

REPORT OF CHIEF ENGINEER
HUDSON RIVER - BLACK RIVER REGULATING DISTRICT
BOARD MEETING
JUNE 20, 2024 – MAYFIELD, NEW YORK

HUDSON RIVER AREA - MAY SUMMARY

Reservoir Operation

Great Sacandaga Lake

The May average daily release from the Sacandaga Reservoir (Great Sacandaga Lake) was approximately 2,620 cubic feet per second (cfs). The Upper Hudson / Sacandaga River Offer of Settlement target elevation for May 31 is 767.12 feet (ft). The release of water from Great Sacandaga Lake was consistent with the Upper Hudson/Sacandaga River Offer of Settlement.

Table 1.0 - *Great Sacandaga Lake Elevation and Release*

Date	Daily Average Elevation (ft, NAVD) ⁽⁴⁾	Deviation (ft) ⁽¹⁾		Release (cfs)	
		From Average	From Offer of Settlement	Conklingville Dam	E.J. West ⁽²⁾ Hydro Plant
Apr. 30	767.62	+2.63	+4.00	0	4,330
May 31	767.2 (e)	+0.6 (e)	+0.1 (e)	0	1,280 (e)

Notes: ⁽¹⁾ Difference between current reservoir elevation and historic average or Level 3

⁽²⁾ Release established by Regulating District

⁽³⁾ "(e)" represents estimated value

⁽⁴⁾ "NAVD" is National Geodetic Vertical Datum

Indian Lake Reservoir

The May average daily release from Indian Lake was approximately 228 cfs.

Table 2.0 - *Indian Lake Reservoir Elevation and Release*

Date	Daily Average Elevation ⁽¹⁾ (ft, NAVD)	Deviation (ft)		Release (cfs)
		From Average	From Target	
Apr. 30	1,650.15	+0.45	-0.48	535
May 31	1,650.1 (e)	+0.2 (e)	+0.4 (e)	130 (e)

Notes: ⁽¹⁾ Local datum = NAVD elevation + 1617.63ft; spillway crest = 1651.01ft (33.38ft)

⁽²⁾ "(e)" represents estimated value

HUDSON RIVER AREA - MAY SUMMARY- continued

River Flow

Hudson River flow, downstream of the confluence with the Sacandaga River, was approximately 3,710 cfs on May 31 and approximately 1,630 cfs below the historic average flow.

Table 3.0 - Sacandaga, Indian, and Hudson River Flow

River	Monthly Average Flow (cfs)	Historic Average Flow (2) (cfs)
Sacandaga at Hope	1,110 (e)	1,730
Sacandaga at Stewarts Bridge	2,620 (e)	2,410
Indian at Indian Lake Dam	228 (e)	331
Hudson at Hadley (1)	2,750 (e)	5,200

Notes: (1) Above confluence with Sacandaga River

(2) Based on USGS records

(3) "(e)" represents estimated value

Precipitation

Monthly total precipitation measured 64%, 65%, and 114% historic average at Indian Lake, Mayfield, and Conklingville, respectively, as of May 31

Table 4.0 - Hudson River Basin Precipitation - as of May 31

Station	Monthly Total (inch)	Historic Average (inch)
Indian Lake	2.35	3.67
Mayfield	2.46	3.80
Conklingville	4.04	3.54

HUDSON RIVER AREA - MAY SUMMARY- continued

Operation Overview

Precipitation during the month of May was below normal across the Great Sacandaga Lake watershed and above average in the Indian Lake watershed. The monthly inflow to Great Sacandaga Lake and Indian Lake reservoir was approximately 86% and 56% of historic average, respectively. Monthly release of water from Great Sacandaga Lake and Indian Lake measured 113% and 59% of historic average, respectively.

Great Sacandaga Lake Operation

Great Sacandaga Lake operation summary report for the period May 1, 2024 through May 27, 2024 is attached. This report includes projected and forecast values for dates after May 27, 2024.

Hudson River Area Staff Activities

Staff completed routine maintenance and operations activities during the month.

A summary of Regulating District staff activities and work projects at the dam facilities is attached in the Operations Manager's Report.

BLACK RIVER AREA – MAY SUMMARY

Reservoir Operations

Stillwater Reservoir

The May average daily release from Stillwater Reservoir was approximately 80 cfs. The maximum discharge for the month was 154 cfs.

Table 1.0 - *Stillwater Reservoir Elevation and Release*

Date	Daily Average Elevation (ft, NAVD)	Deviation from Average Elevation (ft) (1)	Release (cfs)
Apr. 30	1,675.37	-1.81	100
May 31	1,676.8 (e)	-1.6 (e)	50 (e)

Notes: (1) Difference between current reservoir elevation and historic average

(2) "(e)" represents estimated value

Sixth Lake Reservoir

The May average daily release from Sixth Lake Reservoir was approximately 18 cfs.

Table 2.0 - *Sixth Lake Reservoir Elevation and Release*

Date	Elevation (1) (ft, NAVD)	Deviation from Average Elevation (2) (ft)	Release (cfs)
Apr. 30	1,785.31	+0.53	4
May 31	1,786.2 (e)	+0.4 (e)	59 (e)

Notes: (1) Local datum = USGS datum

(2) Difference between current reservoir elevation and historic average.

(3) "(e)" represents estimated value

Old Forge Reservoir

The May average daily release from Old Forge Reservoir was approximately 44 cfs.

Table 3.0 - *Old Forge Reservoir Elevation and Release*

Date	Elevation (1) (ft, NAVD)	Deviation from Average Elevation (2) (ft)	Release (cfs)
Apr. 30	1,706.49	+0.71	8
May 31	1,707.0 (e)	+0.2 (e)	162 (e)

Notes: (1) Local Datum = USGS elevation

(2) Difference between current reservoir elevation and historic average.

(3) "(e)" represents estimated value

BLACK RIVER AREA - MAY SUMMARY - continued

River Flow

The average daily Black River flow, as measured at the Watertown gauge, was approximately 4,900 cfs on May 31

Table 4.0 - Moose, Independence, Beaver, and Black River Flow

River	Monthly Average Flow (cfs)	Historic Average Flow ⁽¹⁾ (cfs)
Moose at McKeever	592 (e)	1,263
Beaver at Croghan	220 (e)	714
Black at Watertown	2,910 (e)	5,320

Notes: ⁽¹⁾ Based on USGS records

⁽²⁾ "(e)" represents estimated value

⁽³⁾ Stage and flow affected by ice in river

Precipitation

Monthly total precipitation measured 71%, 123%, 118% of historic average at Stillwater, Old Forge, and Sixth Lake, respectively, as of May 31.

Table 5.0 - Black River Basin Precipitation - as of May 31

Station	Monthly Total (inch)	Historic Average (inch)
Stillwater	3.06	4.30
Old Forge	5.25	4.27
Sixth Lake	4.58	3.87

BLACK RIVER AREA - MAY SUMMARY - continued

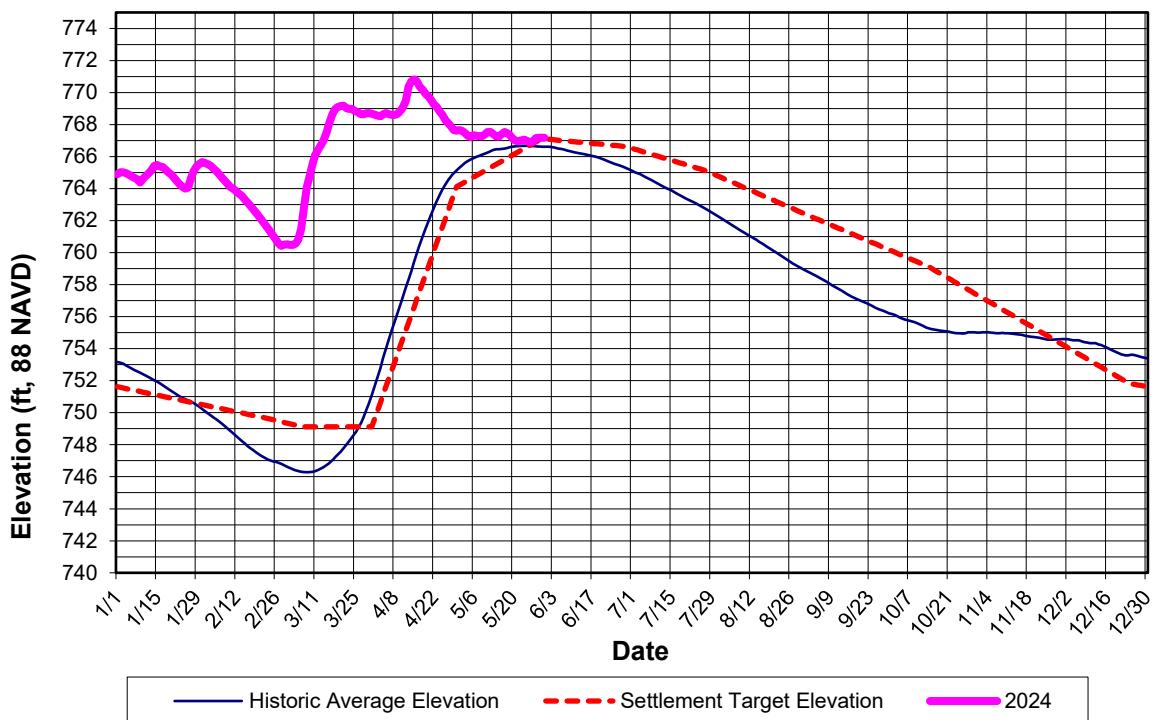
Operation Overview

Precipitation in the month of May was below average at Stillwater and above average at Sixth Lake and Old Forge Reservoir. The monthly inflow to Stillwater Reservoir was approximately 43% of historic average. The inflow to Sixth Lake and Old Forge Reservoir totaled 0.06 and 0.19 billion cubic feet, or 55% and 70% of historic average, respectively, in May. Stillwater Reservoir released 18% of historic monthly average discharge.

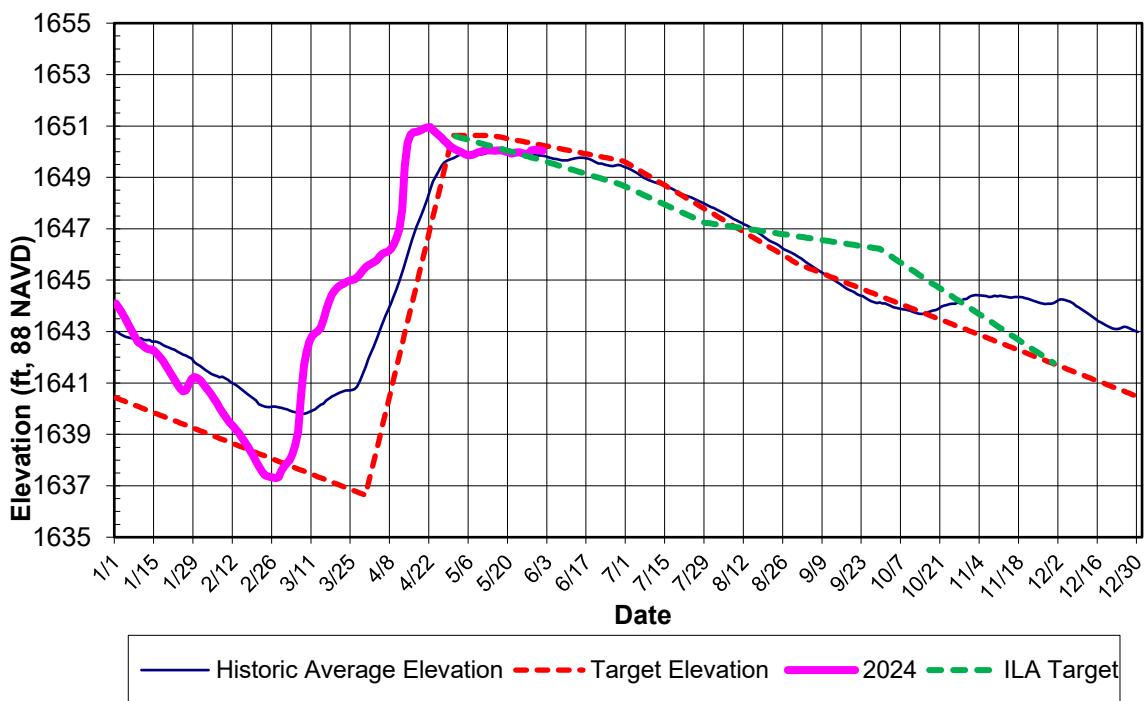
Black River Area Staff Activities

A summary of Regulating District staff activities and work projects at the dam facilities is attached in the Superintendent's Report.

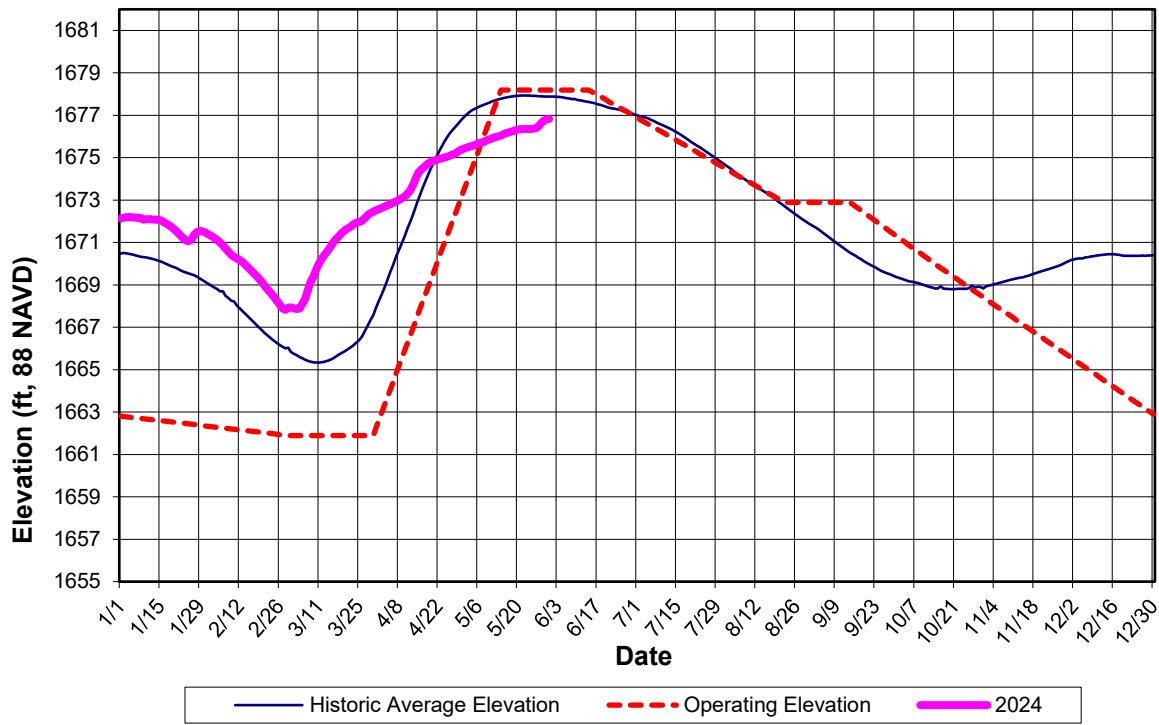
Great Sacandaga Lake 2024 Reservoir Elevation



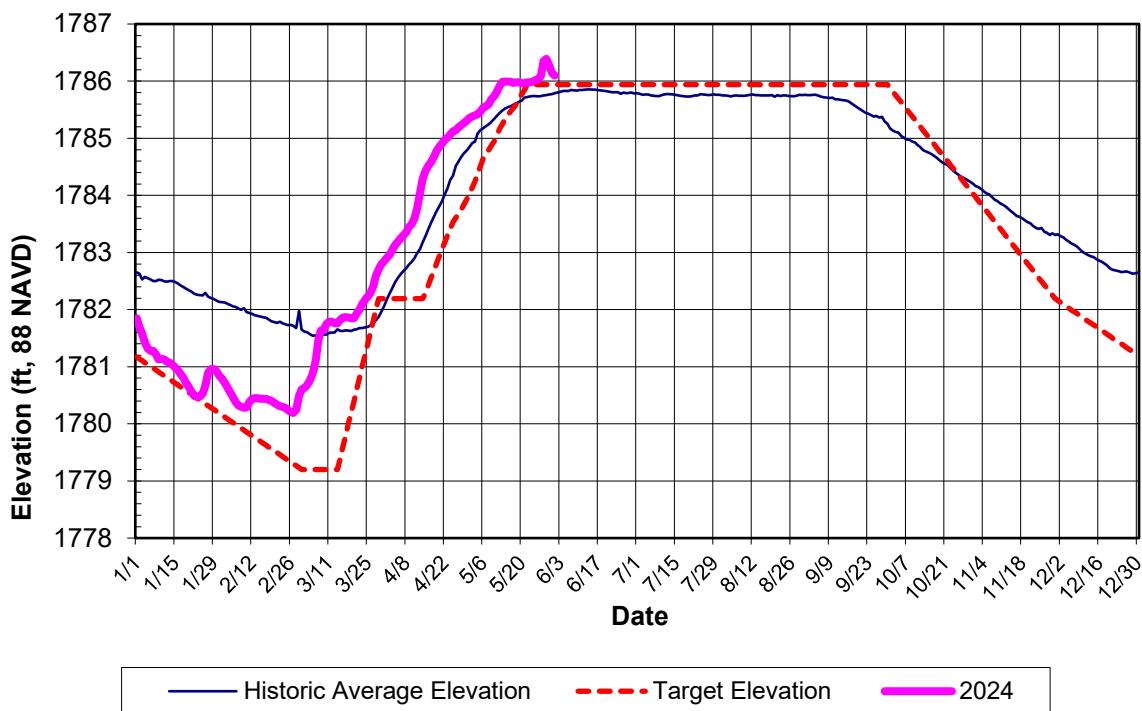
Indian Lake 2024 Reservoir Elevation



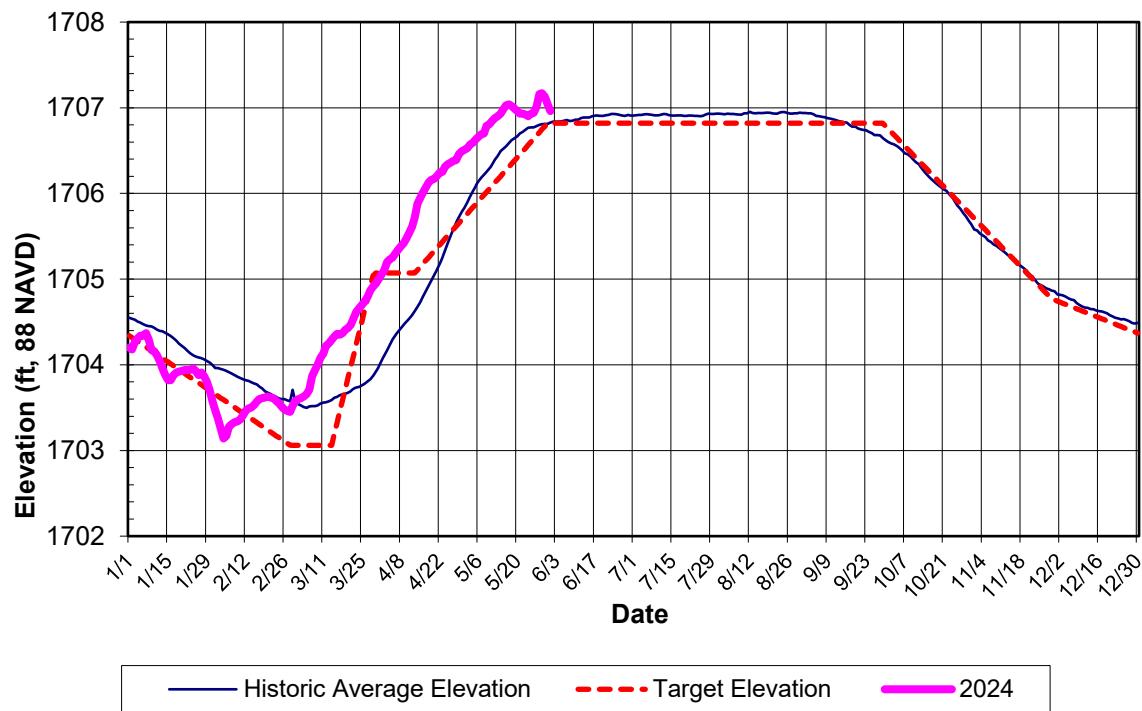
Stillwater Reservoir 2024 Reservoir Elevation



Sixth Lake 2024 Reservoir Elevation



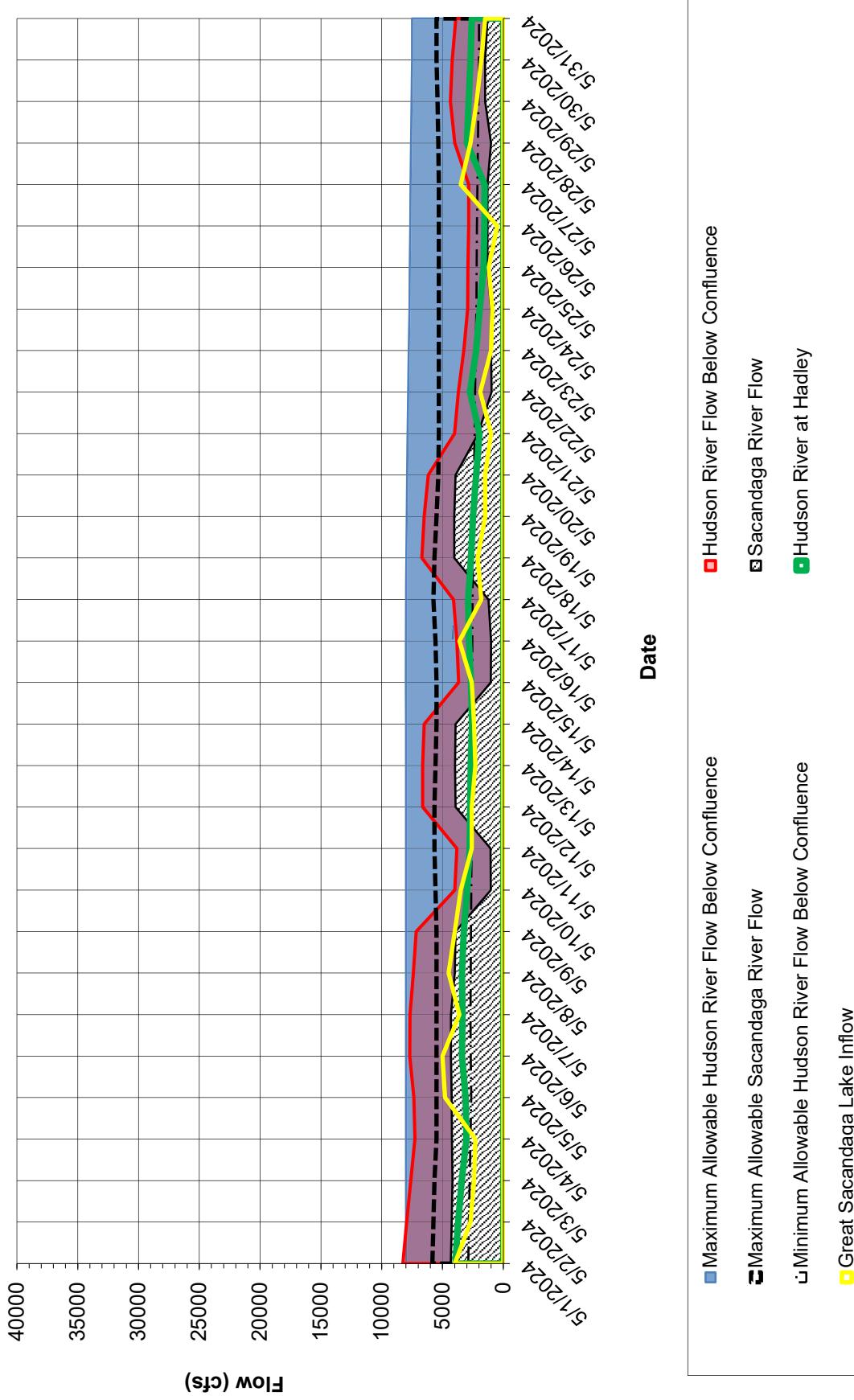
Old Forge 2024 Reservoir Elevation



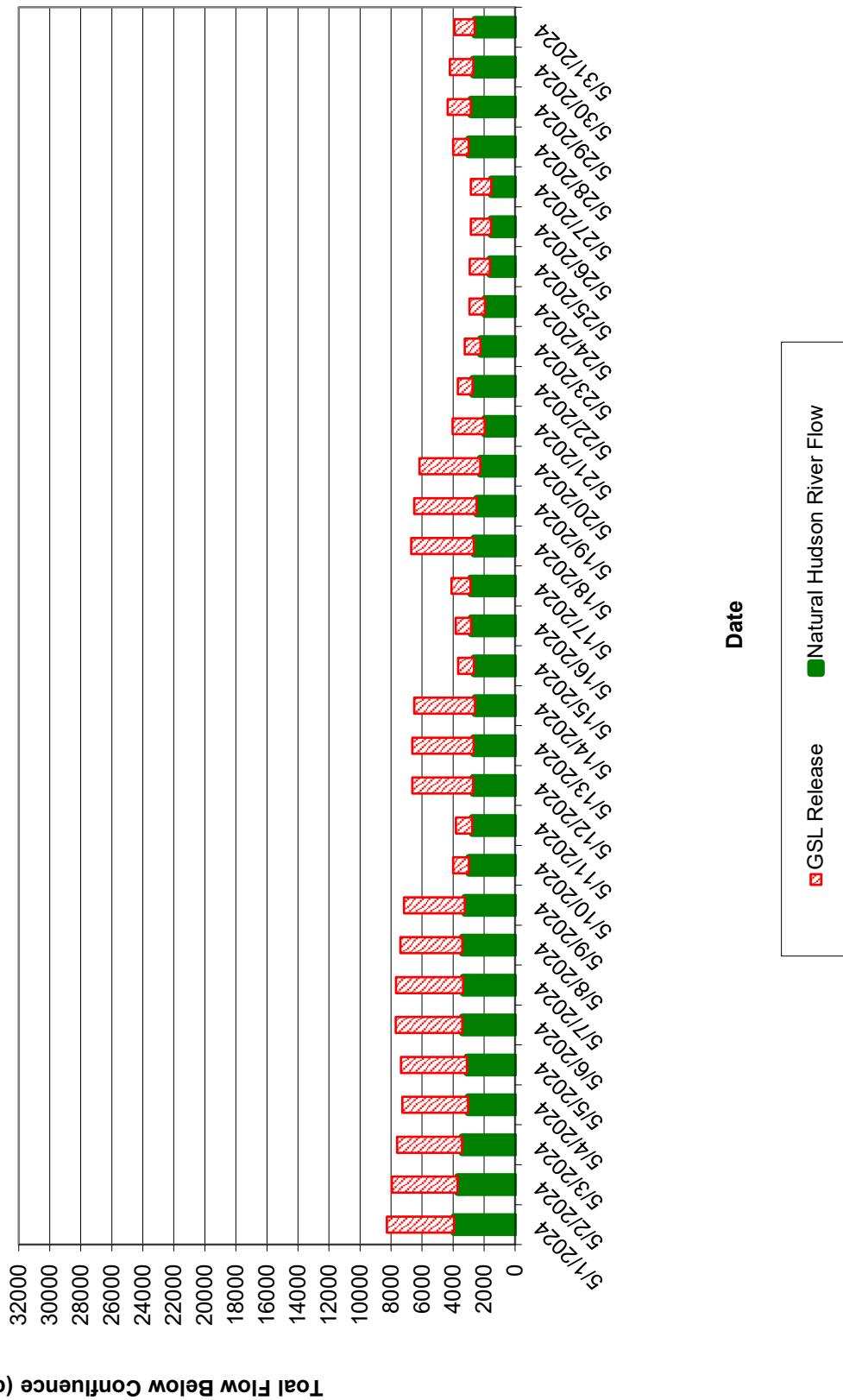
Indian Lake Dam Rehabilitation – Construction Progress Update

Construction activities during the month of May are summarized in Colliers Engineering & Design Construction Progress Report.

Great Sacandaga Lake Actual and Maximum Allowable Hudson River Flow Below Confluence



Great Sacandaga Lake GSL Release and Natural Hudson River Flow



STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
SACANDAGA RESERVOIR / HUDSON RIVER REGULATION

Monthly Report for: April 2024

Day	Sacandaga Reservoir Elevation Average Daily	Sacandaga Reservoir Elevation Midnight	Sacandaga River Near Hope cfs	Reservoir Inflow Hope x 2.0025 cfs	Sacandaga River at Stewarts Bridge cfs	Hudson River at Hadley cfs	Regulated Hudson River below confluence cfs
1	768.61	768.62	1560	3124	4020	4760	8780
2	768.55	768.57	1470	2944	4020	4500	8520
3	768.51	768.51	1530	3064	4130	4380	8510
4	768.64	768.63	1760	3524	3340	4790	8130
5	768.71	768.70	1610	3224	4030	4810	8840
6	768.65	768.73	1470	2944	4040	4640	8680
7	768.60	768.59	1510	3024	4030	4580	8610
8	768.61	768.59	1870	3745	4070	4810	8880
9	768.65	768.64	2510	5026	3970	5310	9280
10	768.84	768.65	3520	7049	2540	6130	8670
11	769.07	768.96	3520	7049	3040	6930	9970
12	769.46	769.14	8410	16841	5770	10400	16170
13	770.38	769.92	9080	18183	6750	17100	23850
14	770.71	770.62	6300	12616	6910	15400	22310
15	770.82	770.70	4480	8971	6990	11500	18490
16	770.70	770.75	3520	7049	8370	9740	18110
17	770.35	770.51	2780	5567	8130	8330	16460
18	770.17	770.25	2600	5207	8120	7410	15530
19	769.92	769.98	2530	5066	7670	6870	14540
20	769.76	769.84	2380	4766	6800	6530	13330
21	769.52	769.53	2030	4065	6730	6120	12850
22	769.25	769.34	1750	3504	5270	5590	10860
23	769.09	769.21	1570	3144	5380	5160	10540
24	768.82	768.99	1350	2703	5340	4760	10100
25	768.60	768.72	1220	2443	5420	4430	9850
26	768.28	768.40	1130	2263	5380	4080	9460
27	768.07	768.15	1010	2023	4300	3830	8130
28	767.89	767.98	941	1884	4320	3630	7950
29	767.65	767.78	926	1854	4280	3450	7730
30	767.62	767.51	1180	2363	4330	3590	7920

AVERAGE

2580

5170

6450

11700

CHANGE IN STORAGE DURING THE MONTH

-1.41 B.C.F.

CHIEF ENGINEER

STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
INDIAN LAKE RESERVOIR REGULATION

Monthly Report for: April, 2024

Day	Reservoir Elevation Average Daily	Reservoir Elevation Midnight	Net Reservoir Inflow cfs	Indian River at Indian Lake cfs	Hudson River at Newcomb cfs	Regulated Hudson River at North Creek cfs
1	1645.64	1645.61	322	204	421	2040
2	1645.70	1645.66	342	204	392	1940
3	1645.78	1645.73	402	205	381	1900
4	1645.93	1645.83	542	208	408	1990
5	1646.03	1646.00	324	206	402	2040
6	1646.08	1646.06	263	204	376	1990
7	1646.12	1646.10	342	204	350	1760
8	1646.21	1646.16	405	169	360	1800
9	1646.37	1646.28	565	152	416	2280
10	1646.64	1646.49	757	169	563	2980
11	1646.98	1646.78	1069	152	828	3940
12	1647.73	1647.22	2905	134	1440	7260
13	1649.44	1648.55	3471	133	3260	13300
14	1650.35	1650.05	1546	389	2920	9360
15	1650.66	1650.55	1056	603	1820	6550
16	1650.76	1650.74	690	617	1400	5120
17	1650.77	1650.77	551	600	1090	3920
18	1650.79	1650.75	791	597	861	3310
19	1650.86	1650.83	734	588	763	3020
20	1650.91	1650.89	654	581	740	2950
21	1650.94	1650.92	625	576	755	2770
22	1650.96	1650.94	380	574	627	3490
23	1650.84	1650.87	411	581	497	2320
24	1650.74	1650.79	376	580	419	2110
25	1650.64	1650.71	297	575	403	2000
26	1650.55	1650.59	291	569	380	1790
27	1650.44	1650.47	399	561	337	1770
28	1650.34	1650.40	278	556	311	1650
29	1650.21	1650.28	311	542	382	1560
30	1650.15	1650.18	350	535	502	1780
AVERAGE			715	399	793	3356

0.845 B.C.F

CHIEF ENGINEER

STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
STILLWATER RESERVOIR / BLACK RIVER REGULATION

Monthly Report for: April 2024

CHANGE IN STORAGE DURING THE MONTH

0.66 BCE

CHIEF ENGINEER

STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
SIXTH LAKE RESERVOIR REGULATION

Monthly Report for: April, 2024

STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
OLD FORGE RESERVOIR REGULATION

Monthly Report for: April, 2024

Day	Reservoir Elevation Average Daily	Reservoir Elevation Midnight	Net Reservoir Inflow cfs	Gate Opening (ft)		Reservoir Release (cfs)
				Gate A	Gate B	
1	1705.05	1705.03	68	0.00	0.17	8
2	1705.10	1705.07	128	0.00	0.17	8
3	1705.20	1705.14	113	0.00	0.17	8
4	1705.23	1705.21	53	0.00	0.17	8
5	1705.25	1705.24	38	0.00	0.17	8
6	1705.30	1705.27	83	0.00	0.17	8
7	1705.34	1705.32	68	0.00	0.17	8
8	1705.38	1705.36	83	0.00	0.17	8
9	1705.42	1705.40	98	0.00	0.17	8
10	1705.47	1705.46	38	0.00	0.17	8
11	1705.54	1705.48	113	0.00	0.17	8
12	1705.61	1705.56	189	0.00	0.17	8
13	1705.71	1705.67	204	0.00	0.17	8
14	1705.88	1705.81	204	0.00	0.17	8
15	1705.95	1705.93	113	0.00	0.17	8
16	1706.01	1706.00	68	0.00	0.17	8
17	1706.07	1706.05	116	0.00	0.17	8
18	1706.13	1706.12	73	0.00	0.17	8
19	1706.16	1706.15	57	0.00	0.17	8
20	1706.17	1706.18	54	0.00	0.17	8
21	1706.20	1706.21	38	0.00	0.17	8
22	1706.24	1706.23	53	0.00	0.17	8
23	1706.25	1706.26	53	0.00	0.17	8
24	1706.31	1706.30	58	0.00	0.17	8
25	1706.34	1706.33	42	0.00	0.17	8
26	1706.36	1706.35	42	0.00	0.17	8
27	1706.38	1706.37	58	0.00	0.17	8
28	1706.39	1706.39	83	0.00	0.17	8
29	1706.46	1706.44	83	0.00	0.17	8
30	1706.49	1706.49	24	0.00	0.17	8

AVERAGE 83 8

CHANGE IN STORAGE DURING THE MONTH 0.197 B.C.F

CHIEF ENGINEER

**STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
SACANDAGA RESERVOIR OPERATION**

FOR WEEK ENDING: May 4, 2024

DATE	SACANDAGA RESERVOIR			HUDSON RIVER FLOW		
	WATER SURFACE ELEV. 12 A.M.	TOTAL STORAGE B.C.F. ⁽¹⁾	PERIODS OF RELEASE	RELEASE AVG. DAILY C.F.S.*	HADLEY AVG. DAILY C.F.S.	SPIER FALLS AVG. DAILY C.F.S.
Saturday 27	768.15	35.45	12 AM - Mid	4,300	3,830	8,130
Sunday 28	767.98	35.26	12 AM - Mid	4,320	3,630	7,950
Monday 29	767.78	35.03	12 AM - Mid	4,280	3,450	7,730
Tuesday 30	767.51	34.72	12 AM - Mid	4,330	3,590	7,920
Wednesday 1	767.69	34.93	12 AM - Mid	4,320	3,940	8,260
Thursday 2	767.61	34.83	12 AM - Mid	4,240	3,710	7,950
Friday 3	767.51	34.72	12 AM - Mid	4,190	3,420	7,610
Saturday 4	767.39	34.58	12 AM - Mid	4,230	3,040	7,270
CHANGE IN STORAGE DURING THE WEEK		-0.87	* SACANDAGA RIVER AT STEWARTS BRIDGE INCLUDES 350 CFS MINIMUM CONTINUOUS RELEASE			

ELEVATIONS AND CAPACITIES ON THIS DATE FOR THE PAST TEN YEARS

NO.	YEAR	ELEV.	CAPACITY	NO.	YEAR	ELEV.	CAPACITY
1	2023	770.20	37.82	6	2020	767.06	34.20
2	2017	769.05	36.48	7	2018	765.43	32.39
3	2022	768.23	35.54	8	2016	765.13	32.06
4	2019	767.96	35.23	9	2021	763.82	30.62
5	2024	767.39	34.58	10	2015	762.89	29.61

CAPACITY AT SPILLWAY CREST (EL 770.12) 37.72 B.C.F.

CAPACITY AT LOW FLOW LINE (EL 734.12) 4.60 B.C.F.

(1) Includes dead storage below El. 734.12 ft.

Datum: NAVD 88

CHIEF ENGINEER

**STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
SACANDAGA RESERVOIR OPERATION**

FOR WEEK ENDING: May 11, 2024

DATE	SACANDAGA RESERVOIR			HUDSON RIVER FLOW		
	WATER SURFACE ELEV. 12 A.M.	TOTAL STORAGE B.C.F. ⁽¹⁾	PERIODS OF RELEASE	RELEASE AVG. DAILY C.F.S.*	HADLEY AVG. DAILY C.F.S.	SPIER FALLS AVG. DAILY C.F.S.
Saturday 4	767.39	34.58	12 AM - Mid	4,230	3,040	7,270
Sunday 5	767.21	34.38	12 AM - Mid	4,250	3,100	7,350
Monday 6	767.23	34.40	12 AM - Mid	4,300	3,400	7,700
Tuesday 7	767.30	34.48	12 AM - Mid	4,310	3,360	7,670
Wednesday 8	767.25	34.42	12 AM - Mid	3,990	3,400	7,390
Thursday 9	767.30	34.48	12 AM - Mid	3,920	3,250	7,170
Friday 10	767.29	34.47	12 AM - Mid	1,020	2,970	3,990
Saturday 11	767.46	34.66	12 AM - Mid	1,050	2,770	3,820
CHANGE IN STORAGE DURING THE WEEK		0.08	* SACANDAGA RIVER AT STEWARTS BRIDGE INCLUDES 350 CFS MINIMUM CONTINUOUS RELEASE			

ELEVATIONS AND CAPACITIES ON THIS DATE FOR THE PAST TEN YEARS

NO.	YEAR	ELEV.	CAPACITY	NO.	YEAR	ELEV.	CAPACITY
1	2023	769.89	37.46	6	2018	766.69	33.79
2	2017	769.05	36.48	7	2020	766.22	33.27
3	2019	767.68	34.91	8	2016	765.93	32.94
4	2024	767.46	34.66	9	2021	765.46	32.42
5	2022	767.09	34.24	10	2015	763.17	29.91

CAPACITY AT SPILLWAY CREST (EL 770.12) 37.72 B.C.F.

CAPACITY AT LOW FLOW LINE (EL 734.12) 4.60 B.C.F.

(1) Includes dead storage below El. 734.12 ft.

Datum: NAVD 88

CHIEF ENGINEER

**STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
SACANDAGA RESERVOIR OPERATION**

FOR WEEK ENDING: May 18, 2024

DATE	SACANDAGA RESERVOIR			HUDSON RIVER FLOW		
	WATER SURFACE ELEV. 12 A.M.	TOTAL STORAGE B.C.F. ⁽¹⁾	PERIODS OF RELEASE	RELEASE AVG. DAILY C.F.S.*	HADLEY AVG. DAILY C.F.S.	SPIER FALLS AVG. DAILY C.F.S.
Saturday 11	767.46	34.66	12 AM - Mid	1,050	2,770	3,820
Sunday 12	767.54	34.75	12 AM - Mid	3,920	2,710	6,630
Monday 13	767.51	34.72	12 AM - Mid	3,960	2,670	6,630
Tuesday 14	767.30	34.48	12 AM - Mid	3,920	2,580	6,500
Wednesday 15	767.25	34.42	12 AM - Mid	1,020	2,660	3,680
Thursday 16	767.34	34.53	12 AM - Mid	996	2,830	3,826
Friday 17	767.51	34.72	12 AM - Mid	1,220	2,880	4,100
Saturday 18	767.59	34.81	12 AM - Mid	4,040	2,660	6,700
CHANGE IN STORAGE DURING THE WEEK		0.15	* SACANDAGA RIVER AT STEWARTS BRIDGE INCLUDES 350 CFS MINIMUM CONTINUOUS RELEASE			

ELEVATIONS AND CAPACITIES ON THIS DATE FOR THE PAST TEN YEARS

NO.	YEAR	ELEV.	CAPACITY	NO.	YEAR	ELEV.	CAPACITY
1	2019	769.51	37.02	6	2016	766.50	33.58
2	2023	768.22	35.53	7	2020	766.39	33.46
3	2024	767.59	34.81	8	2018	766.14	33.18
4	2022	767.53	34.74	9	2021	765.82	32.82
5	2017	766.75	33.86	10	2015	763.71	30.50

CAPACITY AT SPILLWAY CREST (EL 770.12) 37.72 B.C.F.

CAPACITY AT LOW FLOW LINE (EL 734.12) 4.60 B.C.F.

(1) Includes dead storage below El. 734.12 ft.

Datum: NAVD 88

CHIEF ENGINEER

**STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
SACANDAGA RESERVOIR OPERATION**

FOR WEEK ENDING: May 25, 2024

DATE	SACANDAGA RESERVOIR			HUDSON RIVER FLOW		
	WATER SURFACE ELEV. 12 A.M.	TOTAL STORAGE B.C.F. ⁽¹⁾	PERIODS OF RELEASE	RELEASE AVG. DAILY C.F.S.*	HADLEY AVG. DAILY C.F.S.	SPIER FALLS AVG. DAILY C.F.S.
Saturday 18	767.59	34.81	12 AM - Mid	4,040	2,660	6,700
Sunday 19	767.35	34.54	12 AM - Mid	4,030	2,480	6,510
Monday 20	767.20	34.37	12 AM - Mid	3,920	2,240	6,160
Tuesday 21	766.98	34.12	12 AM - Mid	2,060	1,960	4,020
Wednesday 22	766.88	34.01	12 AM - Mid	953	2,740	3,693
Thursday 23	766.94	34.07	12 AM - Mid	1,010	2,230	3,240
Friday 24	766.99	34.13	12 AM - Mid	997	1,940	2,937
Saturday 25	766.94	34.07	12 AM - Mid	1,300	1,620	2,920
CHANGE IN STORAGE DURING THE WEEK		-0.74	* SACANDAGA RIVER AT STEWARTS BRIDGE INCLUDES 350 CFS MINIMUM CONTINUOUS RELEASE			

ELEVATIONS AND CAPACITIES ON THIS DATE FOR THE PAST TEN YEARS

NO.	YEAR	ELEV.	CAPACITY	NO.	YEAR	ELEV.	CAPACITY
1	2019	769.81	37.37	6	2020	766.80	33.92
2	2022	767.47	34.67	7	2018	766.71	33.82
3	2023	767.05	34.20	8	2016	766.70	33.80
4	2024	766.94	34.07	9	2021	765.80	32.80
5	2017	766.87	34.00	10	2015	763.74	30.53

CAPACITY AT SPILLWAY CREST (EL 770.12) 37.72 B.C.F.

CAPACITY AT LOW FLOW LINE (EL 734.12) 4.60 B.C.F.

(1) Includes dead storage below El. 734.12 ft.

Datum: NAVD 88

CHIEF ENGINEER

**STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
SACANDAGA RESERVOIR OPERATION**

FOR WEEK ENDING: June 1, 2024

DATE	SACANDAGA RESERVOIR			HUDSON RIVER FLOW		
	WATER SURFACE ELEV. 12 A.M.	TOTAL STORAGE B.C.F. ⁽¹⁾	PERIODS OF RELEASE	RELEASE AVG. DAILY C.F.S.*	HADLEY AVG. DAILY C.F.S.	SPIER FALLS AVG. DAILY C.F.S.
Saturday 25	766.94	34.07	12 AM - Mid	1,300	1,620	2,920
Sunday 26	766.96	34.10	12 AM - Mid	1,300	1,550	2,850
Monday 27	766.85	33.97	12 AM - Mid	1,310	1,540	2,850
Tuesday 28	767.08	34.23	12 AM - Mid	1,020	3,140	4,160
Wednesday 29	767.15	34.31	12 AM - Mid	1,600	3,260	4,860
Thursday 30	767.19	34.36	12 AM - Mid	1,600	2,810	4,410
Friday 31	767.19	34.36	12 AM - Mid	1,280	2,430	3,710
Saturday 1	767.17	34.33	12 AM - Mid	1,290	2,020	3,310
CHANGE IN STORAGE DURING THE WEEK		0.26	* SACANDAGA RIVER AT STEWARTS BRIDGE INCLUDES 350 CFS MINIMUM CONTINUOUS RELEASE			

ELEVATIONS AND CAPACITIES ON THIS DATE FOR THE PAST TEN YEARS

NO.	YEAR	ELEV.	CAPACITY	NO.	YEAR	ELEV.	CAPACITY
1	2019	769.64	37.17	6	2018	766.91	34.04
2	2017	767.39	34.58	7	2023	766.67	33.77
3	2024	767.17	34.33	8	2016	766.47	33.55
4	2022	767.14	34.30	9	2021	765.55	32.52
5	2020	766.95	34.08	10	2015	763.83	30.63

CAPACITY AT SPILLWAY CREST (EL 770.12) 37.72 B.C.F.

CAPACITY AT LOW FLOW LINE (EL 734.12) 4.60 B.C.F.

(1) Includes dead storage below El. 734.12 ft.

Datum: NAVD 88

CHIEF ENGINEER

**STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
INDIAN LAKE RESERVOIR OPERATION**

FOR WEEK ENDING: May 4, 2024

DATE	INDIAN LAKE RESERVOIR			INDIAN RIVER	HUDSON RIVER	
	WATER SURFACE ELEV. 12 A.M.	AVAIL. STORAGE B.C.F.	PERIODS OF RELEASE	RELEASE AVG. DAILY C.F.S.*	NEWCOMB AVG. DAILY C.F.S.	NORTH CREEK AVG. DAILY C.F.S.
Saturday 27	1,650.47	3.61	12 AM - Mid	558	337	1,770
Sunday 28	1,650.40	3.59	12 AM - Mid	555	311	1,650
Monday 29	1,650.28	3.57	12 AM - Mid	540	382	1,560
Tuesday 30	1,650.18	3.55	12 AM - Mid	533	502	1,780
Wednesday 1	1,650.11	3.53	12 AM - Mid	484	535	1,820
Thursday 2	1,650.07	3.53	12 AM - Mid	400	526	1,800
Friday 3	1,650.00	3.51	12 AM - Mid	395	483	1,570
Saturday 4	1,649.96	3.51	12 AM - Mid	393	423	1,530
CHANGE IN STORAGE DURING THE WEEK		-0.10	* INIDAN RIVER NEAR INDIAN LAKE			

ELEVATIONS AND CAPACITIES ON THIS DATE FOR THE PAST TEN YEARS

NO.	YEAR	ELEV.	CAPACITY	NO.	YEAR	ELEV.	CAPACITY
1	2023	1,651.48	3.82	6	2022	1,650.19	3.55
2	2019	1,651.20	3.76	7	2020	1,650.06	3.53
3	2017	1,650.51	3.62	8	2016	1,649.97	3.51
4	2021	1,650.37	3.59	9	2024	1,649.96	3.51
5	2018	1,650.29	3.57	10	2015	1,648.45	3.22

CAPACITY AT SPILLWAY CREST (EL 1651.01) 3.7 B.C.F.

Datum: NAVD 88

CHIEF ENGINEER

STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
INDIAN LAKE RESERVOIR OPERATION

FOR WEEK ENDING: May 11, 2024

DATE	INDIAN LAKE RESERVOIR			INDIAN RIVER	HUDSON RIVER	
	WATER SURFACE ELEV. 12 A.M.	AVAIL. STORAGE B.C.F.	PERIODS OF RELEASE	RELEASE AVG. DAILY C.F.S.*	NEWCOMB AVG. DAILY C.F.S.	NORTH CREEK AVG. DAILY C.F.S.
Saturday 4	1,649.96	3.51	12 AM - Mid	393	423	1,530
Sunday 5	1,649.89	3.49	12 AM - Mid	393	405	1,500
Monday 6	1,649.85	3.48	12 AM - Mid	274	526	1,620
Tuesday 7	1,649.87	3.49	12 AM - Mid	225	607	1,750
Wednesday 8	1,649.88	3.49	12 AM - Mid	225	519	1,570
Thursday 9	1,649.94	3.50	12 AM - Mid	225	445	1,520
Friday 10	1,649.99	3.51	12 AM - Mid	225	394	1,320
Saturday 11	1,650.02	3.52	12 AM - Mid	225	345	1,390
CHANGE IN STORAGE DURING THE WEEK		0.01	* INIDAN RIVER NEAR INDIAN LAKE			

ELEVATIONS AND CAPACITIES ON THIS DATE FOR THE PAST TEN YEARS

NO.	YEAR	ELEV.	CAPACITY	NO.	YEAR	ELEV.	CAPACITY
1	2017	1,650.91	3.70	6	2016	1,650.05	3.52
2	2023	1,650.68	3.65	7	2024	1,650.02	3.52
3	2019	1,650.62	3.64	8	2020	1,649.93	3.50
4	2022	1,650.14	3.54	9	2018	1,649.90	3.49
5	2021	1,650.14	3.54	10	2015	1,648.86	3.29

CAPACITY AT SPILLWAY CREST (EL 1651.01) 3.7 B.C.F.

Datum: NAVD 88

CHIEF ENGINEER

**STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
INDIAN LAKE RESERVOIR OPERATION**

FOR WEEK ENDING: May 18, 2024

DATE	INDIAN LAKE RESERVOIR			INDIAN RIVER	HUDSON RIVER	
	WATER SURFACE ELEV. 12 A.M.	AVAIL. STORAGE B.C.F.	PERIODS OF RELEASE	RELEASE AVG. DAILY C.F.S.*	NEWCOMB AVG. DAILY C.F.S.	NORTH CREEK AVG. DAILY C.F.S.
Saturday 11	1,650.02	3.52	12 AM - Mid	225	345	1,390
Sunday 12	1,650.06	3.53	12 AM - Mid	225	318	1,320
Monday 13	1,650.05	3.52	12 AM - Mid	225	340	1,310
Tuesday 14	1,650.04	3.52	12 AM - Mid	225	360	1,400
Wednesday 15	1,650.02	3.52	12 AM - Mid	225	393	1,310
Thursday 16	1,650.05	3.52	12 AM - Mid	225	446	1,590
Friday 17	1,650.05	3.52	12 AM - Mid	225	440	1,480
Saturday 18	1,650.04	3.52	12 AM - Mid	225	382	1,450
CHANGE IN STORAGE DURING THE WEEK	0.00	* INIDAN RIVER NEAR INDIAN LAKE				

ELEVATIONS AND CAPACITIES ON THIS DATE FOR THE PAST TEN YEARS

NO.	YEAR	ELEV.	CAPACITY	NO.	YEAR	ELEV.	CAPACITY
1	2023	1,650.75	3.67	6	2024	1,650.04	3.52
2	2019	1,650.41	3.60	7	2020	1,649.98	3.51
3	2022	1,650.30	3.57	8	2017	1,649.95	3.50
4	2016	1,650.16	3.55	9	2015	1,649.77	3.47
5	2021	1,650.10	3.53	10	2018	1,648.79	3.28

CAPACITY AT SPILLWAY CREST (EL 1651.01) 3.7 B.C.F.

Datum: NAVD 88

CHIEF ENGINEER

**STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
INDIAN LAKE RESERVOIR OPERATION**

FOR WEEK ENDING: May 25, 2024

DATE	INDIAN LAKE RESERVOIR			INDIAN RIVER	HUDSON RIVER	
	WATER SURFACE ELEV. 12 A.M.	AVAIL. STORAGE B.C.F.	PERIODS OF RELEASE	RELEASE AVG. DAILY C.F.S.*	NEWCOMB AVG. DAILY C.F.S.	NORTH CREEK AVG. DAILY C.F.S.
Saturday 18	1,650.04	3.52	12 AM - Mid	225	382	1,450
Sunday 19	1,650.01	3.52	12 AM - Mid	225	327	1,270
Monday 20	1,649.99	3.51	12 AM - Mid	225	283	1,060
Tuesday 21	1,649.95	3.50	12 AM - Mid	225	248	1,120
Wednesday 22	1,649.95	3.50	12 AM - Mid	158	232	1,030
Thursday 23	1,649.97	3.51	12 AM - Mid	129	220	1,030
Friday 24	1,649.97	3.51	12 AM - Mid	129	199	793
Saturday 25	1,649.96	3.51	12 AM - Mid	129	178	808
CHANGE IN STORAGE DURING THE WEEK	-0.02	* INIDAN RIVER NEAR INDIAN LAKE				

ELEVATIONS AND CAPACITIES ON THIS DATE FOR THE PAST TEN YEARS

NO.	YEAR	ELEV.	CAPACITY	NO.	YEAR	ELEV.	CAPACITY
1	2023	1,650.76	3.67	6	2020	1,649.91	3.50
2	2016	1,650.08	3.53	7	2019	1,649.88	3.49
3	2021	1,650.01	3.52	8	2022	1,649.84	3.48
4	2017	1,649.99	3.51	9	2015	1,649.79	3.47
5	2024	1,649.96	3.51	10	2018	1,649.06	3.33

CAPACITY AT SPILLWAY CREST (EL 1651.01) 3.7 B.C.F.

Datum: NAVD 88

CHIEF ENGINEER

**STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
INDIAN LAKE RESERVOIR OPERATION**

FOR WEEK ENDING: June 1, 2024

DATE	INDIAN LAKE RESERVOIR			INDIAN RIVER	HUDSON RIVER	
	WATER SURFACE ELEV. 12 A.M.	AVAIL. STORAGE B.C.F.	PERIODS OF RELEASE	RELEASE AVG. DAILY C.F.S.*	NEWCOMB AVG. DAILY C.F.S.	NORTH CREEK AVG. DAILY C.F.S.
Saturday 25	1,649.96	3.51	12 AM - Mid	129	178	808
Sunday 26	1,649.93	3.50	12 AM - Mid	129	160	686
Monday 27	1,649.89	3.49	12 AM - Mid	129	152	600
Tuesday 28	1,650.00	3.51	12 AM - Mid	129	256	1,360
Wednesday 29	1,650.07	3.53	12 AM - Mid	129	356	1,530
Thursday 30	1,650.06	3.53	12 AM - Mid	129	293	1,370
Friday 31	1,650.06	3.53	12 AM - Mid	129	236	982
Saturday 1	1,650.05	3.52	12 AM - Mid	129	194	904
CHANGE IN STORAGE DURING THE WEEK		0.02	* INIDAN RIVER NEAR INDIAN LAKE			

ELEVATIONS AND CAPACITIES ON THIS DATE FOR THE PAST TEN YEARS

NO.	YEAR	ELEV.	CAPACITY	NO.	YEAR	ELEV.	CAPACITY
1	2017	1,650.55	3.62	6	2021	1,650.01	3.52
2	2023	1,650.40	3.59	7	2020	1,649.84	3.48
3	2015	1,650.31	3.58	8	2016	1,649.81	3.48
4	2019	1,650.13	3.54	9	2022	1,649.42	3.40
5	2024	1,650.05	3.52	10	2018	1,649.20	3.36

CAPACITY AT SPILLWAY CREST (EL 1651.01) 3.7 B.C.F.

Datum: NAVD 88

CHIEF ENGINEER

STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
STILLWATER RESERVOIR OPERATION
FOR WEEK ENDING: **May 4, 2024**

DATE	STILLWATER RESERVOIR			BEAVER RIVER		BLACK RIVER
	WATER SURFACE ELEV. 12 A.M.	AVAIL. STORAGE B.C.F.	PERIODS OF RELEASE	STILLWATER RELEASE AVG. DAILY C.F.S.	CROGHAN AVG. DAILY FLOW C.F.S.	WATERTOWN AVG. DAILY FLOW C.F.S.
Saturday 27	1,675.12	3.69	12 AM -Mid	100	214	2,990
Sunday 28	1,675.17	3.70	12 AM -Mid	100	281	2,770
Monday 29	1,675.26	3.72	12 AM -Mid	100	242	2,810
Tuesday 30	1,675.34	3.74	12 AM -Mid	100	237	2,140
Wednesday 1	1,675.40	3.76	12 AM -Mid	100	267	3,620
Thursday 2	1,675.47	3.77	12 AM -Mid	100	256	3,500
Friday 3	1,675.50	3.78	12 AM -Mid	100	265	3,020
Saturday 4	1,675.54	3.79	12 AM -Mid	100	260	2,740
CHANGE IN STORAGE DURING THE WEEK		0.10				

ELEVATIONS AND CAPACITIES ON THIS DATE FOR THE PAST TEN YEARS

NO.	YEAR	ELEV.	CAPACITY	NO.	YEAR	ELEV.	CAPACITY
1	2017	1,678.69	4.61	6	2019	1,676.98	4.16
2	2022	1,678.31	4.51	7	2021	1,676.74	4.09
3	2018	1,677.95	4.41	8	2024	1,675.54	3.79
4	2016	1,677.72	4.35	9	2020	1,673.36	3.27
5	2023	1,677.64	4.33	10	2015	1,672.26	3.03

CAPACITY AT SPILLWAY CREST (EL 1677.19) 4.213 B.C.F.

CAPACITY AT LOW FLOW LINE (EL 1650.69) 0.10 B.C.F.

Datum: NAVD 88

CHIEF ENGINEER

STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
STILLWATER RESERVOIR OPERATION
FOR WEEK ENDING: **May 11, 2024**

DATE	STILLWATER RESERVOIR			BEAVER RIVER		BLACK RIVER
	WATER SURFACE ELEV. 12 A.M.	AVAIL. STORAGE B.C.F.	PERIODS OF RELEASE	STILLWATER RELEASE AVG. DAILY C.F.S.	CROGHAN AVG. DAILY FLOW C.F.S.	WATERTOWN AVG. DAILY FLOW C.F.S.
Saturday 4	1,675.54	3.79	12 AM -Mid	100	260	2,740
Sunday 5	1,675.59	3.80	12 AM -Mid	100	245	2,630
Monday 6	1,675.64	3.82	12 AM -Mid	100	261	2,960
Tuesday 7	1,675.70	3.83	12 AM -Mid	100	239	3,260
Wednesday 8	1,675.75	3.84	12 AM -Mid	100	277	3,160
Thursday 9	1,675.79	3.85	12 AM -Mid	100	274	2,930
Friday 10	1,675.84	3.86	12 AM -Mid	100	230	2,940
Saturday 11	1,675.89	3.88	12 AM -Mid	100	255	3,030
CHANGE IN STORAGE DURING THE WEEK		0.09				

ELEVATIONS AND CAPACITIES ON THIS DATE FOR THE PAST TEN YEARS

NO.	YEAR	ELEV.	CAPACITY	NO.	YEAR	ELEV.	CAPACITY
1	2017	1,679.41	4.81	6	2016	1,677.79	4.37
2	2023	1,678.18	4.47	7	2021	1,677.74	4.36
3	2022	1,678.13	4.46	8	2024	1,675.89	3.88
4	2018	1,678.11	4.45	9	2020	1,673.73	3.36
5	2019	1,677.97	4.42	10	2015	1,672.48	3.08

CAPACITY AT SPILLWAY CREST (EL 1677.19) 4.213 B.C.F.

CAPACITY AT LOW FLOW LINE (EL 1650.69) 0.10 B.C.F.

Datum: NAVD 88

CHIEF ENGINEER

STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
STILLWATER RESERVOIR OPERATION
FOR WEEK ENDING: **May 18, 2024**

DATE	STILLWATER RESERVOIR			BEAVER RIVER		BLACK RIVER
	WATER SURFACE ELEV. 12 A.M.	AVAIL. STORAGE B.C.F.	PERIODS OF RELEASE	STILLWATER RELEASE AVG. DAILY C.F.S.	CROGHAN AVG. DAILY FLOW C.F.S.	WATERTOWN AVG. DAILY FLOW C.F.S.
Saturday 11	1,675.89	3.88	12 AM -Mid	100	255	3,030
Sunday 12	1,675.96	3.90	12 AM -Mid	100	368	3,290
Monday 13	1,675.99	3.90	12 AM -Mid	138	316	3,510
Tuesday 14	1,676.05	3.92	12 AM -Mid	100	300	2,960
Wednesday 15	1,676.08	3.92	12 AM -Mid	100	306	2,950
Thursday 16	1,676.14	3.94	12 AM -Mid	100	293	2,870
Friday 17	1,676.18	3.95	12 AM -Mid	69	224	3,070
Saturday 18	1,676.22	3.96	12 AM -Mid	50	208	2,760
CHANGE IN STORAGE DURING THE WEEK		0.08				

ELEVATIONS AND CAPACITIES ON THIS DATE FOR THE PAST TEN YEARS

NO.	YEAR	ELEV.	CAPACITY	NO.	YEAR	ELEV.	CAPACITY
1	2017	1,679.04	4.70	6	2016	1,677.81	4.37
2	2019	1,678.69	4.61	7	2018	1,677.26	4.23
3	2022	1,678.17	4.47	8	2024	1,676.22	3.96
4	2021	1,678.16	4.47	9	2020	1,674.33	3.50
5	2023	1,678.15	4.46	10	2015	1,672.99	3.19

CAPACITY AT SPILLWAY CREST (EL 1677.19) 4.213 B.C.F.

CAPACITY AT LOW FLOW LINE (EL 1650.69) 0.10 B.C.F.

Datum: NAVD 88

CHIEF ENGINEER

STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
STILLWATER RESERVOIR OPERATION
FOR WEEK ENDING: **May 25, 2024**

DATE	STILLWATER RESERVOIR			BEAVER RIVER		BLACK RIVER
	WATER SURFACE ELEV. 12 A.M.	AVAIL. STORAGE B.C.F.	PERIODS OF RELEASE	STILLWATER RELEASE AVG. DAILY C.F.S.	CROGHAN AVG. DAILY FLOW C.F.S.	WATERTOWN AVG. DAILY FLOW C.F.S.
Saturday 18	1,676.22	3.96	12 AM -Mid	50	208	2,760
Sunday 19	1,676.27	3.97	12 AM -Mid	50	212	2,450
Monday 20	1,676.30	3.98	12 AM -Mid	50	208	2,300
Tuesday 21	1,676.33	3.99	12 AM -Mid	50	197	2,080
Wednesday 22	1,676.36	4.00	12 AM -Mid	154	144	1,980
Thursday 23	1,676.36	4.00	12 AM -Mid	154	147	1,920
Friday 24	1,676.35	3.99	12 AM -Mid	50	126	2,180
Saturday 25	1,676.37	4.00	12 AM -Mid	50	152	2,110
CHANGE IN STORAGE DURING THE WEEK		0.04				

ELEVATIONS AND CAPACITIES ON THIS DATE FOR THE PAST TEN YEARS

NO.	YEAR	ELEV.	CAPACITY	NO.	YEAR	ELEV.	CAPACITY
1	2019	1,679.59	4.86	6	2016	1,677.58	4.31
2	2017	1,678.56	4.57	7	2018	1,677.25	4.23
3	2022	1,678.32	4.51	8	2024	1,676.37	4.00
4	2021	1,678.32	4.51	9	2020	1,674.74	3.60
5	2023	1,677.93	4.41	10	2015	1,673.15	3.23

CAPACITY AT SPILLWAY CREST (EL 1677.19) 4.213 B.C.F.

CAPACITY AT LOW FLOW LINE (EL 1650.69) 0.10 B.C.F.

Datum: NAVD 88

CHIEF ENGINEER

STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
STILLWATER RESERVOIR OPERATION
FOR WEEK ENDING: June 1, 2024

DATE	STILLWATER RESERVOIR			BEAVER RIVER		BLACK RIVER
	WATER SURFACE ELEV. 12 A.M.	AVAIL. STORAGE B.C.F.	PERIODS OF RELEASE	STILLWATER RELEASE AVG. DAILY C.F.S.	CROGHAN AVG. DAILY FLOW C.F.S.	WATERTOWN AVG. DAILY FLOW C.F.S.
Saturday 25	1,676.37	4.00	12 AM -Mid	50	152	2,110
Sunday 26	1,676.36	4.00	12 AM -Mid	50	139	1,800
Monday 27	1,676.40	4.01	12 AM -Mid	50	154	1,590
Tuesday 28	1,676.52	4.04	12 AM -Mid	50	151	1,910
Wednesday 29	1,676.69	4.08	12 AM -Mid	50	144	4,610
Thursday 30	1,676.77	4.10	12 AM -Mid	50	137	5,060
Friday 31	1,676.83	4.12	12 AM -Mid	50	135	4,900
Saturday 1	1,676.86	4.12	12 AM -Mid	50	133	3,770
CHANGE IN STORAGE DURING THE WEEK		0.12				

ELEVATIONS AND CAPACITIES ON THIS DATE FOR THE PAST TEN YEARS

NO.	YEAR	ELEV.	CAPACITY	NO.	YEAR	ELEV.	CAPACITY
1	2019	1,679.78	4.91	6	2016	1,677.24	4.22
2	2017	1,678.69	4.61	7	2018	1,676.99	4.16
3	2022	1,678.49	4.56	8	2024	1,676.86	4.12
4	2021	1,677.99	4.42	9	2020	1,675.39	3.76
5	2023	1,677.52	4.30	10	2015	1,674.17	3.46

CAPACITY AT SPILLWAY CREST (EL 1677.19) 4.213 B.C.F.

CAPACITY AT LOW FLOW LINE (EL 1650.69) 0.10 B.C.F.

Datum: NAVD 88

CHIEF ENGINEER

**STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
FULTON CHAIN RESERVOIR OPERATION**

FOR WEEK ENDING: **May 4, 2024**

DATE	OLD FORGE RESERVOIR			SIXTH LAKE RESERVOIR		
	WATER SURFACE ELEV. 12 A.M.	AVAIL. STORAGE B.C.F.	RELEASE AVG. DAILY C.F.S.	WATER SURFACE ELEV. 12 A.M.	AVAIL. STORAGE B.C.F.	RELEASE AVG. DAILY C.F.S.
Saturday 27	1,706.37	0.839	8	1,785.17	0.275	4
Sunday 28	1,706.39	0.843	8	1,785.20	0.276	4
Monday 29	1,706.44	0.850	8	1,785.25	0.278	4
Tuesday 30	1,706.49	0.856	8	1,785.29	0.279	4
Wednesday 1	1,706.50	0.858	6	1,785.32	0.280	4
Thursday 2	1,706.53	0.861	4	1,785.35	0.281	4
Friday 3	1,706.56	0.865	4	1,785.39	0.283	4
Saturday 4	1,706.59	0.869	4	1,785.43	0.284	4
CHANGE IN STORAGE	0.030			0.008		

ELEVATIONS AND CAPACITIES ON THIS DATE FOR THE PAST FIVE YEARS

OLD FORGE RESERVOIR				SIXTH LAKE RESERVOIR			
NO.	YEAR	ELEV.	CAPACITY	NO.	YEAR	ELEV.	CAPACITY
1	2022	1,706.69	0.883	1	2023	1,785.75	0.294
2	2024	1,706.59	0.869	2	2024	1,785.43	0.284
3	2021	1,706.54	0.862	3	2021	1,785.33	0.281
4	2023	1,706.49	0.856	4	2022	1,785.01	0.270
5	2020	1,705.91	0.779	5	2020	1,783.71	0.229

OLD FORGE CAPACITY AT SPILLWAY CREST (EL 1706.99) 0.924 B.C.F.
SIXTH LAKE CAPACITY AT SPILLWAY CREST (EL 1785.83) 0.297 B.C.F.

Datum: NAVD 88

CHIEF ENGINEER

**STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
FULTON CHAIN RESERVOIR OPERATION**

FOR WEEK ENDING: **May 11, 2024**

DATE	OLD FORGE RESERVOIR			SIXTH LAKE RESERVOIR		
	WATER SURFACE ELEV. 12 A.M.	AVAIL. STORAGE B.C.F.	RELEASE AVG. DAILY C.F.S.	WATER SURFACE ELEV. 12 A.M.	AVAIL. STORAGE B.C.F.	RELEASE AVG. DAILY C.F.S.
Saturday 4	1,706.59	0.869	4	1,785.43	0.284	4
Sunday 5	1,706.62	0.873	4	1,785.41	0.283	4
Monday 6	1,706.66	0.880	4	1,785.50	0.286	4
Tuesday 7	1,706.68	0.882	4	1,785.55	0.288	4
Wednesday 8	1,706.70	0.885	4	1,785.57	0.288	4
Thursday 9	1,706.76	0.893	4	1,785.65	0.291	4
Friday 10	1,706.80	0.897	6	1,785.71	0.293	4
Saturday 11	1,706.83	0.901	8	1,785.78	0.295	4
CHANGE IN STORAGE	0.032			0.011		

ELEVATIONS AND CAPACITIES ON THIS DATE FOR THE PAST FIVE YEARS

OLD FORGE RESERVOIR				SIXTH LAKE RESERVOIR			
NO.	YEAR	ELEV.	CAPACITY	NO.	YEAR	ELEV.	CAPACITY
1	2023	1,706.86	0.905	1	2023	1,786.07	0.304
2	2022	1,706.85	0.904	2	2021	1,785.81	0.296
3	2024	1,706.83	0.901	3	2024	1,785.78	0.295
4	2021	1,706.76	0.893	4	2022	1,785.26	0.278
5	2020	1,706.12	0.805	5	2020	1,783.87	0.234

OLD FORGE CAPACITY AT SPILLWAY CREST (EL 1706.99) 0.924 B.C.F.
SIXTH LAKE CAPACITY AT SPILLWAY CREST (EL 1785.83) 0.297 B.C.F.

Datum: NAVD 88

CHIEF ENGINEER

**STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
FULTON CHAIN RESERVOIR OPERATION**

FOR WEEK ENDING: **May 18, 2024**

DATE	OLD FORGE RESERVOIR			SIXTH LAKE RESERVOIR		
	WATER SURFACE ELEV. 12 A.M.	AVAIL. STORAGE B.C.F.	RELEASE AVG. DAILY C.F.S.	WATER SURFACE ELEV. 12 A.M.	AVAIL. STORAGE B.C.F.	RELEASE AVG. DAILY C.F.S.
Saturday 11	1,706.83	0.901	8	1,785.78	0.295	4
Sunday 12	1,706.88	0.909	8	1,785.87	0.298	4
Monday 13	1,706.89	0.910	17	1,785.97	0.301	24
Tuesday 14	1,706.93	0.916	24	1,786.00	0.302	38
Wednesday 15	1,706.95	0.919	24	1,785.99	0.302	38
Thursday 16	1,707.00	0.926	24	1,785.98	0.301	38
Friday 17	1,707.05	0.931	58	1,785.97	0.301	28
Saturday 18	1,707.04	0.930	85	1,785.98	0.301	20
CHANGE IN STORAGE	0.029			0.006		

ELEVATIONS AND CAPACITIES ON THIS DATE FOR THE PAST FIVE YEARS

OLD FORGE RESERVOIR				SIXTH LAKE RESERVOIR			
NO.	YEAR	ELEV.	CAPACITY	NO.	YEAR	ELEV.	CAPACITY
1	2024	1,707.04	0.930	1	2024	1,785.98	0.301
2	2022	1,706.98	0.923	2	2023	1,785.93	0.300
3	2023	1,706.87	0.907	3	2021	1,785.92	0.299
4	2021	1,706.83	0.901	4	2022	1,785.58	0.289
5	2020	1,706.37	0.839	5	2020	1,784.11	0.242

OLD FORGE CAPACITY AT SPILLWAY CREST (EL 1706.99) 0.924 B.C.F.
SIXTH LAKE CAPACITY AT SPILLWAY CREST (EL 1785.83) 0.297 B.C.F.

Datum: NAVD 88

CHIEF ENGINEER

**STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
FULTON CHAIN RESERVOIR OPERATION**

FOR WEEK ENDING: **May 25, 2024**

DATE	OLD FORGE RESERVOIR			SIXTH LAKE RESERVOIR		
	WATER SURFACE ELEV. 12 A.M.	AVAIL. STORAGE B.C.F.	RELEASE AVG. DAILY C.F.S.	WATER SURFACE ELEV. 12 A.M.	AVAIL. STORAGE B.C.F.	RELEASE AVG. DAILY C.F.S.
Saturday 18	1,707.04	0.930	85	1,785.98	0.301	20
Sunday 19	1,707.01	0.927	85	1,785.98	0.301	20
Monday 20	1,706.98	0.923	85	1,785.96	0.301	20
Tuesday 21	1,706.95	0.919	85	1,785.95	0.300	20
Wednesday 22	1,706.95	0.919	55	1,785.97	0.301	11
Thursday 23	1,706.93	0.916	34	1,785.97	0.301	5
Friday 24	1,706.94	0.917	34	1,785.99	0.302	5
Saturday 25	1,706.94	0.917	34	1,786.01	0.302	5
CHANGE IN STORAGE	-0.013			0.001		

ELEVATIONS AND CAPACITIES ON THIS DATE FOR THE PAST FIVE YEARS

OLD FORGE RESERVOIR				SIXTH LAKE RESERVOIR			
NO.	YEAR	ELEV.	CAPACITY	NO.	YEAR	ELEV.	CAPACITY
1	2024	1,706.94	0.917	1	2022	1,785.92	0.299
2	2022	1,706.91	0.913	2	2021	1,785.88	0.298
3	2023	1,706.89	0.910	3	2023	1,785.87	0.298
4	2021	1,706.82	0.900	4	2024	1,786.01	0.302
5	2020	1,706.55	0.863	5	2020	1,784.28	0.247

OLD FORGE CAPACITY AT SPILLWAY CREST (EL 1706.99) 0.924 B.C.F.
SIXTH LAKE CAPACITY AT SPILLWAY CREST (EL 1785.83) 0.297 B.C.F.

Datum: NAVD 88

CHIEF ENGINEER

**STATE OF NEW YORK
HUDSON RIVER-BLACK RIVER REGULATING DISTRICT
FULTON CHAIN RESERVOIR OPERATION**

FOR WEEK ENDING: **June 1, 2024**

DATE	OLD FORGE RESERVOIR			SIXTH LAKE RESERVOIR		
	WATER SURFACE ELEV. 12 A.M.	AVAIL. STORAGE B.C.F.	RELEASE AVG. DAILY C.F.S.	WATER SURFACE ELEV. 12 A.M.	AVAIL. STORAGE B.C.F.	RELEASE AVG. DAILY C.F.S.
Saturday 25	1,706.94	0.917	34	1,786.01	0.302	5
Sunday 26	1,706.94	0.917	34	1,786.02	0.303	5
Monday 27	1,706.97	0.922	34	1,786.03	0.303	5
Tuesday 28	1,707.16	0.948	109	1,786.25	0.310	28
Wednesday 29	1,707.18	0.951	163	1,786.41	0.315	69
Thursday 30	1,707.16	0.948	163	1,786.34	0.313	87
Friday 31	1,707.09	0.937	162	1,786.20	0.308	59
Saturday 1	1,707.01	0.927	161	1,786.13	0.306	40
CHANGE IN STORAGE	0.010			0.004		

ELEVATIONS AND CAPACITIES ON THIS DATE FOR THE PAST FIVE YEARS

OLD FORGE RESERVOIR				SIXTH LAKE RESERVOIR			
NO.	YEAR	ELEV.	CAPACITY	NO.	YEAR	ELEV.	CAPACITY
1	2024	1,707.01	0.927	1	2024	1,786.13	0.306
2	2021	1,706.89	0.910	2	2022	1,786.01	0.302
3	2023	1,706.88	0.909	3	2021	1,785.90	0.299
4	2022	1,706.88	0.909	4	2023	1,785.79	0.295
5	2020	1,706.80	0.897	5	2020	1,784.49	0.254

OLD FORGE CAPACITY AT SPILLWAY CREST (EL 1706.99) 0.924 B.C.F.
SIXTH LAKE CAPACITY AT SPILLWAY CREST (EL 1785.83) 0.297 B.C.F.

Datum: NAVD 88

CHIEF ENGINEER

**Hudson River Area
Report of the Operations Manager
Sacandaga Field Office at Great Sacandaga Lake
June Board Meeting 2023**

Activity report for May 2024

SFO

- Cleaned offices and conference room weekly.
- Performed maintenance on vehicles and equipment.
- Performed lawn maintenance as needed.
- Cleaned up and expanded our launch area near the Northville Bridge.
- Removed several trees and debris at multiple locations on the GSL.
- Provided the workboat for the Fulton County Annual Multi-Agency Drill.
- Removed the sidewalk and slab at the main office entrance.
- Built a stone confinement area near the maintenance building.

Indian Lake

- Nothing to report

Conklingville Dam

- Read and reported piezometer data including spillway and toe observations daily.
- Performed maintenance on vehicles and equipment.
- Installed the new Tuffboom log boom system.
- Performed lawn maintenance as needed.

Respectfully,

Matthew Ginter

Operations Manager

**Black River Area
Report of the Superintendent
Black River Field Office at the Stillwater Reservoir (BRFO)
May 2024**

- Road maintenance, raking
- Vehicle/equipment maintenance
- Received quotes on tank removal at BRFO
- Installed rain gauges at OF/SL
- Applied gravel on Necessary Dam Road
- Continued barn renovation project
- Installed new battery in Sutron at OF
- Worked on Gate #1 at Old Forge Dam. Found damaged guide bracket
- Worked on quotes for Old Forge Gate #1 repairs
- Installed booms at OF/SL
- Started mowing facilities
- Continued work on budget items
- SW staff gauges and Stevens recorder moved to 1988 NAVD (corrected)
- Monitoring continues: piezometers, weirs, profile surveys, seepage sites.
- Misc. gate changes at Stillwater, O.F. & S.L.
- Daily readings Stillwater, O.F. & S.L.



Indian River Lake Dam Rehabilitation Project (State ID#169-0758)
Construction Progress Report

Report No: 07

Period: 04/16/24 through 05/15/24

Date: May 15, 2024

Prepared for: Donald E. Canestrari, John Smith
Bureau of Flood Protection and Dam Safety, Division of Water

Prepared by: Colliers Engineering & Design

On behalf of the Hudson River Black River Regulating District (HRBRRD), Colliers Engineering & Design has prepared this letter in accordance with the requirements of the Dam Safety Permit – Condition 9 – Construction Reports.

Contractor's Progress Schedule, including revisions:

- The most recent construction schedule is dated April 30, and is attached to this progress report. A recovery schedule is anticipated and updates will be provided once received.

Summary of major work completed during period:

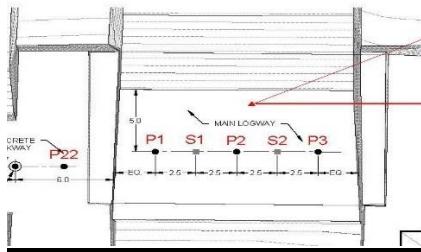
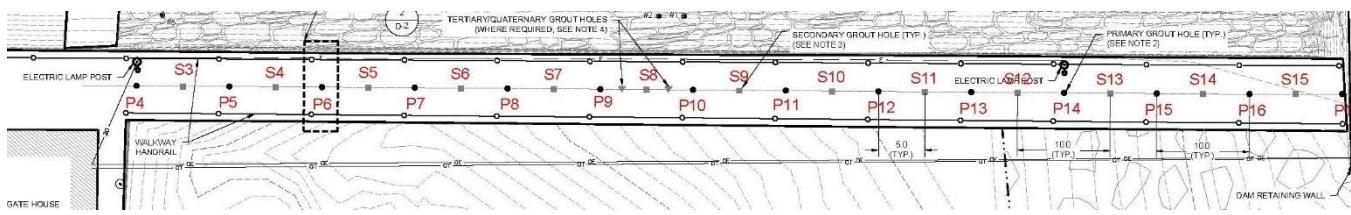
- SWPPP reports. – SWPPP Inspections conducted weekly, and reports located in binder onsite.
- Coring – Completed primary holes 4, 5, 6, 7, 8, 11, and 14 and secondaries 3, 4, 6, 9, 11, 13, and 15 on non-overflow section of dam.
- Grouting – Grouted primary holes 4, 5, 6, 7, 11, and 14 and secondaries 3, 4, 6, 9, 11, 13, and 15 on non-overflow section of dam.
 - Attempted grouting of primary #8 however due to water flow grouting stopped at 15' and did not progress beyond due to grout being washed out.
- Divers – Assisted in the installation of cofferdam located on the upstream side of the logway.
- Cofferdam – Began installation of cofferdam located on the upstream side of the logway.
- Debris – Removal of debris upstream of main logway sill.
- Repointing – Began removal of damaged mortar and vegetation growth in mortar joints also provided a 10' x 10' section for a sample of work and color match.
- Temporary – Installed temporary access for repointing on downstream side of non-overflow section of dam.

Summary of observations made by the on-site representative:

- Daily reports can be provided upon request.

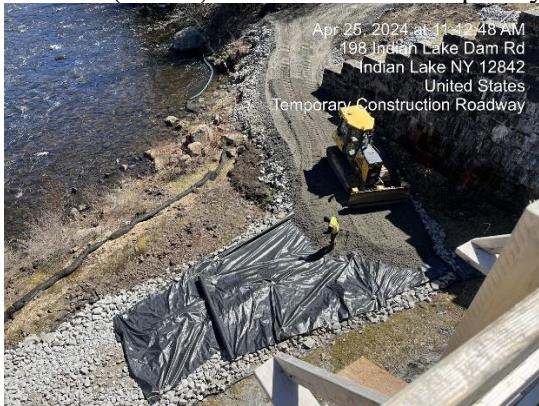
Summary of observations made by the construction engineer during his site inspections:

- Grouted primaries #4, #5, #6, #7, #11, and #14 on the non-overflow section of dam to full depth.
Grouted secondaries #3, #4, #6, #9, #11, #13, and #15 to full depth.
- No dam-safety specific visit has been made to the site yet, as the schedule progresses, and more work is performed site visits will be scheduled for priority activities and observations.



Construction photos:

- Photo 1 (below): Installation of temporary access for repointing.
- Photo 2 (below): Installation of temporary access for repointing.



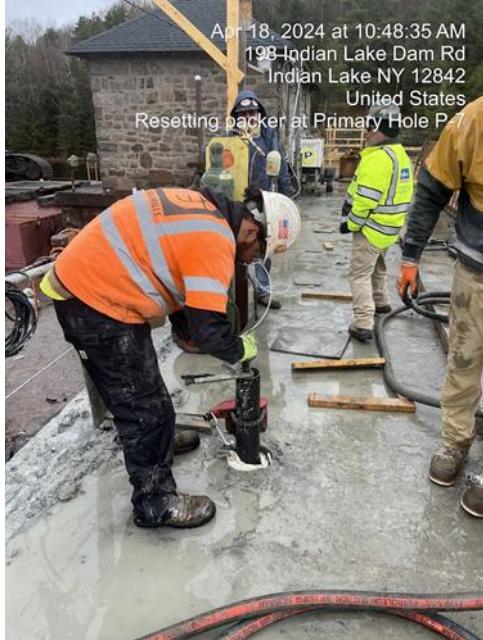
- Photo 3 (below): Mortar removal for repointing on downstream of non-overflow section of dam.
- Photo 4 (below): Mortar removal for repointing on spillway bridge abutment.

- Photo 5 (below): Repointing sample located at spillway bridge abutment.

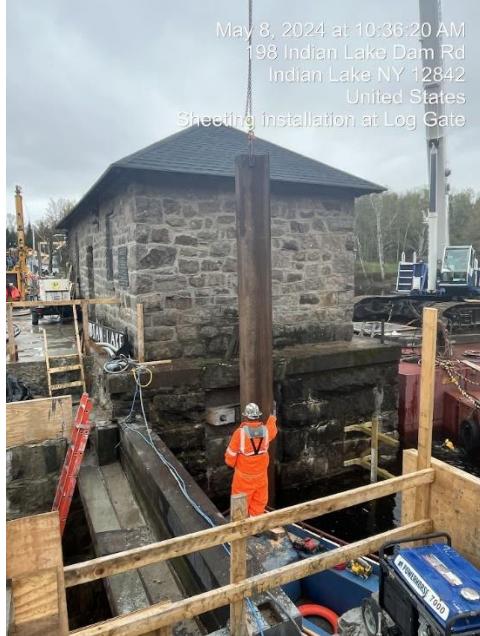
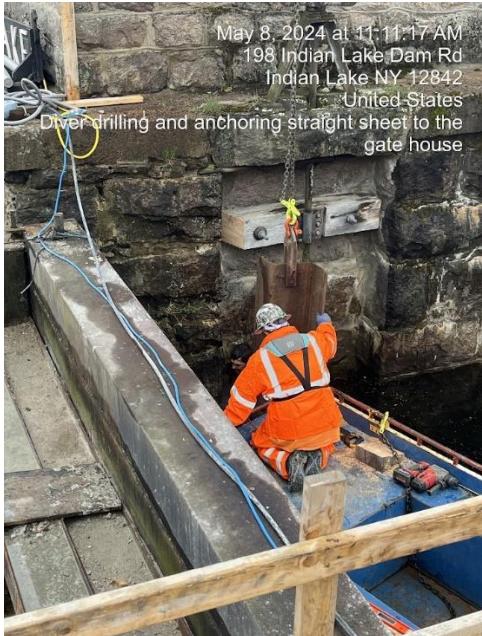


- Photo 6 (below): Grouting for secondary #11 on non-overflow section.
- Photo 7 (below): Core drilling for secondary #11 on non-overflow section.
- Photo 8 (below): Grouting for primary #7 on non-overflow section.
- Photo 9 (below): Core drilling for primary #7 on non-overflow section.
- Photo 10 (below): Grouting for primary #7 on non-overflow section.





- Photo 10 (below): Installation of cofferdam located on upstream side of logway.
- Photo 11 (below): Installation of cofferdam located on upstream side of logway.



**Copies of all lab and field test results:
Grout Placement: Specific Gravity = 1.7**



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PRIMARY HOLE #4 : P-4				
Depth (FT)	Grout Vol. (CF)	Pressure (PSI)	Ratio (Water:Cement)	Time (min)
47-52'	2.87	8	1 to 1	10
47-52'	0.21	8	1 to 1	5
42-47'	0.62	10	1 to 1	10
37-42'	5.54	10	1 to 1	5
37-42'	0.00	10	0.65 to 1	10
32-37'	3.28	0	0.65 to 1	2
32-37'	5.33	0	0.65 to 1	2
32-37'	1.44	-	0.65 to 1 + Celbex	-
32-37'	1.44	-	0.65 to 1 + Celbex	-
27-32'	4.51	8	0.65 to 1	2
Date Grouted: 4/17/2024				
Bag Count: 33				
17-27'	2.87	TREMI	0.65 to 1	1
12-17'	1.44	-	0.65 to 1 + Celbex	1
0-12'	2.05	TREMI	0.65 to 1	1
Date Grouted: 4/19/2024				
Bag Count: 9				
PRIMARY HOLE #5 : P-5				
Depth (FT)	Grout Vol. (CF)	Pressure (PSI)	Ratio (Water:Cement)	Time (min)
48-53'	0.41	10	1 to 1	10
43-48'	1.64	10	1 to 1	10
38-43'	1.03	10	1 to 1	10
33-38'	0.82	10	1 to 1	10
28-33'	1.23	10	1 to 1	10
23-28'	1.64	10	1 to 1	10
18-23'	0.41	8	1 to 1	10
13-18'	0.82	10	1 to 1	10
8-13'	1.23	10	1 to 1	10
0-8'	2.05	TREMI	1 to 1	1
Date Grouted: 4/26/2024				
Bag Count: 21				
PRIMARY HOLE #6 : P-6				
Depth (FT)	Grout Vol. (CF)	Pressure (PSI)	Ratio (Water:Cement)	Time (min)
53-58'	5.33	10	1 to 1	5
48-53'	2.05	5	0.65 to 1	5
43-48'	1.64	5	1 to 1	10
43-48'	2.87	10	1 to 1	10
38-43'	0.22	10	1 to 1	5
33-38'	0	5	1 to 1	10
28-33'	1.85	5	1 to 1	5
23-33'	2.05	TREMI	1 to 1	2
Date Grouted: 5/3/2024				
Bag Count: 18				



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PRIMARY HOLE #7 : P-7				
Depth (FT)	Grout Vol. (CF)	Pressure (PSI)	Ratio (Water:Cement)	Time (min)
19.5-24.5'	0.82	8	1 to 1	10
14.5-19.5'	2.05	5	1 to 1	5
14.5-19.5'	1.23	8	0.80 to 1	10
14.5-19.5'	0.82	10	0.65 to 1	10
9.5-14.5'	2.46	3	0.65 to 1	10
4.5-9.5'	0.82	8	0.65 to 1	10
4.5-9.5'	1.86	10	0.65 to 1	10
0-4.5'	1.04	TREMI	0.65 to 1	1
Date Grouted: 4/8/2024				
Bag Count: 18				
50-55.5'	1.64	0	1 to 1	1
50-55.5'	0.82	0	1 to 1	1
45-50'	0.82	0	1 to 1	1
40-45'	1.64	0	0.65 to 1	1
35-40'	2.46	0	0.65 to 1	1
30-35'	0.41	TREMI	0.65 to 1	2
25-30'	2.87	TREMI	0.65 to 1	1
20-25'	2.87	10	0.65 to 1	10
15-20'	2.05	TREMI	0.65 to 1	1
Date Grouted: 4/18/2024				
Bag Count: 18				
10-15'	2.05	TREMI	1 to 1	1
5-10'	0.41	TREMI	0.65 to 1	1
0-5'	1.23	TREMI	0.65 to 1	1
Date Grouted: 4/19/2024				
Bag Count: 9				
PRIMARY HOLE #11 : P-11				
Depth (FT)	Grout Vol. (CF)	Pressure (PSI)	Ratio (Water:Cement)	Time (min)
20-24'	0.82	18	1 to 1	10
15-20'	1.23	10	.80 to 1	2
15-20'	1.24	10	.65 to 1	14
10-15'	1.23	10	.80 to 1	1
10-15'	13.94	10	.65 to 1	20
Date Grouted: 3/7/2024				
Bag Count: 47				
5-10'	5.74	5	1 to 1	5
5-10'	2.46	5	.65 to 1	11
0-5'	1.23	TREMI	.65 to 1	3
Date Grouted: 3/8/2024				
Bag Count: 12				
48-53'	3.28	5	1 to 1	10
43-48'	1.03	8	1 to 1	10
38-43'	0.41	10	1 to 1	10
33-38'	0.41	10	1 to 1	10
28-33'	0.41	10	1 to 1	10
23-28'	0.41	10	1 to 1	10
18-23'	0.41	10	1 to 1	10
13-18'	0.41	10	1 to 1	10
8-13'	0.41	10	1 to 1	10
0-8'	1.44	TREMI	1 to 1	2
Date Grouted: 5/6/2024				
Bag Count: 14				



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PRIMARY HOLE #14 : P-14				
Depth (FT)	Grout Vol. (CF)	Pressure (PSI)	Ratio (Water:Cement)	Time (min)
48-53'	0.41	10	1 to 1	10
43-48'	1.03	10	1 to 1	10
38-43'	0.22	10	1 to 1	10
33-38'	0.41	10	1 to 1	10
28-33'	0.22	10	1 to 1	10
23-28'	0.41	10	1 to 1	10
18-23'	1.44	10	1 to 1	10
13-18'	0.41	10	1 to 1	10
8-13'	1.03	10	1 to 1	10
0-8'	2.05	TREMI	1 to 1	2

Date Grouted: 5/6/2024
Bag Count: 14

SECONDARY HOLE #3 : S-3				
Depth (FT)	Grout Vol. (CF)	Pressure (PSI)	Ratio (Water:Cement)	Time (min)
48-53'	1.23	10	1 to 1	10
43-48'	1.03	10	1 to 1	10
38-43'	1.03	10	1 to 1	10
33-38'	0.63	10	1 to 1	10
28-33'	0.41	10	1 to 1	10
23-28'	1.44	10	1 to 1	10
18-23'	0.63	10	1 to 1	10
13-18'	1.03	10	1 to 1	10
8-13'	0.82	10	1 to 1	10
0-8'	0.82	TREMI	1 to 1	1

Date Grouted: 5/3/2024
Bag Count: 20

SECONDARY HOLE #4 : S-4				
Depth (FT)	Grout Vol. (CF)	Pressure (PSI)	Ratio (Water:Cement)	Time (min)
48-53'	0.63	10	1 to 1	10
43-48'	0.63	10	1 to 1	10
38-43'	0.41	10	1 to 1	10
33-38'	0.41	10	1 to 1	10
28-33'	0.41	10	1 to 1	10
23-28'	0	10	1 to 1	10
18-23'	0.41	10	1 to 1	10
13-18'	0.82	10	1 to 1	10
8-13'	0.41	10	1 to 1	10
0-8'	1.03	TREMI	1 to 1	2

Date Grouted: 5/8/2024
Bag Count: 16



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& Design

SECONDARY HOLE #6 : S-6				
Depth (FT)	Grout Vol. (CF)	Pressure (PSI)	Ratio (Water:Cement)	Time (min)
20-25'	0.41	10	1 to 1	0.5
15-20'	1.23	0	1 to 1	0.5
15-20'	3.69	0	0.65 to 1	0.5
15-20'	0.82	0	0.65 to 1	0.5
15-20'	1.44	10	0.65 to 1 + Celbex	10
10-15'	0.82	0	0.65 to 1	1
10-15'	0.41	0	0.65 to 1	0.5
10-15'	1.44	10	0.65 to 1 + Celbex	10
5-10'	0.21	10	1 to 1	10
0-5'	0.82	TREMI	1 to 1	2
Date Grouted: 3/29/2024				
Bag Count: 18				
48-53'	0.82	0	1 to 1	1
43-48'	0.41	2	0.65 to 1	1
0-25'	7.79	TREMI	0.65 to 1	5
Date Grouted: 5/8/2024				
Bag Count: 16				
SECONDARY HOLE #13 : S-13				
Depth (FT)	Grout Vol. (CF)	Pressure (PSI)	Ratio (Water:Cement)	Time (min)
50-55'	1.64	10	1 to 1	10
45-50'	1.64	10	1 to 1	10
40-45'	0.82	10	1 to 1	10
35-40'	0.82	10	1 to 1	10
30-35'	0.63	10	1 to 1	10
25-30'	0.63	10	1 to 1	10
20-25'	0.82	10	1 to 1	10
15-20'	1.03	10	1 to 1	10
10-15'	0.41	10	1 to 1	10
5-10'	0.82	10	1 to 1	10
0-5'	1.23	TREMI	1 to 1	1
Date Grouted: 4/30/2024				
Bag Count: 20				
SECONDARY HOLE #15 : S-15				
Depth (FT)	Grout Vol. (CF)	Pressure (PSI)	Ratio (Water:Cement)	Time (min)
48-53'	0.82	10	1 to 1	10
43-48'	1.23	10	1 to 1	10
38-43'	0.82	10	1 to 1	10
33-38'	1.23	10	1 to 1	10
28-33'	0.63	10	1 to 1	10
23-28'	1.23	10	1 to 1	10
18-23'	1.23	10	1 to 1	10
13-18'	1.03	10	1 to 1	10
8-13'	1.23	10	1 to 1	10
0-8'	0.82	TREMI	1 to 1	1
Date Grouted: 4/30/2024				
Bag Count: 18				

Summary of work planned for the next two (2) weeks:

- Continue coring of primary and secondary grout holes in preparation for grouting operations.
- Continue grouting operations.



- Completion of installation of cofferdam at main logway in preparation for forming sill, walls, and installation of logway gate.
- Installation of rebar on logway sill and walls.
- Forming of logway sill and walls.
- Removal of existing logway gate.

Construction reports will continue to be generated and filed throughout the duration of construction. Please do not hesitate to contact us at (315) 705-3894 should you have any questions or require additional information.

Sincerely,

A handwritten signature of Daniel J. Gildea. The name is written in cursive script. A small graphic of the Colliers Engineering & Design logo is positioned above the letter "J".

Daniel J. Gildea, PMP
Bergmann Associates
Project Manager

Attachments:

1. Most recent construction schedule.

PROJECT:	HRBRRD Indian Lake Dam Rehabilitation Project Indian Lake Stone Dam (NYSID 169-0758) Town of Indian Lake, Hamilton County, NY D012023	
SUPPLIER/MANUFACTURER:	CD Perry & Sons	
DATE RECEIVED:	April 30, 2024	
DATE RETURNED:	May 2, 2024	
SUBMISSION NO.:	24 Rev 9	
SUBMISSION DESCRIPTION:	Construction Progress Schedule	
DRAWING NO.:	N/A	
SPECIFICATION SECTION:	Contract General Conditions	
<input type="checkbox"/> NO EXCEPTION <input type="checkbox"/> REVISE AND RESUBMIT <input checked="" type="checkbox"/> FURNISH AS CORRECTED <input type="checkbox"/> REJECTED		<p>Corrections or comments made on the shop drawings during this review do not relieve contractor from compliance with requirements of the contract drawings and specifications. This check is only for review of general conformance with the design concept of the project and general compliance with the information given in the contract documents. The contractor is responsible for: confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating his work with that of all other trades; and performing his work in a safe and satisfactory manner.</p> <p>Architect/Engineer's review of design submittals prepared by Contractor-retained engineers are limited to an evaluation of whether the design submitted conforms to the specified design criteria and whether the Contractor's design professional meets the required qualifications.</p>
COMMENTS:	<ol style="list-style-type: none"> 1. Add variance column (or switch total float column to variance) and itemize schedule activities according to baseline schedule activities with all added activities as sub-activities underneath to reflect overall variance from baseline. 2. Update all dates to reflect highlighted mark ups (actualize dates where called out) 3. Update overall schedule to reflect current posture of submittals, RFIs, and guidance issued on grouting operations. 4. Update % complete to reflect actual percent complete where called out. 5. Update all review times for submittals to be a maximum of 10 days including subsequent submittals reviews for multiple submissions. 6. Add logway formwork submittals with associated predecessors & successors. 7. Update Anchor tieback submittal to reflect no contract submittals have been submitted at this time. 	



May 2, 2024

 Signed: Daniel Gildea, PMP
 Project Manager

Date



April 16, 2024

Mr. Jared Henkel
C.D. Perry LLC
20 Monroe Street
Troy, NY 12180

RE: Hudson River - Black River Regulating District: Contract D012023 Indian Lake Dam Rehabilitation
Subject: D012023-1SU02 - Schedule Update 02

Dear Mr. Henkel,

Per our discussions, please find the attached Schedule Update 02 (D012023-1SU02) for your review and approval. These documents have been prepared in accordance with the Project Specifications and through planning conversations with the Contractor. Please forward a copy of this narrative, along with the attached Schedule files at your earliest convenience for review.

Schedule Identification

Update Period: 03/27/2024 to 04/12/2024
Data Date: 04/12/2024
Schedule File Name: D012023-1SU02

Review of Schedule Contract Milestones & Constraints

Activity ID	Activity Name	Comp. Dur.	Total Float	Start	Finish	Late Finish	Last Update Finish	Var. Last Update
Milestones								
A1010	Project Award 10/10/2024	0		10-Oct-23 A				0
A2330	Award to Substantial Calendar Days	577	-128	10-Oct-23 A	08-May-25	31-Dec-24	23-Dec-24	-136
A1000	Substantial Completion	0	-128		08-May-25	31-Dec-24	23-Dec-24	-136

The contractually required Substantial Completion date is constrained to a “finish on or before” date of 12/31/2024. As indicated in the above table, this Schedule forecasts a Substantial Completion date of 05/08/2025, having -128d of float. The Substantial Completion milestone has slipped 136 calendar days since the last schedule submission.

The slippage over this update period is due to high water levels at the dam halting consolidation grouting operations until early August based on a high-level limit of 1648 feet. The Contractor is currently awaiting response on a request to raise the high-level limit to 1651 feet which would eliminate most of the expected level constraints over the coming months.

The contractor is not waiting on an answer and this issue has been resolved. Current schedule should reflect that understanding.

Summary of Upcoming Work (30-Day Lookahead)

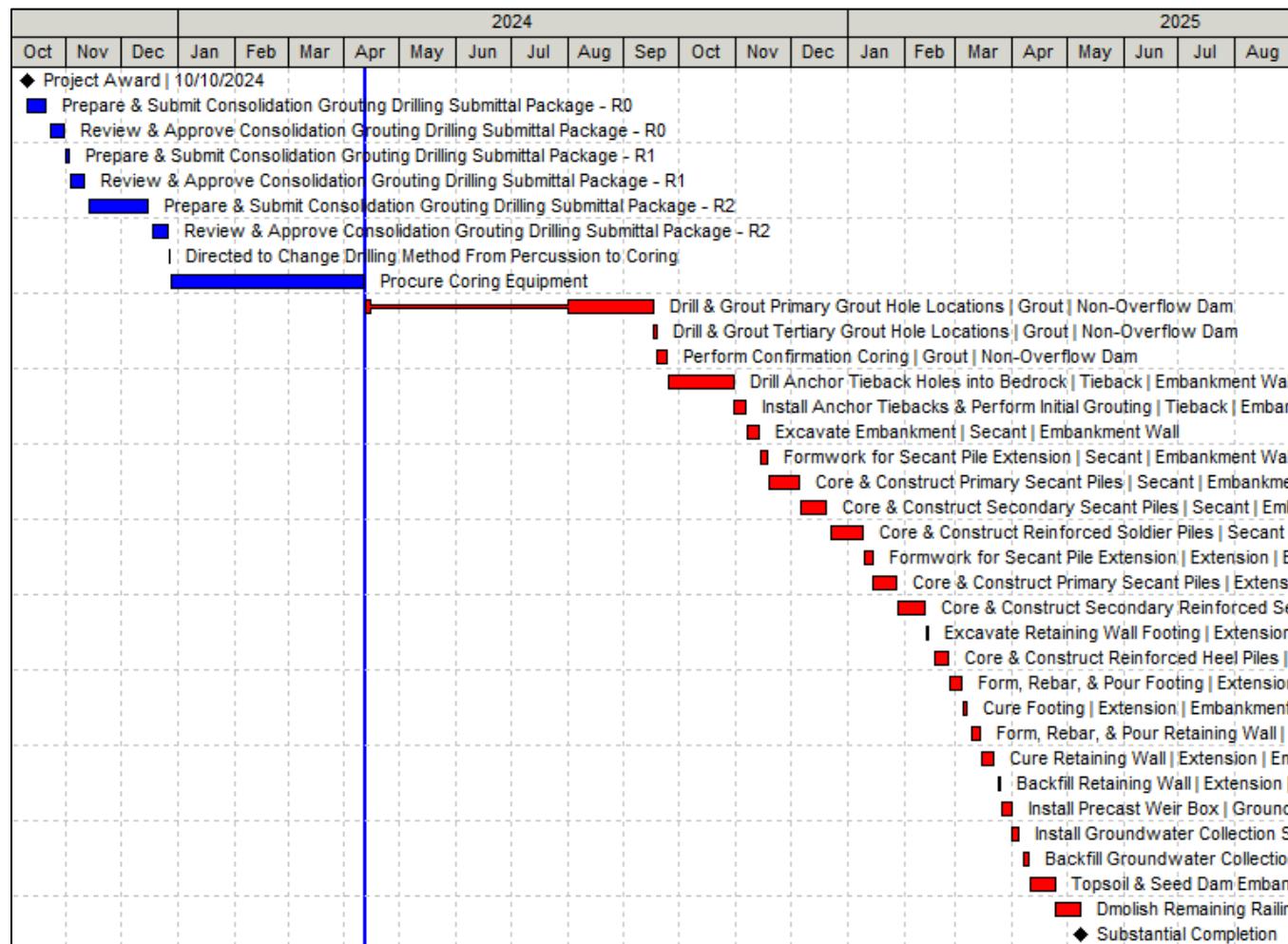
The following construction activities are expected to progress over the next update period:

Activity ID	Activity Name	Orig. Dur.	Total Float	Early Start	Early Finish
Construction					
Main Logway Reconstruction					
Demolition Phase 1	A7700 Install Logway Cofferdam Demo Phase 1 Logway	10	14	29-Apr-24	10-May-24
Main Spillway					
Anchor Tieback Installation Main Spillway	A5440 Construct Anchor Pads Tieback Spillway	5	126	22-Mar-24 A	18-Apr-24
	A5450 Cure Anchor Pads Tieback Spillway	7	182	19-Apr-24	25-Apr-24
	A5400 Drill Anchor Tieback Holes into Bedrock Tieback Spillway	5	126	26-Apr-24	02-May-24
Non-Overflow Dam					
Consolidation Grouting Non-Overflow Dam	A5870 Drill & Grout Primary Grout Hole Locations Grout Non-Overflow Dam	14	-38	12-Apr-24 A	16-Sep-24
	A5880 Drill & Grout Secondary Grout Hole Locations Grout Non-Overflow Dam	13	-38	12-Apr-24 A	16-Sep-24
Dam Embankment					
Embankment Retaining Wall					
Preparation Embankment Wall	A6700 Install Cofferdam Preparation Embankment Wall	10	38	15-Apr-24	26-Apr-24
	A6910 Construct Access for Embankment Wall Preparation Embankment Wall	10	38	29-Apr-24	10-May-24

Description of the Critical (Longest) Path

The Critical Path starts with the remaining consolidation grouting on the non-overflow dam which is expected to pause during the week of 04/16/2024 due to reaching the high-level limit on the dam of 1648 feet. Following the completion of consolidation grouting, anchor tieback installations will be performed. The secant pile wall, soldier pile wall, and embankment wall extension will be constructed. The groundwater collection system will be installed followed by topsoil and seeding placement. Project finish activities will then occur leading to Substantial Completion in May 2025. see note above

High water levels at the dam are expected to halt consolidation grouting operations until early August based on a high-level limit of 1648 feet. The Contractor is currently awaiting response on a request to raise the high-level limit to 1651 feet which would eliminate most of the expected level constraints over the coming months.



Project Issues / Delays

Issue 001 - Late Receipt of NTP - CLOSED

- Baseline

The signed Contract for the Project reflected a Notice to Proceed Date of 09/18/2023. Notice to Proceed was not actually received until 10/10/2023. This late NTP delayed the Contractors' startup operations.

In the future a Time Impact Analyses may be required to analyze the full impact of this delay.  Include with recovery schedule.

Issue 002 - Consolidation Grouting Means & Methods - OPEN

- Baseline

Initially, the Contractor was planning to perform consolidation grouting operations utilizing percussion drilling equipment. Following the 2nd resubmission of the Consolidation Grouting Drilling Submittal package the Contractor was directed to switch to utilizing coring equipment for consolidation grouting due to concerns over potential damage to the dam from percussion drilling equipment.

contractor was never directed to switch.
subcontractor elected to switch.

Agree, this issue should be taken up with the subcontractor outside of this submittal.

As a result of this change, the Contractor is in the process of procuring the necessary coring equipment to perform the consolidation grouting. The Contractor already had percussion drilling equipment immediately available to perform this work. As a result, this issue is delaying the Contractor from progressing consolidation grouting operations. Additionally, the production rate of utilizing coring equipment has the potential to vary more than percussion drilling based on the composition of the material it is coring through. The Contractor has estimated the production rate to the best of their ability, but the expected durations may vary.

 It is the Contractor's position that if the owner had concerns about the method of drilling operations, the project specifications should have reflected this concern and required the preferred method.

Irrelevant to the schedule

Currently, this issue is not expected to cause a delay to the required Substantial Completion date of 12/31/2024. The Contractor will keep the Owner informed of the status of this issue and will coordinate with the owner should further delay mitigation be necessary.

- Update 01

The Contractor has received an updated expected delivery date of the coring drill equipment for the second week of April 2024. This issue is currently driving the Critical Path and is showing a delay to Substantial Completion.

The Contractor will keep the Owner informed of the status of this issue and will coordinate with the owner on potential delay mitigation options. Upon the completion of this issue a Time Impact Analyses may be required to analyze the full impact of this delay.

- Update 02

The coring equipment was delivered to site on 04/11/2024 and consolidation grouting operations on the non-overflow dam have started. The Contractor received approval to perform consolidation grouting while dam water levels are at 1648 feet and below.

Response was already sent to the contractor prior to the schedule meeting as discussed

 High water levels at the dam are expected to halt consolidation grouting operations until early August based on a high-level limit of 1648 feet. The Contractor is currently awaiting response on a request to raise the high-level limit to 1651 feet which would eliminate most of the expected level constraints over the coming months.

The Contractor will keep the Owner informed of the status of this issue and will coordinate with the owner on potential delay mitigation options. Upon the completion of this issue a Time Impact Analyses may be required to analyze the full impact of this delay.

Issue 003 - Logway Gate Water - OPEN

Response was sent to contractor on 4/17/24. This schedule should reflect that.

- Update 02

Following the installation of the logway gate seal it was determined to be insufficient for performing logway gate reconstruction. Therefore, the Contractor believes a cofferdam will be necessary. The Contractor is currently awaiting response on their logway cofferdam submittal to install a cofferdam and perform logway gate repairs.

Currently, this issue is not causing a delay to Substantial Completion. The Contractor will keep the Owner informed of the status of this issue and will coordinate with the owner should further delay mitigation be necessary.

Changes to Progress Schedule

Below is a summary of changes to the progress schedule in this submission.

Activity Name

The following activity name changes have been made to the schedule to reflect:

- *Scope of activities A5920 and A5860 have been clarified as no other railing is expected to be demolished until new railing is ready to be installed on the non-overflow dam.*
- *Scope of activity has been split into two activities: one for sluice gates 1 & 2, and one for sluice gates 3 & 4.*

Activity ID	New Activity Name	Old Activity Name
A5920	Demolish Remaining Railing & Install New Railing Finishes Non-Overflow Dam	Install Railing Finishes Non-Overflow Dam
A5860	Demolish Railings for Drill Rig Access Demo Non-Overflow Dam	Demolish Railings Demo Non-Overflow Dam
A5810	Repoint Interior Walls Phase 1 Sluice Gates 1 & 2	Repoint Interior Walls Gate House

Constraints

The following constraint changes have been made to the schedule to reflect:

- *None.*

No longer applicable

Calendar Reassignments

Calendar assignment changes have been made to the schedule to reflect:

- *Calendar "D012023 - 5d8h - Consolidation Grouting" was created and the days where dam water level is expected to be at or above the high-water limit for consolidation grouting. This is currently expected from 04/16/2024 to 08/01/2024.*

Activity ID	Activity Name	New Calendar Name	Old Calendar Name
A5900	Perform Confirmation Coring Grout Non-Overflow Dam	D012023 - 5d8h - Consolidation Grouting	D012023 - 5d8h
A5890	Drill & Grout Tertiary Grout Hole Locations Grout Non-Overflow Dam	D012023 - 5d8h - Consolidation Grouting	D012023 - 5d8h
A5880	Drill & Grout Secondary Grout Hole Locations Grout Non-Overflow Dam	D012023 - 5d8h - Consolidation Grouting	D012023 - 5d8h
A5870	Drill & Grout Primary Grout Hole Locations Grout Non-Overflow Dam	D012023 - 5d8h - Consolidation Grouting	D012023 - 5d8h

Original Duration

The following original duration changes have been made to the schedule to reflect:

- *Scope of activity has been split into two activities: one for sluice gates 1 & 2, and one for sluice gates 3 & 4.*

Activity ID	Activity Name	New Original Duration	Old Original Duration
A5810	Repoint Interior Walls Phase 1 Sluice Gates 1 & 2	6	12

Activities Added / Deleted

Activities have been added to the project schedule to reflect:

- *Project issue w/ logway water.*
- *Interior gate house pointing was broken into two activities.*
- *Project issue w/ consolidation grouting.*

Activity ID	Activity Name
A7680	Prepare & Submit Logway Cofferdam Submittal Package
A7690	Review & Approve Logway Cofferdam Submittal Package
A7700	Install Logway Cofferdam Demo Phase 1 Logway
A7710	Repoint Interior Walls Phase 2 Sluice Gates 3 & 4
A7720	Submitted RFI #22 Regarding Water Level Variances For Consolidation Grouting
A7730	Received Response RFI #22 Allowing Work Up to 1648' Water Level
A7740	Received Response RFI #22 Allowing Work Up to 1651' Water Level

The following activities were deleted from the project schedule to reflect:

- *None.*

Relationships Added / Deleted

Successor relationships were added to the schedule to reflect:

- *Relationships for added activities.*
- *Correct out-of-sequence relationships.*
- *Properly forecast upcoming construction operations.*

Activity ID	Activity Name	Relationship Lag	Relationship Type	Successor Activity Id	Successor Activity Name
A6540	Test & Tension Anchor Tiebacks Debris Boom Embankment	0	Finish to Finish	A6560	Remove Existing Debris Boom Debris Boom Embankment
A6540	Test & Tension Anchor Tiebacks Debris Boom Embankment	0	Start to Start	A6560	Remove Existing Debris Boom Debris Boom Embankment
A7680	Prepare & Submit Logway Cofferdam Submittal Package	0	Finish to Start	A7690	Review & Approve Logway Cofferdam Submittal Package
A6820	Install Logway Seal Demo Phase 1 Logway	0	Finish to Start	A7680	Prepare & Submit Logway Cofferdam Submittal Package
A5550	Sawcut & Demolish Top of Bulkhead Demo Phase 1 Logway	0	Finish to Start	A7700	Install Logway Cofferdam Demo Phase 1 Logway
A7700	Install Logway Cofferdam Demo Phase 1 Logway	0	Finish to Start	A5540	Form, Rebar, & Pour Logway Sill Reconstruction Phase 1 Logway
A7700	Install Logway Cofferdam Demo Phase 1 Logway	0	Finish to Start	A5590	Install Bulkhead Slot Framing Reconstruction Phase 1 Logway
A6820	Install Logway Seal Demo Phase 1 Logway	0	Finish to Start	A7700	Install Logway Cofferdam Demo Phase 1 Logway
A7690	Review & Approve Logway Cofferdam Submittal Package	0	Finish to Start	A7700	Install Logway Cofferdam Demo Phase 1 Logway
A5870	Drill & Grout Primary Grout Hole Locations Grout Non-Overflow Dam	0	Start to Start	A5880	Drill & Grout Secondary Grout Hole Locations Grout Non-Overflow Dam
A5870	Drill & Grout Primary Grout Hole Locations Grout Non-Overflow Dam	0	Finish to Start	A5890	Drill & Grout Tertiary Grout Hole Locations Grout Non-Overflow Dam
A5130	Review & Approve Masonry Mockups	0	Finish to Start	A7710	Repoint Interior Walls Phase 2 Sluice Gates 3 & 4
A5790	Repoint Exterior Wall Phase 2 Sluice Gates 3 & 4	0	Finish to Start	A7710	Repoint Interior Walls Phase 2 Sluice Gates 3 & 4
A7710	Repoint Interior Walls Phase 2 Sluice Gates 3 & 4	0	Finish to Start	A7250	Remove Diver Protection System Phase 4 Sluice Gates 3 & 4
A5660	Repoint Exterior Wall Phase 1 Sluice Gates 1 & 2	0	Finish to Start	A5810	Repoint Interior Walls Phase 1 Sluice Gates 1 & 2
A5810	Repoint Interior Walls Phase 1 Sluice Gates 1 & 2	0	Finish to Start	A5710	Adjust Diver Protection System Phase 2 Sluice Gates 3 & 4
A7710	Repoint Interior Walls Phase 2 Sluice Gates 3 & 4	0	Finish to Start	A5740	Form, Rebar, & Pour Facing & Sluice Gate Seat Phase 4 Sluice Gates 3 & 4
A7710	Repoint Interior Walls Phase 2 Sluice Gates 3 & 4	0	Finish to Start	A5670	Form, Rebar, & Pour Facing & Sluice Gate Seat Phase 3 Sluice Gates 1 & 2
A7710	Repoint Interior Walls Phase 2 Sluice Gates 3 & 4	0	Finish to Start	A5820	Install Gatehouse Grating & Railing Gate House
A7720	Submitted RFI #22 Regarding Water Level Variances For Consolidation Grouting	0	Finish to Start	A7730	Received Response RFI #22 Allowing Work Up to 1648' Water Level
A7720	Submitted RFI #22 Regarding Water Level Variances For Consolidation Grouting	0	Finish to Start	A7740	Received Response RFI #22 Allowing Work Up to 1651' Water Level
A7120	Review & Approve Consolidation Grouting Drilling Submittal Package - R4	0	Finish to Start	A7720	Submitted RFI #22 Regarding Water Level Variances For Consolidation Grouting
A7740	Received Response RFI #22 Allowing Work Up to 1651' Water Level	0	Finish to Finish	A5870	Drill & Grout Primary Grout Hole Locations Grout Non-Overflow Dam

A7740	Received Response RFI #22 Allowing Work Up to 1651' Water Level	0	Finish to Finish	A5880	Drill & Grout Secondary Grout Hole Locations Grout Non-Overflow Dam
A7740	Received Response RFI #22 Allowing Work Up to 1651' Water Level	0	Finish to Finish	A5890	Drill & Grout Tertiary Grout Hole Locations Grout Non-Overflow Dam
A7730	Received Response RFI #22 Allowing Work Up to 1648' Water Level	0	Finish to Start	A5870	Drill & Grout Primary Grout Hole Locations Grout Non-Overflow Dam
A7730	Received Response RFI #22 Allowing Work Up to 1648' Water Level	0	Finish to Start	A5880	Drill & Grout Secondary Grout Hole Locations Grout Non-Overflow Dam
A7730	Received Response RFI #22 Allowing Work Up to 1648' Water Level	0	Finish to Start	A5890	Drill & Grout Tertiary Grout Hole Locations Grout Non-Overflow Dam

Successor relationships were deleted from the schedule to reflect:

- *Correct out-of-sequence relationships.*
- *Consolidation grouting of primary and secondary holes is now being performed as a singular operation instead of sequential.*

Activity ID	Activity Name	Relationship Lag	Relationship Type	Successor Activity Id	Successor Activity Name
A5790	Repoint Exterior Wall Phase 2 Sluice Gates 3 & 4	0	Finish to Start	A5810	Repoint Interior Walls Gate House
A5870	Drill & Grout Primary Grout Hole Locations Grout Non-Overflow Dam	0	Finish to Start	A5880	Drill & Grout Secondary Grout Hole Locations Grout Non-Overflow Dam

Closing Statement

Please see enclosed schedule documents and the requested layouts. If you require any additional information, please contact me at 315-559-3247.

Sincerely,

On Point Construction Services, LLC



Jonathan Cadwell | Project Coordinator
jcadwell@onpointct.com | 315.559.3247
www.onpointct.com

Attachments:

[D012023-1SU01 - Appendix 1 - All Activities](#)
[D012023-1SU01 - Appendix 2 - Longest \(Critical\) Path](#)
[D012023-1SU01 - Appendix 3 - Remaining Activities](#)
[D012023-1SU01 - Appendix 4 - P6 XER](#)

D012023-1SU02 | Indian River Dam Rehabilitation | Schedule Update 02
Appendix 1 - All Activities

Activity ID	Activity Name	Calendar 23												Calendar 24												Calendar 25																				
		Org. Dur.	Comp. Dur.	Total Float	Baseline Start	Actual Start	Actual Finish	Late Start	Late Finish	% Complete	Predescors	J	A	S	O	N	D	J	F	M	A	M	J	J	J	A	S	O	N	D	J	F	M	A	M	J	J									
A6400	Install Split Rail Fencing Finishes	10	10	-89				08-May-25	17-Dec-24	0%	A6550,A6460,A5530																																			
A6390	Install Fencing & Gate on SE Side of Dam Including Embankment Wall Finishes	10	10	-89				25-Apr-25	08-May-25	0%	A6550,A6470,A6460,A5330																																			
A6380	Install Fencing & Gate on NW Side of Dam Finishes	10	10	-89				25-Apr-25	08-May-25	0%	A6460,A6550,A5510,A5330																																			
A5820	Demolish Remaining Railing & Install New Railing Finishes Non-Overflow Dam	10	10	-89				25-Apr-25	08-May-25	0%	A6550,A6460,A5910,A7860,37																																			
	Demo																																													

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