

1 Project Description

Introduction

The New York City Department of City Planning (DCP) is proposing zoning map and text amendments to the Zoning Resolution (ZR) to modify existing special district regulations and establish the Special Natural Resources District (SNRD) in Community District (CD) 8 in the Bronx. The proposed special district regulations would provide a clear and consistent framework for natural resource preservation that balances development and ecological goals.

The Proposed Actions include zoning text and related zoning map changes that would affect the Special Natural Area District (SNAD) (Article X, Chapter 5). The Proposed Actions would affect the Bronx's SNAD (NA-2) in Riverdale and Fieldston, CD 8. The Proposed Actions would not affect the SNAD in Queens (NA-4).

Current regulations lack a broader approach to the ecological context, focusing on the preservation of natural features on a site-by-site basis. Without considering the relationship of the natural features on a site to the wider ecological context, the current regulations lack clear and consistent parameters to guide the City Planning Commission's (CPC) review when a property owner requests permission to remove or modify natural features, which can result in unpredictable and inconsistent outcomes. Additionally, a one-size fits all approach for properties of all sizes, land uses, and types of natural feature subject to CPC review imposes burdensome costs and time delays for homeowners seeking to make modest changes to their properties, while allowing some larger developments in sensitive areas to go without any public oversight.

Moreover, the City's understanding of the natural environment has evolved, revealing a better understanding of the importance of larger natural areas, such as Forever Wild parklands, which are referred to as "public lands containing habitat" in the proposed regulations. These larger natural areas are now understood to be key "anchor habitats" that have a high level of biodiversity with more species of plants and animals and form an integral part of the larger ecosystem. Technology has also

improved in the last 40 years, allowing these areas to be mapped more accurately. These public lands containing habitat that are already on publicly protected lands, combined with other larger habitats on private properties, are the most important assets to protect, preserve, and enhance.

The Proposed Actions seek to (1) update and refine these regulations to strengthen and rationalize natural resource preservation, (2) codify best practices learned over 40 years, and (3) create a more homeowner-friendly environment with robust as-of-right rules with clearer outcomes for development on small lots (less than an acre). Such as-of-right regulations that protect significant natural features and ensure cohesion within neighborhoods with distinct character would allow small properties (less than an acre) to proceed directly to the Department of Buildings (DOB) for approval by showing compliance with the proposed regulations without requiring CPC review.

The Proposed Actions would require special review by CPC for development on large properties (an acre or more), as well as subdivisions resulting in four or more lots, development with new private roads or new buildings, or subdivisions of a lot in historic districts. In areas of ecological sensitivity (abutting public lands containing habitat), developments including four or more new lots or buildings or eight or more dwelling units would also require CPC review. All these developments have a greater potential to affect the surrounding ecology, neighborhood character, and the public realm.

Because the current regulations require many small properties to go through CPC review, the proposed framework would result in a reduction of approximately 60 percent (four of seven applications per year, on average) of applications requiring CPC review, based on data analysis of applications to CPC in the special district from 2012 to 2017.

The Proposed Actions would set clear parameters for large and sensitive sites such that CPC review would result in predictable outcomes for natural feature preservation and development. Additionally, for sites with existing habitat, portions of habitat would be preserved in perpetuity to maintain ecological connectivity and neighborhood character. These sites, which would be pre-identified, would require ecological assessment of habitat before a development is designed so that the requirement can be met by preservation of the most valuable ecological areas that may also provide connectivity to the larger protected natural areas. There would be an option to cluster buildings on these sites to preserve natural habitat on a portion of the site while maintaining roughly the same development potential for the entire site. The proposal would encourage upfront long-term site planning to create a holistic development plan for the public and the property owner that considers natural resource preservation.

The Proposed Actions would also remove CPC review for NYC Department of Parks and Recreation (NYC Parks). This review is required in the existing SNAD. Previous CPC reviews have not added significant value to NYC Parks proposals and have been onerous. NYC Parks has goals of preserving natural resources and have their own public review process. These processes, combined with the Public Design Commission (PDC) public review process for any publicly owned property, makes CPC review redundant and unnecessary.

To achieve these objectives, the proposal would change the existing special district (SNAD NA-2) into a special district called the SNRD to create consistent natural resource preservation rules. In the new special district, two ecological areas (Resource Adjacent and Base Protection) would be established to create a hierarchy of natural resource preservation based on the proximity of a private property to public lands containing habitat, to protect, enhance, and connect the most ecologically sensitive resources.

The Proposed Actions, as described in detail below, are not expected to cause a significant change in the overall amount, type, or location of development. In certain cases, on large sites (1 acre or more) with existing habitat where a portion of the site is required to be preserved, the development under the proposed regulations may be slightly reduced to balance with the goals of preservation of habitat on this limited number of sites. This proposal is not expected to induce development where it would not have occurred absent the Proposed Actions. However, the land use actions (certifications, authorizations, and special permits) necessary to facilitate development on a site may be changed or eliminated by the proposed regulations.

The Proposed Actions would address the connectivity of the ecosystem in the natural areas by allowing eco-conscious development and creating connective corridors. The Proposed Actions are expected to result in more consistent ecological outcomes in terms of trees; ground cover planting; permeability; and preservation of steep slopes, rock outcrops, aquatic resources, old growth trees, and habitat across the special district. The clear, strict standards included in the Proposed Actions would result in fewer discretionary processes for small sites and lend predictable development outcomes. On sites that would require discretionary review, the Proposed Actions are intended to produce improved site plans that preserve natural features and neighborhood character and create more opportunities for recreational spaces for communities.

The proposal is a coordinated effort developed over the course of several years with input from residents, elected officials, community boards, other community stakeholders, and city and other public agencies. Implementation of the proposed zoning text and map amendment would require review and approval of the discretionary action pursuant to the

City's Uniform Land Use Review Procedure (ULURP). DCP is acting as lead agency on CPC's behalf and is conducting a coordinated environmental review under the City Environmental Quality Review (CEQR) process. The description of the Proposed Actions provided below includes the Reasonable Worst-Case Development Scenario (RWCDs), which establishes the framework for the environmental review of the Bronx SNAD Update proposal.

Required Approvals and Review Procedures

The proposed zoning text and map amendment encompasses a discretionary action that is subject to review under Section 200 of the City Charter and the CEQR review process. The proposal also includes rule changes subject to the City Administrative Procedure Act (CAPA). The rulemaking process generally takes a minimum of 60 days, and during this period, agencies are required to provide New Yorkers with an opportunity to review and comment on the proposed rules. The Proposed Actions are classified as Type I, as defined under 6 New York Codes, Rules and Regulations (NYCRR) 617.4 and 43 Rules of the City of New York (RCNY) 6-15, and subject to environmental review in accordance with CEQR guidelines. An environmental assessment statement was completed on November 9, 2018. A Positive Declaration, issued on November 9, 2018, established that the Proposed Actions may have a significant, adverse impact on the environment, thus warranting the preparation of an environmental impact statement (EIS).

A Draft Scope of Work was also published on November 9, 2018, which set forth the analyses and methodologies to be used to prepare the EIS. Those interested in reviewing the Draft Scope of Work were given the opportunity to comment on the document, either in writing or orally. A public scoping meeting was held on Monday, December 10, 2018, at Wagner College, Spiro Hall, Room 2, 1 Campus Road, Staten Island, NY 10301 at 4:00 p.m. A second public scoping meeting was held on Thursday, December 13, 2018, at Ethical Culture Fieldston School, Student Commons Room, 3901 Fieldston Road, Bronx, NY 10471 at 4:00 p.m. Written comments received through Monday, January 14, 2019, were considered and incorporated as appropriate into the Final Scope of Work, which was published on May 3, 2019. The Draft EIS (DEIS) was then prepared in accordance with the Final Scope of Work.

Once the lead agency was satisfied that the DEIS was complete, the document was made available for public review and comment; the DCP, acting on behalf of CPC, issued a Notice of Completion (NOC) for the DEIS on May 3, 2019. A public hearing on the DEIS was held on August 14, 2019, in conjunction with the CPC hearing on the land use applications to afford all interested parties the opportunity to submit oral and written comments. The public hearing also considered a modification to the Proposed Actions (ULURP No. N 190430 (A) ZRY), which was

analyzed in Technical Memorandum 001, Bronx Special Natural Area District Update (Formerly Staten Island and Bronx Special District Update) issued on July 30, 2019 (Appendix 10). An extended public hearing was held on August 28, 2019, to provide the public with sufficient time to review the Technical Memo and amended application. Written comments were accepted through the close of the public comment period, which ended on September 9, 2019. Following the close of the public review period, this Final EIS (FEIS) was prepared that incorporates all substantive comments made on the DEIS and any revisions to the technical analysis necessary to respond to those comments. Decision makers will use this FEIS to evaluate CEQR findings, which address project impacts and proposed mitigation measures, in deciding whether to approve the requested discretionary actions, with or without modifications.

Background

In November 1964, the opening of Verrazano-Narrows Bridge provided the first direct connection between Staten Island and the rest of New York City via roadway. In the early 1970s, environmental conservation was at the forefront of local and national political debate; the protection of air and water were codified in the Clean Air Act and the Clean Water Act. The protection of natural resources was broadly established through the National Environmental Policy Act (NEPA), which created the environmental assessment framework. The increased pressure of development in largely undeveloped areas that were recently connected via the Verrazano Bridge and the national environmental regulations were the main impetus for creating the special districts to guide development that is balanced with natural resource preservation.

In July 1974, DCP published a report entitled *Preservation of Natural Features and Scenic Views in New York City*, which analyzed strategies that were used to protect substantial natural resources in other areas of the country and local needs and opportunities for natural resource preservation. In accordance with these national trends, New York City began to adopt the principle that its significant natural features could be protected using zoning regulations. New York City's first SNAD was formed in December 1974 to balance the level of development with preserving natural features.

Existing Special Districts

The existing special district (SNAD: NA-2), as shown in **Figure 1-1**, is described in further detail in this section.

Special Natural Area District

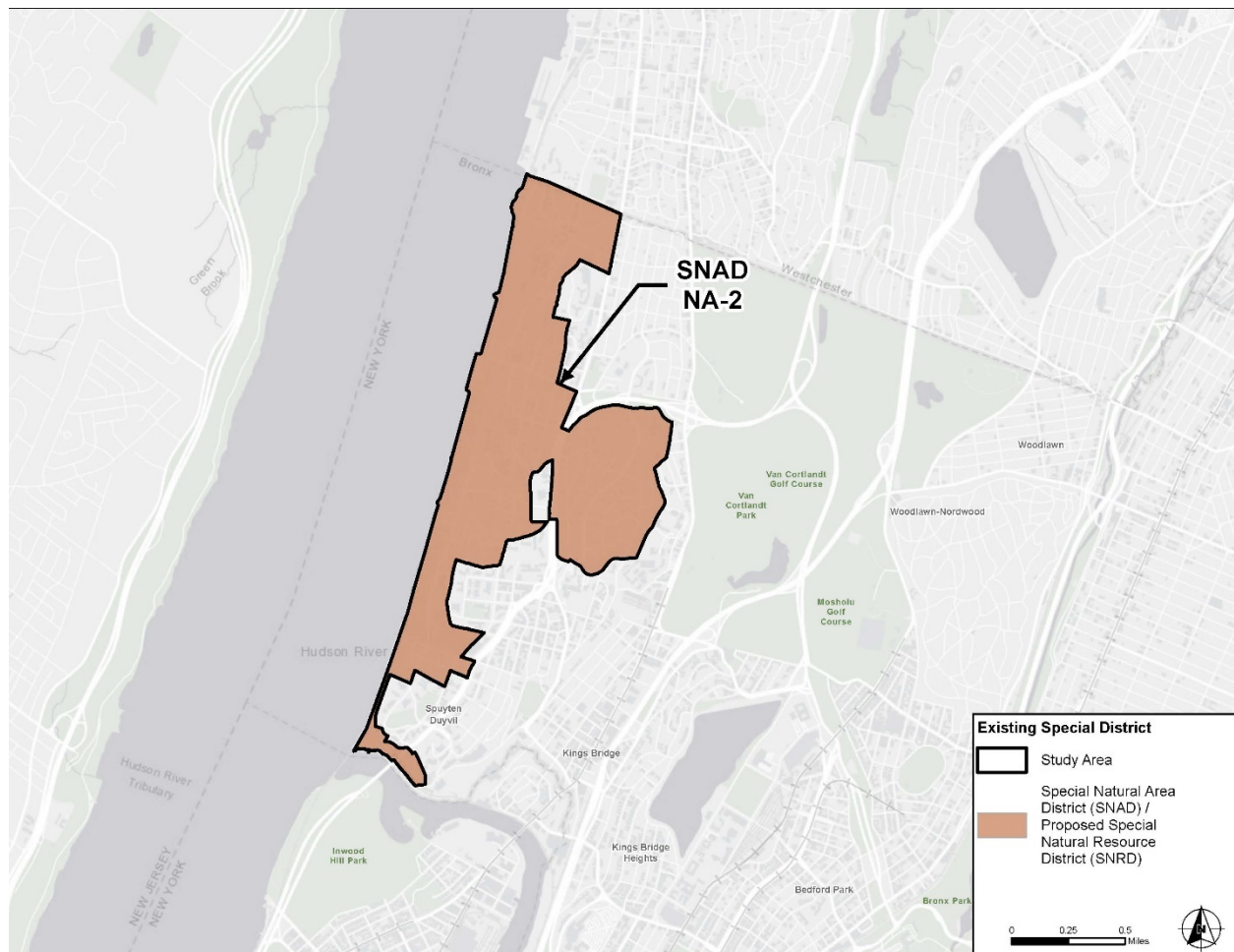
The SNAD was established in 1974 as the first special-purpose zoning district to protect natural features such as aquatic, biologic, botanic,

geologic, and topographic features. The district is mapped in neighborhoods with significant natural features, such as steep slopes, rock outcroppings, forests, wetlands, ponds, and stream corridors. The district includes more than 3,900 acres and comprises the neighborhoods of Emerson Hill, Dongan Hills, Todt Hill, Lighthouse Hill, and an area now known as the Greenbelt of Staten Island (CD 2). In 1975, the SNAD was extended to the communities of Riverdale, Spuyten Duyvil, and Fieldston in the Bronx (CD 8) to include a little less than 900 acres of area of ecological and geological significance in age and variety. This area is part of the Riverdale Ridge, formed with Fordham Gneiss, the oldest rock formation in New York City and contains numerous ecological resources that provide habitat for birds and other small animals. In 1977, the SNAD was expanded to include Shore Acres in Staten Island (CD 1) adding 50 acres; and in 1983, it was expanded again to include Fort Totten Park in Queens (CD 7), which has separate rules from the rest of the natural areas and are not being changed through this proposal.

In 2005, the SNAD regulations were updated to include certain recommendations of the Staten Island Special Natural Area District Task Force and the Bronx Community Board 8 197-a plan to strengthen the preservation of significant natural features, including steep slopes, trees, and plantings. The changes included

- lot coverage standards on sloped sites similar to the Special Hillside Preservation District (SHPD);
- elimination of a grandfathering clause that exempted lots smaller than 40,000 square feet from CPC review in certain situations;
- introduction of as-of-right regulations for lots under 10,000 square feet with less than 2,500 square feet of development on lots with flat topography and few trees;
- introduction of additional tree preservation rules; and
- grading controls and tailoring of Lower Density Growth Management Area private road regulations to preserve natural features in the SNAD.

Figure 1-1. Existing Special District



The SNAD is mapped primarily in low-density residential zoning districts characterized by detached single- and two-family homes and community facilities on large parcels such as hospitals, senior care, educational and religious institutions, parkland, and open space. In the Bronx NA-2, 83 percent of lots contain one- or two-family homes, 5 percent are multifamily, and 12 percent are institutions, including schools, colleges, and nursing facilities.

SNAD regulations guide development on private properties to preserve natural features, including trees, topography, topsoil, rock outcrops, erratic boulders, natural ground-level vegetation, and aquatic features by requiring CPC review of developments, enlargements, or site alterations. CPC permission is generally required to allow a minimum amount of disturbance of these natural features. Concurrently, applicants may request certain modifications in use, yard, and height and setback regulations of the underlying district by special permit of CPC to help minimize disturbing natural features.

Ecology

Ecology is a branch of science that deals with the interrelationships of organisms and their surroundings. Habitat is the natural environment in which an organism normally lives. When the special districts were established in the 1970s and 1980s, the importance of habitat size and connections between habitats had not yet been explored. Today, a well-established body of research and practice has shown that larger habitats are much more valuable because they can sustain a large variety of species (and therefore rarer species) and larger populations of those species, which allows them to be more resilient. In addition, smaller patches of habitat can serve as stepping-stones between natural areas. Furthermore, intact natural habitats of any size perform valuable ecosystem services, including stormwater absorption, flood mitigation, air and water filtration, and temperature regulation (e.g., reducing the urban heat island effect).

The larger size of these natural areas allows an inner portion of the habitat area to function as core habitat for species that cannot use the edge habitat that is the outer boundary of such natural area. The width of this edge can vary for different organisms. For instance, pollinators like native bees and butterflies (mason bees and monarch butterflies) can take advantage of a much smaller area of habitat than bird species such as wood thrush, which require larger buffers. The shape of an area of habitat also has significant consequences regarding the amount of habitat that can function as core versus edge: a long, thin rectangular area would have much less core habitat than a square or circular area of the same overall size. Disturbance at the edge of these natural areas can greatly reduce the amount of core habitat; hence providing planted buffers or transition areas helps to maintain the size of the core habitat. Maintaining

and creating ecological corridors between the large natural areas through small patches of biodiversity, especially in an urban environment, can increase the overall habitat and create resiliency in the ecosystem.

The three principles—the importance of core habitat for certain species, the value of larger habitats for sustaining genetic diversity and a more resilient population, and the value of maintaining connections between habitats, which also supports genetic diversity—are key guiding principles for the framework of proposed regulations. Proposed rules about habitat preservation on large sites, planted buffers at the boundary of protected natural areas, biodiversity gardens throughout the special district, and the variation in rules based on areas of ecological sensitivity are all based on these principles.

Purpose and Need

The purpose of the Proposed Actions is to provide a clear and consistent framework for natural resource preservation that balances neighborhood development and ecological goals. The update would codify best practices; streamline regulations to reflect the three principles (as stated in the “Background” section) of prioritizing protection of core habitats, preserving large habitats on private properties, and creating connective corridors for resilient ecosystem; and create clear development standards, resulting in better and more predictable outcomes. Through clear standards, the purpose of the Proposed Actions is to create a streamlined process that would allow small properties (less than an acre) to go directly to DOB for permitting and require large properties (an acre or more) and sensitive sites to come for discretionary review. The goals of the Proposed Actions would be achieved by creating and establishing NA-2 as an SNRD.

Since its establishment, the special district regulations have helped to guide development and have resulted in tree-lined streets, preserved rock outcrops, old growth trees, wetlands, and forested parks that today exemplify this community. However, the existing regulatory framework has presented challenges over the last 40 years.

First, the special district lacks a clear development framework and broader ecological strategy to protect natural resources. The current rules focus on protecting individual natural features such as steep slopes, trees, and rock outcrops, and do not consider the importance of ecological connectivity with neighboring sites. No clear guidelines exist to preserve natural features on larger, ecologically sensitive sites that form part of the connected ecosystem. Such preservation is negotiated and decided on a case-by-case basis for a variety of project types (see **Figure 1-2**), which can result in unpredictable outcomes, time delays, and sometimes destruction of ecological connectivity that undermines the health of these natural ecosystems. To address this, the proposed CPC

review process would have clear parameters that would result in better site plans with more predictable outcomes for the applicant and the community.

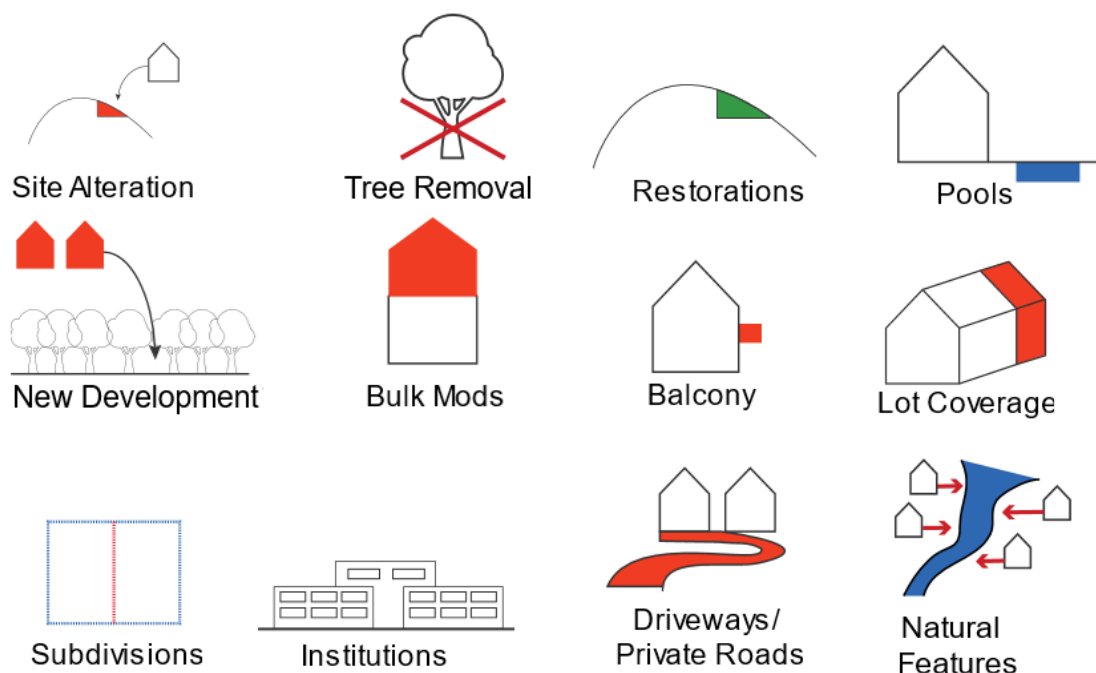


Figure 1-2. Example Project Types and Regulations

Second, the current framework of requiring discretionary review irrespective of the size of a property or the extent of natural features imposes burdensome cost and time delays for small property owners and results in unpredictable outcomes for the development and preservation of natural features. More than 83 percent of these areas are composed of one- or two-family homes and form the overwhelming majority (approximately 70 percent) of applications in the past 5 years that have come to CPC for approval. To address this challenge, best practices would be codified to create clearly defined parameters that would allow applicants to proceed directly to DOB for building permits and confirm zoning regulation compliance. This would ease the process for homeowners by eliminating CPC review, where appropriate.

Third, under the current rules, multiple discretionary review actions are sometimes required to create a well-designed site that balances development with the preservation of natural features on a property. However, property owners are often reluctant to apply for optional land use actions that could result in a better project because these actions could trigger additional delays and costs. They focus instead on those

land use actions that are essential to moving the project forward, which can result in missed opportunities for good site planning. To address this, CPC review process would be more integrated, so that optional land use actions would not result in significant increased costs or delays.

Fourth, science and expertise around environmental protection have evolved since the special district rules were adopted nearly 40 years ago, but the rules have not evolved. Large consolidated natural areas are more ecologically valuable in providing core habitat to a variety of species than smaller areas, but current rules do not recognize the higher value of these larger areas. Technological advances in the last several decades have helped map these ecological communities more accurately, allowing for habitat on larger private properties to be pre-identified to better preserve regional ecological linkages and biodiversity. Current rules are more preservation focused and do not account for the diversity of native landscapes that are recognized today. Individual trees and small plant communities are renewable resources that can be replanted after disturbance to create microhabitats and provide ecosystem services. Ground level plants and understory vegetation play a critical role in the long-term health of forests, help the nutrient cycle by building up organic matter, and provide food and shelter to many insects and wildlife that help the larger ecosystem and human health.

Based on research and an assessment of natural resources and natural features provided by NYC Parks, New York State Department of Environmental Conservation (NYSDEC), and the Natural Areas Conservancy, DCP identified the regional natural assets unique to areas of the Bronx (**Figure 1-3**) that are critical for ecological connectivity. The proposal would identify these natural assets, such as City Forever Wild parks, as part of the Proposed Actions in the form of text maps in the Zoning Resolution. These natural assets, called “public lands containing habitat” in the SNRD, would form the basis of a holistic ecological strategy to strengthen and protect these core natural areas while guiding development that is balanced with natural resource preservation across the special district.²

To achieve this goal, the Proposed Actions would map “ecological areas” (**Figure 1-4**) based on proximity to public lands containing habitat such as large parks, forests, and hillsides. These would be represented as text maps in the Zoning Resolution as part of the SNRD. *Resource Adjacent Areas* would be mapped within 100 feet of the property line abutting the public lands containing habitat. Specific regulations regarding landscape buffers would apply along the boundary of these Resource Adjacent Areas to protect and enhance the core habitat within the protect lands. All other areas of the SNRD would be *Base Protection Areas*, where

² Maps of public lands containing habitat are provided as part of the Proposed Text Amendment (see Appendix 8).

consistent regulations would help enhance and connect natural areas across the special district.

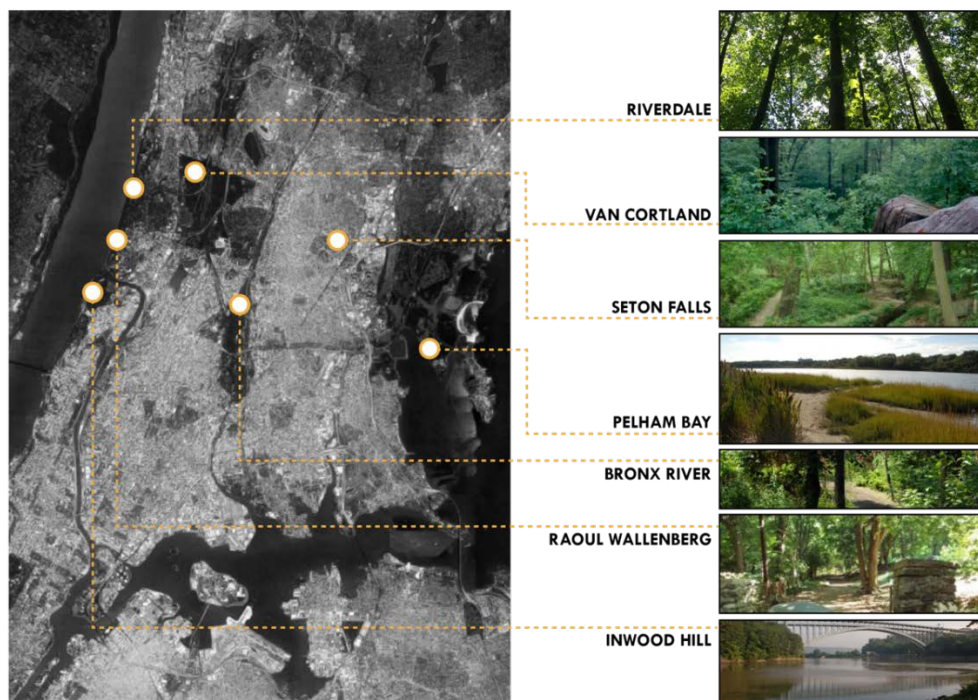


Figure 1-3. Major Natural Assets in the Bronx and Northern Manhattan



BASE PROTECTION AREA

aims to provide consistent requirements for development and preservation to contribute to the overall ecological importance of the special district and include properties outside the Resource Adjacent Areas



RESOURCE ADJACENT AREA

aims to protect the most sensitive natural resources adjacent to protected/public lands and include properties adjacent to these areas

Figure 1-4. Ecological Areas Based on Proximity to Natural Resources

To advance this effort and ensure input from community stakeholders, DCP has met with local community boards and convened advisory groups

of local civic organizations, architects, landscape architects, environmental groups, elected officials, institutions, and city agencies. The first working group meeting occurred in April 2015. The advisory groups established the following principles, which have been used to guide the update process:

- Strengthen and rationalize natural resource preservation.
- Create a homeowner-friendly regulatory environment with robust as-of-right rules for the development of homes on small lots that protect significant natural features.
- Protect and enhance the natural resources and neighborhood character of the districts, with greater predictability of development outcomes.
- Strengthen and clarify regulations so that review by CPC focuses on sites that have a greater impact on natural resources and the public realm.

Based on principles described above and to apply the framework, the Proposed Actions would establish regulations that create a hierarchy of natural resource protection based on proximity of a development site to public lands containing habitat (Resource Adjacent Areas) to protect and enhance the most ecologically sensitive resources.

The Proposed Actions would determine the appropriate review process based on the size of properties, proximity to sensitive areas, and effects on neighborhood character and the public realm.

Properties Less than 1 Acre

With clear zoning regulations that would establish building footprint, permeability, trees, and ground cover, most small property owners would go directly to DOB for project review and permits, skipping the current requirements for review by CPC. In some special cases, CPC review would still be required. These cases include:

- development with new private roads, because these sites are more likely to affect the public realm and neighborhood character;
- new buildings or subdivisions of a lot in a historic district to align and coordinate review with Landmarks Preservation Commission (LPC) such that both goals of historic and natural resource preservation are met;

- four or more buildings or eight or more dwelling units in areas that are adjacent to regionally important habitats, (Resource Adjacent) because the new as-of-right rules may not predict every outcome that best achieves the goals of balancing development and preservation; and
- subdivision resulting in four or more new lots (in all areas).

Properties of 1 Acre or More

For larger sites, the proposed rules with clear parameters would require individual site plan review by CPC because large sites may contribute more to the public realm and preservation of natural habitat.

- The proposal encourages upfront long-term planning to create a holistic development plan for the public and the property owner that considers natural resource preservation.
- For sites with existing habitats, portions of habitat would be preserved in perpetuity to maintain ecological connectivity and neighborhood character because the surrounding natural ecosystem and public realm directly rely on intact, larger natural features found on properties that are 1 acre or more.

The Proposed Actions would maintain the primary intent of the special district as guiding development in areas of outstanding natural beauty to protect, maintain, and enhance the natural features and create a consistent framework in a new SNRD to increase predictability and ecological connectivity.

Existing Zoning

This section describes the existing regulations that the Proposed Actions would affect. It is organized to describe the geography of the special districts and subdistricts, followed by an overview of how DOB and CPC review proposed subdivisions, construction, or other site work. Next is a description of the various regulations pertaining to the protection of natural features, various use, bulk and parking regulations, and any associated discretionary actions to modify these existing provisions. The last section describes CPC certifications, authorizations, and special permits available in the existing special district.

Geography

The special districts are located in the Boroughs of the Bronx, Staten Island, and Queens. The special districts contain approximately 1,003 lots in the Bronx that would be affected by the updates to the special district rules as described below. Because there would be no substantive

changes to the special district in Staten Island or Queens, those areas are not described further in this document.

The Bronx

The SNAD within the Bronx is mapped as NA-2 along the Riverdale Ridge and is composed of parts of Riverdale, Spuyten Duyvil, and Fieldston in CD 8. The ridge contains steep slopes, rock outcrops, and mature trees. In addition, the southwestern foot of the ridge includes marshes, and the shoreline of the Hudson River contains aquatic habitat that supports marine life.

Review Structure

The current CPC review structure for the special district includes certifications, authorizations, and special permits. When no CPC approvals are required for a proposed development, it is considered to be “as-of-right”—the proposed development can apply directly to DOB for a building permit, which will be granted if the proposal complies with all zoning requirements and other applicable codes and regulations. The certifications granted by either the CPC Chair or CPC as a whole are considered to be ministerial in nature, meaning that, similar to as-of-right development, the proposal must be approved or denied based on whether it meets the conditions of the certification, based on facts. In contrast to these, CPC-granted authorizations and special permits are discretionary in nature because CPC must weigh and balance various factors to arrive at a decision on each of the findings of an authorization or special permit. These discretionary actions may permit encroachment into an area containing natural features or may modify specified zoning rules relating to use, bulk, or parking regulations. These discretionary actions include a public review process that provides opportunities for public comment on the proposed project, which CPC considers when making its decision.

All developments in Bronx NA-2 were discretionary between 2012 and 2017. The special district protects certain natural features but provides a mechanism to waive or modify those protections to disturb those natural features by CPC-granted authorization. Additional authorizations and special permits are available if an applicant seeks to modify certain zoning regulations, such as yard regulations.

The special district does not require CPC review of all larger sites, or exempt smaller sites from CPC review, with one exception.

(1) In the SNAD, a smaller site may be exempted if it comprises the construction, enlargement, or alteration with proposed lot coverage of less than 2,500 square feet; is located on a lot of no more than 10,000 square feet and with less than 10 percent

average slope; is not impacting any significant natural features; and has no legal documents recorded against it.

The special district requires a certification from CPC for any future subdivision of a zoning lot to ensure it complies with the special district rules and preserves natural features to the greatest extent possible. The special district permits residential development to be clustered to preserve natural features by a CPC special permit that allows rules for large-scale residential developments to be applied to smaller sites than permitted by zoning elsewhere.

SNAD generally requires at least a certification from CPC that the proposed development meets the standards of the special district and that it does not require an authorization or special permit from CPC. CPC authorizations are required for disturbance of a variety of protected natural features on a lot or to modify bulk regulations. A special permit may be sought to modify permitted residential building types (e.g., to allow an attached residence in an R2 district, where normally only detached homes are permitted to facilitate clustering development to preserve natural features elsewhere on the site).

Further detailed information on zoning regulations associated with certification and discretionary actions is described toward the end of this section.

Protection of Natural Features

Natural features that are protected by the special district include trees and natural topography, including steep slopes. Other natural features that are protected by regulation include vegetation other than trees, aquatic features, erratic boulders, and rock outcrops. Natural features are protected as separate individual items, without regard to whether they are part of a larger ecological area on adjacent lots, and without requiring a higher level of protection for lots adjacent to regionally important ecological areas. The current special district rules allow modification of natural features while providing little guidance regarding the relative value of one type of natural feature versus another, how to prioritize protection, and how much encroachment to authorize.

Zoning regulations in the SNAD protect natural features, including geological features such as rock outcrops and geological deposits, topographical features such as steep slope, existing natural topography and topsoil, aquatic resources, and botanic environments. With just a few exceptions, all of these features cannot be removed or disturbed except through CPC authorization.

Tree Regulations

Tree Removal

The special district often protects natural features such as trees by prohibiting the removal or disturbance of the natural feature within a certain distance of the proposed development; however, property owners can apply for an authorization from CPC to remove or disturb these natural features in any way. The standards for approving or denying these authorizations are not well defined.

Trees are protected when they reach 6-inch caliper (defined as the diameter of a tree trunk measured 4 feet, 6 inches from the ground). Trees cannot be removed as-of-right except within the proposed building footprint or within 15 feet of the proposed building footprint, and except for when they are located in the path of proposed driveways, private roads, and required accessory parking spaces. Trees can be removed as-of-right if the continued presence of a tree would create dangers to persons or property or would interfere with the growth or health of another tree of 6-inch caliper or more.

CPC may grant an authorization for tree removal or modifications to planting requirements, pursuant to ZR Section 105-425. The findings require the proposed development, enlargement, or site alteration to demonstrate that it is designed to make the least modification necessary, allows for the survival of newly planted trees or other plant material, and that it aligns with the purposes of the special district.

Tree Planting Requirements

The current tree planting requirements in the special district come into effect when there is new construction or site work on a property, and requirements are based on a tree credit calculation. Tree credit is the value given to every tree based on the tree caliper inches. The current zoning assigns one credit for the first 6 inches of caliper and one credit for every additional 4 inches of caliper.

The requirement is one tree credit per 1,000 square feet of lot area or 51 percent of tree credits originally on site, whichever is greater. Newly planted trees must be a minimum of 3 inches of caliper.

Critical Root Zone

The critical root zone is defined as an area around the tree containing the roots that should be maintained and protected. In the existing rules, it is measured as 1 radial foot for every caliper inch and ranges from a minimum of 4 feet to a maximum of 22 feet.

The critical root zones of all preserved trees are protected within an “area of no disturbance” and must remain undisturbed except as provided for in a tree protection plan and letter from a certified arborist.

Biodiversity Regulations

No vegetation may be removed except within the proposed building footprint or within 15 feet of the proposed building footprint, except for driveways, private roads, and required accessory parking spaces, and except when granted CPC authorization, pursuant to ZR 105-425. Ground cover, shrubs, small trees, and large trees must be planted to replace any vegetation that is removed or any topsoil that is disturbed, each on a basis proportionate to the size of the area disturbed.

Topographic and Geologic Resources

Slopes and topography are regulated in the special district by prohibiting the disturbance of the natural feature within a certain distance of the proposed development. However, property owners can apply for an authorization from CPC to disturb these natural features, and the standards for approving or denying these authorizations are not well defined.

For Tier II sites, no grading is permitted beyond 15 feet of the building footprint, except for grading to construct private roads and driveways. The grading requirements for Tier II sites limit how steep the final slope can be after cut and fill to a ratio no steeper than 2 horizontal to 1 vertical, along with other technical specifications.

CPC may grant an authorization for modifications to topographic features pursuant to ZRs 105-421 (Modification of topographic features on Tier I sites) and 105-422 (Authorization of a development, enlargement or site alteration on a Tier II site or portion of a zoning lot having a steep slope or steel slope buffer). The findings require the proposed development, enlargement, or site alteration to demonstrate the least modification to existing topography, so that the modified topography will not impair character and topography of surrounding area and will result in minimal effects on drainage patterns and soil conditions.

Erosion control is regulated by zoning, requiring one of a variety of sediment control measures to be used.

Rock outcrops cannot be altered without an authorization from CPC. CPC may grant an authorization for modifications to rock outcrops if it is the minimum modification necessary, pursuant to ZR 105-424 (Alteration of rock outcrops).

No erratic boulder with a diameter of 6 feet or more may be removed from its location without authorization from CPC. CPC may grant an authorization for relocation of erratic boulders if the boulder is located in an area to be occupied by buildings, driveways, parking areas, or recreation areas, or its current location would create hazards or dangers, pursuant to ZR 105-423 (Relocation of erratic boulders).

Aquatic Resources

Property owners can apply for CPC authorization to modify these natural features, and the standards for approving or denying these authorizations are not well defined.

Aquatic features cannot be altered without CPC authorization. CPC may grant an authorization to modify aquatic features if the proposal results in minimal disturbance of the aquatic feature and will not disturb the existing drainage pattern of the area, pursuant to ZR 105-426 (Alteration of aquatic features).

Controls during Construction

No construction equipment can be operated beyond 15 feet of the building footprint, except for the construction of driveways and private roads; construction fences must be erected around all areas of no disturbance and around vegetation proposed to be preserved; excavating for fill is prohibited unless approved under a specified grading plan; a staging area must be located where it would minimize destruction of natural features; topsoil is to be used to revegetate the area upon completion of construction; and exposed earth will be seeded during construction.

Habitat Preservation

No specific regulations currently require the preservation of habitat. As noted earlier, designated areas of no disturbance exist that are protected from all types of construction activity. Areas of no disturbance include steep slopes, steep slope buffers, and the critical root zone of each tree proposed for preservation. Existing zoning rules establishing areas of no disturbance are not based on the relative value, size, or location of existing habitat, but they protect habitat as a secondary outcome of protecting steep slopes and individual trees. The amount of area actually preserved as natural habitat through this mechanism is impossible to predict because the amount of permitted development on a given site is not defined by standards in the zoning regulations.

Bulk Regulations

Lot Coverage

On Tier I sites with no impact on steep slopes, underlying zoning regulates lot coverage. On Tier II sites with no proposed disturbance of steep slopes, maximum lot coverage is regulated by the average percent of slope on the lot and the applicable zoning district (see **Table 1-1**).

Table 1-1. SNAD Tier II Sites Lot Coverage Governed by Average Percent Slope of the Site

Average % of Slope	R1	R2	R3	R4	R5	R6 (1-2 Family)	R6 (Other)
10–14.9	22.5	22.5	22.5	36.0	45.0	48.6	32.4
15–19.9	20.0	20.0	20.0	32.0	40.0	43.2	28.8
20–24.5	17.5	17.5	17.5	28.0	35.0	37.8	25.2

On Tier II or Tier I sites where steep slope or steep slope buffer areas are being modified through development, enlargement, or site alteration, the maximum lot coverage is regulated by the applicable zoning district as noted in the table below (see **Table 1-2**).

Table 1-2. SNAD Tier II Lot Coverage if Steep Slope is Disturbed

R1	R2	R3	R4	R5	R6 (1-2 Family)	R6 (Other)
12.5	12.5	12.5	20.0	25.0	27.0	18.0

CPC may authorize the modification of limits to lot coverage on a Tier II site or applicable Tier I sites pursuant to ZR 105-431 (Modification of lot coverage controls). CPC will grant the authorization if the development or enlargement is not feasible without modification, if the shape of the building preserves the aesthetic value of the area, if such modification is the least modification necessary, has minimal impact on existing natural topography, will not disturb the drainage pattern and soil conditions, and does not impair the essential character of the area.

Hard Surface Area

Hard surface area is any area on a lot covered by paved or other solid/hard surfaces, such as roads, driveways and sidewalks, patios, decks, or porches, and the roofs of buildings. Hard surface areas generally do not allow water to penetrate into the ground; therefore, swimming pools are also considered hard surface area, because rainwater cannot penetrate into the ground through the bottom of the pool. The opposite of hard surface area is area that includes planted areas at ground level, including lawn, gardens, and other areas with natural soil.

Hard surface area is not currently regulated in the special district. However, during review of proposed development seeking an authorization, DCP established a guideline that lots should generally have no more than 50 percent coverage by hard surface areas.

Lot Area and Lot Width

The minimum lot area for a proposed subdivision is increased to 12,500 square feet if a lot contains steep slopes covering more than half of the lot.

Yard Regulations

Underlying zoning regulations regulate yards. However, CPC may grant an authorization to modify yard regulations if the proposed placement of buildings and arrangement of open space will preserve significant natural features and will not have negative effects on the light, air, and privacy of existing adjacent buildings, pursuant to ZR 105-432 (Modification of yard, height, and setback regulations, and parking location regulations).

Height and Setback

Height and setback requirements are regulated by underlying residential zoning regulations. CPC may authorize modification of height and setback regulations pursuant to ZR 105-432 (Modification of yard, height, and setback regulations, and parking location regulations) if the modification will preserve significant natural features, and if the proposed buildings will not have adverse effects on the light, air, and privacy of adjacent buildings.

Parking and Curb Cut Regulations

Rules regarding the location of parking spaces can directly affect how much design flexibility exists to preserve natural features.

Accessory parking spaces may be provided as curbside parking on a private road. CPC may authorize modifications in parking location regulations pursuant to ZR 105-432 (Modification of yard, height, and setback regulations, and parking location regulations) if the modification will preserve significant natural features.

Approvals

Certifications

As discussed above, the following certifications by either the CPC Chair or CPC as a whole are required in certain circumstances in the existing special district regulations. Certifications are considered ministerial in nature, meaning that, like as-of-right development, the proposal must be approved or denied based on whether or not it meets the conditions of the certification, based on facts.

When it is not necessary for the applicant to apply for an authorization or special permit, CPC certifies to DOB pursuant to ZR 105-41 that the proposed development complies with the regulations of the special district. A certification of Restoration Plans pursuant to ZR 105-45 is

required for unauthorized removal of trees or other disturbance of the site. A certification for Future Subdivision pursuant to ZR 105-90 is required for the subdivision of a lot in the SNAD.

Authorizations

As discussed above, the following discretionary approvals are available to modify or waive regulations set forth in each existing special district.

Authorizations are available for modification of topographic features on Tier I sites pursuant to ZR 105-421; Authorization of a development, enlargement, or site alteration on a Tier II site or portion of a zoning lot having a steep slope or steep slope buffer pursuant to ZR 105-422; Relocation of erratic boulders pursuant to ZR 105-423; Alteration of rock outcrops pursuant to ZR 105-424; Modification of botanic environment and tree preservation and planting requirements pursuant to ZR 105-425; Alteration of aquatic features pursuant to ZR 105-426; Modification of lot coverage controls pursuant to ZR 105-431; Modification of yard, height, and setback regulations, and parking location regulations pursuant to ZR 105-432; Modification of grading controls pursuant to ZR 105-433; Modification of requirements for private roads and driveways pursuant to ZR 105-434; and Special district designation on Public Parks pursuant to ZR 105-91.

Special Permits

As discussed above, the following discretionary approvals are available to modify or waive regulations set forth in each existing special district.

Special permits are available for Modification of use regulations pursuant to ZR 105-441 and Natural area dedicated for public use pursuant to ZR 105-442.

Proposed Land Use Actions

This section describes the proposed regulations, compares them with existing regulations, and identifies any anticipated change in outcomes from the current scenario. The section is organized similar to the “Existing Zoning” section and describes the location of the combined special district and its relation to the existing special district, provides an overview of the proposed review structure, describes the regulations pertaining to protection of natural features and bulk, and describes the details of discretionary review required.

The proposal would also require rule changes subject to CAPA. Proposed rule changes would include changes to: references to online maps, and proposed site assessment protocols and associated fees. These proposed changes are required to implement the proposed zoning map and text amendments and are analyzed as part of the Proposed Actions.

Geography

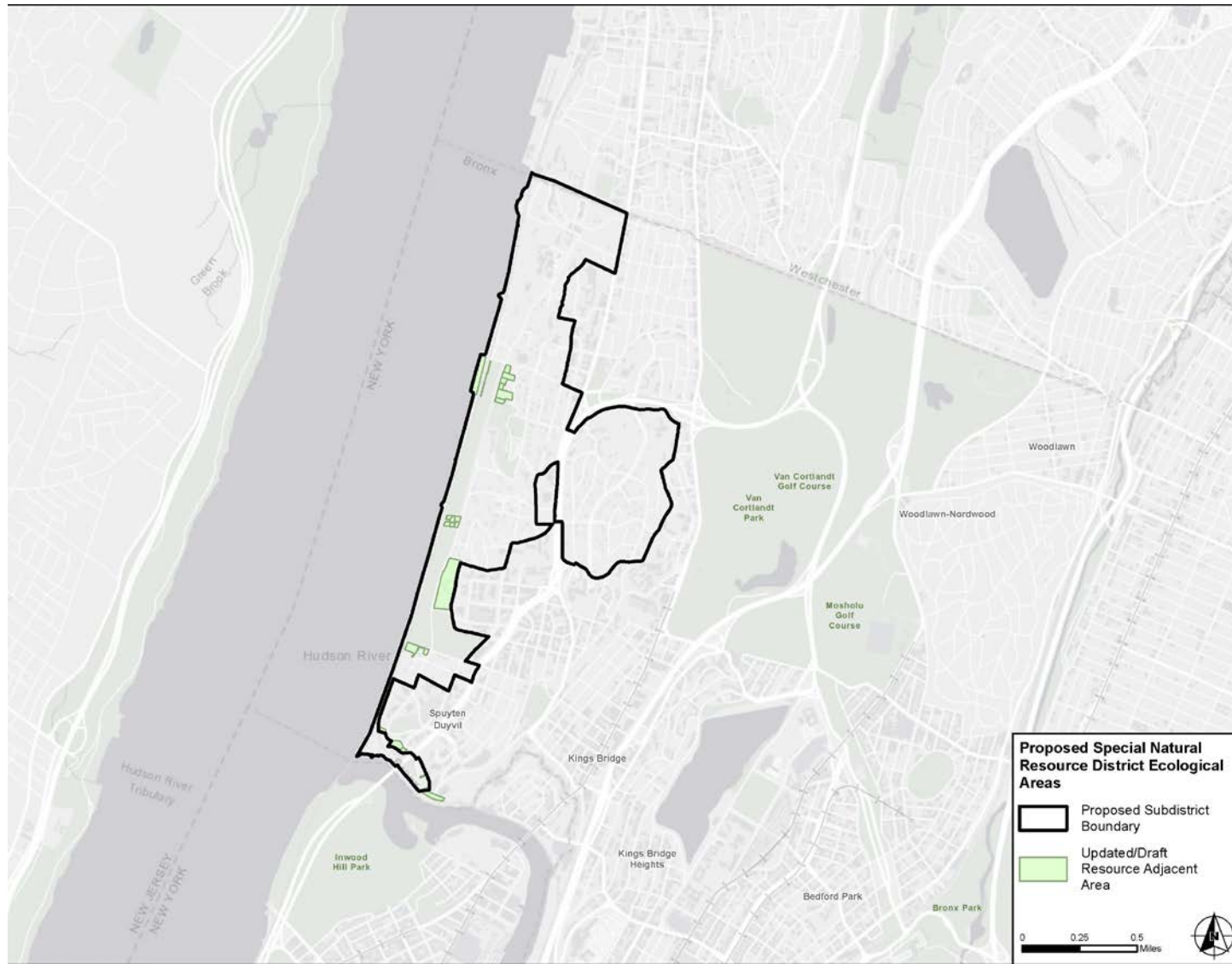
The proposed special district would be referred to as the SNRD. The currently mapped SNAD NA-1, NA-3 and NA-4 would remain. The existing SNAD NA-2 in the Bronx would become the SNRD. See **Figure 1-1**.

Separate from the SNRD described above, the proposal would establish two new ecological area designations that would be applicable in the SNRD: Resource Adjacent Area and Base Protection Area. Modified bulk, parking, and planting rules would apply and vary within the two ecological area designations. Resource Adjacent Areas would be the first 100 feet from the lot line that abuts the public lands containing habitat, such as parklands designated by the City as “Forever Wild.” The proposed regulations for this area would balance development on private property and protect and provide a buffer from public lands containing habitat on protected lands. Areas not designated Resource Adjacent would be designated as Base Protection; the proposed regulations for this area would provide consistent regulations for development and preservation to contribute to the overall ecological importance of the combined special district. See **Figure 1-5**. A map of proposed Resource Adjacent Areas is shown in **Figure 1-6**.

Figure 1-5. Proposed Ecological Areas Based on Proximity to Natural Resources



Figure 1-6. Map of Proposed Ecological Areas



Review Structure

While the existing special districts require CPC approval based on a variety of factors, including proposed removal of individual trees or modification of slopes even for small properties, the proposed SNRD would require CPC review only for properties that are:

- an acre or larger in size where a new building, enlargement, subdivision or site alteration is proposed, or,
- if smaller than 1 acre:
 - where a private road is proposed to be extended or created;
 - if located in a Resource Adjacent Area, where four or more buildings, or eight or more dwelling units are proposed;
 - subdivisions resulting in four or more zoning lots; or
 - if located in a Historic District and a new building or subdivision is proposed.

Properties that would be required to undergo CPC review are referred to as “Plan Review Sites.” However, minor enlargements and minor site alterations on Plan Review Sites that meet certain proposed thresholds would not require CPC review and would be able to proceed directly to DOB. For example, minor enlargements of no more than 5,000 square feet located within 15 feet of the existing building, minor site alteration consisting of no more than 10,000 square feet, or removal of 12 tree credits located outside a habitat preservation area would not require CPC review and would be able to proceed directly to DOB. All other properties, new buildings, enlargements, subdivisions, and site alterations within the SNRD would be able to proceed directly through DOB. This ability to apply directly to DOB is known as “as-of-right” development, meaning that if underlying zoning regulations and proposed special district rules are met, DOB will approve the plans.

The proposal would remove CPC review for NYC Parks properties that is required in the existing SNAD because these properties/projects already go through a separate public review process with the Public Design Commission.

Note that the area of Plan Review Sites would include all contiguous tracts of land under single ownership or control, including abutting zoning lots under the same ownership or control. Accordingly, the development of multiple adjacent parcels would likely entail development of a Plan Review Site.

Protection of Natural Features

The proposed zoning regulations have goals for preservation of natural features that would be similar to those within the existing special district; however, the proposed rules would approach the preservation of natural features in a holistic manner to enhance the relationship between the natural features on a property and the larger ecological landscape and prioritize protection of large anchor habitats or public lands containing habitat. Existing properties in the special district would apply the proposed rules when new construction or significant changes are proposed (e.g., an enlargement with a 20 percent increase in floor area or an increase of hard surface area [areas of the site covered by a building or hard surfaces] of 400 square feet or greater). These properties would be subject to all proposed planting requirements (**Table 1-4**) to better protect and enhance these natural areas of regional importance, as well as more controlled lot coverage (**Tables 1-5** and **1-6**) and limits on hard surface areas (**Table 1-7**) such as driveways, walkways, decks, and patios. Development within the Base Protection Area would be subject to meeting the special district regulations by requiring similar requirements for planting, lot coverage, and hard surface area, thus contributing to the overall ecological importance of the special district. The proposed regulations for planting, lot coverage, and hard surface areas can be found in the narrative below, which describes proposed regulations under each type of natural feature and highlights the differences between the current regulations wherever necessary. Unless otherwise specified, the regulations apply to both ecological areas.

Tree Regulations

The goal of the proposed tree planting and preservation regulations is to encourage preservation of old growth trees and provide flexibility for development by creating as-of-right requirements for the number of trees and tree credits based on the lot area and type of development. The proposed rules for trees would apply whenever trees with trunks more than 6 inches thick (6 caliper inches) are proposed to be removed, when topography is proposed to be modified, or when new hard surface areas, such as a driveway, are proposed, as well as when new buildings or enlargements are proposed. Tree requirements would continue to be determined through a system of tree credits, but the proposed rules would assign a higher value to larger trees, as opposed to the current credit system that increases linearly with the tree caliper inches (see **Figure 1-7** for comparative difference in credit system between existing and proposed).

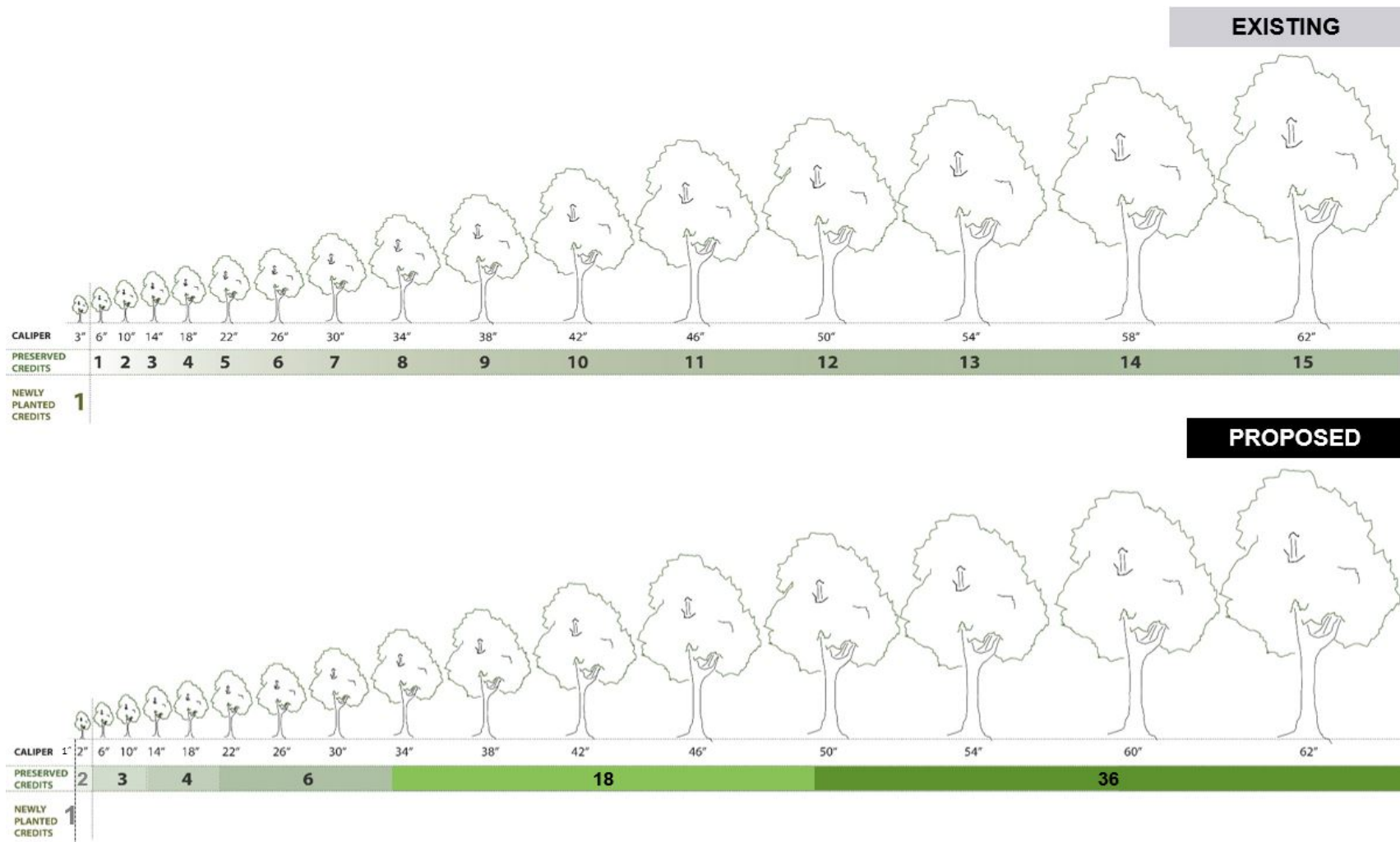


Figure 1-7. Comparison between Existing and Proposed Tree Credit System

As specified in **Table 1-3**, the proposed rules would encourage tree preservation by offering more credit for preserved trees than for newly planted trees, and values for the largest old growth trees would be significantly higher than under the current systems. The proposed rules would also offer more credit for trees that are native to the ecosystem (target species) to incentivize the planting of these trees, and no credit for trees that are designated as invasive species (e.g., Norway maple). In addition, based on ecological science that shows that groupings of trees have greater ecological value and resilience than individual trees, existing trees that are in groups would get 50 percent more credit than a single existing tree, and new trees planted in a group would receive 25 percent more credit than a single new tree.

Table 1-3. Proposed Tree Credit System

Individual Tree Designation	Description	Tree Credits	
		Target species	Non-target species
Old Tree	A preserved tree 50-inch caliper or greater, or at least 144 years of age*	36	18
Mature Tree	A preserved tree 34-inch caliper or greater, or at least 98 years of age*	18	12
Large Tree	A preserved tree 22-inch caliper or greater, or at least 62 years of age*	6	4
Medium Tree	A preserved tree 14-inch caliper or greater, or at least 38 years of age*	4	3
Standard Tree	A preserved tree 6-inch caliper or greater, or at least 24 years of age*	3	2
Young Tree	A newly planted tree, 2-inch caliper or greater	2	1
Sapling	A newly planted tree between 1- and 2-inch caliper	1	n/a

Note: In cases where tree credits are determined by the age of a tree, such determination shall be made by a professional arborist.

Properties in lower density residential districts would have to achieve higher tree credit scores than properties in higher density residential districts, commercial districts, or manufacturing districts as specified below.

- For residential uses, one tree would be required for every 1,000 square feet of lot area. In addition, for R1 and R2 zoning districts, three tree credits would be required for every 750 square feet of lot area; for R4 and R6 zoning districts, two tree credits would be required for every 750 square feet of lot area.

- For community facility uses, one tree would be required for every 2,000 square feet of lot area and 1.5 tree credits would be required for every 750 square feet of lot area.

In addition to the above requirements, for lots with at least 40 feet of frontage, some of these trees would be required to be located in front of the home. These rules would ensure that trees are more evenly distributed around a property to support the character of tree-lined streets found throughout much of the special district. Trees in the rear portion of the lot (within 15 feet of the rear lot line) would need to be preserved, except when they are within 8 feet of an existing or proposed building; would conflict with a proposed driveway, private road, or required parking space; or where too much of the tree's critical root zone (more than 30 percent) would be disturbed by structures permitted near the protected zone.

Critical Root Zone

The critical root zone is an area around the tree that is critical to the tree's survival. While the proposed calculations would be similar to existing regulations (1-foot radial from the center of the tree trunk for every inch of thickness of the tree trunk), the upper limit of 22 feet would be removed. For instance, a 50-inch caliper tree would require 50 feet of critical root zone in the proposed regulations. The proposed regulations introduce the concept of a *structural root zone*, which is a smaller portion of the critical root zone that should not be disturbed at all to ensure the survival of the tree. In comparison, existing rules do not allow any impact to the critical root zones of trees. These rules protect trees, but they may discourage their preservation because no credit accrues if development needs to occur within the area of the tree's critical root zone. Ecological science indicates that trees are able to tolerate a small amount of disturbance within their critical root zones. The proposed rules would allow a portion of the critical root zone of the tree to be disturbed by proposed construction, thus encouraging the preservation of existing trees. Under the proposed rules, up to 30 percent of the critical root zone (outside the structural root zone) could be disturbed, but if more than 10 percent were disturbed, a tree protection plan would be required.

Parking lot landscaping rules per ZR 37-90 would continue to apply and would count toward the proposed regulations.

Biodiversity Regulations

The purpose of the biodiversity planting regulations is to protect, support, and enhance the core habitat of the large natural areas and maintain ecological connectivity between public lands containing habitat and habitat protected on private properties.

The proposed rules for planting ground-level plants and shrubs would apply for construction, enlargements, or site alterations that meet certain criteria, such as when an enlargement with a 20 percent increase in floor area or an increase of hard surface area of 400 square feet or greater are proposed on a lot. The proposed regulations would also limit the square footage of natural vegetation that could be removed on an existing property if the area of remaining vegetation is between 5 to 15 percent of the lot area, depending on the ecological area in which property is located.

Resource Adjacent Areas would have the highest planting requirement, including a buffer planting area (with shrubs, ground cover, and canopy trees) along the lot line that abuts the designated natural resource to create a transition area between the designated natural resource and the development to help protect and enhance the core habitat and its ability to support higher levels of biodiversity across the network of natural areas. This leads to more species diversity, population diversity, and genetic diversity across the natural areas of New York City. The buffer is required to be 10 feet wide at the rear or 8 feet wide on the side, as applicable. For properties with existing development in Resource Adjacent Areas, the biodiversity points may be satisfied by providing planting anywhere on the property.

All other areas would have a planting requirement generally resulting in 5 to 10 percent of the lot being planted. **Table 1-4** details the biodiversity planting requirement and various ways to achieve the requirements:

Table 1-4. Proposed Biodiversity Requirements

Ecological Area	Land Use / Zoning District	Biodiversity Points Required
Resource Adjacent Area	All uses / all districts	6 points
Base Protection Area	Residential in R1, R2	4 points
	Non-residential in R1, R2	2 points
	All uses in R4, R6	2 points
Landscape Options	Biodiversity Points	Area Required
Basic Garden	1 point	2.5% lot area
Wildlife Garden	1 point	2% lot area
Green Roof Intensive	1 point	12.5% roof coverage
Green Roof Extensive	1 point	15% roof coverage

For instance, to achieve six points in a Resource Adjacent lot of 100 feet x 100 feet with designated natural resource at the rear of the lot, five points are required to be achieved by planting a 10-foot-wide buffer with shrubs, ground cover, and some required trees. The remaining one point could be achieved by planting a 200-square foot area wildlife garden with at least four species of shrubs and ground cover each (or 250 square feet of basic garden with shrubs and groundcover) anywhere on the property. For a 100 feet x 100 feet lot in Base Protection, four points could be met in various ways—all four points could be achieved by planting a wildlife garden of 800 square feet (or basic garden of 1,000 square feet) that could be located anywhere on the lot either as a single garden or as multiple gardens as long as they meet minimum dimensional requirements. Points could also be achieved by a combination of wildlife garden, basic garden, and green roof. Intensive green roofs have deeper soil and can sustain variety of plants, including shrubs and grasses. Extensive green roofs have shallower soil depth and can sustain various kinds of grasses, such as sedums.

Parking lot landscaping rules per ZR 37-90 would continue to apply and would count toward the proposed tree and biodiversity requirements.

Topographic and Geologic Resources

The proposed rules for topographic and geologic resources aim to:

- limit disturbance of steep slopes;
- reduce hillside erosion, landslides, and excessive stormwater runoff associated with development;

- incentivize placing new development and other additions to the site on the flatter portion or areas with the least significant geologic resources;
- preserve neighborhood character; and
- enhance and protect these natural features by more stringent requirements for planting, lot coverage, and limits to hard surface areas on the site.

Proposed rules for sites within the Resource Adjacent Area would be allowed less lot coverage and hard surface area compared to the Base Protection Areas. The lot coverage, described in **Table 1-5** later in this section, would be based on the type of slope category that is being affected by any kind of encroachment that cumulatively adds to 150 square feet with more than 2 feet of cut or fill. For example, if a building were sited on a steeper portion of the site with a slope of 85 percent or greater, the lot coverage would be limited to 12.5 percent. In addition, the maximum hard surface area allowed would be linked to the amount of permitted lot coverage; for a site limited to 12.5 percent lot coverage, the proposed rules would limit lot coverage to 40 percent. Lot coverage and hard surface regulations would allow for more flexibility when siting the building and making other site alterations on the flatter portions of the site.

Proposed rules would permit topographical changes as-of-right, as long as slopes meet certain grading standards in all areas of the special district. Cut slopes would be limited to a ratio no steeper than 1 horizontal to 1 vertical (versus 2 horizontal to 1 vertical under current rules). Fill slopes would be limited to no steeper than 3 horizontal to 1 vertical (versus 2 horizontal to 1 vertical under current rules).

Under existing rules, retaining walls have no height limits. Under the proposed rules, any retaining walls needed to manage slopes would be limited to an average height of 6 feet, with no point exceeding 8 feet above adjacent final grade. Within 10 feet of a street, retaining walls would need to be lower, with an average height of 4 feet, with no point above 6 feet to preserve neighborhood character.

Where slopes exceed 25 percent, topographical change would be permitted only within 20 feet of a building or to permit a driveway or a private road. Erosion and sediment controls would apply, as appropriate, in accordance with New York State Standards and Specifications for Erosion and Sediment Control.

Rock outcrops and erratic boulders would be protected by rules that would function on an as-of-right basis. Under existing rules, any disturbance to such geologic features is only permitted through a CPC authorization, and there are no limits to how much disturbance can be

allowed by CPC. Under the proposed rules, rock outcrops in the front yard may not be disturbed, except to permit access to the property via a driveway, private road, or walkway. Beyond the required front yard, no more than 50 percent of rock outcrops in the front portion of the lot and in the rear yard could be disturbed. If such a disturbance were greater than 400 square feet, a CPC authorization would be required. Such disturbance would be measured as area in plan and elevation views. Erratic boulders may be relocated, if necessary, to the front portion of the lot. These rules would provide robust and predictable protections for these dramatic natural features that are an important aspect of the character of these communities.

Aquatic Resources

In general, the proposed regulations would strengthen the preservation of significant aquatic resources with as-of-right rules for the proposed special district compared to existing regulations where aquatic resources are not adequately protected. Because NYSDEC has robust rules that govern tidal wetlands, the proposed zoning rules do not address them. However, the rules do address freshwater wetlands because NYSDEC does not have similar adjacent-area rules for this type of wetland. An analysis of existing freshwater aquatic resources in the special district found the Bronx contains two NYSDEC-regulated wetlands with one site located on a lot less than 1 acre and one site located on a lot larger than 1 acre; these wetlands have a 100-foot adjacent area regulated by NYSDEC where development would require a NYSDEC permit. In addition, there are less than 10 other sites that contain non-NYSDEC wetlands; these wetlands may be under U.S. Army Corps of Engineers (USACE) jurisdiction or not currently protected except through the special district rules.

Under the proposed regulations, small properties that are less than an acre would be subject to special zoning rules that aim to preserve freshwater wetlands regulated by NYSDEC. All construction within NYSDEC-regulated areas would continue to be subject to NYSDEC approval, and the proposed regulations would not affect NYSDEC's ability to review and approve or deny construction within regulated wetland and adjacent areas.

NYSDEC's 100-foot adjacent area lacks any specific development or planting regulations and is generally guided by NYSDEC best practices on a site-by-site basis. Based on NYSDEC's best practices, the proposed regulations for all properties, including small properties that are less than an acre, would aim to preserve the quality of NYSDEC-regulated freshwater wetlands by requiring a planted buffer area of natural vegetation within 60 feet of a wetland boundary. Within 100 feet from the wetland boundary, the amount of lot coverage (15 percent) and hard surface area (45 percent) would be limited. The lot area within wetlands

and planted buffer areas would be excluded from minimum lot area calculations, except that such minimum lot area requirements could be reduced by 10 percent. A minimum 20-foot separation at the rear and a minimum 5-foot separation at the side would need to be provided between planted buffer areas and residences to provide usable areas for access, maintenance, and recreation and to avoid encroachment into buffer areas.

For sites larger than 1 acre, all aquatic features, including streams, non-NYSDEC wetlands, and NYSDEC freshwater and tidal wetlands would need to be described and assessed as part of the general authorization process by CPC. Properties that consist of non-NYSDEC-regulated wetlands would be subject to special zoning rules that aim to preserve these wetlands. A 30-foot planted buffer would be required for non-NYSDEC wetlands and other aquatic features. Any disturbances to these aquatic features and the associated buffer should be avoided, but if avoidance is not feasible, as determined by CPC through the authorization, then disturbance should be minimized, and protection of the aquatic resource should be provided. Similar lot coverage and hard surface area limitations that are described above for NYSDEC-regulated wetlands would apply to all aquatic features on Plan Review Sites.

Based on the comments received during the scoping meeting, as-of-right clustering regulations are proposed that apply to sites where natural features are required to be preserved. For all sites with aquatic features, as-of-right clustering rules, such as reduction of yards and minimum distance between buildings and minimum open area are proposed to maintain substantial development potential of the site while reducing the effect of development on the aquatic resources.

For all existing zoning lots with aquatic features, a minimum building footprint with a permitted disturbance area for buffers and/or aquatic features would be specified to allow development, subject to NYSDEC approval where applicable.

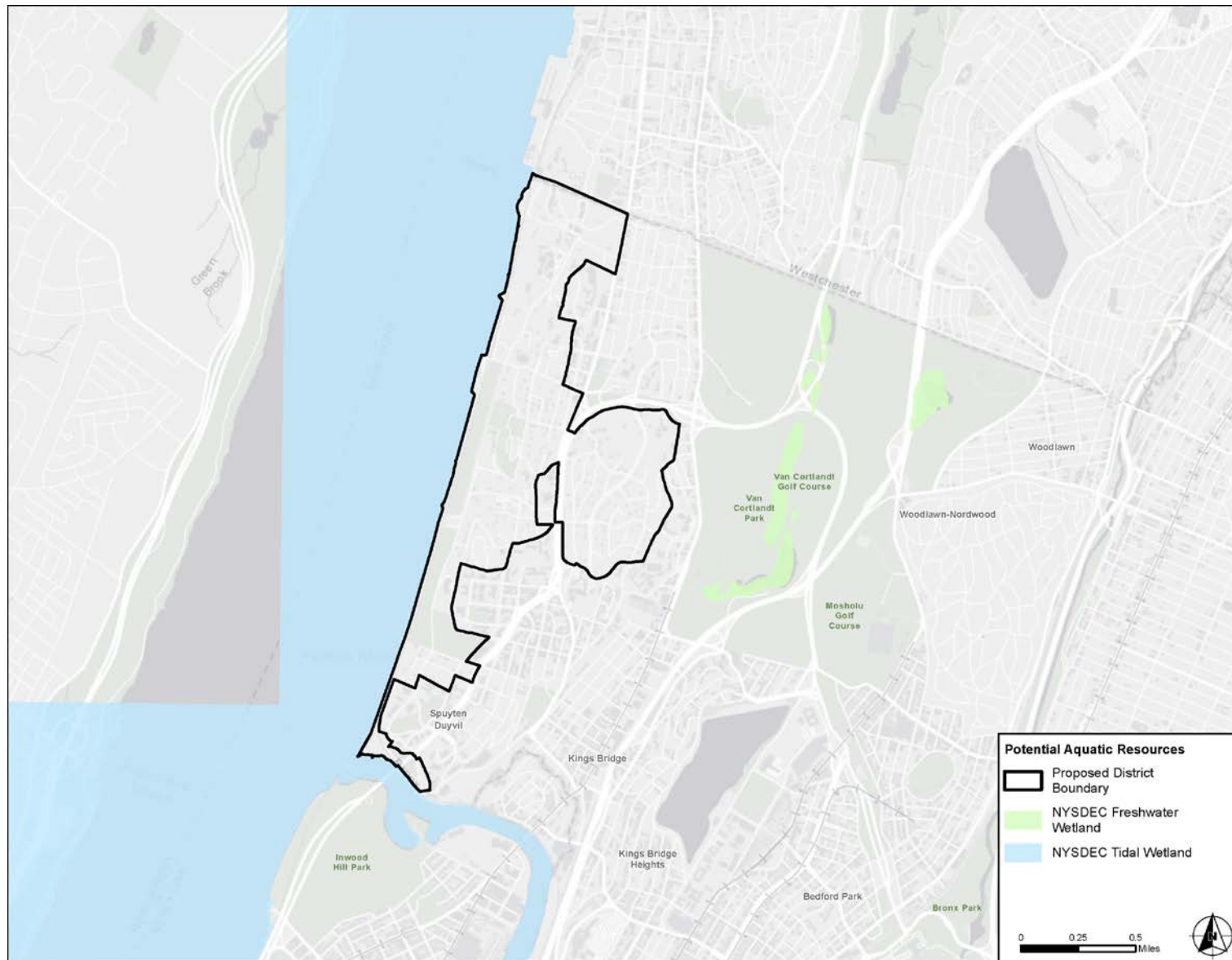
Potential aquatic resources are mapped in **Figure 1-8**. The mapping is not based on field delineations but would act as a flag for properties, similar to NYSDEC's freshwater wetland "checkzone" maps. Aquatic resources would need to be delineated in the field for the flagged properties.

Controls during Construction

In addition to proposed rules regarding erosion and sedimentation controls, an overall set of rules similar to those that currently exist in the SNAD would apply throughout the entire special district to preserve natural features during the construction process. These rules would require that site use during the construction process is carefully planned

and contained so that the ecologically sensitive portions of a site are preserved. Construction fencing would be required around the critical root zones of trees and vegetation being preserved. A construction plan, which is currently a required submission material for a CPC authorization, including details such as locating equipment access roads, staging areas, construction fences, and preserved areas would be required per the proposed zoning rules to be submitted to DOB as part of the application requirements.

Figure 1-8. Map of Potential Aquatic Resources



Habitat Preservation

The special district contains large natural areas with significant habitat on private properties, both developed and undeveloped. Based on current analysis, approximately 80 properties may be subject to habitat preservation regulations. These 80 properties occupy more than half of the total land area of the special district.

The proposed rules aim to prioritize the preservation of significant natural features that are part of larger anchor habitats or have ecological connectivity with these habitats because they consist of a higher level of biodiversity with more species of plants and animals. Habitat preservation on private properties provides opportunities for ecological connectivity to the larger habitats and brings people closer to nature, thereby improving human health.

Proposed rules would require that properties of 1 acre or more preserve existing habitat area on site if the habitat is 10,000 square feet or larger in size. A habitat of at least 10,000 square feet of land is more likely to survive self-sufficiently and maintain its higher level of ecological quality when development is proposed adjacent to it. Smaller pockets of habitat would not be required to be preserved. These sites, which would be pre-identified, would require an ecological assessment of habitat before a development is designed so that the requirement could be met by preserving the most valuable ecological areas that may also provide connectivity to the larger protected natural areas. These valuable features may include a large grouping of old-growth and native trees, wetlands, and other aquatic features.

Because the area of the special district is characterized in part by large community facility campuses, and because these campuses often contain large areas of natural habitat, these properties with existing habitat would be required to preserve 35 percent of the site as natural habitat. The habitat areas on community facility campuses serve a complementary function of providing passive recreation on-site for the users of the facility. For all other properties, the maximum required amount of habitat preservation area would be 25 percent.

To allow for enjoyment of these preserved natural habitat, residential properties would be permitted to substitute up to 5 percent of the required habitat preservation area with a recreational area to help connect residents to the natural features of the preserved area.

Bulk Regulations

Lot Coverage

The proposed lot coverage rules would provide predictable and clear outcomes for future development and apply more stringent controls based

on a lot's adjacency to important ecological features. The proposed regulations introduce the concept of lot coverage for all R1 and R2 districts, including the districts that are currently governed by yard and open space regulations. Based on the study of existing buildings in various districts, proposed rules would limit lot coverage for residential buildings in R1 and R2 districts based on the ecological area in which the proposed development is located. As specified in **Table 1-5** below, sites in Resource Adjacent would be allowed less lot coverage compared to sites in Base Protection Areas. In addition, buildings or any encroachment, with more than 2 feet of cut or fill, greater than 150 square feet cumulatively (when viewed in plan), affecting the steep slopes would be subject to tighter lot coverage restrictions in relation to the steepness of the slope. Buildings located within 100 feet of NYSDEC-regulated freshwater wetlands and all wetlands on sites larger than 1 acre would also be subject to lot coverage limits similar to those for Resource Adjacent Areas; these rules may vary by zoning district. Additionally, unlike underlying zoning regulations, which exclude buildings that are permitted obstructions in yards and open space from lot coverage calculations, the proposed rules would include all buildings in lot coverage calculations for R1 and R2 districts. However, in instances where the property is subject to limited lot coverage of 20 percent or smaller, such as on steeply upward sloping sites (slope 25 percent or greater), garages located close to the front of the lot would be exempt from lot coverage calculations to encourage less encroachment within the slope.

Table 1-5. Proposed Maximum Lot Coverage for R1 and R2

Resource Adjacent Area	Based on <u>Encroachment on Slope</u>		Base Protection Area
15%	85 or greater	12.5%	R1: 25% R2: 30%
	65–84.9	15%	
	45–64.9	17.5%	
	35–44.9	20%	
	25–34.9	22.5%	
	10.0–24.9	25%	

When the proposed lot coverage results in a very small house, feasible development footprints are proposed as an exception (see table below), based on the analysis of feasible developments across the low-density districts in the special district area. See **Table 1-6**.

Table 1-6. Minimum Residential Footprint

Zoning District	Min Lot Coverage (Square Feet)
R1-1	1200
R1-2	800
R2 (1-2 family)	700
All other zoning lots	600

For Plan Review Sites containing community facilities (such as schools, medical facilities, or houses of worship), sites that are located in Resource Adjacent are required to have a habitat preservation area, and lot coverage would be limited to 25 percent and include buildings that are permitted obstructions in yards and open space. However, such uses that are located in the Base Protection Area and do not contain a habitat preservation area would be permitted to have a lot coverage of 35 percent.

For all other zoning districts, underlying regulations would continue to apply.

Hard Surface Area

Proposed regulations aim to limit the amount of hard surface area to facilitate permeability in the special district to maintain natural ground water levels for the health of the forests and wetlands. Hard surface area calculations would include buildings, other structures, driveways, pathways, pools, and other paved surfaces including pervious pavers. Proposed rules would limit the amount of hard surface area as a percentage of the lot. For residences in R1 and R2 districts, the amount of hard surface area would be linked to the amount of permitted lot coverage—the sites with the most restricted lot coverage would also have the most restricted amount of hard surface area. All other uses of property in the special district would be subject to limits on the amount of hard surface area and maintain consistent requirements for development and permeability that would contribute to the overall ecological health of the natural areas in the district.

The proposed rule would not recognize or seek to encourage various types of pervious pavement—all forms of paving or other built structure would be combined into the same category representing “built” or “constructed” portions of the site, versus portions of the site that are natural or planted, including lawn (Table 1-7).

Table 1-7. Maximum Hard Surface Area

Resource Adjacent Area	<u>Slope</u>		Base Area
	Max Lot Coverage	Max Hard Surface Area	
R1, R2,: 45%	12.5%	40%	R1: 50% R2: 65% R4, R6: 75%
	15%	45%	
	17.5%	45%	
	20%	50%	
	22.5%	50%	
	25%	50%	

Lot Area and Lot Width

To provide clear and predictable outcomes, in addition to lot coverage and hard surface area rules, the proposed rules would require larger minimum lot areas to ensure the preservation of these areas and reduce encroachment from proposed development within sensitive natural areas.

As described in the “Aquatic Resources” section, on properties with these resources and applicable planted buffer areas, these portions of the site would be excluded from minimum lot area calculations, except minimum lot area required may be reduced by 10 percent.

Yard Regulations

New proposed rules would modify underlying and existing yard regulations for the preservation of natural features. If a lot were highly constrained because it is in a Resource Adjacent Area or contains steep slopes or nearby NYSDEC-regulated wetlands and adjacent areas, front yards could be reduced in R1 districts to 15 feet, and in R2 districts to 10 feet. In R2 through R4 districts, front yards could be reduced to 10 feet to protect a significant rock outcrop or one or more large trees of significant value of at least 12 tree credits in the back portion of the lot.

Similarly, rear yards could be reduced from 30 feet to 20 feet in R2 districts if a lot were highly constrained because it is in a Resource Adjacent Area or contains steep slopes or nearby NYSDEC-regulated wetlands and adjacent areas. In R1 through R6 districts, rear yards could be reduced to 20 feet if a significant rock outcrop or one or more large trees of significant value of at least 12 tree credits is protected in the front half of the lot.

Front and rear yard as-of-right reductions would not be permitted to be used together on the same lot. If a site has a restricted lot coverage of 20 percent or less, a garage that is located close to the front of the lot, on steeply upward sloping sites (slope greater than 25 percent), would be a

permitted obstruction in the front yard to minimize disturbance of a steep slope. Such garages would not be counted toward lot coverage. In addition, for lots in R2 districts with steep slopes or nearby NYSDEC-regulated wetlands and adjacent areas, or for lots in all districts in Resource Adjacent Areas, the front yard may be measured from the tax lot line in the unimproved portion of a mapped street if the New York City Department of Transportation (DOT) has issued a waiver of curb alignment and has no plans to widen such street to its mapped width. These standards are consistent with DOB practice, as documented in its Bulletin on Privately Owned Mapped Streets.

The proposed modifications are aimed at providing flexibility of design in an as-of-right scenario to achieve preservation of natural features to the greatest extent possible. The Proposed Actions would not affect the amount or type of development.

Height and Setback

The proposed zoning would also include a rule that would apply to Resource Adjacent Areas and to lots with steep slopes or nearby NYSDEC-regulated wetlands to allow for an additional 5 feet in the height of buildings in R1 and R2 districts, to help offset for the reduced lot coverage permitted and allow the floor area to be accommodated more vertically. Under existing zoning rules, steep slopes can sometimes result in a building that complies with basic height limits appearing to be extremely tall from the rear or the side. Therefore, the proposed zoning would require that buildings in proposed Resource Adjacent Areas (where additional height is permitted under the proposal) calculate the height of all sides of the building, and any side that rises more than 31 feet from ground level to roof must break up that façade by building projections, such as bay windows or recesses into the outer wall.

Court and Open Area Rules

The proposed regulations would require an open area of at least 20 feet at the rear of any residence and adjacent to a wetland buffer surrounding a NYSDEC wetland or any other wetland in Plan Review Sites. A 5-foot open area would be required between the sides of the building and these features.

For Plan Review Site properties containing community facilities, such as schools, colleges, or universities, a special type of open area consisting of 15 percent of the lot would be required to provide active or passive recreational amenities on site and to maintain and enhance community character in the special district. This open area would not be permitted to overlap with any required habitat preservation area or any required biodiversity planting area. These open areas would also not be permitted to include buildings, parking areas, driveways, private roads, walkways, or other paved areas. Paved recreational areas would not be counted

toward satisfying this open area requirement, except that active recreational areas surfaced with artificial turf may be included as up to 10 percent of the required 15 percent. This requirement would not apply to hospitals, medical offices, or houses of worship, which do not typically have large active or passive recreational amenities on site.

Parking and Curb Cut Regulations

The proposed regulations would also modify curb cut and parking location rules for lots within Resource Adjacent Areas and lots with steep slopes or nearby NYSDEC wetlands to allow more flexible site design to avoid disturbance to slopes or other sensitive natural features. These modifications would allow parking to be located in the front yard and parallel to the street, either of which could minimize disturbance to steep slopes and other natural features. In addition, the proposed rules would allow parking spaces to be located on the property in the unimproved portion of a mapped street if DOT has issued a waiver of curb alignment and has no plans to widen such street to its mapped width.

Special Rules for Plan Review Sites

Properties that are considered Plan Review Sites, such as lots larger than 1 acre, and properties less than an acre where a private road is proposed to be extended or created, where four lots are proposed, where four or more buildings or eight or more dwelling units are proposed within the Resource Adjacent Area, or where a new building or subdivision is proposed within a Historic District, would be required to seek CPC authorization for any proposed development, enlargement, site alteration, or subdivision. Proposed as-of-right regulations with certain modifications would apply to such Plan Review Sites, but CPC authorization would include the opportunity to apply for modifications that are discussed in the following sections with clear standards for Plan Review Sites. Plan Review Sites would also be eligible to apply for additional CPC authorizations, including approval of a long-term development site plan that approaches development in phases. For phased development, there would be an associated certification or authorization confirming that later development is consistent with previously approved long-term development plans. Plan Review Sites with areas required to be preserved as natural habitat may apply for modification of the boundaries of habitat preservation area, modification of permitted residential building types, or modification of bulk regulations.

Properties with new or extended private roads would be subject to proposed private road standards that are based on existing regulations for private roads in the SNAD. Plan Review Sites would also be exempt from triggering the need for CPC review if the proposed enlargement is no more than 5,000 square feet and located within 15 feet of the existing building, and if any proposed site alteration consists of no more than 10,000 square feet.

Approvals

Certifications

Certifications for future subdivisions for any non-Plan Review Sites would be eliminated, whereas future subdivision for Plan Review Sites would require CPC authorization.

Two new certifications would be created as part of the Proposed Actions. One would certify that a development on a Plan Review Site complies with a previously approved plan for the long-term development of a large site. The other would certify that, on a lot greater than an acre in size containing habitat of 0.25 acre or more, trees proposed for removal are not in an area that would be considered natural habitat.

See **Appendix 1** for a complete list of certifications being eliminated or modified under the proposal.

Authorizations

Except as noted above, Plan Review Sites would be required to apply for CPC authorization for any proposed development, enlargement, site alteration, or subdivision.

Permission to proceed, if granted, would be based on the extent that the project meets the findings established under the proposed regulations, including that the most significant natural features of the site have been preserved, when feasible; that any required habitat preservation area is located to preserve significant natural features and connects the preserved habitat to other off-site habitats; and that vehicular and pedestrian circulation on the site is well designed and integrated with the surrounding road network. The authorization would allow the modification of regulations for private roads, parking areas, and site-planning requirements for Plan Review Sites to preserve natural features and result in a site plan that best meets the goals of the special district.

Plan Review Sites would have the option to seek authorization from CPC for a phased development plan, which would establish areas of the site within which future development is proposed. If CPC approves the plan, development within the parameters of the plan could be constructed subject to a certification or authorization; depending on how specifically the future development parameters are detailed. Preliminary plan sites would be more thoroughly described in the plan and would be able to proceed in the future by certification. Conceptual plan sites that more loosely describe future development in the plan would need to apply for an authorization with findings that are more specifically focused than the general authorization applicable to all Plan Review Sites.

Plan Review Sites with areas required to be preserved as natural habitat would be able to apply for various authorizations that permit CPC to

modify various zoning rules. CPC would be permitted to modify the habitat preservation area standards to resolve site design conflicts, such as where habitat area that would normally be required to be preserved is located at the only access point to the property. To facilitate site design that better protects natural features, CPC would be able to allow clustering of development by modifying the permitted residential building types, such as allowing semi-detached residences where normally only detached residences would be allowed, provided that the project is well integrated into the existing character of the surrounding area. CPC would also be able to modify bulk regulations to achieve the same purpose of clustering of development to preserve natural features on the site. For residential projects, the authorization to modify bulk rules would establish limits on the extent of bulk modifications and the types of bulk modifications that can be combined. For community facility projects, bulk modifications would facilitate the distribution of floor area, hard surface area, and lot coverage throughout a site that may consist of multiple lots. CPC would also be able to modify the special lot coverage, open area, and habitat preservation requirements applicable to large community facility campuses. CPC would also review parking circulation and vehicular access and egress.

See **Appendix 1** for a complete list of authorizations being eliminated or modified under the proposal.

Special Permits

A special permit would be required for modifying the boundaries of a previously approved and established habitat preservation area. This would be permitted only where unforeseen circumstances require the modification of the boundaries, and the boundary modification has been accommodated by establishing a new area to be preserved or enhancing existing habitat.

See **Appendix 1** for a complete list of special permits being eliminated or modified under the proposal.

Discretionary approval applications would continue to be subject to the current public referral process for authorizations and special permits.

Analytic Framework

Effects of the Proposed Actions

The Proposed Actions are not expected to change the rate of growth, which is controlled primarily by the supply of developable land and the local supply of skilled professionals in the construction industry. In addition, the Proposed Actions are not anticipated to change the overall amount, type, and location of development in the affected area. As such,

the type and distribution of development across the affected area as a result of the Proposed Actions are expected to track historic trends.

Development affected by the Proposed Actions is projected based on trends. In the Bronx, between 2012 and 2017, DOB issued 59 permits for new residential buildings and enlargements in NA-2, representing an average of approximately 10 permits per year or approximately 1 percent of NA-2 properties annually.

Development in the future with and without the Proposed Actions is assumed to mirror these recent historical development patterns. As such, approximately 100 new housing units would be constructed in the SNRD from 2020 through 2029.

However, because the current regulations require many small properties to go through CPC review, the Proposed Actions would result in a reduction of more than 60 percent in the number of applications requiring CPC review, based on data analysis of applications to CPC in the special district from 2012 to 2017. Applications not requiring CPC review would proceed directly to DOB for building permits and confirmation of zoning regulation compliance. This would ease the process for homeowners by eliminating CPC review, where appropriate.

Environmental Review

The basis for environmental review is the comparison between a future in which the Proposed Actions are not implemented (the No Action scenario) and the future with the Proposed Actions (the With Action scenario). This framework, the RWCDs, is used as the basis for analysis for assessing the potential environmental impacts of a proposed action. The RWCDs takes existing conditions and adds known or projected changes to arrive at a reasonable estimate of future conditions in both the No Action and With Action scenarios.

Consistent with 2014 *CEQR Technical Manual* guidance, a RWCDs was developed for the Proposed Actions. The Proposed Actions are analyzed as a “generic action” because no known developments are projected at this time. According to the *CEQR Technical Manual*, generic actions are programs and plans that have wide application or affect a range of future alternative policies; for such actions, a site-specific description or analysis is not appropriate. As described in the *CEQR Technical Manual*, generic analyses are conducted using the following methodology:

- **Identify Typical Cases:** Provide several descriptions similar to those in a localized action for cases that can reasonably typify the conditions and impacts of the entire proposal.

- **Identify a Range of Conditions:** Discuss the range of conditions or situations under which the action(s) may take place, so that the full range of impacts can be identified.

Because of the broad applicability of the Proposed Actions, it is difficult to predict the sites where development would occur. In addition, the proposal is not in-and-of-itself expected to induce development where it would not have occurred absent the Proposed Actions. While the proposal may change the proportion of sites proceeding as-of-right, the overall amount, type, and location of development in the affected area is not anticipated to change. Because of the generic nature of this action, there are no known or projected development sites identified as part of the RWCDs.

To produce the RWCDs framework, four representative sites were identified. These prototypical analysis sites serve as an analysis tool to demonstrate the wide range of how the proposed regulations would apply to sites that would be able to develop as-of-right in the With Action scenario. Prototypical analysis sites are shown in **Appendix 2**. These sites are used to assess the effect of changes to proposed regulations (including elimination of existing discretionary actions), in which the development would proceed as-of-right under the With Action scenario.

Under CEQR, a conceptual analysis is required when a proposed action introduces new discretionary actions. Because the Proposed Actions would modify or introduce discretionary authorizations and special permits, a conceptual analysis is required. Conceptual analysis sites were identified for those sites where development would require discretionary action under the With Action scenario (**Appendix 3**). This conceptual analysis serves as a means of disclosing the potential impacts of the proposed discretionary actions for Plan Review Sites, which would be subject to new or different future environmental review under the Proposed Actions.

Prototypical Analysis Sites

To assess the possible effects of the Proposed Actions, an RWCDs was developed for the future without the Proposed Actions (No Action scenario), and the future with the Proposed Actions (With Action scenario) for a 10-year period. The incremental difference between the No Action and With Action scenarios will serve as the basis for assessing the potential environmental impacts of the Proposed Actions.

To determine the No Action and With Action scenarios, standard methodologies were used pursuant to the *CEQR Technical Manual* to identify the amount and location of future development, as discussed below.

The Proposed Actions would affect five zoning districts located in the existing NA-2, which, under the Proposed Actions, would be mapped within two future ecological areas (Resource Adjacent and Base Protection) of the proposed special district. Changes in the special district rules could affect 989 properties in the Bronx. As shown in **Table 1-8**, a range of sites were selected as prototypes for environmental analysis for No Action and With Action scenarios that are intended to represent the range of conditions affected by the Proposed Actions.

Using the methodology described below, site location, lot characteristics, and development typology were assigned to each prototype to identify typical cases and the range of conditions. The characteristics listed below were analyzed to determine the combination of zoning district and proposed ecological subarea designations to create hypothetical site locations where the effects of the proposed regulations could be assessed (prototypical analysis sites). After site location characteristics were established, recent development trends were used to illustrate the range of how the Proposed Actions would affect different building types. Lot characteristics were established using the methods described below. These sites are not intended to illustrate a specific lot, but they reflect prevalent conditions as a basis for analysis. Current and proposed regulations were then applied to each prototypical analysis site to establish the No Action and With Action scenarios to be assessed.

To determine site location and development typology for the prototypical analysis sites, DCP:

- determined the number and prevalence of each Zoning District within proposed ecological areas;
- used the percentage of unbuilt lots within a given zoning district to approximate the areas where future development is most likely to occur;
- considered zoning districts that permit a reasonable range of building typologies and development scenarios; and
- analyzed building permits issued by DOB between 2006 and 2017 to estimate development typology (e.g., single-family, multifamily, mixed use) most likely to occur in each zoning district.

To determine lot characteristics for the prototypical analysis sites, DCP conducted the following analyses.

- Based on the median lot area, width, and depth of all unbuilt lots within a selected prototype's zoning district and ecological area, DCP considered whether those lots would be included in the prototypical

analysis. All lots larger than 1 acre were excluded from this analysis because they would be subject to discretionary review in the With Action scenario and analyzed through conceptual analysis.

- Based on the site location characteristics, characteristics of natural features such as trees and habitat were selected based on a range of criteria, including visual assessment of vacant sites within a given geography, site surveys of recent applications before DCP, and aerial and street view imagery.
- As defined by the proposed zoning framework, lots within Resource Adjacent Areas are characterized by a greater presence of sensitive natural features. Therefore, the base conditions for prototypical analysis sites in these areas contain a greater number of trees and greater topographic variation.

Consideration of the development typology, including size and location of buildings, layout of required parking, and front and rear yard amenity, was determined by:

- reviewing recent applications before the DCP within the existing special districts;
- determining the median lot coverage, floor area, and building height throughout various neighborhoods in the existing special districts; and
- using aerial and street view photography.

Once prototypical analysis sites and characteristics were selected, the No Action and With Action scenarios were developed for each prototype.

For the purpose of the No Action scenario, it is assumed that each prototype would maximize development permitted under the existing zoning. Because the existing special district includes various discretionary actions that are required for certain types of development, those actions are not assumed to be granted in the No Action scenario. For example, because the alteration or modification of natural features outside the construction zone requires discretionary approval, amenities located outside the construction zone are not assumed to be granted in the as-of-right No Action scenario. Additionally, sites may demonstrate a No Action scenario in which there is no feasible as-of-right development because any development on a lot containing only steep slopes requires CPC authorization. The No Action scenario may include Chair or CPC certifications because these actions are considered ministerial in nature. If the site meets the criteria for the certification, the analysis assumes that the certification would be granted under the No Action scenario.

For this analysis, it is assumed that, in the With Action scenario, prototypical analysis sites would develop to the greatest extent possible by maximizing floor area, lot coverage, and hard surface area pursuant to the proposed regulations. Unless otherwise noted, development maximizes accessory parking and front and rear yard amenities (e.g., patios, decks, swimming pools) on each site that could occur on an as-of-right basis under the Proposed Actions.

Because the proposed special district would change the methods and regulations for planting, trees, and development within areas of steep slope on a site to better encourage the preservation of existing trees and minimize impacts in areas of steep slope, the location of large caliper trees and other natural features is also considered in determining the location and size of the proposed buildings and yard amenities. Within the RWCDs, this may result in buildings that do not fully maximize the development potential in some cases because the alteration of additional natural features may lead to a development scenario that is not aligned with development trends in the area.

Prototypical analysis sites are listed in **Table 1-8** and shown in **Appendix 2**.

Conceptual Analysis Sites

Because the Proposed Actions would create new discretionary actions to be considered by CPC, an assessment of the potential environmental impacts that could result from these actions within the proposed special district is warranted. However, because it is not possible to predict whether a discretionary action would be pursued on any one site in the future, the RWCDs for the Proposed Actions does not consider specific development that would seek these actions. Instead, a conceptual analysis is provided to understand how the new discretionary actions could be used and to assess the potential generic environmental impacts that could result. However, all potential significant, adverse impacts related to these future discretionary actions would be disclosed through environmental review at the time of application. These scenarios would include, but are not limited to:

- development on zoning lots greater than 1 acre in lot area;
- establishment of a development plan for large community facility campuses;
- development on waterfront lots with NYSDEC freshwater wetlands;
- subdivision of an existing zoning lot that will result in the creation of four or more new buildings or zoning lots or eight or more new dwelling units, in Resource Adjacent Areas;

Table 1-8. Prototypical Analysis Sites*

ID	Zoning District	Proposed Ecological Area	Typology (1F= one-family; 2F = two family)	Lot Area (Square Feet)	Width (feet)	Depth (feet)
1	R1-2	Base Protection	1-F Detached (enlarge)	6,000	60	100
2	R2	Base Protection	1-F Detached	4,500	45	100
3	R1-1	Base Protection	1-F Detached	12,000	120	100
4	R1-2	Resource Adjacent	1-F Detached	8,000	80	100

*Note: As indicated in the post-DEIS *Technical Memorandum 001, Bronx Special Natural Area District Update (Formerly Staten Island and Bronx Special District Update)*, the A-Text Application (N 190430 (A) ZRY) removed the Staten Island applicability of the proposed SNRD. The substantially reduced project area resulted in a reduction in the number of prototypical analysis sites, which have been renumbered as follows: prototypical analysis sites 1 through 4 are former DEIS prototypical analysis site 3, 7, 8, and 10, respectively.

- subdivision of an existing zoning lot resulting in four or more new zoning lots;
- when a new building or subdivision is proposed in a historic district; and
- development or extension of a residential private road.

To provide a qualitative assessment of these new or modified discretionary actions, three hypothetical sites were identified to provide a conceptual analysis (conceptual analysis sites). Methodology similar to the prototypical analysis sites described above was used to determine site and lot characteristics, and development assumptions for the No Action and With Action scenarios.

These conceptual analysis sites are described and shown in **Appendix 3**.

Analysis Year

The 2014 *CEQR Technical Manual* notes that for some actions where the build-out depends on market conditions and other variables, the build year cannot be determined with precision. In these cases, a 10-year build year is generally considered reasonable because it captures a typical cycle of market conditions and generally represents the outer timeframe within which predictions of future development may usually be made without speculation. Therefore, an analysis year of 2029 has been identified for this environmental review.

Public Review Process for the Proposed Action

The Proposed Actions described above are subject to public review under CEQR procedures and ULURP, Section 200 of the City Charter. The CEQR and ULURP public review processes are described below.

Environmental Review

The environmental review process established under State and City rules provides a means for decision makers to:

- systematically consider environmental effects along with other aspects of project planning and design;
- evaluate reasonable alternatives; and
- identify and mitigate, when practicable, any significant, adverse environmental effects.

The rules guide environmental review through the following steps:

Establishing a Lead Agency

Under CEQR, the “lead agency” is the public entity responsible for conducting the environmental review. Usually, the lead agency is the entity principally responsible for carrying out, funding, or approving the proposed action. DCP acting on behalf of CPC is the lead agency for the Proposed Actions.

Determination of Significance

The lead agency’s first charge is to determine whether the proposed project may have a significant impact on the environment. To do so, it must prepare an environmental assessment statement. The Proposed Actions were the subject of an environmental assessment statement that was issued on November 9, 2018. Based on the information contained in that document, DCP acting on behalf of CPC as the lead agency determined that the Proposed Actions may have a significant, adverse effect on the environment and issued a Positive Declaration on November 9, 2018, requiring that an EIS be prepared.

Scoping

Once the lead agency has issued a Positive Declaration, it must then issue a draft scope of work for the EIS. “Scoping,” or creating the scope of work, is the process of focusing the environmental impact analyses on the key issues that are to be studied. CEQR requires a public scoping meeting as part of the process. Scoping meetings were held for the Proposed Actions and EIS Draft Scope of Work on December 10, 2018, and December 13, 2018. The period for agencies and the public to review and comment on the Draft Scope of Work was open through January 14, 2019. Modifications to the Draft Scope of Work were made as a result of public and interested agency input during the scoping process. A Final Scope of Work for the project was issued on May 3, 2019.

Draft Environmental Impact Statement

In accordance with the Final Scope of Work, a DEIS is prepared. Once the lead agency is satisfied that the DEIS is complete, it issues an NOC and circulates the DEIS for public review. DCP, acting on behalf of CPC, issued an NOC for the DEIS on May 3, 2019.

Public Review

Publication of the DEIS and issuance of the NOC signal the start of the public review period. During this time, which is a period of not less than 30 days, the public has the opportunity to review and comment on the DEIS either in writing or at the public hearing convened for the purpose of receiving such comments. Where the CEQR process is coordinated with another City process that requires a public hearing, such as the CPC ULURP process (described below), the hearings may be held jointly. The lead agency must publish a notice of the hearing at least 14 days before it

takes place and must accept written comments for at least 10 days following the close of the hearing. All substantive comments received at the hearing become part of the CEQR record and must be summarized and responded to in the FEIS.

The DEIS public hearing held in conjunction with CPC's public hearing pursuant to ULURP was held on August 14, 2019, and an extended hearing was held on August 28, 2019. The public hearing also considered a modification to the Proposed Actions (ULURP No. N 190430 (A) ZRY). Written comments were accepted through the close of the public review period, which ended September 9, 2019.

This FEIS addresses all substantive comments made on the DEIS during the DEIS public hearing and subsequent DEIS comment period. Those comments are summarized and responded to in **Chapter 27, Response to Comments on the DEIS.**

Final Environmental Impact Statement

Following the close of the DEIS public comment period, this FEIS was prepared by DCP, the lead agency. This FEIS incorporates relevant comments on the DEIS, as summarized and responded to in **Chapter 27, Response to Comments on the DEIS.** This FEIS also incorporates changes to the body of the text, graphics and tables that were made in response to public comments as well as modifications to the Proposed Actions (ULURP No. N 190430 (A) ZRY) that were made subsequent to the DEIS. Once the lead agency determines that the FEIS is complete, it issues an NOC and circulates the FEIS. DCP, acting on behalf of CPC, issued an NOC for the FEIS on September 13, 2019.

Findings

The lead agency will adopt a formal set of written findings based on the FEIS, reflecting its conclusions about the significant, adverse environmental impacts of the proposed project, potential alternatives, and potential mitigation measures. The findings may not be adopted until at least 10 days after the Notice of Completion has been issued for the FEIS. Once findings are adopted, the lead agency may take its actions. This means that CPC must wait at least 10 days after the FEIS is complete to take action on a given application.

ULURP Public Review Process

The City's ULURP, mandated by Sections 197-c and -d of the City Charter, is a process specially designed to allow public review of a proposed action at four levels: the Community Board, the Borough President and (if applicable) the Borough Board, CPC, and the City Council. The procedure sets time limits for each review stage to ensure a maximum total review period of about seven months.

The ULURP process begins with a certification by DCP that the ULURP application is complete, which includes satisfying CEQR requirements (see the discussion above). The application is then forwarded to the applicable community board, which has 60 days in which to review and discuss the approval, hold public hearings, and adopt recommendations regarding the application. Once this step is complete, the borough board has up to 30 days to review the application. CPC then has 60 days to review the application, during which time a public hearing is held. Following the hearing, CPC may approve, approve with modifications, or deny the application. CPC may approve, approve with modifications, or deny the application.

If the application is approved or approved with modifications, it moves forward to City Council. The City Council has 50 days for application review and to hold a public hearing on the proposed action. The Council may approve, approve with modifications, or deny the application. If the Council proposes a modification to the proposed action, the ULURP review process stops for 15 days, providing time for a CPC determination on whether the proposed modification is within the scope of the environmental and ULURP review. The Council may then act to approve, approve with modifications, or disapprove. The City Council vote is final, unless the Mayor chooses to veto it. The City Council can override the Mayoral veto by a two-thirds vote. The Mayor has 5 days to veto the Council's actions, and the City Council may override the mayoral veto within 10 days.