16.1 INTRODUCTION

16.1.1 CONTEXT

The World Trade Center Memorial and Redevelopment Plan (Proposed Action) *would entail* construction and operation activities on the Project Site, which is located within the designated boundaries of New York City's coastal zone. The coastal zone is defined as the geographic area of New York City's coastal waters and adjacent shoreline that have a direct effect on coastal waters. Within Lower Manhattan and the Project Site, the coastal zone consists of an area that includes the coastal waters of the Hudson River to the west and the western portion of the Project Site along Church Street (see Figure 16-1).

Given the Proposed Action's location within the coastal zone, its consistency with state and local coastal policies must be considered. A determination of consistency demonstrates that the Proposed Action adheres to applicable coastal zone management policies administered by the New York State Department of State (NYSDOS) Coastal Management Program (CMP). The state's program stems from federal and state coastal zone legislation, including the federal Coastal Zone Management Act (CZMA) of 1972. The NYSDOS plays a role for both federal and New York State agencies in ensuring consistency with the CZMA and CMP. Where proposed activities involve federal funding or approval, NYSDOS reviews the consistency of those activities with the CZMA and CMP. For state actions, the NYSDOS advises state agencies in their review of actions for consistency with state coastal policies or, if in New York City, with the city's Waterfront Revitalization Program (WRP).

The New York City Department of City Planning (DCP) administers the city's current *program*. For federal and state actions within the city's coastal zone, DCP, acting on behalf of the New York City Coastal Commission, forwards its comments to the state agency making the consistency determination.¹

This chapter considers the degree to which the Proposed Action is consistent with federal, state, and local coastal zone management policies.

16.1.2 CONCLUSIONS

The following analysis compares the Proposed Action in the years 2009 and 2015 to pre-September 11 conditions and, as appropriate, current conditions. The Proposed Action would comprise land uses that existed prior to September 11 on the Project Site, as well as new uses, including the Memorial, memorial-related uses, commercial office space, and cultural facilities.

¹ New Waterfront Revitalization Program, September 2002, p.4, and http://home.nyc.gov/html/dcp/html/wrp/wrp.html

The Proposed Action reflects a commitment to consistency with coastal policies for the entire Project Site. The Proposed Action would contribute to the WRP's goals of enlivening the waterfront and attracting the public to the city's coastal areas, and the new towers would significantly contribute to the skyline of Lower Manhattan.

Under the policies of the CMP and WRP, the Proposed Action would not have a significant adverse impact on coastal resources. Therefore, the Proposed Action would be consistent with applicable policies in the CMP and WRP.

Certain construction activities occurring within the coastal zone prior to 2015 may result in unavoidable, temporary impacts within the Project Site and coastal zone. However, no construction activity is contemplated directly within the shoreline or waterfront area along the Hudson River or New York Harbor. While no new activities are envisioned in the Hudson River or New York Harbor, use of the existing Hudson River pump station and associated cooling water intake and outfall structures located along the shoreline, is a part of the Proposed Action.

16.2 REGULATORY CONTEXT

The CZMA of 1972 was established to encourage and assist the states in preparing and implementing management programs to preserve, protect, develop, and use or enhance the resources of the nation's coastal zone. The CZMA delegates authority and responsibilities to individual states, such as New York, to enforce the CZMA provided such actions comply with both CZMA and approved state management programs.

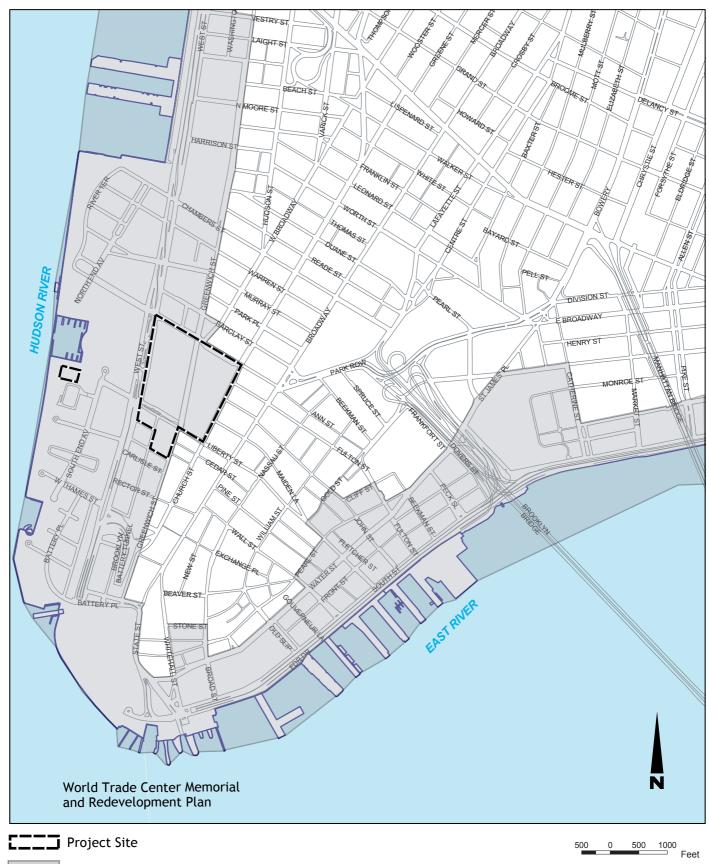
New York State's Waterfront Revitalization and Coastal Resources Act of 1981 led to the creation of the CMP, a program that established 44 state policies and designated five coastal zones, including one in New York City. The program also requires that all state agencies undertaking actions within the coastal zone must make a determination of consistency with state and, where applicable, local coastal area policies and file such determinations with NYSDOS, the agency administering the CMP. For activities requiring federal agency funding or approval, the NYSDOS reviews such activities for their consistency with the CMP or approved local waterfront revitalization program.

Pursuant to state regulations, New York City adopted a Local Waterfront Revitalization Program (LWRP) in 1982 to address coastal zone issues specific to New York City. The LWRP contains the 44 state policies and 10 city-specific policies, which were incorporated by extension into the state CMP.

The city's current WRP represents the September 2002 update to the LWRP. The WRP, containing 10 city-specific policies, creates a framework for the management of coastal zone resources. Collectively, these 10 policies reflect federal, state, and local policies and interests regarding development within the coastal zone.

Agencies that propose discretionary actions within New York City's coastal zone must address their consistency with the city's WRP. To address the full range of projects that could take place throughout the coastal zones of the state and city, the 10 city policies incorporate the following coastal topics:

- Residential and commercial redevelopment;
- Water-dependent and industrial uses;
- Commercial and recreational boating;
- Coastal ecological systems;



Coastal Zone Boundary

Sources: New York City Department of City Planning, NYC DoITT Landbase Graphic produced by: The Louis Berger Group, Inc. Octerber 2003

World Trade Center Memorial and Redevelopment Plan

Coastal Zone Map Figure 16-1

- Water quality;
- Flooding and erosion;
- Solid waste and hazardous substances;
- Public access:
- Scenic resources: and
- Historic and cultural resources.

16.3 METHODOLOGY

In general, potential effects on coastal resources include: direct physical effects, such as damage from temporary (construction) or permanent activities within the coastal zone or restriction of physical or visual access; and indirect effects, such as introduction of activities that result in growth-inducing impacts or may lead to other activities which further erode coastal resources. The potential effects on coastal resources during peak construction year 2006 and the analysis years 2009 and 2015 are assessed for their consistency with the applicable WRP policies and to determine whether they would have a significant adverse effect on coastal resources.

16.4 PROPOSED ACTION 2009 AND 2015 CONDITIONS

16.4.1 PERMANENT ACTIVITIES

In 2009, the Proposed Action would provide approximately 2.6 million square feet of office space in Freedom Tower, up to 1 million square feet of retail space, the Memorial Memorial Center, cultural facilities, and new open spaces. Fulton and Greenwich Streets would be extended through the WTC Site. Washington Street between Cedar and Liberty Streets would be closed, but Cedar Street between Washington and Greenwich Streets would be extended.

By 2015, the Proposed Action is expected to reach full build-out with 10 million square feet of office space plus hotel and conference facilities on the Project Site.

16.4.2 TEMPORARY (CONSTRUCTION) ACTIVITIES

Potential construction activities that could occur during the peak construction year of 2006 within the coastal zone include: transport of soils from excavation; slurry wall construction; concrete pours; steel erection; dewatering and water discharge activities; transport of supplies; demolition of existing structures; preparation activities on site; and remediation and removal of hazardous material from the Project Site. A more detailed description of construction activities is included in Chapter 21, "Construction."

The following section provides a discussion of the Proposed Action's compliance with New York City WRP policies in 2009 and 2015. Unless noted, the 2009 and 2015 conditions would have the same potential impacts to the coastal zone.

New York City Policy 1: Support and facilitate commercial and residential redevelopment in areas well-suited to such development.

1.1 Encourage commercial and residential redevelopment in appropriate coastal zone areas.

The Proposed Action would support commercial redevelopment on the Project Site, which is consistent with Policy 1.1. It is likely that if the Proposed Action were not built, the area would

be affected by disinvestment. The Proposed Action would be consistent with the policy of redevelopment as the Project Site is "well-suited" to the commercial development proposed. That is, the Project Site is located within the Special Lower Manhattan District, which promotes commercial and residential uses in Lower Manhattan. The Proposed Action would replace office and retail space that existed on the WTC Site until September 11, thus restoring a large amount of commercial space and the infrastructure to support the residential and commercial uses of Lower Manhattan. Therefore, the Proposed Action would be consistent with the policy.

1.2 Encourage non-industrial development that enlivens the waterfront and attracts the public.

As noted in Policy 1.1, the proposed development would be replacing what existed on the Project Site pre-September 11 as well as adding the Memorial, cultural facilities, and open space. The WTC complex was among New York City's most prominent commercial centers and tourist attractions before September 11. The reconstructed Project Site would continue to be a prominent commercial center, and the Memorial and cultural facilities would attract tourists. The Proposed Action, therefore, would contribute to the goals of enlivening the waterfront and attracting the public.

1.3 Encourage redevelopment in the coastal area where public facilities and infrastructure are adequate or will be developed.

It is anticipated that the Proposed Action would result in the redevelopment of the Project Site that would include 10 million square feet of commercial space and approximately 1 million square feet of retail space, among other uses. Public facilities and infrastructure, including public transit with 14 subway lines, 15 bus routes, PATH commuter train, numerous ferries, and local and express buses, are located within one-quarter mile of the Project Site. Water and sewer lines that adequately served the demands of the WTC complex pre-September 11 would also be adequate for the Proposed Action. The buildings of the Proposed Action would also be more efficient than the previous buildings (see Chapter 12, "Infrastructure"). Police and fire protection services in the area would be adequate for the Proposed Action. The Proposed Action would therefore occur in an area adequately served by infrastructure and public facilities, and would be consistent with this policy.

New York City Policy 2: Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.

2.1 Promote water-dependent and industrial uses in Significant Maritime and Industrial Areas.

The Project Site is not located in a Significant Maritime and Industrial Area. Therefore, this policy is not applicable.

2.2 Encourage working waterfront uses at appropriate sites outside the Significant Maritime and Industrial Areas.

The Proposed Action would include the use of the existing Hudson River pump station and associated cooling water intake and outfall structures that are located along the waterfront but not within a Significant Maritime and Industrial Area. The use of the Hudson River pump station and associated cooling water intake and outfall structures would not affect current uses or prevent the siting of industrial or other uses, such as heliports or other aviation facilities, on the site along the waterfront. As a result, the Proposed Action would be consistent with this policy.

2.3 Provide infrastructure improvements necessary to support working waterfront uses.

No infrastructure changes would be necessary for the use of the Hudson River pump station and associated cooling water intake and outfall structures. The use of the existing structures would support and promote the Proposed Action, itself located within the proximity to the waterfront. As a result, the Proposed Action would be consistent with this policy.

New York City Policy 3: Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation centers.

3.1 Support and encourage recreational and commercial boating in New York City's maritime centers.

The Project Site is within the service areas of the New York Waterway ferry lines, and it is likely that some of the employees of the Proposed Action, especially in the 2015 scenario, would use the ferries to go to and from work, while tourists may use ferries to visit the Memorial and cultural facilities. These ferries transport commuters and visitors to stops at the World Financial Center, Pier A Battery Park, Pier 11 Wall Street, and 38th Street and Route 9A. Shuttle buses run from the 38th Street location to Downtown Manhattan. The Proposed Action could, therefore, help support and increase patronage of ferry lines and commercial boating uses.

While located within the coastal zone, the Proposed Action is unlikely to have a negative impact on recreational and commercial boating due to the distance of the Project Site from the waterfront and maritime center. However, the Proposed Action may encourage greater public interest and access to ferries beated at the World Financial Center and maritime-related uses farther east at the Pier 17/South Street Seaport complex. Use of the cooling water intake and discharge structures is not anticipated to result in impacts to recreational or commercial boating. Use of the Hudson River pump station and associated cooling water intake and outfall structures would not be expected to affect recreational or commercial boating. Therefore, the Proposed Action would be consistent with this policy.

3.2 Minimize conflicts between recreational, commercial, and ocean-going freight vessels.

The Proposed Action would not directly involve recreational, commercial, and ocean-going freight vessels. As a result, this policy is not applicable to the Proposed Action.

3.3 Minimize impact of commercial and recreational boating activities on the aquatic environment and surrounding land and water uses.

As stated above, the Proposed Action would not directly involve commercial or recreational boating activities, and therefore would *not* cause adverse impacts on the aquatic environment from commercial/recreational boating. As a result, this policy is not applicable to the Proposed Action.

New York City Policy 4: Protect and restore the quality and function of ecological systems within the New York City coastal area.

4.1 Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas, Recognized Ecological Complexes, and Significant Coastal Fish and Wildlife Habitats.

While the Project Site is not along the waterfront, the Proposed Action would withdraw Hudson River water for cooling purposes using the Hudson River pump station and intake and outfall structures. The lower Hudson River has been designated a Significant Coastal Fish and Wildlife

Habitat by the NYSDOS. As discussed in Chapter 18, "Natural Resources," the Proposed Action would not be expected to result in significant adverse impacts to aquatic biota. Therefore, the Proposed Action would be consistent with this policy.

4.2 Protect and restore tidal and freshwater wetlands.

There are no tidal or freshwater wetlands on the Project Site. As a result, this policy is not applicable to the Proposed Action.

4.3 Protect vulnerable plant, fish and wildlife species, and rare ecological communities. Design and develop land and water uses to maximize their integration or compatibility with the identified ecological community.

As discussed in Chapter 18, "Natural Resources," shortnose sturgeon and four species of marine turtle (Kemps ridley, loggerhead, green, and leatherback), all New York State and federally listed endangered species, may occur in the lower Hudson River where the WTC intake and outfalls are located, as occasional, seasonal transients. The state-listed peregrine falcon is also known to occur in the vicinity of the Project Site. The shortnose sturgeon prefer deepwater habitats and are not likely to be found near the shoreline at the location of the water intake and outfall structures. The National Marine and Fisheries Service (NMFS) has indicated that shortnose sturgeon are not a concern unless modifications of the existing WTC intake structure, or increases in the volume of water withdrawn or the flow velocity at the intake from conditions issued in the 1999 SPDES permit, are proposed. The four marine turtle species are also unlikely to occur at the Hudson River pump station and associated cooling water intake and outfall structures. These species occur rarely in New York Harbor, and when they do occur, it is usually in the more saline areas south of the lower Hudson River. Peregrine falcons are accustomed to the intensely developed habitats of New York City and are not expected to experience a negative impact due to the operation of the Proposed Action. Measures would be developed in consultation with the New York State Department of Environmental Conservation (NYSDEC) and the New York City Department of Environmental Protection (NYCDEP), as necessary, to minimize potential impacts to peregrine falcons during construction activities. Therefore, the Proposed Action would be consistent with this policy.

4.4 Maintain and protect living aquatic resources.

Other than potential issues relative to the Hudson River pump station, analyses indicate that the Proposed Action would not be expected to result in any significant adverse impacts to aquatic biota. With regard to the Hudson River pump station, the NYSDEC has commented that such impacts will occur. This conclusion is based on the premise that impingement and entrainment to aquatic organisms is an adverse impact. Other agencies may or may not follow the same premise, and there appears to be no federal standard yet promulgated that is directly on point. In any event, these issues will be addressed by the Port Authority in its SPDES permit renewal process that is now underway. With this in mind, the Proposed Action would be consistent with this policy.

New York City Policy 5: Protect and improve water quality in the New York City coastal area.

5.1 Manage direct or indirect discharges to waterbodies.

All construction related activities, including dewatering and stormwater runoff increases, would be carefully monitored to avoid and/or minimize discharges. All discharges would be pre-treated

on the Project Site and then discharged to the city's stormwater and sewer lines. During large storm events, water entering combined sewers from the Project Site may be released into the Hudson River prior to being treated; however, this is a relatively rare occurrence and, in any event, would be unaffected by the Proposed Action. Any regulated non-hazardous wastes generated would be disposed of in properly licensed facilities that handle hazardous and non-hazardous waste and would not be discharged into waterbodies. All discharges, including cooling water effluent, would be conducted in accordance with permits and approvals obtained prior to construction.

Both phases of the Proposed Action would include the use of the Hudson River pump station and associated cooling water intake and outfall structures that existed pre-September 11. River water use for the 2009 analysis year would be less than that authorized in the State Pollutant Discharge Elimination System (SPDES) permit issued for the cooling water system for the former WTC complex.

For the 2015 analysis year, the Proposed Action would meet the conditions of the existing SPDES permit. Therefore, the Proposed Action would be consistent with this policy.

5.2 Protect the quality of New York City's waters by managing activities that generate nonpoint source pollution.

The construction and operation of the Proposed Action would not result in soil erosion or generate additional nutrients or pollutants to the Hudson River.

The Proposed Action would result in a small percentage increase in vehicular traffic visiting the Project Site in 2015, and a corresponding increase in motor vehicle runoff of oils and emissions would increase from pre-September 11 conditions. However, this increase would not result in significant adverse impacts as all runoff would be captured by the city's existing combined sewer system. The Proposed Action would be consistent with this policy.

5.3 Protect water quality when excavating or placing fill in navigable waters and in or near marshes, estuaries, tidal marshes, and wetlands.

No construction activities are anticipated to occur in navigable waters or in or near marshes, estuaries, tidal marshes, and wetlands. The Proposed Action would entail upland excavation for the construction of the concourses and office towers; lowever, no fill would be placed in navigable waters, in or near marshes, estuaries, tidal marshes, or wetlands. The Proposed Action would include the use of the existing Hudson River pump station and associated cooling water intake and outfall structures.

The use of the Hudson River pump station and associated cooling water intake and outfall structures would not require any in-water activities. Results of the analyses in this document indicate that no significant adverse impacts to water quality would be expected to occur as a result of the Proposed Action. Therefore, the Proposed Action would be consistent with this policy.

5.4 Protect the quality and quantity of groundwater, streams, and the sources of water for wetlands.

There are no streams or wetlands located on or in the proximity of the Project Site. Groundwater is not used for drinking water or other purposes in the project vicinity or Manhattan as a whole. If dewatering is required, it would be done in conformance with the *NYC*DEP regulations. As a result, this policy is not applicable to the Proposed Action.

New York City Policy 6: Minimize the loss of life, structures, and natural resources caused by flooding and erosion.

6.1 Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the condition and use of the property to be protected and the surrounding area.

The Proposed Action, a portion of which is located within the 100-year floodplain, would not have an adverse effect on flooding conditions on the Project Site or surrounding areas, as discussed in Chapter 17, "Floodplain." The Proposed Action would not alter the natural features of the shoreline or any structural or non-structural flood or erosion control measures. When compared with pre-September 11 conditions, the Proposed Action would not increase the amount of impervious surface on the Project Site in 2015, and thus would not increase flood hazards. As a result, the Proposed Action would be consistent with this policy.

6.2 Direct public funding for flood prevention or erosion control measures to those locations where the investment will yield significant public benefit.

The Proposed Action would not include erosion control measures except those related to temporary construction purposes. As a result, the Proposed Action would be consistent with this policy.

6.3 Protect and preserve non-renewable sources of sand for beach nourishment.

The Project Site is not located near sand or beach areas. As a result, this policy is not applicable.

New York City Policy 7: Minimize environmental degradation from solid waste and hazardous substances.

7.1 Manage solid waste material, hazardous wastes, toxic pollutants, and substances hazardous to the environment to protect public health, control pollution and prevent degradation of coastal ecosystems.

The Proposed Action might include the temporary storage of solid waste material, siting of several small generators of hazardous wastes, and handling of other hazardous substances within the Project Site. Potential generators of hazardous waste and substances on site include the use of fuel storage tanks and compressed gas (e.g. acetylene), paints, and cleaning solvents. In addition, the construction operations may also require the storage of fuel storage tanks, use of diesel or other fuels, and other hazardous substances routinely used in construction. Uses of any hazardous substances would be conducted and managed according to applicable laws, regulations, and permits. Storage areas of hazardous substances (including petroleum) would have secondary containment. Solid waste would be disposed of by private haulers to appropriate licensed facilities. Therefore, the Proposed Action would be consistent with this policy.

7.2 Prevent and remediate discharge of petroleum products.

No petroleum products are anticipated to be disturbed or discharged by the Proposed Action. If pending investigations and construction activities reveal the presence of more than de minimis levels of petroleum products on the Project Site, such products would be managed, remediated, and/or disposed of in accordance with all laws and regulations. If in the unlikely event that petroleum is disturbed or discharged, it would be managed, remediated, and/or disposed in conformance with all applicable laws, rules, and regulations. As a result, the Proposed Action would be consistent with this policy.

7.3 Transport solid waste and hazardous substances and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.

All solid waste generated by the Proposed Action would be transported by a licensed waste hauler according to applicable laws and regulations. As a result, the Proposed Action would be consistent with this policy.

New York City Policy 8: Provide public access to and along New York City's coastal waters.

8.1 Preserve, protect and maintain existing physical, visual and recreational access to the waterfront.

The Hudson River pump station and associated cooling water intake and outfall structures portion of the Proposed Action are located along the Hudson River waterfront. No expansion of existing facilities is contemplated with the use of the pump station, which is located primarily below grade. As a result, the Proposed Action has been designed to facilitate preserving, protecting, and maintaining physical, visual, and recreational access to the waterfront.

The Proposed Action would also facilitate at-grade connections to the Hudson River Park trails and open spaces to the west of the Project Site by designing for east-west connections such as the construction of the Fulton Street *Transit Center* and maintaining access to Vesey and Liberty Streets.

Further, the Proposed Action would include the construction of five commercial office buildings, each of which would provide tenants and users views of, or toward, the waterfront and coastline. The Freedom Tower in particular would provide an observation area in all directions, and it would be visible for many miles.

Recreational access would be maintained and enhanced by connections to the Hudson River Park trail by way of several open spaces, including the Memorial, Liberty Park, September 11 Place, Wedge of Light Plaza, and the PATH Plaza.

For all the reasons stated above, the Proposed Action would be consistent with this policy.

8.2 Incorporate public access into new public and private development where compatible with proposed land use and coastal location.

Providing public access throughout the Project Site is one of the paramount goals of the Proposed Action. Public access on the Project Site would include the Memorial and other open spaces, such as Liberty Park, September 11 Place, Wedge of Light Plaza, and the PATH Plaza, incorporated with the private office and retail development uses on the Project Site.

No structural changes to the Hudson River pump station and associated cooling water intake and outfall structures are anticipated. As a result, there would be no impedance to public access to and along the shoreline.

For all the reasons stated above, the Proposed Action would be consistent with this policy.

8.3 Provide visual access to coastal lands, waters and open space where physically practical.

As discussed in Policy 8.1, visual access to coastal lands, waters and open space has been incorporated into the Proposed Action. Views westward toward the shoreline, Hudson River, and Hudson River Park would be available from the observation areas open to the public in the

Freedom Tower. Tenants and visitors to all five office buildings would also potentially have views of the shoreline and river. The Hudson River pump station and associated cooling water intake and outfall structures would not impair visual access to or from coastal lands, water, and open spaces. As a result, the Proposed Action would be consistent with this policy.

8.4 Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.

The Proposed Action would be built on lands that are owned by public entities and would provide public open space. As discussed in policy 8.1, the Proposed Action would preserve a substantial portion of the Project Site's acreage as open space for passive recreation use and for public gatherings on the Project Site and within the coastal zone. Use of the Hudson River pump station and associated cooling water intake and outfall structures would not affect the current use of the waterfront, esplanade, or other public open space areas along the waterfront. As a result, the Proposed Action would be consistent with this policy.

8.5 Preserve the public interest in and use of lands and waters held in public trust by the State and City.

The Proposed Action would not interfere with the continued use or ownership of land and waters held in the public trust as the Project Site is not located directly along the waterfront and would not hinder current accessibility to the waterfront. The Proposed Action seeks to preserve the public interest and encourage the use of the Project Site by way of the Memorial and other open spaces. As a result, the Proposed Action would be consistent with this policy.

New York City Policy 9: Protect scenic resources that contribute to the visual quality of the New York City coastal area.

9.1 Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.

The Proposed Action would provide a significant contribution to the skyline of Lower Manhattan and New York City from the Hudson River and from other vantage points to Lower Manhattan. The Freedom Tower in particular would add to the visual resources of the area and would be consistent with the visual fabric of the tall buildings of Lower Manhattan while contributing its own unique character to the Project Site.

Use of the Hudson River pump station and associated water cooling intake and outfall structures are not anticipated to affect visual quality in the project areas. Therefore, the Proposed Action would be consistent with this policy.

9.2 Protect scenic values associated with natural resources.

The visual character of the Hudson River waterfront and coastal area in Manhattan is comprised of an urban landscape with tall commercial and industrial buildings. When viewed from the Hudson River and shoreline in the vicinity of the Project Site, it is more apparent that the tall buildings dominate the visual resources. The siting of buildings in scale and character with existing visual resources in Lower Manhattan would be consistent with protecting the existing scenic values and character of the area.

The Proposed Action at the Project Site and the use of the Hudson River pump station and associated water cooling intake and outfall structures are not anticipated to affect visual quality in the project areas. Therefore, the Proposed Action would be consistent with this policy.

New York City Policy 10: Protect, preserve, and enhance resources significant to the historical, archaeological, and cultural legacy of the New York City coastal area.

10.1 Retain and preserve designated historic resources and enhance resources significant to the coastal culture of New York City.

The Proposed Action is not expected to have significant adverse impacts on historic resources on the Project Site — namely the WTC Site itself — or elsewhere in the area of potential effect for historic resources. The Proposed Action would, however, have the potential to adversely affect some of the remaining remnants at the WTC Site. In implementing the Proposed Action, LMDC and the Port Authority would undertake appropriate efforts to avoid, minimize, or mitigate any such adverse effects or any unexpected adverse effects on other historic resources. These efforts would include both the Environmental Performance Commitments described in Chapter 21, "Construction," and the measures described in Chapter 22, "Mitigation Measures," and the Programmatic Agreement under consideration that will address any potential adverse effects on historic resources.

10.2 Protect and preserve archaeological resources and artifacts.

Portions of the Southern Site and areas east of Greenwich Street may be potentially sensitive for archaeological resources. To avoid any potential impacts to archaeological resources, Stage IB investigations in the form of monitoring during excavation would be undertaken in those areas. If archaeological remains are identified during monitoring, recovery of such remains would be undertaken in consultation with SHPO and LPC.

Because construction for the Proposed Action would take place within 90 feet of historic structures (in the floodplain, these structures include the Barclay-Vesey Building and 90 West Street), adherence to Construction Protection Plans would be required to avoid potential damage due to ground-borne vibrations.

Accordingly, the Proposed Action would be consistent with this policy.