Chapter 3: Land Use, Zoning, and Other Programs

3.1. INTRODUCTION

This chapter describes existing land uses, zoning, and land-use related documents and policies at the Project Sites (as defined below) and analyzes the potential impacts of the Proposed Project on these conditions. The existing land use at and in the vicinity of the Project Sites is described first, followed by a section discussing the likely conditions in the future without the Proposed Project. The final section discusses the impacts of the Proposed Project on land use and zoning, and the ways in which the Proposed Project relates to existing policies and community goals related to land use.

This chapter of the Draft Environmental Impact Statement (DEIS) includes the following sections:

Section 3.2: Existing Conditions.
Section 3.3: The Future Without the Proposed Project.
Section 3.4: Probable Impacts of the Proposed Project.
Section 3.5: Conclusions.

The study area for a land use assessment should consist of the area where a proposed project has the potential to directly affect land use and overall neighborhood character. The general study area boundary can be modified, as appropriate, to reflect the actual context of the area. Geographical and physical features, such as bodies of water, significant changes in topography, and wide roadways, can be the appropriate delineation of the study area.

For the Proposed Project, the land use study area consists of the area that may potentially experience land use effects directly associated with the operation of the Proposed Project's intake pumping station and water treatment plant. This is the area located within the immediate area of the Project Sites, and therefore the land use study area has been defined to include the areas within 1,000 feet of the Project Sites, and was expanded as appropriate to capture natural boundaries such as roadways. Information about land uses was derived from Geographic Information System (GIS), tax maps and records, and data were confirmed with field surveys and aerial photography.

In addition to the site-specific analysis that considers potential impacts at the Project Sites, this chapter also examines the Proposed Project in light of the land use and zoning policies of state, county, and local agencies. The analysis identifies existing regulations, guidelines, and master plans and evaluates the Proposed Project for compliance and consistency with those plans.

The potential for the Proposed Project to result in changes elsewhere in the county (including potential changes at the Ambrey Pond Reservoir site) is considered in Chapter 19, "Cumulative and Indirect Effects," and Chapter 20, "Growth-Inducing Aspects."

The analysis in this chapter concludes that the Proposed Project, including the new intake pumping station on the Intake Site and the new water treatment plant on the Water Treatment

Plant Site, would be compatible with, and would not adversely affect, land uses in the surrounding area, which include a mix of industrial, waterfront-related, residential, and recreational uses. The Proposed Project would not directly displace any existing land use or impair the functioning of nearby land uses. The Proposed Project would require some local permits and approvals but would be consistent with established land use plans and policies, including current Town of Haverstraw zoning requirements. Therefore, the Proposed Project would not result in any significant adverse land use or zoning impacts, or impacts on the analyzed policies and documents.

3.2. EXISTING CONDITIONS

3.2.1. LAND USE

The Proposed Project would be located in Rockland County, New York, in the Town of Haverstraw, as indicated in **Figure 3-1**. The land use study area is generally defined as the 1,000 foot radius surrounding the three Project Sites—the Intake Site; Raw Water Transmission Main Route Options 1 through 5; and the Water Treatment Plant Site. The study area is generally bounded by Munn Avenue and the Hudson River in the Town of Stony Point to the north, the south side of Railroad Avenue in the Village of West Haverstraw to the south, the Hudson River to the east, and Demarest Avenue in the Village of West Haverstraw to the west. The study area contains a mix of land use including industrial, residential, recreation, and commercial uses, all within close proximity to one another.

3.2.1.1. PROJECT SITES

3.2.1.1.1. Intake Site

The Intake Site is an underdeveloped, industrialized Hudson River waterfront site located on the northernmost border of the Town of Haverstraw, abutting the Town of Stony Point. The Site is at 710 Beach Road, at the terminus of Beach Road where it intersects with River Road, on a point of land that extends into the Hudson River. Collectively, these roadways comprise County Route 108. The Site consists of a portion of one tax parcel, 21.09-2-1 that is owned by U.S. Gypsum Company (USG). The Intake Site comprises vacant land, marginally improved with broken asphalt, dirt and rubble piles, and brush areas. A portion of the Intake Site is used as a parking area, and by the adjacent Haverstraw Marina for off-season storage for approximately 20 recreational boats. The intake site also includes a water area extending into the Hudson River 900 to 1,500 feet from the shoreline, where the Project's water intake structure would be located.

3.2.1.1.2. Raw Water Transmission Main Routes

As discussed in Chapter 2, "Project Description," the Proposed Project includes several raw water transmission main route options. The transmission main would transfer the raw water from the Intake Site to the Water Treatment Plant Site, and as such, all options lie between the two sites (see Figure 3-1).

Raw Water Transmission Main Route Option 1 route comprises public road rights-of-way, generally following Ecology Lane and Beach Road, as shown in Figure 3-1. In addition, the route also passes through sections of USG property near the Intake Site and the Joint Regional Sewage Treatment Plant (JRSTP). In general, land along the transmission main route is characterized by vacant roadsides, commercial/recreational marina and boat storage areas, sparse residential uses, former landfill, and a public utility (the JRSTP).

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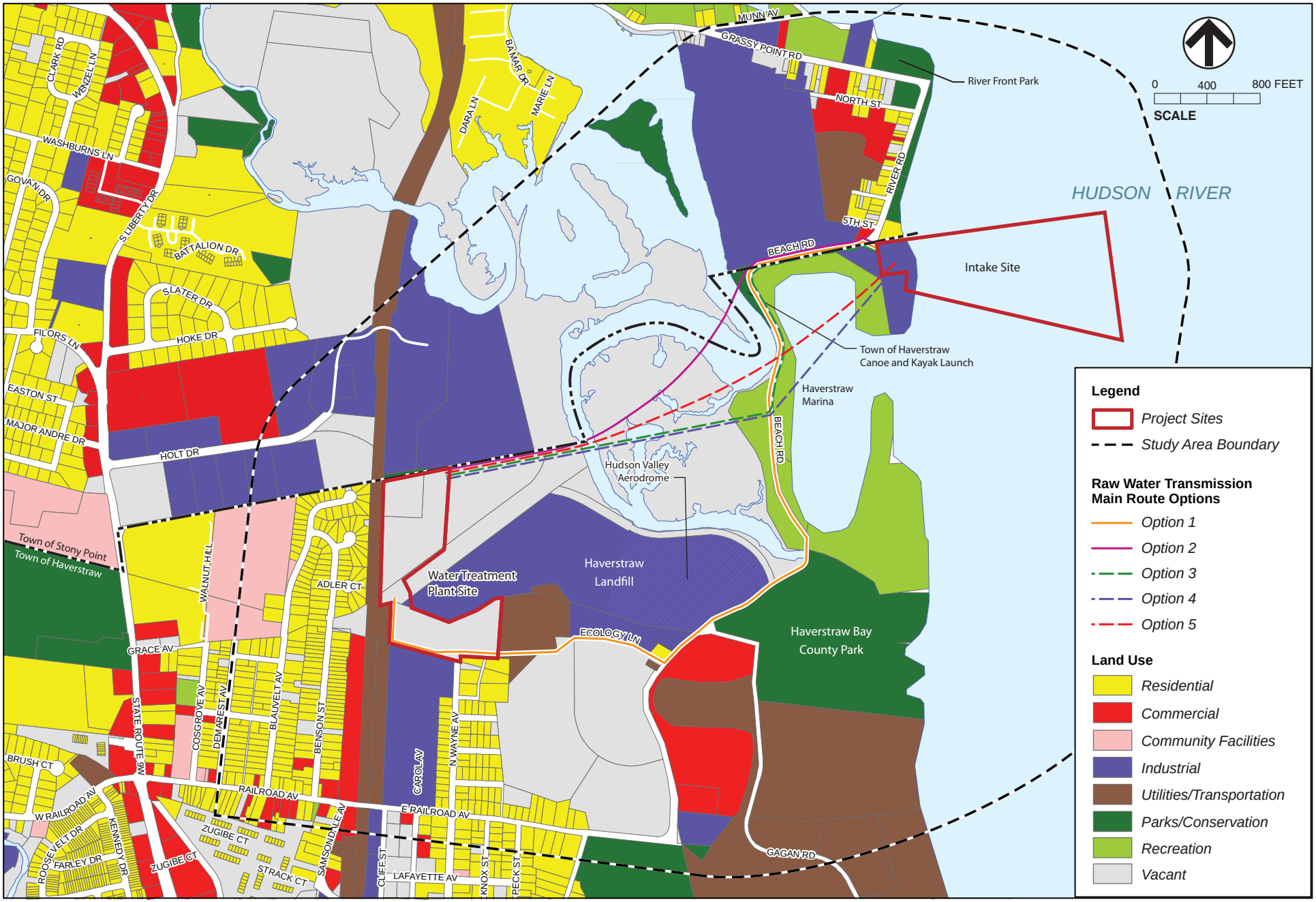

Figure 3-1

Existing Land Use

As shown in Figure 3-1, Raw Water Transmission Main Route Option 2 route would also follow Beach Road, but at the first bend of Beach Road would extend on a diagonal beneath the Minisceongo Creek and associated vacant marshlands, portions of which are located in the Town of Stony Point, to the northern boundary of the landfill and Stony Point Town limits. It would then traverse the landfill property to the Water Treatment Plant Site.

Similar to Option 2, Raw Water Transmission Main Route Option 3 route would follow the public right-of-way along Beach Road, and would then cross beneath the Minisceongo Creek and associated vacant marshlands to the northern boundary of the landfill and Stony Point Town limits. However, under this option, the raw water transmission main would leave the Beach Road right-of-way at a point farther south, and the route would be entirely within the Town of Haverstraw.

Raw Water Transmission Main Route Option 4 route includes the installation of the water main beneath the Haverstraw Marina. It would traverse the marina in a southwesterly direction, cross Beach Road, and continue to the Water Treatment Plant Site along the north boundary of the landfill and Stony Point Town limits.

Similar to Option 4, Raw Water Transmission Main Route Option 5 would also involve installing the water main beneath the Haverstraw Marina. However, this transmission main option would cross the marina at a point farther north, and would be a more direct line to the north boundary of the landfill.

3.2.1.1.3. Water Treatment Plant Site

The Water Treatment Plant Site is a total of 15.38 acres and consists of two parts. The northern part, which comprises 9.03 acres, is located at 555-571 Beach Road along the Town of Haverstraw/Town of Stony Point border and consists of portions of four tax parcels: 20.16-2-1, 20.16-2-2.1, 20.16-2-2.2, and 20.16-2-5. Most of this portion of the Water Treatment Plant Site is located within the boundary of the now closed Haverstraw Landfill. This portion of the Site was once used for landfilling, but the municipal solid waste disposed of there was subsequently removed and the site later backfilled with a variety of materials including construction and demolition (C&D) material and dredge material. Much of the Water Treatment Plant Site is substantially lower in elevation than the surrounding area.

The Proposed Project also incorporates a portion of an adjacent, vacant property owned by DSB Realty Associates, LLC (referred to as the DSB property) to the south of the Water Treatment Plant Site, in the Village of West Haverstraw. This property consists of one tax parcel, 20-16-2-6, and is 6.35 acres in size.

3.2.1.2. STUDY AREA

As indicated above, a 1,000-foot radius around the Project Sites was established as the study area to evaluate the potential land use impacts of the Proposed Project. The discussion below generally describes the uses in the study area near each of the Project Sites. These are also shown in Figure 3-1.

3.2.1.2.1. Intake Site Study Area

The Intake Site is located on a portion of a larger property owned by USG and the area to the west and south is part of the USG complex as well. Immediately to the south of the Intake Site, an above-ground conveyor system passes from the Hudson River to the larger USG complex on the north side of Beach Road. The conveyor has been used to transport material delivered by

ships from the USG pier extending into the Hudson River to USG's main gypsum processing facility along the north side of Beach Road, in the Town of Stony Point. Ships carrying gypsum materials temporarily dock at the pier while materials are unloaded to the conveyor. The USG plant is not currently operating; according to a filing with the United States Securities and Exchange Commission (Form 10-Q, filed by USG on March 31, 2011), the USG plant has been temporarily idled.[1]

Also on the USG property, there is a small boathouse/fishing structure adjacent to the Intake Site, between the USG conveyor and the Intake Site. The Intake Site is also situated immediately adjacent to the Haverstraw Marina, which is to the west and south of the Site, and is bounded by the Hudson River to the east. In addition to the boat storage on the Intake Site, the Haverstraw Marina also maintains additional boat storage to the south of the conveyor.

Lands north of the Intake Site along River Road are in the Town of Stony Point, where there are a mix of utilities, commercial uses, residential uses, and industrial uses, as well as park, public use, and open space lands. One single-family residence is located approximately 100 feet from the Intake Site on the east side of River Road; other residential uses are on the west side of that road. Land uses north of the Intake Site on the west side of River Road consist of the USG facility, a mix of single and multi-family residences, mixed-use commercial, public use, and public parkland. The Town of Stony Point's sewage treatment plant is accessible from North Street, at the north end of River Road.

Public fishing jetties are located along the east side of River Road. Farther north, Riverfront Park is located on the point of land where River Road bends to become Grassy Point Road. This park has public fishing access as well as beach space, a parking area, a picnic pavilion, and a restroom.

3.2.1.2.2. Raw Water Transmission Main Route Study Area

Option 1

As discussed above, the raw water transmission main between the Intake Site and the Water Treatment Plant Site runs primarily along Beach Road and Ecology Lane. The land uses include vacant land, railroad/utilities, and parks/conservation, recreation, industrial, and residential uses. The land north of Beach Road, before it bends south, is primarily industrial land associated with the USG site. The east side of Beach Road, as it bends south to Ecology Lane, is predominantly recreation and park land, and includes the Haverstraw Marina and Haverstraw County Bay Park. The west side of Beach Road, as it bends south to Ecology Lane, is predominantly vacant marshland and the former landfill. There are two recreation uses on the west side of Beach Road, the Town of Haverstraw Canoe and Kayak Launch (located at the bend in Beach Road) and the Haverstraw Aerodrome (located at the former landfill). From the intersection of Beach Road and Ecology Lane to the intersection of Beach Road and Railroad Avenue, the land uses consist largely of industrial, commercial, and vacant lands. The lands within 1,000 feet of Ecology Lane consist of the Haverstraw Landfill, vacant, industrial, and public utility lands to the north, and vacant, industrial, and residential uses to the south. Along Railroad Avenue, the study area for this raw water transmission main route also includes the residential area on the south side of Railroad Avenue.

[1] http://www.gurufocus.com/StockLink.php?type=sec&symbol=USG&date=2011-04-28&report=10-Q.

Option 2

Raw Water Transmission Main Route Option 2 would follow the same east–west section of Beach Road described above. It would then cross beneath the Minisceongo Creek and associated vacant marshlands. The entry point of the raw water transmission main beneath Minisceongo Creek would be in close proximity to the Town of Haverstraw Canoe and Kayak Launch. As the raw water transmission main route traverses the town line, land uses to the north are predominantly industrial, and the land to the south is primarily vacant land associated with the former landfill, as well as the JTRSP.

Option 3

Land uses along Raw Water Transmission Main Route Option 3 route are the same as those identified in Options 1 and 2.

Options 4 and 5

Land uses along Raw Water Transmission Main Route Options 4 and 5 routes are the same as those identified in Options 1 and 2, except that both of these options would cross through the Haverstraw Marina, a private recreational land use.

3.2.1.2.3. Water Treatment Plant Site Study Area

The Water Treatment Plant Site is bounded to the east by the closed Haverstraw Landfill. The Landfill is now capped and no longer in use for solid waste. A portion of the capped landfill is now the Haverstraw Aerodrome and is the home of the Hudson Valley Radio Control Club, a model plane membership club.

To the north and northeast of the Water Treatment Plant Site is a mix of industrial uses and vacant land. The industrial uses include warehouse-like structures associated with a music company, manufacturing-type operations associated with an ink business and a fiberglass company. A self-storage facility is also located northeast of the Site.

To the immediate west of the Site are the CSX freight railroad tracks and right-of-way. Farther west and separated from the Site by the freight tracks, the study area includes part of the downtown area of the Village of West Haverstraw. Land uses including local commercial uses along Railroad Avenue west of the railroad tracks, which consist of typical neighborhood businesses (e.g., automobile repair shops, day care, deli, and restaurant/bar). These retail uses are predominately at street-level, and many buildings with ground-floor retail uses have residential uses above. North of Railroad Avenue is a residential neighborhood (along Benson Street and Blauvelt Avenue, as well as other streets) consisting of a mix of single-family, two-family, and multifamily dwellings. These residences are primarily one to two stories, with attached garages, along residential streets dead ending at the railroad right-of-way. Beyond these residences, farther to the west, is the West Haverstraw Elementary School. The roadway configuration and railroad tracks provide a physical buffer between the industrial uses to the east of the railroad, including the Water Treatment Plant Site, and residential uses to the west, with clear distinctions between residential neighborhoods and industrial areas.

To the south and east of the Water Treatment Plant Site are mixes of vacant and undeveloped lands, and a mix of industrial uses, including a contractor business located off of Beach Road, and warehousing uses along Carol Avenue. The West Haverstraw Business Park is located to the south of the Site along Carol Avenue. The building housing United Water's pilot study for the Proposed Project is currently located on Carol Avenue. The JRSTP, which serves the Village of

West Haverstraw and the Towns of Haverstraw and Stony Point, is located directly east of the DSB property portion of the Water Treatment Plant Site. South of the JRSTP, a small residential neighborhood is located within the land use study area along North Wayne Avenue. This neighborhood is separated from the Water Treatment Plant Site by the JRSTP and the mound of the closed landfill. This residential area is bounded to the east by vacant land.

As noted above in the discussion of Raw Water Transmission Main Route Option 1, the eastern portion of the study area near the Hudson River waterfront is occupied by recreational resources, including the Haverstraw Marina and Haverstraw County Bay Park. A small portion of the Village of West Haverstraw Peck's Pond Park and Recreation Facility is located in the study area at the east end of Railroad Avenue.

3.2.2. ZONING

The Proposed Project is located within the Town of Haverstraw, but the 1,000-foot study area includes three jurisdictions: The Towns of Haverstraw and Stony Point, and the Village of West Haverstraw. The study area's zoning districts are shown in **Figure 3-2**, and are further described below. The zoning districts permit a variety of uses ranging from industrial to residential.

3.2.2.1. PROJECT SITES

The Intake Site is in an area zoned Commercial Recreation (CR), which allows for marinas, camps, parks, playgrounds, and special permit uses such as public utility substations. The Water Treatment Plant Site is in an area zoned Planned Industrial Office (PIO) district. Allowed within this district are industrial uses such as laboratories, manufacturing, offices, and warehousing. The raw water transmission main route is in areas zoned CR, Commercial (C), Waterfront Recreation Development District (WRD), and PIO in the Town of Haverstraw and Planned Light Industrial (PLI) and Residence District (R-3) in the Village of West Haverstraw.

Table 3-1a, below, provides a listing of zoning districts in the study area and typical permitted uses relevant to the Project Sites in the Town of Haverstraw.

3.2.2.2. STUDY AREA

The larger study area for the Project Sites includes zoning districts in the Town of Haverstraw as shown in Table 3-1a, as well as zoning districts within the Village of West Haverstraw and the Town of Stony Point, as shown in **Tables 3-1b and 3-1c**, respectively.

The railroad use and right-of-way immediately to the west of the Water Treatment Plant Site is permitted as a special use in the Town of Haverstraw's PIO zoning district, and the land beyond that to the west is zoned R-3 in the Village of West Haverstraw, which allows single family and two-family residences. The land directly to the north of the Water Treatment Plant Site is zoned Light Industrial (LI) in the Town of Stony Point, which permits manufacturing and fabricating uses, processing of products, warehousing, and freight and truck transfers. To the south of the Site, along the raw water transmission main route, and south to Railroad Avenue, the zoning districts include PLI, R-3, and C in the Village of West Haverstraw, and C and PIO in the Town of Haverstraw. The uses in these districts include manufacturing, wholesale storage, warehousing, single-family and two-family residences, retail stores, public buildings, and bus stops.

East of Ecology Road, the land is zoned PIO, WRD, and CR by the Town of Haverstraw. Uses conforming to these zoning designations include marinas, camps, commercial recreation establishments, and public use and park lands. Public utility substations are allowed as a special

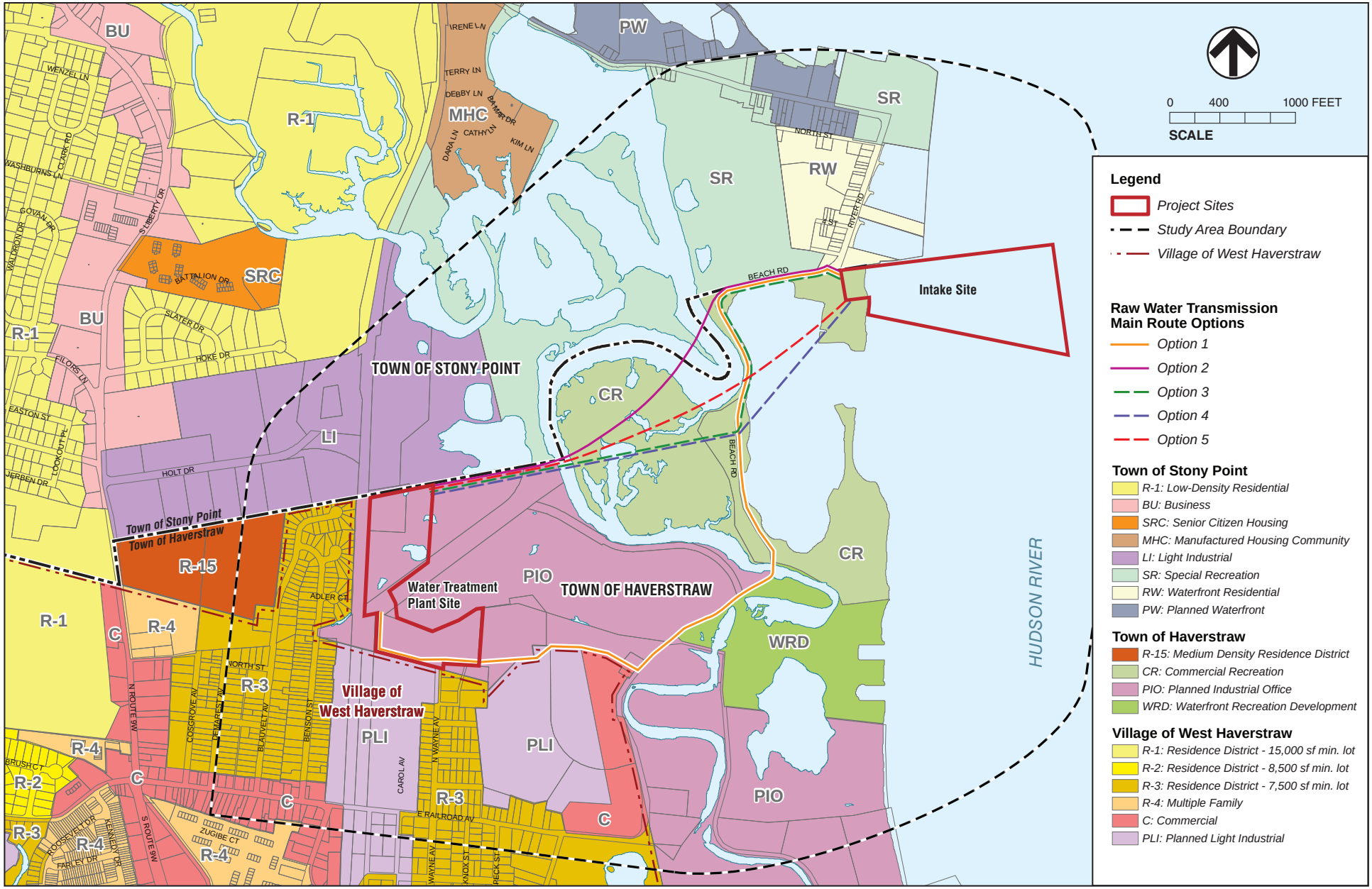

Figure 3-2
Existing Zoning

permit use in the CR and WRD zoning districts. Land immediately west of Beach Road is land zoned C and CR by the Town of Haverstraw. These lands include the Town of Haverstraw's capped and covered landfill, some residences, and commercial establishments. North of Beach Road is land that is zoned as LI by the Town of Stony Point, and north of the Intake Site are the Town of Stony Point's Residential Waterfront (RW), Special Recreation (SR), and Planned Waterfront (PW) zoning districts. The SR district covers the shoreline to the east of River Road, in the Town of Stony Point, and the residences in the RW district abut the industrial uses that are permitted in the LI district.

Table 3-1a
Town of Haverstraw Zoning Districts in the Study Area

Zoning District	Permitted Uses	Bulk Requirements
PIO - Planned Industrial Office	Research and development laboratories; Manufacturing as an adjunct to office or research use; telephone exchanges; industrial uses; warehousing. Special permit uses include, but are not limited to, electrical central-station power plants and railroad and public utility rights-of-way lines.	Minimum lot area of 40,000 sq ft; minimum 100 ft front yard setback; minimum 50 ft side and rear yard setbacks; maximum height of 2.5 stories or 35 ft.
C – Commercial	Commercial recreation establishments; convention and catering facilities; retail stores (see Zoning Law for specifics); bus stops; public buildings; libraries, museums and art galleries; offices.	Minimum lot area of 10,000 sq ft; minimum 25 ft front yard setback; minimum 10 to 25 ft side yard setback; 25 ft rear yard setback maximum height of 2.5 stories or 35 ft.
CR – Commercial Recreation	Marinas; camps; commercial recreational establishments; public parks and playgrounds. Special permit uses include, but are not limited to, public utility substations and telephone exchanges.	Minimum lot area for marinas is 5 acres; for other permitted uses, the minimum lot area is 60,000 sq ft. For all uses: minimum 60 ft front and rear yard setbacks; minimum 40 ft side yard setback; maximum height of 2.5 stories or 35 ft.
R-15 Medium Density Residence	Single-family detached residences; public parks and playgrounds. Special permit uses include, but are not limited to, public utility rights-of-way lines and public utility substations.	Single-family detached residences: minimum lot area of 15,000 sq ft; minimum 30 ft front yard setback; minimum 20 ft side yard setback; minimum 35 ft rear yard setback; maximum height of 2.5 stories or 35 ft. Other permitted uses: minimum lot area of 22,000 sq ft; minimum 60 ft front, side and rear yard setbacks; maximum height of 2.5 stories or 35 ft.
WRD – Waterfront Recreational Development District	Marinas; camps; commercial recreation establishments; public parks and playgrounds. Special permit uses include, but are not limited to, public utility substations and telephone exchanges.	Minimum lot area of 25 acres; minimum 150 ft front yard setback; minimum 50 ft side and rear yard setbacks; maximum height of 8 stories.

Source: Town of Haverstraw Town Code, §167: Zoning

Table 3-1b
Village of West Haverstraw Zoning Districts in the Study Area

Zoning District	Permitted Uses	Bulk Requirements
C – Commercial District	Group J: Commercial (retail, restaurants, banks, personal service establishments, museums, libraries, community centers, art galleries, business and professional offices, service establishments, laundry drop-off, places of worship, public utility structures and rights-of-way, shopping centers, social halls, meeting rooms and convention and catering facilities, indoor commercial recreational facilities, drive-in restaurants, theaters and cinemas, and automotive washing facilities) Group K: 1-family Group K-1: 2-family Group K-2: Mixed residential/commercial	Group J: Minimum lot area of 10,000 sq ft; maximum building coverage of 50%; maximum impervious lot coverage of 70%; minimum 30 ft front yard setback; minimum 8 ft side yard setback (or 20 ft total); minimum height of 2.5 stories or 35 ft. Group K: Minimum lot area of 5,000 sq ft; maximum building coverage of 35%; maximum impervious lot coverage of 40%; minimum 20 ft front yard setback; minimum 12 ft side yard setback (or 25 ft total); minimum height of 2.5 stories or 35 ft. Group K-1: Minimum lot area of 5,000 sq ft; maximum building coverage of 35%; maximum impervious lot coverage of 40%; minimum 20 ft front yard setback; minimum 15 ft side yard setback (or 30 ft total); minimum height of 2.5 stories or 35 ft. Group K-2: Minimum lot area of 5,000 sq ft; maximum building coverage of 35%; maximum impervious lot coverage of 40%; minimum 20 ft front yard setback; minimum 12 ft side yard setback (or 25 ft total); minimum height of 2.5 stories or 35 ft.
R-3 – Residence District	Single-family, detached residences; two-family residences.	For Single-Family Residences: Minimum lot area of 8,500 sq ft; maximum building coverage of 25%; maximum impervious lot coverage of 35%; minimum 20 ft front yard setback; minimum 12 ft side yard setback (or 25 ft total); minimum 25 ft rear yard setback; maximum height of 2.5 stories or 35 ft. For Two-Family Residences: Minimum lot area of 15,000 sq ft; maximum building coverage of 25%; maximum impervious lot coverage of 35%; minimum 20 ft front yard setback; minimum 15 ft side yard setback (or 30 ft total); minimum height of 2.5 stories or 35 ft.
PLI – Planned Light Industrial District	Wholesale storage and warehousing; industrial uses which may include manufacturing, fabricating, processing, etc. of products.	Minimum lot area of 25,000 sq ft; maximum building coverage of 50%; maximum impervious lot coverage of 70%; minimum 50 ft front yard setback; minimum 35 ft side yard setback; minimum 50 ft rear yard setback; maximum height of 2.5 stories or 35 ft.

Source: Zoning Code, Village of West Haverstraw

Table 3-1c
Town of Stony Point Zoning Districts in the Study Area

Zoning District	Permitted Uses	Bulk Requirements
LI – Light Industrial	Group I: Office buildings; industrial uses which may include manufacturing, fabricating, processing, etc. of product; wholesaling, warehousing and distribution; freight and truck transfer terminals. Group F: indoor commercial recreation.	Group I: Minimum lot area of 40,000 sq ft; minimum 50 ft side yard setback (100 ft total); maximum development coverage of 80%; maximum height of 45 ft. Group F: Minimum lot area of 60,000 sq ft; minimum 40 ft side yard setback (80 ft total); maximum development coverage of 75%; maximum height of 25 ft.
PW – Planned Waterfront	Public recreational facilities requiring waterfront access; waterfront parks, trails and scenic outlooks. Group K: maritime centers and similar facilities; municipal community centers; existing marinas and related uses; existing oil and fuel storage and distribution facilities. Groups K and h.5: wireless communication facilities.	Group K: Minimum lot area of one acre; minimum 50 ft side yard setback (100 ft total); maximum development coverage of 50%; maximum height 45 ft. Group h.5: Minimum lot area of 5,000 sq ft; minimum 20 ft side yard setback (20 ft total); maximum development coverage of 50%; maximum height of 15 ft.
RW – Residential Waterfront	Waterfront trails, parks, scenic overlooks and playgrounds. Group h.3: Single-Family detached residences. Group h.4: Two-Family detached residences	Group h.3: Minimum lot area of 5,000 sq ft; minimum 10 ft side yard setback (20 ft total); maximum development coverage of 60%; maximum height of 35 ft. Group h.4: Minimum lot area of 7,500 sq ft; minimum 10 ft side yard setback (20 ft total); maximum development coverage of 60%; maximum height of 35 ft.
SR – Special Recreation	Public parks; waterfront trails and scenic outlooks; wetland conservation areas.	N/A

Source: Town of Stony Point, Town Code

3.2.3. OTHER PROGRAMS

A number of documents guide development within the Town of Haverstraw and the Town of Stony Point, including the towns' Comprehensive Plans as well as county and state planning documents. A summary of those documents and the relevant policies and recommendations are discussed below.

3.2.3.1. TOWNS

3.2.3.1.1. Town Master Plan Report Town of Haverstraw, New York (1990)

The Town of Haverstraw drafted a Master Plan Report in 1990 (Haverstraw Master Plan Report).[1] The Haverstraw Master Plan Report outlines the demographics of the Town of Haverstraw in 1990, as well as the land use and zoning conditions at that time. The Haverstraw Master Plan Report also outlines Master Plan Development Policies, with eight specific planning goals, including:

[1] Manuel S. Emanuel Associates, Inc. 1990.

- Establish adequate and appropriate land use planning policies and development standards to ensure a balanced and orderly pattern of future growth and economic stability compatible with the town's ability to provide adequate community facilities and services;
- Encourage adequate quantity and variety of sound housing to serve diverse income levels and age groups;
- Strengthen the local economy by enhancing the viability of existing economic activity centers;
- Broaden the town's tax base in order to stabilize and limit residential property tax burden;
- Provide a safe, adequate, and efficient network of roads to serve the various types of existing and proposed land use within the town;
- Preserve the historic and natural features of the town—its parks, waterways, and historic sites – which provide a pleasant setting with attractive community character;
- Encourage high standards of environmental quality in public and private development; and
- Provide a pleasant and efficient community in which people can live, work, and pursue leisure activities.

With these goals in mind, the Haverstraw Master Plan Report outlines a land use plan for the town, stating that "the Land Use Plan is not intended to be static, but rather, is designed to be flexible and subject to revision as town and planning policies are modified."[1] Some of the major land use policies include:

- The Hudson River is an important natural resource both for the town and the region as a whole. Land use patterns that reduce negative impacts on the River should be encouraged;
- Land use patterns that respond to the density of development of adjoining communities while still serving the needs of the citizens of Haverstraw should be encouraged;
- The impacts of development should be minimized through landscaping, paths, green buffer zones, and preservation of forest land;
- Subdivision and/or Site Development Plan Review is required for all land development in order to control such items as circulation, parking, landscaping, drainage, energy conservation measures, and to promote environmental quality;
- Landscaping and adequate temporary erosion control should be required during construction through site plan review under zoning and subdivision regulations; and
- All new land developments and renovations should be required to provide adequate fire protection, including, but not limited to, hydrants and standpipes.

The Haverstraw Master Plan Report also sets forth an open space and recreation plan. It is recommended that the town provide a mix of active and passive recreation uses, as well as protect environmentally sensitive lands. The town does not currently have an open space plan or established open space policies.[2]

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[1] Haverstraw Master Plan Report, page 28.

[2] Town Building Inspector, telephone conversation, April 28, 2008.

3.2.3.1.2. Town of Stony Point Master Plan (1995) and Recommended Comprehensive Plan Amendments (2008)

The Town of Stony Point is located within the 1,000-foot land use study area for the Intake Site and the raw water transmission main route, and is therefore considered in this analysis. The Town of Stony Point Master Plan (Stony Point Master Plan) was approved by the Stony Point Town Board on April 9, 1996. The Stony Point Master Plan outlines the town's existing land use, zoning, and physical conditions as of 1995, and then puts forth a set of development policies for the town. In September 2008, the Stony Point Comprehensive Plan Advisory Committee issued a "Summary of Recommended Comprehensive Plan Amendments"; however, none of the recommended amendments relates to water quality or water supply issues.

The Stony Point Master Plan states that 65 percent of the town's land lies within the boundaries of the Palisades Interstate Park (PIP) system. These PIP lands comprise primarily forested lands with some recreational opportunities. The town also has a series of state, county, and town parks in addition to the PIP lands. Outside of these parklands, the town comprises a mix of residential uses (primarily low-density); commercial uses, providing retail and service needs; office space, focused along Route 9W; and industrial uses. In addition, the town comprises lands occupied by community and government uses, utilities, and railroad lines. The Stony Point Master Plan addresses private marinas, stating that these marinas, "while commercial facilities, also represent a very important water-dependent use for recreational boaters" (Stony Point Master Plan, p. II-66). At the time of adoption of the Stony Point Master Plan, a total of less than two acres of noncontiguous land area was categorized as vacant. In addition, at that time, Spring Valley Water Company (now United Water New York Inc.) owned 250± acres of land within Stony Point.

The Stony Point Master Plan outlines a series of development policies, including:

- Keep development within the present capacity of infrastructure systems wherever possible;
- Protect and promote the unique physical and environmental features of the town: the forested mountain views, the streams and their banks, and the fresh and salt water wetlands;
- Protect adjoining and abutting incompatible land uses from one another with physical separations and logical edges to minimize the effects of noise, traffic, odors, lights, and other undesirable factors; and
- Provide roadway and utility connections between residential areas during the planning process wherever possible.

As a result of these and other development policies, the Stony Point Master Plan outlines a Development Plan for the town. The town's Development Plan makes several assumptions, including that "at some undetermined time in the future, the Ambrey Pond Reservoir project of United Water New York will happen…The need for the project was established and the start time was tied to certain water usage levels."[1] The Stony Point Master Plan notes other determining factors for the establishment of the reservoir, including changing water quality standards established by the federal government. These changing standards may make the reservoir "less economically sound" than before.

With this and other assumptions made, the town set forth a plan with development recommendations. Among other suggestions associated with residential and commercial land use, it was recommended that the town review current practices regarding soil erosion control

[1] Town of Stony Point Master Plan, page IV-2.

during construction to reduce siltation in watercourses; protect stream corridors from development by identifying areas to be protected; and apply techniques to avoid development and the disturbance of natural stream corridors. The Stony Point Master Plan suggests that the implementation of the Development Plan should be carried out through appropriate amendments to the zoning text and map.

3.2.3.1.3. Local Waterfront Revitalization Plans (LWRP)

There is no adopted LWRP for the Town of Haverstraw. The following towns and villages within five miles of the Proposed Project have LWRPs, which are addressed in Chapter 17, "Coastal Zone Consistency:"

- The Town of Stony Point;
- The Village of Croton-on-Hudson;
- The Village of Haverstraw;
- The City of Peekskill; and
- The Village of Ossining.

(As described in Chapter 17, there are no reasonably foreseeable effects of the Proposed Project on the LWRPs of these other communities.)

3.2.3.2. ROCKLAND COUNTY

In 2001, Rockland County drafted a comprehensive plan document entitled "Rockland County River to Ridge: A Plan for the 21st Century." While this plan was not formally adopted by the Rockland County legislature, it is published on the Rockland County website[1], and has been used as a guide in land use actions, decision-making and in conducting County General Municipal Law reviews. The River to Ridge document discussed the topic of water supply, recognized that the use of small water systems is not necessarily the most efficient or affordable means of supplying water to the county, and recommended restructuring water delivery.

More recently, the county completed a new Comprehensive Plan, entitled "Rockland Tomorrow." This new Rockland County Comprehensive Plan was adopted by the Rockland County Legislature on March 1, 2011. [2]

The primary objectives of the new county Comprehensive Plan are to:

- Provide guidelines and offer general recommendations on future county land uses and possible alternative strategies;
- Recommend general policies that could be undertaken at both the County and municipal levels to implement these strategies;
- Address those matters that are under direct County jurisdiction; and
- Identify issues of land use and zoning conflicts between and among municipalities that should be resolved to allow the various municipal zoning regulations to work more effectively.

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[1] http://co.rockland.ny.us/planning/landuse/complan.htm.

[2] *Rockland Tomorrow: Rockland County Comprehensive Plan.* Rockland County, adopted March 1, 2011. The 2011 Comprehensive Plan is provided in Appendix 20.1 to this DEIS.

The Comprehensive Plan provides an overview of existing conditions and anticipated future conditions in a range of different areas, including land use and zoning and the balance between development and conservation of open space, regional setting, demographics and housing, transportation, natural and environmental resources, parks and open space, historic and cultural resources, economic development, and infrastructure.

The Comprehensive Plan predicts a growth in residential housing stock over the next 15 years, and an increase in the county's population over the next 30 years. It anticipates that between 2005 and 2020, 8,320 housing units will be added in Rockland County through new construction and conversions, and that between 2005 and 2035 the county's population will increase by 49,000 persons, or 17 percent. The County has also prepared an analysis of its theoretical build-out potential—the potential saturation point that assumes all of the undeveloped residentially zoned land in the county is actually developed. This build-out potential is estimated at 17,948 additional housing units, based on current zoning and constraints. The Comprehensive Plan notes that, "Because the projected growth in population for Rockland has potentially far-reaching consequences, it will influence a wide range of issues, and require specific courses of action, which are discussed in separate chapters of this Plan. . ." [1]

For each area analyzed, the Comprehensive Plan provides recommendations to guide the anticipated future growth in the county. Key recommendations made by the Comprehensive Plan include the following:

- Conservation, Centers, Corridors, and Clusters: Guide new development—including commercial, office, mixed uses, and housing for young adults and seniors—into existing town and village centers and in areas currently zoned for commercial and industrial uses. Land use patterns should be guided by the goal of conservation outside the commercial centers and corridors, while reinforcing existing commercial centers and preserving and redeveloping existing commercial corridors and office and industrial clusters.
- Regional Setting: Foster cooperation among regional agencies regarding transportation and transit access; preservation of scenic, natural, historic, cultural, and recreational resources; and actively promoting the Hudson River as a vital regional resource.
- Demographics, Aging, and Housing: Expand housing options for young singles and young families and create and maintain job opportunities for the young adult populations. Continue efforts to help the senior population remain vital, including supporting affordable housing for seniors and fostering strategies to encourage aging in place.
- Land Use and Zoning: In the course of the county's General Municipal Law (GML) reviews, encourage investment in the county's existing centers, reuse of brownfields, and adaptive reuse of older buildings; preserving existing commercially and industrially zoned areas to support the county's economic base and foster job growth; conserve environmentally sensitive areas such as the Hudson River; promote cluster subdivision design; support zoning that encourages affordable housing.
- Transportation: Work with state, regional and federal officials to secure necessary financing for the replacement of the Tappan Zee Bridge; expand and enhance the local and regional public transit network; support roadway improvements that alleviate congestion and enhance safety; improve pedestrian and bicycle circulation.

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[1] *Rockland Tomorrow: Rockland County Comprehensive Plan.* Rockland County, adopted March 1, 2011. Chapter 3.0, "Demographics," p. 32.

- Natural and Environmental Resources: Protect and enhance significant environmental features; continue to protect the Hudson River as a critical regional resource, ensuring that development along its shoreline does not impair the river's environmental and scenic quality and that physical and visual access to the river is maintained; work to establish Haverstraw Bay as an important estuary learning area; identify and develop action plans for woodland areas that are important to the health of the county's major rivers and streams; implement a water quality notification program for the Hudson River so the public is fully informed of all sewage discharge events. Consider current wellhead protection regulations to determine if they need strengthening and create and enforce buffers around reservoirs and watershed lands that drain into drinking water resources.
- Parks and Open Space: Continue to acquire additional open space and improve existing open spaces. Ensure that development along the Hudson River shoreline does not impede waterfront access or views and facilitates public access.
- Historic and Cultural Resources; Coordinate and publicize the county's rich variety of historic and cultural resources.
- Economic Development: Strive to strengthen the economic base to preserve the county as a desirable place to live, work, and raise a family. Prepare a comprehensive economic development strategy that coordinates activities among municipalities.
- Infrastructure: The Comprehensive Plan notes that predicted growth in Rockland County will place additional pressures on the county's infrastructure and it notes that United Water is currently proposing a new long-term water supply source to address that need [i.e., the Proposed Project that is subject to this SEQRA analysis]. The Plan recommends that the county should take a leadership role in maintaining and, where necessary, improving its infrastructure system to preserve the quality of life and commerce in Rockland County. This includes investigating potential water sources in the county, as recommended by the final study by the United States Geological Survey (USGS); developing a plan to address potential water supply shortfalls, including possible changes to current codes to address emergency conditions and a study of their potential impact on development and county's economic base; promoting water conservation through county regulations and public education; employing green infrastructure practices; working with towns and villages to identify system or capacity constraints in the sewer infrastructure that could impact development and impair economic development initiatives.

3.2.3.3. NEW YORK STATE

3.2.3.3.1. Delaware–Lower Hudson Region Water Resource Management Strategy, January 1989

The Delaware–Lower Hudson Region Water Resource Management Strategy was prepared by the New York State Department of Environmental Conservation (NYSDEC) and New York State Department of Health (NYSDOH) and approved by the Water Resources Planning Council in 1989 as one of 13 regional planning studies undertaken for New York State. These studies were undertaken in accordance with the Water Resources Management Strategy Act of 1984, which amended New York State's Environmental Conservation Law by directing that NYSDEC and NYSDOH prepare a statewide strategy for water supply management and by establishing a Water Resources Planning Council within NYSDEC. The purpose of the study was to identify and plan for the future water supply needs of the Delaware–Lower Hudson Region, which

encompassed New York City and Delaware, Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, and Westchester Counties in New York State.

The 1989 study provided a review of existing conditions at that time related to water supply and demand, water quality, water system management (including metering, conservation, and potential region-wide issues), and the water supply needs of the New York City system, which in itself was considered to be a regional system because it serves not only New York City but also a number of other municipalities in Westchester, Putnam, Ulster, and Orange Counties. The study identified a future water supply deficit for the New York City water system, with a projected demand for water for the year 2000 of up to 1,824 million gallons per day (mgd), which would result in a deficit of 624 mgd. To address this critical future need, the study recommended immediate measures, including introduction of water meters and water-saving devices particularly in New York City, as well as planning for additional water supply for the New York City system. Future long-term water supply projects identified to meet the New York City's future need for water included possible development of the Hudson River as a source of 200 to 300 mgd, which could be withdrawn at the existing Chelsea pumping station in Dutchess County or at another location. The 1989 study also made a number of specific recommendations related to a potential use of the Hudson River as a water source for New York City, including a need to conduct studies of the potential impacts on water quality and river salinity of such a large withdrawal.

In addition to the recommendations related to New York City, the 1989 study recommended implementation of water conservation programs by all communities in the regions, introduction of water metering, measures to protect groundwater quality, and use of interconnections between water systems to address emergency needs. It noted that in addition to the possible use by New York City of Hudson River water, other communities may also wish to use this source to meet future needs.

3.2.3.3.2. Coastal Zone Policies

The federal Coastal Zone Management Act (CZMA) of 1972 was established to encourage coastal states to manage development within the states' designated coastal areas to reduce conflicts between coastal development and protection of resources within the coastal zone. Requirements for federal approval of coastal zone management programs and grant application procedures for development of the state programs is included in 15 CFR Part 923, Coastal Zone Management Program Development and Approval Regulations, National Oceanic and Atmospheric Administration (NOAA). The Coastal Zone Management Act requires that federal permitting activities within a state's coastal zone be consistent with that state's coastal zone management program. The New York State Department of State (NYSDOS) administers New York's coastal zone management program.

3.2.3.3.3. New York State Department of Environmental Conservation (NYSDEC) Hudson River Estuary Program

The Hudson River Estuary Program was established as a result of the passage of the Hudson River Estuary Management Act (New York State Environmental Conservation Law (ECL) 11-0306). The Estuary Action Plan (created by the Estuary Program in 1996 and updated in 1998, 2001, 2005, and 2007) includes goals and targets that are intended to protect and conserve the natural resources and ecosystem health of the Hudson River estuary and to promote public use and enjoyment of the Hudson River. As part of the program, NYSDEC has undertaken an analysis of the potential for establishing swimming beaches at various points along the Hudson

River shoreline, including at Riverfront Park, located approximately 1,000 feet north of the proposed Intake Site in Stony Point. The current plan is the Hudson River Estuary Action Agenda 2010–2014, which is discussed below.

3.2.3.3.4. Hudson River Estuary Action Agenda

The Hudson River Estuary Action Agenda is the implementation tool of the NYSDEC Hudson River Estuary Program, and involves a partnership with federal and state agencies, local municipalities, non-profits, academic and scientific institutions, businesses, trade organizations, landowners and dedicated volunteers. The goals of the plan are stated as follows:

1. *Restore the signature fisheries of the estuary to their full potential, ensuring future generations the opportunity to make a seasonal living from the Hudson's bounty and to fish for recreation and consume their catch without concern for their health.*
2. *Conserve, protect, and enhance river and shoreline habitats to assure that life cycles of key species are supported for human enjoyment and to sustain a healthy ecosystem.*
3. *Conserve for future generations the rich diversity of plants, animals and habitats that are key to the vitality, natural beauty and environmental quality of the Hudson Valley.*
4. *Protect and restore the streams, their corridors, and the watersheds that replenish the estuary and nourish its web of life, and sustain water resources that are critical to the health and well-being of Hudson Valley residents and the ecosystem.*
5. *Conserve key elements of the working pastoral landscapes and world famous river scenery that define the character of the Hudson River Valley, and provide new and enhanced vistas where residents and visitors can enjoy Hudson River views.*
6. *Address the causes of climate change in the Hudson Valley and prepare for projected impacts to safeguard our health and safety and to protect the natural resources and local economies that sustain our communities.*
7. *Develop, maintain and improve a regional system of access points for fishing, boating, swimming, hiking, education, river watching and wildlife-related recreation, and build connections that allow residents and visitors to have rich and diverse river experiences.*
8. *Promote public understanding of the Hudson River, including the life it supports, its role in the global ecosystem, and the challenges the river faces and how they can be met.*
9. *Revitalize all the waterfronts of the valley so that the Hudson is once again the "front door" for river communities, where scenery and natural habitats combine with economic and cultural opportunity, public access, working ports and harbors and lively adjacent downtowns, to sustain vital human population centers and a healthy environment.*
10. *Ensure that Hudson River water quality supports appropriate human benefits, including drinking water, swimming, fishing, navigation, and ecosystem protection.*
11. *Reduce contaminants entering the Hudson River, and remove or remediate river sediments contaminated by long-term pollutants so that food webs of the river are supported, people can safely eat Hudson River fish and harbors are free of the contaminants that constrain their operation.*
12. *Track our progress and celebrate our successes!*

There are several publicly accessible Hudson River waterfront areas within the study area that address the goals of the Hudson River Estuary Action Agenda, including the Riverfront Park and fishing jetties north of the Intake Site, and the Haverstraw Marina and Haverstraw Bay County Park south of the Intake Site. As discussed above, the Riverfront Park has a swimming beach. The Haverstraw Bay County Park offers fishing piers, viewing points, picnic areas, a boat launch, and is a stop on the Hudson River Water Trail. The Town of Haverstraw Canoe and Kayak Launch, located west of the Intake Site, provides indirect access to the Hudson River through the Minisceongo Creek.

3.2.3.3.5. Hudson River Valley National Heritage Area

The Hudson River Valley National Heritage Area was designated by the United States Congress in 1996 as a heritage area. According to the approved Management Plan for the area, "The mission of the Hudson River Valley National Heritage Area is to recognize, preserve, protect and interpret the nationally significant cultural and natural resources of the Hudson River Valley for the benefit of the nation."[1] The Hudson River Valley National Heritage Area has established a network of designated Heritage Sites. The Management Plan for the Heritage Area proposes the implementation of "Heritage Area Trails." A Heritage Area Trail would connect a number of nationally significant Heritage Sites that relate to one another through one or more of the primary themes, and would not usually be a foot or bicycle path in any defined area. The Trails are intended to forge regional partnerships, protect Heritage Sites, improve their communities and promote heritage tourism. The closest Heritage Site to the proposed Water Treatment Plant Site is the Stony Point Battlefield, which is approximately 2.5 miles from the Site.

3.2.3.3.6. Hudson River Valley Greenway

The Hudson River Valley Greenway, established in the New York State Hudson River Valley Greenway Act of 1991, is a state-sponsored program "to facilitate the development of a regional strategy for preserving scenic, natural, historic, cultural and recreational resources while encouraging compatible economic development and maintaining the tradition of home rule for land use decision-making."[2] The Greenway Act created a process for voluntary regional cooperation among 264 communities within 13 counties that border the Hudson River. Communities that choose to participate in the HRVG must pass a resolution indicating their interest, and then are designated as "Greenway Communities." At this time, the Town of Haverstraw is a designated Greenway Community but the Village of West Haverstraw is not. The Town of Stony Point is also a designated Greenway Community. Greenway Communities are eligible for free technical assistance and funding for community planning projects that address the following Greenway criteria:

- *Natural and Cultural Resource Protection:* Protect, preserve and enhance natural and cultural resources including natural communities, open spaces, historic places, scenic areas and scenic roads.

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[1] http://www.hudsongreenway.state.ny.us/Libraries/PDF_s/NHAManagementPlan.sflb.ashx, accessed May 17, 2011.

[2] http://www.hudsongreenway.state.ny.us/AbouttheGreenway/OverviewandMission.aspx; accessed May 17, 2011.

- *Regional Planning:* Encourage communities to work together to develop mutually beneficial regional strategies for natural and cultural resource protection, economic development, public access and heritage and environmental education.
- *Economic Development*: Encourage economic development that is compatible with the preservation and enhancement of natural and cultural resources with emphasis on agriculture, tourism and the revitalization of existing community centers and waterfronts.
- *Public Access:* Promote increased public access to the Hudson River through the creation of riverside parks and the development of the Hudson River Valley Greenway Trail System with linkages to the natural and cultural resources of the Valley.
- *Heritage and Environmental Education:* Promote awareness among residents and visitors about the Valley's natural, cultural, scenic and historic resources.

Rockland County secured funding from the Greenway Council to develop a county-wide regional compact plan. According to "Rockland Tomorrow," the Rockland County Comprehensive Plan, the Comprehensive Plan serves as Rockland's greenway compact plan. As described in the Comprehensive Plan, approximately 35 miles of Greenway trails have been established in the county, and a continuous trail has been designated from Haverstraw Beach in the Village of Haverstraw (south of the Project Sites) to Tallman Mountain State Park in Orangetown. In addition, several access points to the Greenway Water Trail have been designated along Rockland's Hudson River shoreline. The water trail access point closest to the Project Sites is in Haverstraw Bay County Park in the Town of Haverstraw, which is located near the Intake Site.

3.2.3.3.7. New York State Open Space Plan

The New York State Open Space Plan (the Plan) represents current open space conservation actions, tools, and programs administered by NYSDEC and the New York State Office of Parks, Recreation and Historic Preservation (OPRHP), NYSDOS, the Adirondack Park Agency (APA), the New York State Department of Agriculture & Markets (NYSDAM) and the New York State Department of Transportation (NYSDOT). The Plan identified the following goals:

1. *To protect habitat for the diversity of plant and animal species in order to ensure the protection of healthy, viable and sustainable ecosystems.*
2. *To protect our state's water quality, including surface and underground drinking water supplies, lakes, streams and coastal and estuarine waters needed to sustain human life and aquatic ecosystems.*
3. *To combat global climate change by encouraging more compact community design patterns.*
4. *To combat global climate change by sustainable stewardship of our state's forests for carbon sequestration and air quality enhancement.*
5. *To combat climate change by protecting our state's coastlines, and broad riparian corridors and wetlands.*
6. *To combat global climate change by adding to the tree canopy in our urban centers and urban communities in order to moderate temperature fluctuations, thereby lowering our energy consumption.*
7. *To maintain an interconnected network of protected lands and waters allowing wildlife to be able to shift range with climate change to follow natural migration patterns.*

8. *To improve quality of life and overall health in our state's communities, especially those with limited current access to open space.*
9. *To maintain critical natural resource industries such as farming, forest products, commercial fishing and tourism.*
10. *To protect habitat to sustain the traditional pastimes of hunting, fishing, trapping and wildlife viewing.*
11. *To provide accessible, quality outdoor recreation and open space to all New Yorkers.*
12. *To provide places for education and research relating to ecological, environmental and cultural resources.*
13. *To protect and enhance scenic, historic and cultural resources considered to be valued parts of the common heritage of our state's citizens.*

Within the Lower Hudson Valley Region, the Plan identifies a number of priority preservation areas, including the New York Highlands, and specifically, Torne Valley and the Ramapo Mountains in Rockland County. Although these are within the region of the Project Sites, the Project Sites themselves are not within the priority conservation areas.

3.2.3.3.8. New York State Energy Plan

Executive Order No. 2, issued by Governor David A. Paterson in March 2008, directed the creation of a State Energy Plan. The purpose of the 2009 New York State Energy Plan (Energy Plan) is to establish a vision for a clean energy economy that would stimulate investment, create jobs, and meet the energy needs of New York residents and businesses. The Energy Plan included the following five policy objectives:

1. *Assure that New York has reliable energy and transportation systems;*
2. *Support energy and transportation systems that enable the state to significantly reduce greenhouse gas emissions, both to do the state's part in responding to the dangers posed by climate change and to position the state to compete in a national and global carbon-constrained economy;*
3. *Address affordability concerns of residents and businesses caused by rising energy bills, and improve the state's economic competitiveness;*
4. *Reduce health and environmental risks associated with the production and use of energy across all sectors; and*
5. *Improve the state's energy independence and fuel diversity by developing in-state energy supply resources.*

The Energy Plan also included following five strategies to accomplish these objections:

1. *Produce, deliver, and use energy more efficiently;*
2. *Support development of instate energy supplies;*
3. *Invest in energy and transportation infrastructure;*
4. *Stimulate innovation in a clean energy economy; and*
5. *Engage others in achieving the state's policy objectives.*

3.2.3.3.9. Governor Paterson's "45 X 15" Initiative

Governor Paterson's 45 X 15 Initiative sets forth the goal that by 2015, New York will meet 45 percent of its electricity needs through improved energy efficiency and clean renewable energy. In conjunction with this initiative, he has proposed increasing the Renewable Portfolio Standard to 30 percent, and set a goal of decreasing electricity usage by 15 percent. The purpose of these efforts is to help rebuild the New York economy, create jobs, meet the state's energy needs, fight global warming, and protect the environment.

3.2.3.3.10. Final Report of the New York Oceans and Great Lakes Ecosystem Conservation Council, Our Waters, our Communities, Our Future: Taking Bold Action Now to Achieve Long-term Sustainability of New York's Ocean and Great Lakes

The New York Ocean and Great Lakes Ecosystem Conservation Council was created by the New York State Legislature to improve coordination among nine state agencies and to lay a foundation to implement an Ecosystem-based Management (EBM) approach for the long-term sustainability of these resources. The report included the following priorities to achieve and maintain a healthy ecosystem:

1. *Water and Land: Managing Natural Resources, Human Activities, and Environmental Quality*
2. *Economy: Achieving Economic Vitality and Community Well-Being within the Context of Healthy Ecosystems*
3. *Climate Change: Adapting to Dynamic Coastal Ecosystems*
4. *Energy: Developing Ecosystem Approaches to Meet Critical Energy Needs*
5. *Building Capacity: Providing the Tools to Put EBM Principles into Action*

The report builds off the success of the Hudson River Estuary Program. Included in the priority of preparing local communities for ecosystem changes is the recommendation that desalination be considered for municipal water supplies.

3.2.3.3.11. New York State "Climate Smart Community" Pledge

The Climate Smart Communities Pledge is a model pledge program that can be adopted at the local level to address climate change. The model pledge includes the following elements:

1. *Pledge to Combat Climate Change by Becoming a Climate Smart Community*
2. *Set Goals, Inventory Emissions, Move to Action*
3. *Decrease Energy Demand for Local Government Operations*
4. *Encourage Renewable Energy for Local Government Operations*
5. *Realize Benefits of Recycling and Other Climate Smart Solid Waste Management Practices*
6. *Promote Climate Protection Through Community Land Use Tools*
7. *Plan for Adaptation to Unavoidable Climate Change*
8. *Support a Green Innovation Economy*
9. *Inform and Inspire the Public*

10. Commit to an Evolving Process

According to the NYSDEC List of Smart Communities, the Village of Montebello and the Town of Orangetown in Rockland County have adopted this pledge.[1] Both of these communities are serviced by United Water.

3.2.3.3.12. New York State Smart Growth Public Infrastructure Policy Act

In 2010, New York State enacted the State Smart Growth Public Infrastructure Policy Act. The Act's purpose is to:

> *to augment the state's environmental policy by declaring a fiscally prudent state policy of maximizing the social, economic, and environmental benefits from public infrastructure development through minimizing unnecessary costs of sprawl development, including environmental degradation, disinvestment in urban and suburban communities, and loss of open space induced by sprawl facilitated by the funding or development of new or expanded transportation, sewer and waste water treatment, water, education, housing and other publicly supported infrastructure inconsistent with smart growth public infrastructure criteria.*[2]

Under this act, no state infrastructure agency—which has been defined to include the NYSDEC—shall approve, undertake, support, or finance a public infrastructure project, unless, to the extent practicable, the public infrastructure project is consistent with 10 smart growth infrastructure criteria that are spelled out in §6-0105 of the Act, and listed below:

1 *To advance projects for the use, maintenance or improvement of existing infrastructure;*

2. *To advance projects located in municipal centers;*

3. *To advance projects in developed areas or areas designated for concentrated infill development in a municipally-approved comprehensive land use plan, local waterfront revitalization plan and/or brownfield opportunity area plan;*

4. *To protect, preserve and enhance the state's resources, including agricultural land, forests, surface and groundwater, air quality, recreation and open space, scenic areas, and significant historic and archeological resources;*

5. *To foster mixed land uses and compact development, downtown revitalization, brownfield redevelopment, the enhancement of beauty in public spaces, the diversity and affordability of housing in proximity to places of employment, recreation and commercial development and the integration of all income and age groups;*

6. *To provide mobility through transportation choices including improved public transportation and reduced automobile dependency;*

7. *To coordinate between state and local government and inter-municipal and regional planning;*

8. *To participate in community-based planning and collaboration;*

9. *To ensure predictability in building and land use codes; and*

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1 http://www.dec.ny.gov/energy/56876.html, accessed May 17, 2011.

2 New York State Environmental Conservation Law §6-0105.

10. *To promote sustainability by strengthening existing and creating new communities which reduce greenhouse gas emissions and do not compromise the needs of future generations, by among other means encouraging broad based public involvement in developing and implementing a community plan and ensuring the governance structure is adequate to sustain its implementation.*

3.2.3.4. FEDERAL

3.2.3.4.1. American Heritage Rivers Initiative

Executive Order 13061, "Federal Support of Community Efforts along American Heritage Rivers" (September 11, 1997), establishes the American Heritage Rivers Initiative. The American Heritage Rivers Initiative is intended to help river communities that seek federal assistance and other resources to more efficiently meet their needs. The American Heritage Rivers initiative has three objectives: natural resource and environmental protection, economic revitalization, and historic and cultural preservation. These objectives are achieved through increased inter-agency coordination and through encouraging agencies to develop plans to bring increased efficiencies to existing and authorized programs with goals that are supportive of protection and restoration of communities along rivers. For designated American Heritage Rivers, the federal government's policy will be to support community-based efforts to preserve, protect, and restore these rivers and their communities. The policy also requires federal agencies to ensure that their actions have a positive effect on the natural, historic, economic, and cultural resources of American Heritage Rivers. The Hudson River is designated as an American Heritage River.

3.2.3.5. OTHER

3.2.3.5.1. Ramapo Watershed Intermunicipal Council Goals and Initiatives

The Ramapo River Watershed Intermunicipal Council, which consists of the Village of Airmont, County of Bergen, Borough of Franklin Lakes, Town of Haverstraw, Village of Hillburn, Village of Kiryas Joel, Township of Mahwah, Town of Monroe, Village of Monroe, Village of Montebello, Borough of Oakland, County of Orange, Palisades Interstate Park Commission, County of Passaic, Village of Pomona, Borough of Pompton Lakes, Town of Ramapo, Borough of Ramsey, Township of Ringwood, County of Rockland, Village of Sloatsburg, Village of Suffern, Village of Tuxedo Park, Town of Tuxedo, Borough of Wanaque, Township of Wayne, Village of Wesley Hills, and Town of Woodbury, agreed to establish a common and comprehensive watershed model, regulations, and operating practices to prevent or minimize adverse impacts on water quality, wildlife and human well-being, provide storm water management and flood control, and enhance recreation, historic preservation and overall quality of life within the Watershed. According to the Ramapo River Watershed Intermunicipal Council Technical Advisory Committee Watershed Protection Work Plan, adopted September 21, 2006, the Project Sites are located in the moderate to lowest conservation value areas.

3.2.3.5.2. U.S. Mayors' Climate Protection Agreement

Under the U.S. Mayors' Climate Protection Agreement, participating municipalities commit to take following three actions:

1. *Strive to meet or beat the Kyoto Protocol targets in their own communities, through actions ranging from anti-sprawl land-use policies to urban forest restoration projects to public information campaigns;*
2. *Urge their state governments, and the federal government, to enact policies and programs to meet or beat the greenhouse gas emission reduction target suggested for the United States in the Kyoto Protocol—7 percent reduction from 1990 levels by 2012; and*
3. *Urge the U.S. Congress to pass the bipartisan greenhouse gas reduction legislation, which would establish a national emission trading system.*

Within Rockland County, the Villages of Montebello, Nyack, and Upper Nyack, and the Town of Orangetown have signed the agreement.

3.3. THE FUTURE WITHOUT THE PROPOSED PROJECT

3.3.1. LAND USE

In the future without the Proposed Project, this DEIS assumes that land uses on the Project Sites would remain unchanged. The water treatment plant, intake facilities, and the raw water transmission main would not be constructed. Any land use changes or development that occurs in the study area would do so independent of the Proposed Project. Much of the developable land surrounding the Project Sites has already been developed, so any new development would consist primarily of redevelopment.

3.3.2. ZONING

It is not expected that zoning district designations would change in the future without the Proposed Project. While the Towns of Haverstraw or Stony Point, or the Village of West Haverstraw may change their respective zoning codes, there are no known plans to do so at this time.

3.3.3. OTHER PROGRAMS

The policies and plans affecting land use and future goals for the study area will remain in place and unaffected in the future without the Proposed Project. However, some individual goals of the plans may not be met. For example, the projected growth in Rockland County will place demands on the existing water supplies, and would require development of supplemental sources of water for drinking, firefighting, and municipal uses. It is expected that over time, the various plans discussing the study area would evolve and be updated, but no significant changes would be expected to occur in the future without the Proposed Project.

3.4. PROBABLE IMPACTS OF THE PROPOSED PROJECT

3.4.1. LAND USE

3.4.1.1. PROJECT SITES

3.4.1.1.1. Intake Site

With the Proposed Project, the now undeveloped Intake Site would be occupied by an approximately 3,000-square-foot building housing the intake pumping station. United Water intends that the proposed intake pumping station structure be designed to minimize its appearance as an industrial structure. The appearance of the building would be developed in coordination with the Town of Haverstraw as part of the permitting process for the new building, with a goal of designing a facility that is aesthetically suitable to its setting.

Although the Intake Site is currently undeveloped, a portion of the Site is used by the adjacent Haverstraw Marina for off-season storage for approximately 20 recreational boats. These boats would be relocated to another location in the marina, which is large enough to accommodate their storage elsewhere.

With a design intended to be compatible with the surrounding neighborhood and with little daily activity (e.g., employee trips or deliveries), the new intake pumping station on the Intake Site would be compatible with current land uses surrounding the Intake Site. As described above, existing land uses that surround the Intake Site include the Haverstraw Marina, the USG conveyer structure, and a nearby residential area. The Project's intake pumping station on the shoreline and the intake structure in the Hudson River would not interfere with these uses. The intake structure would be sited so as not to interfere with maritime operations at the USG pier, should USG resume activities at its Stony Point plant.

The prominent features around the Intake Site are industrial uses that contribute to its existing industrial character. The proposed intake pumping station would not result in significant adverse land use impacts on nearby residential uses north of the Intake Site, because of its compatible design and limited activity, and because of the presence of existing industrial uses at the Intake Site today. For the same reasons, the new facility also would not adversely affect Riverfront Park, located approximately 1,000 feet north of the Intake Site. Therefore, the Proposed Project at the Intake Site would not result in any significant adverse impacts.

3.4.1.1.2. Raw Water Transmission Main Routes

Option 1

Under Raw Water Transmission Main Route Option 1, the raw water pipe carrying water from the Intake Site to the Water Treatment Plant Site would be buried below grade primarily within public road rights-of-way or easements across Town of Haverstraw and potentially the Village of West Haverstraw land and land comprising the site of the JRSTP. As noted earlier, the pipe would also pass through sections of USG property near the Intake Site and the vacant parcel in the Village of West Haverstraw to the south of the Water Treatment Plant Site. Once constructed, the raw water transmission main would not be visible from surrounding land uses. Since the raw water transmission main would be underground, there would be no impact on nearby land uses from its presence.

Option 2

As discussed in Chapter 2, "Project Description," Raw Water Transmission Main Route Options 2 through 5, which would not be located beneath public streets, would have at-grade manholes to provide inspection and service to the transmission main below. For Option 2, such a manhole would be located at the bend in Beach Road, near the Town of Haverstraw Canoe and Kayak Launch. This manhole would not adversely affect the use of the Town of Haverstraw Canoe and Kayak launch. Another at-grade manhole would be located on the landfill property. With the exception of these two minimally visible manholes, once constructed, the raw water transmission main would not be visible from or affect surrounding land uses. Since the raw water transmission main would be underground, there would be no impact on nearby land uses from its presence.

Options 3 and 4

For Options 3 and 4, a site on Beach Road would be used for the at-grade access manhole to provide inspection and service to the transmission main below. This site is currently used by Haverstraw Marina for off-season storage of approximately 200 boats. The presence of this manhole would not adversely affect the use of the site for off-season storage of boats, nor would it adversely affect surrounding land uses. Similar to Option 2, both Options 3 and 4 would also have an at-grade manhole on the former landfill site. Since the remainder of the raw water transmission main would be underground, there would be no impact on nearby land uses from its presence.

Option 5

For Option 5, access manholes would be located at the Intake Site and at the former landfill. Neither of these would adversely affect land uses nearby. Since the remainder of the raw water transmission main would be underground, there would be no impact on nearby land uses from its presence.

3.4.1.1.3. Water Treatment Plant Site

The proposed water treatment plant would be constructed on vacant land in an industrial area (a former landfill, adjacent to other industrial parcels including the JRSTP and the closed landfill) and would be compatible with the overall character of the area and adjacent and nearby land uses. The Water Treatment Plant Site is located within an industrial area, adjacent to an active freight railway and directly adjacent to a mix of industrial uses and vacant lands, including the Haverstraw Landfill, which has been closed and is no longer in use. While there is a residential neighborhood located across the railroad tracks to the west of the Water Treatment Plant Site, the residential area is separated from the plant by the existing elevated railroad right-of-way that defines the western edge of the industrial area. There is also a residential neighborhood to the south of the Water Treatment Plant Site, which is separated from the Site by the JRSTP. It should be further noted that the operation of the water treatment plant is expected to be of relatively low intensity compared to other commercial and industrial uses in the Project area.

The water treatment plant facilities would be consistent in bulk with other adjacent industrial land uses and would be consistent in character with the surrounding uses. Since those surrounding uses include industrial facilities, warehousing, and the CSX railroad, the Proposed Project would not significantly alter the character of the study area. As described in Chapter 2, "Project Description," the design of the plant is intended to qualify for the United Green Building Council's Leadership in Environmental and Energy Design (LEED) certification, and

to achieve a non-industrial appearance. In doing so, the facility would likely improve the overall visual quality of the existing industrial area in which it would be located. The facility would not displace any existing land use or interfere with operation of other existing land uses in the area; however, it would prevent the construction of other uses on the Water Treatment Plant Site.

The water treatment plant would not be easily accessible or visible to the general public, as it would be located in an area not currently served by public roads. The Water Treatment Plant Site was formerly used for operations related to the Haverstraw Landfill and DSB Realty Associates, and is now vacant and vegetated with a mix of grasses, shrubs, and small trees. A portion of the Haverstraw Landfill is currently utilized as the Haverstraw Aerodrome for the launching of model aircraft, but this is not within the area proposed for use by the water treatment plant. The Water Treatment Plant Site is generally lower in elevation than the surrounding area and is set back from both Railroad Avenue and Beach Road, further reducing the potential for adverse impacts on surrounding uses.

Access to the Water Treatment Plant Site would be provided from the end of Carol Avenue. The limited amount of Project-related traffic on the access road would not adversely affect the industrial land uses on Carol Avenue. The Water Treatment Plant Site is not accessible from the north or west as the railroad tracks and other properties do not allow vehicular access.

3.4.2. ZONING

The Water Treatment Plant Site, located in the Town of Haverstraw, is zoned as PIO, which permits industrial uses such as the Proposed Project. Permitted uses are required to comply with performance standards as specified in §167-13 of the Haverstraw Zoning Code. It is United Water's intent to comply with all applicable performance standards. The Intake Site is in an area zoned CR, which allows public utility substations as a special permit use. §167-3 of the Town Code defines "public utility substations" as facilities "designed and intended for the control of the distribution of electricity and/or gas or other local utility service." The vacant parcel in the Village of West Haverstraw to be used as an entranceway and staging area is zone as PLI. This zoning designation permits light industrial uses, and is consistent with the Proposed Project. Therefore the Proposed Project would not result in a significant adverse impact.

Prior to building the intake pumping station and water treatment plant, United Water may need to obtain the following permits from the Town of Haverstraw:

- Town of Haverstraw Town Board: Special Use Permit. The intake pumping station would require a special permit for public utility substation in the CR zoning district.
- Town of Haverstraw Planning Board: Site Plan Approvals. Site plan approvals are required for the intake facility and the water treatment plant.
- Town of Haverstraw Planning Board: Subdivision Approval. Both the Intake Site and the Water Treatment Plant Site would require Planning Board approval of the subdivision from larger tax parcels.
- Town of Haverstraw Zoning Board of Appeals: Variances. United Water may need to obtain variances from the Zoning Board of Appeals in the application of the Town of Haverstraw's bulk requirements for both the intake facility and the water treatment plant.
- Town of Haverstraw Architectural Review Board: Approvals. The Architectural Review Board must approve the architectural drawings for the intake facility and the water treatment plant.

- Town of Haverstraw Building Department: Building Permits. A building permit is required prior to commencing work on the construction, enlargement, alteration, improvement, removal, relocation or demolition of any building or structure, and, therefore, will be required for the intake facility and the water treatment plant.
- Town of Haverstraw Highway Department: Road Opening Permit.

In addition, GML Section 239-m requires the Town of Haverstraw to refer several of the local land use applications listed above to the Rockland County Planning Board for review and recommendation. The Rockland County Planning Board, as part of its GML Section 239-m review and recommendation, may require the permit applications be referred and reviewed by the Rockland County Department of Highways and the Rockland County Drainage Agency. Likewise, there are GML provisions which require notice of these applications be provided to adjoining municipalities such as the Town of Stony Point.

3.4.3. OTHER PROGRAMS

This subsection provides an assessment of the consistency of the Proposed Project with existing documents and guides, including policies intended to protect the Hudson River.

3.4.3.1. TOWNS

3.4.3.1.1. Town Master Plan Report Town of Haverstraw, New York (1990)

The Proposed Project is consistent with the goals and land use plans outlined in the Haverstraw Master Plan Report. As noted above, the water treatment plant would be consistent with the existing land uses in the immediate vicinity of the Water Treatment Plant Site and in the surrounding area. The proposed facility is consistent with the proposed use for the Site as indicated in the Haverstraw Master Plan Report, which designates the Water Treatment Plant Site for industrial use. The establishment of the water treatment plant at this location would put a non-productive portion of the former landfill back into active use, and as a result of improvements to the Water Treatment Plant Site, the currently tax-exempt Site would generate additional property tax revenue for the Town of Haverstraw, the school district, and Rockland County. The plant would provide an important new water source for Rockland County. The Proposed Project would serve to ensure the dependability of the water supply to meet long-term needs of the town and county, thereby accommodating growth projected in the Haverstraw Master Plan Report.

The Proposed Project would be subject to and would be required to comply with the town's site plan review ordinance. As part of this review, the town would consider the site development and the associated environmental features, including buffering and landscaping, circulation, erosion control, drainage and stormwater impacts, and potential wetland impacts. The Proposed Project would also be required to comply with local building and fire code regulations.

3.4.3.1.2. Town of Stony Point Master Plan (1995) and Recommended Comprehensive Plan Amendments (2008)

The Stony Point Master Plan addresses land use through a series of land development policies. The proposed Water Treatment Plant Site and Intake Site are located within the Town of Haverstraw, adjacent to the Town of Stony Point's boundary. The Raw Water Transmission Main Route Option 2 would cross through the Town of Stony Point, and portions of Options 2 through 5 would run adjacent to the Town of Stony Point town line. Due to this proximity, this

analysis provides an assessment of the Proposed Project's consistency with the relevant policies included in the Stony Point Master Plan.

- *Keep development within the present capacity of infrastructure systems wherever possible.*

  The Proposed Project is designed to meet the documented need for additional water supply infrastructure capacity.

- *Protect and promote the unique physical and environmental features of the town: the forested mountain views, the streams and their banks, and the fresh and salt water wetlands.*

  The intake facility would be sited on industrial property with limited natural resource value. The principal natural asset of the Intake Site is its location along the Hudson River and the views it provides of the Hudson River Valley. As discussed elsewhere in this DEIS, design, construction, and operation of the intake pumping station facility would meet all federal, state, and local environmental requirements and would not result in any significant environmental impacts. In addition, the design approach for the facility would provide for a structure that is non-industrial in appearance to the extent practicable.

  The water treatment facility would be located on the site of the former Town of Haverstraw Landfill, also with limited natural resource value. It is adjacent to other industrial properties in the Town of Stony Point, as well as the railroad lines. It is not located within the buffer of Minisceongo Creek. Therefore, as discussed elsewhere in this DEIS, the design, construction, and operation of the water treatment facility would meet all federal, state, and local environmental requirements and would not result in any significant environmental impacts.

  As previously discussed, the proposed raw water transmission mains would be constructed so as to limit surface disturbance other than in existing roadways. Therefore, no significant adverse impacts on environmental features are anticipated.

- *Protect adjoining and abutting incompatible land uses from one another with physical separations and logical edges to minimize the effects of noise, traffic, odors, lights, and other undesirable factors.*

  As described above, with a design intended to be compatible with the surrounding neighborhood and with little daily activity (e.g., employee trips or deliveries), the new intake pumping station on the Intake Site and the new water treatment plant would be compatible with current land uses surrounding the Project Sites.

  The proposed water treatment facility is consistent with adjacent land uses in the Town of Stony Point. The Raw Water Transmission Line Main would be located underground, and within the exception of a limited number of manholes or similar access points, would not be visible or incompatible with adjacent land uses.

As previously discussed, the Stony Point Comprehensive Plan Advisory Committee's "Summary of Recommended Comprehensive Plan Amendments" did not relate to the Proposed Project. Therefore, it is not anticipated that the Proposed Project would result in any significant adverse impacts on Stony Point Master Plan or policies.

3.4.3.1.3. Local Waterfront Revitalization Plans

The Proposed Project's potential effects on the five LWRPs covering areas within five miles of the Project Sites—for the Town of Stony Point, the Village of Croton-on-Hudson, the Village of Haverstraw, the City of Peekskill, and the Village of Ossining—are discussed in Chapter 17,

"Coastal Zone Consistency." As described in Chapter 17, there are no reasonably foreseeable effects of the Proposed Project on the LWRPs of these other communities.

3.4.3.2. ROCKLAND COUNTY

The Proposed Project is consistent with various aspects of both the Rockland County 2001 River to Ridge Plan and the 2011 Comprehensive Plan entitled "Rockland Tomorrow." The 2001 River to Ridge Plan notes that the appropriate way to facilitate development in accordance with desired land use patterns is through the establishment of appropriate zoning. The Project Sites are either in areas zoned for industrial uses or allow the proposed uses by special permit, and the Sites are primarily surrounded by lands zoned for and in industrial use. As discussed above, the Intake Site zoning allows public utility uses by special permit. The Water Treatment Plant Site's PIO zoning classification permits industrial uses as-of-right. As an industrial use, the Proposed Project would conform to the Town of Haverstraw zoning requirements. United Water is not seeking any amendment or variance to Town of Haverstraw zoning requirements.

The 2001 River to Ridge Plan recognizes that the use of small water systems is not necessarily the most efficient or affordable means of supplying water to the county, and recommends restructuring water delivery. The Proposed Project is consistent with this principle, since it would provide a new water supply source that would meet projected county demand. It would also be consistent with the 2001 River to Ridge Plan's policies with respect to addressing water supply issues related to drought conditions because the Proposed Project would create a reliable water supply for the region.

A number of the recommendations made in "Rockland Tomorrow," the 2011 Rockland County Comprehensive Plan, apply to the Proposed Project:

- Land Use and Zoning: The Comprehensive Plan recommends reuse of brownfields and industrially zoned sites to support the county's economic base. The Proposed Project would reuse a brownfield site that is zoned for industrial development.
- Natural and Environmental Resources / Parks and Open Space: The Comprehensive Plan promotes protection of the Hudson River and emphasizes the importance of maintaining the river's scenic quality and providing public access to the Hudson River waterfront. The Proposed Project would not create public access to the river, but it would also not eliminate any public access. The Intake Site, which is located on the waterfront, is a relatively small site that has historically been a privately owned industrial site, and did not provide public access to the waterfront. There are a number of publicly accessible parks and open spaces along the Hudson River waterfront and adjacent marshlands in close proximity to the Project Sites. The Proposed Project would not inhibit the public's enjoyment of these resources. Furthermore, other off-site surface connections between these publicly accessible areas may be feasible should such connections be desired and pursued. As discussed in Chapter 4, "Visual Resources," the Proposed Project would also maintain the scenic quality of the Hudson River. The Intake Site and immediate area are industrial in character, and the USG aerial conveyor that crosses to the south of the Site and across Beach Road dominates views of the area. The intake pumping station would bring a small new building and landscaping to this area; its small footprint size, low height, and landscaping would maintain the waterfront's scenic quality. At the Water Treatment Plant Site, the new structures would be buffered from any Hudson River views by the Site's distance from the shoreline, its substantially lower elevation than the surrounding area, the intervening Haverstraw Landfill, and intervening structures.

- Infrastructure: The Comprehensive Plan notes that predicted growth in Rockland County will place additional pressures on the county's infrastructure: "Development pressures will be placed on infrastructure systems that provide water, sewer, waste disposal, energy, and telecommunications services. Capacity expansions and system upgrades will be needed to accommodate new development and maintain the quality of service."[1] It also notes that "a deficit in annual average capacity could also potentially limit future growth in Rockland County."[2] Therefore, the Comprehensive Plan stresses the importance of maintaining adequate water supply, including investigating potential water sources in the county while promoting water conservation. The Proposed Project is being planned specifically to meet the needs anticipated as a result of the predicted increase in population in Rockland County and is therefore fully consistent with this aspect of the Comprehensive Plan.

3.4.3.3. NEW YORK STATE

3.4.3.3.1. Delaware–Lower Hudson Region Water Resource Management Strategy, January 1989

As discussed earlier in this chapter, the Delaware–Lower Hudson Region Water Resource Management Strategy was developed by NYSDEC and NYSDOH in 1989 to guide water supply planning in the future. Since that time, many of the recommendations made by that study have been implemented, including introduction of water metering and conservation measures. United Water has implemented universal water metering and conservation measures throughout its Rockland County system, as discussed in Chapter 1, "Purpose and Need," of this DEIS. The 1989 study also recommended a number of measures intended to address the long-term water supply needs of New York City. Many of these initiatives have been implemented; development of the Chelsea pumping station in Dutchess County as a permanent withdrawal location for up to 300 mgd of drinking water has not yet been actively pursued (and the pumping station has not been used to draw water into the New York City system since 1985).

The 1989 study also notes that other communities along the Hudson River may wish to use the Hudson River as a drinking water source. The Proposed Project is consistent with the Delaware–Lower Hudson Region Water Resource Management Strategy, since it would utilize the Hudson River as a new water supply source to meet projected demand. If New York City pursues development of Chelsea pumping station (now called the Hudson River pump station) as a potential permanent source for up to 300 mgd of drinking water, it will conduct appropriate evaluation at that time of the effect of that withdrawal on river water quality and salinity, and the effect on other users of the water, as recommended in the 1989 study. According to a USGS study,[3] regular withdrawal of that magnitude could potentially influence salinity migration up to one mile upstream. Depending on the specific effect, this could potentially result in lower production capacity at the Proposed Project.

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1 Comprehensive Plan, Chapter 3.0, "Demographics," p. 32.

2 Comprehensive Plan, Chapter 12.0, "Infrastructure," p. 275.

3 de Vries, M.P., and Weiss, L.A., 2001, Salt-Front Movement in the Hudson River Estuary, New York - Simulations by One-Dimensional Flow and Solute-Transport Models: U.S. Geological Survey Water-Resources Investigations Report 99-4024 (http://ny.water.usgs.gov/pubs/wri/wri994024/wrir99-4024.pdf)

3.4.3.3.2. Coastal Zone Policies

The Proposed Project's consistency with the New York State's coastal zone policies is addressed in Chapter 17, "Coastal Zone Consistency."

3.4.3.3.3. NYSDEC Hudson River Estuary Program and Hudson River Estuary Action Agenda

The water treatment plant and intake facility would be consistent with the goals of the Estuary Program described above. The Proposed Project would comply with state water quality standards for all discharges through the use of best-technology-available control measures, minimize construction impacts through the use of trenchless technology, and would not significantly affect the recreational use of the River as further described under Policies 19 and 20 of Chapter 17. The new water treatment plant and intake facility would not adversely affect any future plans to use Riverfront Park, to the north of the Intake Site in the Town of Stony Point, as a swimming beach in the future as part of the Estuary Program, nor would it affect the use of Haverstraw Bay County Park as a stop on the Hudson River Water Trail or fishing spot. Furthermore, the intake structure includes screens to minimize the entrapment of fish, and any potential significant adverse impacts on wildlife.

3.4.3.3.4. Hudson River Valley National Heritage Area

The closest Heritage Site in the Lower Hudson Valley to the proposed Water Treatment Plant Site is the Stony Point Battlefield, which is approximately 2.5 miles from the Site. Given this distance and the proposed Project's limited visibility, the construction or operation of the Proposed Project would not affect the Stony Point Battlefield Heritage Site, or the Heritage Site's inclusion in a Heritage Area Trail. (For more information on the Project's visual impacts, see Chapter 4, "Visual Resources").

3.4.3.3.5. Hudson River Valley Greenway

The construction and operation of the Proposed Project would be consistent with the planning principles of the Hudson River Valley Greenway. The Proposed Project would maintain the scenic quality of the Hudson River and, as discussed in Chapter 9A, "Aquatic Natural Resources," and Chapter 9B, "Terrestrial Natural Resources," impacts on natural resources have been minimized. The Proposed Project would not interfere with the Greenway Trails in Rockland County or with the water trail access point located near the Intake Site.

3.4.3.3.6. New York State Open Space Plan

The construction and operation of the Proposed Project would not adversely affect the goals or policies of the New York State Open Space Plan. The Project Sites are not within the priority conservation areas identified for the Lower Hudson Valley Region. Some of the key policies include protecting habitat, water quality, combating global climate change, providing access to outdoor recreation, and protecting and enhancing scenic, historic and cultural resources. The Proposed Project is not anticipated to adversely affect any of these policies.

3.4.3.3.7. New York State Energy Plan

The Proposed Project would not adversely affect the goals or policies of the New York State Energy Plan. Consistent with New York State Energy Plan, United Water is investigating the use of alternative energy sources, such as on-site wind and solar power, to reduce its energy consumption and greenhouse gas emissions.

As discussed in Chapter 2, "Project Description," the Proposed Project is being designed to meet the benchmarks of the LEED building rating system. The new facility would be designed for energy efficiency and to incorporate environmentally sustainable elements to the extent practicable. The Project would incorporate a range of energy-saving measures, on-site energy generation, and sustainability practices, all of which are consistent with the New York State Energy Plan.

3.4.3.3.8. Governor Paterson's "45 X 15" Initiative

The Proposed Project would not adversely affect the goals or policies of Governor Paterson's 45 X 15 Initiative. As discussed above, United Water is investigating the use of alternative energy sources, such as wind and solar power, to reduce its energy consumption and greenhouse gas emissions. LEED standards would be employed to further improved energy efficiency and sustainability, and would be consistent with Governor Paterson's 45 X 15 Initiative.

3.4.3.3.9. Final Report of the New York Oceans and Great Lakes Ecosystem Conservation Council, Our Waters, Our Communities, Our Future: Taking Bold Action Now to Achieve Long-term Sustainability of New York's Ocean and Great Lakes

The Proposed Project would not adversely affect the goals or policies of the New York Ocean and Great Lakes Ecosystem Conservation Council. The report builds off the success of the Hudson River Estuary Program, and effects of the Proposed Project on this program are similar to those described above. Furthermore, the Proposed Project is consistent with the recognition of the need for alternative water sources identified in the plan.

3.4.3.3.10. NYS "Climate Smart Community" Pledge

According to the NYSDEC List of Smart Communities, the communities in Rockland County that have adopted this pledge are the Village of Montebello and the Town of Orangetown; both of these communities are within United Water's service area.[1] The Proposed Project would not adversely affect the goals or policies of the Climate Smart Community Pledge, or preclude other communities within Rockland County from becoming Climate Smart Communities.

Consistent with the Climate Smart Community Pledge, the Proposed Project would incorporate LEED building technologies to improve energy efficiency and sustainability. United Water is also investigating the use of alternative energy sources, such as on-site wind and solar power, to reduce its energy consumption and greenhouse gas emissions. Each of these measures is consistent with the Climate Smart Community Pledge.

3.4.3.3.11. New York State Smart Growth Public Infrastructure Policy Act

As discussed earlier, the New York State Smart Growth Public Infrastructure Policy Act requires that no state infrastructure agency, including the NYSDEC, shall approve, undertake, support, or finance a public infrastructure project, unless, to the extent practicable, the public infrastructure project is consistent with 10 smart growth infrastructure criteria.

United Water believes the State Smart Growth Public Infrastructure Policy Act does not apply to the Proposed Project, because the Act applies only to "public infrastructure development" and "publicly supported infrastructure" projects that are directly funded or undertaken by the New York State government, whereas the Proposed Project would be privately funded (see

[1] http://www.dec.ny.gov/energy/56876.html, accessed May 17, 2011.

Appendix 3.1). Nonetheless, the Proposed Project is consistent with the 10 smart growth policies, for the reasons discussed below.

Criterion 1*: To advance projects for the use, maintenance or improvement of existing infrastructure.*

The Proposed Project is a project that would use, maintain, and improve existing water supply infrastructure. As discussed in detail in Chapter 1, "Purpose and Need," United Water supplies water to a service area that encompasses all of Rockland County except the Villages of Suffern, Nyack and South Nyack. The existing water supply system consists of four reservoirs (Lake DeForest and the Letchworth Reservoirs), 60 wells, more than 1,000 miles of water mains, 14 storage tanks, and 14 booster pumps. The purpose of the Proposed Project is to add an additional water supply source to that existing system, to meet the future water needs of Rockland County could be met as the County's population expands. The new water supply source would be connected to the existing system and would serve the existing United Water service area in Rockland County. Therefore, the Proposed Project would be consistent with this criterion.

Criterion 2: *To advance projects located in municipal centers.*

The Proposed Project would improve the existing water supply infrastructure in Rockland County by providing additional water in response to population growth within its Rockland County service area. The additional water would serve all of United Water's service area, which encompasses most of Rockland County, and therefore would serve the needs throughout the County. The comprehensive plans that guide growth within the service area, including the 2011 Rockland County Comprehensive Plan, reflect the goal of advancing projects in municipal centers according to smart growth principles.[1] The Proposed Project would not extend new water supply infrastructure into areas not currently served by such infrastructure and therefore would not change development patterns or shift projects toward or away from municipal centers; rather, it would serve projects proposed throughout the County in accordance with local land use laws and comprehensive plans. Therefore, the Proposed Project would be consistent with this criterion.

Criterion 3: *To advance projects in developed areas or areas designated for concentrated infill development in a municipally-approved comprehensive land use plan, local waterfront revitalization plan and/or brownfield opportunity area plan.*

As noted under Criterion 2, the Proposed Project would improve the existing United Water water supply system and meet the projected future demands for water and as a result would support the goals of Rockland County comprehensive plans. As discussed in Chapter 17, "Coastal Zone Consistency," the Proposed Project is consistent with the policies of the LWRPs of the affected communities, including the Village of Haverstraw and the Town of Stony Point, as well as those of the communities within 3 to 5 miles of the Project Sites. No nominated

[1] *Rockland Tomorrow: Rockland County Comprehensive Plan*. Rockland County, adopted March 1, 2011.See Appendix 20.1.

brownfield opportunity area plans are known to exist in the United Water Rockland County service area.[1]

It is also important to note that the Project Sites are located within developed areas. A portion of the Intake Site is owned by USG and is currently used as a parking area and by the adjacent Haverstraw Marina for off-season storage for approximately 20 recreational boats. The raw water transmission main routes comprise public road rights-of-way and the Haverstraw Marina, except for a portion of the Option 2 and Option 3 routes, which would extend beneath Minisceongo Creek and associated vacant marshlands. A portion of the Water Treatment Plant Site is located within the boundary of the now-closed Haverstraw Landfill.

Therefore, the Proposed Project would be consistent with this criterion.

Criterion 4*: To protect, preserve and enhance the state's resources, including agricultural land, forests, surface and groundwater, air quality, recreation and open space, scenic areas, and significant historic and archeological resources.*

This DEIS evaluates the projected effects of the Proposed Project on a variety of potentially affected resources, including forests, surface and groundwater, air quality, recreation and open space, scenic areas, and significant historic and archaeological resources. The evaluation has concluded that none of these resources would be adversely affected by the Proposed Project. As noted above, the Proposed Project would be consistent with and support the goals of the Rockland County and local comprehensive plans to protect, preserve, and enhance these, and other, resources. Therefore, the Proposed Project would be consistent with this criterion.

Criterion 5: *To foster mixed land uses and compact development, downtown revitalization, brownfield redevelopment, the enhancement of beauty in public spaces, the diversity and affordability of housing in proximity to places of employment, recreation and commercial development and the integration of all income and age groups.*

This criterion is not applicable to the Proposed Project. As noted above, however, the Proposed Project would redevelop underused properties in already developed areas (a property owned by USG and a portion of the now-closed Haverstraw Landfill property). In addition, the additional water would serve all of United Water's service area, which encompasses most of Rockland County, and therefore would serve the needs throughout the County that occur in accordance with the comprehensive plans and local land use laws and regulations that guide growth within the service area and reflect the goal of advancing projects in municipal centers according to smart growth principles.

Criterion 6: *To provide mobility through transportation choices including improved public transportation and reduced automobile dependency.*

This criterion is not applicable to the Proposed Project.

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[1] http://nyswaterfronts.com/BOA_projects.asp#region3

Criterion 7*: To coordinate between state and local government and inter-municipal and regional planning.*

This criterion is not applicable to the Proposed Project.

Criterion 8: *To participate in community-based planning and collaboration.*

This criterion is not applicable to the Proposed Project.

Criterion 9: *To ensure predictability in building and land use codes.*

This criterion is not applicable to the Proposed Project.

Criterion 10: *To promote sustainability by strengthening existing and creating new communities which reduce greenhouse gas emissions and do not compromise the needs of future generations, by among other means encouraging broad based public involvement in developing and implementing a community plan and ensuring the governance structure is adequate to sustain its implementation.*

This criterion is not applicable to the Proposed Project.

Based on a review of the 10 smart growth infrastructure criteria with respect to the Proposed Project, this analysis concludes that the Proposed Project is consistent with the applicable criteria of the State Smart Growth Public Infrastructure Policy Act.

3.4.3.4. FEDERAL

3.4.3.4.1. U.S. Environmental Protection Agency American Heritage Rivers Initiative

The Proposed Project would not adversely affect the objectives of the American Heritage Rivers Initiative. The Proposed Project would not be in conflict with the program's policies of protection of natural resources and the environment, economic revitalization, and historic or cultural preservation.

3.4.3.5. OTHER

3.4.3.5.1. Ramapo Watershed Intermunicipal Council Goals and Initiatives

The Proposed Project would not adversely affect the Ramapo Watershed Intermunicipal Council goals and initiatives. The Proposed Project would not be in conflict with the program's policies regarding water quality, wildlife, and human well-being, storm water management and flood control, and/or recreation, historic preservation, and overall quality of life within the watershed. The Project Sites are located within the moderate to lowest conservation value areas, and therefore no significant adverse impacts on the Ramapo Watershed are anticipated.

3.4.3.5.2. U.S. Mayors' Climate Protection Agreement

The Proposed Project would not be in conflict with the U.S. Mayors' Climate Protection Agreement. The Proposed Project is designed to serve an existing and future demand for water; therefore no significant adverse impacts are anticipated. Furthermore, consistent with the U.S. Mayors' Climate Protection Agreement, the Proposed Project would incorporate LEED building technologies to improve energy efficiency and sustainability. United Water is also investigating the use of alternative energy sources, such as on-site wind and solar power, to reduce its energy consumption and greenhouse gas emissions.

3.5. CONCLUSIONS

The proposed new intake pumping station on the Intake Site would be compatible with, and would not adversely affect, land uses in the surrounding area, which include a mix of industrial, waterfront-related, residential, and recreational uses. The design of the new intake pumping station is intended to be compatible with the surrounding neighborhood. The facility would have little daily activity (e.g., employee trips or deliveries), and would be consistent with the nearby industrial uses. The new water treatment plant on the Water Treatment Plant Site also would not result in significant adverse land use impacts on nearby uses, including the numerous industrial facilities (Haverstraw Landfill, JRSTP) as well as residential neighborhoods near Benson Street and North Wayne Avenue. The building's design is intended to be compatible with surrounding uses, and the Water Treatment Plant Site's isolated location would buffer it from residential neighborhoods. The raw water transmission route main would be located underground and, thus, would not result in long-term land use impacts. The Proposed Project would not directly displace any existing land use or impair the functioning of nearby land uses.

The Proposed Project would require some local permits and approvals, but would be consistent with established land use plans and policies, including current Town of Haverstraw zoning requirements. The Proposed Project is specifically consistent with the newly adopted Rockland County Comprehensive Plan in that the Plan states that water system capacity expansions and system upgrades will be needed to accommodate new development and projected growth. The Proposed Project would not create a larger demand for water within the town and county, but rather would function to meet the level of demand as projected by the county and other municipalities in United Water's service area. Therefore, the Proposed Project would not result in any significant adverse land use or zoning impacts, or impacts on the policies and documents discussed above. ✷