

RELICENSING STUDY 3.2.2
HYDRAULIC STUDY OF
TURNERS FALLS
IMPOUNDMENT, BYPASS
REACH AND BELOW CABOT
ADDENDUM

Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

Prepared for:



Prepared by:



MARCH 2016

TABLE OF CONTENTS

1	INTRODUCTION.....	1-1
2	HEC-RAS SCENARIOS (PER RSP).....	2-1
2.1	Vernon Dam to Turners Falls Dam: Turners Falls Impoundment	2-1
2.2	Montague USGS Gage to Holyoke Dam.....	2-2

LIST OF ATTACHMENTS

Attachment – Excel Spreadsheet including Mean Channel Velocity and Water Surface Elevation for the Turners Falls Impoundment Reach and the Montague USGS Gage Reach

LIST OF TABLES

Table 2.1-1:	Steady-State Hydraulic Modeling Scenarios for the Turners Falls Impoundment Reach.....	2-1
Table 2.2-1:	Steady-State Hydraulic Modeling Scenarios for the Montague USGS Gage Reach	2-2

LIST OF FIGURES

Figure 2.1-1:	Plan Map of Turners Falls Impoundment HEC-RAS Transect Numbers	2-3
Figure 2.2-1:	Plan Map of HEC-RAS Transects from Montague USGS Gage to Holyoke Dam	2-7

LIST OF ABBREVIATIONS

cfs	cubic feet per second
CRWC	Connecticut River Watershed Council
ft	feet
FERC	Federal Energy Regulatory Commission
FirstLight	FirstLight Hydro Generating Company
HEC-RAS	Hydrologic Engineering Center River Analysis System
Northfield Mountain	Northfield Mountain Pumped Storage Project
RSP	Revised Study Plan
SPDL	Study Plan Determination Letter
TFI	Turners Falls Impoundment
TNC	The Nature Conservancy
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
USR	Updated Study Report
WSEL	water surface elevation

1 INTRODUCTION

On September 15, 2015, FirstLight filed with the Federal Energy Regulatory Commission (FERC) Study Report No. 3.2.2 *Hydraulic Study of Turners Falls Impoundment, Bypass Reach and below Cabot*. On September 29-30, 2015, FirstLight held its Updated Study Report (USR) meetings in which Study No. 3.2.2 was discussed. FirstLight filed its USR meeting minutes on October 14, 2015 and stakeholders had until November 13, 2015 to file comments. Comments on Study No. 3.2.2 were received from the United States Fish and Wildlife Service (USFWS), Connecticut River Watershed Council (CRWC), and the Nature Conservancy (TNC). Of the comments received, it was noted that mean channel velocity data was not included in the report per the approved Revised Study Plan (RSP). In FirstLight's responsiveness summary to comments, filed with FERC on December 14, 2015, it agreed that mean channel velocity data would be provided as an addendum to the report.

On January 15, 2016, FERC issued its Determination on Requests for Study Modifications and New Studies. Relative to Study No. 3.2.2, FERC states in the Determination *"In reply comments filed on December 14, 2015, FirstLight states that it will file addendums to finalized studies 3.2.2 and 3.3.18 to address requests for additional information. However, FirstLight does not address a number of requests for information to be included in future reports. In the study report due on March 1, 2016, FirstLight must include the addendums to studies 3.2.2 and 3.3.18 or indicate when the addendums will be filed with the Commission. In addition, FirstLight's March 1, 2016, filing must respond to all outstanding requests by either : (1) providing the requested information, (2) indicating when the information will be provided to stakeholders, or (3) indicating why the information will not or cannot be provided to stakeholders"*.

One of the study objectives for the hydraulic model included the following:

- Provide water surface elevation (WSEL or depth) and mean channel velocity information to help inform other environmental, geologic, and recreation studies.

This addendum includes mean channel velocity data and WSELs for a) the 15 steady state scenarios simulated for the reach between Vernon Dam to the Turners Falls Dam—"Turners Falls Impoundment Reach" and b) the eight (8) steady state scenarios simulated for the reach between the Montague United States Geological Survey (USGS) gage and Holyoke Dam—"Montague USGS Gage Reach".

2 HEC-RAS SCENARIOS (PER RSP)

2.1 Vernon Dam to Turners Falls Dam: Turners Falls Impoundment

Task 4 of the RSP required the simulation of various steady-state “scenarios”. [Table 2.1-1](#) lists the scenarios simulated in the HEC-RAS hydraulic model for the Turners Falls Impoundment (TFI) reach.

Shown in [Figure 2.1-1 \(a-d\)](#) are the 409 transects included in the TFI Reach hydraulic model. Due to the amount of data, FirstLight is filing with this addendum an Excel spreadsheet including mean channel velocities and WSELs for the 409 transects for Scenarios 1-15. Note that in the HEC-RAS hydraulic model, the mean channel velocity represents the mean velocity over the entire wetted transect including the left bank, right bank and in-channel areas.

Table 2.1-1: Steady-State Hydraulic Modeling Scenarios for the Turners Falls Impoundment Reach

Scenario Number	Vernon Project		Northfield Mountain Project			Turners Impoundment El. at Dam		
	Max Gen Flow (cfs)	Min Flow (cfs)	Max Gen Flow (cfs)	Max Pump Flow (cfs)	Off	Max Imp. Elev. (ft)	Median Imp. Elev. (ft)	Min Imp. Elev. (ft)
Flow (cfs)	17,130	1,250	20,000	-15,200		185 ft	181.3 ft	176 ft
1	X		X			X		
2	X		X				X	
3	X		X					X
4	X			X		X		
5	X			X			X	
6	X			X				X
7	X				X	X		
8	X				X		X	
9	X				X			X
10		X	X			X		
11		X	X				X	
12		X	X					X
13		X			X	X		
14		X			X		X	
15		X			X			X

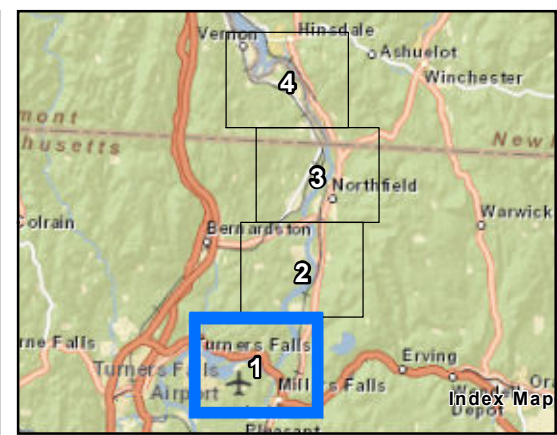
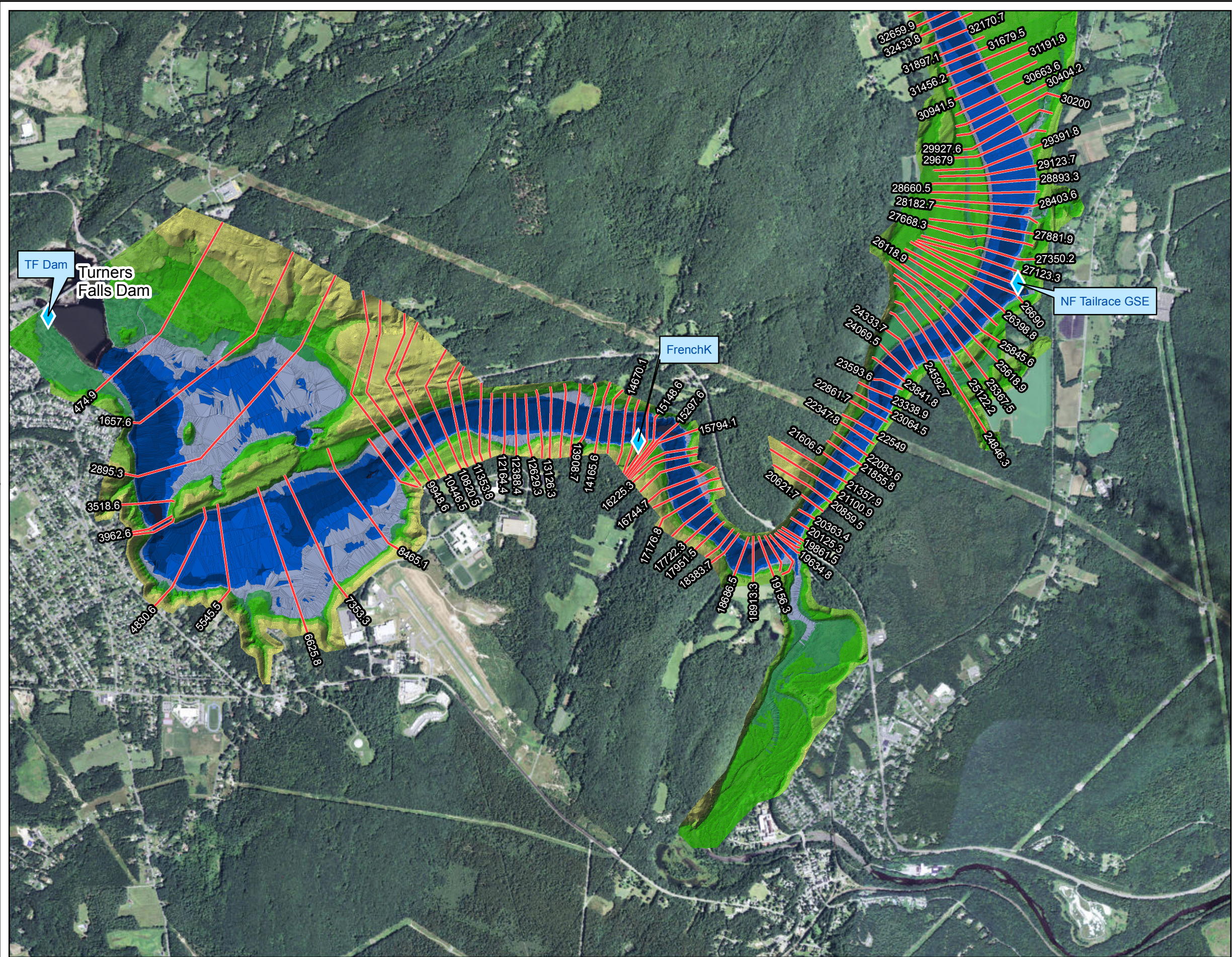
2.2 Montague USGS Gage to Holyoke Dam

Task 7 of the RSP requires the simulation of various steady-state scenarios. [Table 2.2-1](#) lists the scenarios simulated in the HEC-RAS hydraulic model for the Montague USGS Gage Reach.

Shown in [Figure 2.2-1 \(a-h\)](#) are the 114 transects included in the Montague USGS Gage Reach. Due to the amount of data, FirstLight is filing with this addendum an Excel spreadsheet including mean channel velocities and WSELs for the 114 transects for Scenarios 1-8.

Table 2.2-1: Steady-State Hydraulic Modeling Scenarios for the Montague USGS Gage Reach

Scenario Number	Turners Falls Project		Deerfield River Project - Station No.2		Holyoke Impoundment Elev. At Dam	
	Max Gen Flow	Min Flow	Max Gen Flow	Min Flow	Max Imp. Elev.	Min Imp. Elev.
Flow (cfs)	15,938	1,433	1,450	200	100.67 ft	99.47 ft
1	X		X		X	
2	X		X			X
3	X			X	X	
4	X			X		X
5		X	X		X	
6		X	X			X
7		X		X	X	
8		X		X		X



FIRSTLIGHT POWER RESOURCES
 Hydraulic Study of Turners Falls Impoundment
 Addendum

Figure 2.1-1a
 Plan Map of Turners Falls Impoundment
 HEC-RAS Transect Numbers

Legend

- ▲ USGS Stream Gage
- ◆ Water Level Logger
- Transects

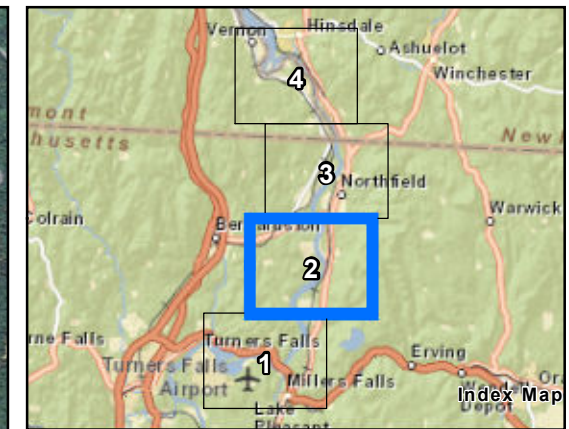
Impoundment Terrain (NGVD29)

- >275'
- 225' - 275'
- 195' - 225'
- 185' - 195'
- 176' - 185'
- 165' - 176'
- 128' - 165'

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

0 1,000 2,000 4,000 Feet
 1 inch = 2,000 feet





FIRSTLIGHT POWER RESOURCES
 Hydraulic Study of Turners Falls Impoundment
 Addendum

Figure 2.1-1b
 Plan Map of Turners Falls Impoundment
 HEC-RAS Transect Numbers

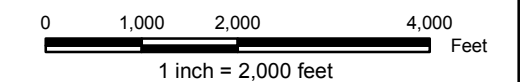
Legend

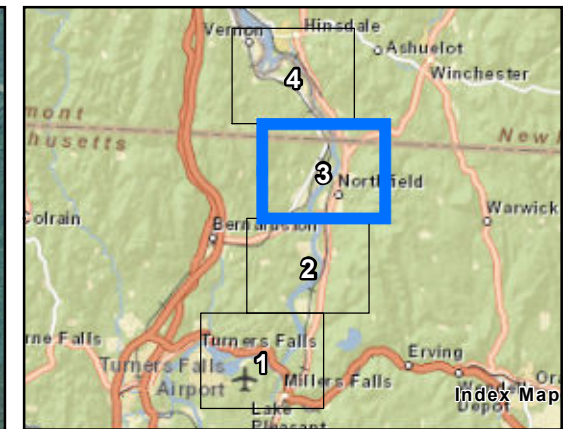
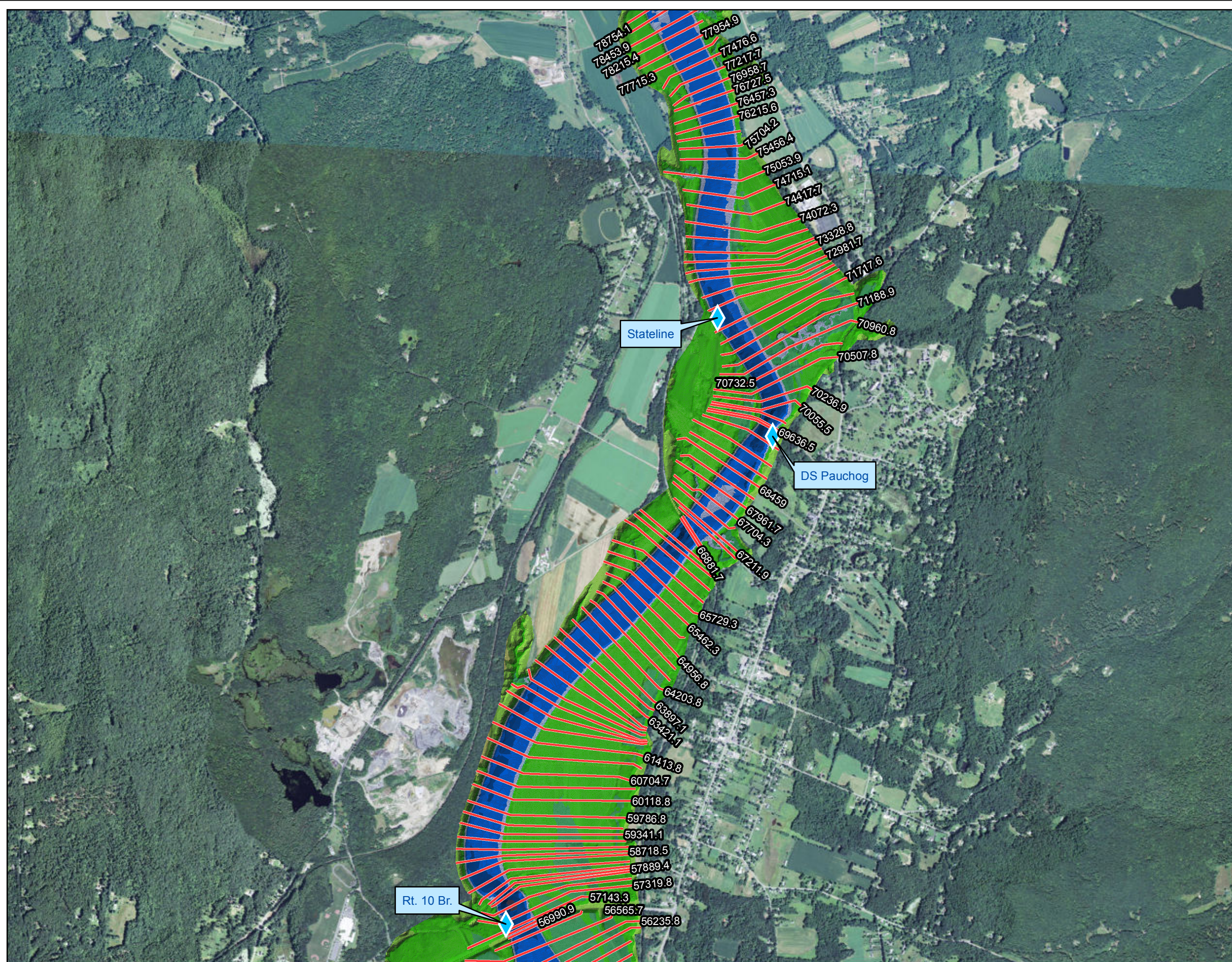
- USGS Stream Gage
- Water Level Logger

- Transects
- Impoundment Terrain (NGVD29)

- >275'
- 225' - 275'
- 195' - 225'
- 185' - 195'
- 176' - 185'
- 165' - 176'
- 128' - 165'

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aergrid, IGN, IGP, swisstopo, and the GIS User Community





FIRSTLIGHT POWER RESOURCES
 Hydraulic Study of Turners Falls Impoundment
 Addendum

Figure 2.1-1c
 Plan Map of Turners Falls Impoundment
 HEC-RAS Transect Numbers

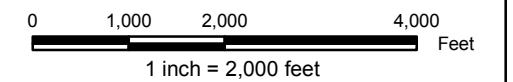
Legend

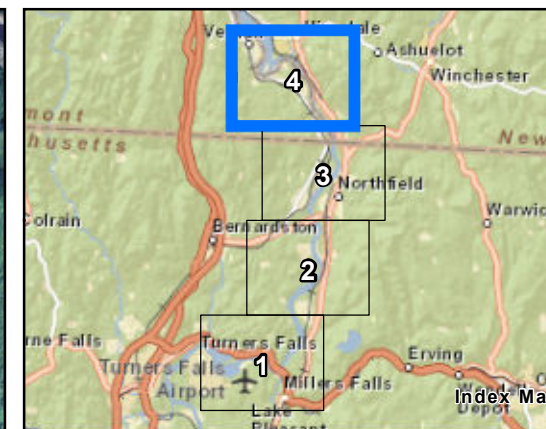
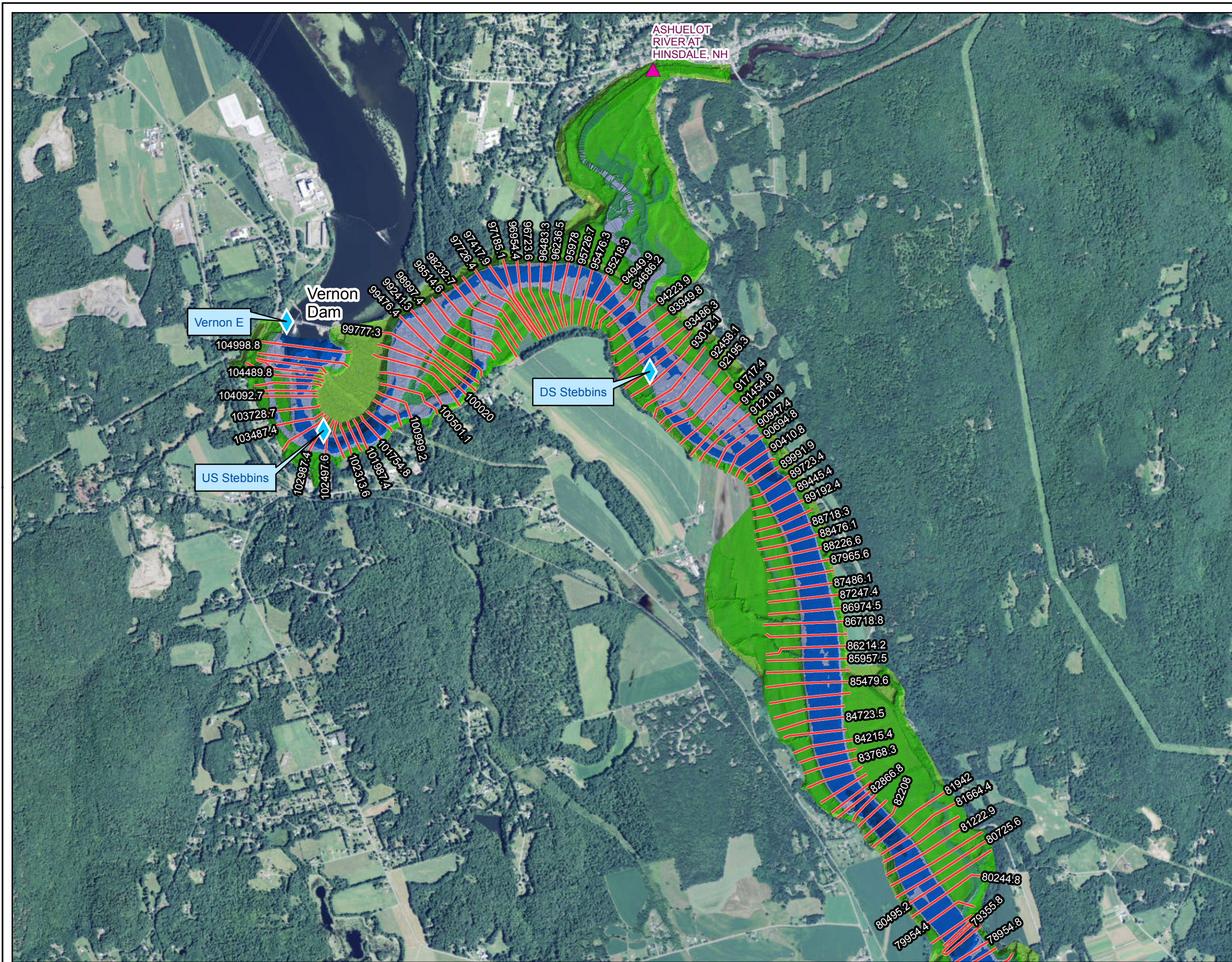
- USGS Stream Gage
- Water Level Logger

— Transects
 Impoundment Terrain (NGVD29)

- >275'
- 225' - 275'
- 195' - 225'
- 185' - 195'
- 176' - 185'
- 165' - 176'
- 128' - 165'

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community





FIRSTLIGHT POWER RESOURCES
 Hydraulic Study of Turners Falls Impoundment
 Addendum

Figure 2.1-1d
 Plan Map of Turners Falls Impoundment
 HEC-RAS Transect Numbers

Legend

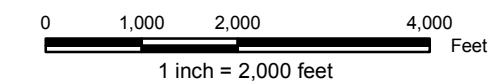
- USGS Stream Gage
- Water Level Logger

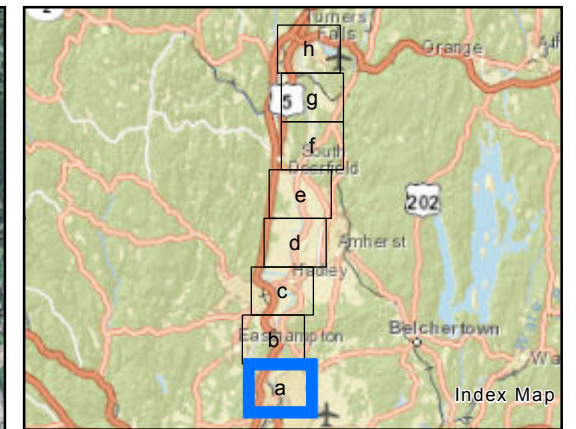
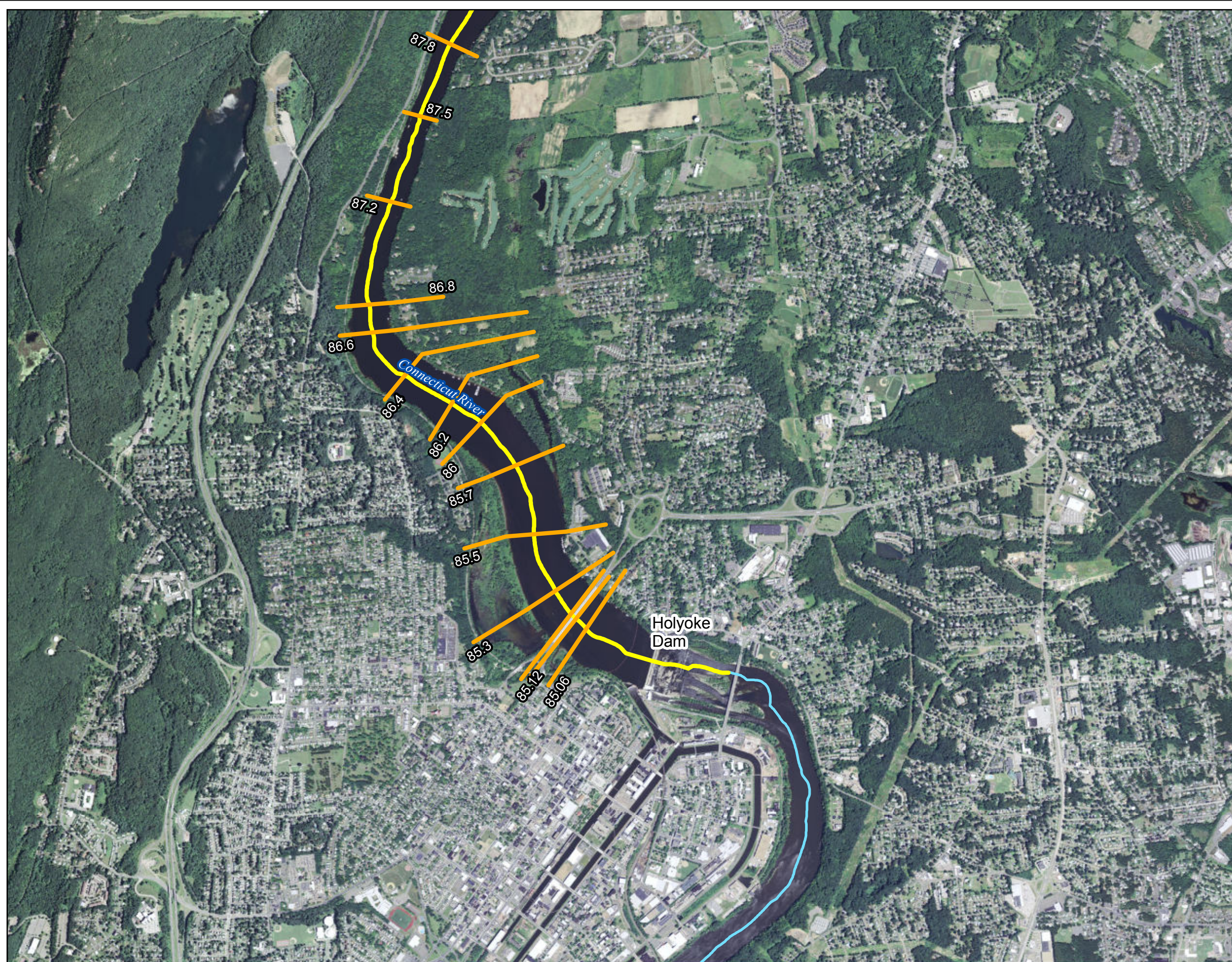
— Transects

Impoundment Terrain (NGVD29)

- >275'
- 225' - 275'
- 195' - 225'
- 185' - 195'
- 176' - 185'
- 165' - 176'
- 128' - 165'

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community











FIRSTLIGHT POWER RESOURCES
 Hydraulic Study of Connecticut River
 from Montague USGS Gage to Holyoke Dam
 Addendum

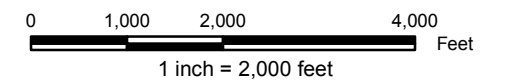
Figure 2.2-1a
 Plan Map of HEC-RAS Transects
 from Montague USGS Gage to Holyoke Dam

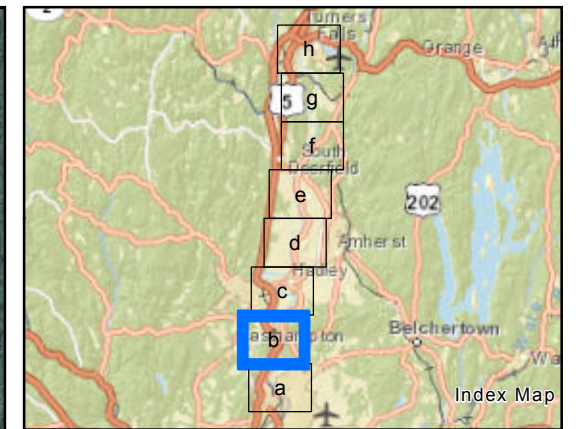
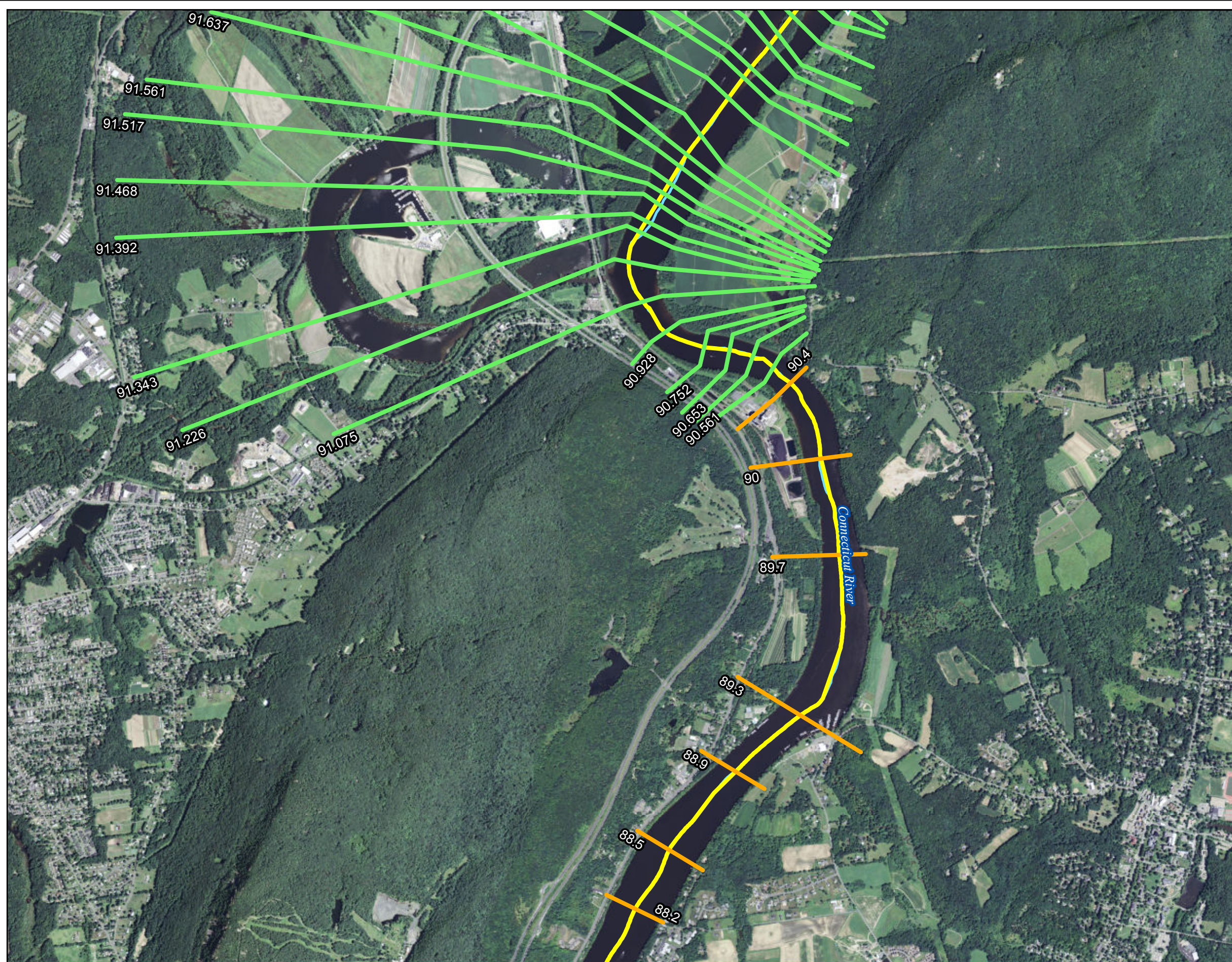
Legend

-  USGS Stream Gage
-  Water Level Logger
-  FEMA transects
-  FirstLight Hatfield transects
-  USACE Northampton transects
-  HEC-RAS Hydraulic Model Extent



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community











FIRSTLIGHT POWER RESOURCES
Hydraulic Study of Connecticut River
from Montague USGS Gage to Holyoke Dam
Addendum

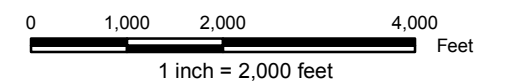
Figure 2.2-1b
Plan Map of HEC-RAS Transects
from Montague USGS Gage to Holyoke Dam

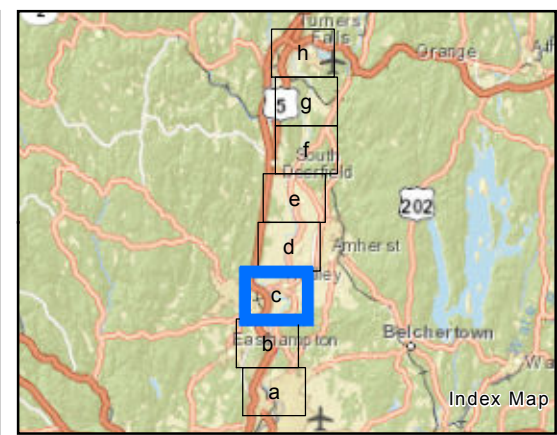
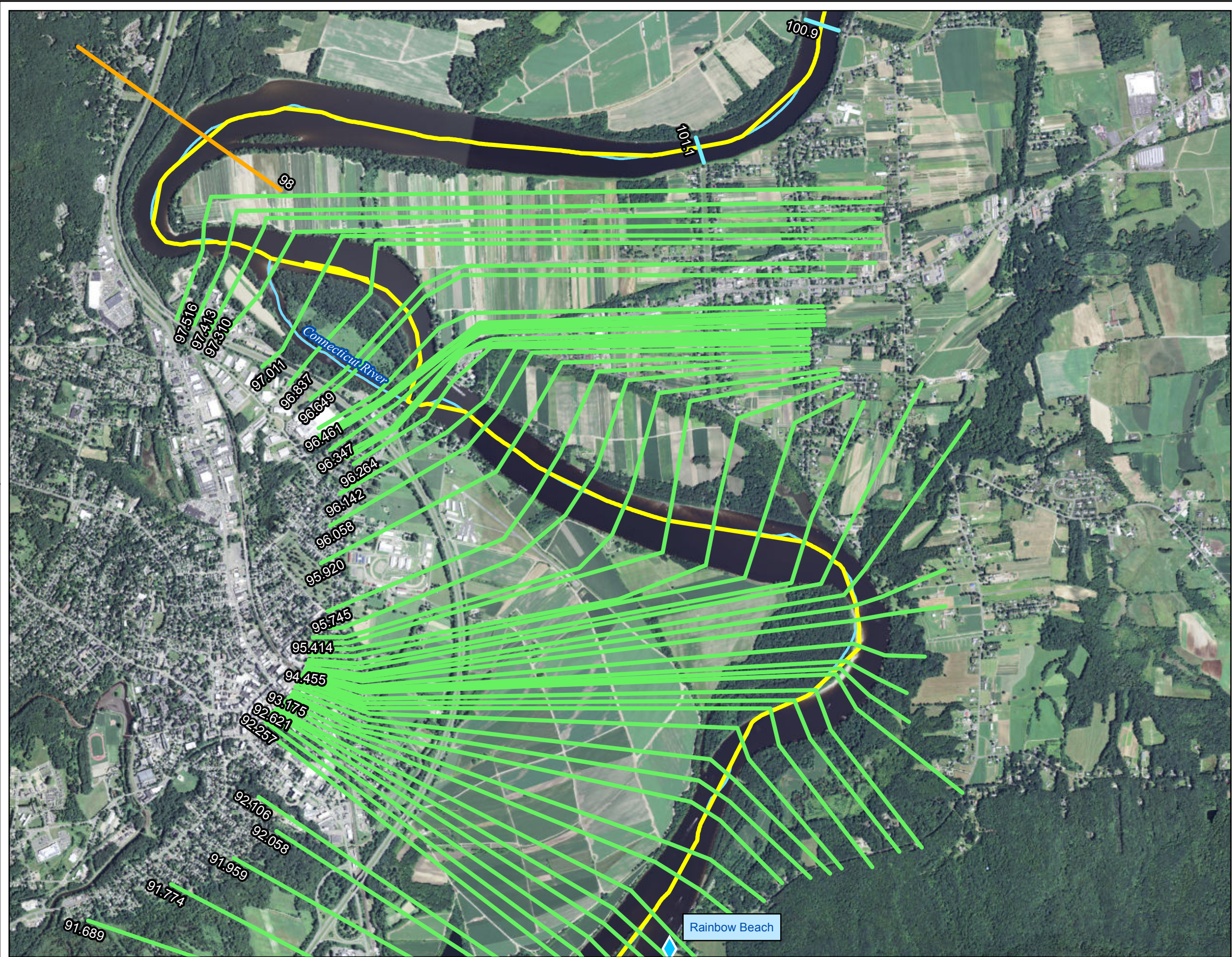
Legend

-  USGS Stream Gage
-  Water Level Logger
-  FEMA transects
-  FirstLight Hatfield transects
-  USACE Northampton transects
-  HEC-RAS Hydraulic Model Extent



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aergrid, IGN, IGP, swisstopo, and the GIS User Community





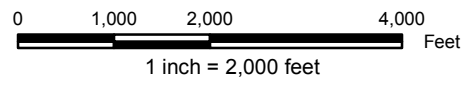
FIRSTLIGHT POWER RESOURCES
 Hydraulic Study of Connecticut River
 from Montague USGS Gage to Holyoke Dam
 Addendum

Figure 2.2-1c
 Plan Map of HEC-RAS Transects
 from Montague USGS Gage to Holyoke Dam

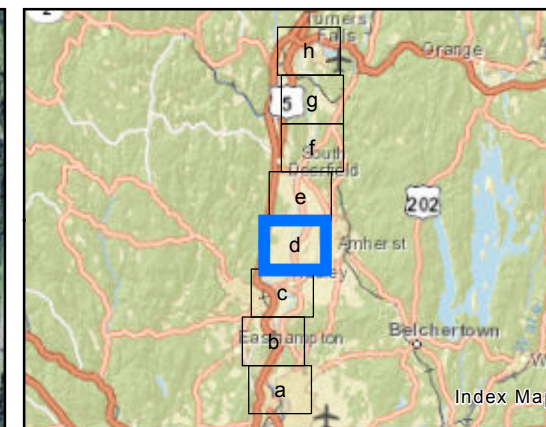
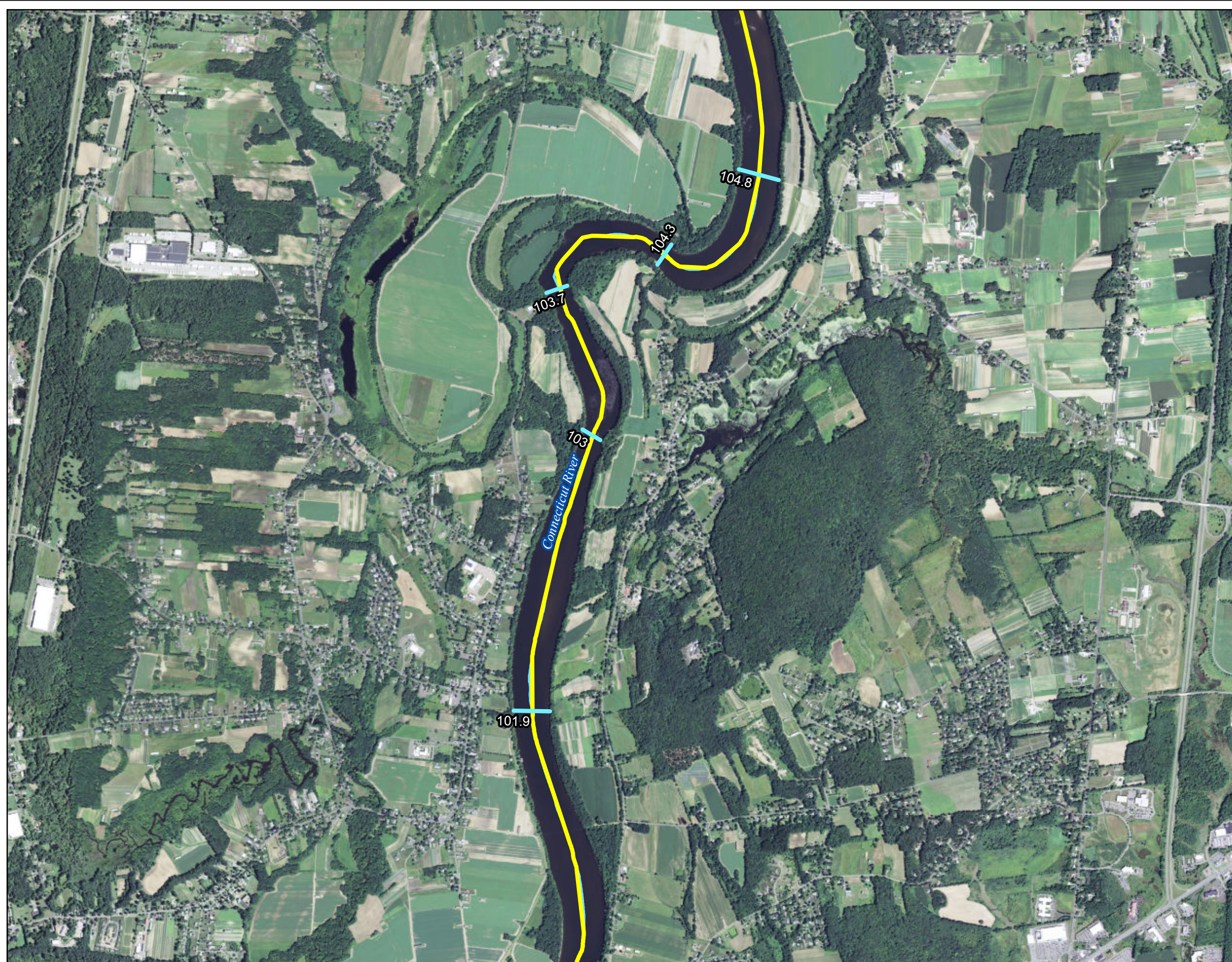
- Legend
- USGS Stream Gage
 - Water Level Logger
 - FEMA transects
 - FirstLight Hatfield transects
 - USACE Northampton transects
 - HEC-RAS Hydraulic Model Extent



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Copyright © 2016 FirstLight Power Resources All rights reserved.



FIRSTLIGHT POWER RESOURCES
 Hydraulic Study of Connecticut River
 from Montague USGS Gage to Holyoke Dam
 Addendum

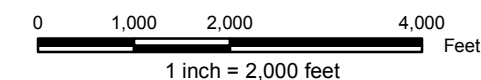
Figure 2.2-1d
 Plan Map of HEC-RAS Transects
 from Montague USGS Gage to Holyoke Dam

Legend

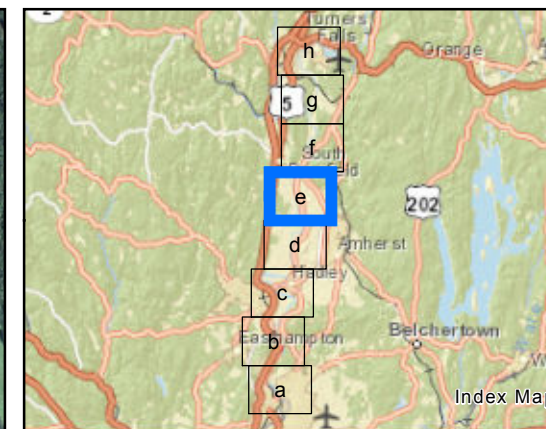
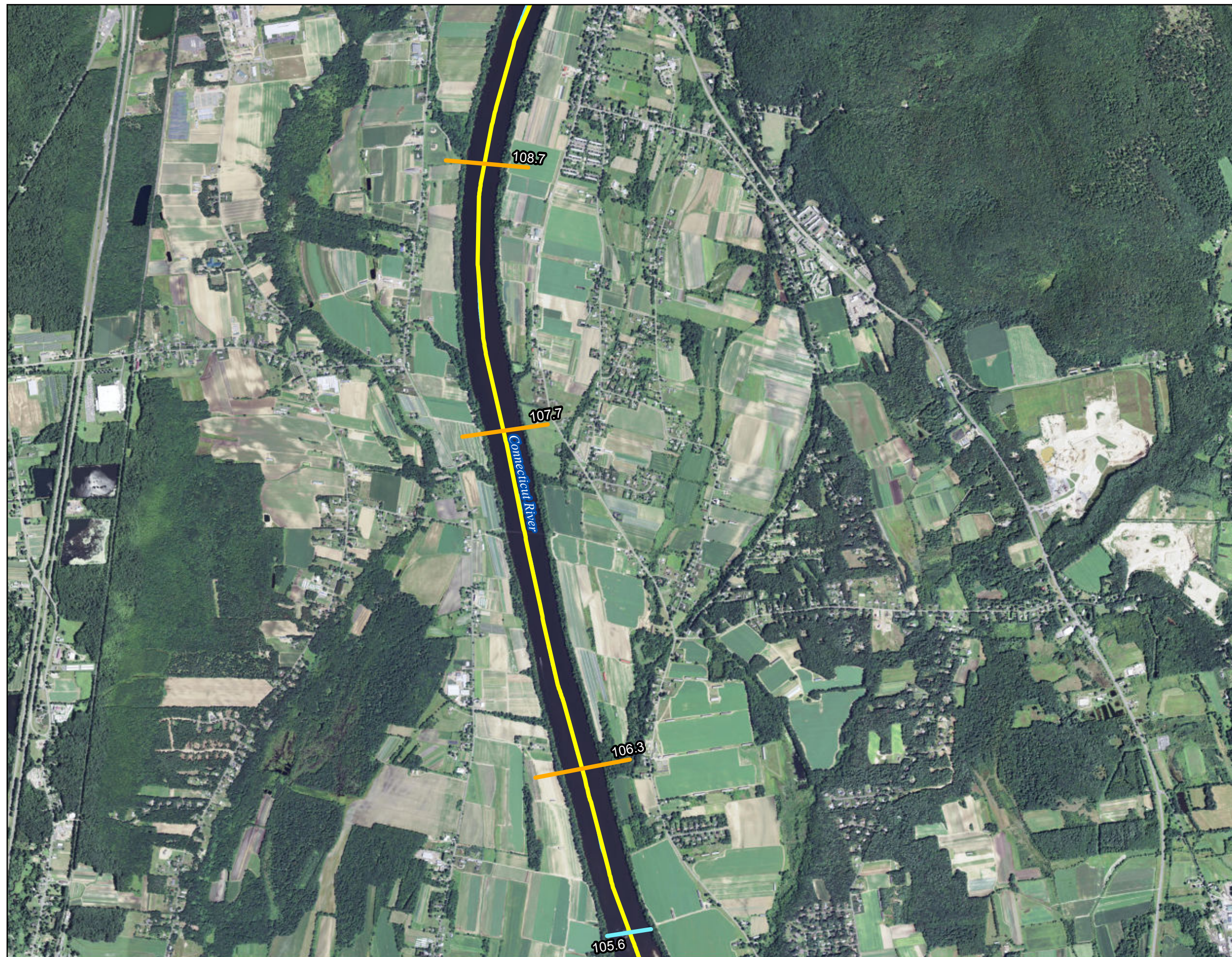
- USGS Stream Gage
- Water Level Logger
- FEMA transects
- FirstLight Hatfield transects
- USACE Northampton transects
- HEC-RAS Hydraulic Model Extent



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aergrid, IGN, IGP, swisstopo, and the GIS User Community









Copyright © 2016 FirstLight Power Resources All rights reserved.



FIRSTLIGHT POWER RESOURCES
 Hydraulic Study of Connecticut River
 from Montague USGS Gage to Holyoke Dam
 Addendum

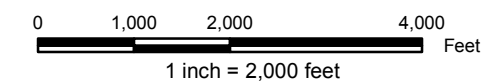
Figure 2.2-1e
 Plan Map of HEC-RAS Transects
 from Montague USGS Gage to Holyoke Dam

Legend

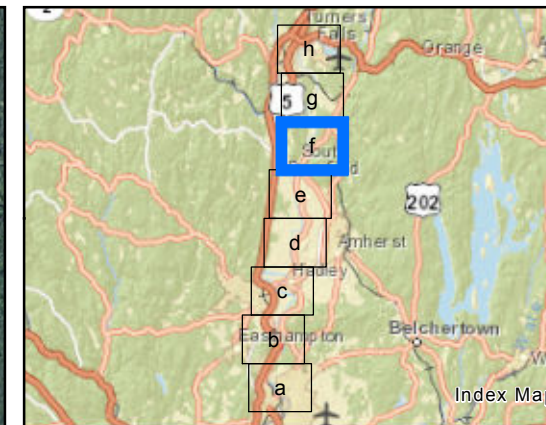
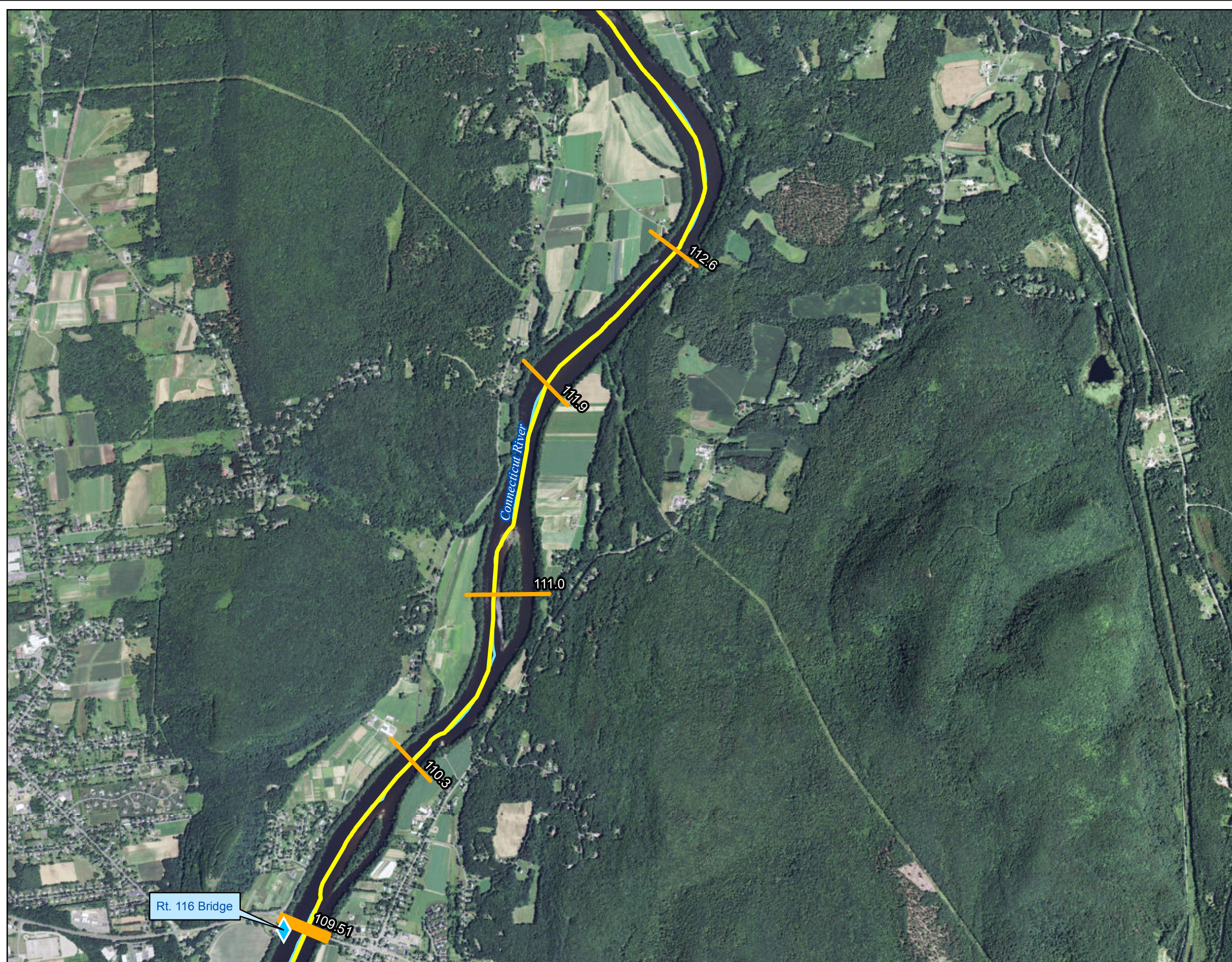
-  USGS Stream Gage
-  Water Level Logger
-  FEMA transects
-  FirstLight Hatfield transects
-  USACE Northampton transects
-  HEC-RAS Hydraulic Model Extent



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Copyright © 2016 FirstLight Power Resources All rights reserved.



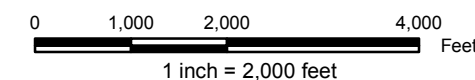
FIRSTLIGHT POWER RESOURCES
 Hydraulic Study of Connecticut River
 from Montague USGS Gage to Holyoke Dam
 Addendum

Figure 2.2-1f
 Plan Map of HEC-RAS Transects
 from Montague USGS Gage to Holyoke Dam

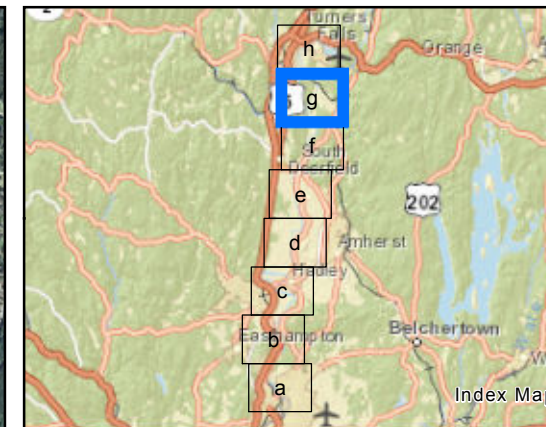
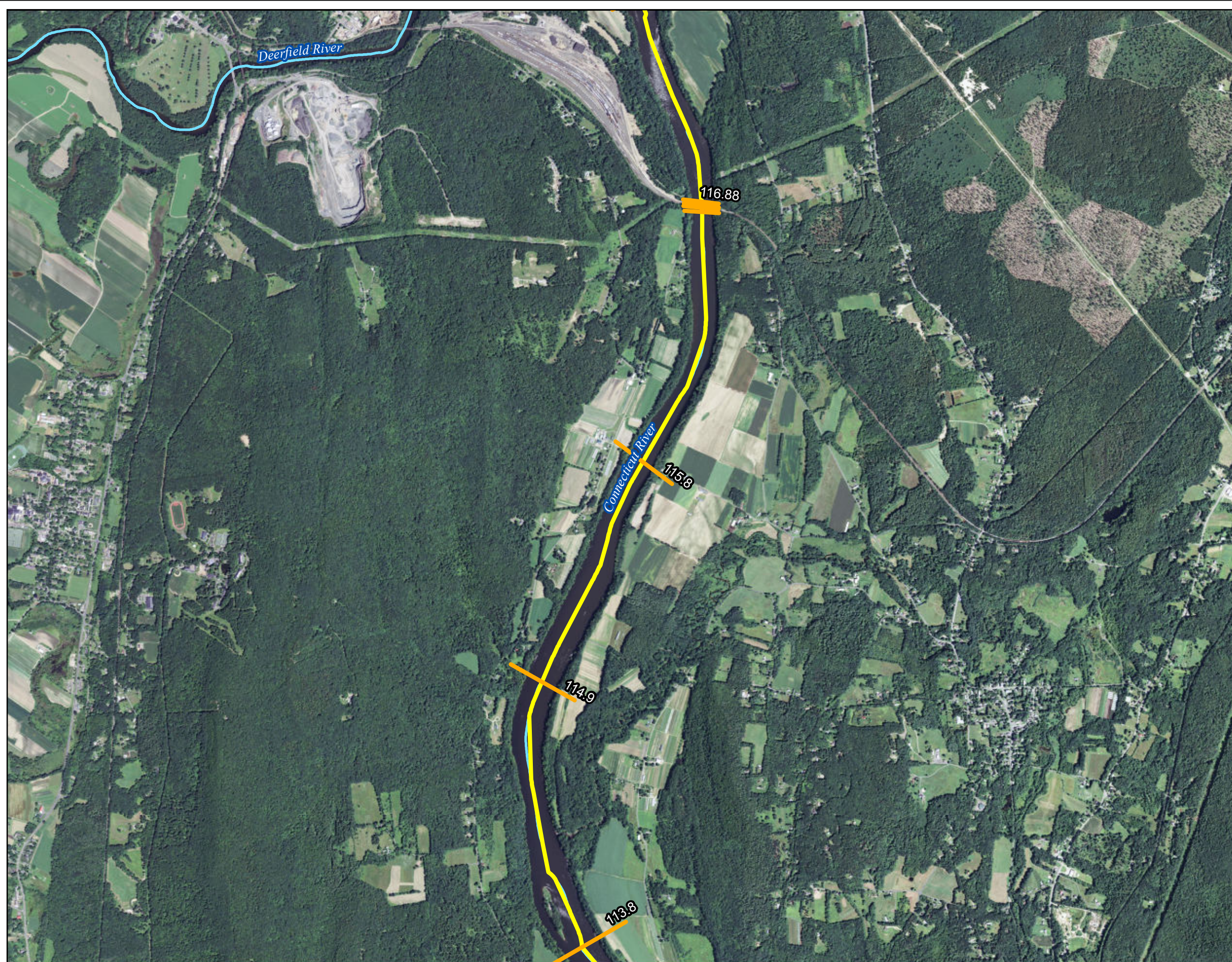
- Legend
- USGS Stream Gage
 - Water Level Logger
 - FEMA transects
 - FirstLight Hatfield transects
 - USACE Northampton transects
 - HEC-RAS Hydraulic Model Extent



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community









Copyright © 2016 FirstLight Power Resources All rights reserved.



FIRSTLIGHT POWER RESOURCES
 Hydraulic Study of Connecticut River
 from Montague USGS Gage to Holyoke Dam
 Addendum

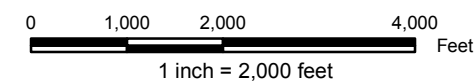
Figure 2.2-1g
 Plan Map of HEC-RAS Transects
 from Montague USGS Gage to Holyoke Dam

Legend

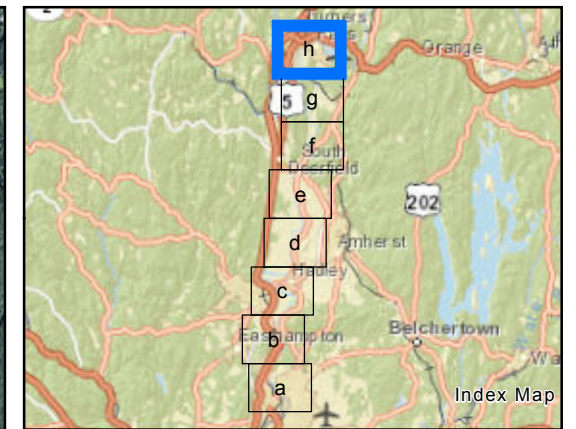
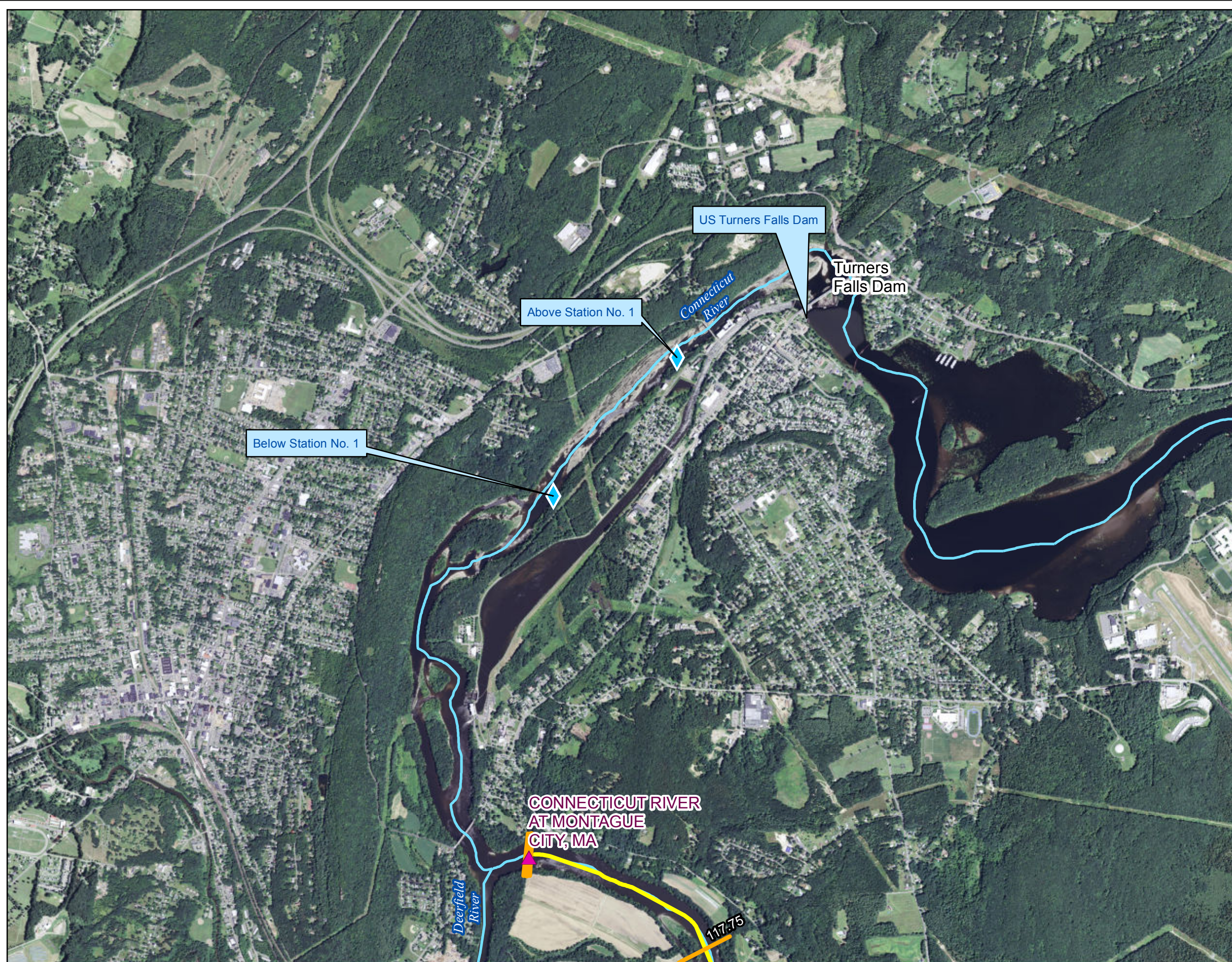
-  USGS Stream Gage
-  Water Level Logger
-  FEMA transects
-  FirstLight Hatfield transects
-  USACE Northampton transects
-  HEC-RAS Hydraulic Model Extent



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community









Copyright © 2016 FirstLight Power Resources All rights reserved.



FIRSTLIGHT POWER RESOURCES
 Hydraulic Study of Connecticut River
 from Montague USGS Gage to Holyoke Dam
 Addendum

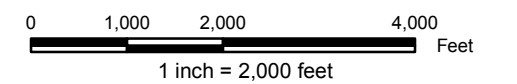
Figure 2.2-1h
 Plan Map of HEC-RAS Transects
 from Montague USGS Gage to Holyoke Dam

Legend

-  USGS Stream Gage
-  Water Level Logger
-  FEMA transects
-  FirstLight Hatfield transects
-  USACE Northampton transects
-  HEC-RAS Hydraulic Model Extent



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aergrid, IGN, IGP, swisstopo, and the GIS User Community



**ATTACHMENT – EXCEL SPREADSHEET
INCLUDING MEAN CHANNEL
VELOCITY AND WATER SURFACE
ELEVATION FOR THE TURNERS FALLS
IMPOUNDMENT REACH AND THE
MONTAGUE USGS GAGE REACH**

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 1		Scenario 2		Scenario 3		Scenario 4	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
104998.8	189.96	0.5	188.35	0.5	188.90	0.5	188.72	0.5
104757.3	189.95	0.7	188.34	0.8	188.89	0.7	188.71	0.7
104619.8	189.94	1.0	188.33	1.1	188.88	1.0	188.70	1.1
104489.8	189.93	1.3	188.30	1.5	188.86	1.5	188.68	1.5
104376.1	189.87	2.1	188.23	2.5	188.79	2.3	188.61	2.4
104243.6	189.83	2.4	188.16	2.8	188.73	2.7	188.55	2.7
104092.7	189.77	2.7	188.07	3.2	188.65	3.0	188.46	3.1
103987.4	189.74	2.7	188.03	3.3	188.62	3.1	188.43	3.1
103728.7	189.67	2.8	187.90	3.4	188.51	3.2	188.32	3.2
103487.4	189.66	2.1	187.89	2.5	188.50	2.3	188.30	2.4
103247.7	189.64	2.0	187.85	2.3	188.47	2.2	188.27	2.2
102987.4	189.61	2.1	187.81	2.4	188.44	2.3	188.24	2.3
102742.2	189.57	2.4	187.76	2.7	188.39	2.6	188.19	2.6
102497.6	189.56	2.1	187.75	2.3	188.38	2.2	188.18	2.3
102313.6	189.50	2.7	187.67	3.0	188.31	2.9	188.11	2.9
102140.4	189.49	2.6	187.66	2.8	188.30	2.7	188.10	2.7
101987.4	189.53	1.5	187.71	1.6	188.35	1.5	188.14	1.5
101754.8	189.54	1.0	187.72	1.1	188.36	1.1	188.15	1.1
101517.8	189.48	2.1	187.65	2.3	188.29	2.2	188.08	2.2
101210.5	189.42	2.5	187.53	3.0	188.19	2.8	187.98	2.9
100999.2	189.40	2.2	187.48	2.7	188.15	2.5	187.94	2.6
100764.8	189.24	3.4	187.20	4.3	187.93	3.9	187.70	4.0
100501.1	189.21	2.7	187.07	3.7	187.85	3.2	187.61	3.4
100237.4	189.18	2.0	186.99	2.7	187.80	2.4	187.55	2.5
100020	189.15	2.0	186.92	2.6	187.75	2.3	187.49	2.4
99777.3	189.12	1.8	186.84	2.4	187.70	2.1	187.43	2.2
99476.41	189.08	1.7	186.73	2.4	187.62	2.1	187.35	2.2
99241.33	189.06	1.6	186.68	2.2	187.59	1.9	187.31	2.0
98997.41	189.01	2.1	186.56	2.9	187.50	2.5	187.21	2.6
98769.96	188.96	2.2	186.46	3.0	187.43	2.6	187.14	2.7
98514.62	188.91	2.3	186.35	3.0	187.36	2.6	187.05	2.7
98232.68	188.87	2.3	186.26	3.0	187.29	2.7	186.98	2.8
98006.39	188.83	2.5	186.18	3.2	187.23	2.8	186.92	2.9
97726.45	188.86	1.4	186.20	1.9	187.26	1.7	186.95	1.7
97417.87	188.84	1.7	186.17	2.0	187.23	1.9	186.92	1.9
97185.14	188.82	1.9	186.14	2.3	187.21	2.1	186.89	2.1
96954.39	188.79	2.1	186.10	2.6	187.18	2.4	186.86	2.4
96723.61	188.76	2.4	186.05	3.0	187.13	2.7	186.81	2.8
96483.27	188.75	2.5	186.02	3.1	187.11	2.8	186.79	2.9
96236.51	188.73	2.4	185.98	3.1	187.09	2.8	186.76	2.9
95978	188.73	2.2	185.97	2.9	187.08	2.6	186.75	2.7
95726.73	188.72	2.2	185.94	2.9	187.06	2.5	186.73	2.6

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 5		Scenario 6		Scenario 7		Scenario 8	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
104998.8	187.84	0.5	188.01	0.5	188.95	0.5	187.88	0.5
104757.3	187.83	0.8	188.00	0.8	188.95	0.7	187.88	0.8
104619.8	187.82	1.1	187.99	1.1	188.94	1.0	187.86	1.1
104489.8	187.79	1.6	187.96	1.6	188.91	1.4	187.83	1.6
104376.1	187.70	2.6	187.88	2.5	188.85	2.3	187.75	2.6
104243.6	187.63	3.0	187.80	2.9	188.79	2.6	187.67	3.0
104092.7	187.52	3.4	187.70	3.4	188.71	3.0	187.57	3.4
103987.4	187.46	3.5	187.65	3.4	188.68	3.0	187.51	3.5
103728.7	187.31	3.6	187.51	3.5	188.58	3.2	187.36	3.6
103487.4	187.29	2.6	187.49	2.6	188.57	2.3	187.34	2.6
103247.7	187.25	2.4	187.45	2.4	188.54	2.2	187.30	2.4
102987.4	187.21	2.5	187.41	2.5	188.50	2.3	187.26	2.5
102742.2	187.15	2.8	187.35	2.7	188.45	2.6	187.20	2.8
102497.6	187.14	2.4	187.34	2.4	188.45	2.2	187.19	2.4
102313.6	187.05	3.1	187.26	3.0	188.38	2.8	187.11	3.0
102140.4	187.04	2.9	187.25	2.8	188.37	2.7	187.10	2.9
101987.4	187.09	1.6	187.30	1.6	188.41	1.5	187.15	1.6
101754.8	187.11	1.1	187.31	1.1	188.42	1.1	187.16	1.1
101517.8	187.03	2.3	187.23	2.3	188.36	2.2	187.08	2.3
101210.5	186.88	3.2	187.10	3.2	188.26	2.8	186.94	3.2
100999.2	186.81	2.9	187.04	2.8	188.23	2.5	186.87	2.9
100764.8	186.46	4.7	186.71	4.6	188.00	3.9	186.52	4.7
100501.1	186.24	4.3	186.53	4.0	187.93	3.2	186.31	4.2
100237.4	186.11	3.1	186.42	3.0	187.88	2.4	186.19	3.1
100020	185.99	3.1	186.32	2.9	187.83	2.3	186.08	3.0
99777.3	185.85	2.9	186.21	2.7	187.78	2.1	185.95	2.8
99476.41	185.65	2.9	186.05	2.7	187.71	2.0	185.76	2.8
99241.33	185.57	2.6	185.98	2.4	187.68	1.9	185.68	2.5
98997.41	185.36	3.5	185.81	3.2	187.59	2.5	185.49	3.4
98769.96	185.17	3.7	185.67	3.4	187.53	2.6	185.31	3.6
98514.62	184.98	3.5	185.51	3.3	187.45	2.6	185.13	3.5
98232.68	184.83	3.5	185.40	3.3	187.39	2.7	185.00	3.4
98006.39	184.69	3.8	185.28	3.5	187.33	2.8	184.86	3.7
97726.45	184.71	2.2	185.31	2.1	187.36	1.6	184.88	2.2
97417.87	184.67	2.4	185.27	2.2	187.33	1.9	184.84	2.3
97185.14	184.63	2.6	185.23	2.5	187.31	2.1	184.80	2.6
96954.39	184.58	2.9	185.19	2.8	187.28	2.4	184.76	2.9
96723.61	184.50	3.4	185.12	3.2	187.24	2.7	184.68	3.4
96483.27	184.45	3.5	185.08	3.3	187.21	2.8	184.63	3.5
96236.51	184.38	3.7	185.03	3.4	187.19	2.8	184.57	3.6
95978	184.33	3.5	185.00	3.2	187.18	2.6	184.53	3.4
95726.73	184.27	3.5	184.95	3.2	187.16	2.5	184.47	3.4

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 9		Scenario 10		Scenario 11		Scenario 12	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
104998.8	188.13	0.5	186.02	0.0	181.33	0.1	183.14	0.0
104757.3	188.13	0.8	186.02	0.1	181.33	0.1	183.14	0.1
104619.8	188.11	1.1	186.02	0.1	181.33	0.2	183.14	0.1
104489.8	188.09	1.6	186.02	0.1	181.33	0.3	183.14	0.2
104376.1	188.00	2.5	186.02	0.2	181.33	0.4	183.14	0.3
104243.6	187.94	2.9	186.02	0.3	181.32	0.5	183.14	0.4
104092.7	187.84	3.3	186.02	0.3	181.32	0.7	183.14	0.5
103987.4	187.79	3.4	186.02	0.3	181.31	0.8	183.13	0.5
103728.7	187.65	3.5	186.01	0.3	181.29	0.8	183.13	0.5
103487.4	187.64	2.5	186.01	0.2	181.28	0.4	183.13	0.3
103247.7	187.60	2.3	186.01	0.2	181.28	0.4	183.13	0.3
102987.4	187.56	2.4	186.01	0.2	181.28	0.3	183.13	0.3
102742.2	187.50	2.7	186.01	0.2	181.28	0.3	183.12	0.3
102497.6	187.49	2.4	186.01	0.2	181.28	0.3	183.12	0.2
102313.6	187.41	3.0	186.01	0.2	181.28	0.3	183.12	0.3
102140.4	187.40	2.8	186.01	0.2	181.28	0.3	183.12	0.3
101987.4	187.45	1.6	186.01	0.1	181.28	0.2	183.12	0.1
101754.8	187.46	1.1	186.01	0.1	181.28	0.1	183.12	0.1
101517.8	187.39	2.3	186.01	0.2	181.28	0.3	183.12	0.2
101210.5	187.26	3.1	186.01	0.3	181.27	0.7	183.12	0.4
100999.2	187.20	2.8	186.01	0.2	181.26	0.5	183.12	0.4
100764.8	186.90	4.5	186.01	0.4	181.22	1.3	183.11	0.7
100501.1	186.73	3.9	186.01	0.4	181.12	1.6	183.09	0.8
100237.4	186.64	2.9	186.01	0.3	181.02	1.3	183.08	0.5
100020	186.55	2.8	186.00	0.3	180.90	1.6	183.07	0.5
99777.3	186.45	2.6	186.00	0.2	180.79	1.3	183.06	0.5
99476.41	186.32	2.5	186.00	0.2	180.55	1.9	183.05	0.5
99241.33	186.26	2.3	186.00	0.2	180.50	0.9	183.05	0.4
98997.41	186.11	3.1	186.00	0.3	180.39	1.5	183.04	0.5
98769.96	185.98	3.2	186.00	0.3	180.21	1.5	183.03	0.5
98514.62	185.85	3.1	186.00	0.3	180.14	0.9	183.03	0.4
98232.68	185.75	3.1	186.00	0.3	180.12	0.7	183.03	0.4
98006.39	185.65	3.4	186.00	0.3	180.11	0.8	183.03	0.4
97726.45	185.67	2.0	186.00	0.2	180.10	0.5	183.03	0.2
97417.87	185.64	2.1	186.00	0.2	180.10	0.3	183.03	0.2
97185.14	185.61	2.4	186.00	0.2	180.10	0.3	183.02	0.2
96954.39	185.56	2.7	186.00	0.2	180.10	0.3	183.02	0.2
96723.61	185.50	3.1	186.00	0.2	180.10	0.4	183.02	0.3
96483.27	185.46	3.2	186.00	0.2	180.10	0.5	183.02	0.3
96236.51	185.42	3.3	186.00	0.2	180.09	0.5	183.02	0.3
95978	185.40	3.1	186.00	0.2	180.09	0.6	183.02	0.3
95726.73	185.36	3.1	186.00	0.2	180.09	0.6	183.02	0.3

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 13		Scenario 14		Scenario 15	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
104998.8	185.05	0.0	181.16	0.1	181.85	0.1
104757.3	185.05	0.1	181.16	0.1	181.85	0.1
104619.8	185.05	0.1	181.16	0.2	181.85	0.1
104489.8	185.05	0.2	181.16	0.3	181.85	0.3
104376.1	185.05	0.3	181.16	0.4	181.84	0.4
104243.6	185.05	0.3	181.15	0.5	181.84	0.5
104092.7	185.05	0.3	181.15	0.7	181.84	0.6
103987.4	185.05	0.4	181.14	0.8	181.83	0.7
103728.7	185.04	0.4	181.11	0.8	181.82	0.7
103487.4	185.04	0.2	181.11	0.4	181.81	0.4
103247.7	185.04	0.2	181.10	0.4	181.81	0.3
102987.4	185.04	0.2	181.10	0.3	181.81	0.3
102742.2	185.04	0.2	181.10	0.3	181.81	0.3
102497.6	185.04	0.2	181.10	0.3	181.81	0.3
102313.6	185.04	0.3	181.10	0.3	181.81	0.3
102140.4	185.04	0.2	181.10	0.3	181.81	0.3
101987.4	185.04	0.1	181.10	0.2	181.81	0.1
101754.8	185.04	0.1	181.10	0.1	181.81	0.1
101517.8	185.04	0.2	181.10	0.3	181.81	0.2
101210.5	185.04	0.3	181.09	0.7	181.80	0.6
100999.2	185.04	0.3	181.08	0.5	181.80	0.5
100764.8	185.03	0.5	181.04	1.4	181.77	1.1
100501.1	185.03	0.5	180.93	1.8	181.72	1.3
100237.4	185.03	0.3	180.81	1.5	181.66	0.9
100020	185.03	0.3	180.63	1.8	181.60	1.1
99777.3	185.03	0.3	180.48	1.5	181.56	0.9
99476.41	185.02	0.3	180.18	2.3	181.48	1.1
99241.33	185.02	0.2	180.16	1.0	181.45	0.6
98997.41	185.02	0.3	180.02	1.9	181.42	0.9
98769.96	185.02	0.3	179.38	2.7	181.39	0.9
98514.62	185.02	0.3	179.01	1.3	181.38	0.6
98232.68	185.02	0.3	178.97	0.9	181.37	0.5
98006.39	185.02	0.3	178.93	1.1	181.37	0.6
97726.45	185.02	0.2	178.90	0.8	181.36	0.4
97417.87	185.02	0.2	178.90	0.4	181.36	0.3
97185.14	185.02	0.2	178.90	0.4	181.36	0.3
96954.39	185.02	0.2	178.90	0.4	181.36	0.3
96723.61	185.02	0.2	178.89	0.5	181.36	0.4
96483.27	185.02	0.2	178.89	0.6	181.36	0.4
96236.51	185.02	0.3	178.88	0.7	181.36	0.4
95978	185.01	0.2	178.87	0.8	181.36	0.4
95726.73	185.01	0.2	178.86	0.9	181.35	0.4

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 1		Scenario 2		Scenario 3		Scenario 4	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
95476.27	188.71	2.1	185.92	2.7	187.05	2.4	186.71	2.5
95218.33	188.71	2.0	185.91	2.5	187.04	2.3	186.71	2.3
94949.95	188.68	2.2	185.87	2.7	187.01	2.5	186.67	2.5
94686.2	188.65	2.5	185.80	3.2	186.96	2.9	186.62	2.9
94491.76	188.64	2.4	185.79	3.0	186.95	2.7	186.61	2.8
94223.94	188.61	2.3	185.72	2.8	186.90	2.6	186.56	2.6
93949.82	188.59	2.1	185.65	2.7	186.85	2.4	186.50	2.5
93719.23	188.58	2.0	185.63	2.6	186.84	2.3	186.49	2.4
93486.29	188.57	2.1	185.60	2.7	186.82	2.4	186.47	2.5
93245.75	188.56	2.0	185.58	2.6	186.81	2.3	186.45	2.4
93012.06	188.56	1.8	185.56	2.4	186.80	2.1	186.44	2.2
92693.29	188.55	1.7	185.53	2.4	186.78	2.1	186.42	2.1
92458.11	188.55	1.6	185.51	2.3	186.77	1.9	186.41	2.0
92195.3	188.54	1.5	185.49	2.1	186.76	1.8	186.39	1.9
91958.72	188.53	1.4	185.47	2.0	186.75	1.7	186.38	1.8
91717.45	188.52	1.5	185.45	2.0	186.73	1.8	186.36	1.8
91454.77	188.52	1.5	185.42	2.1	186.72	1.8	186.35	1.9
91210.13	188.51	1.5	185.41	2.0	186.71	1.7	186.34	1.8
90947.39	188.51	1.4	185.40	1.9	186.70	1.6	186.33	1.7
90694.8	188.50	1.4	185.38	1.8	186.69	1.6	186.32	1.7
90410.77	188.49	1.4	185.38	1.8	186.68	1.6	186.31	1.7
90209.16	188.49	1.5	185.37	1.7	186.68	1.6	186.31	1.6
89991.85	188.48	1.5	185.37	1.7	186.68	1.6	186.30	1.7
89723.36	188.48	1.5	185.36	1.8	186.67	1.6	186.30	1.7
89445.41	188.47	1.7	185.34	2.0	186.65	1.8	186.28	1.9
89192.41	188.46	1.6	185.33	2.0	186.65	1.8	186.27	1.9
88943.99	188.46	1.6	185.33	1.9	186.65	1.7	186.27	1.8
88718.3	188.46	1.6	185.31	2.0	186.64	1.8	186.26	1.8
88476.09	188.45	1.6	185.30	2.0	186.63	1.8	186.25	1.9
88226.57	188.44	1.7	185.29	2.1	186.61	1.9	186.24	2.0
87965.59	188.44	1.7	185.28	2.1	186.61	1.9	186.23	1.9
87731.66	188.44	1.6	185.27	2.0	186.61	1.8	186.22	1.9
87486.08	188.43	1.7	185.25	2.1	186.59	1.9	186.21	2.0
87247.37	188.42	1.6	185.25	2.1	186.59	1.9	186.21	1.9
86974.55	188.42	1.7	185.23	2.1	186.57	1.9	186.19	2.0
86718.84	188.41	1.6	185.21	2.1	186.57	1.9	186.18	1.9
86460.38	188.41	1.6	185.20	2.1	186.56	1.9	186.17	2.0
86214.21	188.40	1.7	185.18	2.2	186.54	1.9	186.16	2.0
85957.52	188.39	1.6	185.16	2.2	186.53	1.9	186.15	2.0
85718.83	188.39	1.6	185.15	2.1	186.53	1.9	186.14	1.9
85479.65	188.38	1.6	185.14	2.1	186.52	1.9	186.13	1.9
85207.05	188.37	1.6	185.12	2.1	186.51	1.9	186.11	2.0

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 5		Scenario 6		Scenario 7		Scenario 8	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
95476.27	184.24	3.3	184.93	3.0	187.15	2.4	184.44	3.2
95218.33	184.23	2.9	184.92	2.7	187.15	2.2	184.43	2.9
94949.95	184.17	3.2	184.87	3.0	187.11	2.5	184.37	3.1
94686.2	184.06	3.7	184.78	3.5	187.06	2.8	184.27	3.7
94491.76	184.03	3.6	184.76	3.3	187.06	2.7	184.25	3.5
94223.94	183.90	3.4	184.66	3.2	187.01	2.5	184.13	3.3
93949.82	183.74	3.4	184.55	3.1	186.96	2.4	183.98	3.3
93719.23	183.71	3.3	184.53	3.0	186.95	2.3	183.95	3.2
93486.29	183.64	3.4	184.48	3.1	186.93	2.4	183.89	3.3
93245.75	183.60	3.3	184.45	3.0	186.92	2.3	183.85	3.2
93012.06	183.54	3.1	184.41	2.7	186.91	2.1	183.81	3.0
92693.29	183.42	3.4	184.35	2.9	186.90	2.0	183.71	3.2
92458.11	183.34	3.3	184.30	2.8	186.89	1.9	183.64	3.1
92195.3	183.26	2.9	184.26	2.5	186.87	1.8	183.58	2.8
91958.72	183.22	2.7	184.24	2.3	186.87	1.7	183.54	2.6
91717.45	183.15	2.8	184.19	2.4	186.85	1.8	183.48	2.7
91454.77	183.08	2.9	184.15	2.5	186.84	1.8	183.43	2.7
91210.13	183.04	2.8	184.13	2.3	186.83	1.7	183.39	2.6
90947.39	183.00	2.5	184.11	2.2	186.82	1.6	183.36	2.4
90694.8	182.97	2.3	184.09	2.1	186.81	1.6	183.34	2.2
90410.77	182.97	2.1	184.08	1.9	186.80	1.6	183.33	2.1
90209.16	182.96	2.0	184.08	1.9	186.80	1.6	183.32	2.0
89991.85	182.95	2.0	184.07	1.9	186.79	1.6	183.32	2.0
89723.36	182.94	2.1	184.06	1.9	186.79	1.6	183.30	2.0
89445.41	182.90	2.5	184.03	2.2	186.77	1.8	183.26	2.4
89192.41	182.88	2.4	184.02	2.2	186.77	1.8	183.25	2.4
88943.99	182.88	2.3	184.01	2.1	186.76	1.7	183.25	2.2
88718.3	182.86	2.4	184.00	2.2	186.76	1.8	183.23	2.3
88476.09	182.84	2.4	183.98	2.2	186.75	1.8	183.21	2.3
88226.57	182.80	2.6	183.96	2.4	186.73	1.9	183.18	2.5
87965.59	182.79	2.5	183.95	2.3	186.73	1.9	183.16	2.5
87731.66	182.77	2.5	183.94	2.2	186.73	1.8	183.15	2.4
87486.08	182.73	2.7	183.91	2.4	186.71	1.9	183.12	2.6
87247.37	182.71	2.6	183.90	2.3	186.71	1.8	183.10	2.5
86974.55	182.67	2.8	183.87	2.4	186.69	1.9	183.06	2.7
86718.84	182.63	2.8	183.85	2.4	186.69	1.9	183.03	2.6
86460.38	182.59	2.9	183.82	2.5	186.68	1.9	183.00	2.7
86214.21	182.54	2.9	183.79	2.5	186.67	1.9	182.96	2.8
85957.52	182.50	2.9	183.77	2.5	186.66	1.9	182.92	2.8
85718.83	182.47	2.8	183.75	2.4	186.65	1.8	182.90	2.7
85479.65	182.42	2.9	183.72	2.5	186.64	1.9	182.86	2.7
85207.05	182.38	2.9	183.70	2.5	186.63	1.9	182.82	2.7

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 9		Scenario 10		Scenario 11		Scenario 12	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
95476.27	185.34	2.9	186.00	0.2	180.08	0.5	183.02	0.3
95218.33	185.33	2.6	186.00	0.2	180.08	0.4	183.02	0.2
94949.95	185.28	2.8	186.00	0.2	180.08	0.4	183.02	0.3
94686.2	185.20	3.3	186.00	0.2	180.08	0.5	183.02	0.3
94491.76	185.19	3.2	186.00	0.2	180.08	0.5	183.02	0.3
94223.94	185.10	3.0	186.00	0.2	180.08	0.4	183.02	0.3
93949.82	185.01	2.9	185.99	0.2	180.07	0.5	183.02	0.3
93719.23	184.99	2.8	185.99	0.2	180.07	0.4	183.02	0.3
93486.29	184.95	2.9	185.99	0.2	180.07	0.5	183.02	0.3
93245.75	184.92	2.8	185.99	0.2	180.06	0.5	183.02	0.3
93012.06	184.90	2.6	185.99	0.2	180.06	0.4	183.02	0.2
92693.29	184.85	2.7	185.99	0.2	180.05	0.7	183.02	0.3
92458.11	184.82	2.5	185.99	0.2	180.03	0.7	183.01	0.3
92195.3	184.79	2.3	185.99	0.1	180.02	0.5	183.01	0.2
91958.72	184.77	2.2	185.99	0.1	180.02	0.4	183.01	0.2
91717.45	184.73	2.2	185.99	0.1	180.02	0.4	183.01	0.2
91454.77	184.70	2.3	185.99	0.1	180.02	0.4	183.01	0.2
91210.13	184.68	2.2	185.99	0.1	180.01	0.4	183.01	0.2
90947.39	184.67	2.0	185.99	0.1	180.01	0.3	183.01	0.2
90694.8	184.65	2.0	185.99	0.1	180.01	0.3	183.01	0.2
90410.77	184.64	1.9	185.99	0.1	180.01	0.2	183.01	0.2
90209.16	184.64	1.8	185.99	0.1	180.01	0.2	183.01	0.1
89991.85	184.63	1.8	185.99	0.1	180.01	0.2	183.01	0.1
89723.36	184.62	1.8	185.99	0.1	180.01	0.2	183.01	0.2
89445.41	184.59	2.1	185.99	0.1	180.01	0.2	183.01	0.2
89192.41	184.59	2.1	185.99	0.1	180.01	0.2	183.01	0.2
88943.99	184.58	2.0	185.99	0.1	180.01	0.2	183.01	0.2
88718.3	184.57	2.1	185.99	0.1	180.01	0.2	183.01	0.2
88476.09	184.56	2.1	185.99	0.1	180.01	0.2	183.01	0.2
88226.57	184.53	2.3	185.99	0.1	180.01	0.3	183.01	0.2
87965.59	184.53	2.2	185.99	0.1	180.01	0.3	183.01	0.2
87731.66	184.52	2.1	185.99	0.1	180.01	0.2	183.01	0.2
87486.08	184.50	2.3	185.99	0.1	180.01	0.3	183.01	0.2
87247.37	184.49	2.2	185.99	0.1	180.01	0.3	183.01	0.2
86974.55	184.46	2.3	185.99	0.1	180.01	0.3	183.01	0.2
86718.84	184.44	2.3	185.99	0.1	180.01	0.3	183.01	0.2
86460.38	184.42	2.3	185.99	0.1	180.01	0.3	183.01	0.2
86214.21	184.40	2.4	185.99	0.1	180.00	0.3	183.01	0.2
85957.52	184.38	2.4	185.99	0.1	180.00	0.3	183.01	0.2
85718.83	184.37	2.3	185.99	0.1	180.00	0.3	183.01	0.2
85479.65	184.34	2.3	185.99	0.1	180.00	0.3	183.01	0.2
85207.05	184.32	2.3	185.99	0.1	180.00	0.3	183.01	0.2

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 13		Scenario 14		Scenario 15	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
95476.27	185.01	0.2	178.85	0.6	181.35	0.4
95218.33	185.01	0.2	178.85	0.5	181.35	0.3
94949.95	185.01	0.2	178.85	0.5	181.35	0.3
94686.2	185.01	0.2	178.84	0.6	181.35	0.4
94491.76	185.01	0.2	178.84	0.6	181.35	0.4
94223.94	185.01	0.2	178.84	0.5	181.35	0.3
93949.82	185.01	0.2	178.83	0.6	181.35	0.4
93719.23	185.01	0.2	178.82	0.6	181.35	0.3
93486.29	185.01	0.2	178.81	0.7	181.34	0.4
93245.75	185.01	0.2	178.81	0.7	181.34	0.3
93012.06	185.01	0.2	178.79	0.6	181.34	0.3
92693.29	185.01	0.2	178.69	1.7	181.34	0.4
92458.11	185.01	0.2	178.35	2.2	181.34	0.4
92195.3	185.01	0.2	177.62	2.3	181.34	0.3
91958.72	185.01	0.2	177.37	1.7	181.33	0.3
91717.45	185.01	0.2	177.16	2.1	181.33	0.3
91454.77	185.01	0.2	176.90	2.6	181.33	0.3
91210.13	185.01	0.2	176.78	1.9	181.33	0.3
90947.39	185.01	0.1	176.70	1.2	181.33	0.2
90694.8	185.01	0.1	176.69	0.6	181.33	0.2
90410.77	185.01	0.1	176.69	0.3	181.33	0.2
90209.16	185.01	0.1	176.69	0.3	181.33	0.2
89991.85	185.01	0.1	176.69	0.2	181.33	0.2
89723.36	185.01	0.1	176.69	0.3	181.33	0.2
89445.41	185.01	0.2	176.68	0.4	181.33	0.2
89192.41	185.01	0.2	176.68	0.4	181.33	0.2
88943.99	185.01	0.1	176.68	0.3	181.33	0.2
88718.3	185.01	0.1	176.68	0.3	181.33	0.2
88476.09	185.01	0.1	176.68	0.4	181.33	0.2
88226.57	185.01	0.2	176.68	0.4	181.33	0.2
87965.59	185.01	0.2	176.68	0.4	181.33	0.2
87731.66	185.01	0.2	176.68	0.4	181.33	0.2
87486.08	185.01	0.2	176.67	0.5	181.33	0.2
87247.37	185.01	0.2	176.67	0.5	181.33	0.2
86974.55	185.01	0.2	176.66	0.6	181.33	0.2
86718.84	185.01	0.2	176.66	0.7	181.33	0.2
86460.38	185.01	0.2	176.64	0.8	181.33	0.2
86214.21	185.01	0.2	176.62	0.9	181.33	0.3
85957.52	185.01	0.2	176.60	0.9	181.33	0.3
85718.83	185.01	0.2	176.58	0.8	181.33	0.2
85479.65	185.01	0.2	176.56	0.9	181.33	0.2
85207.05	185.01	0.2	176.55	0.7	181.33	0.2

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 1		Scenario 2		Scenario 3		Scenario 4	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
84955.75	188.37	1.7	185.11	2.1	186.50	1.9	186.10	2.0
84723.48	188.36	1.7	185.09	2.2	186.49	1.9	186.09	2.0
84460.97	188.36	1.6	185.08	2.1	186.48	1.9	186.08	1.9
84215.45	188.35	1.6	185.07	2.1	186.47	1.9	186.07	1.9
83987.26	188.35	1.6	185.06	2.0	186.47	1.8	186.07	1.9
83768.3	188.35	1.6	185.06	2.0	186.46	1.8	186.06	1.8
83507.77	188.34	1.6	185.05	2.0	186.45	1.8	186.06	1.9
83250.2	188.34	1.6	185.04	1.9	186.45	1.8	186.05	1.8
83009.73	188.32	1.7	185.02	2.2	186.43	2.0	186.03	2.0
82866.84	188.32	1.8	185.01	2.2	186.42	2.0	186.02	2.0
82706	188.32	1.7	185.01	2.1	186.42	1.9	186.02	1.9
82480.01	188.33	1.3	185.03	1.5	186.44	1.4	186.04	1.4
82208.01	188.33	1.1	185.03	1.2	186.44	1.2	186.04	1.2
81942	188.33	1.2	185.03	1.3	186.44	1.2	186.04	1.3
81664.38	188.31	1.6	185.00	1.8	186.41	1.7	186.01	1.7
81469.66	188.30	1.7	184.98	2.1	186.40	1.9	186.00	2.0
81222.88	188.29	1.8	184.95	2.3	186.38	2.0	185.98	2.1
80966.12	188.28	1.8	184.93	2.4	186.37	2.1	185.96	2.2
80725.63	188.27	1.9	184.90	2.5	186.35	2.2	185.94	2.2
80495.16	188.26	1.9	184.87	2.6	186.33	2.2	185.92	2.3
80244.8	188.26	1.8	184.86	2.4	186.32	2.1	185.91	2.2
79954.4	188.25	1.8	184.85	2.3	186.32	2.0	185.91	2.1
79568.18	188.25	1.6	184.86	1.9	186.32	1.8	185.91	1.8
79430.94	188.24	1.8	184.83	2.3	186.30	2.0	185.89	2.1
79355.8	188.26	1.0	184.87	1.1	186.33	1.0	185.92	1.0
79241.25	188.27	0.5	184.88	0.5	186.34	0.5	185.93	0.5
78954.75	188.23	1.6	184.80	2.2	186.29	1.9	185.87	2.0
78754.13	188.23	1.6	184.79	2.2	186.28	1.9	185.86	2.0
78453.87	188.22	1.6	184.78	2.2	186.27	1.9	185.86	1.9
78215.39	188.22	1.6	184.77	2.2	186.26	1.9	185.85	2.0
77954.88	188.21	1.6	184.76	2.2	186.26	1.9	185.84	2.0
77715.34	188.21	1.7	184.75	2.2	186.25	2.0	185.83	2.0
77476.61	188.20	1.6	184.74	2.1	186.24	1.9	185.82	1.9
77217.72	188.20	1.6	184.74	2.0	186.24	1.8	185.82	1.9
76958.73	188.20	1.5	184.73	2.0	186.24	1.8	185.82	1.8
76727.45	188.20	1.5	184.72	2.0	186.23	1.8	185.81	1.8
76457.27	188.20	1.5	184.72	1.9	186.23	1.7	185.81	1.8
76215.57	188.19	1.5	184.72	1.9	186.23	1.7	185.81	1.7
75958.63	188.19	1.5	184.71	2.0	186.22	1.8	185.80	1.8
75704.23	188.19	1.4	184.71	1.7	186.22	1.6	185.80	1.6
75456.38	188.19	1.5	184.70	1.8	186.21	1.7	185.79	1.7
75053.87	188.18	1.5	184.69	1.9	186.21	1.7	185.78	1.7

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 5		Scenario 6		Scenario 7		Scenario 8	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
84955.75	182.35	2.8	183.68	2.4	186.62	1.9	182.80	2.7
84723.48	182.31	2.9	183.66	2.5	186.61	1.9	182.76	2.7
84460.97	182.29	2.7	183.64	2.4	186.60	1.8	182.75	2.6
84215.45	182.26	2.7	183.62	2.4	186.59	1.9	182.72	2.6
83987.26	182.24	2.6	183.61	2.3	186.59	1.8	182.71	2.5
83768.3	182.23	2.5	183.60	2.2	186.59	1.8	182.69	2.4
83507.77	182.21	2.5	183.59	2.2	186.58	1.8	182.67	2.4
83250.2	182.19	2.4	183.58	2.2	186.57	1.8	182.66	2.3
83009.73	182.15	2.7	183.55	2.4	186.56	1.9	182.62	2.6
82866.84	182.14	2.6	183.54	2.4	186.55	2.0	182.61	2.6
82706	182.14	2.4	183.54	2.2	186.55	1.9	182.61	2.4
82480.01	182.17	1.6	183.56	1.5	186.56	1.4	182.64	1.6
82208.01	182.17	1.4	183.57	1.3	186.57	1.2	182.65	1.3
81942	182.17	1.5	183.56	1.4	186.56	1.2	182.64	1.4
81664.38	182.12	2.2	183.52	2.0	186.54	1.7	182.59	2.1
81469.66	182.08	2.5	183.49	2.3	186.52	1.9	182.56	2.5
81222.88	182.01	3.0	183.45	2.6	186.51	2.0	182.50	2.9
80966.12	181.95	3.2	183.42	2.7	186.49	2.1	182.45	3.0
80725.63	181.86	3.5	183.37	2.9	186.48	2.1	182.38	3.3
80495.16	181.75	3.9	183.32	3.1	186.46	2.2	182.30	3.6
80244.8	181.69	3.6	183.29	2.9	186.45	2.1	182.26	3.3
79954.4	181.66	3.3	183.27	2.7	186.45	2.0	182.23	3.1
79568.18	181.68	2.5	183.28	2.2	186.45	1.7	182.24	2.4
79430.94	181.63	3.0	183.25	2.6	186.43	2.0	182.20	2.8
79355.8	181.71	1.2	183.31	1.2	186.46	1.0	182.27	1.2
79241.25	181.72	0.6	183.32	0.6	186.47	0.5	182.28	0.6
78954.75	181.54	3.3	183.20	2.6	186.42	1.9	182.13	3.0
78754.13	181.48	3.4	183.18	2.7	186.41	1.9	182.09	3.1
78453.87	181.43	3.3	183.16	2.6	186.40	1.8	182.06	3.0
78215.39	181.40	3.3	183.14	2.6	186.39	1.9	182.03	3.0
77954.88	181.36	3.2	183.13	2.6	186.39	1.9	182.00	2.9
77715.34	181.33	3.2	183.10	2.6	186.38	1.9	181.98	3.0
77476.61	181.30	3.1	183.09	2.5	186.38	1.8	181.96	2.8
77217.72	181.28	2.9	183.08	2.4	186.37	1.8	181.94	2.7
76958.73	181.26	2.8	183.08	2.3	186.37	1.7	181.93	2.6
76727.45	181.24	2.9	183.06	2.3	186.36	1.8	181.91	2.6
76457.27	181.23	2.6	183.06	2.2	186.36	1.7	181.90	2.5
76215.57	181.21	2.6	183.05	2.2	186.36	1.7	181.89	2.4
75958.63	181.19	2.7	183.04	2.2	186.35	1.7	181.87	2.5
75704.23	181.20	2.3	183.04	2.0	186.35	1.6	181.88	2.2
75456.38	181.17	2.5	183.02	2.1	186.35	1.6	181.85	2.3
75053.87	181.14	2.6	183.01	2.2	186.34	1.7	181.83	2.4

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 9		Scenario 10		Scenario 11		Scenario 12	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
84955.75	184.31	2.3	185.99	0.1	180.00	0.3	183.01	0.2
84723.48	184.29	2.3	185.99	0.1	180.00	0.3	183.01	0.2
84460.97	184.28	2.2	185.99	0.1	180.00	0.3	183.01	0.2
84215.45	184.26	2.3	185.99	0.1	180.00	0.3	183.01	0.2
83987.26	184.25	2.2	185.99	0.1	180.00	0.2	183.01	0.2
83768.3	184.24	2.1	185.99	0.1	180.00	0.2	183.01	0.2
83507.77	184.23	2.1	185.99	0.1	180.00	0.2	183.01	0.2
83250.2	184.22	2.1	185.99	0.1	180.00	0.2	183.01	0.2
83009.73	184.20	2.3	185.99	0.1	180.00	0.2	183.01	0.2
82866.84	184.19	2.3	185.99	0.1	180.00	0.2	183.01	0.2
82706	184.19	2.2	185.99	0.1	180.00	0.2	183.01	0.2
82480.01	184.21	1.5	185.99	0.1	180.00	0.1	183.01	0.1
82208.01	184.21	1.3	185.99	0.1	180.00	0.1	183.01	0.1
81942	184.21	1.4	185.99	0.1	180.00	0.1	183.01	0.1
81664.38	184.17	1.9	185.99	0.1	180.00	0.2	183.01	0.2
81469.66	184.15	2.2	185.99	0.1	180.00	0.2	183.01	0.2
81222.88	184.12	2.4	185.99	0.2	180.00	0.3	183.01	0.2
80966.12	184.09	2.6	185.99	0.2	180.00	0.3	183.01	0.2
80725.63	184.05	2.7	185.99	0.2	180.00	0.3	183.01	0.2
80495.16	184.01	2.8	185.99	0.2	179.99	0.4	183.01	0.2
80244.8	183.99	2.7	185.99	0.2	179.99	0.3	183.01	0.2
79954.4	183.98	2.5	185.99	0.2	179.99	0.3	183.01	0.2
79568.18	183.99	2.1	185.99	0.1	179.99	0.2	183.01	0.2
79430.94	183.96	2.4	185.99	0.2	179.99	0.3	183.01	0.2
79355.8	184.00	1.1	185.99	0.1	179.99	0.1	183.01	0.1
79241.25	184.02	0.6	185.99	0.0	179.99	0.0	183.01	0.0
78954.75	183.92	2.4	185.99	0.1	179.99	0.3	183.01	0.2
78754.13	183.91	2.4	185.99	0.1	179.99	0.3	183.01	0.2
78453.87	183.89	2.4	185.99	0.1	179.99	0.3	183.01	0.2
78215.39	183.87	2.4	185.99	0.1	179.99	0.3	183.01	0.2
77954.88	183.86	2.4	185.99	0.1	179.99	0.3	183.01	0.2
77715.34	183.84	2.4	185.99	0.1	179.99	0.3	183.01	0.2
77476.61	183.84	2.3	185.99	0.1	179.99	0.3	183.01	0.2
77217.72	183.83	2.2	185.99	0.1	179.99	0.3	183.01	0.2
76958.73	183.82	2.1	185.99	0.1	179.99	0.2	183.01	0.2
76727.45	183.81	2.2	185.99	0.1	179.99	0.2	183.01	0.2
76457.27	183.81	2.1	185.99	0.1	179.99	0.2	183.01	0.2
76215.57	183.80	2.0	185.99	0.1	179.99	0.2	183.01	0.2
75958.63	183.79	2.1	185.99	0.1	179.99	0.2	183.01	0.2
75704.23	183.80	1.9	185.99	0.1	179.99	0.2	183.01	0.1
75456.38	183.78	2.0	185.99	0.1	179.99	0.2	183.01	0.2
75053.87	183.77	2.0	185.99	0.1	179.99	0.2	183.01	0.2

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 13		Scenario 14		Scenario 15	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
84955.75	185.01	0.2	176.54	0.6	181.33	0.2
84723.48	185.01	0.2	176.53	0.6	181.32	0.2
84460.97	185.01	0.2	176.53	0.5	181.32	0.2
84215.45	185.01	0.2	176.53	0.5	181.32	0.2
83987.26	185.01	0.1	176.53	0.4	181.32	0.2
83768.3	185.01	0.1	176.53	0.4	181.32	0.2
83507.77	185.01	0.1	176.52	0.4	181.32	0.2
83250.2	185.01	0.1	176.52	0.3	181.32	0.2
83009.73	185.01	0.2	176.52	0.4	181.32	0.2
82866.84	185.01	0.2	176.52	0.3	181.32	0.2
82706	185.01	0.2	176.52	0.3	181.32	0.2
82480.01	185.01	0.1	176.52	0.2	181.32	0.1
82208.01	185.01	0.1	176.52	0.1	181.32	0.1
81942	185.01	0.1	176.52	0.1	181.32	0.1
81664.38	185.01	0.1	176.52	0.2	181.32	0.2
81469.66	185.01	0.2	176.52	0.3	181.32	0.2
81222.88	185.01	0.2	176.52	0.5	181.32	0.2
80966.12	185.01	0.2	176.51	0.7	181.32	0.3
80725.63	185.01	0.2	176.49	1.0	181.32	0.3
80495.16	185.01	0.2	176.41	1.6	181.32	0.3
80244.8	185.01	0.2	176.35	1.1	181.32	0.3
79954.4	185.01	0.2	176.34	0.7	181.32	0.3
79568.18	185.01	0.1	176.34	0.4	181.32	0.2
79430.94	185.01	0.2	176.34	0.4	181.32	0.2
79355.8	185.01	0.1	176.35	0.1	181.32	0.1
79241.25	185.01	0.0	176.35	0.0	181.32	0.0
78954.75	185.01	0.2	176.34	0.8	181.32	0.2
78754.13	185.01	0.2	176.29	1.4	181.32	0.3
78453.87	185.01	0.2	176.20	1.1	181.32	0.2
78215.39	185.01	0.2	176.19	0.9	181.32	0.2
77954.88	185.01	0.2	176.18	0.8	181.32	0.2
77715.34	185.01	0.2	176.17	0.7	181.32	0.2
77476.61	185.01	0.2	176.17	0.6	181.32	0.2
77217.72	185.01	0.1	176.16	0.6	181.32	0.2
76958.73	185.01	0.1	176.16	0.5	181.32	0.2
76727.45	185.01	0.1	176.16	0.5	181.32	0.2
76457.27	185.01	0.1	176.16	0.4	181.32	0.2
76215.57	185.01	0.1	176.16	0.4	181.32	0.2
75958.63	185.01	0.1	176.16	0.4	181.32	0.2
75704.23	185.01	0.1	176.16	0.3	181.32	0.2
75456.38	185.01	0.1	176.16	0.3	181.32	0.2
75053.87	185.01	0.1	176.15	0.4	181.32	0.2

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 1		Scenario 2		Scenario 3		Scenario 4	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
74715.09	188.17	1.6	184.66	2.1	186.19	1.9	185.76	2.0
74417.66	188.17	1.5	184.66	2.0	186.19	1.8	185.76	1.8
74072.34	188.17	1.5	184.65	1.9	186.19	1.7	185.76	1.7
73805.66	188.17	1.4	184.65	1.8	186.18	1.6	185.76	1.7
73519.42	188.16	1.4	184.64	1.8	186.18	1.6	185.75	1.7
73328.77	188.16	1.4	184.64	1.8	186.18	1.6	185.75	1.7
73154.4	188.16	1.4	184.64	1.7	186.18	1.5	185.75	1.6
72981.71	188.16	1.4	184.63	1.8	186.17	1.6	185.74	1.7
72676.98	188.15	1.5	184.63	1.8	186.17	1.6	185.74	1.7
72416.56	188.15	1.4	184.63	1.7	186.16	1.6	185.74	1.6
71976.27	188.14	1.6	184.61	1.9	186.15	1.8	185.72	1.8
71717.6	188.14	1.5	184.61	1.9	186.15	1.7	185.72	1.7
71456.14	188.14	1.5	184.61	1.8	186.15	1.6	185.72	1.7
71188.9	188.14	1.3	184.61	1.6	186.15	1.5	185.72	1.5
70960.76	188.14	1.3	184.61	1.5	186.15	1.4	185.72	1.5
70732.54	188.14	1.4	184.60	1.6	186.15	1.5	185.72	1.5
70507.77	188.14	1.3	184.61	1.5	186.15	1.4	185.72	1.5
70236.88	188.14	1.3	184.61	1.5	186.15	1.4	185.72	1.4
70055.52	188.14	1.1	184.61	1.3	186.15	1.2	185.72	1.3
69813.3	188.14	1.1	184.61	1.3	186.15	1.2	185.72	1.2
69636.5	188.11	1.7	184.57	1.9	186.12	1.8	185.69	1.9
69636								
69595.84	188.12	1.5	184.58	1.7	186.13	1.6	185.70	1.6
69314.55	188.12	1.6	184.57	1.8	186.12	1.7	185.69	1.7
68953.73	188.11	1.6	184.56	2.0	186.11	1.8	185.68	1.8
68679.79	188.11	1.6	184.55	2.0	186.11	1.8	185.67	1.8
68459.02	188.11	1.6	184.54	2.0	186.10	1.8	185.67	1.8
68196.79	188.10	1.6	184.53	2.2	186.09	1.9	185.66	2.0
67961.7	188.10	1.6	184.52	2.1	186.09	1.8	185.65	1.9
67704.32	188.09	1.6	184.51	2.1	186.08	1.9	185.65	1.9
67458.44	188.09	1.5	184.51	2.0	186.08	1.8	185.64	1.8
67211.95	188.09	1.5	184.50	1.9	186.08	1.7	185.64	1.8
67120.52	188.09	1.5	184.50	1.9	186.08	1.7	185.64	1.8
66936.21	188.08	1.7	184.47	2.2	186.06	2.0	185.62	2.0
66900								
66881.67	188.09	1.4	184.50	1.6	186.07	1.5	185.63	1.6
66577.69	188.09	1.1	184.51	1.3	186.08	1.2	185.64	1.2
66452.61	188.09	1.3	184.50	1.5	186.07	1.4	185.63	1.4
66243.23	188.08	1.3	184.49	1.6	186.06	1.5	185.63	1.5
65965.29	188.08	1.4	184.47	1.8	186.06	1.6	185.62	1.6
65729.32	188.07	1.5	184.46	1.9	186.05	1.7	185.61	1.7
65462.29	188.07	1.5	184.45	2.0	186.04	1.7	185.60	1.8

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 5		Scenario 6		Scenario 7		Scenario 8	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
74715.09	181.05	3.2	182.96	2.5	186.32	1.9	181.76	2.9
74417.66	181.04	2.9	182.96	2.3	186.32	1.7	181.75	2.6
74072.34	181.02	2.7	182.95	2.2	186.32	1.7	181.74	2.5
73805.66	181.01	2.5	182.95	2.1	186.32	1.6	181.73	2.3
73519.42	180.98	2.6	182.93	2.1	186.31	1.6	181.71	2.4
73328.77	180.98	2.5	182.93	2.1	186.31	1.6	181.71	2.3
73154.4	180.98	2.3	182.93	1.9	186.31	1.5	181.71	2.1
72981.71	180.96	2.4	182.92	2.0	186.30	1.6	181.70	2.2
72676.98	180.96	2.3	182.91	2.0	186.30	1.6	181.69	2.2
72416.56	180.95	2.2	182.91	1.9	186.30	1.6	181.68	2.1
71976.27	180.91	2.5	182.88	2.2	186.28	1.8	181.65	2.4
71717.6	180.91	2.4	182.88	2.1	186.28	1.7	181.65	2.2
71456.14	180.91	2.2	182.88	1.9	186.28	1.6	181.65	2.1
71188.9	180.92	1.9	182.89	1.7	186.29	1.5	181.66	1.8
70960.76	180.92	1.8	182.89	1.7	186.29	1.4	181.66	1.8
70732.54	180.91	2.0	182.88	1.8	186.28	1.5	181.65	1.9
70507.77	180.91	1.8	182.88	1.7	186.28	1.4	181.65	1.8
70236.88	180.91	1.7	182.88	1.6	186.28	1.4	181.65	1.7
70055.52	180.91	1.6	182.89	1.5	186.29	1.2	181.65	1.5
69813.3	180.92	1.5	182.89	1.3	186.29	1.2	181.66	1.4
69636.5	180.86	2.3	182.84	2.1	186.25	1.8	181.60	2.2
69636								
69595.84	180.88	1.9	182.85	1.8	186.26	1.6	181.62	1.9
69314.55	180.85	2.2	182.84	2.0	186.25	1.7	181.60	2.1
68953.73	180.81	2.6	182.81	2.2	186.24	1.8	181.56	2.4
68679.79	180.78	2.7	182.80	2.3	186.24	1.8	181.54	2.6
68459.02	180.76	2.8	182.79	2.3	186.24	1.8	181.53	2.6
68196.79	180.68	3.3	182.76	2.6	186.23	1.9	181.47	3.0
67961.7	180.65	3.3	182.75	2.5	186.22	1.8	181.45	2.9
67704.32	180.61	3.3	182.73	2.5	186.22	1.8	181.42	3.0
67458.44	180.59	3.1	182.72	2.4	186.22	1.7	181.41	2.8
67211.95	180.59	2.8	182.72	2.2	186.21	1.7	181.40	2.5
67120.52	180.58	2.7	182.72	2.2	186.21	1.7	181.40	2.5
66936.21	180.51	3.2	182.68	2.6	186.19	2.0	181.35	3.0
66900								
66881.67	180.57	2.1	182.71	1.8	186.21	1.5	181.39	2.0
66577.69	180.59	1.5	182.72	1.4	186.21	1.2	181.41	1.4
66452.61	180.57	1.8	182.71	1.6	186.21	1.4	181.39	1.7
66243.23	180.55	2.1	182.69	1.8	186.20	1.5	181.37	2.0
65965.29	180.52	2.4	182.68	2.0	186.19	1.6	181.35	2.2
65729.32	180.48	2.7	182.66	2.2	186.18	1.7	181.32	2.5
65462.29	180.44	2.9	182.64	2.3	186.18	1.7	181.29	2.6

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 9		Scenario 10		Scenario 11		Scenario 12	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
74715.09	183.73	2.3	185.99	0.1	179.99	0.3	183.01	0.2
74417.66	183.73	2.2	185.99	0.1	179.99	0.2	183.01	0.2
74072.34	183.72	2.0	185.99	0.1	179.99	0.2	183.01	0.2
73805.66	183.72	2.0	185.99	0.1	179.99	0.2	183.01	0.2
73519.42	183.71	2.0	185.99	0.1	179.99	0.2	183.01	0.2
73328.77	183.71	2.0	185.99	0.1	179.99	0.2	183.01	0.2
73154.4	183.71	1.8	185.99	0.1	179.99	0.2	183.01	0.1
72981.71	183.70	1.9	185.99	0.1	179.99	0.2	183.01	0.1
72676.98	183.69	1.9	185.99	0.1	179.99	0.2	183.01	0.1
72416.56	183.69	1.8	185.99	0.1	179.99	0.2	183.01	0.1
71976.27	183.67	2.1	185.99	0.1	179.99	0.2	183.01	0.2
71717.6	183.67	2.0	185.99	0.1	179.99	0.2	183.01	0.2
71456.14	183.67	1.8	185.99	0.1	179.99	0.2	183.01	0.1
71188.9	183.67	1.6	185.99	0.1	179.99	0.1	183.01	0.1
70960.76	183.67	1.6	185.99	0.1	179.99	0.1	183.01	0.1
70732.54	183.66	1.7	185.99	0.1	179.99	0.2	183.01	0.1
70507.77	183.67	1.6	185.99	0.1	179.99	0.1	183.01	0.1
70236.88	183.67	1.5	185.99	0.1	179.99	0.1	183.01	0.1
70055.52	183.67	1.4	185.99	0.1	179.99	0.1	183.01	0.1
69813.3	183.67	1.3	185.99	0.1	179.99	0.1	183.01	0.1
69636.5	183.63	2.0	185.99	0.1	179.99	0.2	183.01	0.2
69636								
69595.84	183.64	1.7	185.99	0.1	179.99	0.1	183.01	0.1
69314.55	183.63	1.9	185.99	0.1	179.99	0.2	183.01	0.1
68953.73	183.61	2.1	185.99	0.1	179.99	0.2	183.01	0.2
68679.79	183.60	2.1	185.99	0.1	179.98	0.2	183.01	0.2
68459.02	183.59	2.1	185.99	0.1	179.98	0.2	183.01	0.2
68196.79	183.56	2.4	185.99	0.1	179.98	0.3	183.00	0.2
67961.7	183.56	2.3	185.99	0.1	179.98	0.3	183.00	0.2
67704.32	183.54	2.3	185.99	0.1	179.98	0.3	183.00	0.2
67458.44	183.54	2.2	185.99	0.1	179.98	0.2	183.00	0.2
67211.95	183.53	2.1	185.99	0.1	179.98	0.2	183.00	0.2
67120.52	183.53	2.1	185.99	0.1	179.98	0.2	183.00	0.2
66936.21	183.50	2.4	185.99	0.1	179.98	0.3	183.00	0.2
66900								
66881.67	183.53	1.7	185.99	0.1	179.98	0.2	183.00	0.1
66577.69	183.54	1.3	185.99	0.1	179.98	0.1	183.00	0.1
66452.61	183.53	1.6	185.99	0.1	179.98	0.1	183.00	0.1
66243.23	183.51	1.7	185.99	0.1	179.98	0.2	183.00	0.1
65965.29	183.50	1.9	185.99	0.1	179.98	0.2	183.00	0.1
65729.32	183.48	2.1	185.99	0.1	179.98	0.2	183.00	0.2
65462.29	183.47	2.1	185.99	0.1	179.98	0.2	183.00	0.2

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 13		Scenario 14		Scenario 15	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
74715.09	185.01	0.2	176.15	0.6	181.32	0.2
74417.66	185.01	0.1	176.15	0.4	181.32	0.2
74072.34	185.01	0.1	176.15	0.4	181.32	0.2
73805.66	185.01	0.1	176.15	0.4	181.32	0.2
73519.42	185.01	0.1	176.15	0.4	181.32	0.2
73328.77	185.01	0.1	176.15	0.4	181.32	0.2
73154.4	185.01	0.1	176.15	0.3	181.32	0.2
72981.71	185.01	0.1	176.14	0.3	181.32	0.2
72676.98	185.01	0.1	176.14	0.3	181.32	0.2
72416.56	185.01	0.1	176.14	0.2	181.32	0.2
71976.27	185.01	0.1	176.14	0.3	181.32	0.2
71717.6	185.01	0.1	176.14	0.3	181.32	0.2
71456.14	185.01	0.1	176.14	0.2	181.32	0.2
71188.9	185.01	0.1	176.14	0.2	181.32	0.1
70960.76	185.01	0.1	176.14	0.2	181.32	0.1
70732.54	185.01	0.1	176.14	0.2	181.32	0.1
70507.77	185.01	0.1	176.14	0.2	181.32	0.1
70236.88	185.01	0.1	176.14	0.2	181.32	0.1
70055.52	185.01	0.1	176.14	0.2	181.32	0.1
69813.3	185.01	0.1	176.14	0.1	181.32	0.1
69636.5	185.01	0.1	176.14	0.2	181.32	0.2
69636						
69595.84	185.01	0.1	176.14	0.2	181.32	0.1
69314.55	185.01	0.1	176.14	0.2	181.32	0.2
68953.73	185.01	0.1	176.14	0.3	181.32	0.2
68679.79	185.01	0.1	176.14	0.4	181.32	0.2
68459.02	185.01	0.1	176.14	0.4	181.32	0.2
68196.79	185.01	0.2	176.14	0.6	181.32	0.2
67961.7	185.01	0.1	176.13	0.5	181.32	0.2
67704.32	185.01	0.1	176.13	0.5	181.32	0.2
67458.44	185.01	0.1	176.13	0.5	181.32	0.2
67211.95	185.01	0.1	176.13	0.4	181.32	0.2
67120.52	185.01	0.1	176.13	0.4	181.32	0.2
66936.21	185.01	0.2	176.13	0.5	181.32	0.2
66900						
66881.67	185.01	0.1	176.13	0.2	181.32	0.1
66577.69	185.01	0.1	176.13	0.1	181.32	0.1
66452.61	185.01	0.1	176.13	0.2	181.32	0.1
66243.23	185.01	0.1	176.13	0.2	181.32	0.1
65965.29	185.01	0.1	176.13	0.3	181.32	0.2
65729.32	185.01	0.1	176.13	0.4	181.32	0.2
65462.29	185.01	0.1	176.13	0.4	181.31	0.2

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 1		Scenario 2		Scenario 3		Scenario 4	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
65193.11	188.06	1.5	184.44	2.0	186.04	1.7	185.60	1.8
64956.79	188.06	1.5	184.44	2.0	186.03	1.7	185.59	1.8
64708.19	188.06	1.5	184.42	2.0	186.02	1.8	185.58	1.8
64461.66	188.05	1.5	184.41	2.0	186.02	1.7	185.57	1.8
64203.75	188.05	1.4	184.41	1.9	186.02	1.7	185.57	1.7
63897.09	188.05	1.4	184.40	1.9	186.01	1.7	185.56	1.7
63618.34	188.04	1.4	184.40	1.8	186.00	1.6	185.56	1.7
63421.12	188.04	1.5	184.38	1.9	186.00	1.7	185.55	1.8
63180.13	188.04	1.4	184.39	1.7	186.00	1.6	185.55	1.6
62859.84	188.03	1.5	184.37	1.9	185.99	1.7	185.54	1.7
62518.48	188.03	1.4	184.37	1.7	185.99	1.6	185.54	1.6
62323.34	188.03	1.3	184.37	1.7	185.99	1.5	185.54	1.5
62062.17	188.03	1.3	184.36	1.7	185.98	1.5	185.54	1.6
61765.15	188.03	1.3	184.36	1.6	185.98	1.5	185.53	1.5
61413.82	188.03	1.3	184.36	1.6	185.98	1.5	185.53	1.5
61075.39	188.02	1.4	184.35	1.7	185.97	1.5	185.53	1.6
60704.67	188.02	1.3	184.35	1.6	185.97	1.5	185.52	1.5
60403.18	188.01	1.5	184.33	1.9	185.95	1.7	185.51	1.8
60118.81	188.01	1.4	184.33	1.8	185.96	1.6	185.51	1.6
59786.81	188.01	1.4	184.32	1.8	185.95	1.6	185.50	1.7
59559.16	188.01	1.4	184.32	1.7	185.95	1.5	185.50	1.6
59341.07	188.01	1.3	184.32	1.7	185.95	1.5	185.50	1.6
59125.54	188.01	1.3	184.31	1.7	185.95	1.5	185.50	1.5
58915.65	188.01	1.3	184.31	1.6	185.94	1.5	185.49	1.5
58718.52	188.01	1.2	184.31	1.5	185.95	1.4	185.50	1.4
58504.29	188.01	1.2	184.31	1.4	185.95	1.3	185.50	1.3
58240.53	188.01	1.1	184.31	1.3	185.95	1.2	185.50	1.2
58026.85	188.00	1.3	184.30	1.5	185.94	1.4	185.49	1.5
57889.35	187.99	1.5	184.29	1.8	185.92	1.7	185.47	1.7
57784.32	188.00	1.2	184.30	1.3	185.94	1.3	185.49	1.3
57558.05	188.01	0.7	184.31	0.7	185.95	0.7	185.50	0.7
57319.76	188.00	0.9	184.30	1.1	185.94	1.0	185.49	1.0
57143.26	187.99	1.2	184.29	1.4	185.92	1.3	185.47	1.4
57060.96	187.98	1.3	184.28	1.6	185.92	1.5	185.47	1.5
57050								
56990.94	187.98	1.3	184.27	1.6	185.91	1.5	185.46	1.5
56854.16	187.98	1.2	184.28	1.5	185.92	1.4	185.47	1.4
56565.66	187.97	1.4	184.26	1.8	185.90	1.6	185.45	1.6
56235.8	187.97	1.4	184.25	1.8	185.90	1.6	185.45	1.6
56009.69	187.97	1.4	184.24	1.9	185.89	1.6	185.44	1.7
55730.57	187.97	1.3	184.23	1.8	185.89	1.6	185.43	1.6
55459.46	187.97	1.3	184.23	1.8	185.89	1.5	185.43	1.6

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 5		Scenario 6		Scenario 7		Scenario 8	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
65193.11	180.41	2.9	182.63	2.3	186.17	1.7	181.27	2.6
64956.79	180.38	3.0	182.61	2.3	186.17	1.7	181.25	2.7
64708.19	180.31	3.2	182.59	2.4	186.16	1.7	181.20	2.8
64461.66	180.25	3.3	182.57	2.4	186.15	1.7	181.17	2.9
64203.75	180.24	3.0	182.56	2.3	186.15	1.7	181.16	2.6
63897.09	180.18	3.0	182.54	2.3	186.14	1.7	181.12	2.6
63618.34	180.16	2.7	182.53	2.1	186.14	1.6	181.11	2.5
63421.12	180.12	3.0	182.52	2.3	186.13	1.7	181.08	2.6
63180.13	180.13	2.6	182.52	2.0	186.14	1.5	181.08	2.3
62859.84	180.07	2.9	182.49	2.3	186.13	1.7	181.04	2.6
62518.48	180.06	2.6	182.49	2.0	186.13	1.5	181.04	2.3
62323.34	180.06	2.4	182.49	1.9	186.12	1.5	181.04	2.2
62062.17	180.05	2.4	182.48	2.0	186.12	1.5	181.03	2.2
61765.15	180.04	2.3	182.48	1.9	186.12	1.5	181.02	2.1
61413.82	180.03	2.3	182.47	1.9	186.12	1.5	181.01	2.1
61075.39	180.01	2.3	182.46	1.9	186.11	1.5	181.00	2.1
60704.67	180.01	2.2	182.46	1.8	186.11	1.5	180.99	2.0
60403.18	179.94	2.7	182.43	2.2	186.09	1.7	180.95	2.5
60118.81	179.94	2.5	182.43	2.0	186.09	1.6	180.95	2.3
59786.81	179.91	2.7	182.41	2.1	186.09	1.6	180.92	2.4
59559.16	179.91	2.5	182.41	2.0	186.09	1.5	180.92	2.3
59341.07	179.89	2.5	182.41	2.0	186.09	1.5	180.91	2.3
59125.54	179.88	2.5	182.40	2.0	186.09	1.5	180.90	2.2
58915.65	179.87	2.4	182.40	1.9	186.08	1.5	180.90	2.2
58718.52	179.87	2.2	182.40	1.8	186.08	1.4	180.90	2.0
58504.29	179.87	2.0	182.40	1.6	186.09	1.3	180.90	1.8
58240.53	179.88	1.7	182.40	1.5	186.09	1.2	180.90	1.6
58026.85	179.86	2.0	182.39	1.7	186.08	1.4	180.89	1.9
57889.35	179.84	2.2	182.37	1.9	186.06	1.6	180.87	2.1
57784.32	179.86	1.6	182.39	1.4	186.08	1.2	180.89	1.5
57558.05	179.88	0.8	182.40	0.8	186.09	0.7	180.91	0.8
57319.76	179.87	1.3	182.39	1.1	186.08	1.0	180.89	1.2
57143.26	179.84	1.8	182.37	1.6	186.06	1.3	180.87	1.7
57060.96	179.82	2.1	182.36	1.8	186.06	1.4	180.85	1.9
57050								
56990.94	179.81	2.1	182.35	1.8	186.05	1.5	180.84	2.0
56854.16	179.81	2.0	182.36	1.7	186.06	1.4	180.85	1.8
56565.66	179.75	2.7	182.32	2.1	186.04	1.6	180.80	2.4
56235.8	179.68	3.0	182.30	2.2	186.04	1.6	180.76	2.6
56009.69	179.59	3.5	182.28	2.4	186.03	1.6	180.71	2.9
55730.57	179.51	3.6	182.26	2.3	186.03	1.6	180.67	2.9
55459.46	179.44	3.5	182.25	2.2	186.03	1.5	180.64	2.8

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 9		Scenario 10		Scenario 11		Scenario 12	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
65193.11	183.46	2.1	185.99	0.1	179.98	0.2	183.00	0.2
64956.79	183.45	2.1	185.99	0.1	179.98	0.2	183.00	0.2
64708.19	183.43	2.2	185.99	0.1	179.98	0.2	183.00	0.2
64461.66	183.42	2.2	185.99	0.1	179.98	0.3	183.00	0.2
64203.75	183.41	2.1	185.99	0.1	179.98	0.2	183.00	0.2
63897.09	183.40	2.1	185.99	0.1	179.98	0.2	183.00	0.2
63618.34	183.39	2.0	185.99	0.1	179.98	0.2	183.00	0.1
63421.12	183.38	2.1	185.99	0.1	179.98	0.2	183.00	0.2
63180.13	183.38	1.9	185.99	0.1	179.98	0.2	183.00	0.1
62859.84	183.36	2.1	185.99	0.1	179.98	0.2	183.00	0.2
62518.48	183.36	1.9	185.99	0.1	179.98	0.2	183.00	0.1
62323.34	183.36	1.8	185.99	0.1	179.98	0.2	183.00	0.1
62062.17	183.35	1.8	185.99	0.1	179.98	0.2	183.00	0.1
61765.15	183.35	1.8	185.99	0.1	179.98	0.2	183.00	0.1
61413.82	183.34	1.8	185.99	0.1	179.98	0.2	183.00	0.1
61075.39	183.33	1.8	185.99	0.1	179.98	0.2	183.00	0.1
60704.67	183.33	1.7	185.99	0.1	179.98	0.2	183.00	0.1
60403.18	183.31	2.1	185.99	0.1	179.98	0.2	183.00	0.2
60118.81	183.31	1.9	185.99	0.1	179.98	0.2	183.00	0.1
59786.81	183.29	2.0	185.99	0.1	179.98	0.2	183.00	0.1
59559.16	183.29	1.8	185.99	0.1	179.98	0.2	183.00	0.1
59341.07	183.29	1.8	185.99	0.1	179.98	0.2	183.00	0.1
59125.54	183.29	1.8	185.99	0.1	179.98	0.2	183.00	0.1
58915.65	183.28	1.8	185.99	0.1	179.98	0.2	183.00	0.1
58718.52	183.28	1.7	185.99	0.1	179.98	0.2	183.00	0.1
58504.29	183.29	1.5	185.99	0.1	179.98	0.1	183.00	0.1
58240.53	183.29	1.4	185.99	0.1	179.98	0.1	183.00	0.1
58026.85	183.27	1.6	185.99	0.1	179.98	0.1	183.00	0.1
57889.35	183.26	1.8	185.99	0.1	179.98	0.2	183.00	0.1
57784.32	183.27	1.4	185.99	0.1	179.98	0.1	183.00	0.1
57558.05	183.29	0.7	185.99	0.1	179.98	0.1	183.00	0.1
57319.76	183.28	1.1	185.99	0.1	179.98	0.1	183.00	0.1
57143.26	183.26	1.5	185.99	0.1	179.98	0.1	183.00	0.1
57060.96	183.25	1.7	185.99	0.1	179.98	0.2	183.00	0.1
57050								
56990.94	183.24	1.7	185.99	0.1	179.98	0.2	183.00	0.1
56854.16	183.25	1.6	185.99	0.1	179.98	0.1	183.00	0.1
56565.66	183.22	1.9	185.99	0.1	179.98	0.2	183.00	0.1
56235.8	183.21	2.0	185.99	0.1	179.98	0.2	183.00	0.1
56009.69	183.19	2.1	185.99	0.1	179.98	0.2	183.00	0.2
55730.57	183.18	2.1	185.99	0.1	179.98	0.2	183.00	0.2
55459.46	183.17	2.0	185.99	0.1	179.98	0.2	183.00	0.1

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 13		Scenario 14		Scenario 15	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
65193.11	185.01	0.1	176.13	0.4	181.31	0.2
64956.79	185.01	0.1	176.12	0.5	181.31	0.2
64708.19	185.01	0.1	176.12	0.6	181.31	0.2
64461.66	185.01	0.1	176.11	0.6	181.31	0.2
64203.75	185.01	0.1	176.11	0.5	181.31	0.2
63897.09	185.01	0.1	176.11	0.4	181.31	0.2
63618.34	185.01	0.1	176.10	0.4	181.31	0.2
63421.12	185.01	0.1	176.10	0.4	181.31	0.2
63180.13	185.01	0.1	176.10	0.3	181.31	0.2
62859.84	185.01	0.1	176.10	0.4	181.31	0.2
62518.48	185.01	0.1	176.10	0.3	181.31	0.2
62323.34	185.01	0.1	176.10	0.3	181.31	0.2
62062.17	185.01	0.1	176.10	0.3	181.31	0.2
61765.15	185.01	0.1	176.10	0.3	181.31	0.2
61413.82	185.01	0.1	176.10	0.2	181.31	0.1
61075.39	185.01	0.1	176.10	0.2	181.31	0.2
60704.67	185.01	0.1	176.10	0.2	181.31	0.1
60403.18	185.01	0.1	176.10	0.3	181.31	0.2
60118.81	185.01	0.1	176.10	0.3	181.31	0.2
59786.81	185.01	0.1	176.10	0.3	181.31	0.2
59559.16	185.01	0.1	176.10	0.3	181.31	0.2
59341.07	185.01	0.1	176.10	0.3	181.31	0.2
59125.54	185.01	0.1	176.10	0.3	181.31	0.2
58915.65	185.01	0.1	176.10	0.3	181.31	0.2
58718.52	185.01	0.1	176.10	0.2	181.31	0.1
58504.29	185.01	0.1	176.10	0.2	181.31	0.1
58240.53	185.01	0.1	176.10	0.2	181.31	0.1
58026.85	185.01	0.1	176.10	0.2	181.31	0.1
57889.35	185.01	0.1	176.10	0.2	181.31	0.1
57784.32	185.01	0.1	176.10	0.1	181.31	0.1
57558.05	185.01	0.1	176.10	0.1	181.31	0.1
57319.76	185.01	0.1	176.10	0.1	181.31	0.1
57143.26	185.01	0.1	176.10	0.2	181.31	0.1
57060.96	185.01	0.1	176.10	0.2	181.31	0.1
57050						
56990.94	185.01	0.1	176.10	0.2	181.31	0.1
56854.16	185.01	0.1	176.10	0.2	181.31	0.1
56565.66	185.01	0.1	176.09	0.3	181.31	0.2
56235.8	185.01	0.1	176.09	0.5	181.31	0.2
56009.69	185.01	0.1	176.08	0.7	181.31	0.2
55730.57	185.01	0.1	176.08	0.7	181.31	0.2
55459.46	185.01	0.1	176.07	0.7	181.31	0.2

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 1		Scenario 2		Scenario 3		Scenario 4	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
55197.36	187.96	1.3	184.21	1.9	185.88	1.6	185.42	1.6
54914.73	187.96	1.3	184.21	1.7	185.88	1.5	185.42	1.5
54674.8	187.96	1.2	184.21	1.6	185.88	1.4	185.42	1.5
54374.24	187.96	1.2	184.20	1.6	185.87	1.4	185.42	1.4
54160.03	187.96	1.2	184.20	1.5	185.87	1.4	185.41	1.4
53849.7	187.96	1.1	184.20	1.4	185.87	1.3	185.41	1.3
53628.71	187.95	1.3	184.19	1.6	185.86	1.5	185.40	1.5
53394.08	187.94	1.5	184.17	1.8	185.85	1.7	185.39	1.7
53184.98	187.94	1.4	184.18	1.7	185.85	1.6	185.39	1.6
52941.11	187.94	1.3	184.18	1.5	185.85	1.4	185.40	1.4
52704.13	187.94	1.2	184.18	1.5	185.85	1.4	185.40	1.4
52484.44	187.94	1.3	184.17	1.6	185.85	1.5	185.39	1.5
52205.61	187.94	1.3	184.17	1.6	185.85	1.4	185.39	1.5
51962.34	187.94	1.3	184.17	1.6	185.84	1.4	185.38	1.4
51746.66	187.94	1.2	184.17	1.5	185.84	1.4	185.38	1.4
51509.61	187.93	1.2	184.16	1.5	185.84	1.4	185.38	1.4
51289.01	187.93	1.2	184.16	1.4	185.84	1.3	185.38	1.3
51075.53	187.93	1.1	184.16	1.4	185.84	1.2	185.38	1.3
50809.47	187.93	1.3	184.15	1.5	185.83	1.4	185.37	1.4
50609.43	187.93	1.2	184.15	1.5	185.83	1.4	185.37	1.4
50475.29	187.93	1.0	184.16	1.2	185.84	1.1	185.38	1.1
50226.31	187.93	1.1	184.15	1.4	185.83	1.3	185.37	1.3
49964.29	187.92	1.2	184.15	1.4	185.83	1.3	185.37	1.3
49716.13	187.92	1.2	184.15	1.4	185.83	1.3	185.37	1.3
49486.54	187.92	1.2	184.14	1.4	185.83	1.3	185.36	1.3
49203.69	187.92	1.3	184.13	1.6	185.82	1.4	185.36	1.5
48939.98	187.91	1.3	184.12	1.7	185.81	1.5	185.35	1.5
48679.82	187.91	1.3	184.12	1.7	185.81	1.5	185.35	1.5
48441.5	187.91	1.4	184.11	1.7	185.80	1.6	185.34	1.6
48200.73	187.90	1.4	184.11	1.8	185.80	1.6	185.34	1.6
47938.42	187.90	1.4	184.11	1.7	185.80	1.5	185.34	1.6
47701.4	187.90	1.4	184.10	1.8	185.79	1.6	185.33	1.6
47457.45	187.90	1.3	184.10	1.7	185.79	1.5	185.33	1.5
47200.12	187.90	1.3	184.09	1.7	185.79	1.5	185.33	1.6
46939.23	187.90	1.3	184.09	1.6	185.79	1.5	185.33	1.5
46683.5	187.90	1.3	184.09	1.6	185.79	1.4	185.33	1.5
46439.77	187.90	1.2	184.09	1.5	185.79	1.4	185.32	1.4
46185.32	187.90	1.2	184.09	1.5	185.79	1.3	185.32	1.4
45940.55	187.90	1.1	184.09	1.3	185.79	1.2	185.33	1.2
45694.53	187.90	1.1	184.09	1.3	185.79	1.2	185.32	1.3
45457.17	187.90	1.1	184.09	1.3	185.79	1.2	185.32	1.2
45172.46	187.89	1.3	184.08	1.5	185.78	1.4	185.31	1.4

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 5		Scenario 6		Scenario 7		Scenario 8	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
55197.36	179.28	4.1	182.22	2.4	186.02	1.6	180.57	3.1
54914.73	179.25	3.4	182.22	2.1	186.02	1.5	180.56	2.7
54674.8	179.24	2.9	182.21	2.0	186.02	1.4	180.55	2.4
54374.24	179.22	2.7	182.21	1.9	186.02	1.4	180.54	2.3
54160.03	179.21	2.6	182.20	1.8	186.01	1.4	180.53	2.2
53849.7	179.22	2.1	182.20	1.6	186.01	1.3	180.54	1.8
53628.71	179.18	2.4	182.19	1.9	186.00	1.4	180.51	2.1
53394.08	179.16	2.5	182.17	2.0	185.99	1.7	180.50	2.3
53184.98	179.16	2.4	182.17	1.9	185.99	1.6	180.50	2.2
52941.11	179.17	2.1	182.18	1.7	186.00	1.4	180.50	1.9
52704.13	179.17	2.0	182.17	1.7	186.00	1.3	180.50	1.8
52484.44	179.14	2.4	182.16	1.9	185.99	1.5	180.48	2.1
52205.61	179.13	2.3	182.16	1.8	185.99	1.4	180.47	2.1
51962.34	179.12	2.3	182.15	1.8	185.99	1.4	180.47	2.1
51746.66	179.11	2.2	182.15	1.7	185.99	1.3	180.46	2.0
51509.61	179.10	2.2	182.15	1.7	185.98	1.3	180.46	2.0
51289.01	179.10	2.1	182.15	1.6	185.98	1.3	180.46	1.9
51075.53	179.10	2.0	182.15	1.6	185.98	1.2	180.46	1.8
50809.47	179.08	2.2	182.13	1.7	185.98	1.4	180.44	1.9
50609.43	179.08	2.0	182.13	1.6	185.98	1.3	180.44	1.8
50475.29	179.10	1.5	182.15	1.3	185.98	1.1	180.45	1.4
50226.31	179.08	1.8	182.13	1.5	185.98	1.2	180.44	1.7
49964.29	179.06	2.0	182.12	1.6	185.97	1.3	180.43	1.8
49716.13	179.06	2.0	182.12	1.6	185.97	1.3	180.42	1.8
49486.54	179.05	2.0	182.12	1.6	185.97	1.3	180.41	1.8
49203.69	179.02	2.3	182.10	1.8	185.96	1.4	180.39	2.1
48939.98	178.99	2.5	182.09	1.9	185.96	1.5	180.37	2.2
48679.82	178.97	2.6	182.08	1.9	185.95	1.5	180.36	2.2
48441.5	178.95	2.7	182.07	2.0	185.95	1.5	180.34	2.3
48200.73	178.92	2.8	182.06	2.1	185.94	1.6	180.33	2.4
47938.42	178.92	2.6	182.06	2.0	185.94	1.5	180.33	2.3
47701.4	178.89	2.7	182.05	2.1	185.94	1.6	180.31	2.4
47457.45	178.89	2.5	182.05	1.9	185.94	1.5	180.31	2.2
47200.12	178.87	2.6	182.04	2.0	185.93	1.5	180.29	2.3
46939.23	178.86	2.5	182.04	1.9	185.93	1.5	180.29	2.2
46683.5	178.85	2.4	182.03	1.8	185.93	1.4	180.28	2.1
46439.77	178.85	2.3	182.03	1.7	185.93	1.3	180.28	2.0
46185.32	178.84	2.2	182.03	1.7	185.93	1.3	180.28	1.9
45940.55	178.85	1.9	182.03	1.5	185.93	1.2	180.28	1.7
45694.53	178.85	1.8	182.03	1.5	185.93	1.2	180.28	1.6
45457.17	178.84	1.7	182.03	1.4	185.93	1.2	180.28	1.6
45172.46	178.83	2.0	182.02	1.6	185.92	1.4	180.26	1.8

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 9		Scenario 10		Scenario 11		Scenario 12	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
55197.36	183.15	2.1	185.99	0.1	179.98	0.3	183.00	0.2
54914.73	183.15	1.9	185.99	0.1	179.98	0.2	183.00	0.1
54674.8	183.15	1.8	185.99	0.1	179.98	0.2	183.00	0.1
54374.24	183.14	1.7	185.99	0.1	179.98	0.2	183.00	0.1
54160.03	183.14	1.7	185.99	0.1	179.98	0.2	183.00	0.1
53849.7	183.14	1.5	185.99	0.1	179.98	0.1	183.00	0.1
53628.71	183.12	1.7	185.99	0.1	179.98	0.2	183.00	0.1
53394.08	183.11	1.9	185.99	0.1	179.98	0.2	183.00	0.1
53184.98	183.11	1.8	185.99	0.1	179.98	0.2	183.00	0.1
52941.11	183.11	1.6	185.99	0.1	179.98	0.1	183.00	0.1
52704.13	183.11	1.6	185.99	0.1	179.98	0.1	183.00	0.1
52484.44	183.10	1.7	185.99	0.1	179.98	0.2	183.00	0.1
52205.61	183.10	1.7	185.99	0.1	179.98	0.2	183.00	0.1
51962.34	183.10	1.7	185.99	0.1	179.98	0.2	183.00	0.1
51746.66	183.09	1.6	185.99	0.1	179.98	0.1	183.00	0.1
51509.61	183.09	1.6	185.99	0.1	179.98	0.2	183.00	0.1
51289.01	183.09	1.5	185.99	0.1	179.98	0.1	183.00	0.1
51075.53	183.09	1.5	185.99	0.1	179.98	0.1	183.00	0.1
50809.47	183.08	1.6	185.99	0.1	179.98	0.1	183.00	0.1
50609.43	183.08	1.6	185.99	0.1	179.98	0.1	183.00	0.1
50475.29	183.09	1.2	185.99	0.1	179.98	0.1	183.00	0.1
50226.31	183.08	1.4	185.99	0.1	179.98	0.1	183.00	0.1
49964.29	183.07	1.5	185.99	0.1	179.98	0.1	183.00	0.1
49716.13	183.07	1.5	185.99	0.1	179.98	0.1	183.00	0.1
49486.54	183.07	1.5	185.99	0.1	179.98	0.1	183.00	0.1
49203.69	183.05	1.7	185.99	0.1	179.98	0.2	183.00	0.1
48939.98	183.04	1.8	185.99	0.1	179.98	0.2	183.00	0.1
48679.82	183.04	1.8	185.99	0.1	179.98	0.2	183.00	0.1
48441.5	183.03	1.9	185.99	0.1	179.98	0.2	183.00	0.1
48200.73	183.02	1.9	185.99	0.1	179.98	0.2	183.00	0.1
47938.42	183.02	1.8	185.99	0.1	179.98	0.2	183.00	0.1
47701.4	183.01	1.9	185.99	0.1	179.98	0.2	183.00	0.1
47457.45	183.01	1.8	185.99	0.1	179.98	0.2	183.00	0.1
47200.12	183.00	1.8	185.99	0.1	179.98	0.2	183.00	0.1
46939.23	183.00	1.8	185.99	0.1	179.98	0.2	183.00	0.1
46683.5	183.00	1.7	185.99	0.1	179.98	0.2	183.00	0.1
46439.77	183.00	1.6	185.99	0.1	179.98	0.2	183.00	0.1
46185.32	183.00	1.6	185.99	0.1	179.98	0.1	183.00	0.1
45940.55	183.00	1.4	185.99	0.1	179.98	0.1	183.00	0.1
45694.53	183.00	1.4	185.99	0.1	179.98	0.1	183.00	0.1
45457.17	183.00	1.4	185.99	0.1	179.98	0.1	183.00	0.1
45172.46	182.99	1.6	185.99	0.1	179.98	0.1	183.00	0.1

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 13		Scenario 14		Scenario 15	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
55197.36	185.01	0.1	176.06	0.7	181.31	0.2
54914.73	185.01	0.1	176.06	0.5	181.31	0.2
54674.8	185.01	0.1	176.06	0.4	181.31	0.2
54374.24	185.01	0.1	176.06	0.4	181.31	0.2
54160.03	185.01	0.1	176.06	0.3	181.31	0.1
53849.7	185.01	0.1	176.06	0.2	181.31	0.1
53628.71	185.01	0.1	176.06	0.2	181.31	0.1
53394.08	185.00	0.1	176.06	0.2	181.31	0.2
53184.98	185.00	0.1	176.06	0.2	181.31	0.1
52941.11	185.00	0.1	176.06	0.2	181.31	0.1
52704.13	185.01	0.1	176.06	0.2	181.31	0.1
52484.44	185.00	0.1	176.06	0.2	181.31	0.1
52205.61	185.00	0.1	176.06	0.2	181.31	0.1
51962.34	185.00	0.1	176.06	0.2	181.31	0.1
51746.66	185.01	0.1	176.06	0.2	181.31	0.1
51509.61	185.01	0.1	176.06	0.2	181.31	0.1
51289.01	185.01	0.1	176.06	0.2	181.31	0.1
51075.53	185.01	0.1	176.06	0.2	181.31	0.1
50809.47	185.00	0.1	176.06	0.2	181.31	0.1
50609.43	185.01	0.1	176.06	0.2	181.31	0.1
50475.29	185.01	0.1	176.06	0.1	181.31	0.1
50226.31	185.01	0.1	176.06	0.2	181.31	0.1
49964.29	185.00	0.1	176.06	0.2	181.31	0.1
49716.13	185.00	0.1	176.06	0.2	181.31	0.1
49486.54	185.00	0.1	176.06	0.2	181.31	0.1
49203.69	185.00	0.1	176.06	0.2	181.31	0.1
48939.98	185.00	0.1	176.06	0.3	181.31	0.2
48679.82	185.00	0.1	176.05	0.3	181.31	0.2
48441.5	185.00	0.1	176.05	0.3	181.31	0.2
48200.73	185.00	0.1	176.05	0.3	181.31	0.2
47938.42	185.00	0.1	176.05	0.3	181.31	0.2
47701.4	185.00	0.1	176.05	0.3	181.31	0.2
47457.45	185.00	0.1	176.05	0.3	181.31	0.1
47200.12	185.00	0.1	176.05	0.3	181.31	0.2
46939.23	185.00	0.1	176.05	0.3	181.31	0.1
46683.5	185.00	0.1	176.05	0.2	181.31	0.1
46439.77	185.00	0.1	176.05	0.2	181.31	0.1
46185.32	185.00	0.1	176.05	0.2	181.31	0.1
45940.55	185.00	0.1	176.05	0.2	181.31	0.1
45694.53	185.00	0.1	176.05	0.2	181.31	0.1
45457.17	185.00	0.1	176.05	0.2	181.31	0.1
45172.46	185.00	0.1	176.05	0.2	181.31	0.1

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 1		Scenario 2		Scenario 3		Scenario 4	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
44896.65	187.89	1.3	184.08	1.5	185.78	1.4	185.31	1.4
44670.32	187.88	1.5	184.06	1.8	185.76	1.6	185.30	1.7
44363.26	187.86	1.7	184.04	2.0	185.75	1.9	185.28	1.9
44165.45	187.87	1.5	184.04	1.8	185.75	1.7	185.28	1.7
43908.58	187.88	1.1	184.06	1.3	185.76	1.2	185.30	1.2
43643.61	187.87	1.2	184.05	1.3	185.76	1.3	185.29	1.3
43404.46	187.87	1.2	184.05	1.4	185.76	1.3	185.29	1.4
43152.57	187.87	1.2	184.05	1.4	185.76	1.3	185.29	1.4
42905.02	187.87	1.2	184.05	1.4	185.75	1.3	185.29	1.4
42654.48	187.87	1.2	184.04	1.5	185.75	1.3	185.28	1.4
42394.9	187.87	1.2	184.04	1.5	185.75	1.4	185.28	1.4
42149.3	187.87	1.2	184.03	1.6	185.74	1.4	185.28	1.4
41880.37	187.87	1.2	184.03	1.5	185.74	1.4	185.27	1.4
41569.84	187.86	1.1	184.02	1.6	185.74	1.4	185.27	1.4
41243.18	187.86	1.1	184.01	1.5	185.74	1.3	185.27	1.4
40944.43	187.86	1.2	184.01	1.6	185.73	1.3	185.26	1.4
40702.65	187.86	1.2	184.00	1.5	185.73	1.3	185.26	1.4
40497.86	187.85	1.2	184.00	1.6	185.72	1.4	185.25	1.4
40343.54	187.85	1.1	183.99	1.5	185.72	1.3	185.25	1.4
40146.96	187.85	1.1	183.98	1.5	185.72	1.3	185.24	1.4
39952.09	187.85	1.1	183.98	1.5	185.71	1.3	185.24	1.4
39738.39	187.84	1.1	183.98	1.5	185.71	1.3	185.24	1.3
39561.95	187.84	1.1	183.97	1.5	185.71	1.3	185.23	1.3
39307.16	187.84	1.1	183.96	1.4	185.70	1.2	185.23	1.3
39095.12	187.84	1.1	183.96	1.4	185.70	1.2	185.22	1.3
38849.68	187.83	1.1	183.95	1.4	185.69	1.2	185.22	1.3
38638.08	187.83	1.1	183.94	1.4	185.69	1.3	185.21	1.3
38403.85	187.83	1.1	183.94	1.4	185.68	1.3	185.21	1.3
38188.25	187.82	1.1	183.93	1.4	185.68	1.3	185.20	1.3
37953.25	187.82	1.2	183.92	1.5	185.67	1.4	185.19	1.4
37700.31	187.82	1.1	183.92	1.4	185.67	1.3	185.19	1.3
37459.86	187.81	1.2	183.91	1.5	185.67	1.3	185.19	1.3
37262.37	187.81	1.2	183.91	1.5	185.66	1.3	185.18	1.4
37064.9	187.81	1.2	183.90	1.5	185.66	1.3	185.18	1.3
36859.68	187.81	1.1	183.90	1.5	185.66	1.3	185.18	1.3
36653.04	187.81	1.1	183.89	1.4	185.65	1.3	185.18	1.3
36461.71	187.80	1.2	183.88	1.5	185.65	1.3	185.17	1.4
36205.89	187.80	1.1	183.88	1.5	185.64	1.3	185.16	1.3
36012.17	187.80	1.1	183.87	1.5	185.64	1.3	185.16	1.3
35804.52	187.80	1.1	183.87	1.4	185.64	1.2	185.16	1.3
35553.02	187.79	1.0	183.87	1.3	185.64	1.2	185.15	1.2
35350.64	187.79	1.1	183.86	1.4	185.63	1.2	185.15	1.2

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 5		Scenario 6		Scenario 7		Scenario 8	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
44896.65	178.82	2.0	182.01	1.7	185.92	1.4	180.26	1.8
44670.32	178.78	2.4	181.99	2.0	185.91	1.6	180.23	2.2
44363.26	178.72	2.9	181.96	2.3	185.89	1.8	180.18	2.6
44165.45	178.74	2.4	181.97	2.0	185.90	1.7	180.20	2.2
43908.58	178.78	1.6	181.99	1.4	185.91	1.2	180.23	1.5
43643.61	178.77	1.7	181.99	1.5	185.90	1.3	180.22	1.6
43404.46	178.75	1.9	181.98	1.6	185.90	1.3	180.21	1.7
43152.57	178.75	1.9	181.98	1.6	185.90	1.3	180.20	1.8
42905.02	178.73	2.0	181.97	1.6	185.90	1.3	180.20	1.8
42654.48	178.72	2.1	181.96	1.7	185.90	1.3	180.19	1.9
42394.9	178.69	2.4	181.96	1.8	185.89	1.4	180.17	2.1
42149.3	178.65	2.7	181.94	1.9	185.89	1.4	180.15	2.2
41880.37	178.60	2.9	181.93	1.9	185.89	1.3	180.12	2.3
41569.84	178.49	3.4	181.91	2.0	185.88	1.3	180.07	2.6
41243.18	178.45	3.0	181.90	1.9	185.88	1.3	180.05	2.4
40944.43	178.40	3.0	181.89	1.9	185.88	1.3	180.03	2.4
40702.65	178.37	3.0	181.88	1.9	185.87	1.3	180.01	2.3
40497.86	178.35	2.9	181.87	1.9	185.87	1.3	180.00	2.3
40343.54	178.33	2.8	181.87	1.8	185.87	1.3	179.99	2.2
40146.96	178.26	2.9	181.85	1.9	185.86	1.3	179.96	2.3
39952.09	178.24	2.9	181.85	1.9	185.86	1.3	179.95	2.3
39738.39	178.21	2.8	181.84	1.8	185.86	1.3	179.93	2.2
39561.95	178.17	2.7	181.83	1.8	185.85	1.3	179.91	2.2
39307.16	178.09	2.7	181.81	1.7	185.85	1.2	179.88	2.1
39095.12	178.05	2.6	181.80	1.7	185.84	1.2	179.86	2.1
38849.68	178.01	2.4	181.79	1.6	185.84	1.2	179.84	2.0
38638.08	177.97	2.5	181.78	1.7	185.83	1.3	179.81	2.0
38403.85	177.94	2.4	181.77	1.7	185.83	1.3	179.80	2.0
38188.25	177.92	2.3	181.76	1.7	185.83	1.3	179.78	2.0
37953.25	177.89	2.4	181.75	1.8	185.82	1.4	179.76	2.0
37700.31	177.88	2.2	181.74	1.6	185.82	1.3	179.76	1.9
37459.86	177.85	2.3	181.73	1.7	185.81	1.3	179.74	2.0
37262.37	177.82	2.4	181.72	1.7	185.81	1.3	179.72	2.0
37064.9	177.80	2.4	181.72	1.7	185.81	1.3	179.71	2.0
36859.68	177.77	2.4	181.71	1.7	185.80	1.3	179.70	2.0
36653.04	177.74	2.4	181.70	1.7	185.80	1.3	179.68	2.0
36461.71	177.69	2.7	181.68	1.8	185.79	1.3	179.65	2.2
36205.89	177.65	2.6	181.67	1.7	185.79	1.3	179.63	2.1
36012.17	177.60	2.8	181.66	1.8	185.79	1.3	179.61	2.2
35804.52	177.56	2.6	181.66	1.7	185.79	1.2	179.60	2.0
35553.02	177.53	2.4	181.65	1.6	185.78	1.2	179.58	1.9
35350.64	177.50	2.4	181.64	1.6	185.78	1.2	179.56	1.9

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 9		Scenario 10		Scenario 11		Scenario 12	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
44896.65	182.98	1.6	185.99	0.1	179.98	0.1	183.00	0.1
44670.32	182.96	1.9	185.99	0.1	179.98	0.2	183.00	0.1
44363.26	182.94	2.2	185.99	0.1	179.97	0.2	183.00	0.2
44165.45	182.94	1.9	185.99	0.1	179.97	0.2	183.00	0.1
43908.58	182.96	1.3	185.99	0.1	179.98	0.1	183.00	0.1
43643.61	182.96	1.4	185.99	0.1	179.98	0.1	183.00	0.1
43404.46	182.95	1.5	185.99	0.1	179.98	0.1	183.00	0.1
43152.57	182.95	1.5	185.99	0.1	179.98	0.1	183.00	0.1
42905.02	182.95	1.5	185.99	0.1	179.98	0.1	183.00	0.1
42654.48	182.94	1.6	185.99	0.1	179.97	0.1	183.00	0.1
42394.9	182.93	1.6	185.99	0.1	179.97	0.2	183.00	0.1
42149.3	182.93	1.7	185.99	0.1	179.97	0.2	183.00	0.1
41880.37	182.92	1.7	185.99	0.1	179.97	0.2	183.00	0.1
41569.84	182.91	1.8	185.99	0.1	179.97	0.2	183.00	0.1
41243.18	182.90	1.7	185.99	0.1	179.97	0.2	183.00	0.1
40944.43	182.89	1.7	185.99	0.1	179.97	0.2	183.00	0.1
40702.65	182.88	1.7	185.99	0.1	179.97	0.2	183.00	0.1
40497.86	182.88	1.7	185.99	0.1	179.97	0.2	183.00	0.1
40343.54	182.87	1.7	185.99	0.1	179.97	0.2	183.00	0.1
40146.96	182.86	1.7	185.99	0.1	179.97	0.2	183.00	0.1
39952.09	182.86	1.7	185.99	0.1	179.97	0.2	183.00	0.1
39738.39	182.85	1.6	185.99	0.1	179.97	0.2	183.00	0.1
39561.95	182.84	1.6	185.99	0.1	179.97	0.2	183.00	0.1
39307.16	182.83	1.6	185.99	0.1	179.97	0.2	183.00	0.1
39095.12	182.82	1.5	185.99	0.1	179.97	0.1	183.00	0.1
38849.68	182.81	1.5	185.99	0.1	179.97	0.1	183.00	0.1
38638.08	182.80	1.6	185.99	0.1	179.97	0.1	183.00	0.1
38403.85	182.80	1.6	185.99	0.1	179.97	0.1	183.00	0.1
38188.25	182.79	1.6	185.99	0.1	179.97	0.1	183.00	0.1
37953.25	182.78	1.6	185.99	0.1	179.97	0.1	183.00	0.1
37700.31	182.78	1.5	185.99	0.1	179.97	0.1	183.00	0.1
37459.86	182.77	1.6	185.99	0.1	179.97	0.1	183.00	0.1
37262.37	182.76	1.6	185.99	0.1	179.97	0.1	183.00	0.1
37064.9	182.75	1.6	185.99	0.1	179.97	0.1	183.00	0.1
36859.68	182.75	1.6	185.99	0.1	179.97	0.1	183.00	0.1
36653.04	182.74	1.5	185.99	0.1	179.97	0.1	183.00	0.1
36461.71	182.73	1.7	185.99	0.1	179.97	0.2	183.00	0.1
36205.89	182.72	1.6	185.99	0.1	179.97	0.1	183.00	0.1
36012.17	182.72	1.6	185.99	0.1	179.97	0.2	183.00	0.1
35804.52	182.71	1.5	185.99	0.1	179.97	0.1	183.00	0.1
35553.02	182.71	1.5	185.99	0.1	179.97	0.1	183.00	0.1
35350.64	182.70	1.5	185.99	0.1	179.97	0.1	183.00	0.1

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 13		Scenario 14		Scenario 15	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
44896.65	185.00	0.1	176.05	0.2	181.31	0.1
44670.32	185.00	0.1	176.05	0.2	181.31	0.2
44363.26	185.00	0.1	176.05	0.3	181.31	0.2
44165.45	185.00	0.1	176.05	0.2	181.31	0.2
43908.58	185.00	0.1	176.05	0.1	181.31	0.1
43643.61	185.00	0.1	176.05	0.1	181.31	0.1
43404.46	185.00	0.1	176.05	0.2	181.31	0.1
43152.57	185.00	0.1	176.05	0.2	181.31	0.1
42905.02	185.00	0.1	176.05	0.2	181.31	0.1
42654.48	185.00	0.1	176.05	0.2	181.31	0.1
42394.9	185.00	0.1	176.05	0.2	181.31	0.1
42149.3	185.00	0.1	176.05	0.3	181.31	0.1
41880.37	185.00	0.1	176.05	0.4	181.31	0.1
41569.84	185.00	0.1	176.05	0.4	181.31	0.2
41243.18	185.00	0.1	176.05	0.3	181.31	0.1
40944.43	185.00	0.1	176.05	0.3	181.31	0.1
40702.65	185.00	0.1	176.05	0.3	181.31	0.1
40497.86	185.00	0.1	176.04	0.3	181.31	0.1
40343.54	185.00	0.1	176.04	0.3	181.31	0.1
40146.96	185.00	0.1	176.04	0.3	181.31	0.1
39952.09	185.00	0.1	176.04	0.3	181.31	0.1
39738.39	185.00	0.1	176.04	0.3	181.31	0.1
39561.95	185.00	0.1	176.04	0.3	181.31	0.1
39307.16	185.00	0.1	176.04	0.3	181.31	0.1
39095.12	185.00	0.1	176.04	0.3	181.31	0.1
38849.68	185.00	0.1	176.04	0.2	181.31	0.1
38638.08	185.00	0.1	176.04	0.2	181.31	0.1
38403.85	185.00	0.1	176.04	0.2	181.31	0.1
38188.25	185.00	0.1	176.04	0.2	181.31	0.1
37953.25	185.00	0.1	176.04	0.2	181.31	0.1
37700.31	185.00	0.1	176.04	0.2	181.31	0.1
37459.86	185.00	0.1	176.04	0.2	181.31	0.1
37262.37	185.00	0.1	176.04	0.2	181.31	0.1
37064.9	185.00	0.1	176.04	0.2	181.31	0.1
36859.68	185.00	0.1	176.04	0.2	181.31	0.1
36653.04	185.00	0.1	176.04	0.2	181.31	0.1
36461.71	185.00	0.1	176.04	0.2	181.31	0.1
36205.89	185.00	0.1	176.04	0.2	181.31	0.1
36012.17	185.00	0.1	176.04	0.3	181.31	0.1
35804.52	185.00	0.1	176.04	0.2	181.31	0.1
35553.02	185.00	0.1	176.03	0.2	181.31	0.1
35350.64	185.00	0.1	176.03	0.2	181.31	0.1

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 1		Scenario 2		Scenario 3		Scenario 4	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
35175.05	187.79	1.0	183.86	1.3	185.63	1.2	185.15	1.2
34910.65	187.79	1.1	183.85	1.4	185.62	1.2	185.14	1.3
34698.16	187.78	1.3	183.84	1.5	185.61	1.4	185.13	1.4
34485	187.77	1.4	183.83	1.7	185.60	1.6	185.12	1.6
34214.59	187.76	1.4	183.82	1.7	185.60	1.5	185.12	1.6
33986.44	187.76	1.4	183.82	1.6	185.60	1.5	185.11	1.5
33704.14	187.77	1.2	183.82	1.4	185.60	1.3	185.12	1.3
33405.38	187.76	1.3	183.81	1.5	185.59	1.4	185.11	1.4
33145.7	187.76	1.2	183.81	1.4	185.59	1.3	185.11	1.3
32911.84	187.76	1.2	183.81	1.4	185.59	1.3	185.10	1.3
32659.88	187.75	1.2	183.80	1.5	185.58	1.3	185.10	1.4
32433.8	187.75	1.2	183.79	1.5	185.58	1.3	185.10	1.4
32170.68	187.75	1.2	183.79	1.5	185.57	1.3	185.09	1.4
31897.1	187.75	1.2	183.78	1.4	185.57	1.3	185.09	1.3
31679.52	187.75	1.1	183.78	1.4	185.57	1.3	185.08	1.3
31456.24	187.74	1.1	183.77	1.4	185.57	1.3	185.08	1.3
31191.84	187.74	1.1	183.77	1.4	185.56	1.3	185.08	1.3
30941.48	187.74	1.2	183.76	1.5	185.56	1.3	185.07	1.3
30663.6	187.73	1.1	183.75	1.5	185.55	1.3	185.06	1.3
30404.2	187.73	1.1	183.74	1.5	185.55	1.3	185.06	1.3
30200	187.73	1.1	183.74	1.5	185.54	1.3	185.05	1.4
29927.59	187.73	1.1	183.73	1.5	185.54	1.3	185.05	1.3
29678.98	187.72	1.1	183.72	1.4	185.53	1.3	185.05	1.3
29391.82	187.72	1.0	183.72	1.4	185.53	1.2	185.04	1.2
29123.74	187.72	1.0	183.71	1.4	185.53	1.2	185.04	1.2
28893.34	187.72	1.0	183.71	1.3	185.52	1.2	185.03	1.2
28660.47	187.71	1.0	183.70	1.3	185.52	1.2	185.03	1.2
28403.59	187.71	1.1	183.69	1.4	185.51	1.2	185.02	1.3
28182.7	187.70	1.2	183.68	1.5	185.50	1.4	185.01	1.4
27881.93	187.70	1.1	183.68	1.4	185.50	1.2	185.01	1.3
27668.25	187.70	1.1	183.67	1.3	185.50	1.2	185.01	1.2
27350.23	187.69	1.2	183.66	1.5	185.49	1.3	185.00	1.3
27123.32	187.69	1.2	183.65	1.5	185.48	1.4	184.99	1.4
26873.83	187.69	1.0	183.66	1.2	185.49	1.1	185.00	1.1
26689.96	187.67	1.4	183.63	1.6	185.47	1.5	185.01	0.1
26398.85	187.63	2.1	183.56	2.5	185.41	2.3	185.01	0.1
26118.91	187.60	2.3	183.51	2.9	185.37	2.6	185.01	0.1
25845.57	187.59	2.2	183.49	2.8	185.36	2.5	185.01	0.1
25618.93	187.57	2.4	183.45	3.0	185.33	2.7	185.01	0.1
25367.54	187.56	2.4	183.43	2.9	185.32	2.6	185.01	0.1
25122.15	187.53	2.6	183.37	3.3	185.27	2.9	185.01	0.2
24846.34	187.53	2.5	183.36	3.1	185.26	2.8	185.01	0.1

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 5		Scenario 6		Scenario 7		Scenario 8	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
35175.05	177.49	2.2	181.64	1.5	185.78	1.2	179.56	1.8
34910.65	177.46	2.2	181.63	1.6	185.77	1.2	179.54	1.9
34698.16	177.44	2.3	181.61	1.7	185.76	1.4	179.52	2.0
34485	177.41	2.5	181.59	1.9	185.75	1.5	179.50	2.2
34214.59	177.39	2.5	181.58	1.9	185.75	1.5	179.49	2.1
33986.44	177.39	2.3	181.58	1.8	185.75	1.5	179.48	2.0
33704.14	177.39	2.0	181.58	1.6	185.75	1.3	179.48	1.8
33405.38	177.36	2.2	181.57	1.7	185.74	1.4	179.46	1.9
33145.7	177.35	2.1	181.57	1.6	185.74	1.3	179.46	1.8
32911.84	177.33	2.2	181.56	1.6	185.74	1.3	179.45	1.9
32659.88	177.30	2.3	181.55	1.7	185.73	1.3	179.43	2.0
32433.8	177.28	2.2	181.54	1.7	185.73	1.3	179.42	1.9
32170.68	177.24	2.4	181.53	1.7	185.72	1.3	179.40	2.0
31897.1	177.22	2.3	181.52	1.7	185.72	1.3	179.38	1.9
31679.52	177.19	2.3	181.51	1.6	185.72	1.3	179.37	1.9
31456.24	177.17	2.4	181.51	1.7	185.72	1.3	179.36	2.0
31191.84	177.13	2.5	181.49	1.7	185.71	1.3	179.34	2.0
30941.48	177.07	2.7	181.48	1.7	185.71	1.3	179.31	2.1
30663.6	177.01	2.8	181.47	1.8	185.70	1.3	179.28	2.2
30404.2	176.94	2.9	181.45	1.8	185.70	1.3	179.25	2.2
30200	176.86	3.1	181.44	1.8	185.69	1.3	179.22	2.3
29927.59	176.76	3.2	181.43	1.8	185.69	1.3	179.19	2.3
29678.98	176.66	3.3	181.41	1.8	185.69	1.2	179.16	2.3
29391.82	176.56	3.1	181.40	1.7	185.68	1.2	179.13	2.2
29123.74	176.46	3.1	181.39	1.7	185.68	1.2	179.10	2.1
28893.34	176.35	3.0	181.38	1.6	185.67	1.2	179.07	2.1
28660.47	176.26	3.0	181.36	1.6	185.67	1.2	179.04	2.1
28403.59	176.20	2.9	181.35	1.6	185.66	1.2	179.02	2.1
28182.7	176.13	3.1	181.33	1.9	185.66	1.3	178.98	2.3
27881.93	176.11	2.5	181.32	1.6	185.65	1.2	178.98	1.9
27668.25	176.10	2.3	181.32	1.5	185.65	1.2	178.97	1.8
27350.23	176.04	2.6	181.30	1.7	185.64	1.3	178.94	2.0
27123.32	176.00	2.7	181.29	1.8	185.64	1.4	178.92	2.1
26873.83	176.02	2.0	181.30	1.4	185.64	1.1	178.93	1.6
26689.96	176.06	0.1	181.32	0.1	185.65	0.7	178.94	0.9
26398.85	176.06	0.2	181.32	0.2	185.64	1.0	178.91	1.6
26118.91	176.06	0.3	181.32	0.2	185.63	1.2	178.89	1.8
25845.57	176.06	0.3	181.32	0.2	185.63	1.1	178.88	1.8
25618.93	176.06	0.3	181.32	0.2	185.62	1.2	178.85	1.9
25367.54	176.06	0.3	181.32	0.2	185.62	1.2	178.84	1.9
25122.15	176.05	0.3	181.32	0.2	185.61	1.3	178.81	2.2
24846.34	176.05	0.3	181.32	0.2	185.61	1.3	178.80	2.0

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 9		Scenario 10		Scenario 11		Scenario 12	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
35175.05	182.70	1.4	185.99	0.1	179.97	0.1	183.00	0.1
34910.65	182.69	1.5	185.99	0.1	179.97	0.1	183.00	0.1
34698.16	182.67	1.6	185.99	0.1	179.97	0.1	183.00	0.1
34485	182.66	1.8	185.99	0.1	179.97	0.2	183.00	0.1
34214.59	182.65	1.8	185.99	0.1	179.97	0.2	183.00	0.1
33986.44	182.65	1.7	185.99	0.1	179.97	0.1	183.00	0.1
33704.14	182.65	1.5	185.99	0.1	179.97	0.1	183.00	0.1
33405.38	182.64	1.6	185.99	0.1	179.97	0.1	183.00	0.1
33145.7	182.64	1.5	185.99	0.1	179.97	0.1	183.00	0.1
32911.84	182.63	1.5	185.99	0.1	179.97	0.1	183.00	0.1
32659.88	182.62	1.6	185.99	0.1	179.97	0.1	183.00	0.1
32433.8	182.62	1.6	185.99	0.1	179.97	0.1	183.00	0.1
32170.68	182.61	1.6	185.99	0.1	179.97	0.1	183.00	0.1
31897.1	182.60	1.5	185.99	0.1	179.97	0.1	183.00	0.1
31679.52	182.60	1.5	185.99	0.1	179.97	0.1	183.00	0.1
31456.24	182.59	1.5	185.99	0.1	179.97	0.1	183.00	0.1
31191.84	182.58	1.6	185.99	0.1	179.97	0.1	183.00	0.1
30941.48	182.57	1.6	185.99	0.1	179.97	0.1	183.00	0.1
30663.6	182.56	1.6	185.99	0.1	179.97	0.1	183.00	0.1
30404.2	182.55	1.6	185.99	0.1	179.97	0.1	183.00	0.1
30200	182.54	1.6	185.99	0.1	179.97	0.2	183.00	0.1
29927.59	182.53	1.6	185.99	0.1	179.97	0.2	183.00	0.1
29678.98	182.52	1.6	185.99	0.1	179.97	0.2	183.00	0.1
29391.82	182.51	1.5	185.99	0.1	179.97	0.1	183.00	0.1
29123.74	182.50	1.5	185.99	0.1	179.97	0.1	183.00	0.1
28893.34	182.50	1.5	185.99	0.1	179.97	0.1	183.00	0.1
28660.47	182.49	1.5	185.99	0.1	179.97	0.1	183.00	0.1
28403.59	182.48	1.5	185.99	0.1	179.97	0.1	183.00	0.1
28182.7	182.46	1.7	185.99	0.1	179.97	0.2	183.00	0.1
27881.93	182.46	1.5	185.99	0.1	179.97	0.1	183.00	0.1
27668.25	182.45	1.4	185.99	0.1	179.97	0.1	183.00	0.1
27350.23	182.44	1.6	185.99	0.1	179.97	0.1	183.00	0.1
27123.32	182.43	1.7	185.99	0.1	179.97	0.1	183.00	0.1
26873.83	182.44	1.3	185.99	0.1	179.97	0.1	183.00	0.1
26689.96	182.45	0.8	185.98	0.8	179.95	1.1	182.98	1.0
26398.85	182.43	1.2	185.96	1.3	179.91	1.8	182.96	1.5
26118.91	182.41	1.4	185.95	1.5	179.87	2.1	182.94	1.7
25845.57	182.41	1.4	185.94	1.4	179.86	2.0	182.93	1.7
25618.93	182.40	1.5	185.93	1.5	179.83	2.2	182.92	1.8
25367.54	182.40	1.4	185.93	1.5	179.82	2.1	182.91	1.7
25122.15	182.38	1.6	185.92	1.6	179.78	2.5	182.89	2.0
24846.34	182.38	1.5	185.92	1.5	179.76	2.3	182.88	1.8

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 13		Scenario 14		Scenario 15	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
35175.05	185.00	0.1	176.03	0.2	181.31	0.1
34910.65	185.00	0.1	176.03	0.2	181.31	0.1
34698.16	185.00	0.1	176.03	0.2	181.31	0.1
34485	185.00	0.1	176.03	0.2	181.31	0.1
34214.59	185.00	0.1	176.03	0.2	181.31	0.1
33986.44	185.00	0.1	176.03	0.2	181.31	0.1
33704.14	185.00	0.1	176.03	0.2	181.31	0.1
33405.38	185.00	0.1	176.03	0.2	181.31	0.1
33145.7	185.00	0.1	176.03	0.2	181.31	0.1
32911.84	185.00	0.1	176.03	0.2	181.31	0.1
32659.88	185.00	0.1	176.03	0.2	181.31	0.1
32433.8	185.00	0.1	176.03	0.2	181.31	0.1
32170.68	185.00	0.1	176.03	0.2	181.31	0.1
31897.1	185.00	0.1	176.03	0.2	181.31	0.1
31679.52	185.00	0.1	176.03	0.2	181.31	0.1
31456.24	185.00	0.1	176.03	0.2	181.31	0.1
31191.84	185.00	0.1	176.03	0.2	181.31	0.1
30941.48	185.00	0.1	176.03	0.2	181.31	0.1
30663.6	185.00	0.1	176.03	0.2	181.31	0.1
30404.2	185.00	0.1	176.03	0.2	181.31	0.1
30200	185.00	0.1	176.03	0.3	181.31	0.1
29927.59	185.00	0.1	176.03	0.3	181.31	0.1
29678.98	185.00	0.1	176.03	0.3	181.31	0.1
29391.82	185.00	0.1	176.03	0.3	181.31	0.1
29123.74	185.00	0.1	176.03	0.2	181.31	0.1
28893.34	185.00	0.1	176.03	0.2	181.31	0.1
28660.47	185.00	0.1	176.03	0.2	181.31	0.1
28403.59	185.00	0.1	176.03	0.2	181.31	0.1
28182.7	185.00	0.1	176.02	0.2	181.31	0.1
27881.93	185.00	0.1	176.02	0.2	181.31	0.1
27668.25	185.00	0.1	176.02	0.2	181.31	0.1
27350.23	185.00	0.1	176.02	0.2	181.31	0.1
27123.32	185.00	0.1	176.02	0.2	181.31	0.1
26873.83	185.00	0.1	176.02	0.1	181.31	0.1
26689.96	185.00	0.1	176.02	0.1	181.31	0.1
26398.85	185.00	0.1	176.02	0.1	181.31	0.1
26118.91	185.00	0.1	176.02	0.2	181.31	0.1
25845.57	185.00	0.1	176.02	0.2	181.31	0.1
25618.93	185.00	0.1	176.02	0.2	181.31	0.1
25367.54	185.00	0.1	176.02	0.2	181.31	0.1
25122.15	185.00	0.1	176.02	0.2	181.31	0.1
24846.34	185.00	0.1	176.02	0.2	181.31	0.1

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 1		Scenario 2		Scenario 3		Scenario 4	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
24592.73	187.50	2.7	183.31	3.3	185.23	3.0	185.01	0.2
24333.71	187.48	2.7	183.29	3.3	185.21	3.0	185.01	0.2
24069.49	187.48	2.5	183.29	3.0	185.21	2.8	185.01	0.1
23841.76	187.49	2.2	183.30	2.6	185.22	2.4	185.01	0.1
23593.6	187.48	2.2	183.29	2.6	185.21	2.4	185.01	0.1
23338.94	187.45	2.6	183.22	3.2	185.16	2.9	185.01	0.2
23064.45	187.28	3.9	182.91	5.1	184.93	4.4	185.01	0.2
22861.73	187.10	4.9	182.46	6.8	184.65	5.8	185.01	0.3
22548.95	186.97	5.1	181.97	7.6	184.41	6.2	185.01	0.3
22347.8	187.01	4.4	182.05	6.1	184.46	5.1	185.01	0.3
22083.64	186.98	4.2	181.94	5.9	184.41	4.9	185.01	0.2
21855.79	186.99	3.7	181.93	5.1	184.41	4.3	185.01	0.2
21606.48	186.92	3.9	181.81	5.2	184.33	4.5	185.01	0.2
21357.94	186.93	3.4	181.82	4.4	184.34	3.8	185.01	0.2
21100.9	186.88	3.6	181.71	4.7	184.26	4.1	185.01	0.2
20859.54	186.75	4.3	181.52	5.4	184.11	4.8	185.00	0.2
20621.7	186.54	5.4	181.13	6.8	183.83	6.0	185.00	0.3
20363.4	186.24	6.3	180.49	8.2	183.40	7.1	185.00	0.3
20125.28	186.14	5.3	180.18	7.1	183.23	6.0	185.00	0.3
19861.47	186.07	4.3	179.90	6.0	183.10	5.0	185.00	0.2
19775.42	186.05	4.0	179.83	5.6	183.06	4.7	185.00	0.2
19679.1	186.04	3.6	179.79	4.9	183.05	4.1	185.00	0.2
19634.78	186.06	3.1	179.80	4.3	183.06	3.5	185.00	0.2
19489.12	186.04	2.8	179.73	4.0	183.03	3.3	185.00	0.2
19342.91	186.09	1.6	179.85	1.9	183.10	1.7	185.00	0.1
19156.33	186.09	1.5	179.85	1.7	183.10	1.6	185.00	0.1
18913.32	186.09	1.3	179.85	1.5	183.11	1.4	185.00	0.1
18686.48	186.05	2.0	179.76	2.6	183.04	2.3	185.00	0.1
18383.7	185.79	4.0	179.20	5.6	182.69	4.6	185.00	0.2
18226.59	185.77	3.7	179.13	5.0	182.65	4.2	185.00	0.2
17951.49	185.73	3.3	178.99	4.6	182.58	3.8	185.00	0.2
17722.34	185.71	2.9	178.91	4.1	182.55	3.4	185.00	0.2
17455.78	185.70	2.5	178.84	3.5	182.52	2.9	185.00	0.1
17176.83	185.68	2.3	178.76	3.2	182.48	2.7	185.00	0.1
16953.31	185.66	2.3	178.68	3.3	182.44	2.7	185.00	0.1
16744.72	185.64	2.2	178.63	3.0	182.41	2.5	185.00	0.1
16425.13	185.56	2.7	178.45	3.7	182.30	3.1	185.00	0.1
16225.31	185.49	3.1	178.27	4.4	182.19	3.6	185.00	0.2
16080.88	185.47	3.0	178.23	4.1	182.17	3.4	185.00	0.2
15794.06	185.48	2.3	178.19	3.3	182.16	2.7	185.00	0.1
15616.67	185.51	1.3	178.27	1.5	182.21	1.4	185.00	0.1
15297.58	185.41	2.7	178.08	3.6	182.08	3.0	185.00	0.1

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 5		Scenario 6		Scenario 7		Scenario 8	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
24592.73	176.05	0.3	181.32	0.2	185.60	1.4	178.78	2.0
24333.71	176.05	0.3	181.32	0.2	185.60	1.4	178.77	2.0
24069.49	176.05	0.2	181.32	0.2	185.60	1.3	178.77	1.8
23841.76	176.05	0.2	181.32	0.1	185.60	1.1	178.78	1.5
23593.6	176.05	0.2	181.32	0.1	185.60	1.1	178.77	1.5
23338.94	176.05	0.3	181.31	0.2	185.59	1.3	178.74	1.9
23064.45	176.05	0.5	181.31	0.3	185.54	2.0	178.59	3.3
22861.73	176.04	0.7	181.31	0.4	185.49	2.5	178.31	4.8
22548.95	176.03	0.9	181.31	0.4	185.46	2.6	177.89	5.7
22347.8	176.03	0.6	181.31	0.3	185.46	2.2	177.92	4.2
22083.64	176.03	0.6	181.31	0.3	185.46	2.1	177.82	4.1
21855.79	176.03	0.5	181.31	0.3	185.46	1.9	177.80	3.4
21606.48	176.03	0.4	181.31	0.3	185.44	1.9	177.75	3.2
21357.94	176.03	0.3	181.31	0.2	185.44	1.7	177.75	2.6
21100.9	176.02	0.4	181.31	0.2	185.43	1.8	177.70	2.8
20859.54	176.02	0.4	181.31	0.3	185.40	2.1	177.65	3.0
20621.7	176.02	0.5	181.31	0.4	185.35	2.6	177.52	3.9
20363.4	176.02	0.6	181.31	0.4	185.28	3.0	177.31	4.5
20125.28	176.02	0.5	181.31	0.3	185.26	2.5	177.18	3.9
19861.47	176.02	0.4	181.31	0.3	185.24	2.1	177.08	3.3
19775.42	176.01	0.4	181.31	0.3	185.23	1.9	177.05	3.1
19679.1	176.01	0.3	181.31	0.2	185.23	1.7	177.03	2.7
19634.78	176.01	0.3	181.31	0.2	185.24	1.5	177.03	2.4
19489.12	176.01	0.3	181.31	0.2	185.23	1.4	177.01	2.2
19342.91	176.01	0.1	181.31	0.1	185.24	0.8	177.05	0.9
19156.33	176.01	0.1	181.31	0.1	185.24	0.7	177.05	0.9
18913.32	176.01	0.1	181.31	0.1	185.24	0.6	177.05	0.7
18686.48	176.01	0.2	181.31	0.1	185.23	1.0	177.02	1.4
18383.7	176.01	0.4	181.30	0.3	185.18	1.9	176.85	3.0
18226.59	176.01	0.3	181.30	0.2	185.17	1.7	176.83	2.6
17951.49	176.01	0.3	181.30	0.2	185.16	1.6	176.78	2.4
17722.34	176.01	0.3	181.30	0.2	185.16	1.4	176.76	2.2
17455.78	176.01	0.2	181.30	0.2	185.15	1.2	176.73	1.8
17176.83	176.01	0.2	181.30	0.1	185.15	1.1	176.70	1.7
16953.31	176.01	0.2	181.30	0.1	185.14	1.1	176.68	1.7
16744.72	176.01	0.2	181.30	0.1	185.14	1.0	176.67	1.5
16425.13	176.01	0.2	181.30	0.2	185.12	1.3	176.62	1.9
16225.31	176.01	0.3	181.30	0.2	185.11	1.5	176.57	2.2
16080.88	176.01	0.2	181.30	0.2	185.10	1.4	176.56	2.0
15794.06	176.01	0.2	181.30	0.1	185.10	1.1	176.54	1.7
15616.67	176.01	0.1	181.30	0.1	185.11	0.6	176.57	0.7
15297.58	176.01	0.2	181.30	0.2	185.09	1.3	176.52	1.8

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 9		Scenario 10		Scenario 11		Scenario 12	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
24592.73	182.37	1.6	185.90	1.7	179.74	2.3	182.87	1.9
24333.71	182.36	1.6	185.90	1.7	179.73	2.3	182.86	2.0
24069.49	182.36	1.5	185.90	1.5	179.73	2.1	182.86	1.8
23841.76	182.36	1.2	185.90	1.3	179.74	1.8	182.86	1.5
23593.6	182.36	1.3	185.90	1.3	179.73	1.8	182.86	1.5
23338.94	182.34	1.5	185.88	1.6	179.69	2.2	182.84	1.8
23064.45	182.27	2.4	185.82	2.4	179.50	3.8	182.73	2.9
22861.73	182.17	3.2	185.74	3.1	179.17	5.4	182.60	3.8
22548.95	182.08	3.5	185.69	3.2	178.69	6.3	182.47	4.2
22347.8	182.10	2.8	185.70	2.7	178.72	4.7	182.49	3.4
22083.64	182.08	2.7	185.69	2.6	178.62	4.6	182.46	3.2
21855.79	182.07	2.3	185.69	2.3	178.59	3.8	182.46	2.8
21606.48	182.05	2.4	185.67	2.4	178.52	3.8	182.43	2.9
21357.94	182.05	2.0	185.67	2.1	178.52	3.1	182.43	2.4
21100.9	182.03	2.1	185.65	2.2	178.46	3.3	182.40	2.6
20859.54	181.99	2.4	185.61	2.6	178.38	3.6	182.34	3.0
20621.7	181.92	3.0	185.53	3.2	178.19	4.6	182.23	3.7
20363.4	181.81	3.5	185.43	3.7	177.90	5.4	182.07	4.3
20125.28	181.76	3.0	185.39	3.1	177.73	4.7	182.00	3.7
19861.47	181.73	2.5	185.36	2.6	177.58	4.0	181.94	3.0
19775.42	181.72	2.3	185.36	2.4	177.54	3.7	181.93	2.8
19679.1	181.71	2.0	185.35	2.1	177.51	3.3	181.92	2.5
19634.78	181.71	1.8	185.36	1.8	177.52	2.8	181.93	2.2
19489.12	181.71	1.6	185.35	1.7	177.49	2.6	181.91	2.0
19342.91	181.72	0.8	185.37	0.9	177.54	1.1	181.94	1.0
19156.33	181.72	0.8	185.37	0.9	177.54	1.0	181.94	0.9
18913.32	181.72	0.7	185.37	0.7	177.54	0.9	181.94	0.8
18686.48	181.71	1.1	185.36	1.2	177.50	1.7	181.92	1.4
18383.7	181.62	2.3	185.27	2.3	177.26	3.6	181.79	2.8
18226.59	181.61	2.0	185.26	2.2	177.23	3.2	181.77	2.5
17951.49	181.60	1.8	185.25	2.0	177.16	2.9	181.75	2.3
17722.34	181.59	1.6	185.24	1.7	177.12	2.6	181.73	2.0
17455.78	181.58	1.4	185.24	1.4	177.09	2.2	181.72	1.7
17176.83	181.57	1.3	185.23	1.3	177.05	2.1	181.71	1.6
16953.31	181.56	1.3	185.22	1.3	177.01	2.1	181.69	1.6
16744.72	181.55	1.2	185.22	1.3	177.00	1.9	181.69	1.5
16425.13	181.53	1.5	185.19	1.6	176.92	2.3	181.65	1.8
16225.31	181.50	1.7	185.16	1.8	176.85	2.7	181.61	2.1
16080.88	181.50	1.6	185.16	1.8	176.83	2.5	181.60	2.0
15794.06	181.49	1.3	185.16	1.4	176.82	2.0	181.60	1.6
15616.67	181.51	0.7	185.17	0.8	176.85	0.9	181.61	0.8
15297.58	181.48	1.4	185.14	1.6	176.78	2.2	181.57	1.8

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 13		Scenario 14		Scenario 15	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
24592.73	185.00	0.1	176.02	0.2	181.31	0.1
24333.71	185.00	0.1	176.02	0.2	181.31	0.1
24069.49	185.00	0.1	176.02	0.2	181.31	0.1
23841.76	185.00	0.1	176.02	0.1	181.31	0.1
23593.6	185.00	0.1	176.02	0.1	181.31	0.1
23338.94	185.00	0.1	176.02	0.2	181.31	0.1
23064.45	185.00	0.1	176.02	0.3	181.31	0.2
22861.73	185.00	0.2	176.02	0.5	181.30	0.3
22548.95	185.00	0.2	176.01	0.6	181.30	0.3
22347.8	185.00	0.2	176.01	0.4	181.30	0.2
22083.64	185.00	0.2	176.01	0.4	181.30	0.2
21855.79	185.00	0.1	176.01	0.3	181.30	0.2
21606.48	185.00	0.1	176.01	0.3	181.30	0.2
21357.94	185.00	0.1	176.01	0.2	181.30	0.2
21100.9	185.00	0.1	176.01	0.2	181.30	0.2
20859.54	185.00	0.2	176.01	0.2	181.30	0.2
20621.7	185.00	0.2	176.01	0.3	181.30	0.2
20363.4	185.00	0.2	176.01	0.4	181.30	0.3
20125.28	185.00	0.2	176.01	0.3	181.30	0.2
19861.47	185.00	0.2	176.01	0.3	181.30	0.2
19775.42	185.00	0.1	176.01	0.2	181.30	0.2
19679.1	185.00	0.1	176.01	0.2	181.30	0.2
19634.78	185.00	0.1	176.01	0.2	181.30	0.1
19489.12	185.00	0.1	176.01	0.2	181.30	0.1
19342.91	185.00	0.1	176.01	0.1	181.30	0.1
19156.33	185.00	0.1	176.01	0.1	181.30	0.1
18913.32	185.00	0.0	176.01	0.1	181.30	0.0
18686.48	185.00	0.1	176.01	0.1	181.30	0.1
18383.7	185.00	0.1	176.01	0.2	181.30	0.2
18226.59	185.00	0.1	176.00	0.2	181.30	0.2
17951.49	185.00	0.1	176.00	0.2	181.30	0.1
17722.34	185.00	0.1	176.00	0.2	181.30	0.1
17455.78	185.00	0.1	176.00	0.1	181.30	0.1
17176.83	185.00	0.1	176.00	0.1	181.30	0.1
16953.31	185.00	0.1	176.00	0.1	181.30	0.1
16744.72	185.00	0.1	176.00	0.1	181.30	0.1
16425.13	185.00	0.1	176.00	0.1	181.30	0.1
16225.31	185.00	0.1	176.00	0.2	181.30	0.1
16080.88	185.00	0.1	176.00	0.2	181.30	0.1
15794.06	185.00	0.1	176.00	0.1	181.30	0.1
15616.67	185.00	0.0	176.00	0.1	181.30	0.0
15297.58	185.00	0.1	176.00	0.1	181.30	0.1

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 1		Scenario 2		Scenario 3		Scenario 4	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
15148.62	185.38	2.8	177.96	4.2	182.03	3.3	185.00	0.1
14877.95	185.38	2.4	177.93	3.5	182.02	2.8	185.00	0.1
14670.06	185.38	2.3	177.90	3.5	182.01	2.8	185.00	0.1
14388.96	185.37	2.1	177.88	3.0	182.00	2.5	185.00	0.1
14165.65	185.37	2.1	177.84	3.0	181.99	2.4	185.00	0.1
13908.66	185.35	2.2	177.80	3.1	181.96	2.5	185.00	0.1
13641.07	185.35	1.9	177.79	2.8	181.96	2.2	185.00	0.1
13395.86	185.34	2.0	177.76	2.9	181.94	2.3	185.00	0.1
13126.33	185.33	1.9	177.75	2.7	181.93	2.2	185.00	0.1
12887.33	185.33	1.9	177.73	2.7	181.92	2.2	185.00	0.1
12629.27	185.32	1.9	177.69	2.9	181.90	2.2	185.00	0.1
12388.37	185.31	1.8	177.67	2.8	181.89	2.1	185.00	0.1
12164.37	185.30	1.8	177.64	2.8	181.88	2.2	185.00	0.1
11879.95	185.29	1.9	177.60	2.9	181.86	2.3	185.00	0.1
11663.85	185.28	2.0	177.57	2.9	181.84	2.4	185.00	0.1
11353.78	185.26	2.1	177.55	2.9	181.82	2.4	185.00	0.1
11131.29	185.25	2.1	177.53	2.9	181.81	2.4	185.00	0.1
10820.46	185.24	2.1	177.50	2.9	181.79	2.4	185.00	0.1
10446.46	185.24	1.9	177.48	2.7	181.78	2.2	185.00	0.1
10237.33	185.22	2.1	177.42	3.1	181.75	2.5	185.00	0.1
9948.622	185.21	2.2	177.35	3.4	181.72	2.6	185.00	0.1
9693.004	185.19	2.2	177.29	3.6	181.69	2.7	185.00	0.1
9406.19	185.19	2.0	177.28	3.2	181.68	2.4	185.00	0.1
8465.136	185.19	1.2	177.22	2.3	181.67	1.5	185.00	0.1
7353.321	185.17	1.1	177.07	2.3	181.62	1.4	185.00	0.1
6625.842	185.16	1.0	176.78	2.7	181.57	1.4	185.00	0.1
5545.478	185.13	1.3	176.49	2.5	181.51	1.6	185.00	0.1
4830.614	185.11	1.3	176.34	2.6	181.48	1.6	185.00	0.1
4068.297	185.04	2.3	176.24	3.0	181.40	2.5	185.00	0.1
3962.611	185.00	2.7	176.16	3.6	181.34	3.0	185.00	0.1
3518.562	185.04	1.6	176.24	2.1	181.39	1.8	185.00	0.1
2895.35	185.06	0.7	176.20	2.0	181.41	1.1	185.00	0.0
1657.585	185.04	0.9	176.14	1.6	181.38	1.1	185.00	0.0
474.9396	185.00	1.5	176.00	2.5	181.30	1.9	185.00	0.1

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 5		Scenario 6		Scenario 7		Scenario 8	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
15148.62	176.01	0.2	181.30	0.2	185.08	1.3	176.49	2.1
14877.95	176.01	0.2	181.30	0.2	185.08	1.1	176.48	1.8
14670.06	176.01	0.2	181.30	0.1	185.08	1.1	176.47	1.8
14388.96	176.01	0.2	181.30	0.1	185.08	1.0	176.46	1.5
14165.65	176.01	0.2	181.30	0.1	185.08	1.0	176.45	1.5
13908.66	176.01	0.2	181.30	0.1	185.08	1.0	176.44	1.5
13641.07	176.01	0.2	181.30	0.1	185.08	0.9	176.44	1.4
13395.86	176.01	0.2	181.30	0.1	185.07	0.9	176.43	1.4
13126.33	176.01	0.2	181.30	0.1	185.07	0.9	176.43	1.3
12887.33	176.01	0.2	181.30	0.1	185.07	0.9	176.42	1.3
12629.27	176.01	0.2	181.30	0.1	185.07	0.9	176.41	1.4
12388.37	176.01	0.2	181.30	0.1	185.07	0.8	176.40	1.4
12164.37	176.01	0.2	181.30	0.1	185.07	0.9	176.40	1.4
11879.95	176.01	0.2	181.30	0.1	185.06	0.9	176.39	1.4
11663.85	176.01	0.2	181.30	0.1	185.06	0.9	176.38	1.4
11353.78	176.01	0.2	181.30	0.1	185.06	1.0	176.37	1.4
11131.29	176.01	0.2	181.30	0.1	185.05	1.0	176.37	1.4
10820.46	176.00	0.2	181.30	0.1	185.05	1.0	176.36	1.4
10446.46	176.00	0.2	181.30	0.1	185.05	0.9	176.36	1.3
10237.33	176.00	0.2	181.30	0.1	185.05	1.0	176.34	1.5
9948.622	176.00	0.2	181.30	0.1	185.04	1.0	176.33	1.7
9693.004	176.00	0.2	181.30	0.1	185.04	1.0	176.31	1.7
9406.19	176.00	0.2	181.30	0.1	185.04	0.9	176.31	1.5
8465.136	176.00	0.1	181.30	0.1	185.04	0.6	176.29	1.2
7353.321	176.00	0.1	181.30	0.1	185.04	0.5	176.25	1.2
6625.842	176.00	0.2	181.30	0.1	185.03	0.5	176.18	1.4
5545.478	176.00	0.1	181.30	0.1	185.03	0.6	176.11	1.2
4830.614	176.00	0.1	181.30	0.1	185.02	0.6	176.07	1.2
4068.297	176.00	0.2	181.30	0.1	185.01	1.0	176.05	1.4
3962.611	176.00	0.2	181.30	0.2	185.00	1.3	176.04	1.7
3518.562	176.00	0.1	181.30	0.1	185.01	0.7	176.05	1.0
2895.35	176.00	0.1	181.30	0.1	185.01	0.3	176.04	0.9
1657.585	176.00	0.1	181.30	0.1	185.01	0.4	176.03	0.7
474.9396	176.00	0.1	181.30	0.1	185.00	0.7	176.00	1.2

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 9		Scenario 10		Scenario 11		Scenario 12	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
15148.62	181.46	1.6	185.13	1.6	176.73	2.6	181.55	1.9
14877.95	181.46	1.3	185.13	1.4	176.71	2.2	181.55	1.6
14670.06	181.46	1.3	185.13	1.4	176.70	2.2	181.54	1.6
14388.96	181.46	1.2	185.12	1.2	176.69	1.9	181.54	1.4
14165.65	181.45	1.1	185.12	1.2	176.68	1.8	181.53	1.4
13908.66	181.45	1.2	185.12	1.3	176.66	1.9	181.53	1.5
13641.07	181.45	1.0	185.12	1.1	176.66	1.7	181.53	1.3
13395.86	181.44	1.1	185.11	1.1	176.65	1.8	181.52	1.3
13126.33	181.44	1.0	185.11	1.1	176.64	1.6	181.52	1.3
12887.33	181.44	1.0	185.11	1.1	176.63	1.6	181.51	1.3
12629.27	181.43	1.1	185.11	1.1	176.62	1.8	181.51	1.3
12388.37	181.43	1.0	185.10	1.0	176.61	1.7	181.50	1.3
12164.37	181.43	1.0	185.10	1.1	176.60	1.7	181.50	1.3
11879.95	181.42	1.1	185.10	1.1	176.58	1.7	181.49	1.3
11663.85	181.42	1.1	185.09	1.2	176.57	1.8	181.48	1.4
11353.78	181.41	1.1	185.09	1.2	176.56	1.7	181.48	1.4
11131.29	181.41	1.1	185.08	1.2	176.56	1.7	181.47	1.4
10820.46	181.41	1.1	185.08	1.2	176.55	1.8	181.47	1.4
10446.46	181.41	1.0	185.08	1.1	176.54	1.6	181.46	1.3
10237.33	181.40	1.2	185.07	1.2	176.52	1.9	181.45	1.4
9948.622	181.39	1.2	185.07	1.3	176.49	2.0	181.44	1.5
9693.004	181.39	1.3	185.06	1.3	176.47	2.1	181.43	1.6
9406.19	181.38	1.1	185.06	1.1	176.47	1.9	181.43	1.4
8465.136	181.38	0.7	185.06	0.7	176.44	1.4	181.42	0.9
7353.321	181.37	0.7	185.06	0.6	176.38	1.4	181.41	0.8
6625.842	181.36	0.7	185.05	0.6	176.28	1.7	181.39	0.8
5545.478	181.35	0.8	185.04	0.7	176.17	1.5	181.37	0.9
4830.614	181.34	0.8	185.04	0.7	176.11	1.5	181.36	0.9
4068.297	181.32	1.2	185.01	1.3	176.08	1.7	181.33	1.4
3962.611	181.31	1.4	185.00	1.6	176.05	2.1	181.31	1.7
3518.562	181.32	0.8	185.01	0.9	176.08	1.2	181.33	1.0
2895.35	181.32	0.5	185.02	0.4	176.07	1.2	181.33	0.6
1657.585	181.32	0.5	185.01	0.5	176.04	0.9	181.32	0.6
474.9396	181.30	0.9	185.00	0.9	176.00	1.5	181.30	1.1

Turners Falls Impoundment Hydraulic Model
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.1-1

River Sta	Scenario 13		Scenario 14		Scenario 15	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
15148.62	185.00	0.1	176.00	0.2	181.30	0.1
14877.95	185.00	0.1	176.00	0.1	181.30	0.1
14670.06	185.00	0.1	176.00	0.1	181.30	0.1
14388.96	185.00	0.1	176.00	0.1	181.30	0.1
14165.65	185.00	0.1	176.00	0.1	181.30	0.1
13908.66	185.00	0.1	176.00	0.1	181.30	0.1
13641.07	185.00	0.1	176.00	0.1	181.30	0.1
13395.86	185.00	0.1	176.00	0.1	181.30	0.1
13126.33	185.00	0.1	176.00	0.1	181.30	0.1
12887.33	185.00	0.1	176.00	0.1	181.30	0.1
12629.27	185.00	0.1	176.00	0.1	181.30	0.1
12388.37	185.00	0.1	176.00	0.1	181.30	0.1
12164.37	185.00	0.1	176.00	0.1	181.30	0.1
11879.95	185.00	0.1	176.00	0.1	181.30	0.1
11663.85	185.00	0.1	176.00	0.1	181.30	0.1
11353.78	185.00	0.1	176.00	0.1	181.30	0.1
11131.29	185.00	0.1	176.00	0.1	181.30	0.1
10820.46	185.00	0.1	176.00	0.1	181.30	0.1
10446.46	185.00	0.1	176.00	0.1	181.30	0.1
10237.33	185.00	0.1	176.00	0.1	181.30	0.1
9948.622	185.00	0.1	176.00	0.1	181.30	0.1
9693.004	185.00	0.1	176.00	0.1	181.30	0.1
9406.19	185.00	0.1	176.00	0.1	181.30	0.1
8465.136	185.00	0.0	176.00	0.1	181.30	0.1
7353.321	185.00	0.0	176.00	0.1	181.30	0.1
6625.842	185.00	0.0	176.00	0.1	181.30	0.1
5545.478	185.00	0.0	176.00	0.1	181.30	0.1
4830.614	185.00	0.0	176.00	0.1	181.30	0.1
4068.297	185.00	0.1	176.00	0.1	181.30	0.1
3962.611	185.00	0.1	176.00	0.1	181.30	0.1
3518.562	185.00	0.1	176.00	0.1	181.30	0.1
2895.35	185.00	0.0	176.00	0.1	181.30	0.0
1657.585	185.00	0.0	176.00	0.1	181.30	0.0
474.9396	185.00	0.1	176.00	0.1	181.30	0.1

Montague USGS Gage to Holyoke Dam
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.2-1

River Sta	Scenario 1		Scenario 2		Scenario 3		Scenario 4	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
118.508	113.77	3.1	113.77	3.1	113.33	2.9	113.33	2.9
118.5	113.81	2.4	113.81	2.4	113.36	2.3	113.36	2.3
118.499	113.81	2.4	113.80	2.4	113.36	2.3	113.36	2.3
118.496	Bridge		Bridge		Bridge		Bridge	
118.491	113.72	3.1	113.71	3.1	113.27	3.0	113.27	3.0
117.75	111.74	6.9	111.73	6.9	111.32	6.9	111.32	6.9
116.876	109.61	3.4	109.58	3.4	109.24	3.3	109.21	3.3
116.865	109.47	4.3	109.44	4.4	109.10	4.2	109.08	4.2
116.86	109.46	4.4	109.43	4.4	109.09	4.2	109.07	4.2
116.85	Bridge		Bridge		Bridge		Bridge	
116.848	109.48	3.4	109.45	3.4	109.11	3.3	109.09	3.3
115.841	109.29	2.2	109.26	2.2	108.93	2.1	108.90	2.1
114.895	108.83	3.5	108.79	3.5	108.47	3.4	108.44	3.4
113.834	108.26	2.5	108.22	2.5	107.89	2.5	107.84	2.5
112.641	107.97	2.2	107.92	2.2	107.61	2.1	107.55	2.1
111.917	107.76	2.5	107.71	2.5	107.40	2.4	107.34	2.4
111.08	107.55	1.9	107.48	1.9	107.19	1.8	107.13	1.8
110.29	107.53	1.2	107.46	1.3	107.17	1.2	107.11	1.2
109.52	107.38	2.6	107.31	2.6	107.03	2.5	106.97	2.5
109.519	107.35	2.8	107.28	2.9	107.00	2.8	106.94	2.8
109.51	Bridge		Bridge		Bridge		Bridge	
109.509	107.35	2.5	107.29	2.5	107.01	2.4	106.94	2.4
109.501	107.30	3.0	107.24	3.0	106.96	2.9	106.89	3.0
108.735	107.25	1.5	107.18	1.5	106.91	1.4	106.84	1.4
107.688	106.80	3.7	106.71	3.7	106.46	3.6	106.38	3.7
106.344	105.86	2.9	105.72	3.0	105.50	2.9	105.36	2.9
105.681	105.66	2.4	105.51	2.4	105.30	2.3	105.14	2.4
104.923	105.46	2.2	105.30	2.2	105.10	2.1	104.93	2.1
104.303	105.38	2.0	105.22	2.0	105.03	1.9	104.86	1.9
103.735	105.36	1.7	105.20	1.7	105.01	1.6	104.84	1.6
103.1	105.31	1.9	105.15	1.9	104.97	1.8	104.79	1.8
101.988	105.23	1.8	105.06	1.8	104.89	1.7	104.71	1.7
100.917	105.13	1.7	104.96	1.7	104.79	1.6	104.61	1.7
100.169	105.06	1.8	104.89	1.8	104.74	1.7	104.55	1.7
97.707	104.88	1.7	104.70	1.8	104.57	1.7	104.38	1.7
97.516	104.85	1.9	104.67	1.9	104.54	1.8	104.34	1.8
97.413	104.80	2.3	104.62	2.3	104.49	2.2	104.30	2.2
97.31	104.81	1.6	104.63	1.7	104.51	1.6	104.31	1.6
97.196	104.82	1.2	104.64	1.2	104.51	1.1	104.32	1.1
97.011	104.77	1.8	104.59	1.8	104.47	1.7	104.27	1.7
96.837	104.74	1.7	104.55	1.8	104.44	1.7	104.24	1.7
96.649	104.71	1.7	104.52	1.7	104.41	1.6	104.21	1.7

Montague USGS Gage to Holyoke Dam
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.2-1

River Sta	Scenario 5		Scenario 6		Scenario 7		Scenario 8	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
118.508	106.50	1.1	106.50	1.1	105.02	0.7	105.02	0.7
118.5	106.50	0.9	106.50	0.9	105.02	0.6	105.02	0.6
118.499	106.50	0.9	106.50	0.9	105.02	0.6	105.02	0.6
118.496	Bridge		Bridge		Bridge		Bridge	
118.491	106.49	1.1	106.49	1.1	105.02	0.7	105.01	0.7
117.75	105.62	4.8	105.62	4.8	104.33	4.5	104.32	4.5
116.876	103.92	1.1	103.91	1.1	102.91	0.7	102.88	0.7
116.865	103.89	1.6	103.88	1.6	102.90	1.1	102.87	1.1
116.86	103.89	1.6	103.88	1.6	102.89	1.1	102.86	1.1
116.85	Bridge		Bridge		Bridge		Bridge	
116.848	103.90	1.1	103.88	1.1	102.90	0.7	102.87	0.7
115.841	103.86	0.7	103.84	0.7	102.88	0.4	102.85	0.4
114.895	103.63	2.0	103.61	2.0	102.73	1.5	102.69	1.5
113.834	102.83	1.4	102.78	1.4	101.88	1.3	101.68	1.5
112.641	102.69	0.6	102.64	0.6	101.77	0.4	101.54	0.4
111.917	102.62	1.2	102.56	1.2	101.73	0.9	101.50	0.9
111.08	102.54	0.6	102.48	0.6	101.69	0.4	101.44	0.4
110.29	102.54	0.3	102.48	0.3	101.69	0.2	101.44	0.2
109.52	102.52	0.9	102.46	0.9	101.68	0.6	101.43	0.7
109.519	102.51	1.1	102.45	1.1	101.67	0.8	101.42	0.9
109.51	Bridge		Bridge		Bridge		Bridge	
109.509	102.51	0.9	102.45	0.9	101.67	0.6	101.43	0.6
109.501	102.50	1.2	102.44	1.2	101.67	0.9	101.42	0.9
108.735	102.49	0.4	102.43	0.4	101.66	0.2	101.41	0.2
107.688	102.32	2.3	102.24	2.4	101.55	1.9	101.27	2.1
106.344	101.17	1.4	100.44	2.0	100.85	0.9	99.87	1.6
105.681	101.09	0.9	100.28	1.1	100.82	0.5	99.79	0.8
104.923	101.03	0.7	100.16	0.8	100.79	0.4	99.73	0.5
104.303	101.03	0.4	100.16	0.5	100.79	0.3	99.73	0.3
103.735	101.03	0.3	100.16	0.4	100.79	0.2	99.73	0.2
103.1	101.02	0.4	100.15	0.4	100.79	0.2	99.73	0.2
101.988	101.02	0.4	100.14	0.5	100.79	0.3	99.72	0.3
100.917	101.01	0.4	100.13	0.4	100.79	0.2	99.72	0.3
100.169	101.00	0.4	100.13	0.4	100.78	0.2	99.72	0.2
97.707	100.99	0.4	100.11	0.5	100.78	0.2	99.71	0.3
97.516	100.99	0.4	100.11	0.4	100.78	0.2	99.71	0.2
97.413	100.99	0.5	100.11	0.6	100.78	0.3	99.71	0.4
97.31	100.99	0.4	100.11	0.4	100.78	0.2	99.71	0.3
97.196	100.99	0.3	100.11	0.3	100.78	0.2	99.71	0.2
97.011	100.98	0.5	100.10	0.5	100.78	0.3	99.71	0.3
96.837	100.98	0.5	100.09	0.6	100.78	0.3	99.71	0.4
96.649	100.98	0.4	100.09	0.5	100.77	0.3	99.70	0.3

Montague USGS Gage to Holyoke Dam
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.2-1

River Sta	Scenario 1		Scenario 2		Scenario 3		Scenario 4	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
96.609	104.46	4.1	104.26	4.2	104.17	4.0	103.95	4.1
96.461	104.26	3.8	104.03	4.0	103.97	3.7	103.73	3.9
96.387	104.33	1.8	104.11	1.8	104.05	1.7	103.81	1.7
96.371	104.33	1.8	104.11	1.8	104.04	1.7	103.80	1.7
96.37	Bridge		Bridge		Bridge		Bridge	
96.369	104.32	1.9	104.09	1.9	104.03	1.8	103.79	1.8
96.347	104.25	2.6	104.03	2.7	103.97	2.5	103.73	2.6
96.317	104.31	1.1	104.09	1.2	104.02	1.1	103.78	1.1
96.316	Bridge		Bridge		Bridge		Bridge	
96.315	104.31	1.1	104.09	1.1	104.02	1.0	103.78	1.0
96.264	104.29	1.4	104.07	1.4	104.01	1.3	103.77	1.4
96.142	104.27	1.6	104.05	1.6	103.99	1.5	103.75	1.5
96.058	104.27	1.5	104.04	1.5	103.99	1.4	103.75	1.4
95.92	104.23	1.8	104.01	1.8	103.95	1.7	103.71	1.8
95.745	104.18	2.1	103.95	2.2	103.90	2.0	103.65	2.1
95.598	103.98	3.5	103.72	3.6	103.71	3.3	103.44	3.5
95.414	103.61	4.1	103.29	4.4	103.35	4.0	103.01	4.3
95.223	103.65	1.9	103.34	2.0	103.38	1.8	103.05	1.9
95.046	103.44	3.3	103.09	3.5	103.18	3.2	102.80	3.5
94.874	103.36	2.1	103.00	2.2	103.10	2.0	102.71	2.1
94.692	103.34	1.6	102.97	1.7	103.08	1.5	102.69	1.6
94.57	103.30	1.8	102.93	1.9	103.05	1.7	102.65	1.8
94.455	103.28	1.9	102.91	1.9	103.03	1.8	102.63	1.8
94.298	103.26	1.8	102.89	1.8	103.01	1.7	102.62	1.7
94.164	103.20	2.3	102.83	2.4	102.96	2.2	102.56	2.3
93.965	103.19	1.9	102.82	2.0	102.95	1.8	102.55	1.8
93.853	103.18	1.9	102.80	1.9	102.94	1.8	102.53	1.8
93.737	103.13	2.2	102.74	2.3	102.89	2.1	102.48	2.2
93.646	103.13	1.8	102.74	1.8	102.89	1.7	102.48	1.8
93.534	103.11	1.7	102.73	1.8	102.88	1.6	102.46	1.7
93.395	103.09	1.8	102.71	1.8	102.86	1.7	102.45	1.7
93.263	103.08	1.9	102.69	1.9	102.85	1.8	102.43	1.8
93.175	103.07	1.8	102.68	1.8	102.84	1.7	102.42	1.7
93.089	103.06	1.7	102.67	1.8	102.83	1.6	102.41	1.7
92.919	102.90	3.1	102.49	3.3	102.69	3.0	102.25	3.2
92.812	102.91	1.8	102.50	1.9	102.69	1.7	102.25	1.8
92.621	102.83	2.0	102.40	2.1	102.62	1.9	102.16	2.0
92.456	102.46	4.3	101.93	4.8	102.26	4.1	101.70	4.7
92.257	102.43	2.2	101.89	2.3	102.24	2.0	101.66	2.2
92.106	102.40	1.7	101.85	1.9	102.21	1.6	101.62	1.8
92.058	102.39	1.5	101.84	1.7	102.20	1.5	101.61	1.6
91.959	102.32	1.9	101.74	2.1	102.14	1.8	101.51	2.1

Montague USGS Gage to Holyoke Dam
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.2-1

River Sta	Scenario 5		Scenario 6		Scenario 7		Scenario 8	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
96.609	100.95	1.3	100.04	1.6	100.76	0.8	99.69	1.0
96.461	100.92	1.2	99.99	1.4	100.75	0.7	99.66	0.9
96.387	100.93	0.4	100.01	0.5	100.76	0.2	99.67	0.3
96.371	100.93	0.4	100.01	0.5	100.76	0.2	99.67	0.3
96.37	Bridge		Bridge		Bridge		Bridge	
96.369	100.93	0.5	100.01	0.5	100.76	0.3	99.67	0.3
96.347	100.92	0.7	100.00	0.8	100.75	0.4	99.67	0.5
96.317	100.93	0.2	100.00	0.3	100.76	0.1	99.67	0.1
96.316	Bridge		Bridge		Bridge		Bridge	
96.315	100.93	0.2	100.00	0.2	100.76	0.1	99.67	0.1
96.264	100.92	0.3	100.00	0.4	100.76	0.2	99.67	0.2
96.142	100.92	0.4	100.00	0.4	100.76	0.2	99.67	0.2
96.058	100.92	0.3	100.00	0.4	100.76	0.2	99.67	0.2
95.92	100.92	0.4	100.00	0.5	100.75	0.3	99.67	0.3
95.745	100.92	0.5	99.99	0.6	100.75	0.3	99.66	0.4
95.598	100.89	1.1	99.95	1.4	100.74	0.6	99.65	0.9
95.414	100.82	1.3	99.77	2.0	100.72	0.8	99.57	1.2
95.223	100.83	0.5	99.79	0.5	100.72	0.3	99.58	0.3
95.046	100.81	1.0	99.74	1.5	100.72	0.6	99.56	0.9
94.874	100.80	0.6	99.70	0.8	100.71	0.3	99.55	0.5
94.692	100.80	0.4	99.70	0.4	100.71	0.2	99.55	0.2
94.57	100.79	0.4	99.70	0.4	100.71	0.2	99.55	0.3
94.455	100.79	0.4	99.70	0.4	100.71	0.2	99.55	0.2
94.298	100.79	0.3	99.70	0.4	100.71	0.2	99.55	0.2
94.164	100.79	0.5	99.69	0.5	100.71	0.3	99.54	0.3
93.965	100.79	0.4	99.69	0.4	100.71	0.2	99.54	0.2
93.853	100.79	0.4	99.69	0.4	100.71	0.2	99.54	0.2
93.737	100.79	0.5	99.69	0.5	100.71	0.3	99.54	0.3
93.646	100.79	0.4	99.69	0.4	100.71	0.2	99.54	0.2
93.534	100.78	0.4	99.69	0.4	100.71	0.2	99.54	0.2
93.395	100.78	0.3	99.68	0.4	100.71	0.2	99.54	0.2
93.263	100.78	0.4	99.68	0.4	100.71	0.2	99.54	0.2
93.175	100.78	0.4	99.68	0.4	100.71	0.2	99.54	0.2
93.089	100.78	0.3	99.68	0.4	100.71	0.2	99.54	0.2
92.919	100.77	0.7	99.67	0.9	100.70	0.4	99.54	0.5
92.812	100.77	0.4	99.67	0.5	100.70	0.2	99.54	0.3
92.621	100.77	0.5	99.65	0.6	100.70	0.3	99.53	0.4
92.456	100.74	1.1	99.59	1.5	100.69	0.6	99.51	0.9
92.257	100.74	0.5	99.59	0.6	100.69	0.3	99.51	0.3
92.106	100.74	0.4	99.58	0.5	100.69	0.2	99.51	0.3
92.058	100.73	0.4	99.58	0.5	100.69	0.2	99.51	0.3
91.959	100.73	0.5	99.57	0.8	100.69	0.3	99.50	0.4

Montague USGS Gage to Holyoke Dam
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.2-1

River Sta	Scenario 1		Scenario 2		Scenario 3		Scenario 4	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
91.774	102.31	1.3	101.71	1.4	102.12	1.2	101.48	1.4
91.689	102.29	1.4	101.69	1.5	102.10	1.3	101.46	1.5
91.637	102.27	1.5	101.66	1.7	102.09	1.5	101.44	1.7
91.561	102.23	1.8	101.61	2.1	102.05	1.8	101.38	2.1
91.517	102.24	1.2	101.62	1.4	102.06	1.2	101.39	1.4
91.468	102.21	1.6	101.59	1.8	102.03	1.6	101.36	1.7
91.392	102.20	1.6	101.58	1.7	102.02	1.5	101.35	1.6
91.343	102.21	1.2	101.58	1.3	102.03	1.2	101.36	1.2
91.226	102.20	1.3	101.57	1.4	102.02	1.2	101.35	1.3
91.075	102.19	1.3	101.56	1.3	102.01	1.2	101.34	1.3
90.928	102.17	1.6	101.54	1.7	101.99	1.5	101.32	1.6
90.752	102.16	1.2	101.53	1.3	101.98	1.2	101.31	1.2
90.653	102.14	1.4	101.51	1.5	101.97	1.3	101.29	1.4
90.561	102.13	1.5	101.50	1.6	101.96	1.4	101.28	1.5
90.474	102.12	1.5	101.49	1.5	101.95	1.4	101.28	1.4
90.412	102.11	1.7	101.47	1.8	101.94	1.6	101.26	1.7
89.997	102.06	1.6	101.42	1.7	101.90	1.5	101.21	1.6
89.313	101.97	1.7	101.31	1.8	101.81	1.6	101.11	1.7
88.942	101.93	1.5	101.26	1.6	101.78	1.4	101.06	1.5
88.575	101.88	1.5	101.20	1.6	101.73	1.4	101.01	1.5
88.287	101.85	1.2	101.16	1.3	101.71	1.2	100.98	1.2
87.875	101.80	1.6	101.11	1.7	101.66	1.5	100.93	1.6
87.574	101.44	4.1	100.65	4.6	101.34	3.9	100.51	4.4
87.179	100.81	4.0	99.67	4.6	100.79	3.7	99.64	4.3
86.884	100.81	1.9	99.67	2.0	100.79	1.7	99.65	1.9
86.668	100.81	1.3	99.67	1.4	100.79	1.2	99.65	1.3
86.406	100.80	1.1	99.66	1.2	100.78	1.0	99.64	1.1
86.184	100.79	1.1	99.65	1.2	100.77	1.0	99.62	1.1
86.065	100.78	1.2	99.62	1.4	100.76	1.1	99.60	1.3
85.768	100.75	1.2	99.58	1.4	100.74	1.1	99.57	1.3
85.488	100.71	1.3	99.53	1.5	100.71	1.2	99.52	1.4
85.29	100.69	1.4	99.50	1.5	100.69	1.3	99.49	1.4
85.123	100.68	1.2	99.48	1.3	100.68	1.1	99.48	1.2
85.108	100.67	1.2	99.48	1.3	100.67	1.1	99.48	1.2
85.06	100.67	1.2	99.47	1.4	100.67	1.1	99.47	1.3

Montague USGS Gage to Holyoke Dam
Water Surface Elevations and Mean Channel Velocities at Transects
River Stations are shown on Figure 2.2-1

River Sta	Scenario 5		Scenario 6		Scenario 7		Scenario 8	
	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)	W.S. Elev (ft)	Vel Chnl (ft/s)
91.774	100.73	0.3	99.56	0.4	100.69	0.2	99.50	0.2
91.689	100.73	0.3	99.56	0.5	100.69	0.2	99.50	0.3
91.637	100.73	0.3	99.56	0.5	100.69	0.2	99.50	0.3
91.561	100.72	0.4	99.55	0.6	100.69	0.3	99.50	0.3
91.517	100.72	0.3	99.55	0.3	100.69	0.2	99.50	0.2
91.468	100.72	0.3	99.55	0.4	100.69	0.2	99.50	0.2
91.392	100.72	0.3	99.55	0.4	100.69	0.2	99.50	0.2
91.343	100.72	0.2	99.55	0.3	100.69	0.1	99.50	0.1
91.226	100.72	0.3	99.55	0.3	100.69	0.1	99.50	0.2
91.075	100.72	0.2	99.55	0.3	100.69	0.1	99.50	0.1
90.928	100.72	0.3	99.55	0.3	100.69	0.2	99.50	0.2
90.752	100.72	0.2	99.55	0.2	100.69	0.1	99.50	0.1
90.653	100.72	0.3	99.55	0.3	100.69	0.1	99.50	0.2
90.561	100.72	0.3	99.55	0.3	100.69	0.2	99.50	0.2
90.474	100.72	0.3	99.55	0.3	100.69	0.2	99.50	0.2
90.412	100.72	0.3	99.55	0.4	100.69	0.2	99.49	0.2
89.997	100.72	0.3	99.54	0.3	100.69	0.2	99.49	0.2
89.313	100.71	0.3	99.54	0.4	100.68	0.2	99.49	0.2
88.942	100.71	0.3	99.54	0.3	100.68	0.2	99.49	0.2
88.575	100.71	0.3	99.53	0.3	100.68	0.2	99.49	0.2
88.287	100.71	0.2	99.53	0.3	100.68	0.1	99.49	0.1
87.875	100.71	0.3	99.53	0.3	100.68	0.2	99.49	0.2
87.574	100.69	0.8	99.51	0.9	100.68	0.4	99.48	0.5
87.179	100.67	0.7	99.48	0.8	100.67	0.4	99.47	0.4
86.884	100.67	0.3	99.48	0.3	100.67	0.2	99.47	0.2
86.668	100.67	0.2	99.48	0.2	100.67	0.1	99.47	0.1
86.406	100.67	0.2	99.48	0.2	100.67	0.1	99.47	0.1
86.184	100.67	0.2	99.47	0.2	100.67	0.1	99.47	0.1
86.065	100.67	0.2	99.47	0.2	100.67	0.1	99.47	0.1
85.768	100.67	0.2	99.47	0.2	100.67	0.1	99.47	0.1
85.488	100.67	0.2	99.47	0.3	100.67	0.1	99.47	0.1
85.29	100.67	0.2	99.47	0.3	100.67	0.1	99.47	0.1
85.123	100.67	0.2	99.47	0.2	100.67	0.1	99.47	0.1
85.108	100.67	0.2	99.47	0.2	100.67	0.1	99.47	0.1
85.06	100.67	0.2	99.47	0.2	100.67	0.1	99.47	0.1