FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT FOR THE CROTON WATER TREATMENT PLANT

10. IRREVERSIBLE AND IRRETRIEVABLE LOSS OF RESOURCES

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This section considers losses that are very long-term, or that permanently foreclose the use of property or resources for other uses. Consequences of the proposed Croton Water Treatment Plant at any site would be the commitment of up to 25.9 megawatts (MW) of electricity at peak flows. Average power usage (at 150 mgd) would be about 17.5 MW. This commitment would persist throughout the operation of the proposed Croton Water Treatment Plant.

10.1.1. Eastview Site

Certain unavoidable or unmitigatible significant impacts associated with the proposed project were identified. The clearing of 30 acres of brush and trees, crossing of a forested wetland for a pipeline, altering of groundwater conditions, and the elimination of wetland, which would alter the natural resources habitat on the Eastview Site, is a potential unavoidable significant impact that would be mitigated by planting of trees, implementing a stormwater / groundwater management plan, and construction of a mitigation wetland. This potential unavoidable significant impact is due to the long period of time required for newly planted tree placements to develop into mature trees. In the future scenario without the Catskill/Delaware Ultraviolet Light (UV) Disinfection Facility (Cat/Del UV Facility) on the site, the wetlands would be mitigated on-site. In the scenario with the Cat/Del UV Facility wetland mitigation would be off-site. Trees would be replaced to compensate for the habitat losses. The tree habitat mitigation would take place off-site for both future scenarios. The proposed location for the off-site wetlands and forest habitat replacement mitigation is described in Section 9.1, Mitigation of Potential Impacts at the Eastview Site.

10.1.2. Mosholu Site

During the seven-year construction period, the existing golf driving range and clubhouse would be relocated to a temporary facility. The golf driving range would occupy one of the existing nine holes of the driving range and one other hole would be temporarily restructured to serve as two holes. The clubhouse would occupy a temporary building adjacent to the north end of the existing Mosholu Golf Course in the Shandler Recreation Area. When construction is complete the 8.7-acre footprint of the water treatment plant would be available for the same golf course driving range activity that constitutes the existing use. This does not represent a change from the existing condition, so it is not considered a potential significant loss of open space.

The construction of the water treatment plant at Mosholu would entail the loss of 278 trees, in addition to the 76 cut from the relocation of the temporary golf course facilities, which is considered a potential significant impact on natural resources. Many of these are mature specimens, and the mitigation plan, including a tree replacement plan that is quite extensive, would not replace the trees with mature trees for several decades.

10.1.3. Harlem River Site

The principal irreversible commitment of resources for this site alternative is the utilization of the 17.5-acre waterfront site for water supply purposes. Seven of these acres would be available as new public open space, but 10.5 acres would be unavailable for future development. Of these 17.5 acres, 1.5 acres would be lands under water that would be filled and no longer be tidal wetland. The loss of tidal wetland would be a significant impact. This impact would be mitigated by the creation of 3.0 acres of new wetland. This mitigation wetland would include 1.8 acres on the site (part of the 17.5 acres of total land) plus 1.2 acres off-site. Several sites along the Harlem River have been investigated for this off-site mitigation but no firm decision of a preferred site for this mitigation has been made. One candidate site is an area of fill adjacent to an existing tidal wetland along the north side of the Harlem River east of the Spuyten Duyvil Bridge.

10.1.4. NCA Pressurization, and Jerome Park Reservoir

None of the sites that would be utilized for access and staging for the NCA pressurization work (Eastview Site alternative, NCA conveyance alternative only) would require the taking of land. The proposed work at Gate House No. 1 would require the removal of two trees in the staging area. In addition, seven trees would be removed from around the existing Gate House structure. 35 other trees could be threatened by nearby construction because their branches extend to within twenty feet of the proposed construction boundary. Topsoil would be replaced and trees would be replanted when the work is complete. This small impact in the forest to natural resources is not considered an irretrievable loss of a significant resource.

The historic nature of the New Croton Aqueduct is characterized by the hand-laid brickwork that forms the tunnel liner except for the sections that were designed to hold pressurized water. The proposed pressurization of the remainder of the aqueduct below the proposed treated water connection south of Shaft No. 10 would involve covering the brick liner with either cast-in-place concrete or steel liner plates. This would be considered an irretrievable and irreversible unmitigatable significant adverse impact on the historic character of the NCA and is described in the context of the existing historic resource in Section 5.12.

No irretrievable loss of resources would occur around Jerome Park Reservoir as a consequence of the proposed action. The proposed modifications to the existing historic structures around the Reservoir are all internal to the structures and are consistent with their historic uses as water supply structures.