policy (*i.e.*, the policy is not applicable to the project), no further assessment of the project's potential effects on WRP policies is required or necessary. Where answers to the questions indicate that the project may have a potential effect on a particular identified policy or policies set forth in the WRP ("promote" or "hinder"), further examination through preparation of a detailed analysis is warranted. For more information about determining WRP applicability, see Chapter 1: "Procedures and Documentation", Section 140 "Waterfront Revitalization Program."

322.2 Sustainability

While it is City policy to encourage every project, whether or not subject to CEQR, to incorporate general measures of sustainability, such as energy efficiency, water conservation, stormwater management, etc., into its projects, the sustainability assessment necessarily focuses on the extent to which the stated goals and objectives of a large publicly sponsored project are consistent with the City's sustainability policies and goals, as encouraged through OneNYC. Because OneNYC promotes broad and wide-ranging sustainability goals, no one project can advance all of its initiatives. Therefore, a consistency analysis compares the attributes of the project with the overarching goals and initiatives of OneNYC that are germane to the project. The lead agency determines which OneNYC goals and initiatives should be examined for a particular project.

OneNYC's initiatives touch upon several technical areas, including Open Space, Natural Resources, Infrastructure, Energy, Construction, Transportation, Greenhouse Gas Emissions (GHG), and Air Quality. Many of these technical areas, and whether a project would affect them, are often considered in a CEQR assessment, and are defined and described individually in other chapters of the Manual. While the assessment of a particular technical area focuses on the project's impact on that area, the sustainability assessment considers the combination of project elements discussed in the technical areas as related to the City's current sustainability policy benchmark, OneNYC. Therefore, the analyses and conclusions for each relevant technical area above can be used to provide the context in which to assess a publicly-sponsored project's consistency with relevant sustainability visions, goals, and initiatives as described in OneNYC.

To illustrate, a large publicly sponsored project may have the potential to affect the City's achievement of PlaNYC's water quality goals, and particularly the management of stormwater and wet weather flows of sewage. In Chapter 13, "Water and Sewer Infrastructure," the project may therefore identify best management practices to manage its predicted storm and sanitary flows and incorporate measures to ensure that these flows would not exceed sewer system capacity. The sustainability assessment would discuss those best management practices measures that reduce or control stormwater runoff and examine whether additional sustainability measures could be incorporated into a project to ensure consistency with the City's sustainability policies. Such measures may include adding vegetation to reduce or filter stormwater runoff by increased tree planting on a development parcel or within parking lots. These project elements may also align with sustainability principles by considering the full range of co-benefits; project design elements intended to offset increased stormwater runoff demands could also reduce the Urban Heat Island Effect, energy demand in the summer, and air pollutants, and could even add to open space. It may be the case that the project elements discussed in infrastructure reflect the City's sustainability policies and no further assessment is appropriate. Consideration of these issues should be balanced with consideration of other public policy objectives and the project's purpose and need.

330. DETAILED ANALYSIS TECHNIQUES

Although changes in land use could lead to impacts in other technical areas, significant adverse land use impacts are rare in the absence of an impact in another technical area. Often, a preliminary assessment provides enough information necessary to conduct these technical analyses. However, for some projects, such as generic or area-

wide zoning map amendments, more detailed land use, zoning, or public policy information may be necessary to sufficiently inform other technical reviews and determine whether changes in land use could affect conditions analyzed in those technical areas.

If the preliminary assessment cannot succinctly describe land use conditions in the study area, or if a detailed analysis is conducted in the technical analyses of socioeconomic conditions, neighborhood character, traffic and transportation, air quality, noise, infrastructure, or hazardous materials, a detailed land use assessment may be appropriate. The detailed analysis builds upon the preliminary assessment and involves a more thorough analysis of existing land uses within the rezoning boundaries and the broader study area in light of changes proposed in conjunction with the project. The detailed analysis seeks to describe existing and anticipated future conditions to a level necessary to understand the relationship of the proposed project to such conditions, assess the nature of any changes on these conditions that would be created by the proposed project, and identify those changes that could be significant or adverse.

331. Land Use and Zoning

The proposed project's effects on land use and zoning on the site of the project and in the study area are analyzed in the future With-Action conditions and measured against future No-Action conditions. After describing existing conditions, the assessment should first consider the direct effects of the project: how would the project site be zoned; what use(s) would the proposed project create on the project site; and, would that use be different from the use that would otherwise be located on the site in the build year?

The analysis should then focus on the project's compatibility and consistency with surrounding uses and zoning as they would exist in the future without the project.

Finally, the analysis should determine whether the project would have the ability to generate land use change in the study area. This analysis addresses the interplay between the proposed project in its particular location and conditions in the surrounding area. As described in more detail in Section 331.1, below, the key conditions most often include the size, use, and special characteristics of the development expected with the proposed project; the current and anticipated land use trends; linkages among land uses; presence (or absence) of underutilized properties appropriately zoned for the expected new use; and, zoning or other public policies in the area that promote, permit, or prohibit development of the expected new use.

332. Public Policy

The proposed project's effect on existing and planned policies and initiatives should be considered, and its consistency with any applicable policies should be addressed. The assessment of a project's consistency with WRP considers the future With-Action conditions in comparison to the No-Action conditions. For example, when considering whether the project would be consistent with the surrounding land uses in a small harbor area, consider the uses that are expected to exist in the future rather than only the existing uses.

332.1. Waterfront Revitalization Program

The detailed WRP consistency analysis considers and assesses the potential effects of the proposed project toward the achievement of those policies that are identified as relevant to the project through completion of the NYC CAF. The explanation of the project's potential effects on each of the noted policies should indicate whether the project promotes or hinders the achievement of the noted policy, so that policies which are advanced may be balanced against those which are hindered in determining overall consistency with the WRP.

This assessment may require additional information about the affected site and the project, such as the following:

- Piers, Platforms, or Floating Structures;
- Mean High Water;
- Mean Low Water;
- Pierhead Line;
- Bulkhead Line;
- Water-Dependent and Water-Enhancing Uses;
- Depth to Water Table;
- Ownership;
- Documentation of Lands Underwater;
- Existing and Proposed Vegetation;
- Existing and Proposed Stormwater Drainage;
- Existing and Proposed Public Access;
- Topography;
- Wetlands (Freshwater and Tidal);
- Coastal Erosion Hazard Area;
- Beach or Bank Profile;
- Floodplains;
- Base Flood Elevation;
- Required or Proposed Freeboard;
- Wildlife;
- Climate change projections by the New York City Panel on Climate Change; and/or
- Climate change adaptation strategies.

The level of detail of the analysis depends on the nature of the project and the relevance of each policy to the project. Because the WRP review considers the many laws affecting the coastal area, consideration of a project's overall consistency with the WRP typically requires a comprehensive assessment that includes synthesis of different technical areas described in this Manual. Therefore, close coordination with the assessment of other technical areas is needed. The analysis of these technical areas—such as natural resources, air quality, land use and zoning, hazardous materials, or historic resources—is summarized and presented below (Section 510) as it relates to the WRP policies. Although much of the detail of each technical chapter can be cross-referenced, it is important that the discussion of each policy be able to stand on its own in this chapter. In some cases, information supplemental to that provided in the technical analyses may be necessary to complete the WRP consistency evaluation. Impacts identified within other technical areas should be considered when assessing consistency with WRP policies. For example, if the environmental analysis indicates that a project may result in a significant adverse impacts on open space, the detailed analysis should provide an assessment of the project effects on the achievement of WRP Policy 8, relating to the adequacy of public access to, from, and along the waterfront.

The maps shown in <u>Figures 4-4 through 4-7</u> may also assist applicants; however, these maps are simplified. More detailed maps are available through the sources listed in Section 700, Regulations and Coordination.

332.2 Sustainability

The following provides a guide to OneNYC initiatives that would be most relevant to a CEQR assessment. Although the consistency review is independent from all other environmental sections and stands on its own, it is supported and conducted with consideration of all the other technical analyses performed as part of the project's environmental assessment under CEQR. In addition, many of the OneNYC initiatives overlap, and it is recommended to consider the project holistically, as every technical area listed below may not have the potential to be affected, positively or adversely, by a proposed project. In addition, note that one goal of OneNYC is to achieve carbon neutrality—a one hundred percent reduction in net GHG emissions by 2050.

While many of the initiatives below would reduce GHG emissions, both the GHG emissions associated with a project and specific measures to reduce GHG emissions are discussed in Chapter 18, "Greenhouse Gas Emissions." The discussion of climate change and increased climate resilience is located in Chapter 18 as well.

AIR QUALITY

OneNYC sets forth the goal of achieving the cleanest air quality of any largeU.S. city by 2030. To reach this goal — and to overcome the City's current non-attainment with federal standards for ozone — OneNYC sets forth a multi-pronged strategy to reduce road vehicle emissions, reduce other transportation emissions, reduce emissions from buildings, pursue natural solutions to improve air quality, better understand the scope of the challenge, and update codes and standards accordingly. Publicly sponsored projects that are likely to undergo CEQR review would generally be consistent with OneNYC if they include use of one or more of the following elements:

- Promotion of mass transit;
- Use of alternative fuel vehicles;
- Installation of anti-idling technology;
- Use of retrofitted diesel trucks;
- Use of biodiesel in vehicles and in heating oil;
- Use of ultra-low sulfur diesel and retrofitted construction vehicles;
- Use of cleaner-burning heating fuels; and/or
- Planting of street trees and other vegetation.

ENERGY

The reduction of energy consumption and the generation of energy from cleaner sources is critical to reaching OneNYC's energy goals. OneNYC sets forth a multi-pronged strategy to improve energy planning, increase energy efficiency, provide cleaner, more reliable, and more affordable energy, reduce New York City's energy consumption, expand the City's clean power supply, and modernize the City's electricity delivery infrastructure. Publicly sponsored projects that are likely to undergo CEQR review would generally be consistent with OneNYC if they maximize their use of one or more of the following elements:

- Exceedance of the requirements of the energy code;
- Improvement of energy efficiency in historic buildings;
- Use of energy efficient appliances, fixtures, and building systems;
- Participation in peak load management systems, including smart metering;
- Repowering or replacement of inefficient and costly in-city power plants;
- Construction of distributed generation power units;
- Expansion of the natural gas infrastructure;
- Use of renewable energy;
- Use of natural gas;
- Installation of solar panels;
- Use of digester gas from sewage treatment plants;
- Use of energy from solid waste; and/or
- Reinforcement of the electrical grid.

WATER QUALITY

OneNYC sets forth the goal of offering high-quality water services across the five boroughs of New York City. To reach this goal, OneNYC sets forth a multi-pronged strategy to improve water quality by removing industrial pollution from waterways, protecting and restoring wetlands, aquatic systems, and ecological habitats, continuing construction of infrastructure upgrades, and using "green" infrastructure to

manage stormwater. Publicly-sponsored projects that are likely to undergo CEQR review would generally be consistent with OneNYC if they include use of one or more of the following elements:

- Expansion and improvement of wastewater treatment plants;
- Protection and restoration of wetlands, aquatic systems, and ecological habitats;
- Expansion and optimization of the sewer network;
- Construction of high level storm sewers;
- Expansion of the amount of green, permeable surfaces across the City;
- Expansion of the Bluebelt system;
- Use of "green" infrastructure to manage stormwater;
- Consistency with the Sustainable Stormwater Management Plan;
- Construction of systems for on-site management of stormwater runoff;
- Incorporation of planting and stormwater management within parking lots;
- Green roof construction;
- Protection of wetlands;
- Use of water efficient fixtures; and/or
- Adoption of a water conservation program.

LAND USE

OneNYC sets forth the goals of creating homes for almost a million more New Yorkers, while making housing more affordable and sustainable. To reach these goals, OneNYC sets forth a multi-pronged strategy of publicly-initiated rezonings, creating new housing on public land, exploring additional areas of opportunity, encouraging sustainable neighborhoods, and expanding targeted affordability programs. Other relevant elements of OneNYC include initiatives to further brownfield, open space, and transportation goals. Publicly-sponsored projects that are likely to undergo CEQR review would generally be consistent with OneNYC if they include use of one or more of the following:

- Pursuit of transit-oriented development;
- Preservation and upgrading of current housing;
- Promotion of walkable destinations for retail and other services;
- Reclamation of underutilized waterfronts;
- Adaption of outdated buildings to new uses;
- Development of underused areas to knit neighborhoods together;
- Decking over rail yards, rail lines, and highways;
- Extension of the Inclusionary Housing program in a manner consistent with such policy;
- Preservation of existing affordable housing; and/or
- Brownfield redevelopment.

OPEN SPACE

OneNYC sets forth the goal of increasing the percent of New Yorkers living within walking-distance to a park by 2030. To reach this goal, OneNYC sets forth a multi-pronged strategy of making existing sites available to more New Yorkers, expanding usable hours at existing sites, targeting high-impact projects in neighborhoods underserved by parks, creating destination-level spaces for all types of recreation, promoting and protecting nature, ensuring the long-term health of parks and public space, and re-imagining the public realm. Publicly sponsored projects that are likely to undergo CEQR review would generally be consistent with OneNYC and other related initiatives if they include use of one or more of the following elements:

- Strengthen the utility of parks an dpublic space in underresourced and growing neighborhoods;
- Improve open spaces through Parks Without Borders, stategy to enhance neighborhood access and connectivity;
- Reduce light pollution from large buildings at night;

- Expand the use of streets as places to play, congregate and be together;
- Create beautiful and well-tended streets in neighborhoods;
- Green the city's streets, parks, and open spaces.

NATURAL RESOURCES

The protection of natural resources is discussed within Vision 3: Our Sustainable City of the OneNYC report. The many ecological services provided by natural resources are recognized and promoted within the Air Quality, Brownfields, Water Management, and Parks & Natural Resources sections of OneNYC. In recognition of the many co-benefits provided by natural resources, publicly-sponsored projects that are likely to undergo CEQR review would generally be consistent with OneNYC if they include use of one or more of the following elements:

- Planting of street trees and other vegetation;
- Protection of wetlands;
- Creation of open space;
- Minimization or capture of stormwater runoff; and
- Brownfield redevelopment.

SOLID WASTE

OneNYC sets a long-term goal of sending zero waste to landfills by 2030. The multi-pronged strategy to meet this goal includes increasing the recovery of resources from the waste stream, improving the efficiency of the waste management system, and reducing the City government's solid waste footprint. It should be noted that for the OneNYC Solid Waste policy area, there is a substantial overlap with New York City's adopted Solid Waste Management Plan (SWMP). Accordingly, a large, publicly sponsored project that is consistent with the SWMP would also generally be consistent with OneNYC. A publicly sponsored project that improves the infrastructure for the City's solid waste collection and recycling operations would also generally be consistent with OneNYC. The zero waste goal is to be achieved by many individual projects making progress towards this goal over time. In general, a large, publicly sponsored project that is likely to undergo CEQR review would further the goals of OneNYC with respect to solid waste if it includes one or more of the following elements and does not significantly impede other listed elements:

- Promotion of waste prevention opportunities;
- Increase in the reuse of materials;
- Improvement of the convenience and ease of recycling;
- Creation of opportunities to recover organic material;
- Identification of additional markets for recycled materials;
- Reduction of the impact of the waste system on communities; and/or
- Removal of toxic materials from the general waste system.

TRANSPORTATION

OneNYC sets forth a goal to make New York City's transportation network more reliable, sustainable, and accessible to meet the needs of all New Yorkers and support the City's growing economy. OneNYC sets forth a multi-pronged strategy to reach this goal by building and expanding transit infrastructure, improving transit service on existing infrastructure, promoting other sustainable modes, improving traffic flow by reducing congestion on roads, bridges, and airports, maintaining and improving the physical condition of our roads and transit system, and developing new funding sources. The specific initiatives in OneNYC's Transportation section may be found here. Publicly sponsored projects that are likely to undergo CEQR review would generally be consistent with PlaNYC if they include use of one or more of the following elements:

- Promotion of transit-oriented development;
- Promotion of cycling and other sustainable modes of transportation;

- Improvement of ferry services;
- Making bicycling safer and more convenient;
- Enhancement of pedestrian access and safety;
- Facilitation and improvement of freight movement;
- Maintenance and improvement of roads and bridges;
- More efficient road management;
- Increase in the capacity of mass transit;
- New commuter rail access to Manhattan;
- Improvement and expansion of bus service;
- Improvement of local commuter rail service; and/or
- Improvement of access to existing transit.

333. Existing Conditions

333.1. Land Use and Zoning

The characterization of the study area for informational purposes should include general categories of land use (*e.g.*, residential, commercial, industrial, transportation, institutional), adding whatever information may be provided for other technical analyses. Consideration of compliance and conformance with zoning in the study area may also be appropriate.

The extent and type of data to be collected depend on the project proposed and the area potentially affected. Typically, field surveys are conducted for the site and surrounding area. When larger study areas are used, particularly for generic or programmatic actions, secondary data can be helpful. The following sources are suggested:

FIELD SURVEY. Surveys of the land uses in the study area are performed through field visits. These can be made on foot or in a vehicle, depending on the size of the area and the level of detail to be provided.

The entire study area—every street and every block—should be surveyed. The analyst should note the uses in the area, using such categories as residential, commercial, manufacturing, institutional, parks, or vacant land. More descriptive definitions can also be used: residential uses can be further categorized according to building types and form—detached, semi-detached, single-family, multifamily; commercial uses can be described as retail, office, *etc.*; and manufacturing and other industrial can be identified by category of business. It is sometimes difficult to discern the uses in a particular building, such as a residential use in converted manufacturing buildings. When there is some doubt as to a building's use, the analyst should look for visible signs, such as smoke being emitted from a stack, mailboxes or buzzers with tenants' names, or curtains in windows, etc. Consideration of compliance and conformance with zoning in the study area may also be appropriate.

AVAILABLE DOCUMENTATION. The information gathered in the field survey can be compared to available data sources to fill in missing details and verify questionable material. In some cases, particularly for generic or programmatic actions, the assessment can rely largely on secondary data, with spot field checks conducted to verify these data. It is often appropriate to use field survey data to complement maps and other secondary data to ensure that information is accurate and current. Other useful documentation includes various publications compiled by DCP and other City agencies, such as the New York City Housing Authority, and publications prepared by real estate services (see Section 730).

Zoning information may also be relevant since changes to zoning can guide land use changes. This analysis of zoning should focus on any changes to the zoning regulations or zoning maps, as well as the project's compatibility with surrounding zoning districts. For example, it may be important to note if the project would result in the elimination of manufacturing zones, particularly if this

could result in a change in land use. The assessment may include identification of sites that are (or are not) protected by zoning from conversion or redevelopment to a different use.

Next, based on the information gathered through the field survey and available documentation, describe the land use in the study area. This description should focus on land use patterns, relationships, and trends. It is sometimes appropriate to describe the development history of an area to understand the area's development trends. The amount of detail provided in the land use discussion depends on the project's potential for impacts and on the size of the study area. For example, if the project would alter the types and ranges of mixed-use development, it may be appropriate to describe the land use in sufficient detail to understand the relationships and character of the existing mixed-use development. For a small study area, such as a 0.25 mile radius, uses are often described in detail for every lot. For larger study areas, more general descriptions can often be used because a project's effect on a larger area may be more general than specific.

If necessary, the detailed land use assessment should augment or update maps of the uses in the area provided in the preliminary assessment, detailed as appropriate to the study in question.

333.2. Public Policy

The preliminary assessment should have identified existing public policies and plans within the study area (see Subsection 322, above). It is possible that more information is needed to determine whether the proposed project could potentially alter or conflict with identified policies.

More detailed information on policies can be identified through reviewing published reports and information describing their objectives. Additionally, officials at public agencies or other entities charged with administering or overseeing the relevant policies can be interviewed to better determine the goals and objectives of those policies and identify aspects of those policies that could potentially conflict with the proposed project.

334. Future No-Action Condition

334.1. Land Use and Zoning

The future No-Action condition analyzes land use and development projects, initiatives, and proposals that are expected to be completed by the project's build year (see Chapter 2, "Establishing the Analysis Framework," for more detail on the establishing the No-Action scenario and the build year). The scenario that is assessed in all the other technical areas is usually established in the land use analysis.

In the assessment of No-Action conditions, compile a list of all the proposals (including zoning and public policy) that can reasonably be expected to be completed, given market conditions, existing trends, and other constraints and incentives, by the build year. Information about future projects can be obtained from the appropriate borough office at DCP and from various real estate publications. Then, based on this inventory, describe the land use conditions that would exist in the build year. Depending on the anticipated impacts of the project in question, this assessment should address anticipated changes in land use and land use patterns as well as expected trends. Conditions in the future without the project can affect the potential effects of the project. For example, development may already be proposed for underutilized sites identified in the existing conditions analysis, and a review of proposed development may reveal an ongoing trend or acceleration of that trend that could diminish a project's influence on land use trends.

The analysis should also consider additional zoning changes that could go into effect by the build year in order to describe conditions in the study area. Information on zoning plans and proposals are available through DCP, either on the agency's website or by contacting the borough offices.

334.2. Public Policy

The future No-Action condition sets the background for public policy affecting land use in the project's build year without the project. Information regarding public policies is available through DCP, and may also be available from other city, state, or federal agencies that are undertaking planning in the study area. The assessment of the future No-Action condition should continue the focus on issues relevant to the specific project.

335. Future With-Action Condition

As the discussion of land use makes clear, zoning issues are important to all land use analyses, and analyzing zoning, land use, and public policy together helps the analyst frame future land use conditions.

The future With-Action condition analysis of land use and zoning should include a detailed description of the type of development that would occur as a result of the proposal. Generally, a narrative summary of the With-Action development scenario is adequate, provided it considers the type, amount, and location of any new development.

Based on this description of proposed development and information provided in the existing conditions and future No-Action description, the following analyses should be conducted for the future With-Action condition:

- Considering all general categories of land use, described in Section 111, above, identify the extent
 to which the proposed uses characterize the study area or would be consistent or inconsistent with
 existing uses. In what is sometimes called a "conformance analysis," the amount of the proposed
 use can be presented as a percentage of existing uses or in the aggregate.
- Determine whether the proposed project would create additional non-conformance or non-compliance of existing buildings or uses.
- Determine whether the proposed development would alter or accelerate existing development patterns.
- Consider any public policy that would affect the targeted land uses and determine whether any
 other public policy might affect the potential for land use change.
- Determine whether the proposed project would result in the direct displacement of any existing land uses.

340. ISSUES ASSOCIATED WITH OTHER TECHNICAL AREAS

Since changes in land use can lead to impacts in other technical areas, the information provided should be detailed enough to inform these analyses. In determining the types of information and level of detail appropriate when providing information for other technical areas, consider the following:

- Some technical areas identify land uses that are particularly sensitive to changes in environmental conditions, such as noise levels or air pollutant emissions from manufacturing facilities. Sensitive uses generally include housing, hospitals, schools, and parks. Often, land use investigations associated with this type of technical area coordination include consideration of whether the study area includes any sensitive uses with the potential to be affected by any project-related changes in air pollution or noise. This may include such tasks as:
 - Identifying sensitive uses adjacent to routes to be taken by traffic generated as a result of the proposed project in order to help locate receptor sites for the noise and air quality analyses.
 - o If the use generated by the project—such as the introduction of a new residential population—would be sensitive or potentially affected by environmental conditions in the surrounding area, it may be appropriate to identify uses in the surrounding area that contribute to such conditions. This may include an inventory of all industrial uses within 400 feet of the project site to check for possible air

pollution emissions from manufacturing facilities; locations of hazardous materials that could migrate onto the proposed project site; or identification of uses that may be noise or vibration sources affecting the site.

• If the project would likely affect demand for one or more community facilities (as defined in Chapter 6, "Community Facilities"), such facilities should be identified in the land use study.

400. DETERMINING IMPACT SIGNIFICANCE

410. LAND USE AND ZONING

The analyses above identify land use changes anticipated with a proposed project. Many land use changes may be significant, but not adverse. For example, development of a large vacant site would constitute a significant land use change on that site and perhaps in the surrounding area, but if the site had been vacant and neglected, this change might be considered beneficial.

While changes in land use conditions could create impacts in other technical areas, it is rare that a proposed project would have land use impacts in the absence of impacts in other technical areas. A typical example is of an office building proposed for a densely developed commercial area. This land use change would not be significant; however, the workers and visitors coming to and from the building might create significant traffic, transit, or pedestrian impacts. The potential to create significant impacts in other technical areas should not necessarily be confused with a land use impact. The analysis of the effect of land use changes, then, is often used to determine whether the land use changes could lead to impacts in other technical areas. In making this determination, the following should be considered:

- If the proposed project would directly displace a land use and such a loss would adversely affect surrounding land uses, this displacement should be considered in Chapter 5, "Socioeconomic Conditions."
- In general, if a project would generate a land use that would be incompatible with surrounding uses, such a change should be considered in other technical areas if:
 - The new land use or new site occupants would interfere with the proper functioning of the affected use, or of land use patterns in the area. The relevant technical area may vary depending on the type of incompatible use identified. One example could be a new heavy manufacturing use near a residential area that might diminish the quality of residential use because of noise or air pollution. If so, the information provided in the land use analysis may be relevant for the noise or air quality analysis.
 - The incompatible use could alter neighborhood character and should be considered the neighborhood character analysis described in Chapter 21, "Neighborhood Character."
 - The project would create land uses or structures that substantially do not conform to or comply with underlying zoning. An example would be rezoning of several blocks from manufacturing to commercial use; such a change might permit development of desired residential uses on vacant or underutilized sites in the area, but it could turn existing manufacturing uses into non-conforming uses and might render their structures non-compliant as well. Such a project could affect operating conditions in a specific industry and may need to be considered in the Chapter 5, "Socioeconomic Conditions."
- If a project would alter or accelerate development patterns, it could affect real estate market conditions
 in the area. If this is the case, this analysis should be considered in Chapter 5, "Socioeconomic Conditions."

420. PUBLIC POLICY

For public policy, the following should be considered in determining whether land use changes are significant and adverse:

- Whether the project would create a land use conflict or would itself conflict with public policies and plans for the site or surrounding area.
- Whether the project would result in significant material changes to existing regulations or policy. For example, this could include a proposed bulk variance within a special district that is in conflict with the goals and built form within the special district.

420.1 Waterfront Revitalization Program

As noted above in Section 332.1, where the WRP policy assessments indicate that the proposed project may potentially affect one or more particular WRP policies, the detailed analysis should set forth the extent to which the project may promote or hinder that policy. It is the last category—hindrance of a policy—that requires more scrutiny in the consistency assessment.

If a project is found to hinder any WRP policy, the lead agency and applicant, if applicable, should consider the magnitude of the hindrance. While there may be an inconsistency with or hindrance of a policy, the lead agency may determine that the project would not substantially hinder the achievement of the coastal policy. For example, a proposed new structure that would slightly block a view corridor toward the water may be found to be an insubstantial hindrance upon policies promoting greater visual connectivity to the waterfront, depending on the existing width of that view corridor and other circumstances.

For all projects, where an inconsistency with one or more policies of the WRP has been identified, DCP or the City Coastal Commission (CCC), as applicable, may recommend alternatives or modifications to the project or mitigation measures in order to avoid or minimize the inconsistency. If, in DCP's or the CCC's view, an inconsistency presents a substantial hindrance to the achievement of one or more policies of the WRP, further review and consideration by the CCC is required (see 62 RCNY § 4-04). Specifically, as set forth in the rules of the City of New York governing WRP consistency review, a CEQR lead or involved agency may not undertake, fund, or approve an action that will substantially hinder the achievement of one or more policies of the WRP unless the CEQR lead agency or the CCC makes the findings as required by the rules.

A substantial hindrance to an individual WRP policy may result in the finding of a potentially significant adverse public policy impact. Developing measures to minimize adverse effects related to the policy inconsistency is discussed in Section 510.

420.2 Sustainability

If a project is found to be inconsistent, the lead agency should consider whether changes to the project could be made to make the project consistent with OneNYC or whether changes could be made such that, while there may still be an inconsistency, the lead agency is able to make a determination that the inconsistency is not significant. If changes that would eliminate the inconsistency are not possible, the lead agency should consider whether the degree of inconsistency is significant. In determining the significance of any inconsistencies, the lead agency should balance the policies that would be furthered by the project against those that would be hindered by the project. The lead agency may determine that some inconsistencies are not significant.

500. DEVELOPING MITIGATION

Mitigation for potential significant adverse land use, zoning, or public policy impacts could include the following types of measures, as appropriate:

Establishment of a buffer between the new, incompatible land use and its surroundings.

- Where a project on a particular site might lead to an incompatible or otherwise significantly adverse land use impacts, development of terms and conditions for appropriate regulatory controls, such as the special permit (if there is one), a restrictive declaration (if it is a private application), or inclusion of language requiring the protective restrictions in leases, urban renewal plans, or other agreements (if it is a public project).
- If a zoning text amendment is proposed, modification of the proposed text could mitigate potential impacts. However, substantial changes to the proposed project itself would typically be considered as alternatives to the project.

Even in the absence of an impact on land use, zoning, or public policy, the measures described above may also be appropriate to mitigate impacts in other technical areas if those impacts are related to land use.

510. WATERFRONT REVITALIZATION PROGRAM

When no reasonable alternative exists that would permit a project to be undertaken in a manner that would not substantially hinder the achievement of a policy of the WRP, measures mustbe developed such that the project will minimize all adverse effects related to the policy inconsistency to the maximum extent practicable. Appropriate measures to minimize policy inconsistencies vary, depending on the particular policy.

Measures that are proposed to minimize the adverse effects related to a substantial hindrance to a policy are also assessed for consistency with the WRP policies to the same degree as the proposed project. Measures to minimize the adverse effects related to a substantial hindrance to any WRP policy may require:

- Coordination with other technical analyses;
- Mitigation measures described in Section 500 of the different technical chapters of this Manual. In some
 cases, mitigation measures identified in different areas of analysis may have to be adapted to minimize an
 inconsistency with a WRP policy. For example, mitigation for significant impacts related to flooding and
 erosion discussed in Chapter 11, "Natural Resources," may be used or adapted, as necessary, to minimize
 the adverse effects of the project related to a substantial hindrance toward the achievement of WRP Policy
 6; or
- Mitigation measures identified by other involved local, State, or Federal agencies or programs with regulatory jurisudcation over some or all of a proposed project.

520. SUSTAINABILITY

When a large, publicly sponsored project would result in inconsistencies with OneNYC, and such inconsistencies are of a degree as to be significant, those impacts must be mitigated to the greatest extent practicable, consistent with social, economic, and other essential considerations. If the impacts can be appropriately mitigated, the project would then be consistent with OneNYC. Appropriate mitigation measures will vary depending on the particular inconsistency. Mitigation measures include many of the initiatives listed above. Further sustainability and efficiency measures may also mitigate the inconsistency and can be found here.

600. DEVELOPING ALTERNATIVES

Alternatives that reduce or eliminate land use, zoning, or public policy impacts can include the following:

- Alternative site configuration to separate conflicting uses as much as possible.
- Alteration of the zoning proposal, or inclusion of provisions, to reduce the number of non-conforming uses and non-complying structures.
- Alternative site(s) for the project, particularly for public projects.
- Alternative uses that eliminate or reduce land use impacts.

• Alternative development proposals, such as projects that do not require modifications to the zoning (often called "as-of-right" alternatives).

For example, if a proposed project would result in an inconsistency with a policy of the WRP, consider how the inconsistency can be avoided through changes to the project. Such changes can include alternative uses (*e.g.*, water-dependent and enhancing uses rather than those that are not) or alternative designs (*e.g.*, a different site plan to avoid development in the floodplain, or different building heights or site location to avoid a visual impact).

Even in the absence of an impact on land use, zoning, or public policy, the measures described above may also be appropriate as alternatives that reduce impacts in other technical areas.

700. REGULATIONS AND COORDINATION

710. REGULATIONS AND STANDARDS

The New York City Zoning Resolution is the underlying regulation for land use in the City. Additionally, different parts of the City may also be affected by various other public policies, such as a 197-a plan.

New York City's Waterfront Revitalization Program was adopted in coordination with local, state, and federal regulatory programs. Consistency assessments consider the many federal, state, and local laws affecting the coastal area. For more information on the many rules and regulations affecting cultural resources, coastal erosion, flood management, natural resources, hazardous materials, and air quality, see Section 700 of the appropriate technical chapters of this Manual. Several significant laws and regulations are listed below.

If a lead agency is unsure of the applicability of the sustainability assessment to the proposed project, or has questions with regard to the consistency assessment, it should contact the Mayor's Office of Environmental Coordination (MOEC). For questions regarding the OneNYC goals and initiatives or measures to mitigate an inconsistency, the lead agency should consult with both MOEC and the Mayor's Office of Sustainability.

711. Federal Laws and Regulations

- Coastal Zone Management Act (P.L. 92-583, 16 U.S.C. §§ 1451-1464)
- Marine Protection, Research, and Sanctuaries Act of 1972, Section 103 (33 U.S.C. § 1413)
- National Flood Insurance Act of 1968
- Flood Disaster Protection Act
- Water Pollution Control Act (33 U.S.C. §§ 1251-1387)
- Clean Air Act (42 U.S.C. §§ 7401-7672)
- National Environmental Policy Act (42 U.S.C. §§ 4321-4370a)
- Rivers and Harbors Act of 1899, Section 10 (33 U.S.C. § 403)
- Fish and Wildlife Coordination Act
- Endangered Species Act (16 U.S.C. §§ 1531 et seq.)
- National Historic Preservation Act (16 U.S.C. § 470)
- Deepwater Port Act
- National Fishing Enhancement Act of 1984
- Marine Mammal Protection Act (16 U.S.C. §§ 1361-1423h)
- Federal Power Act (16 U.S.C. §§ 791a-828c)

712. New York State Laws and Regulations

- State Environmental Quality Review Act, Environmental Conservation Law, Article 8 and implementing regulations, 6 NYCRR Part 617
 - Section 617.11 (e) describes the linkage between SEQR and the coastal policies of Article 42 of the Executive Law, as implemented by 19 NYCRR 600.5.
 - Section 617.9 (b)(5)(vi) describes the inclusion of the state and local coastal policies in the preparation and content of Environmental Impact Statements.
- Waterfront Revitalization and Coastal Resources Act (New York State Executive Law, Article 42 and implementing regulations, 19 NYCRR Parts 600-602)
 - o Part 600: Policies and Procedures
 - o Part 601: Local Government Waterfront Revitalization Programs
 - o Part 602: Coastal Area Boundary; Significant Fish and Wildlife Habitats
- Important Agricultural Lands and Scenic Resources of Statewide Significance; Identification, Mapping, and Designation Procedures
- State Guidelines for Federal Reviews: Procedural Guidelines for Coordinating New York State Department of State and New York City Waterfront Revitalization Program Consistency Review of Federal Agency Actions, Coastal Management Program, Department of State, State of New York. (See Appendix C of the WRP).
- Guidelines for Notification and Review of State Agency Actions Where Local Waterfront Programs
 Are in Effect, Coastal Management Program, Department of State, State of New York. (See Appendix
 C of the WRP).
- Coastal Zone Management Rules and Regulations (6 NYCRR Part 505)
- Coastal Erosion Hazard Areas Act (Environmental Conservation Law, Article 34)
- Flood Hazard Areas
- Freshwater Wetlands Protection Program
- Tidal Wetlands Protection Program
- Classification of Waters Program
- Endangered and Threatened Species Program
- Historic Preservation Act
- Community Risk and Resiliency Act

713. New York City Laws and Regulations

- New York City Zoning Resolution
- Zoning Handbook, NYC Department of City Planning, 2018 Edition
- The Waterfront Revitalization Program2016.
- Procedures for the City Planning Commission, acting as the City Coastal Commission, originally adopted in 1987 and amended in 2016 (62 RCNY 4-01)
 - This set of procedures links the Waterfront Revitalization Program with the ULURP process and describes the City Planning Commission's role in the state and federal actions that otherwise do not require local involvement.
- NYC Building Code, Flood-Resistant Construction (Appendix G)

720. APPLICABLE COORDINATION

If any public policies would apply to the proposed project or the area affected by the proposed project, coordination with the responsible agency is advised. Some examples of the agencies and their respective policies are as follows:

- New York City Department of Housing Preservation and Development (HPD)—Urban Renewal Plans
- Department of Small Business Services—Industrial Business Zones
- New York City Department of City Planning—New York City Comprehensive Waterfront Plan, 197a Plans
- Agencies such as the New York City Departments of Transportation, Environmental Protection, Sanitation, or Parks and Recreation, the Police and Fire Departments, or the Board of Education, that may propose capital projects affecting land use.

This coordination is important to avoid the potential for conflicting policies, if overlapping plans are intended for a site or area. By coordinating the proposed project with the relevant agencies, provisions to accommodate potentially conflicting goals can be identified and assessed accordingly.

In addition, the assessment of the project's consistency with WRP relies primarily on information and analyses of the other technical areas discussed in this Manual. Thus, coordination with the other environmental analyses can be very useful.

721. City Coastal Commission

As indicated above, lead agencies conduct their own review of a project's consistency with the WRP during environmental assessment. If the City Planning Commission is an involved agency because the project will come before the City Planning Commission, the City Planning Commission, acting as the City Coastal Commission, is required to make a WRP consistency finding. The City Coastal Commission may elect to adopt the consistency determination and environmental findings of the lead agency or adopt different WRP consistency findings. For this reason, the lead agency may wish to consult with the Waterfront and Open Space Division of the Department of City Planning, acting as advisors to the City Coastal Commission, prior to issuance of its CEQR determination.

The City Coastal Commission's involvement may occur for a variety of federal and state actions and actions subject to ULURP (Charter section 197-c) or Charter section 197-a or 200.

Once a determination is made by a lead agency that a project is consistent with the policies of the WRP, the lead agency is responsible for keeping a WRP file which will ensure a record of consistency between the City and the State.

730. LOCATION OF INFORMATION

- New York City Department of City Planning 120 Broadway, 31st Floor New York, NY 10271
 - Map Sales:
 - Land Use Maps
 - Zoning Resolution
 - 197a Plans
 - Planning Reports
 - Waterfront Revitalization Program
 - Housing and Economic Development Division:
 - Housing Reports
 - Economic and Industry Reports

- Database & Application Development:
 - PLUTO Data (PLUTO files are databases of developed properties, identified by tax block and lot number. The date of the structure, types of use, number of stories, and City or private ownership are identified.)
 - Sanborn Maps available for viewing
- Calendar Officer:
 - City Planning Commission Reports
- Zoning:
 - Zoning text changes, recently adopted and under consideration
 - Department of City Planning, New York City Waterfront Symbol, City of New York, 2009
 - New York City Zoning Resolution, Special Regulations Applying in the Waterfront Area (Article VI, Chapter 2).
- Waterfront and Open Space Division:
 - Coastal Resiliency Studies
 - Waterfront Studies
 - State and Federal Coastal Zone Requirements
 - Department of City Planning, Coastal Zone Boundary, City of New York.
 - Department of City Planning, Reclaiming the City's Edge: New York City Comprehensive Waterfront Plan (1992).
 - Department of City Planning, Vision 2020: New York City Comprehensive Waterfront Plan (2011).
 - Department of City Planning, The Waterfront Revitalization Program (2016).
 - Department of City Planning, <u>New York City Flood Hazard Mapper</u>
- Technical Review:
 - ULURP applications and approvals
 - Zoning and Street Maps
 - Urban Renewal Area Designation and Plans
- Environmental Assessment and Review Division:
 - CEQR applications, approved and pending
- Department of City Planning, Borough Offices:
 - Planning Reports
 - Planning Initiatives

Manhattan

120 Broadway, 31st Floor New York, NY 10271

Staten Island

130 Stuyvesant Street Staten Island, NY 10301

Queens

120-55 Queens Boulevard Queens, NY 11424 Brooklyn

16 Court Street Brooklyn, NY 11241

Bronx

1775 Grand Concourse, Suite 503 Bronx, NY 10453

New York City Panel on Climate Change

New York City Panel on Climate Change. <u>Advancing Tools and Methods for Flexibile Adaptation Pathways and Science Policy Integration (March 2019).</u>

• Mayor's Office of Climate Resiliency

https://www1.nyc.gov/site/orr/index.page

• New York City Economic Development Corporation (EDC)

Planning Division
One Liberty Plaza, 165 Broadway
New York, NY 10006
https://edc.nyc

Department of Housing Preservation and Development

100 Gold Street New York, NY 10038

For:

Urban Renewal Plans Urban Renewal Area Designations Relocation Reports Disposition Agreements

• Buildings Department

For:

Building Permits Certificates of Occupancy

- Search for Property CO
- The NYC Buildings website provides NYSDEC Wetlands & Flood Insurance Rate Maps https://www1.nyc.gov/site/buildings/codes/nys-dec-wetlands.page

Manhattan

280 Broadway New York, NY 10007

Brooklyn

Municipal Building 210 Joralemon Street Brooklyn, NY 11201

Bronx

1932 Arthur Avenue Bronx, NY 10457 Queens

120-55 Queens Boulevard Kew Gardens, NY 11424

Staten Island

10 Richmond Terrace Staten Island, NY 10301

• Board of Standards and Appeals

250 Broadway New York, NY 10007 *For:* BSA Special Permits BSA Reports

• New York State Department of Environmental Conservation, Region 2

47 40 21st Street

Long Island City, NY 11101

https://www.dec.ny.gov/outdoor/7807.html

For:

Coastal Erosion Hazard Area Maps Tidal Wetland Maps. Freshwater Wetlands Maps DEC Tidal Wetland Maps

- o Department of Environmental Conservation, "Stormwater for New Development," a memorandum to Regional Water Engineers, Bureau Directors, Section Chiefs, dated April 1990.
- Department of Environmental Conservation, Floodplain Regulation and the National Flood Insurance Program: A Handbook for the New York Communities, Water Division, Flood Protection Bureau, State of New York, 1990.
- Significant Coastal Fish and Wildlife Habitat Designations.
- Federal Emergency Management Agency (FEMA)

26 Federal Plaza New York, NY 10278

- FEMA National Flood Insurance Program Map Service Center (1-800-358-9616) or https://msc.fema.gov.
- Best Available FEMA Flood Hazard Data for Region 2: http://www.region2coastal.com/
- Federal Emergency Management Agency, Flood Insurance Rate Maps, National Flood Insurance Program. See https://msc.fema.gov/portal/home
- Federal Emergency Management Agency, Flood Insurance Study: City of New York, New York, Community Number 360497, Revised, September 5, 2007.
- U.S. Fish and Wildlife Service 4401 N. Fairfax Drive, Rm. 820 Arlington, VA 22203
 - Coastal Barrier Resources Act Areas. See http://www.fws.gov/cbra/



- National Oceanographic and Atmospheric Association 1401 Constitution Avenue NW, Room 5128 Washington, DC 20230 http://www.noaa.gov/
 - Sea Level Rise and Coastal Flooding Impacts (Map of future mean higher high water levels) http://coast.noaa.gov/slr/
 - Sea Level Rise Planning Tool New York City. (Map of future 1% annual chance floodplain)
 http://geoplat-form.maps.arcgis.com/home/item.html?id=bc90ddc4984a45538c1de5b4ddf91381