List of Underlying Studies, Reports, EISs, and Other Information Obtained and Considered in Preparing the Modification of the Catalum SPDES Permit DEIS

The following is a list of the studies, reports, data, and information obtained and considered in preparing the Modification of the Catalum State Pollutant Discharge Elimination System (SPDES) Permit Draft Environmental Impact Statement (DEIS). The studies, reports and data used and their associated references, where applicable, are integrated into the DEIS. The page number where these are referenced is listed below by DEIS section.

Sections 1-4

Sections 1-4. Studies/Reports/Data Used in Preparing DEIS	**Page #**
Catskill Aqueduct Influent Chamber State Pollutant Discharge Elimination System Permit (SPDES No. NY 026-4652) (CATIC or Catalum SPDES Permit). (*New York State Department of Environmental Conservation (NYSDEC), 2007, administratively renewed in 2012 and 2017*)	1-1
NYSDEC October 4, 2013 Order on Consent (amended in 2018 (2018 Modification) and in 2020 (2020 Modification) (collectively as modified, the Consent Order)). (*NYSDEC 2013, 2018, 2020*)	1-1
Interim Ashokan Release Protocol (IRP), including the Water Quality Monitoring Plan. (*NYSDEC and New York City Department of Environmental Protection (DEP), September 27, 2013 Issued with 2013 Order on Consent*)	1-1
Draft Scope of Work for the EIS. (*Issued by NYSDEC on April 9, 2014*) Final Scope of Work for the EIS. (*Issued by NYSDEC on March 22, 2017*)	1-2
DEP's ten-year 2017 Filtration Avoidance Determination. (*NYSDOH, 2017*)	1-4
The results of DEP's Turbidity Control Studies, where applicable, as listed in Figure 1-7. (*DEP 2004 through 2011; Catskill Turbidity Control Alternatives Summary Report, DEP, 2014*)	1-15

Section 5

Section 5. Studies/Report/Data Used in Preparing DEIS	**Page #**
The National Academy of Science's Review of the New York City Department of Environmental Protection Operations Support Tool (OST) for Water Supply. (*National Academies Press, 2018*)	5-1
Reservoir details modeled by OST including storage/elevation curves, spillway rating curves, aqueduct capacities, valving configurations, etc. (*DEP's OST, based on hydrologic data from 1948-2017*)	5-1
OST Model Assumptions (Flows and Water Quality) as shown in Table 5.1-1. (*DEP, 2020*)	5-2
U.S. Army Corps of Engineers (USACE) Hydrologic Engineering Center River Analysis System (HEC-RAS) model for lower Esopus Creek. (*Gannett Fleming, 2018*)	5-2
DEP climate change studies over the past 13 years. (*DEP, 2007-2020*)	5-4
United States Geological Service (USGS) tool that predicts future peak streamflow information for a given watershed based on multiple climate models. (USGS, https://ny.water.usgs.gov/maps/floodfreq-climate/, *accessed 2020*)	5-4
Comprehensive list of observed data used in the DEIS, including period of analysis (Table 5.2-2). (*Data source and period of analysis varies, listed in Table 5.2-2*)	5-7

Section 5. Studies/Report/Data Used in Preparing DEIS	**Page #**
Hydrologic Inputs used in the DEIS for spills, releases, and streamflow (Table 5.2-3). (*DEP, 1948-2017 and USGS, 1970-2017*)	5-10
47 surveyed cross-sections (*Gannett Fleming*, *2011 and 2018*); nine surveyed bridge structures (*NYS DOT Region 8 Structures Group Office, 2011*); 34 cross-sections from a Federal Emergency Management Agency (FEMA) flood model for lower Esopus Creek (*FEMA, 2011*); and five surveyed topographic areas (*Munoz and Gannett Fleming*, *2018*)	5-10
A one-meter resolution Digital Elevation Model (DEM) obtained from the NYS Statewide Digital Orthoimagery Program (NYSDOP) for Ulster County. (*NYSDOP, accessed 2018*)	5-11
"Guidelines for Determining Flood Flow Frequency." Bulletin 17B of the Hydrology Subcommittee. 1982. (*USGS, 1982*)	5-12
2016 Flood Insurance Study (FIS) for Ulster County. (*FEMA, 2016*)	5-12
River Reconnaissance Report for Sustainable River Management: Lower Esopus Creek, Ulster County, NY. (*Milone & MacBroom, 2009*)	5-13
2011 survey of property owners along lower Esopus Creek. (*DEP and Ashokan Release Working Group (ARWG), 2011*)	5-13
Cross-section surveys, Wolman pebble counts, Bank Assessment for Non-point Source Consequences of Sediment (BANCS) assessments, bank pin measurements, and sediment samples. (*Hazen, 2012-2019*)	5-13
Aerial imagery analysis of lower Esopus Creek from 1994, 2001, 2004, 2009, 2013, and 2016. (*Gannett Fleming, 2019; Imagery from NYSDOP for the years listed and USGS NAPP for New York State, 2018*)	5-13
Lagasse, P., L.W. Zevenbergen, W.J. Spitz, C.R. Thorne. 2004. Methodology for Predicting Channel Migration. National Cooperative Highway Research Program Document 67 (Project 24-16). (*Lagasse et al., 2004*)	5-13
Nine site visits were conducted at the 17 stream geomorphic cross-sections over seven years of monitoring, as follows: September 2012, April 2013, October 2014, August 2015, October 2015, March 2016, November 2017, April 2018, and March 2019. (*Hazen, 2012-2019*)	5-16
Geomorphic investigation in 2006 for the portion of lower Esopus Creek upstream of the spillway confluence. This investigation observed stream features and measured channel dimensions and particle size distributions in lower Esopus Creek between the Ashokan Release Channel and the spillway confluence. (*Hazen and Gannett Fleming, 2006*)	5-16
Copeland, R.R. 2000. Channel-Forming Discharge. USACE ERCD/CHL CHETN-VIII-5. (*Copeland, 2000*)	5-16
Field estimations of CF discharge were conducted at four riffle sections of lower Esopus Creek where measurements were taken specifically to estimate streamflow (cross-sections 0, 2, 7, and 8). (*Hazen, 2012-2018)*	5-16
Slope-breaks within lower Esopus Creek were identified in two ways; first, in the field via on-site investigations, and second through the review of surveyed cross-section data as entered into RiverMorph® software. (*Hazen, 2012-2018*)	5-17
Stream slope was measured at relevant cross-section locations when topographic cross-section surveys were completed. Discharge was then estimated from field data using Manning's equation. (*Hazen, 2012-2018*)	5-17
Manning, R. 1891. On the Flow of Water in Open Channels and Pipes. Transaction of the Institution of Civil Engineers of Ireland 20:161-207. (*Manning, 1891*)	5-18
The hydrologic region 4 regional curve for bankfull discharge. (*Mulvihill et al., 2009*)	5-18

Section 5. Studies/Report/Data Used in Preparing DEIS	**Page #**
Miller, S. and Davis, D. 2013. Optimizing Catskill Mountain Regional Bankfull Discharge and Hydraulic Geometry Relationships. (*Miller and Davis, 2013*)	5-18
Lumia, R., 1991. Regionalization of Flood Discharges for Rural, Unregulated Streams in New York, Excluding Long Island. U.S. Geological Survey Water-Resources Investigations Report 90-4197, 119 pp. https://pubs.usgs.gov/wri/1990/4197/report.pdf, accessed 2020. (*Lumia, 1991*)	5-18
Mulvihill, C.I. and Baldigo, B.P. 2012, Optimizing Bankfull Discharge and Hydraulic Geometry Relations for Streams in New York State. JAWRA Journal of the American Water Resources Association, 48: 449-463. (*Mulvihill, 2012*)	5-18
Rosgen, D. 2009. Watershed Assessment of River Stability and Sediment Supply (WARSSS). Wildland Hydrology. (*Rosgen, 2009*)	5-18
Streambank erodibility curves: two datasets developed in mountain streams in Colorado and Wyoming with high sediment supply of coarse material, one dataset based on North Carolina Piedmont streams, and one in a highly urbanized setting near Washington, D.C. with a drainage area of two square miles. (*Accessed via RiverMorph software version 5.2, 2019*)	5-19
All 17 stream geomorphology cross-sections were evaluated by field staff trained in Rosgen methods to obtain BEHI and NBS ratings. (*Hazen, 2012-2018*)	5-19
The D50 of the particle size distributions of bank material were determined through sieve analysis at seven of the 17 cross-sections. At the remaining ten cross-sections, the D50 was estimated using site photographs and measured D50 values at nearby cross-sections. (*Hazen, 2012-2018*)	5-21
Bunte, Kristin; Abt, Steven R. 2001. Sampling surface and subsurface particle-size distributions in wadable gravel- and cobble-bed streams for analyses in sediment transport, hydraulics, and streambed monitoring. Gen. Tech. Rep. RMRS-GTR-74. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 428 p. (*Bunte and Abt, 2001)*	5-21
Shields and Wildland Hydrology curves define critical shear stress as a function of particle size. Both curves are available in and were obtained from the RiverMORPH® software developed by Wildland Hydrology. (*Accessed via RiverMorph software version 5.2, 2019*)	5-21
Bunte, K., Abt, S.R., Swingle, K.W., Cenderelli, D.A., and Schneider, J.M. 2013. Critical Shields values in coarse-bedded steep streams. Water Resour. Res., 49: 7247-7447. (*Bunte et al., 2013*)	5-21
Clark, L.A., and Wynn, T.M. 2007. Methods for determining streambank critical shear stress and soil erodibility: Implications for erosion rate predictions. Transactions of the ASABE. 50(1): 95-106. (*Clark, Wynn, 2007*)	5-21
Julian, J.P., and Torres, R. 2006. Hydraulic erosion of cohesive riverbanks. Geomorphology, 76: 193-206. (*Julian and Torres, 2006*)	5-21
Huang, H.Q., and Nanson, G.C. 1998. The influence of bank strength on channel geometry: an integrated analysis of some observations. Earth Surf. Process. Landforms, 23: 865-876. (*Huang and Nanson, 1998)*	5-21
Market value and housing characteristic data of 550 single-family homes within 2,500 feet (approximately a 0.5 mile) of the two creeks from 2007 to 2017 were obtained from Ulster County's Parcel Geodatabase. Market value is determined by Ulster County property assessors and was provided in a dataset compiled by the New York State Department of Tax and Finance's Office of Real Property Tax Services (NYS-ORPS). The analysis compared	5-24

Section 5. Studies/Report/Data Used in Preparing DEIS	**Page #**
changes of property values for homes across three time periods: (1) 2007 to 2013; (2) 2013 to 2017; and (3) the full time period from 2007 to 2017. (*Ulster County Geodatabase, 2007-2017; NYSORPS, 2007-2017*)	
Approximately 2,900 questionnaires sent to residents and businesses within a 0.5 mile of lower Esopus Creek in 2018. (*HDR, 2018*)	5-25
IMPLAN Group, LLC. 2019. IMPLAN 2017 data file for Ulster County, New York, Accessed 1/17/2019. (*IMPLAN, 2019*)	5-29
Edinger, G.J., D.J. Evans, S. Gebauer, T.G. Howard, D.M. Hunt and A.M. Olivero (editors). 2014. Ecological Communities of New York State. Second Edition; A Revised and Expanded Edition of Carol Reschke's Ecological Communities of New York State. New York Natural Heritage Program. New York State Department of Environmental Conservation, Albany, NY. (*Edinger, et al., 2014*)	5-34
Annual fish and stream macroinvertebrate community surveys along lower Esopus Creek in 2009, 2012, 2013, 2014, and 2017 (*Normandeau Associates, 2009-2017*)	5-35
Barbour, M.T., J. Gerritsen, B.D. Snyder, and J.B. Stribling. Rapid Bioassessment Protocols for Use in Streams and Wadeable Rivers: Periphyton, Benthic Macroinvertebrates and Fish. Second Edition. EPA 841-B-99-002. U.S. Environmental Protection Agency; Office of Water; Washington, D.C. (*USEPA, 1999*)	5-35
Smith, Alexander J., Duffy, Brian T., Heitzman, Diana L., Lojpersberger, Jeff L., Mosher, Elizabeth A., Novak, Margaret A. 2015. Lower Esopus Creek Stream Biological Assessment. (*NYSDEC, 2015*)	5-35
NYSDEC (Bureau of Fisheries) electrofishing survey data from 2014 to 2016 collected at deep water locations in the Town of Saugerties, Town of Kingston, and Town of Marbletown were reviewed and information on fish stocking in lower Esopus Creek was obtained from the Federated Sportsmen of Ulster County. (*NYSDEC, 2014-2016*)	5-35
HSI reports published by U.S. Fish and Wildlife Service describe life history attributes, habitat preferences and physiological limits for selected species. (*USFWS, 1982-1986*)	5-36
A site survey of Submerged Aquatic Vegetation (SAV) beds conducted in 2018 for the Esopus Estuary, located downstream of the Cantine Dam, to delineate the presence and extent of SAV beds. (*Amy S. Greene Environmental Consultants, 2018*)	5-36
NYSDEC freshwater wetlands maps and U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) maps. (*NYSDEC and USFWS, accessed 2019*)	5-36
Wetland acreage measured during field surveys conducted between 2009 and 2018 for 47 wetlands upstream of the spillway confluence, ten wetlands downstream of the spillway confluence and 11 floodplain forest transects under various streamflow conditions. (*Gannett Fleming, 2009-2018*)	5-36
Wakely, J.S. R.W. Lichvar, C.V. Noble, and J.F. Berkowitz. 2011. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0). (*USACE Research and Development Center, 2011*)	5-36
The 2011 National Land Cover Dataset. (*USGS, 2011*)	5-37
USFWS and NYSDEC's New York Natural Heritage Program (NYNHP) (*Correspondence dated May 9 and 10, 2018*)	5-37
Fish sampling conducted in August 2006 to assess fish distribution throughout Kensico Reservoir. This survey data, along with existing NYSDEC fish survey data, and a detailed review of available water quality data (pH, conductivity, dissolved oxygen) were used to	5-37

Section 5. Studies/Report/Data Used in Preparing DEIS	Page #
assess potential impacts to fish at Kensico. (*Biosonics, 2006*; *DEP, 2011-2017*; *NYSDEC, 1990, 1991, 1993, 2001 and 2010*)	
A list of publicly available environmental databases that were reviewed for the hazardous materials technical resource area DEIS assessment are listed in the document. (*Sources vary as listed, accessed 2019*)	5-38

Section 6

The following lists additional studies, reports, or data not previously presented in Section 5.

Section 6. Studies/Reports/Data Used in Preparing DEIS	Page #
Lower Esopus Creek Bedrock Formations. (*New York State Museum GIS, Geology, accessed 2019*)	6-5
Lower Esopus Creek Surficial Geology. (*New York State Museum GIS, Geology, accessed 2019)*	6-7

Section 7

The following lists additional studies, reports, or data not previously presented in Section 5.

Section 7. Studies/Report/Data Used in Preparing DEIS	Page #
The Delaware System Flexible Flow Management Program. (*Decree Parties, 2017*)	7-46
Table 7.1-8 lists the DEP Water Supply Reliability Metrics considered in the DEIS analysis. (*DEP, 2020*).	7-47
Simon, A., A. Curini, S.E. Darby and E.J. Langendoen. Bank and Near-bank Processes in an Incised Channel. Geomorphology. 335:193-217. (*Simon et al., 2000*)	7-76
Relevant public policies, including adopted State, county, neighborhood, and community plans in the lower Esopus Creek study area. (*Varies by municipality, accessed via municipal websites in 2019*)	7-80
Land use and zoning maps by municipality along lower Esopus Creek. (*Varies by municipality, accessed via municipal websites in 2019*)	7-86
The agricultural overlay Agricultural District #4, which includes tax parcels in the Town of Hurley, Village of Saugerties, Town of Saugerties, Town of Ulster, City of Kingston, northern Town of Olive, and northern and eastern Town of Marbletown. (*Ulster County GIS, accessed 2019*)	7-90
2010 U.S. Census Bureau Decennial Census, Table P9. (*USCB, 2010*)	7-103
2012 – 2017 American Community Survey 5-Year Estimates, Table B03002. (*USCB, 2012-2017*)	7-103
U.S. Census Bureau, 2010 Census; U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates, Table B19013. (*USCB, published in 2018*)	7-108
2017 Census of Agriculture County Data published by the U.S. Department of Agriculture (USDA). (*USDA, 2017*).	7-109
National/State Register of Historic Places (N/SR). (*NYSOPRHP Cultural Resource Information System (CRIS), https://cris.parks.ny.gov/, accessed May 21, 2019.)*	7-140
1999 Phase 1 Cultural Resource survey was conducted at the Ashokan Field Campus. (*Christopher Linder, Ph.D., Bard College, 1999*)	7-143

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Table 7.7-2 lists the richness and biological impact assessment scores for stream macroinvertebrate sampling conducted between 2009 and 2017 along lower Esopus Creek. (*Normandeau Associates, 2009-2017*)	7-172
Lower Esopus Creek Project. A Journey through Lower Esopus Creek. (*Lower Esopus Watershed Partnership, 2011*)	7-173
Tables 7.7-3 and 7.7-4 show presence and absence of fish species collected during electrofishing surveys along lower Esopus Creek. (*Normandeau Associates, 2009-2017*)	7-175
Barrett, J.C., G. Grossman, and J. Rosenfeld. "Turbidity-induced changes in reactive distance of rainbow trout." Transactions of the American Fisheries Society, 121:437-443. 1992. (*Barret, Grossman, Rosenfeld, 1992*)	7-181
Sweka, J.A. and K.J. Hartman. "Influence of turbidity on brook trout reactive distance and foraging success." Transactions of the American Fisheries Society, 130:138-146. 2001. (*Sweka and Hartman, 2001*)	7-181
Sweka, J.A. and K.J. Hartman. "Effects of turbidity on prey consumption and growth in brook trout and implications for bioenergetics modeling." Canadian Journal of Fisheries and Aquatic Sciences, 58:386-393. 2001. (*Sweka and Hartman, 2001*)	7-181
Rowe, D.K., T.L. Dean, E. Williams, and J.P Smith. "Effects of turbidity on the ability of juvenile rainbow trout Oncorhynchus mykiss, to feed on benthic and limnetic prey in laboratory tanks." New Zealand Journal of Marine and Freshwater Research, 37:45-52. 2003. (*Rowe et al., 2003*)	7-181
White, J.L. and B.C. Harvey. "Winter feeding success of stream trout under different streamflow and turbidity conditions." Transactions of the American Fisheries Society, 136:1187-1192. 2007. (*White and Harvey, 2007*)	7-181
Shoup, D.E. and D.H. Wahl. "The effects of turbidity on prey selection by piscivorous largemouth bass." Transactions of the American Fisheries Society, 138:1018–1027. 2009. (*Shoup and Wahl, 2009*)	7-181
Shoup, D.E. and W.D. Lane. "Effects of turbidity on prey selection and foraging return of adult largemouth bass in reservoirs." North American Journal of Fisheries Management, 35:913–924. 2015. (*Shoup and Lane, 2015*)	7-181
Tables 7.7-5 and 7.7-6 show the suitable turbidity levels for fish species used in the DEIS and the relevant sources of that information. (*Sources and dates vary, listed in the table notes*)	7-183
Cowardin, L.M., V. Carter, F.C. Golet, E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of the Interior (USDOI). (*USDOI, 1979*)	7-193
Table 7.8-2 summarizes the dominant wetland vegetation documented upstream of the spillway confluence between 2006 and 2018. (*Gannett Fleming, 2006-2018*)	7-200
Table 7.8-4 summarizes the dominant wetland vegetation documented downstream of the spillway confluence between 2012 and 2018. (*Gannett Fleming, 2012-2018)*	7-203
Emerald Ash Borer Restricted Zone map. (*NYSDEC, 2017*)	7-207
Owen, S.F. M.A. Menzel, W.M. Ford, B.R. Chapman, K.V. Miller, J.W. Edwards and P.B. Wood. 2003. Home-range Size and Habitat Used by the Northern Myotis (Myotis septentrionalis). American Midland Naturalist 156:352-359. (*Owen, et al., 2003*)	7-220
Tesauro, J. 2018. Personal Communication Regarding Observations and Behavior of Wood Turtles in Lower Esopus Creek. (*Jason Tesauro Ecological Consulting, LLC., 2018*)	7-220

Section 7. Studies/Report/Data Used in Preparing DEIS	Page #
Sewer interceptor information for the Town of Ulster Wastewater Treatment Plant. (*Town of Ulster, 2019*)	7-228

Section 8

The following lists additional studies, reports, or data not previously presented in Section 5.

Section 8. Studies/Reports/Data Used in Preparing DEIS	Page #
Extensive bathymetric and sediment sampling studies in 2006 and 2014 to determine the depth, areal distribution, and chemical make-up (total and dissolved aluminum content) of the alum floc deposition within the area of CATIC Cove and the adjacent area of the Reservoir. Analysis of the physical characteristics of collected samples included grain size, percent moisture, percent solids, and percent organic matter. (*HDR, 2007 and 2014*)	8-2
Kensico Reservoir benthic community in proximity to the areas of alum deposition in April and July 2007. The 2007 surveys followed a period of alum application in 2005 and 2006. In July 2014, a representative subset of the stations sampled in 2007 were selected and resampled. The 2014 sampling also followed a period of alum application in 2011 and 2012. (*HDR, 2007 and 2014*)	8-2
Modeled range of average settled thickness of alum floc during WFF Program. (*Hazen, 2015*)	8-5
Table 8.2-2 summarizes historical alum application events from April 5, 2005 to the present. (*DEP, 2020*)	8-9
Table 8.2-3 shows estimated total sediment volume for various time periods. (*DEP, 2020*)	8-11
J. Herbich. Handbook of Dredging Engineering, 2000; USACE. Dredging and Dredged Material Management, EM 1110-2- 5025, July 31, 2015. (*Herbich, 2000*)	8-12
Cowardin, L.M., V. Carter, F.C. Golet, E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of the Interior. (*USDOI, 1979*)	8-19
Huser, B., P. Brezonik, and R. Newman. 2011. Effects of Alum Treatment on Water Quality and Sediment in the Minneapolis Chain of Lakes, Minnesota, USA. Lake and Reservoir Management, 27:220-228, 201. (*Huser et al., 2011*)	8-19
Smeltzer, E., R.A. Kirn, and S. Fiske. 2009. Long-term Water Quality and Biological Effects of Alum Treatment of Lake Morey, Vermont. Lake and Reservoir Management, 15: 173-184. (*Smeltzer et al., 2009*)	8-19
Eight stream and ten reservoir water quality sampling sites in Kensico Reservoir and its tributaries. There are three water quality sampling sites that are representative of water quality entering and diverted from Kensico Reservoir via the Catskill and Delaware Aqueducts, which are CATALUM, DEL17, and DEL18DT. (*DEP, 2017*)	8-20
Steinman, A.D. and M. Ogdahl. 2008. Ecological Effects after an Alum Treatment in Spring Lake, Michigan. Journal of Environmental Quality, 37:22-29. (*Steinman and Ogdahl, 2008*)	8-20
The Use of Alum for Lake Management: Position Statement. (*North American Lake Management Society (NALMS), 2004*)	8-20
Driscoll, C.T., A. Lee, M. Montesdeoca, D.A. Matthews and S.W. Effler. 2014. Mobilization and Toxicity Potential of Aluminum from Alum Floc Deposits in Kensico Reservoir, NY. Journal of the American Water Resources Association, 50:143-152. (*Driscoll et al., 2014*)	8-21
Flood Map Service Center Flood Insurance Rate Map (FIRM) numbers 36119C0257F; 36119C0259F; 36119C0276F. (*FEMA, September 28, 2007*)	8-23

Section 8. Studies/Reports/Data Used in Preparing DEIS	Page #
Kensico Reservoir Geophysical and Aluminum Sampling Program: 2014 Sediment Grab, Vibracore Collection & Bathymetric Survey, Westchester County, NY. (*CR Environmental, Inc. 2015*)	8-23
Temporal Variation and Spatial Heterogeneity of Phytoplankton Abundance within a Water Supply Impoundment. City University of New York. Graduate Dissertation. (*Principe, M.A., 1991*)	8-26
U.S. Environmental Protection Agency. 1983. Fish and Fisheries Management in Lakes and Reservoirs. EPA-841-R-93.002. (*USEPA, 1983*)	8-27
Wetzel, R.G. 1983. Limnology, 2nd Ed. Saunders College Publishing, Philadelphia. (*Wetzel, 1983*)	8-27
McCafferty, W.P. 1981. Aquatic Entomology. First Edition, Jones and Bartlett Learning. (*McCafferty, 1981*)	8-30
Table 8.3.4 lists benthic invertebrates collected and identified during sampling of 41 locations at CATIC Cove in 2007 and 2014. (*HDR, 2007 and 2014*)	8-31
Analysis of Acoustic and Gillnet Data Collected from Kensico Reservoir (Kensico Lake and Rye Lake) in 2006. (*Biosonics, 2010*)	8-34
Fish Stocking Lists (Actual): Beginning 2011. (*NYS Office of Information Technology Service, 2018*)	8-36
Scott, W.B. and E.J. Crossman. 1973. Freshwater Fishes of Canada. 1st Edition. Department of the Environmental Fisheries Research Board. (*Scott and Crossman, 1973*)	8-37
Evaluation of the Potential Adverse Effects of an Alum Treated Kensico Reservoir Inflow. Technical Memorandum prepared for Malcolm Pirnie, Inc., Fair Lawn, NJ. (*Pilgrim, K., 2008*)	8-43
Evaluation of the Potential Adverse Effects of Lake Inflow Treatment with Alum. Lake and Reservoir Management 21: 77-87. (*Pilgrim, K.M. and P.L. Brezonik., 2005*)	8-43
Cardwell, A.S., W.J. Adams, R.W. Genesemer, E. Nordheim, R.C. Santore, A.C. Ryan and W.A. Stubblefield. Chronic Toxicity of Aluminum, at a pH of 6, to Freshwater Organisms: Empirical Data for the Development of International Regulatory Standards/Criteria. (*Cardwell, et al., 2017*)	8-43
Gensemer, R.W. and R.C. Playle. The Bioavailability and Toxicity of Aluminum in Aquatic Environments. Critical Reviews in Environmental Science and Technology 29: 315-450. (*Gensemer and Playle, 1999*)	8-43
Soucek, D.J. 2006. Effects of Freshly Neutralized Aluminum on Oxygen Consumption by Freshwater Invertebrates. Archives of Environmental Contamination and Toxicology 50: 353-360. (*Soucek, 2006*)	8-43
Rediske, R.R., L.B. Nederveld, Y. Hong, K. Rieger, N.W. MacDonald, J.P. Dunn and D.G. Uzarski. 2009. Assessment of Benthic Invertebrate Populations in the Muskegon Lake Area of Concern. MR-2009-1. Prepared for Michigan Department of Environmental Quality. (*Rediske, et al., 2009*)	8-45
Wittman, M.E., S. Chandra, J.E. Reuter, A. Caires, S.G. Schladow and M. Denton. 2012. Harvesting an Invasive Bivalve in a Large Natural Lake: Species Recovery and Impacts on Native Benthic Macroinvertebrate Community Structure in Lake Tahoe, USA. Aquatic Conservation: Marine and Freshwater Ecosystems 22: 588-597. (*Wittman et al., 2012*)	8-45
Auld, A.H. and J.R. Schubel. 1978. Effects of Suspended Sediment on Fish Eggs and Larvae: a Laboratory Assessment. Estuarine and Coastal Marine Science 6:153-164. (*Auld and Schubel, 1978*)	8-46

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Table 8.3-10 lists the Upland vegetation observed during 2014 and 2015 site visits. (*HDR, 2014 and 2015*)	8-54
McGowan, K.J. and K. Corwin. The Second Atlas of Breeding Birds in New York State. Comstock Publishing Associates. (*McGowan and Corwin, 2008*)	8-56
Gibbs, J.P., A.R. Breisch, P.K. Ducey, G. Johnson, J.L. Behler and R.C. Bothner. 2007. The Amphibians and Reptiles of New York State: Identification, Natural History, and Conservation. Oxford University Press. (*Gibbs et al., 2007*)	8-56
Mammals of New York State. (*Loarie, S., 2018*)	8-56
Relevant public policies, including adopted State, county, neighborhood, and community plans in the Kensico Reservoir study area. (*Town of Mt. Pleasant and Westchester County, accessed 2019)*	8-59
Land use and zoning maps in the Kensico Reservoir study area. (*Town of Mt. Pleasant, accessed 2019*)	8-62
60 Ldn Noise Contour CEA Map. (*NYSDEC, accessed 2019*)	8-69
New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP) CRIS Database for Kensico Reservoir study area. (*NYSOPRHP, accessed 2019*)	8-71
Westchester County. 2018. Septic Pump Out Data. (https://giswww.westchestergov.com/gismap/, *accessed May 1, 2018*)	8-83
NYSDEC Monitored Concentrations of Criteria Air Pollutants in the Region. (*NYSDEC,* (2018) and earlier reports, as applicable (available at http://www.dec.ny.gov/chemical/8536.html)	8-87

Sections 9-13

Sections 9-13. Studies/Reports/Data Used in Preparing DEIS	**Page #**
Hillview Reservoir Consent Decree and Judgment (*entered by the United States District Court for the Eastern District of New York on May 15, 2019).*	10-1
Water for the Future Alum Treatment Plan (*DEP, 2018*)	10-1

Section 14

Section 14. Studies/Reports/Data Used in Preparing DEIS	**Page #**
Catskill Turbidity Control Alternatives Summary Report. (*DEP, 2014*)	14-1
Phase III Final Report, Catskill Turbidity Control Study. (*DEP, 2007*)	14-4
Catskill Turbidity Control Phase III Value Engineering Study Workshop. (*NYC Office of Management and Budget, 2008*)	14-4
Report on the Feasibility of Minimizing the Area of Alum Floc Deposition in Kensico Reservoir." (*DEP, October 2007*)	14-15