Discovery Report Appendix L

Dams and Floodplain Structures Lake Ontario – Black River Watershed HUC 04150101

July 2016



Federal Emergency Management Agency Department of Homeland Security 26 Federal Plaza New York, NY

Appendix L: Dams and Floodplain Structures

The following files are available in hard copy at NYSDEC Central Office. Files noted as "CEDR" refer to the NYSDEC archival system in which the files/reports are stored. The information detailed below is also published as a separate accompanying attachment to this report as "Appendix L Dams and Floodplain structures.xls".

Hamilton County

Sixth Lake Dam:

• No files available

Herkimer County

Moshier Dam

- 8/16/1989: Beaver River Project Licensed Project No 2645 Supplement to data for initial stage of consultation document
- 11/12/1990: General plans and details of pipeline, details of intake and minimum flow pipe, plan, elevation, and sections, surge tank, penstock, and powerhouse plan and sections
- 3/8/1991: Application for Beaver River Project FERC license
- 1/29/2012: Annual dam certification

Old Forge Reservoir Dam

- 1930: Letter regarding claims of negligent operations
- 11/5/1953: Specification for repair and rebuilding of spillway at old forge reservoir dam. Includes site plans and spillway
- 8/14/2009: Visual Inspection
- 1/25/2012: Dam Safety Annual Certification Form

Stillwater Reservoir Dam

- 6/14/2013: email note that AS BUILT drawings should be submitted
- 5/13/2013: Project Plans and Specifications
- 1/25/2013: Annual Dam Certification
- 3/21/2012: visual inspection EAP Stillwater Reservoir Dam General Site Plan and spillway elevations
- 9/15/1992: Annual test of the EAP
- 8/2/1991: Stillwater reservoir "AS-BUILT" data
- 11/20/1989: Site location and general arrangement, section and details, auxiliary spillway drawings and Installation of an inverted filter at the Stillwater Dam
- 10/21/1988: Loading diagrams
- 8/5/1988: Site location and General Arrangement, Section and Details, and Auxiliary Spillway Plan and Details drawings
- July 1988: Hudson River Black River Regulating District Watertown, NY Stilllwater Dam. Report on Stability Analysis. (CEDR stored)
- 3/20/1988: Slope Stability Analysis for Stillwater Hydroelectric Project.

- 2/1988: Probable Maximum Flood Analysis for the Stillwater Reservoir Beaver River, NY
- 1/23/1986: site plan and waterway baseline profile drawings
- 9/12/1985: Powerhouse/Tunnel elevation drawing, proposed site plan drawing, baseline profile drawing, site plan drawing
- 4/4/1984: inundation mapping and H&H
- 9/29/1982: Application for exemption of small hydroelectric power project from licensing
- 7/13/1978: Phase I Inspection report national Dam Safety Program and H&H
- 1/30/1923: Enlargement of Stillwater Reservoir Contract No.2 Construction of Dams and Appurtenances

Jefferson County

Beebee Island Main Dam

- 8/9/2011: EAP1/19/2012: Annual Certification Form
- 8/1/1995: Visual Inspection
- 8/1989: BeeBee Island Project Licensed Project No 2538 Supplement to Data for Initial Stage of Consultation Document
- 12/1991: Before the United States of America Federal Energy Regulatory Commission Application for New License for Major Modified Project
- 4/1990: Relicensing Progress Report with Site Plan
- 7/10/1987: Stage I pre-filing information packet "Data for Initial Stage Consultation"
- 4/27/1960: Calculations
- 7/19/1948: Map of BeeBee Island (blueprint)
- 10/8/1947: Application for the construction of a Dam including blueprints
- 3/17/1925: Report of a Structure Impounding Water née NYS Dept of State Engineer and Surveyor
- 9/1915: Map showing bottom of Black River from 1100 feet above Beebee Island

Seawalls South Channel Dam

- 1/19/2012: Annual Certification Form
- 1/22/1998: visual inspection
- 5/21/1986: maps and drawings for black river project
- 4/3/1985: Dam drawings
- 7/20/1981: Permit for Article 15 Protection of Water for reconstructing spillway
- 1981: Attachment to DEC Permit Application Supplement D-1 Stability Summary
- 7/15/1981: Hydraulic and Structural information for proposed spilling capacity
- No date: Preliminary Rehabilitation drawings general plan, cofferdams, location, and sections, elevation, dam intake, sluice, dam sections, flashboards, and ladder details.
- 6/9/1981: General Plan, , elevation and section details drawings
- 10/1977: Subsurface Investigation Report Seawalls Development Project Niagara Mohawk Power Corp. Watertown, NY
- 1924: Dam report drawings

Upper North Channel Dam

- 1/19/2012: Annual Certification
- 8/1/1995: visual inspection
- 5/21/1986: engineering maps and drawings
- 9/30/1985: Stage 1-B Archaeological Investigation North Branch Hydroelectric Project City of Watertown Jefferson County NY
- 4/3/1985: Existing dam drawings
- No date: Preliminary general site plans
- 7/28/1977: Location of Core Borings drawings
- 6/28/1979: H&H calculations
- 12/1977: Design Criteria for Rehabilitation of Seawalls Development Black River with stability analysis
- 11/16/1921: Specifications for Repairs to present dam at Watertown, NY for International Paper Company Job 29-15 and 29-16

Watertown Municipal Power Dam

- 2/10/2012: FERC lowered dam to LOW hazard potential classification.
- 7/6/2011: Annual Dam Certification
- 7/14/2008: visual inspection
- No Date: Exhibit A: Project Description, Exhibit G: Maps of the Project
- 5/3/1989: Land Ownership Map Along Black River
- 1/8/1999: Survey Map of Parcels "A" "B" and "C" lands annexed to the City of Watertown NY
- 5/16/1997: Fish Bypass Facility Plan Sections and details and one line diagram site drawings
- 3/20/1996: Survey Map of the PARCEL of land to be annexed to the City of Watertown Ridge Road (Huntington Street)

Felts Mills Dam

• No files available

Beebee Island Diversion Dam

- 1/19/2012: Annual Certification
- 8/10/2009: Visual inspection
- 12/1991: Application for New License for Major Modified Project
- 8/3/1948: Application for the construction of a Dam
- 7/24/1948: Rating Curve and blue prints for the black water river
- 7/24/1948: Proposed changes to Old Stone Dam blue prints

Herrings Dam

- 1/19/2012: Annual Certification
- 7/23/2002: Visual observations

- No date: General plan and details of dam, intake and powerhouse plan and sections drawings
- 1984/1985: NWS reports and news articles
- 5/31/1923: Soil/sand test results
- 3/15/1923: Blueprints for spillway section with ice pressure, spillway section with Maximum Flood

Black River Power Dam

• 1/19/2012: Annual Certification 2012: EAP 6/27/1989: Black River Project Licensed Project No 2569 Supplement to Data for Initial Stage of Consultation Document 5/21/1986: Engineering maps and drawings for Black River Project 5/22/1979: H&H papers 3/13/1979: Stability analysis calculations 1/26/1979: Permit for Proposed Bulkhead Replacement in Black River. 7/21/1919: site information, drainage area, maximum flood, spill capacity, stability calculations and descriptions 1/5/1990: drawings for general plan, and lower forebay, powerhouse, and tailrace plan and sections

Kamargo Dam

- 1/19/2012 Annual Certification letter
- 7/23/2002: Visual observations
- 11/5/1990 General plans and details of dam head gates, plan and sections
- 11/5/1990: General Plan and Details of dam and head gate, and head gate spillway and tailrace plan and sections drawings 7/14/1989: Black River Hydroelectric Project letter and report "Supplement to Data for Initial Stage of Consultation Document"
- 6/27/1989 Black River Project Licensed Project No 2569 Supplement to data for initial stage of consultation document Niagara Mohawk Power Corporation
- No date Preliminary drawing for general plan, location map and section, dam rehabilitation sections and details
- No date: Preliminary General plan, location map, and section, section and details drawings
- 3/12/1985: As-Built changes drawings
- 12/31/1984: Permit for Hydro Development. Includes Stability Analysis, Rock bolts, spillway check with HEC-2
- 10/1984: As-Built drawings
- 3/30/1984: Water surface profile from HEC2
- 3/30/1984: Application for Amendment of License by Niagara Mohawk Power Corporation Black River Project License No 2569.
- 10/1920: Calculations
- 4/7/1920: blueprints for proposed structures, spillway, plan, sections, and details.

Deferiet Dam

- 1/19/2012: Annual Certification
- 7/23/2002: Visual observations

- 4/24/1992: Replacement of Intake Structure report including environmental assessment and stability analysis and site drawings
- 6/14/1991: Filed with FERC
- 10/21/1985: Before the FERC Application for a preliminary Permit by the Deferiet Corporation for the Shamppion Hydroelectric Power Plant. Including site schematics and flow-duration curve
- 5/21/1986: engineering maps and drawings
- No date: General plan and details of dam drawings
- 8/7/1913: Calculations
- 7/29/1913: Testing Laboratory Results
- 6/25/1913: Specifications for Diversion Dam across Black River at Deferiet NY St Regis Paper Company. Including blueprints.

Dexter South Channel Dam

- 9/23/2012 EAP
- 7/16/2008: Visual inspection 1/8/1985: Before the Federal Emergency Regulatory Commission Application for Amendment of Exception from Licensing. With drawings
- 6/6/1985: Before the Federal Emergency Regulatory Commission Application for Amendment of Exception from Licensing. With drawings

Lewis County

Croghan Island Dam

• No files available

High Falls Dam

- 1/14/2011: Annual Certification Form
- 7/24/2002: Visual inspection
- 8/16/1989: Beaver River Project Licensed Project No 2645 Supplement to data for initial stage of consultation document
- 5/27/1988: Engineering data and analysis, construction plans and specifications
- 5/6/1988: Application for Preliminary Permit by Niagara Mohawk Power Corporation for Beaver River Water Power Projects
- 3/1/1988: General plan drawings, sections and details, plans and details.
- 3/12/1987: Application for permit to perform concrete maintenance values, assumptions, and stability summaries, preliminary maps.
- 6/1986: Second Inspection Report of the Niagara Mohawk Power Cooperation Beaver River Project Moshier Development Soft Maple Development Effley Development High Falls Development FERC Licensed Project No 2645
- 7/1/1924: High Falls Beaver River Calculations
- 6/16/1924: Sand testing results, and drawings/blueprints

Soft Maple Terminal Dam

- 1/19/2012: Annual Certification
- 8/8/2000: visual inspection

- No date: drawings of general plan and details, dams, dikes, and canals, spillway dam plan and sections, and powerhouse and penstock plans and sections
- 11/1992: Report of Terminal Dam Seepage Evaluation Soft Maple Hydro Development Niagara Mohawk Power Corporation Croghan, NY
- 7/12/1991: Seepage Barrier Installation plan and location map
- 1990: Soft Maple Hydro FERC#2645 Part 12 Inspection Beaver Development
- 8/16/1989: Beaver River Project Licensed Project No 2645 Supplement to data for initial stage of consultation document.
- 10/1986: Plan, Elevations, and Sections, Aluminums slide gate installation elevation and sections drawings
- 6/1986: Second inspection report of the Niagara Mohawk power corporation Beaver River Project Moshier Development Effley Development High Falls Development FERC Licensed Project No 2645
- 11/4/1984: AS BUILT plan sections for diversion dam
- 8/30/1984: Permit for gravel placement to provide temporary access to diversion
- 8/11/1980: Initial Inspection of the Mshier, Soft Maple, Effley and High Falls Developments in the Beaver River Project.
- 10/19/1924: Hand calculations 4/22/1924: Application for the Construction or reconstruction of a Dam
- 8/27/1924: Hand calculations
- 3/24/1924: blueprints

Adirondack Acres Dam A

- 1/2/2013: Annual certification form
- 6/17/2012: Lake of the Pines Dam Hydrologic & Hydraulic / Hazard Classification Assessment
- 7/16/2009: Visual Inspection
- 10/6/1971: Hand calculations
- 8/1971: Soils and foundation aspects
- 7/21/1971: Drawings, Specifications, and application for permit to constructor a structure and impoundment.

Denley Dam

- 5/20/2011: visual inspection
- 10/1/1982: Cataldo Hydro Power Associates Application for Exception from Licensing for the Denley Dam Project on the Black River in Lewis County, NY
- 10/1969: Flood frequency and computations of area upstream

Port Leyden Lower Dam

- 5/20/2011: visual inspection
- 11/17/2004: Permiti Application Access Bridge Replacement
- 8/1983: Grouting program drawings and logs and water pressure tests

- 6/10/1983: Permit for demolition of existing rock-filled timber crib dam and construction of new gravity concrete dam 3/8/1983: 1981 Phase One Inspection Report for Hawkinsville Dam H&H (HEC 1 Analysis)
- 4/1983: Port Leyden Hydroelectric Project, Design Report, with Hydrological Studies, Stability Analysis, computations, rating curves, and site plans
- 3/1983: Geotechnical Investigations Port Leyden Hydroelectric Project Town of Leyden
- 2/1983: As Built for site plan, sections and details, stability, and grouting program
- 6/17/1940: Blueprints

Whetstone Gulf Storage Dam

• No files available

Boise Cascade Lower Dam

- 4/15/2012: Annual Certification Form
- 8/8/2006: Visual inspection
- 3/3/2006: CEDR Application for Transfer of License
- 5/30/1989: EAP
- 1/27/1986: AS BUILT drawings
- 10/24/1984: Beaver Falls Hydroelectric Projects Beaver Falls I&II FERC licensed projects no 2593 and 2823. Including calculations.

Boise Cascade Upper Dam

- 1/24/2013: Annual Certification Form
- 12/1995: Upper Beaver Falls Project FERC LP No 2593-Y Second Safety Inspection report. Includes project drawings and stability analysis.
- 1/22/1985: AS BUILTs for anchor and face slab arrangement and miscellaneous details
- 11/2/1984: Permit for Maintenance and Repair work
- 10/22/1984: CEDR: Beaver Falls Hydroelectric Projects Beaver Falls I&II FERC Licensed Project No 2593 and 2823
- 3/29/1984: Before the FERC Application for New License for a Major Water Power Plant 5 MW or Less.
- 7/1981: Evaluation Report FERC Licensed Project 2593 CEDR'D 7/24/2002: Visual Inspection
- 9/21/1979: Flashboard calculations for permit
- 1/29/1979: Project drawings for proposed project boundary
- 1981 & 1979: project drawings
- 3/19/1918: Calculations for dam

Turin Reservoir Dam

- 5/20/2011: visual inspection
- 1969: contract drawings and history of the dam

Eagle Falls Dam

- 1/19/2012: Annual Certification
- 8/8/2000: visual inspection
- 2/22/1988: AS BUILT drawings for dam rehabilitation work: structural stability analysis, H&H data and hand calculations
- 2/11/1986: Joint Application for maintenance work includes construction drawings and stability analysis calculations
- 6/17/1913: Application for construction or reconstruction of a dam
- 8/12/1913: Sand analysis report
- No date: General plan and details of dam and penstick, Minimum flow Unit 4, Minimum Flow Gate, Intake Canal, Gatehouse plan and sections, and Powerhouse plan and sections drawings

High Falls Dam At Copenhagen

- 7/14/2008: visual inspection
- 3/12/2007: Permit Application, Debris management Comprehensive Plan and Sluice Gate Repair with drawings
- 6/18/1987: dam Stability Study with existing and proposed intake drawings
- 12/31/1986: Permit Article 15 Protection of Water. Installation of Ice Sluice
- 9/29/1981: Application for Exception of Small Hydroelectric Power Plant

Oneida County

Alder Pond Dam

- 8/17/2000: Visual Inspection Report
- 1999: Join Application for permit CEDR'd
- 6/1998: Forestport Fuseplu Hydraulic Model Study
- 4/1991: Supporting design report for proposed dam modifications CEDR'd
- 4/1991: Drawings for general arrangement, embankment rehabilitation, reservoir spillway rehabilitation, and canal embankment repair.
- 6/15/1990: Rehabilitation of Alder Pond Dam Engineering Design Report CEDR'd 3/1987: Supporting Design Report for proposed dam and canal modifications CEDR'd
- 2/1991: Attachment to Joint Application Form 95-19-3
- 9/27/1989: Dam Failure EAP with H&H and Structural Stability Analysis
- 12/1/1987: Before the FERC Application for Amendment of License Forestport FERC No 4900 NY
- 8/31/1987: Permit for Phase 2 hydroelectric facility
- 6/3/1987: Permit for Phase I of hydroelectric facility
- 7/1987: DEC hand calcs of H&H
- 2/26/1979: Summary of Dam Safety Analysis

Forestport Reservoir Dam

- 4/2012: Dam Safety Annual Certification Form
- 11/27/1995: Tender Package, Construction Specifications, Quality Control Inspection Program, Addendum, and New Construction drawings
- 8/28/1991: Permit for maintenance repairs

- 4/1991: Analysis of the downstream flood hydrograph produced by the dam break of Forestport Dam on Black River
- 4/1991: Forestport Hydroelectric Project Supporting Design Report for Proposed Dam Modifications CEDR'd
- 6/1988: Before the FERC Application for Amendment of License
- 3/1987: Forestport Hydroelectric Project Supporting Design Report for Proposed Dam and Canal Modifications CEDR'd

Kayuta Lake Dam

- 3/2010: Dam Safety Annual Certification Form
- 1/1991: Attachment to Joint Application Form
- 9/27/1989: Dam Failure H&H and Structural Stability Analysis
- 11/28/1988: As BUILTS and approved drawings
- 12/1987: Drawings for proposed embankment modifications
- 7/20/1987: Permit for maintenance
- 8/1986: Kayuta Lake Hydroelectric Power Project Dam Break Analysis and Stability Analysis CEDR'd
- 8/1986: Dam Break Analysis 1/1987: Construction Specifications
- 4/1985: Supporting Design report for proposed dam modifications
- 4/1985: drawings for general plan, existing dam sections, existing lock structure plan an sections
- 6/24/1915: Dam Report

Hawkinsville Dam

- 2/2/2013: EAP test
- 10/26/2011: EAP
- 5/11/2011: routine visual inspection
- 1/13/2010: Annual dam certification
- 12/2007: Dam Breath Analysis report: Hudson-River Black River Regulating District Albany NY Hawkinsville Dam Breach Analysis, Summary of Study and Analysis to Determine Spillway flood design
- 4/4/2006: Report of the Hydrologic and Hydraulic Study for Hawkinsville Dam
- 4/22/2005: 2003 log-Pearson analyses for NY gauging stations
- 4/2002: Hawkinsville Building Demolition Project
- 5/2/1995: Initial Consultation Document Hawkinsville Dam Hydroelectric Power Plan
- 5/1994: Site drawings
- 6/21/1915: Dam Report
- 3/15/1915: Application for construction or reconstruction of a dam