

APPENDIX B- PLAN MAPS SHOWING VELOCITIES, DEPTHS AND WATER SURFACE ELEVATIONS IN THE TURNERS FALLS IMPOUNDMENT 5 KM UPSTREAM AND 5 KM DOWNSTREAM OF THE NORTHFIELD TAILRACE

Note: Maps below are listed in the order as shown in [Table 5.0-1](#): List of 2D Hydraulic Modeling Scenarios. They are ordered from Scenario 1 through 60. In the case of the velocity maps, they too are ordered from Scenario 1 through 60, with the 5 maps per scenario arranged in upstream to downstream order.

APPENDIX B.

Water Surface Elevation in the Turner Falls Impoundment 5 km upstream and 5 Km Downstream of the Northfield Tailrace

Legend

Project Boundary

Water Surface Elevation

189 - 190 (ft)

188 - 189 (ft)

187 - 188 (ft)

186 - 187 (ft)

185 - 186 (ft)

184 - 185 (ft)

183 - 184 (ft)

182 - 183 (ft)

181 - 182 (ft)

180 - 181 (ft)

179 - 180 (ft)

178 - 179 (ft)

177 - 178 (ft)

176 - 177 (ft)

175 - 176 (ft)

N

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

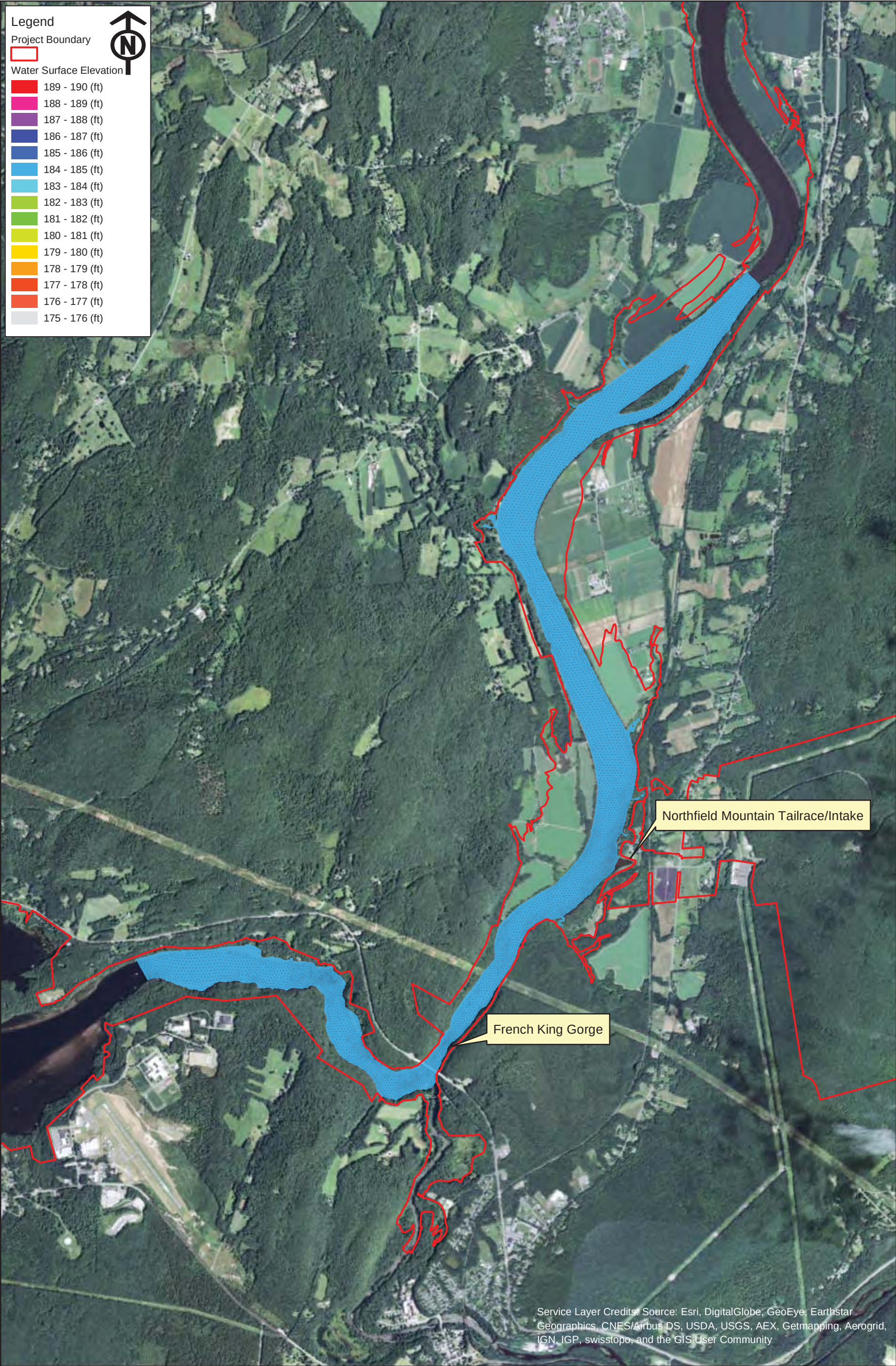
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RELICENSING STUDY 3.3.9

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 1
95% Exceedance Flow (1,760 cfs), 2 Units
Generating (10,000 cfs), 176 WSEL at Dam

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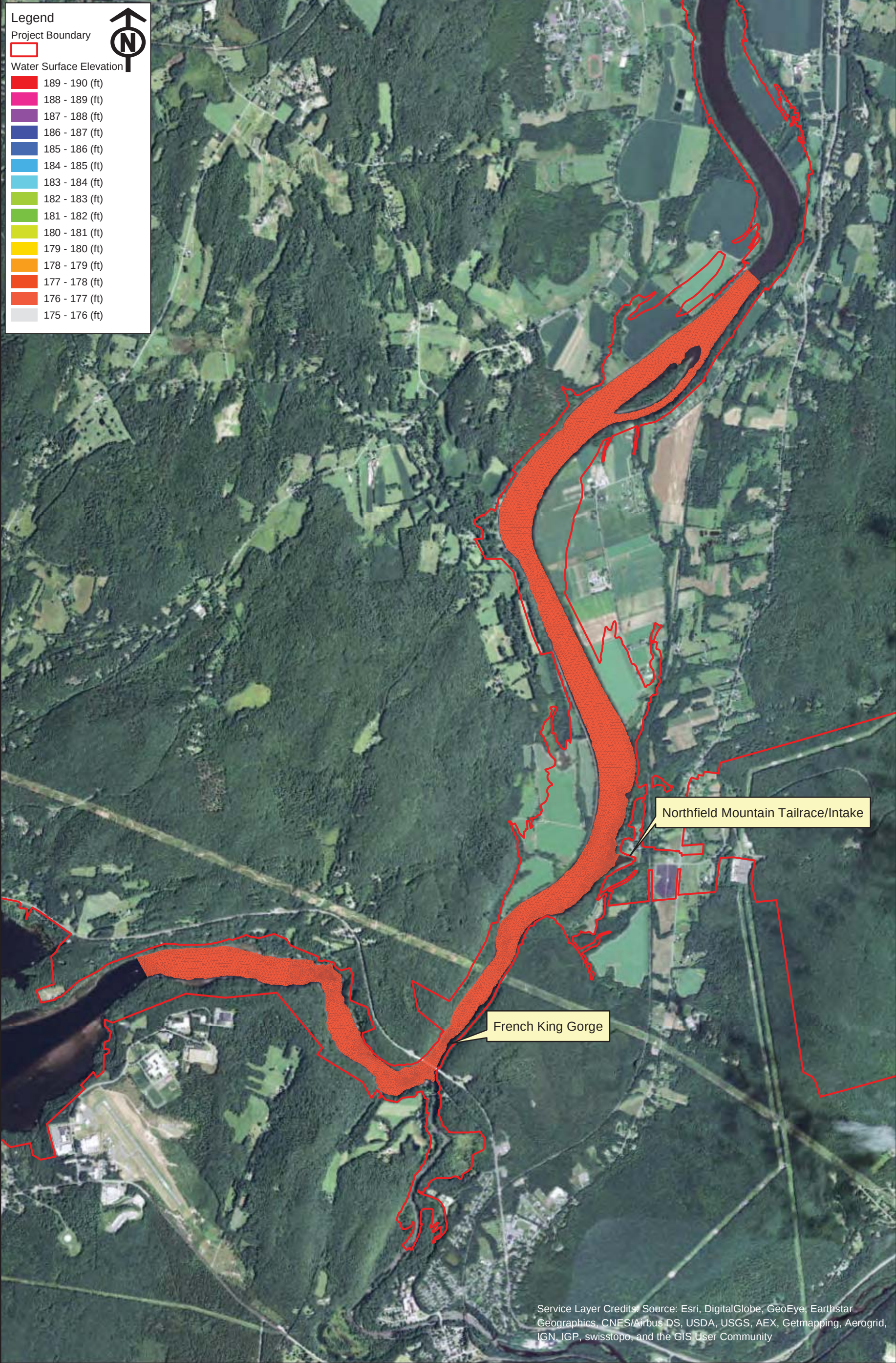
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

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0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 2
95% Exceedance Flow (1,760 cfs), 2 Units
Generating (10,000 cfs), 185 WSEL at Dam



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and Turners Falls Hydroelectric Project (No. 1889)

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0 1,000 2,000 4,000
Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 3
95% Exceedance Flow (1,760 cfs), 4 Units
Generating (20,000 cfs), 176 WSEL at Dam

Legend

Project Boundary

Water Surface Elevation

189 - 190 (ft)

188 - 189 (ft)

187 - 188 (ft)

186 - 187 (ft)

185 - 186 (ft)

184 - 185 (ft)

183 - 184 (ft)

182 - 183 (ft)

181 - 182 (ft)

180 - 181 (ft)

179 - 180 (ft)

178 - 179 (ft)

177 - 178 (ft)

176 - 177 (ft)

175 - 176 (ft)

N

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Northfield Mountain Pumped Storage Project (No. 2485)
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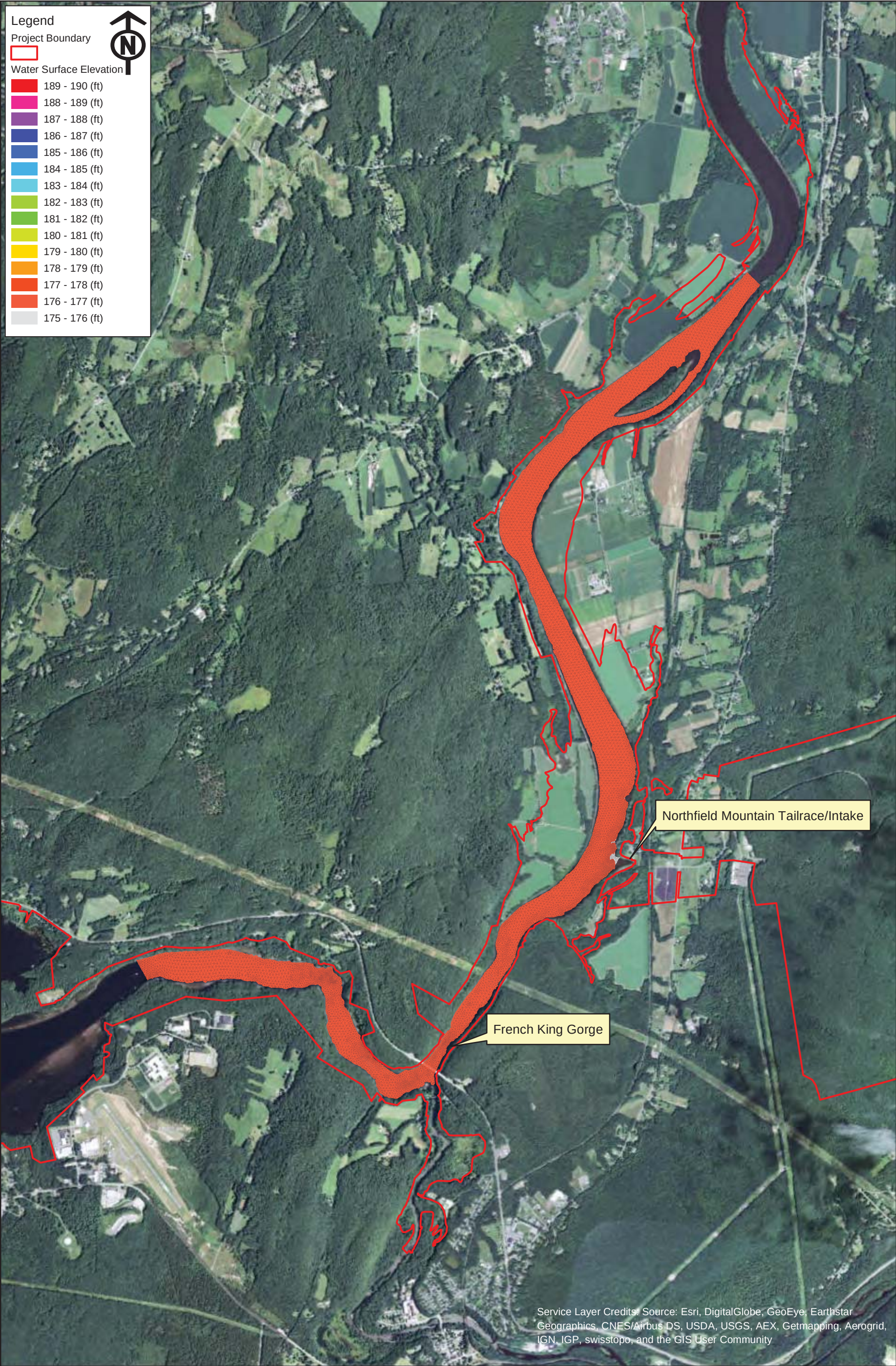
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Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 4
95% Exceedance Flow (1,760 cfs), 4 Units
Generating (20,000 cfs), 185 WSEL at Dam

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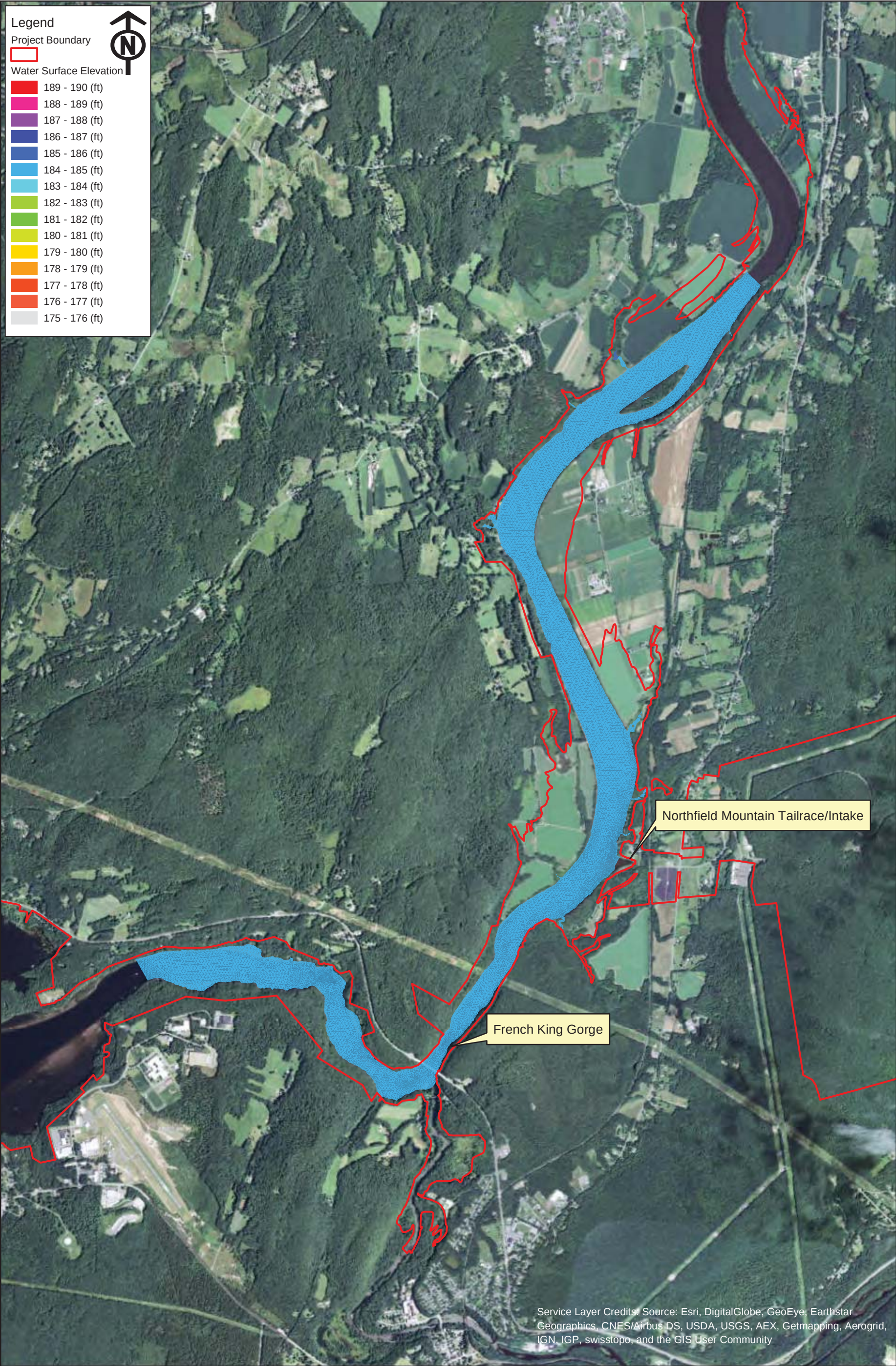
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

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RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 5
95% Exceedance Flow (1,760 cfs), 2 Units
Pumping (7,600 cfs), 176 WSEL at Dam



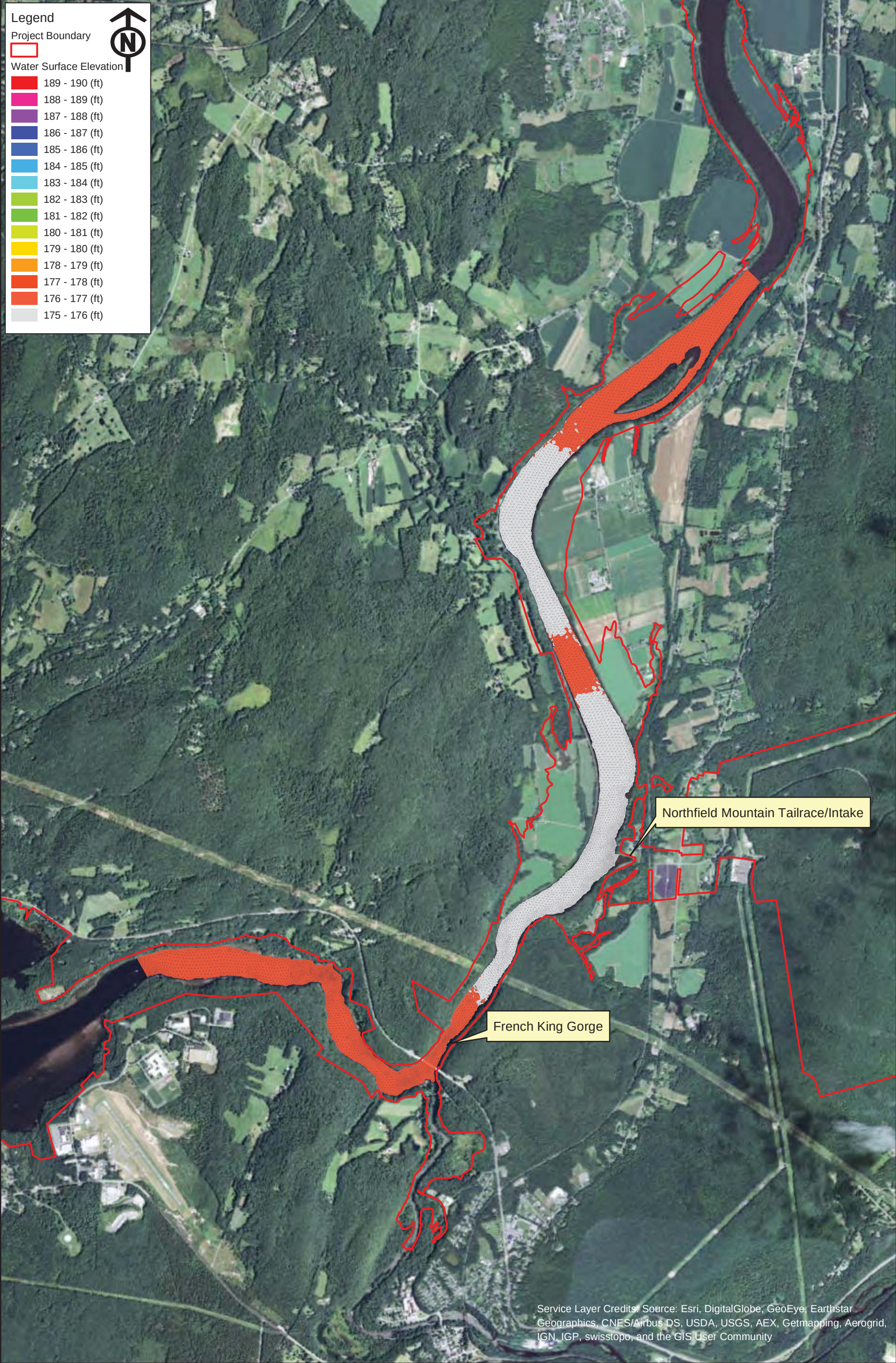
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

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0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 6
95% Exceedance Flow (1,760 cfs), 2 Units
Pumping (7,600 cfs), 185 WSEL at Dam



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

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0 1,000 2,000 4,000
Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 7
95% Exceedance Flow (1,760 cfs), 4 Units
Pumping (15,200 cfs), 176 WSEL at Dam

Legend

Project Boundary

Water Surface Elevation

189 - 190 (ft)

188 - 189 (ft)

187 - 188 (ft)

186 - 187 (ft)

185 - 186 (ft)

184 - 185 (ft)

183 - 184 (ft)

182 - 183 (ft)

181 - 182 (ft)

180 - 181 (ft)

179 - 180 (ft)

178 - 179 (ft)

177 - 178 (ft)

176 - 177 (ft)

175 - 176 (ft)

N

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

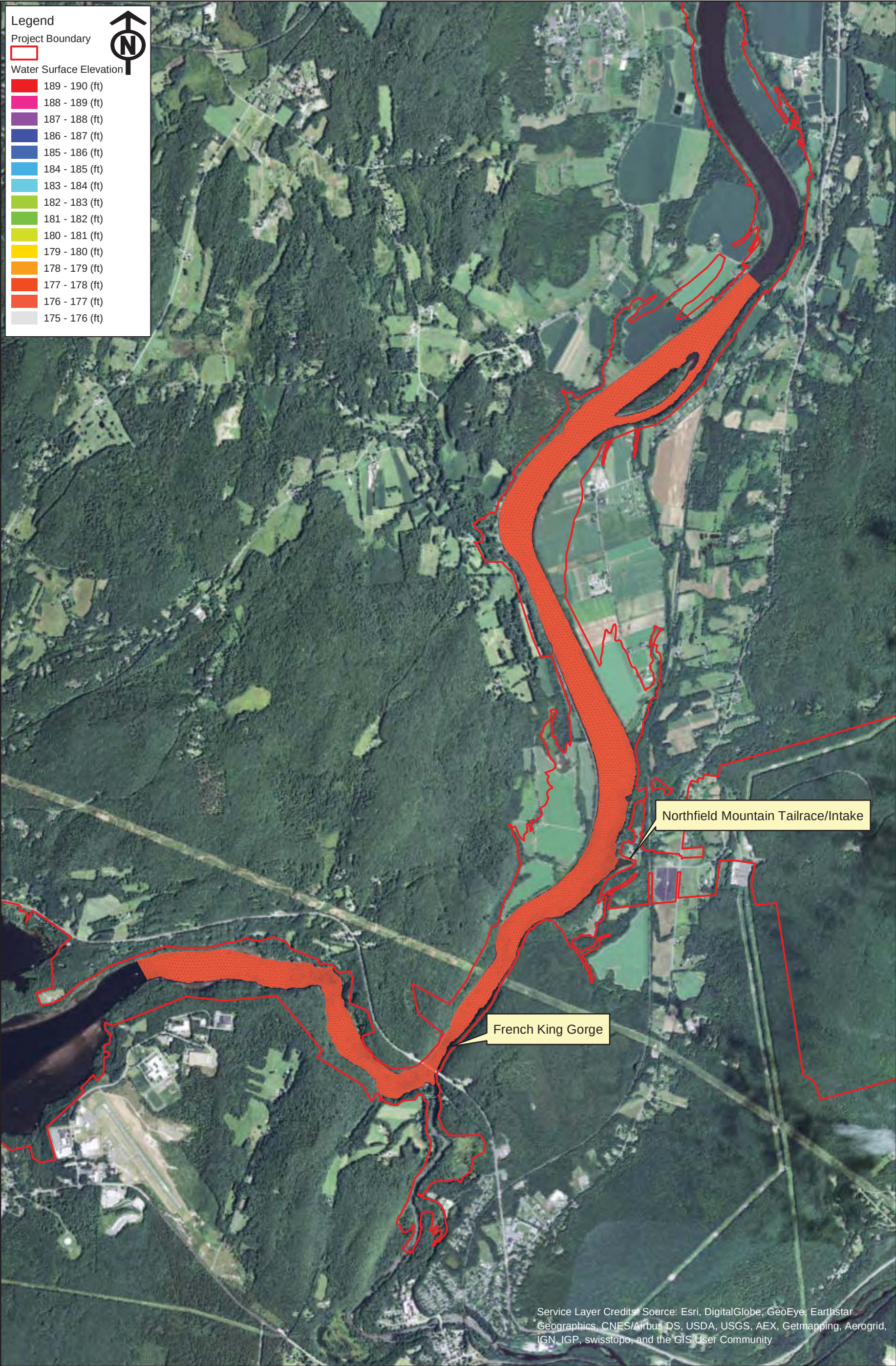
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Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 8
95% Exceedance Flow (1,760 cfs), 4 Units
Pumping (15,200 cfs), 185 WSEL at Dam

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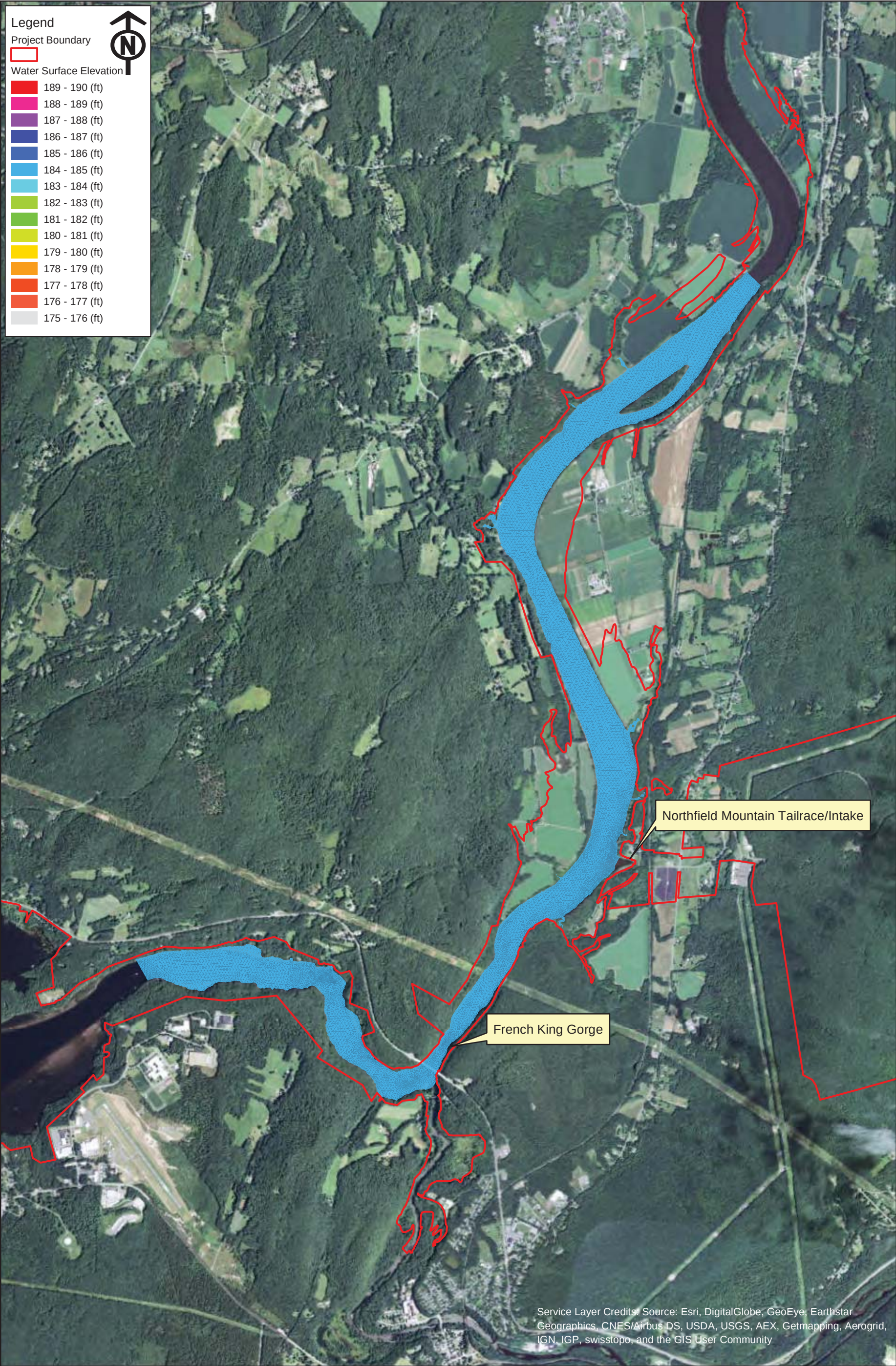
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

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0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 9
75% Exceedance Flow (4,900 cfs), 2 Units
Generating (10,000 cfs), 176 WSEL at Dam



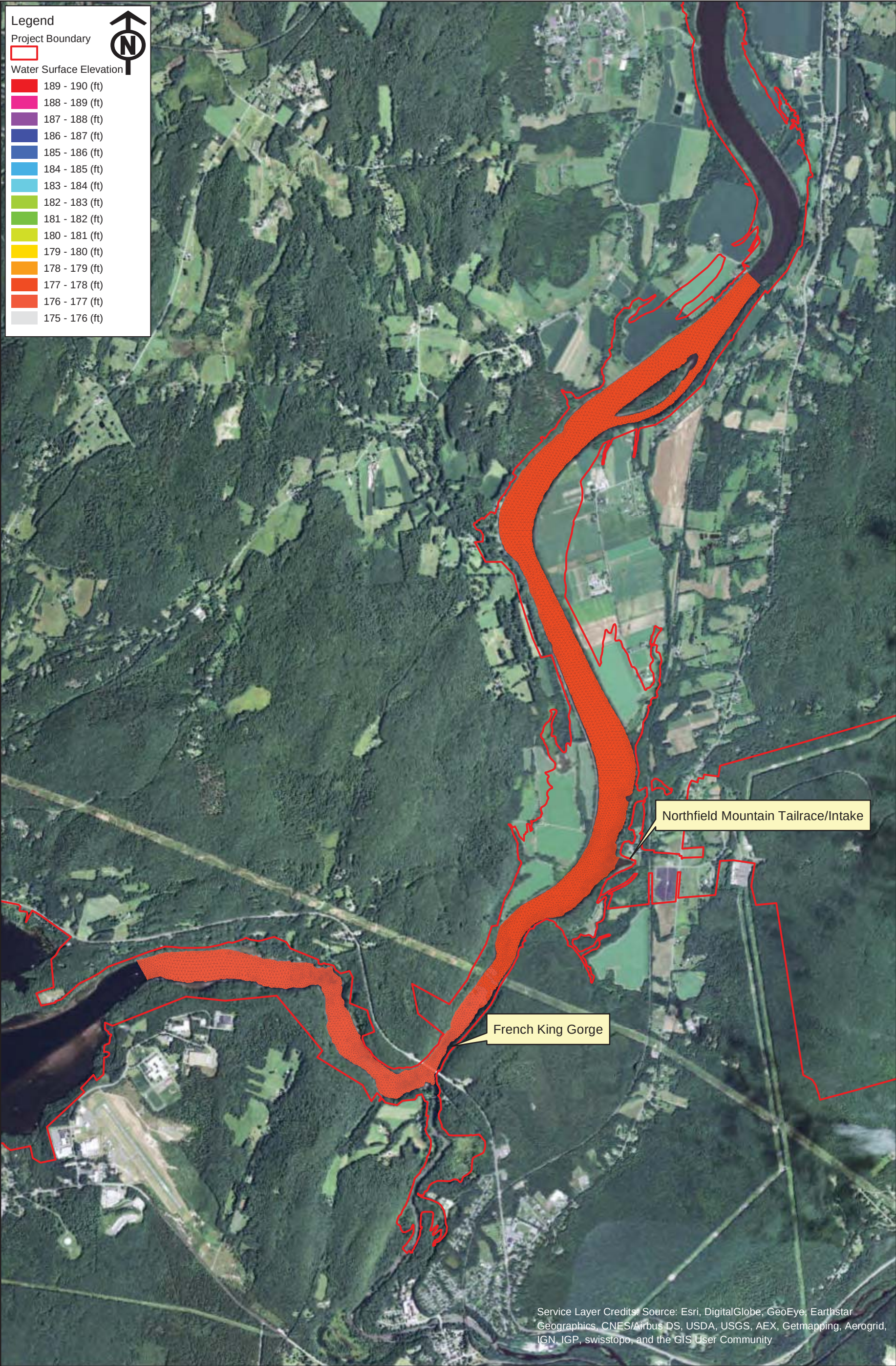
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

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0 1,000 2,000 4,000
Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 10
75% Exceedance Flow (4,900 cfs), 2 Units
Generating (10,000 cfs), 185 WSEL at Dam



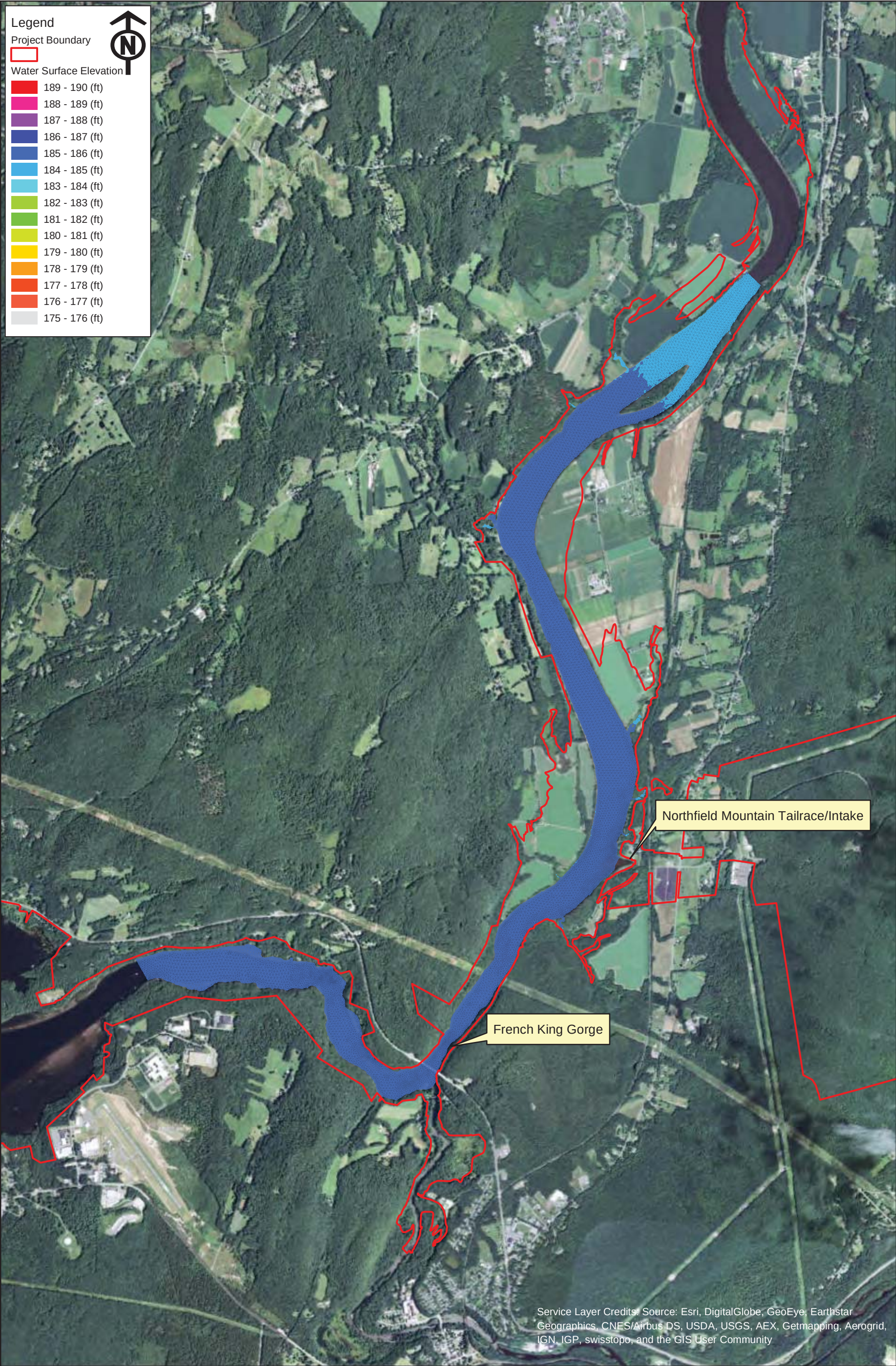
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

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0 1,000 2,000 4,000
Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 11
75% Exceedance Flow (4,900 cfs), 4 Units
Generating (20,000 cfs), 176 WSEL at Dam



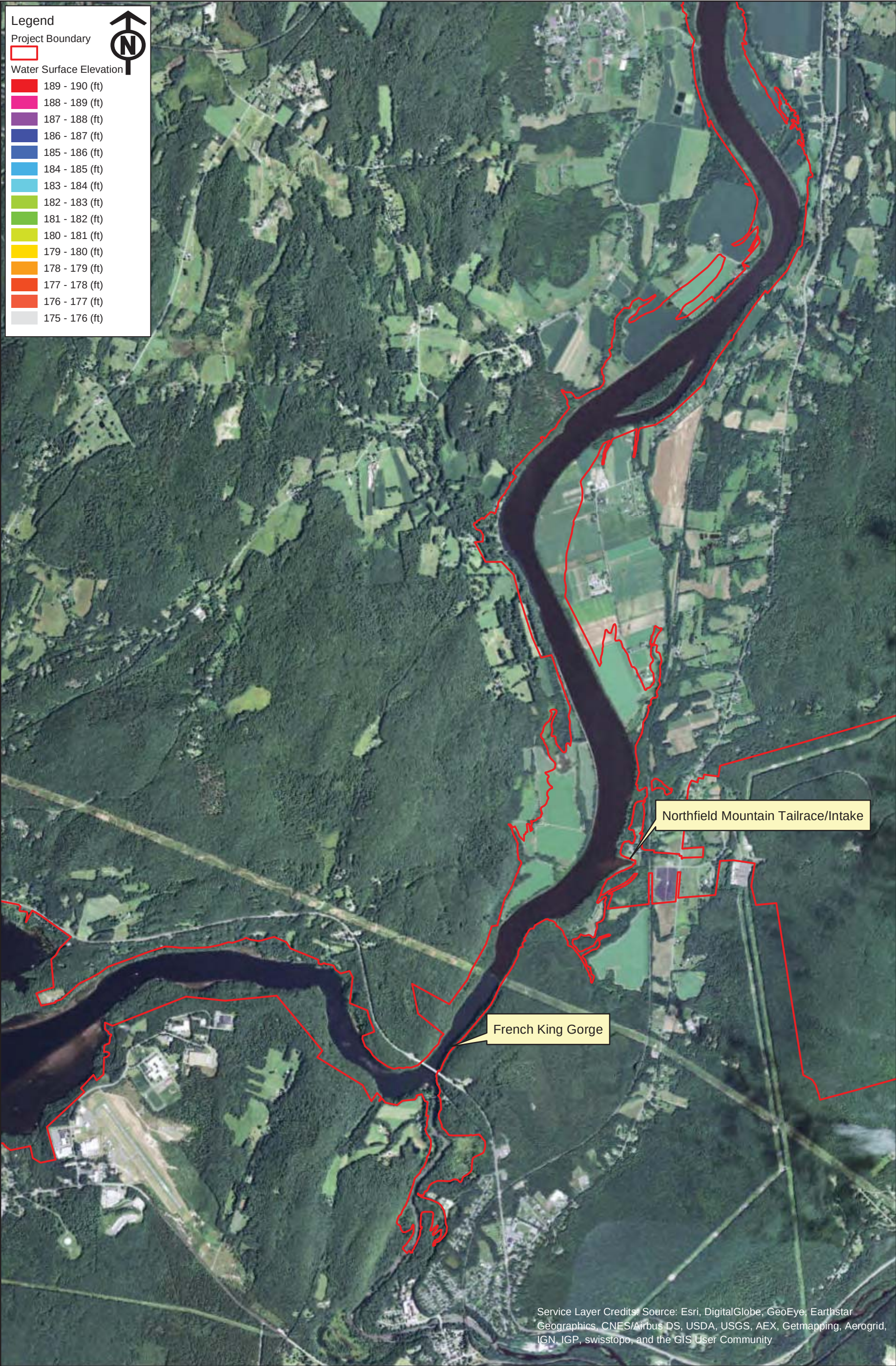
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

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0 1,000 2,000 4,000
Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 12
75% Exceedance Flow (4,900 cfs), 4 Units
Generating (20,000 cfs), 185 WSEL at Dam



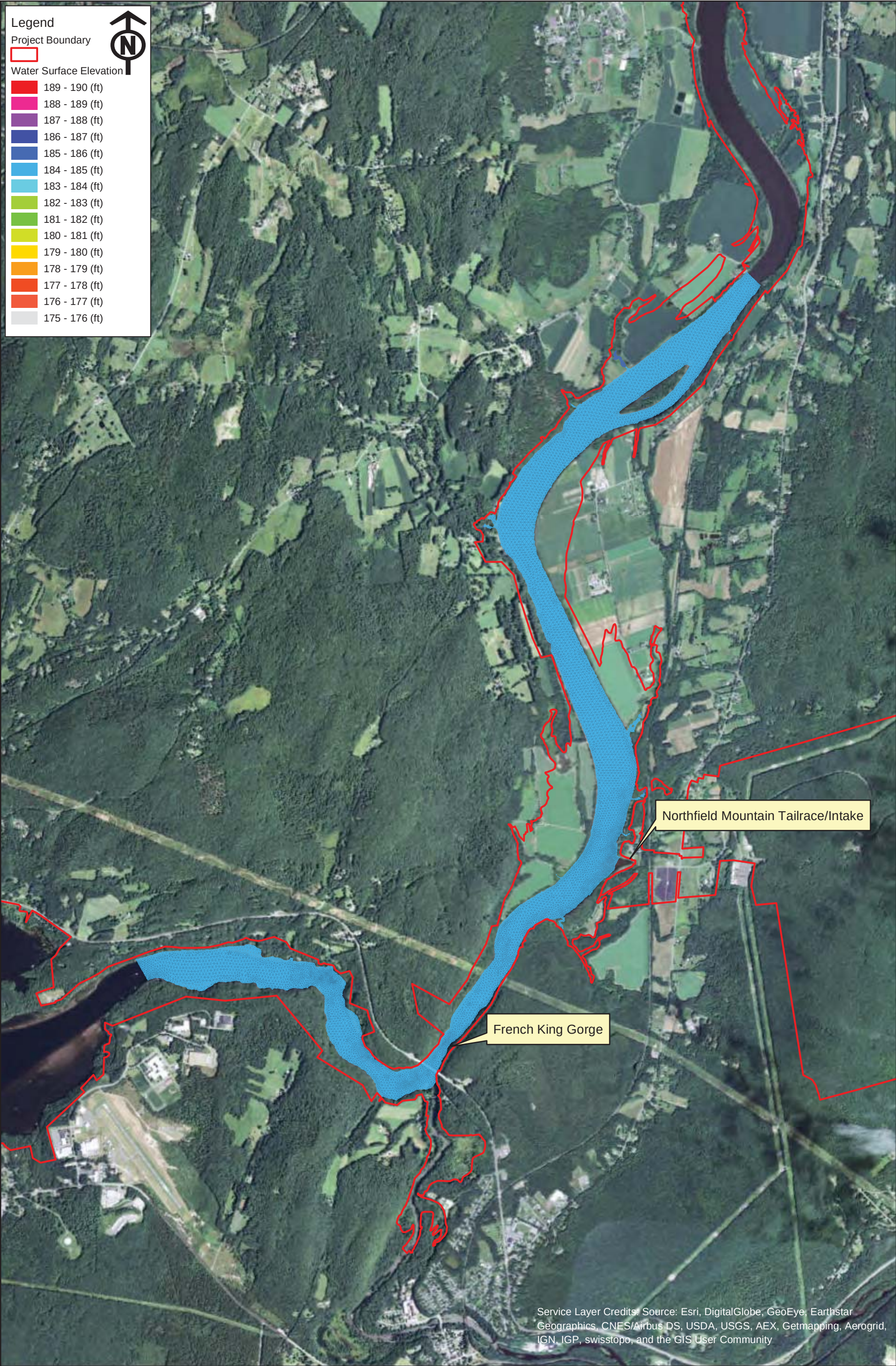
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

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0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 13
75% Exceedance Flow (4,900 cfs), 2 Units
Pumping (7,600 cfs), 176 WSEL at Dam



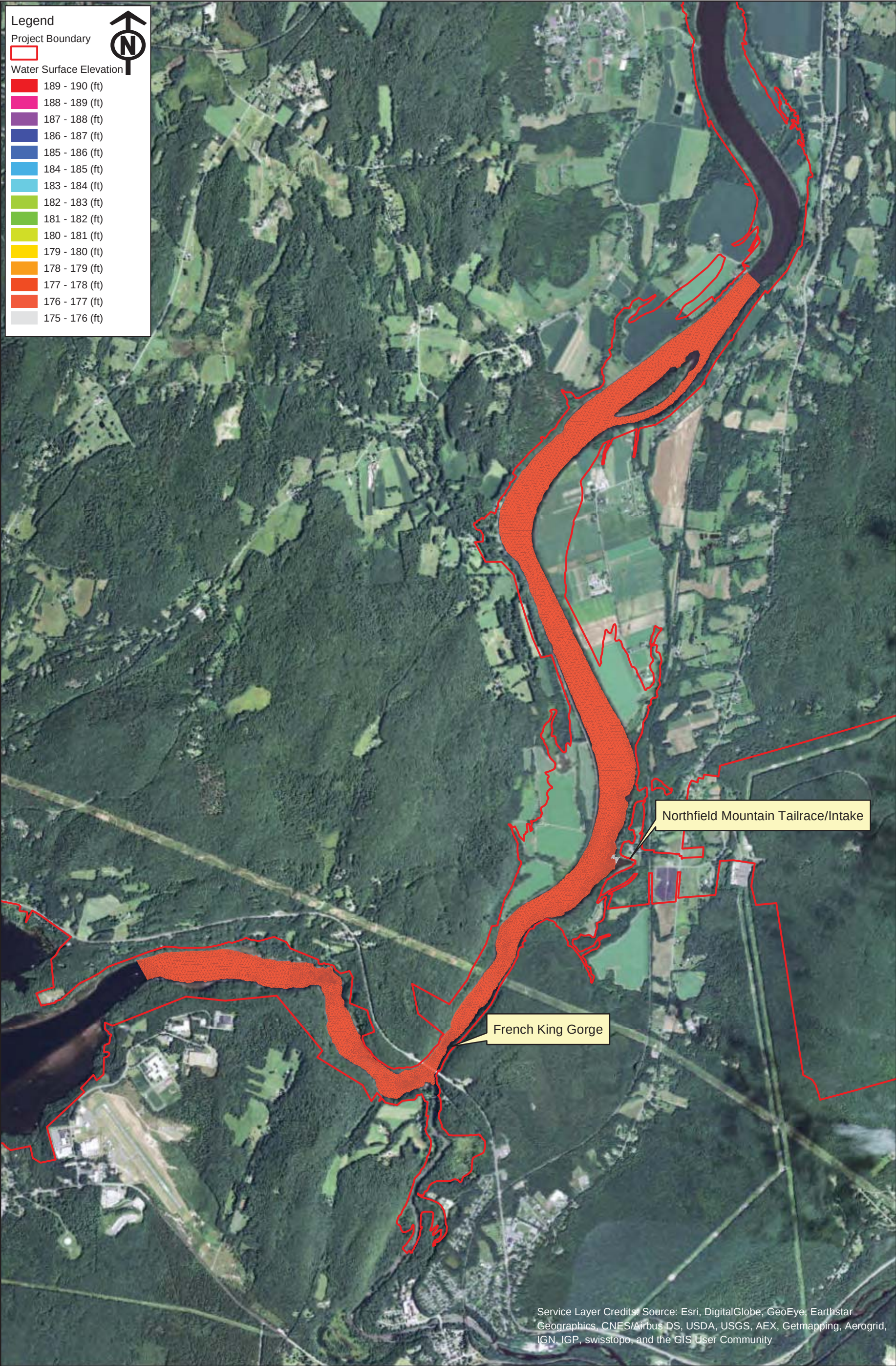
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

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0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 14
75% Exceedance Flow (4,900 cfs), 2 Units
Pumping (7,600 cfs), 185 WSEL at Dam



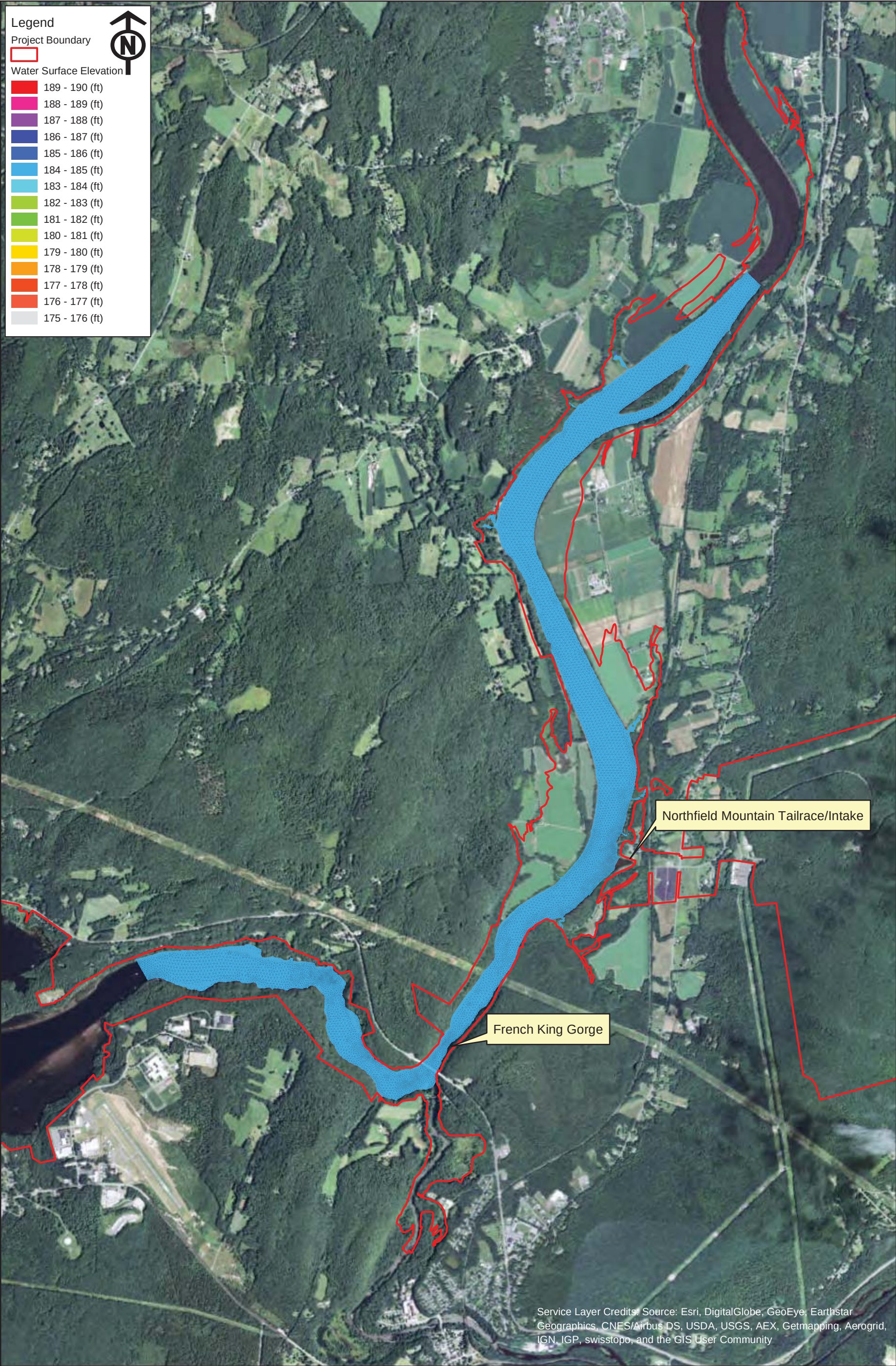
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 15
75% Exceedance Flow (4,900 cfs), 4 Units
Pumping (15,200 cfs), 176 WSEL at Dam



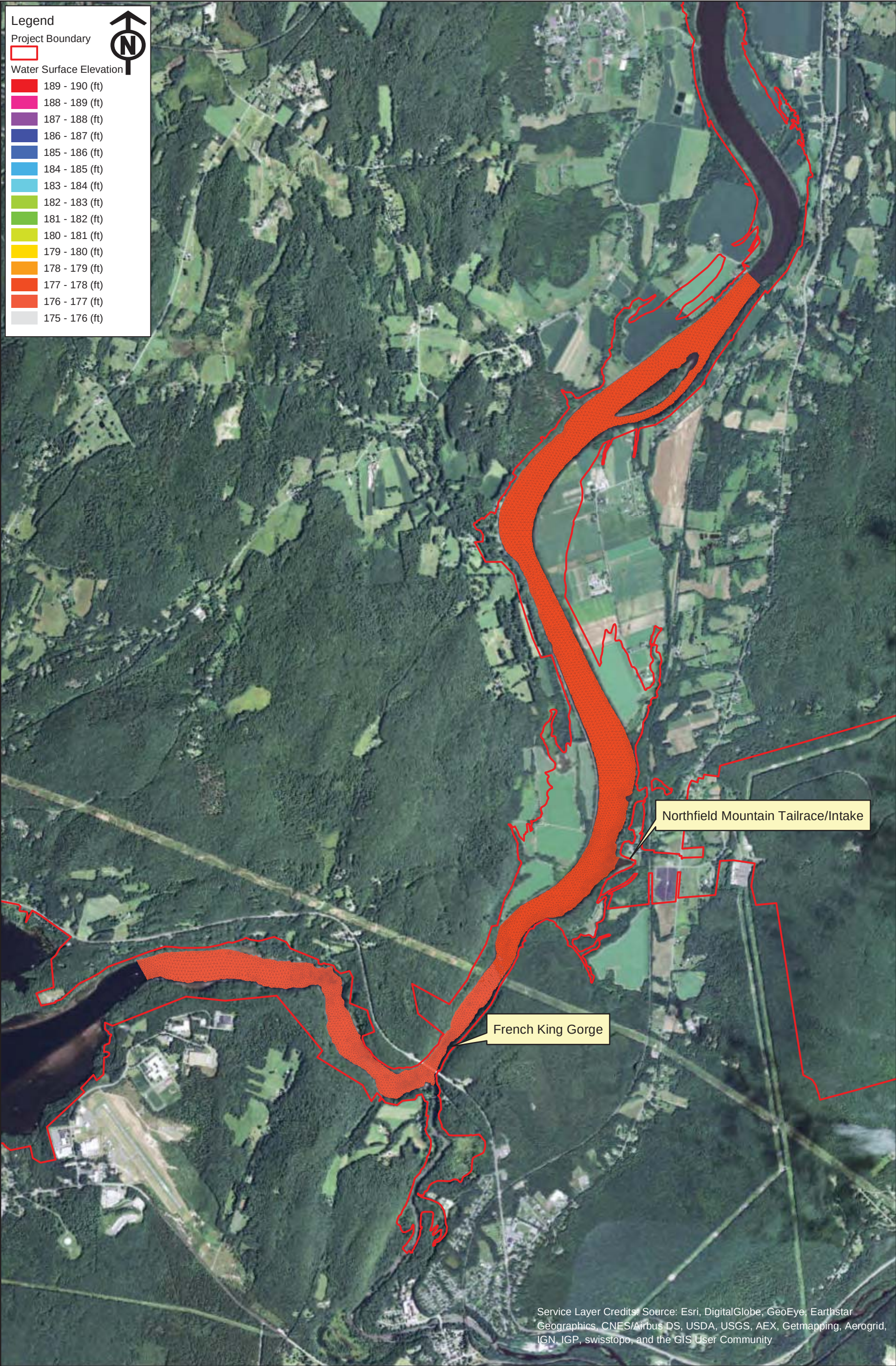
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

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RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 16
75% Exceedance Flow (4,900 cfs), 4 Units
Pumping (15,200 cfs), 185 WSEL at Dam



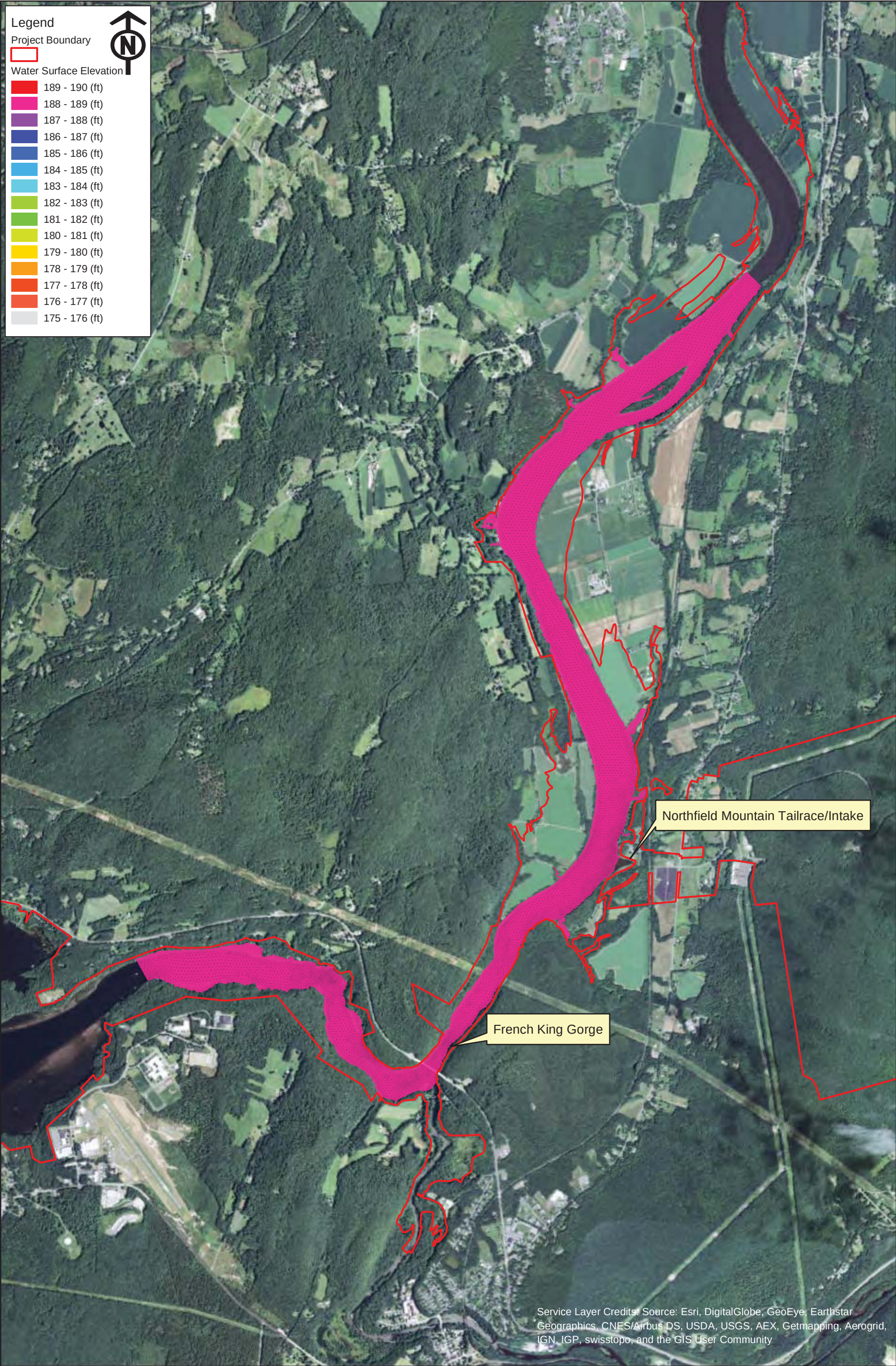
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 17
50% Exceedance Flow (8,440 cfs), 2 Units
Generating (10,000 cfs), 176 WSEL at Dam



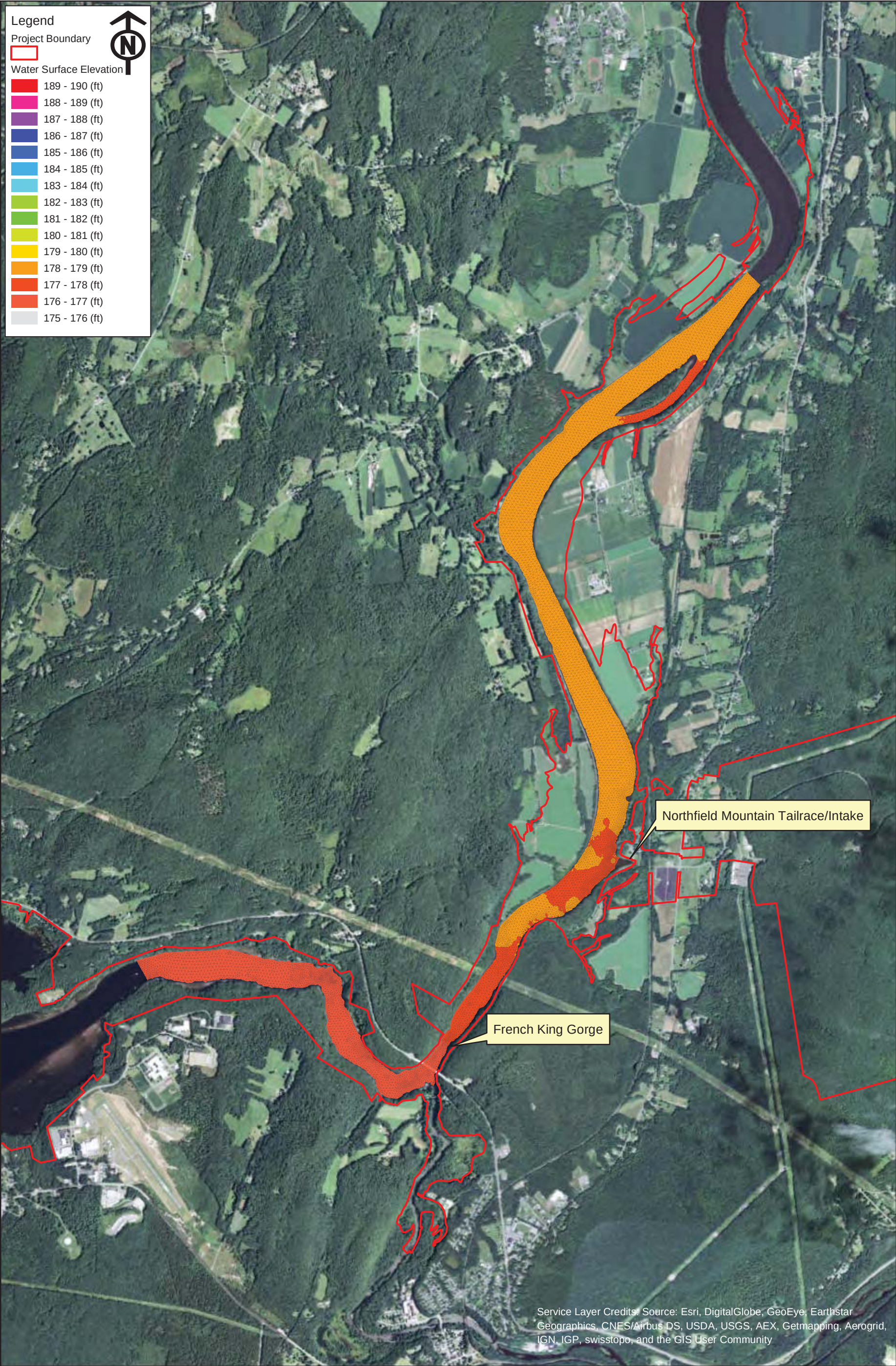
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
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0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 18
50% Exceedance Flow (8,440 cfs), 2 Units
Generating (10,000 cfs), 185 WSEL at Dam



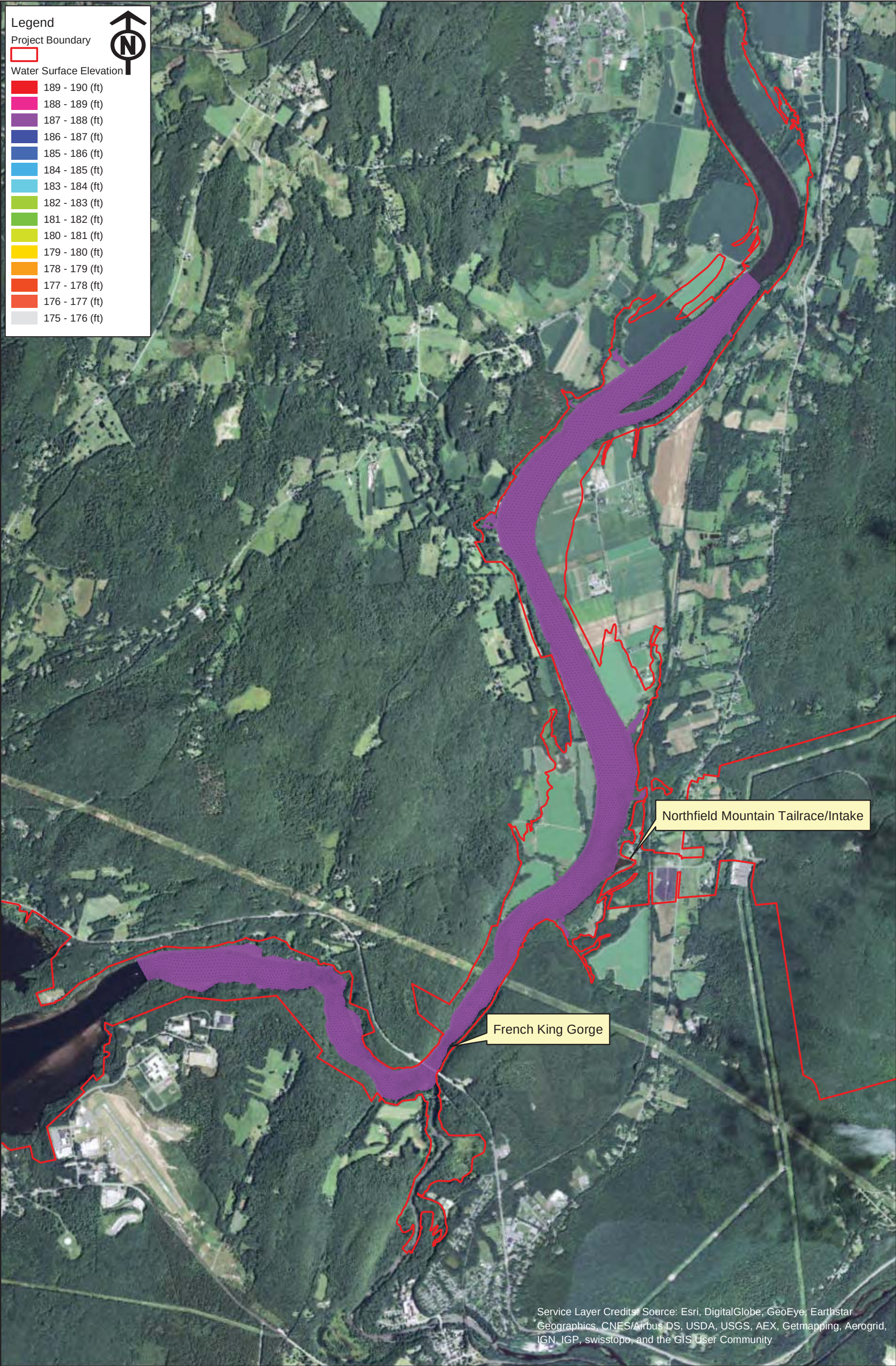
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

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0 1,000 2,000 4,000
Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 19
50% Exceedance Flow (8,440 cfs), 4 Units
Generating (20,000 cfs), 176 WSEL at Dam



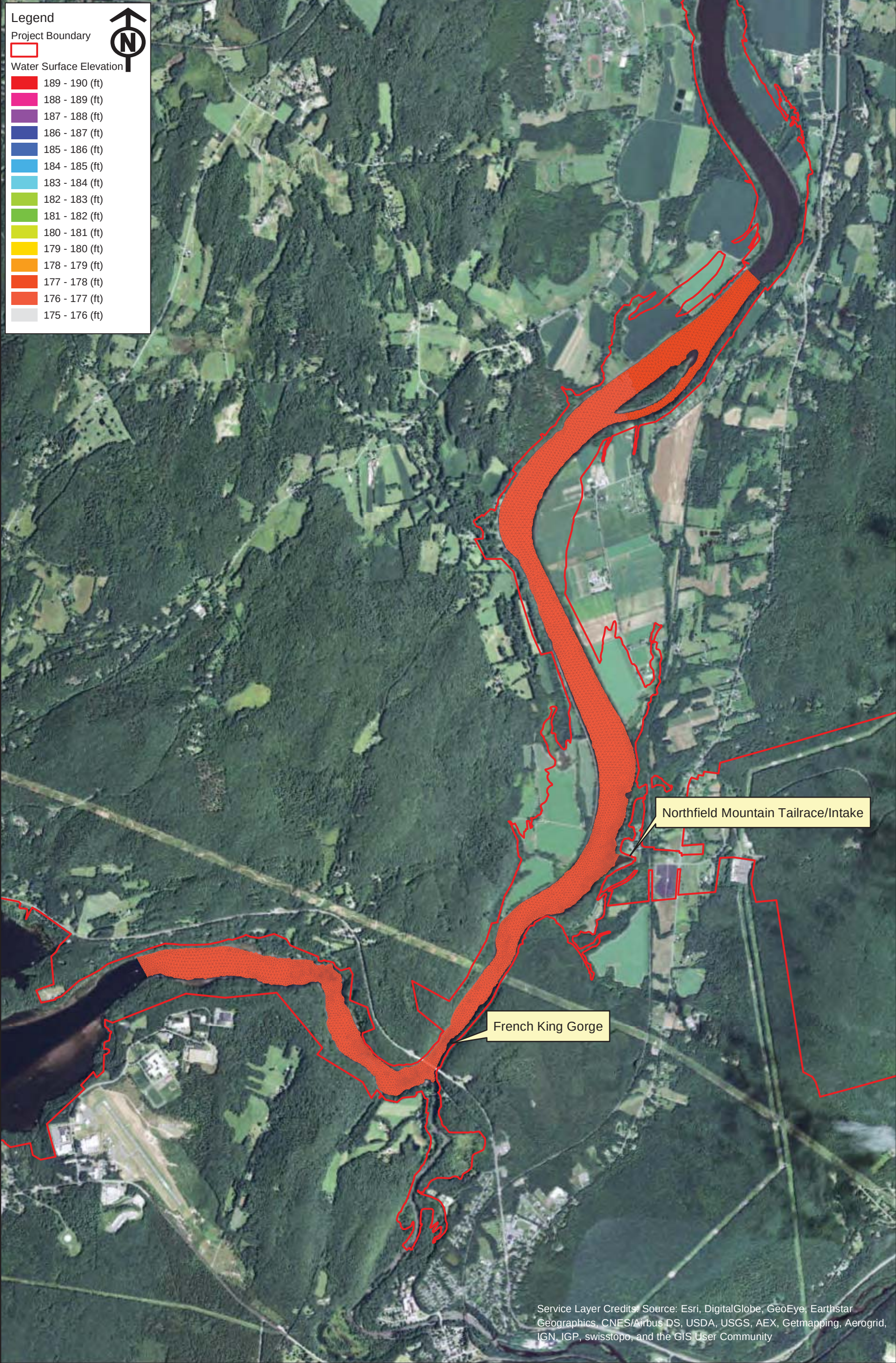
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 20
50% Exceedance Flow (8,440 cfs), 4 Units
Generating (20,000 cfs), 185 WSEL at Dam



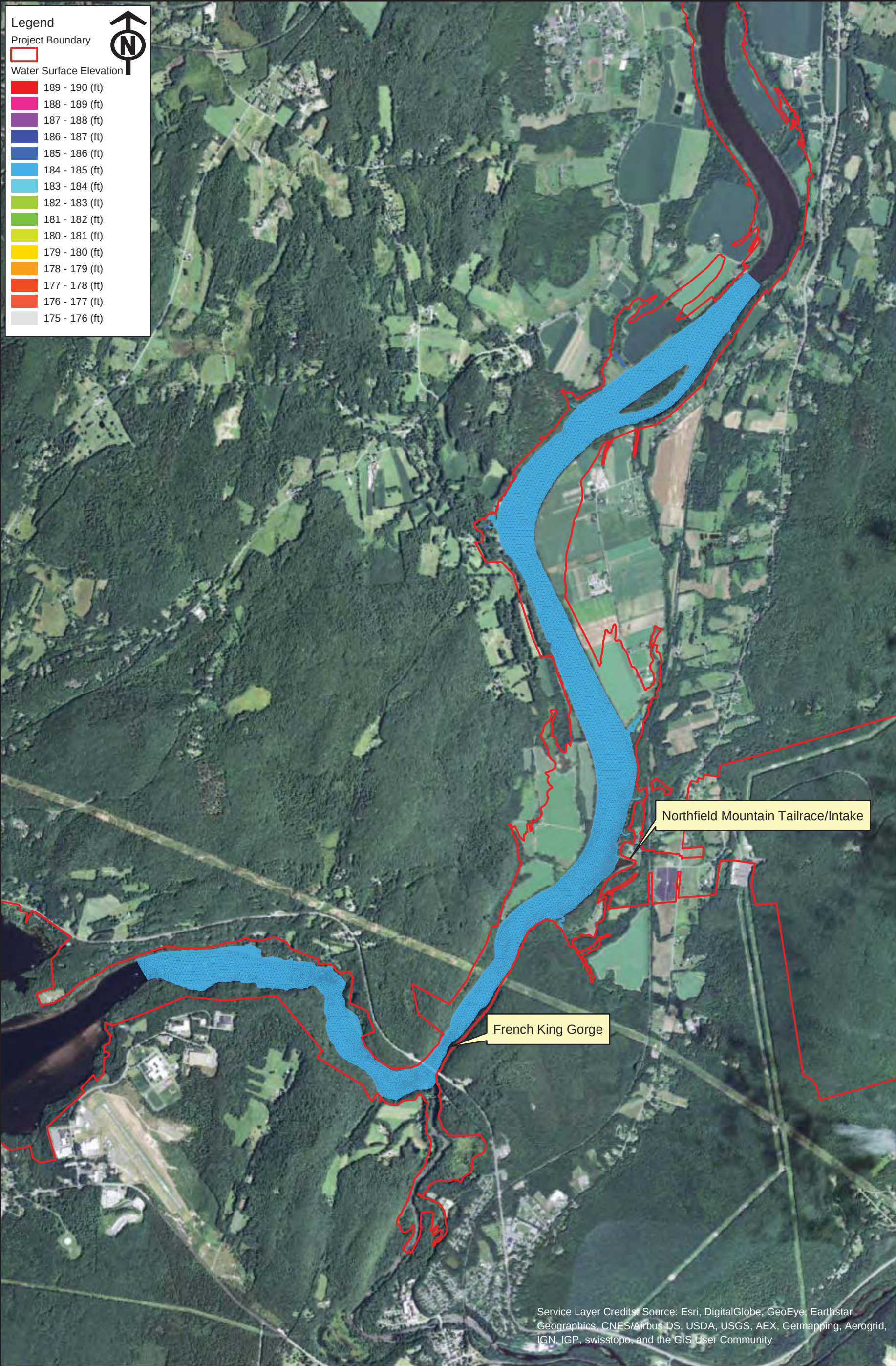
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 21
50% Exceedance Flow (8,440 cfs), 2 Units
Pumping (7,600 cfs), 176 WSEL at Dam



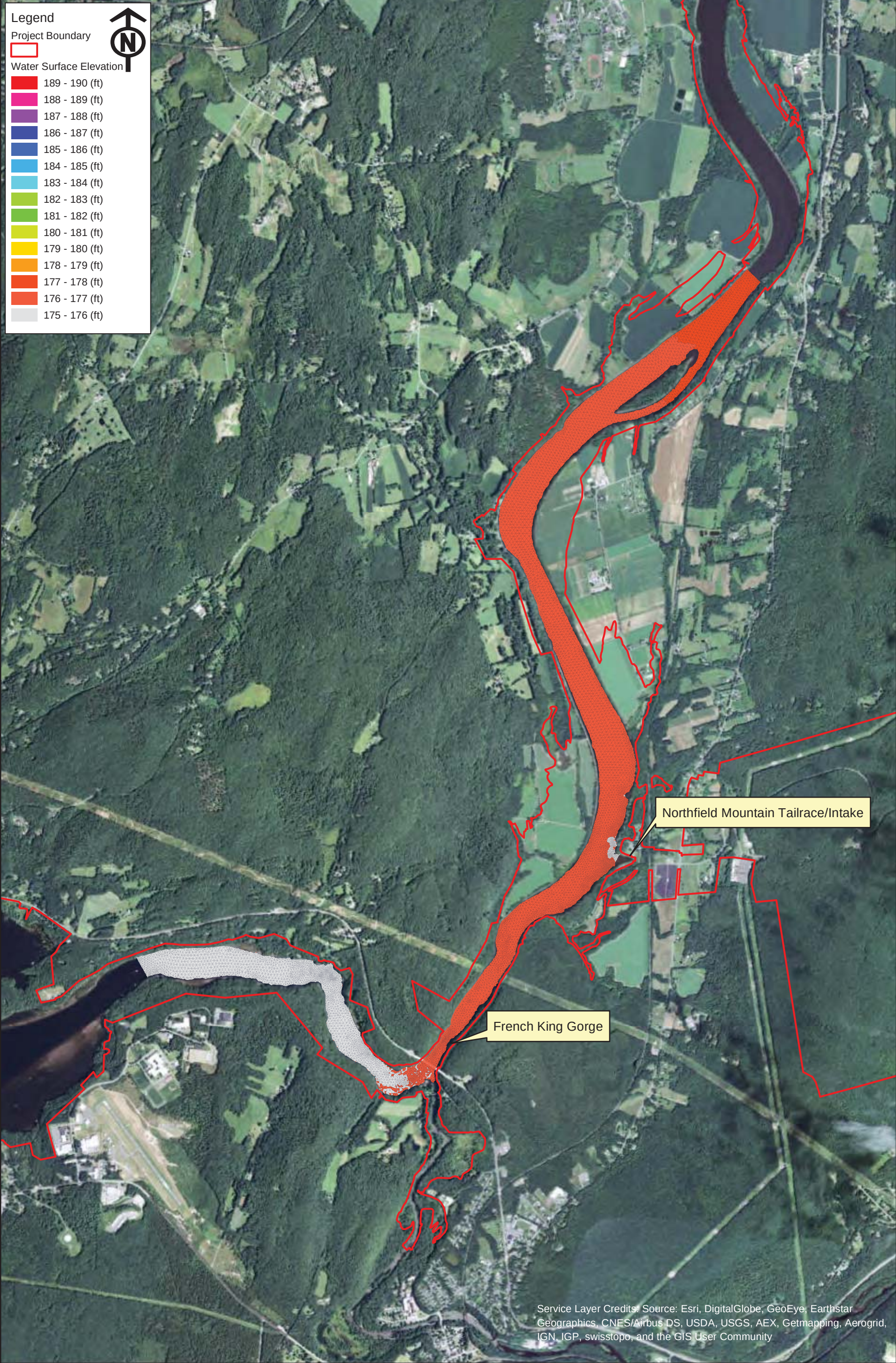
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
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0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 22
50% Exceedance Flow (8,440 cfs), 2 Units
Pumping (7,600 cfs), 185 WSEL at Dam



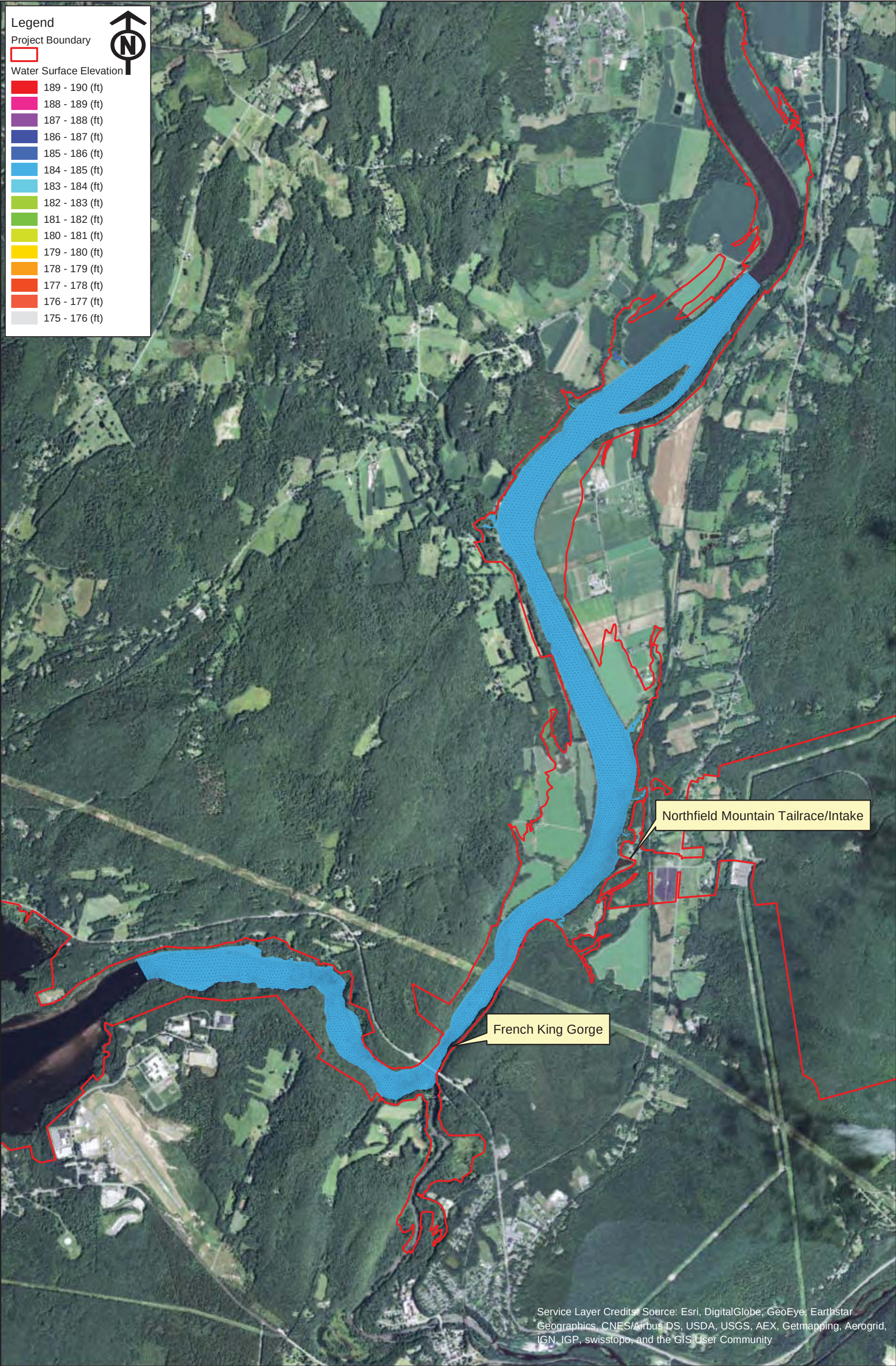
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and Turners Falls Hydroelectric Project (No. 1889)

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0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 23
50% Exceedance Flow (8,440 cfs), 4 Units
Pumping (15,200 cfs), 176 WSEL at Dam



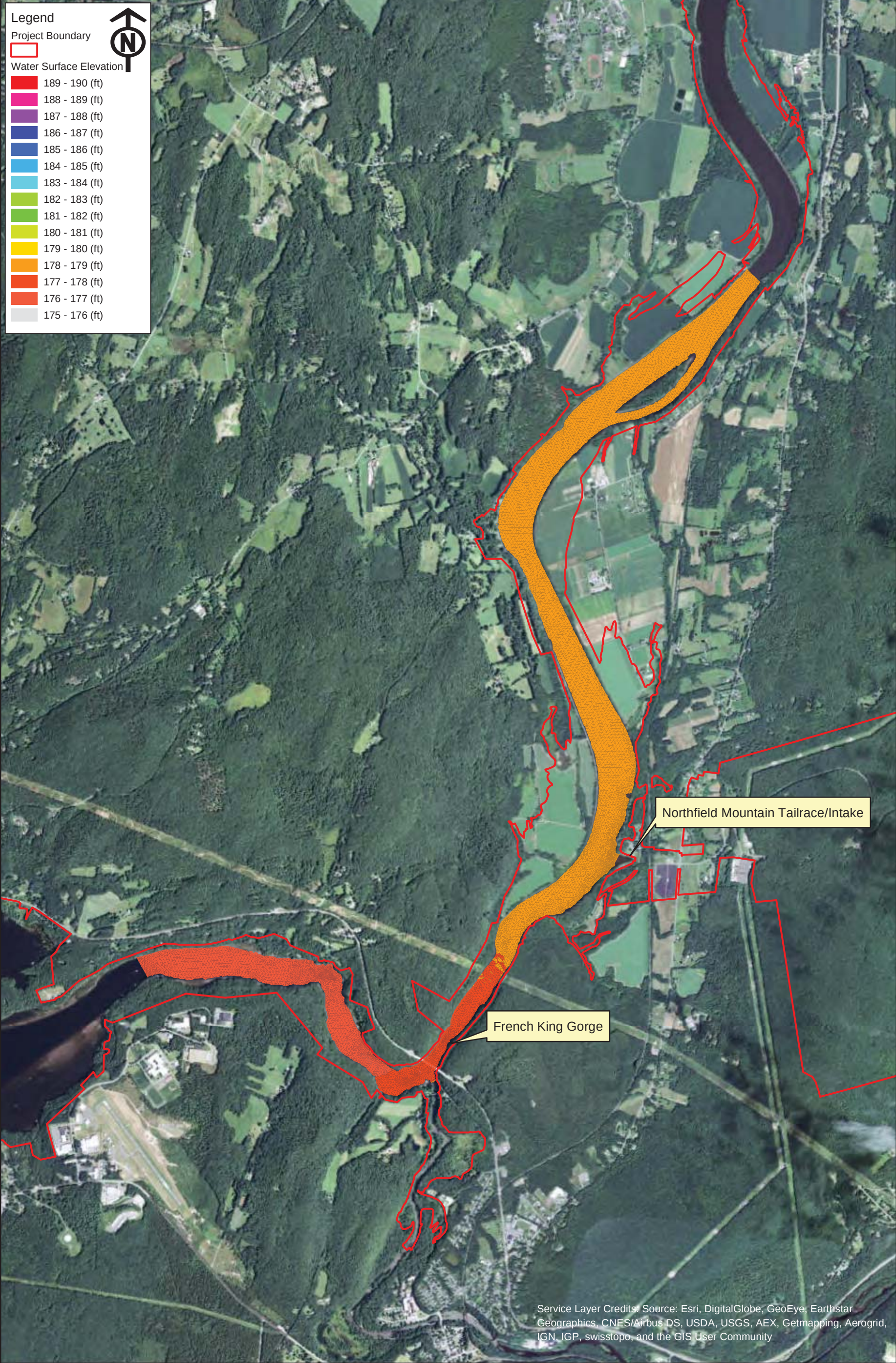
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
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0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 24
50% Exceedance Flow (8,440 cfs), 4 Units
Pumping (15,200 cfs), 185 WSEL at Dam



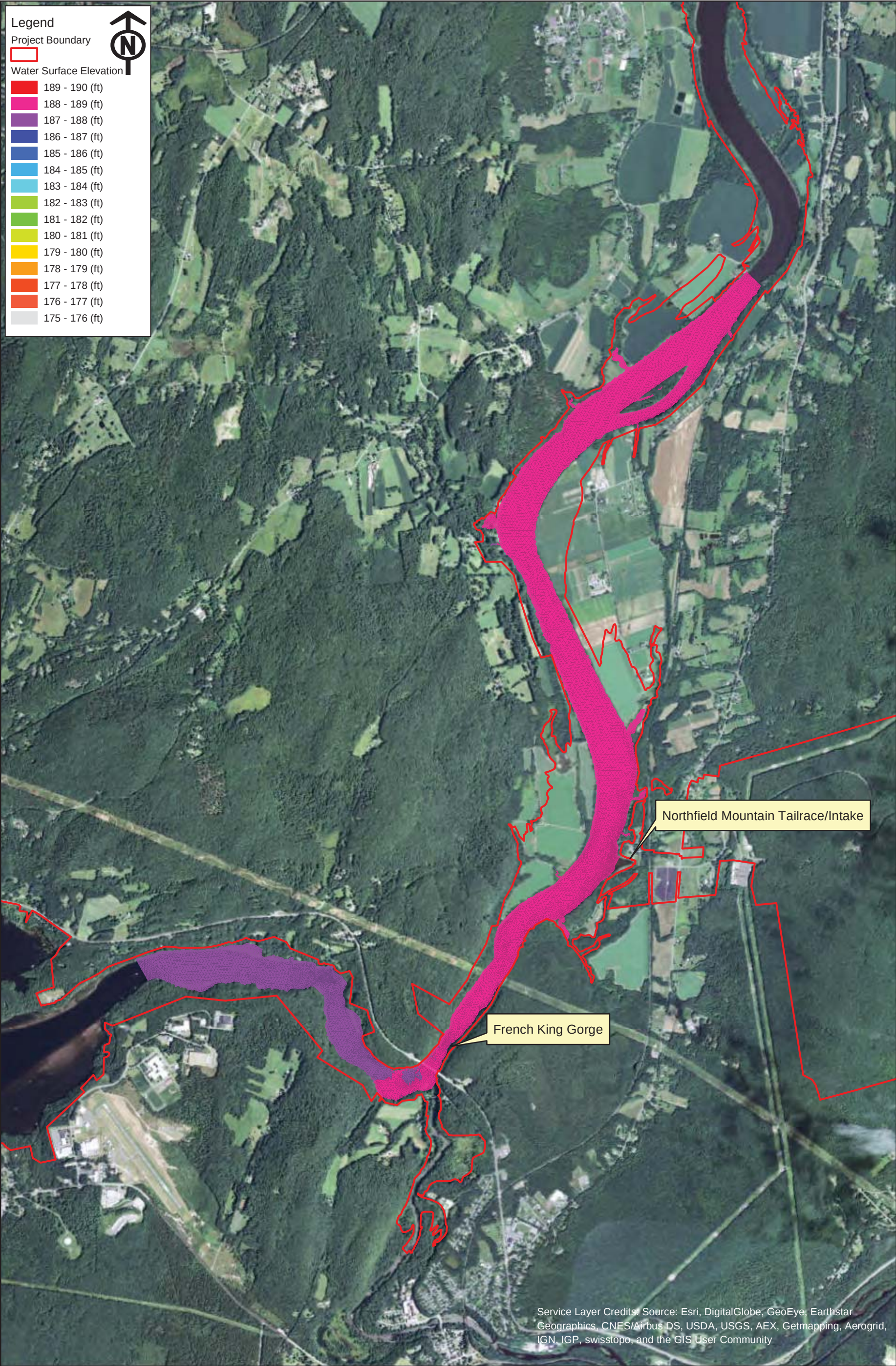
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 25
25% Exceedance Flow (15,700 cfs), 2 Units
Generating (10,000 cfs), 176 WSEL at Dam



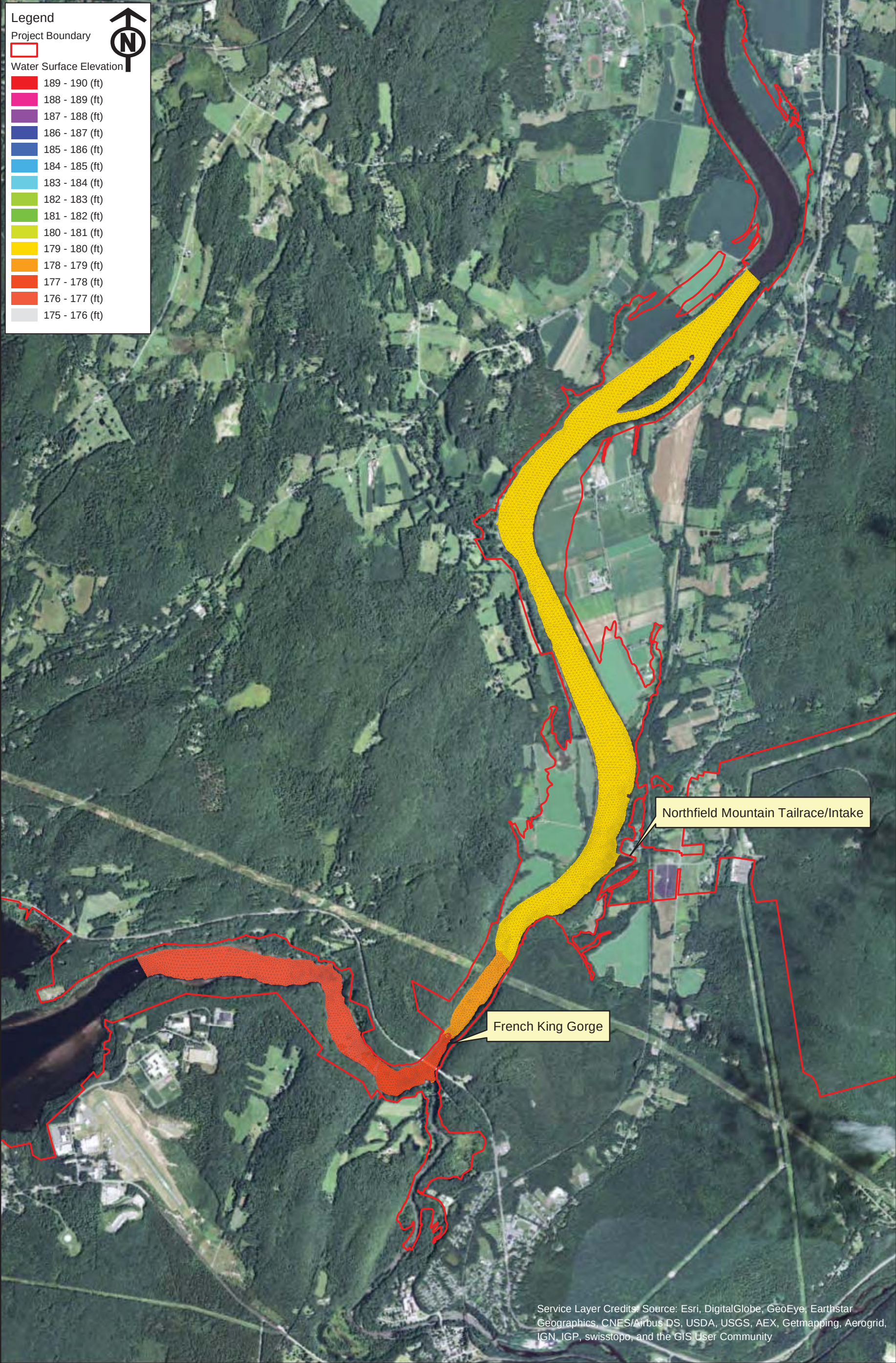
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 26
25% Exceedance Flow (15,700 cfs), 2 Units
Generating (10,000 cfs), 185 WSEL at Dam



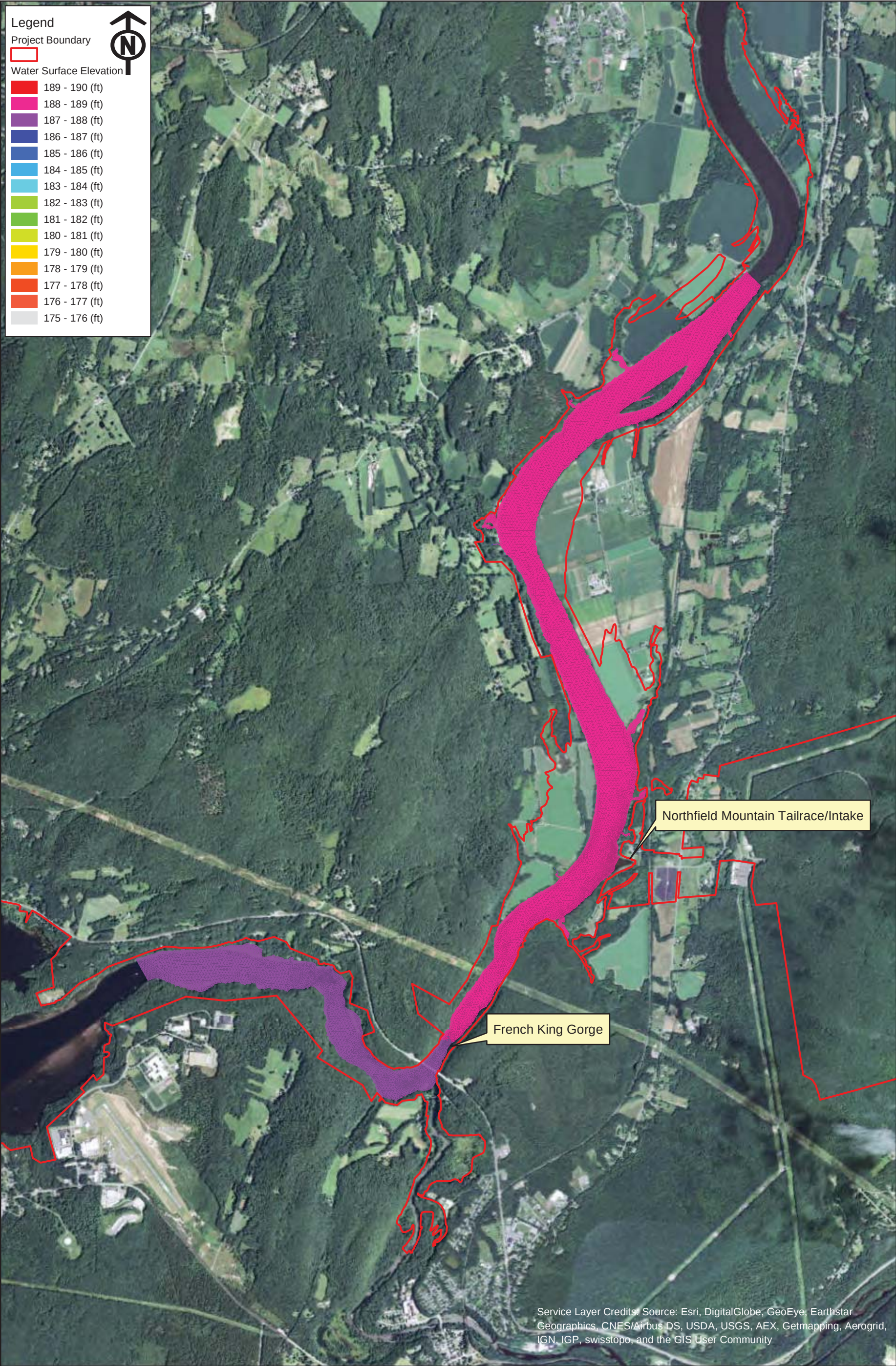
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
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0 1,000 2,000 4,000
Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 27
25% Exceedance Flow (15,700 cfs), 4 Units
Generating (20,000 cfs), 176 WSEL at Dam



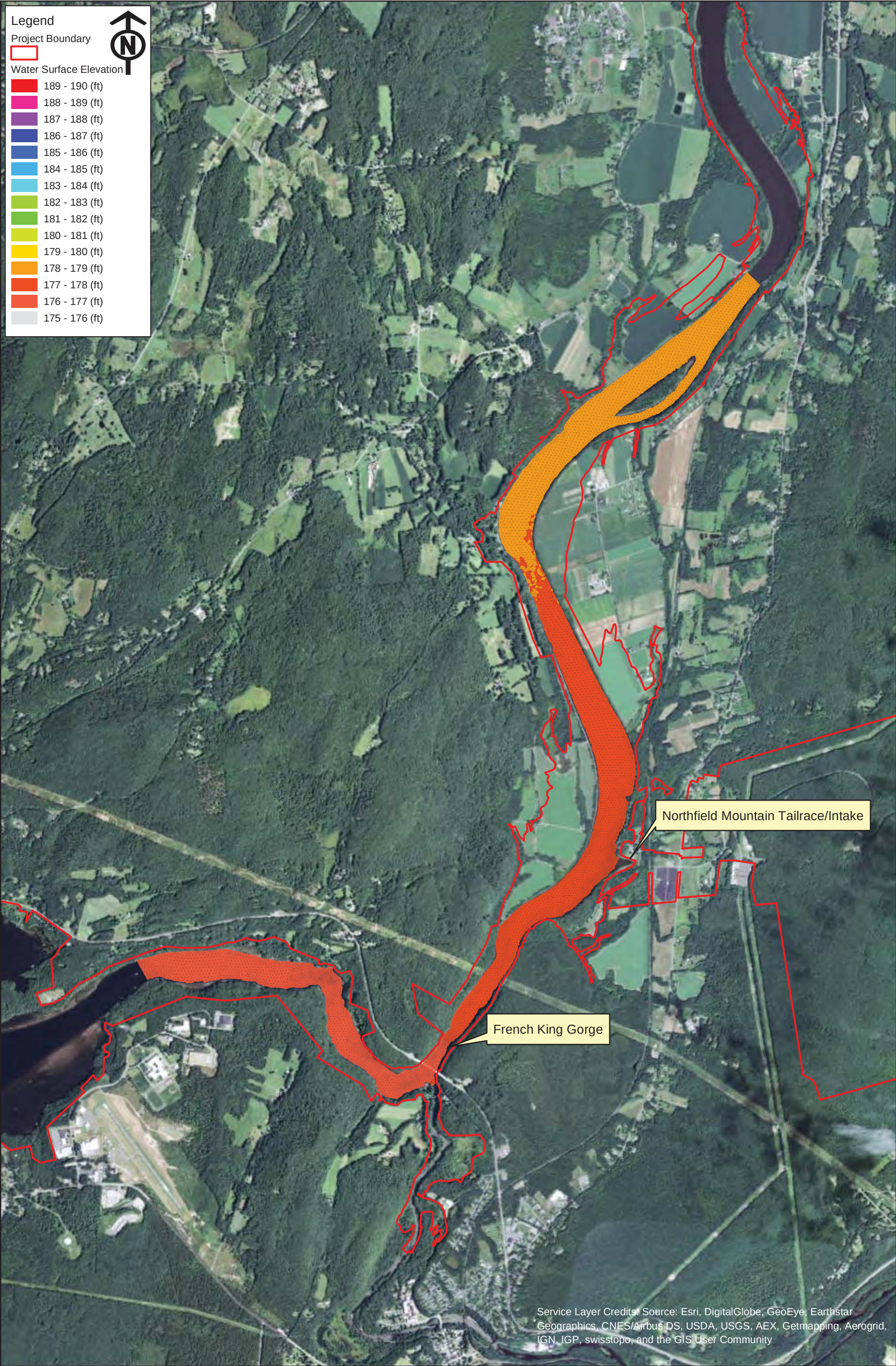
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
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0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 28
25% Exceedance Flow (15,700 cfs), 4 Units
Generating (20,000 cfs), 185 WSEL at Dam



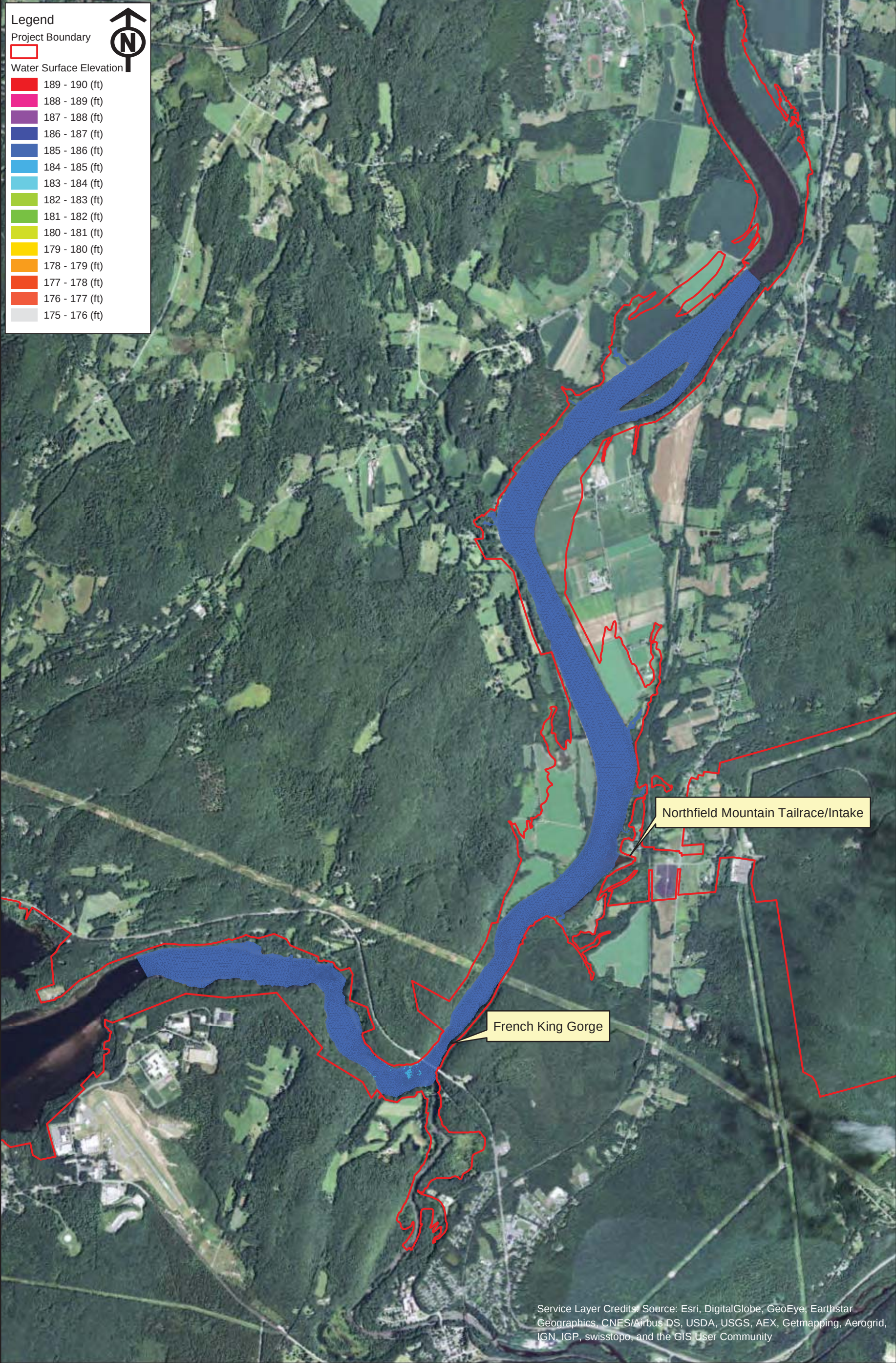
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

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0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 29
25% Exceedance Flow (15,700 cfs), 2 Units
Pumping (7,600 cfs), 176 WSEL at Dam



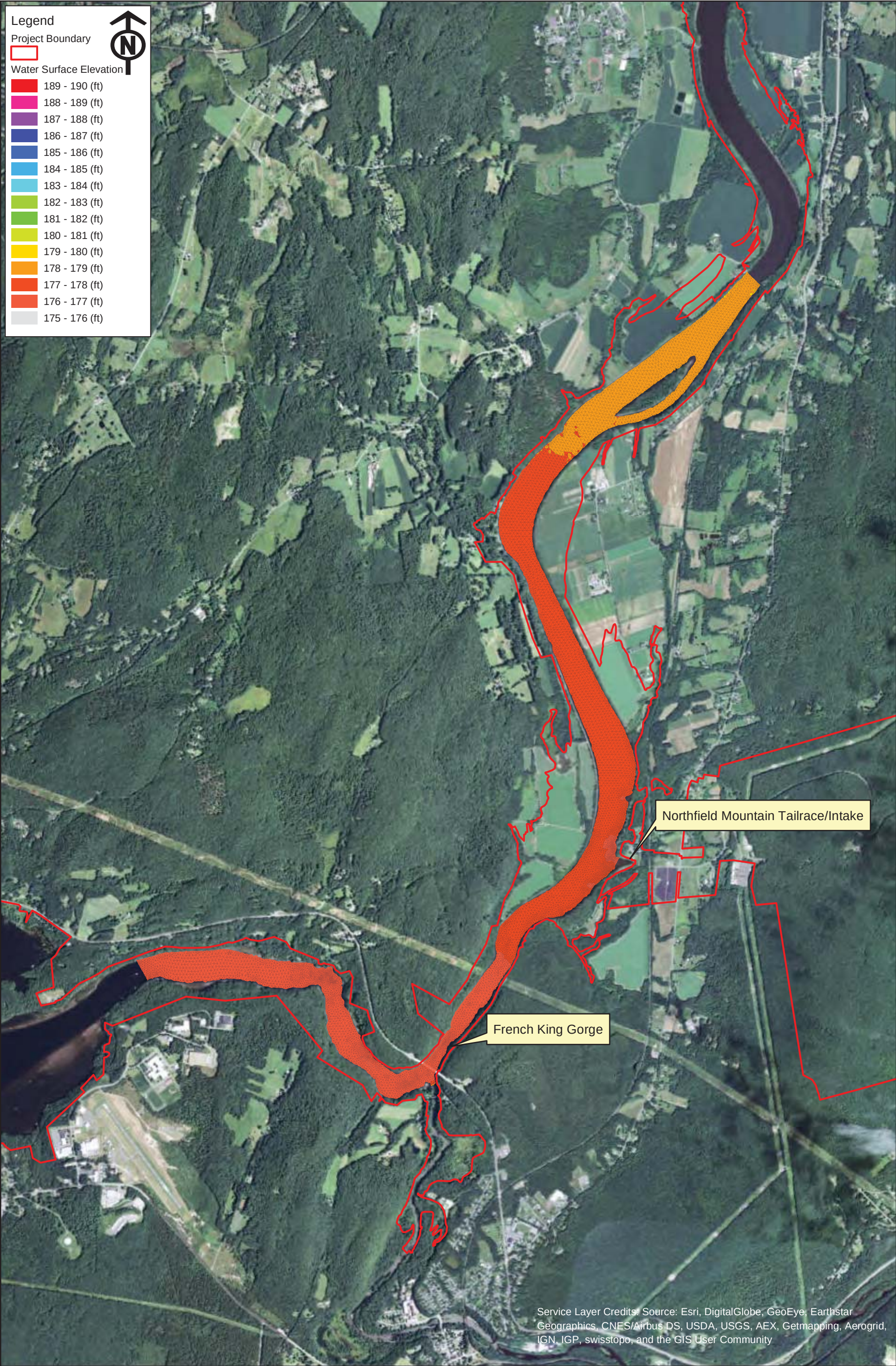
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 30
25% Exceedance Flow (15,700 cfs), 2 Units
Pumping (7,600 cfs), 185 WSEL at Dam



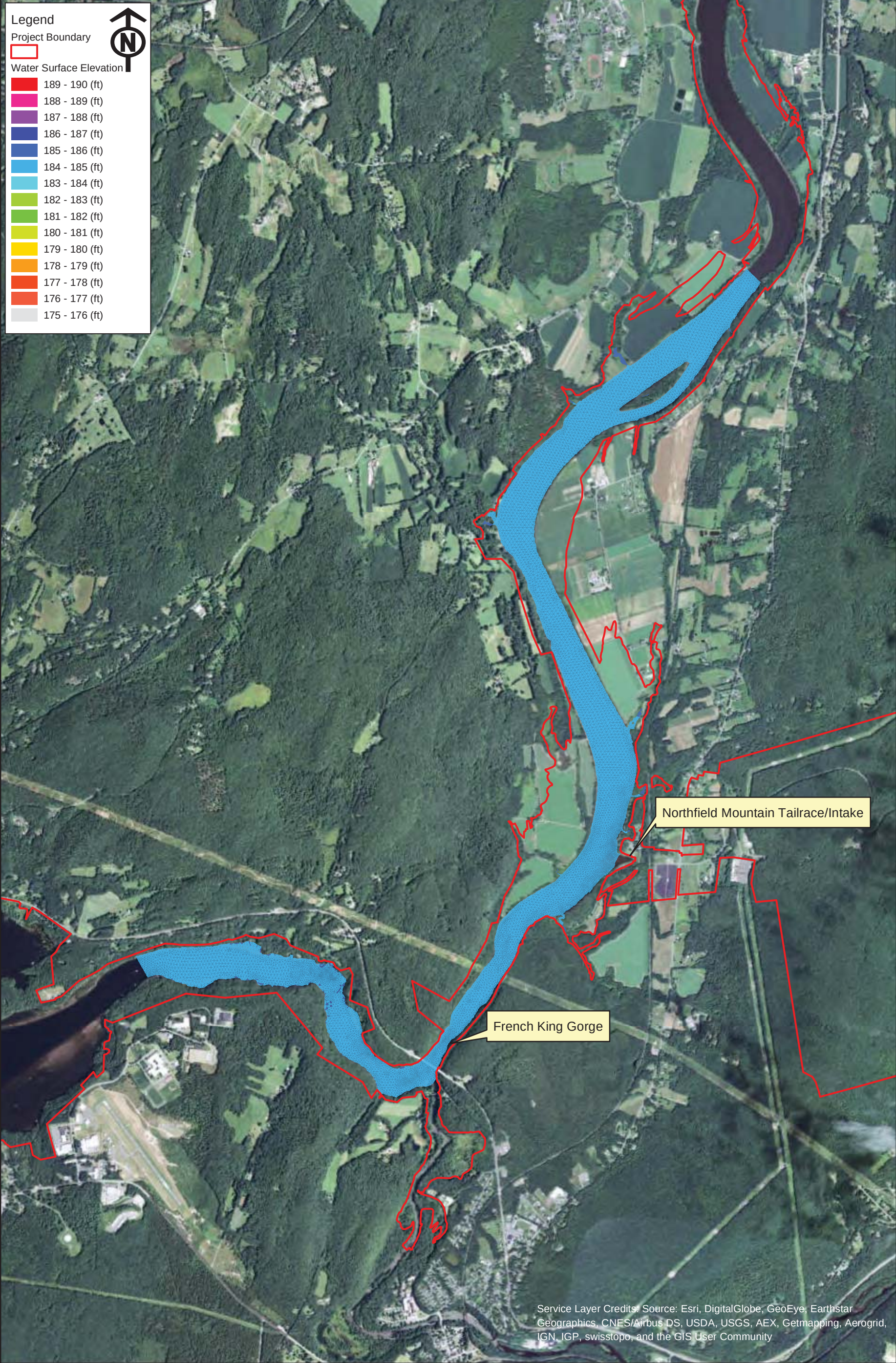
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 31
25% Exceedance Flow (15,700 cfs), 4 Units
Pumping (15,200 cfs), 176 WSEL at Dam



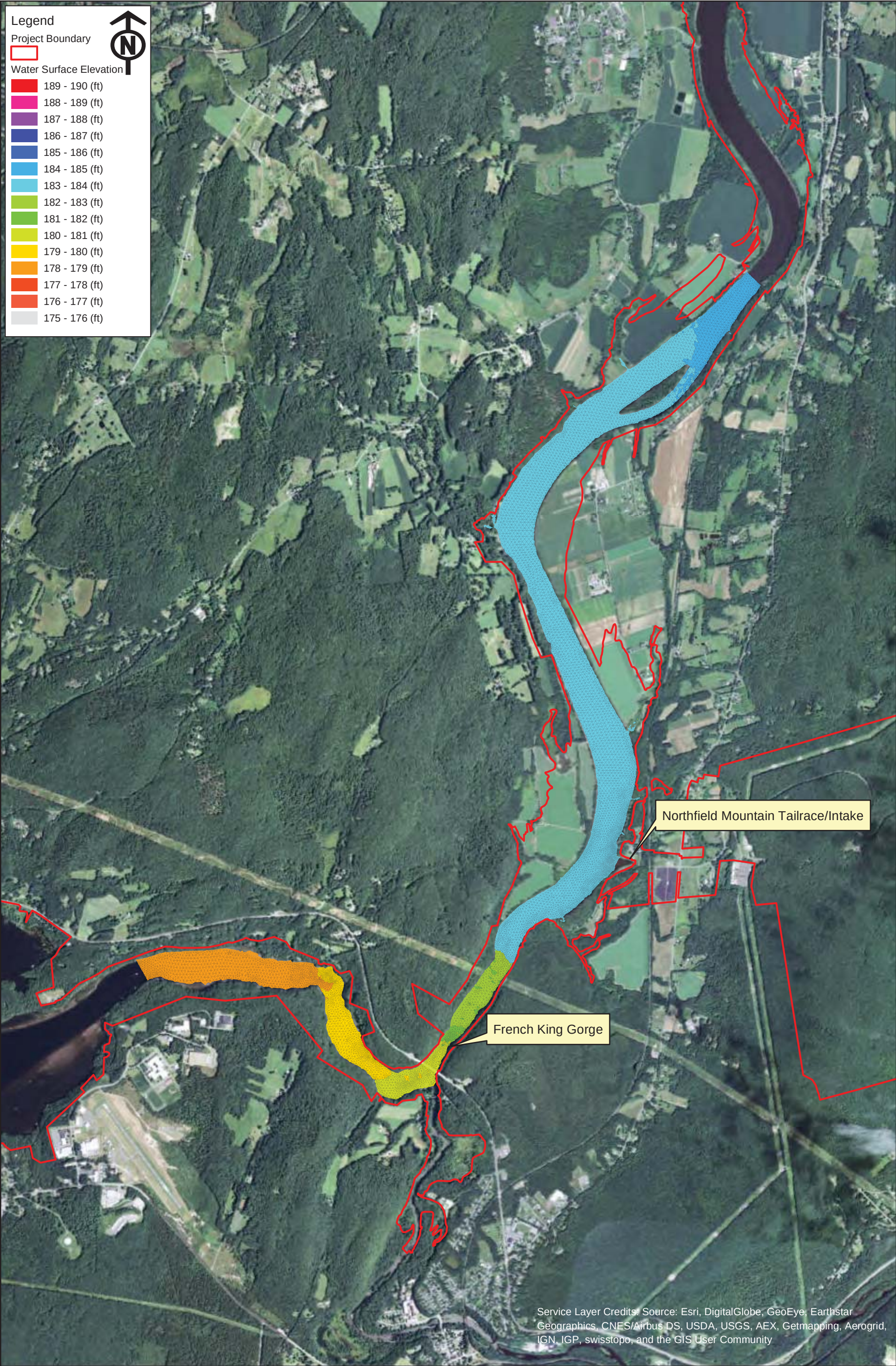
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
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0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 32
25% Exceedance Flow (15,700 cfs), 4 Units
Pumping (15,200 cfs), 185 WSEL at Dam



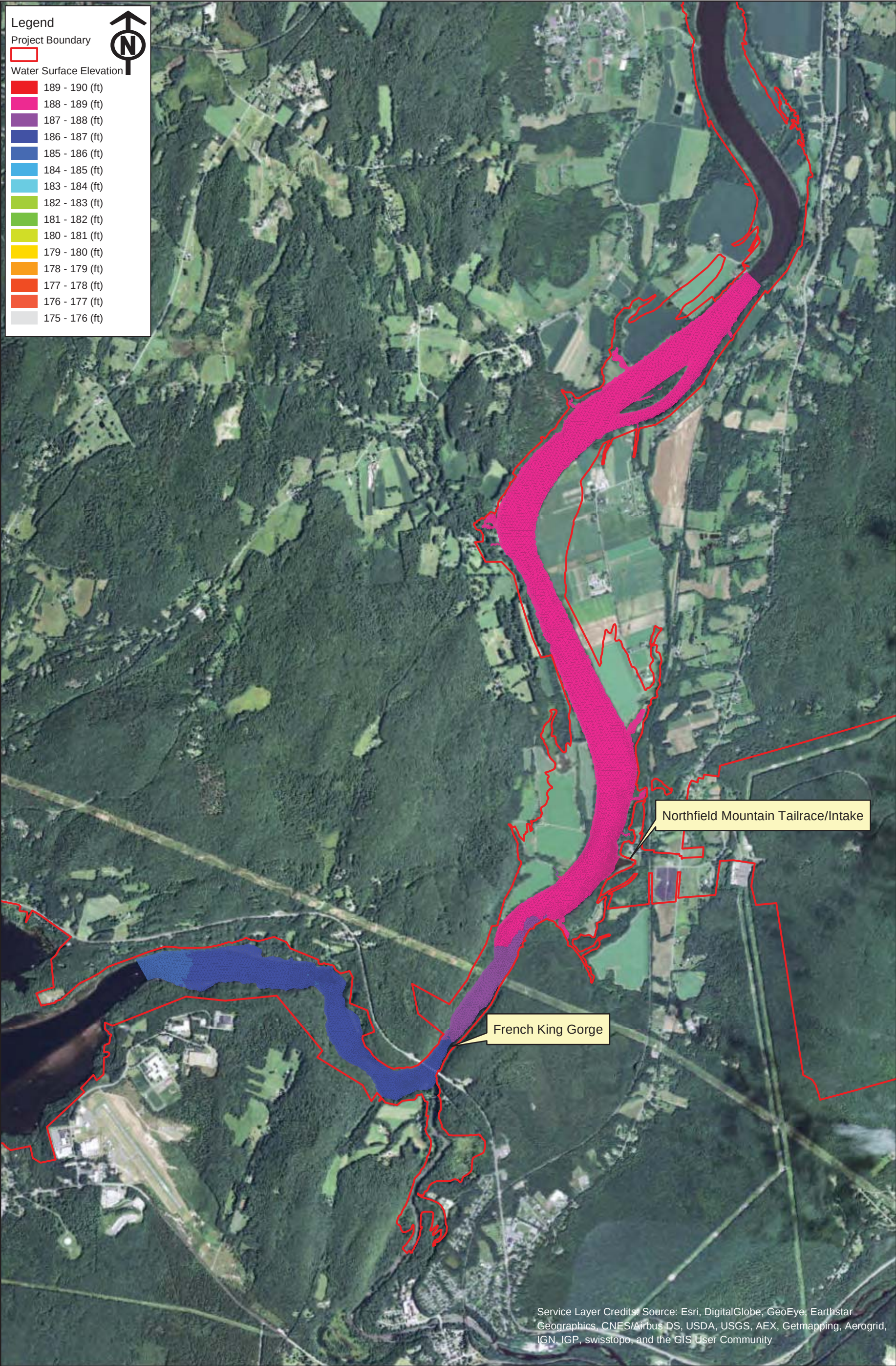
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

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0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 33
5% Exceedance Flow (40,100 cfs), 2 Units
Generating (10,000 cfs), 176 WSEL at Dam



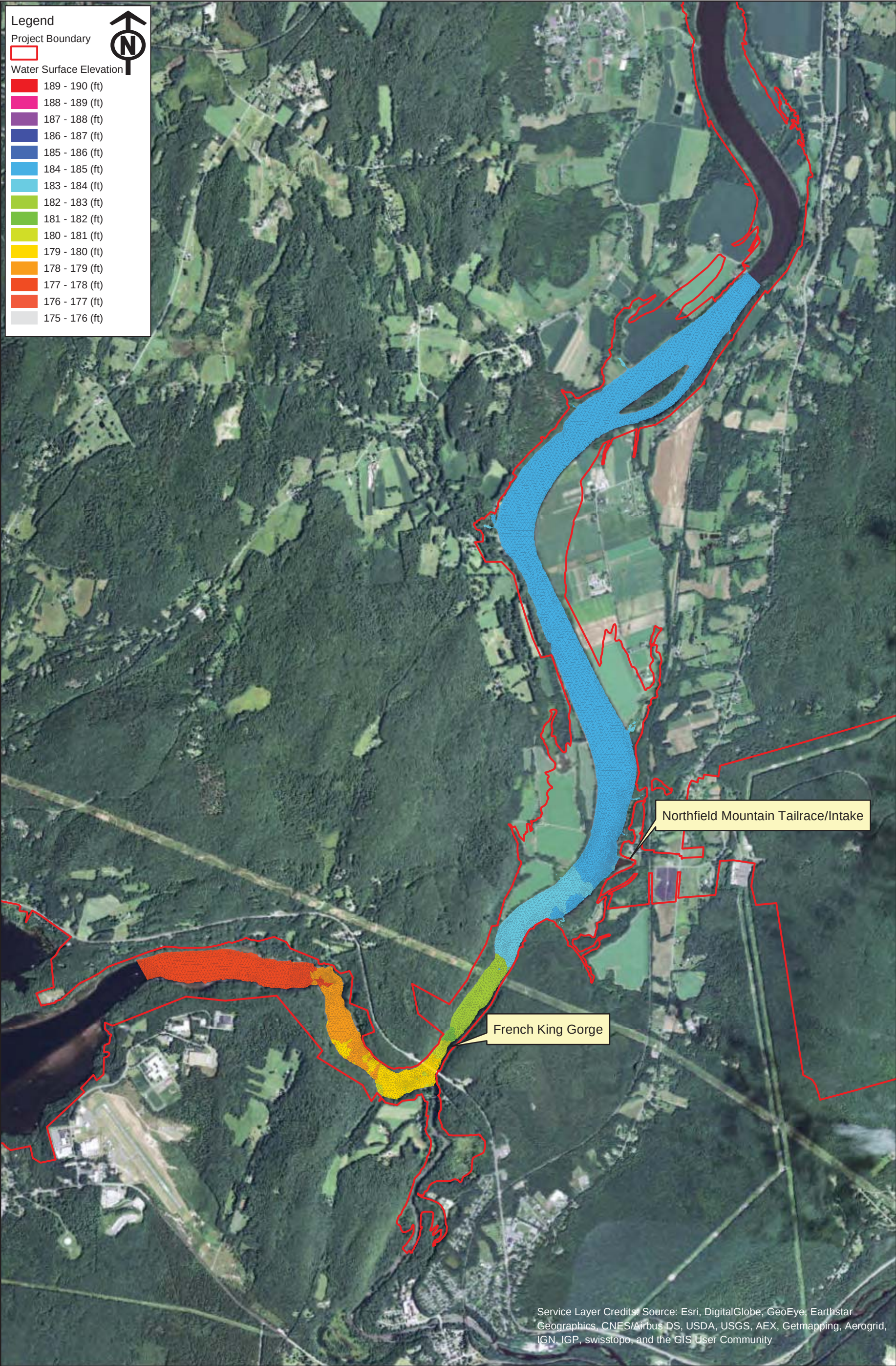
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and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 34
5% Exceedance Flow (40,100 cfs), 2 Units
Generating (10,000 cfs), 185 WSEL at Dam



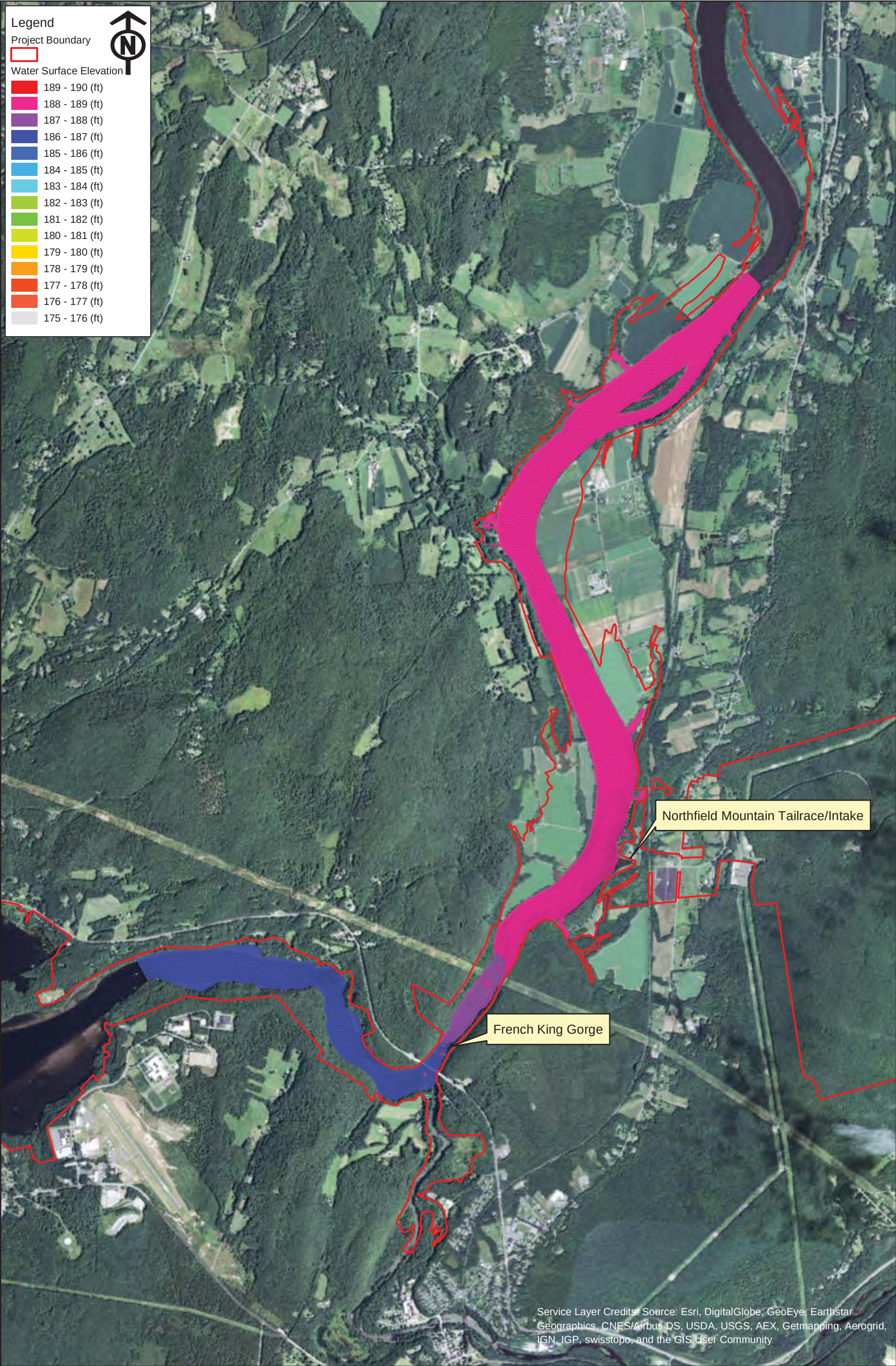
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 35
5% Exceedance Flow (40,100 cfs), 4 Units
Generating (20,000 cfs), 176 WSEL at Dam



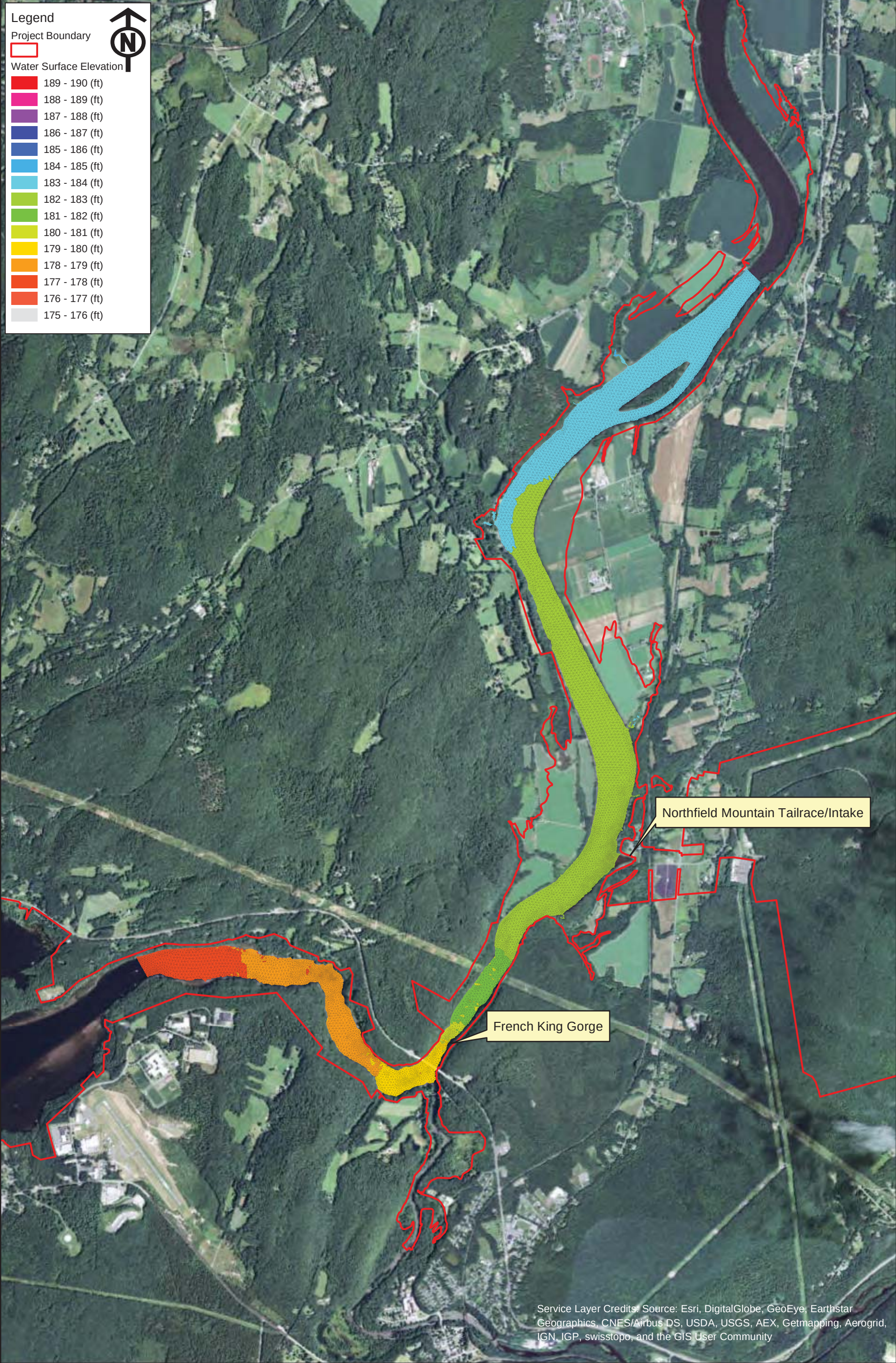
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000
Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 36
5% Exceedance Flow (40,100 cfs), 4 Units
Generating (20,000 cfs), 185 WSEL at Dam



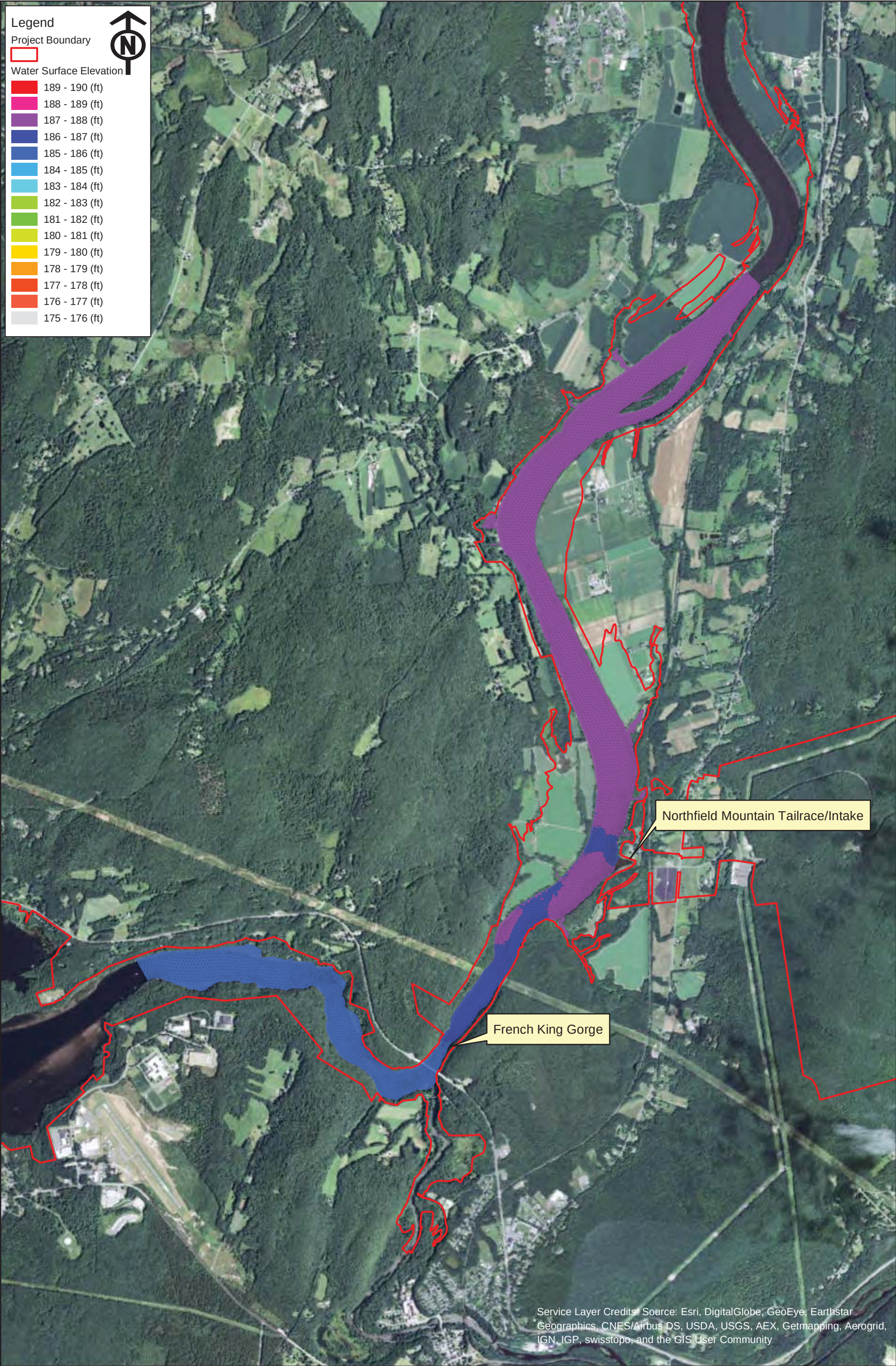
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 37
5% Exceedance Flow (40,100 cfs), 2 Units
Pumping (7,600 cfs), 176 WSEL at Dam



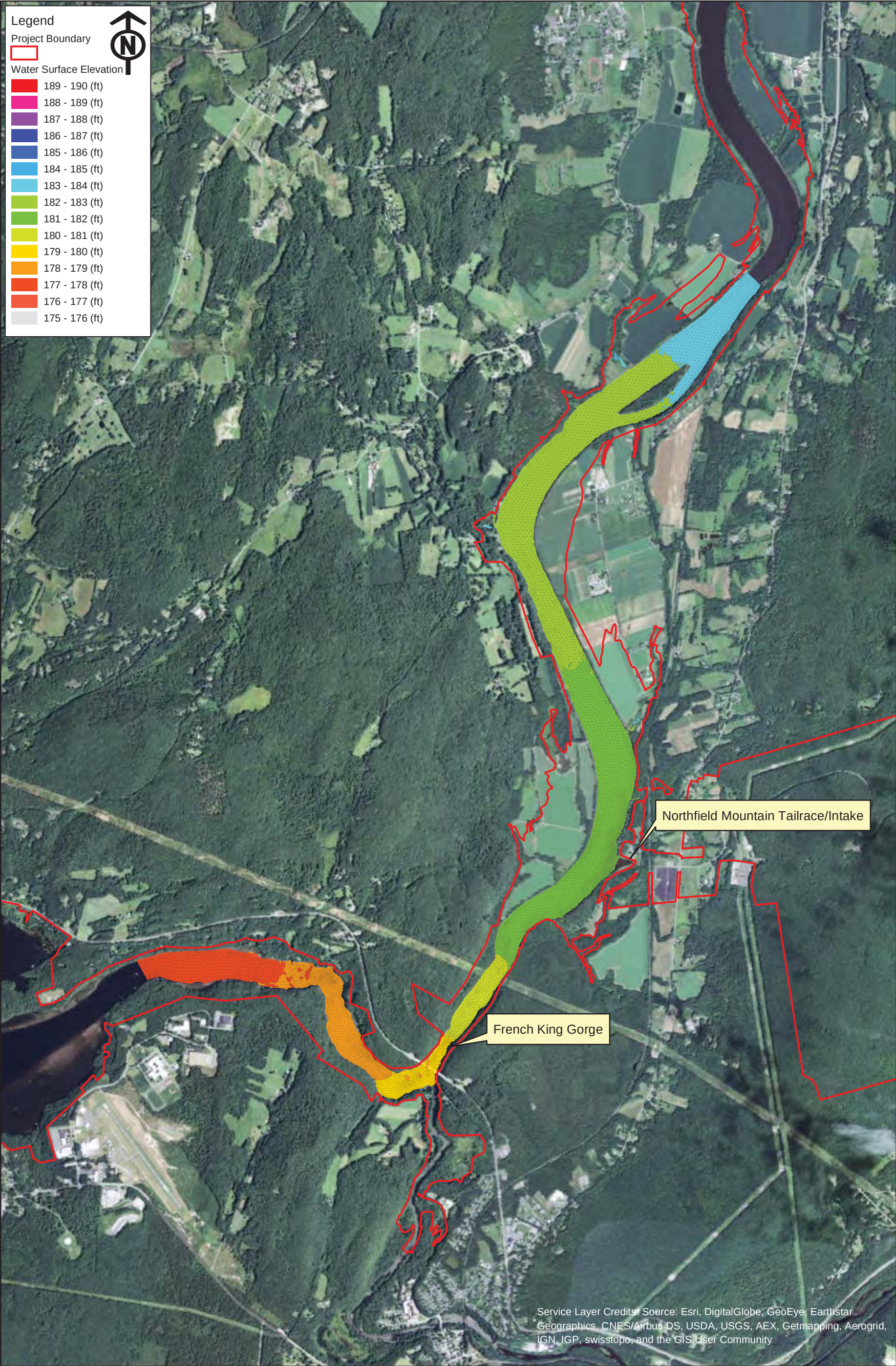
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 38
5% Exceedance Flow (40,100 cfs), 2 Units
Pumping (7,600 cfs), 185 WSEL at Dam



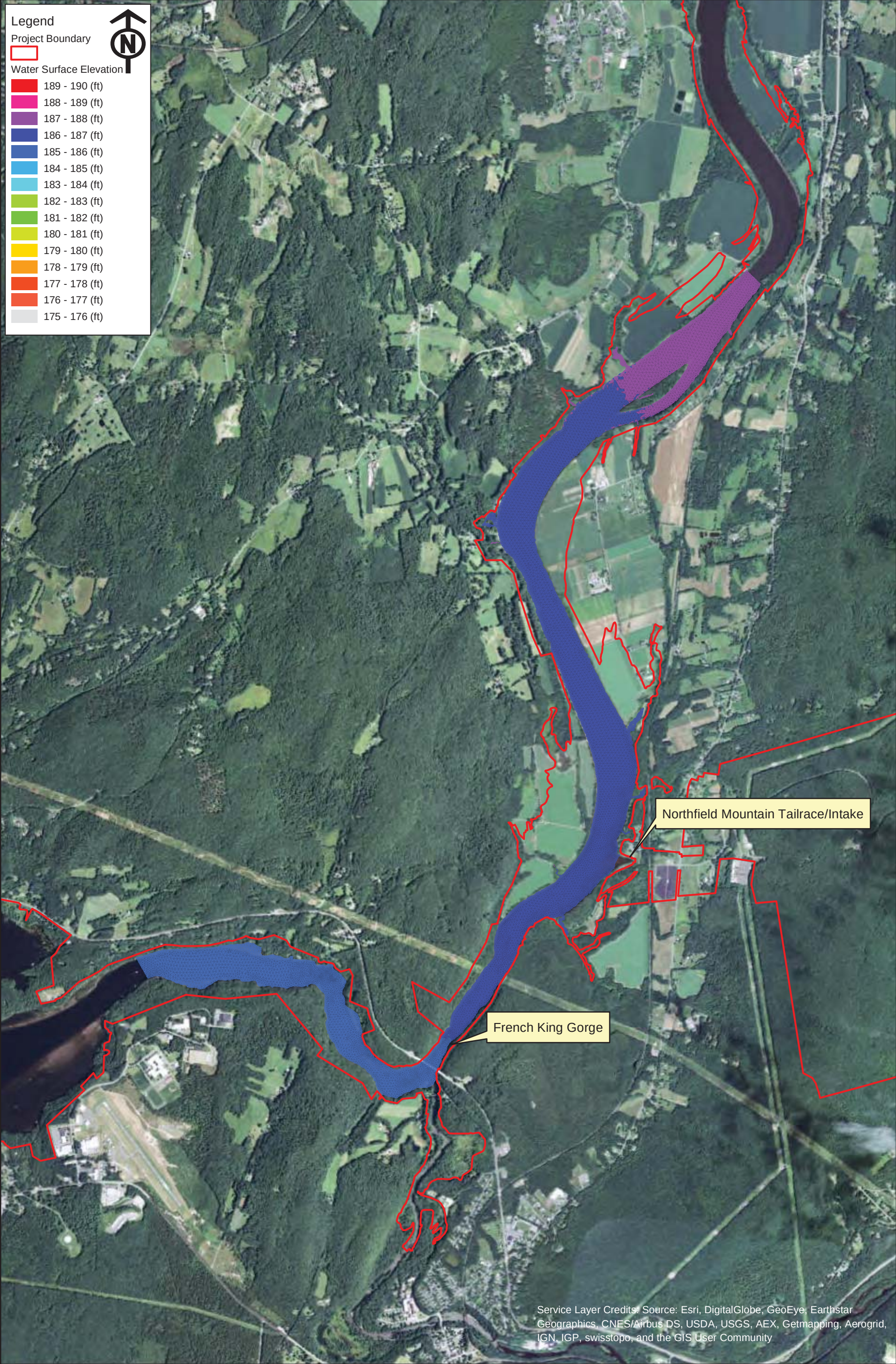
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000
Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 39
5% Exceedance Flow (40,100 cfs), 4 Units
Pumping (15,200 cfs), 176 WSEL at Dam



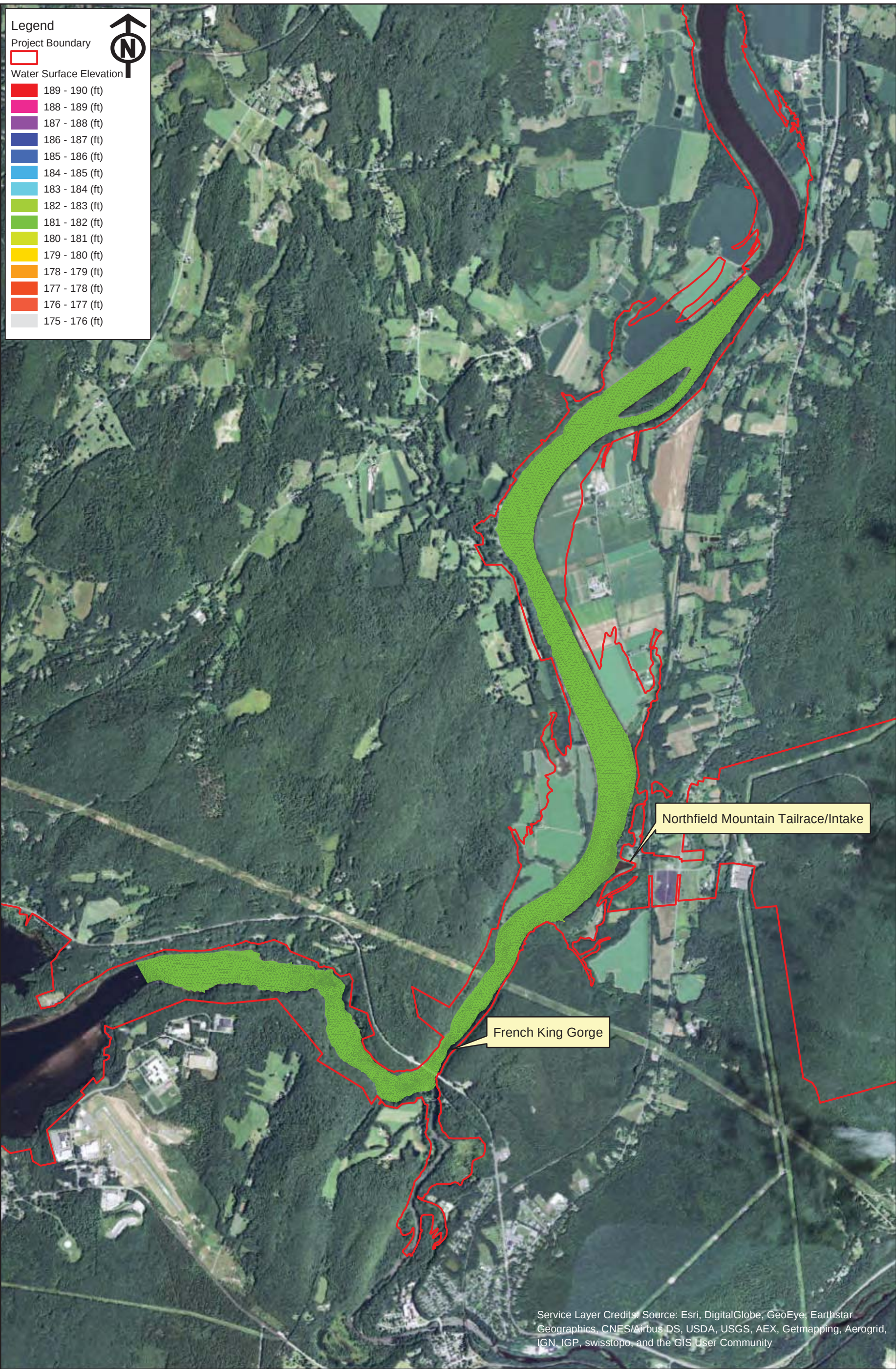
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 40
5% Exceedance Flow (40,100 cfs), 4 Units
Pumping (15,200 cfs), 185 WSEL at Dam



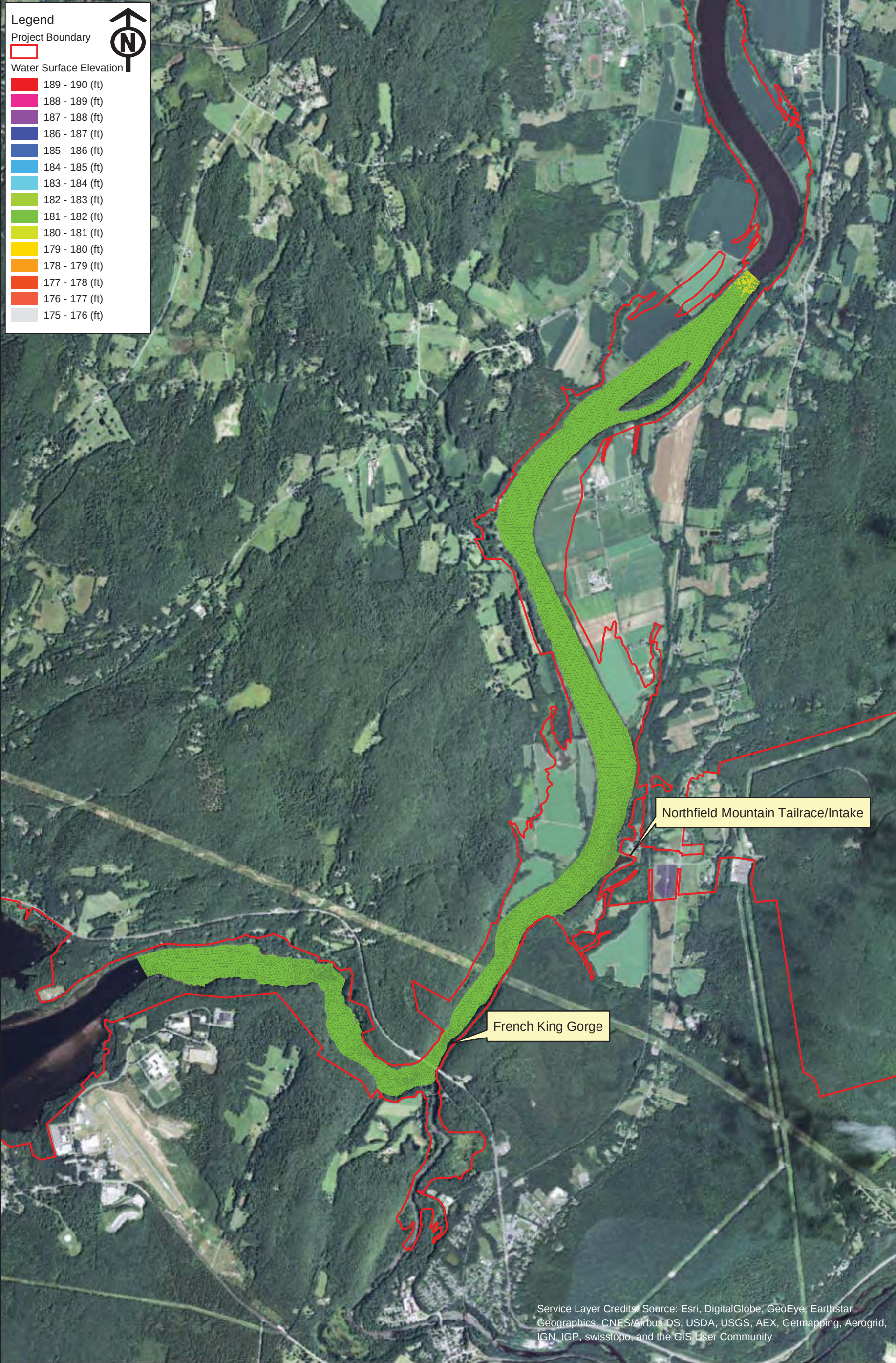
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 41
95% Exceedance Flow (1,760 cfs), 2 Units
Generating (10,000 cfs), 181.3 WSEL at
Dam



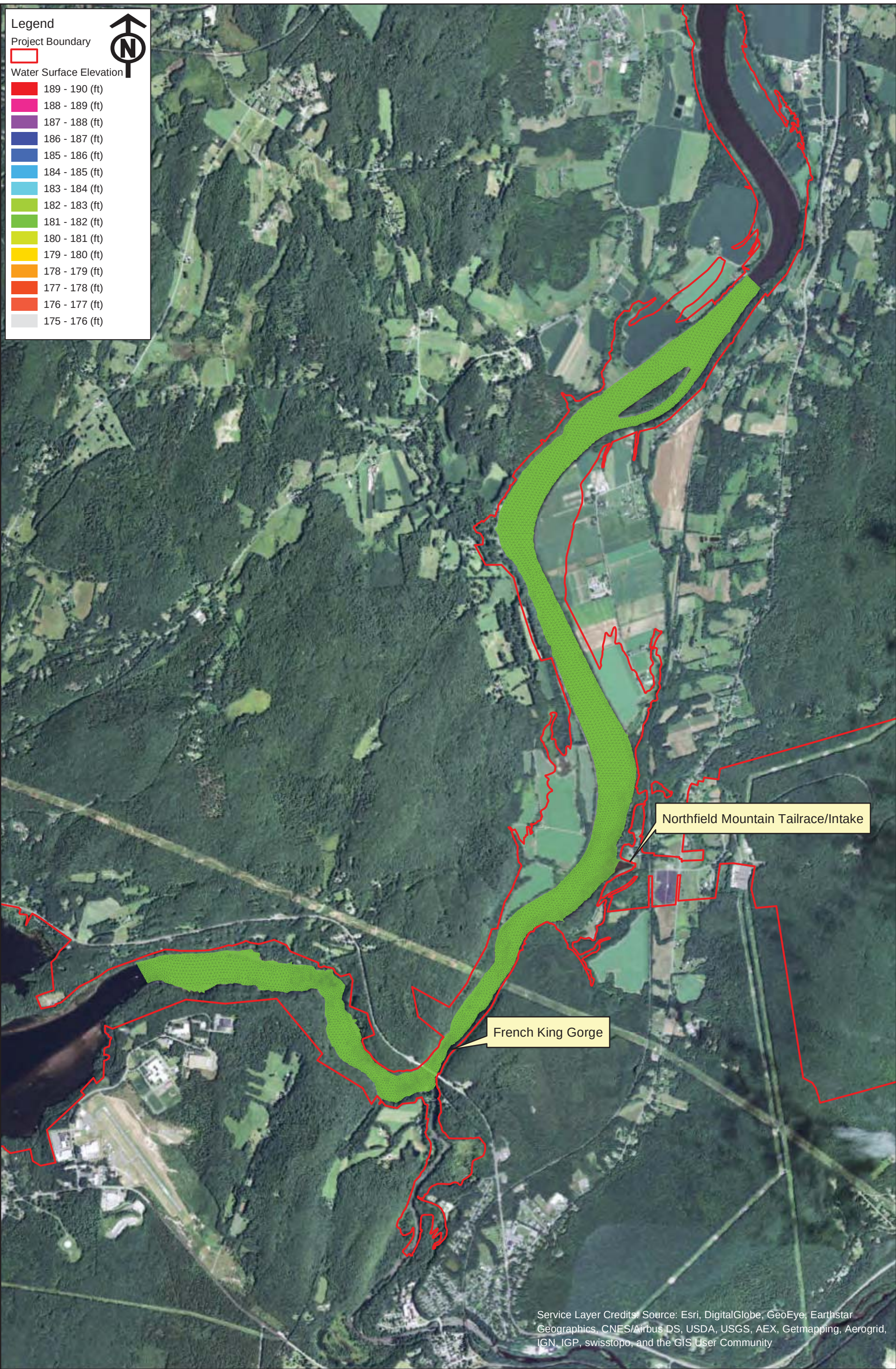
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000
Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 42
95% Exceedance Flow (1,760 cfs), 4 Units
Generating (20,000 cfs), 181.3 WSEL at
Dam



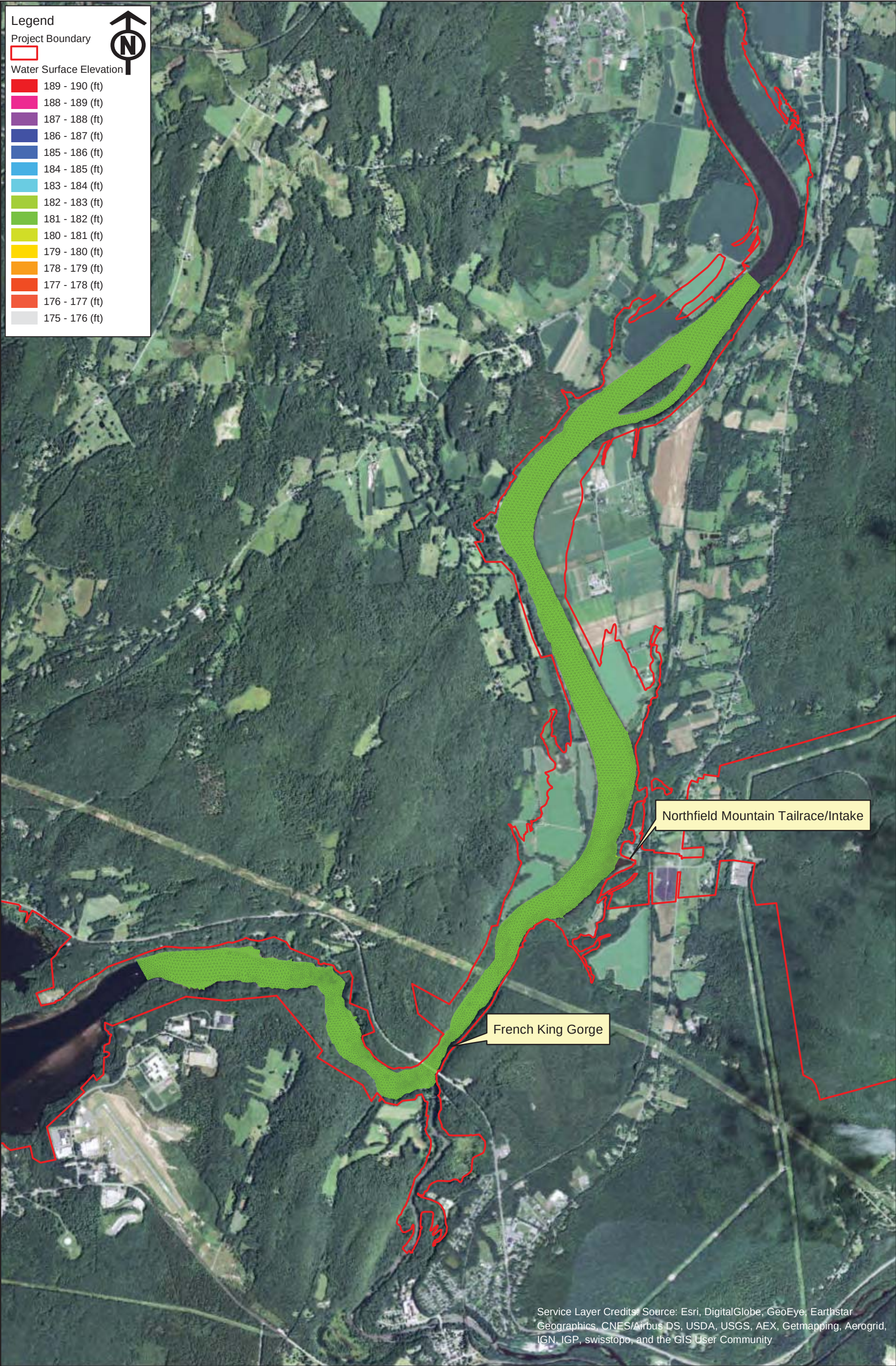
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000
Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 43
95% Exceedance Flow (1,760 cfs), 2 Units
Pumping (7,600 cfs), 181.3 WSEL at Dam



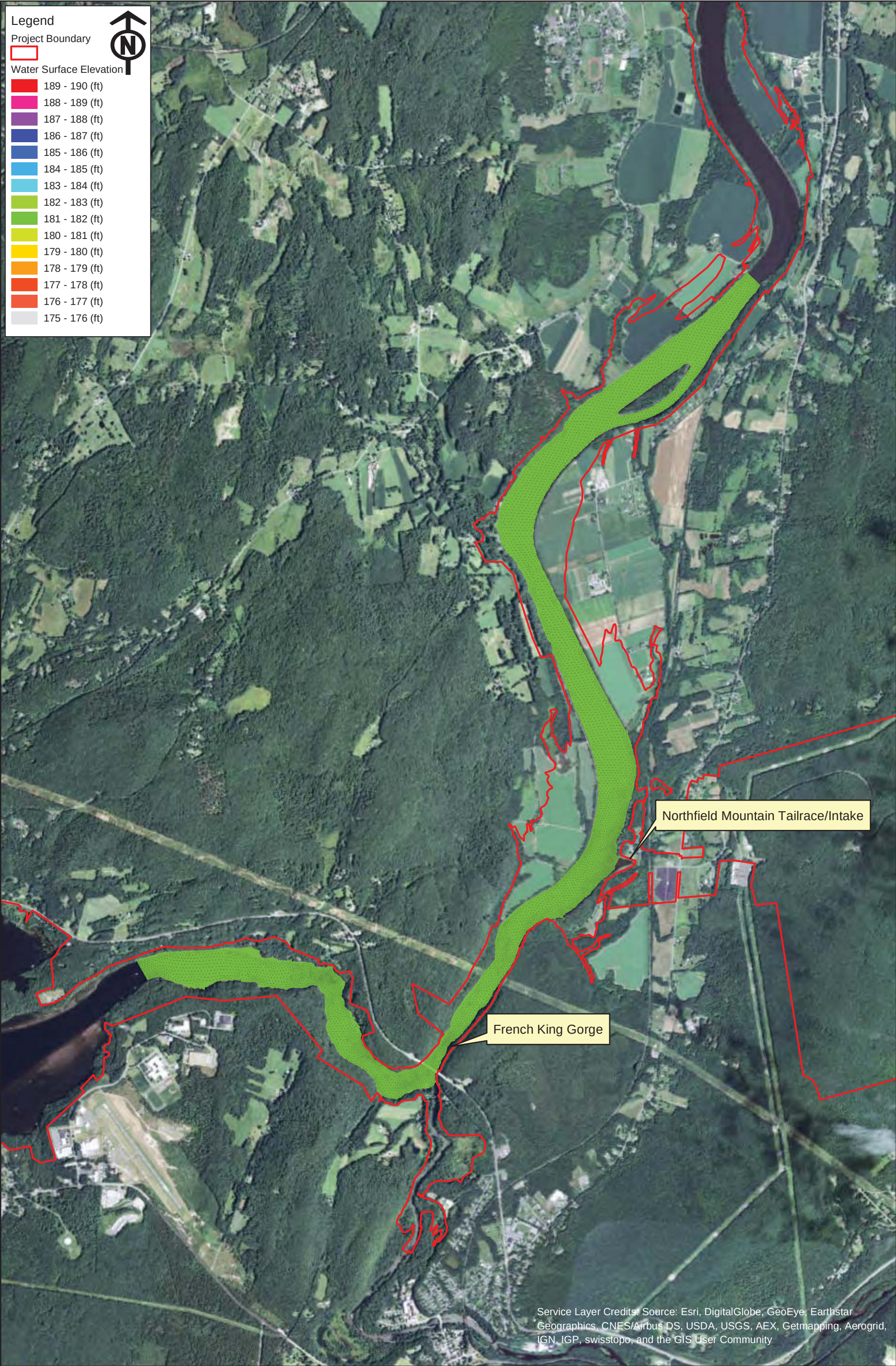
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 44
95% Exceedance Flow (1,760 cfs), 4 Units
Pumping (15,200 cfs), 181.3 WSEL at Dam



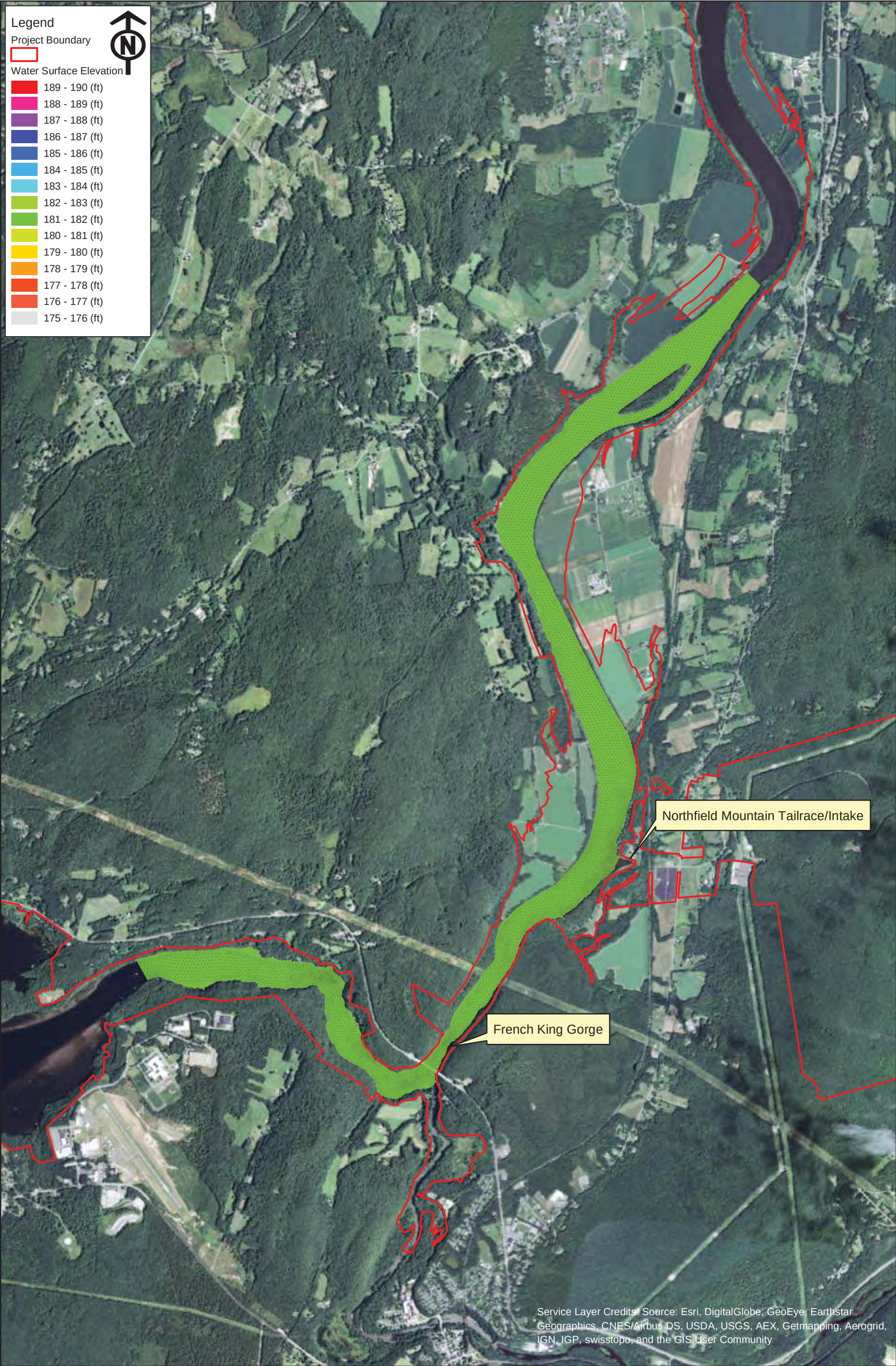
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000
Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 45
75% Exceedance Flow (4,900 cfs), 2 Units
Generating (10,000 cfs), 181.3 WSEL at
Dam



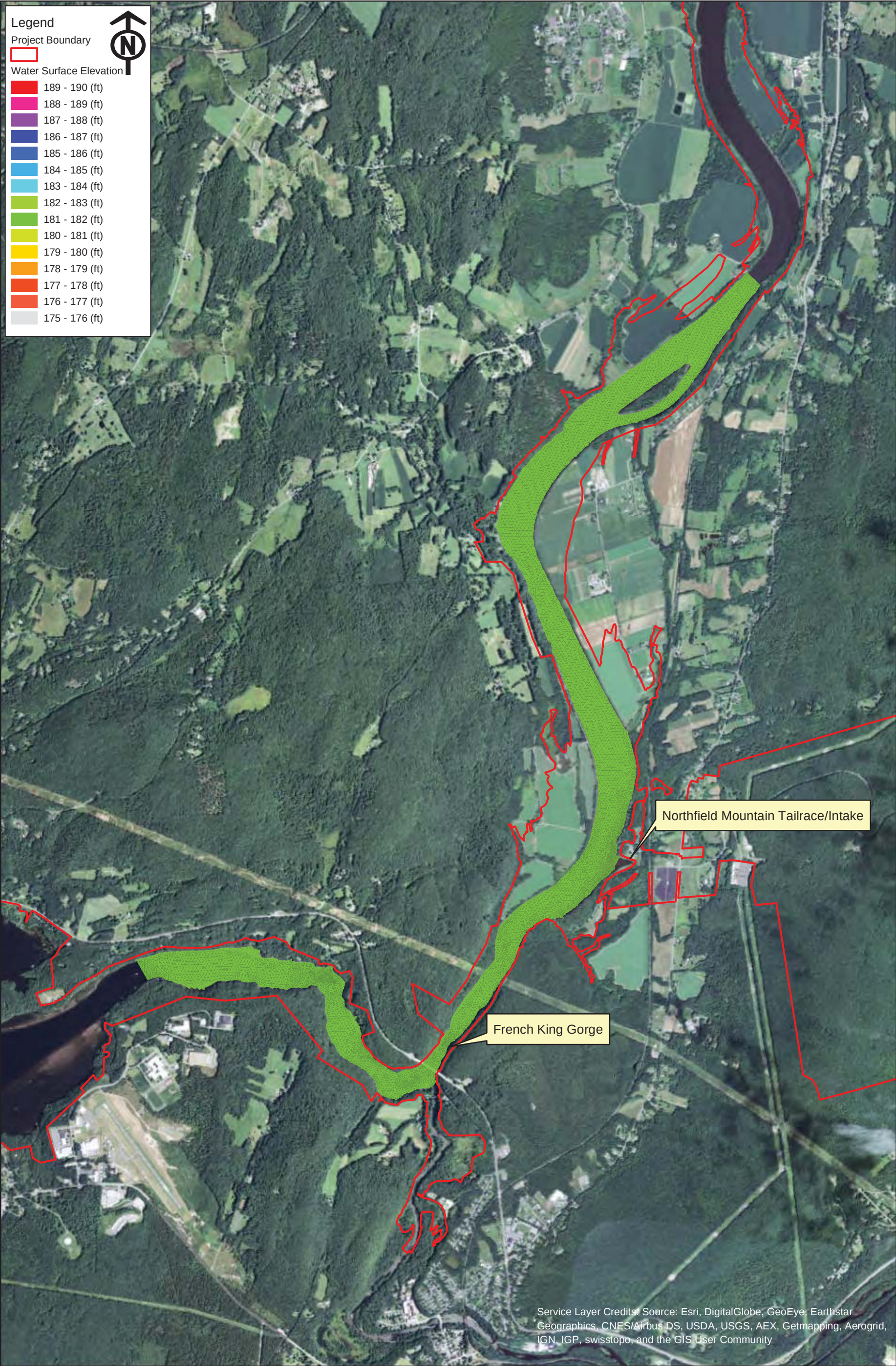
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 46
75% Exceedance Flow (4,900 cfs), 4 Units
Generating (20,000 cfs), 181.3 WSEL at
Dam



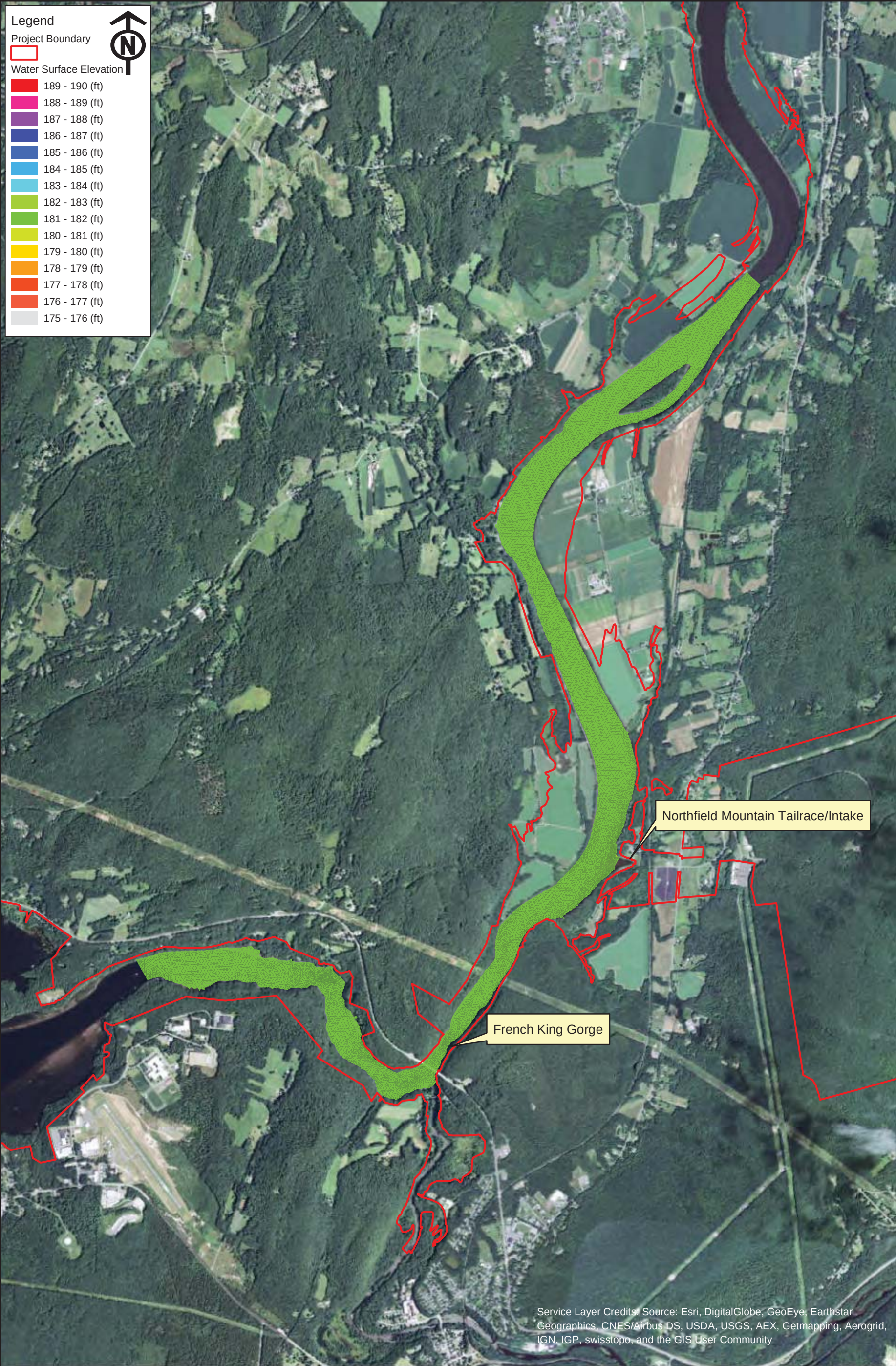
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 47
75% Exceedance Flow (4,900 cfs), 2 Units
Pumping (7,600 cfs), 181.3 WSEL at Dam



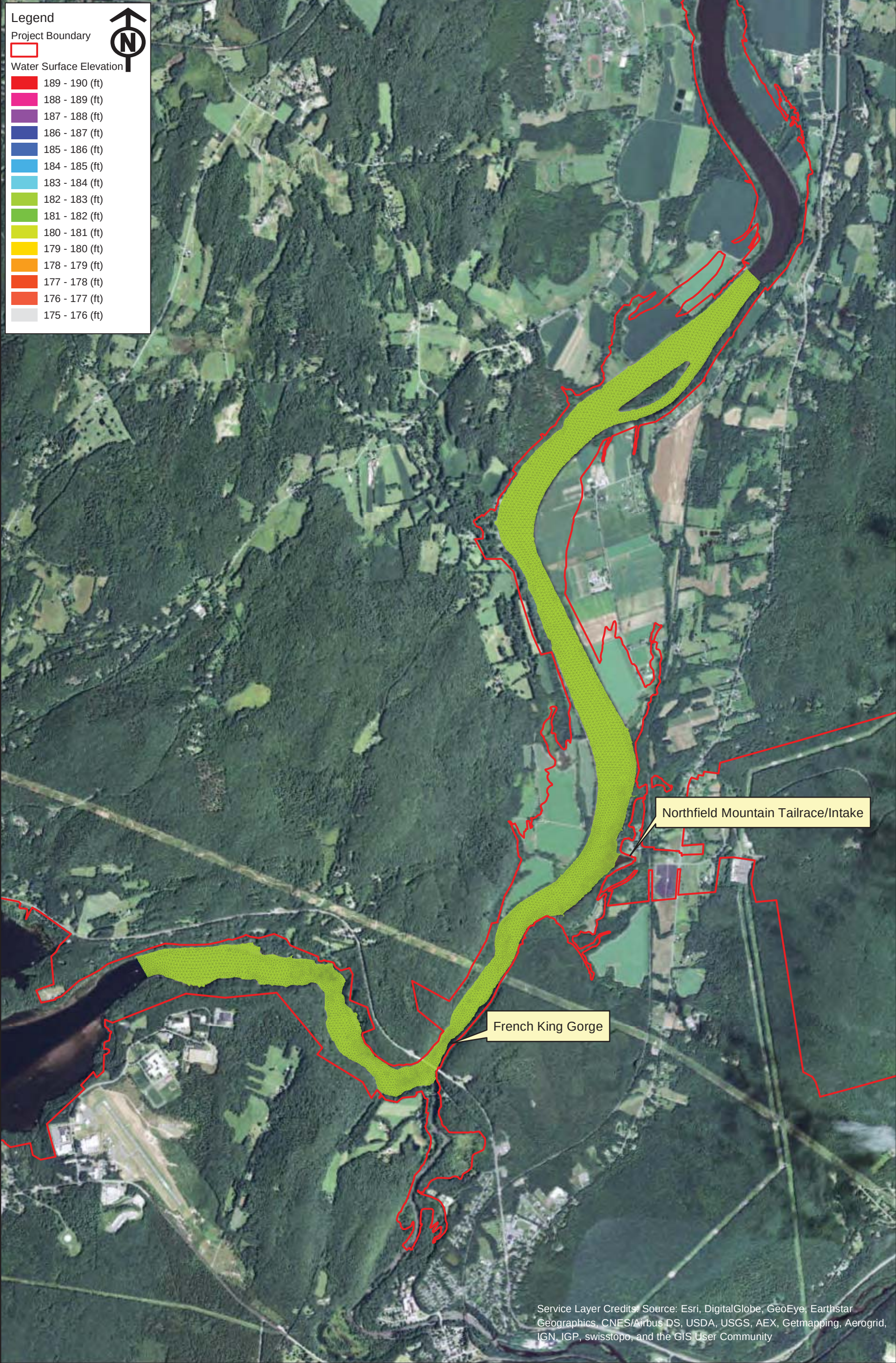
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 48
75% Exceedance Flow (4,900 cfs), 4 Units
Pumping (15,200 cfs), 181.3 WSEL at Dam



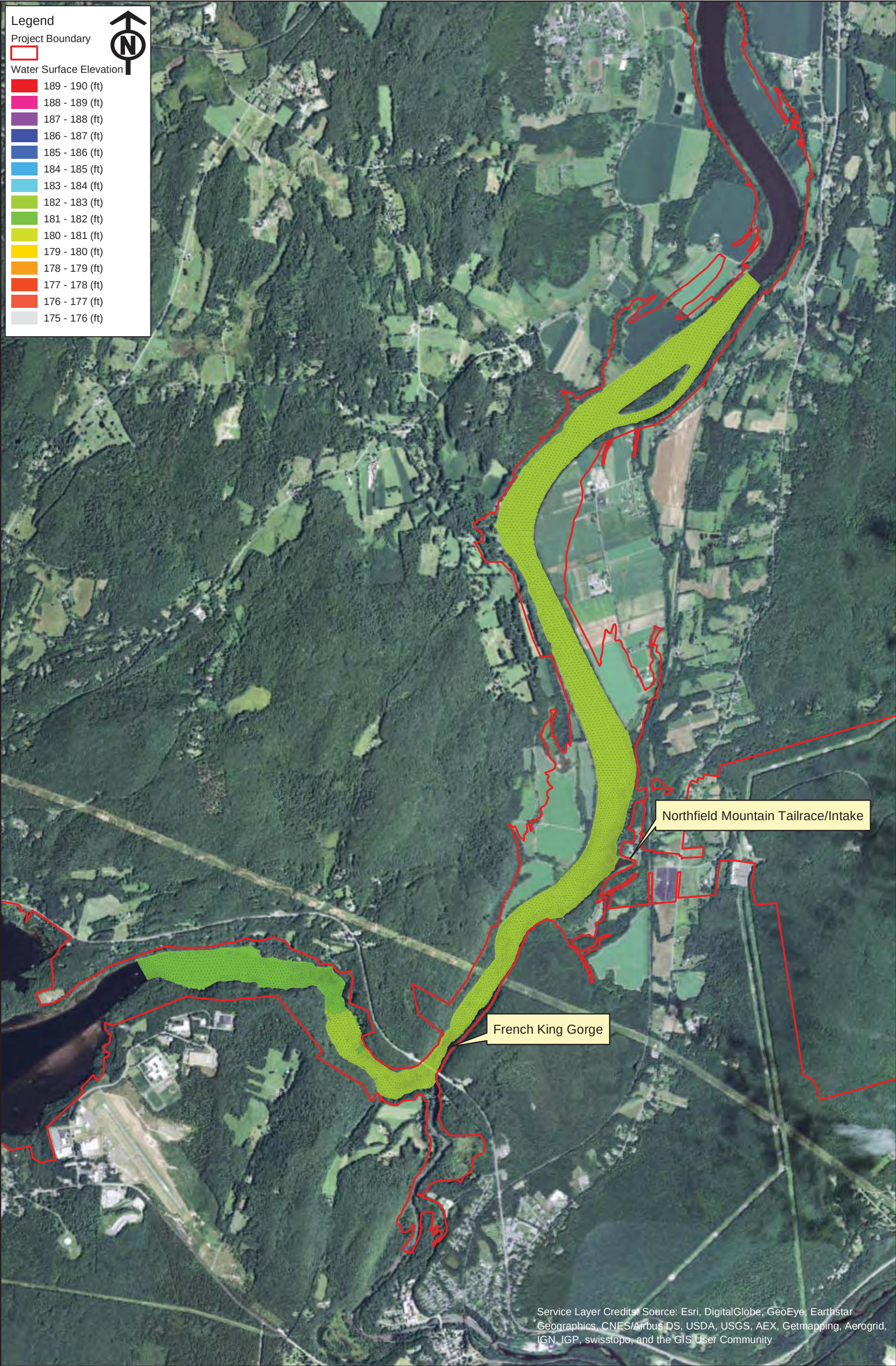
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 49
50% Exceedance Flow (8,440 cfs), 2 Units
Generating (10,000 cfs), 181.3 WSEL at
Dam



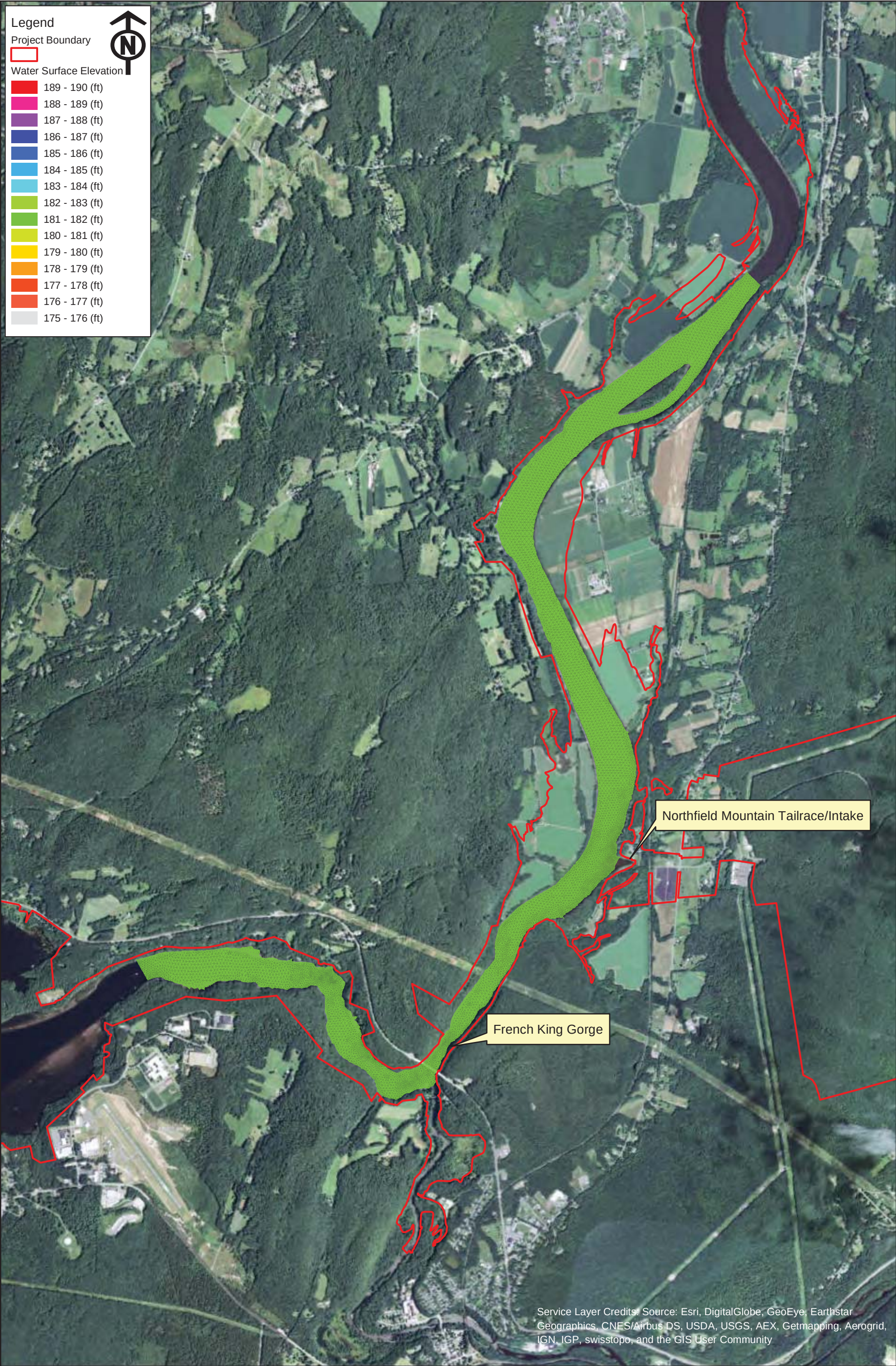
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000
Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 50
50% Exceedance Flow (8,440 cfs), 4 Units
Generating (20,000 cfs), 181.3 WSEL at
Dam



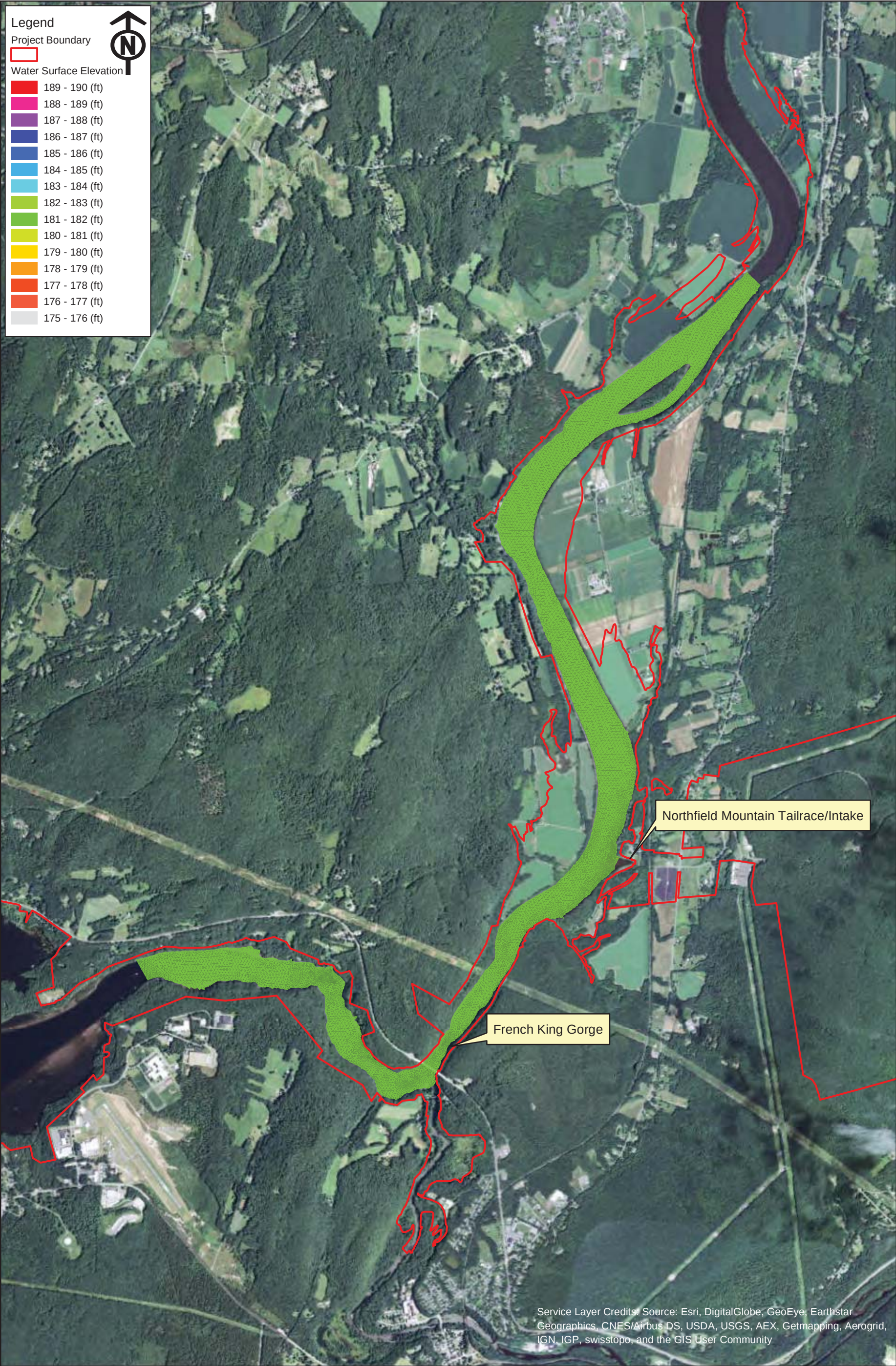
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 51
50% Exceedance Flow (8,440 cfs), 2 Units
Pumping (7,600 cfs), 181.3 WSEL at Dam



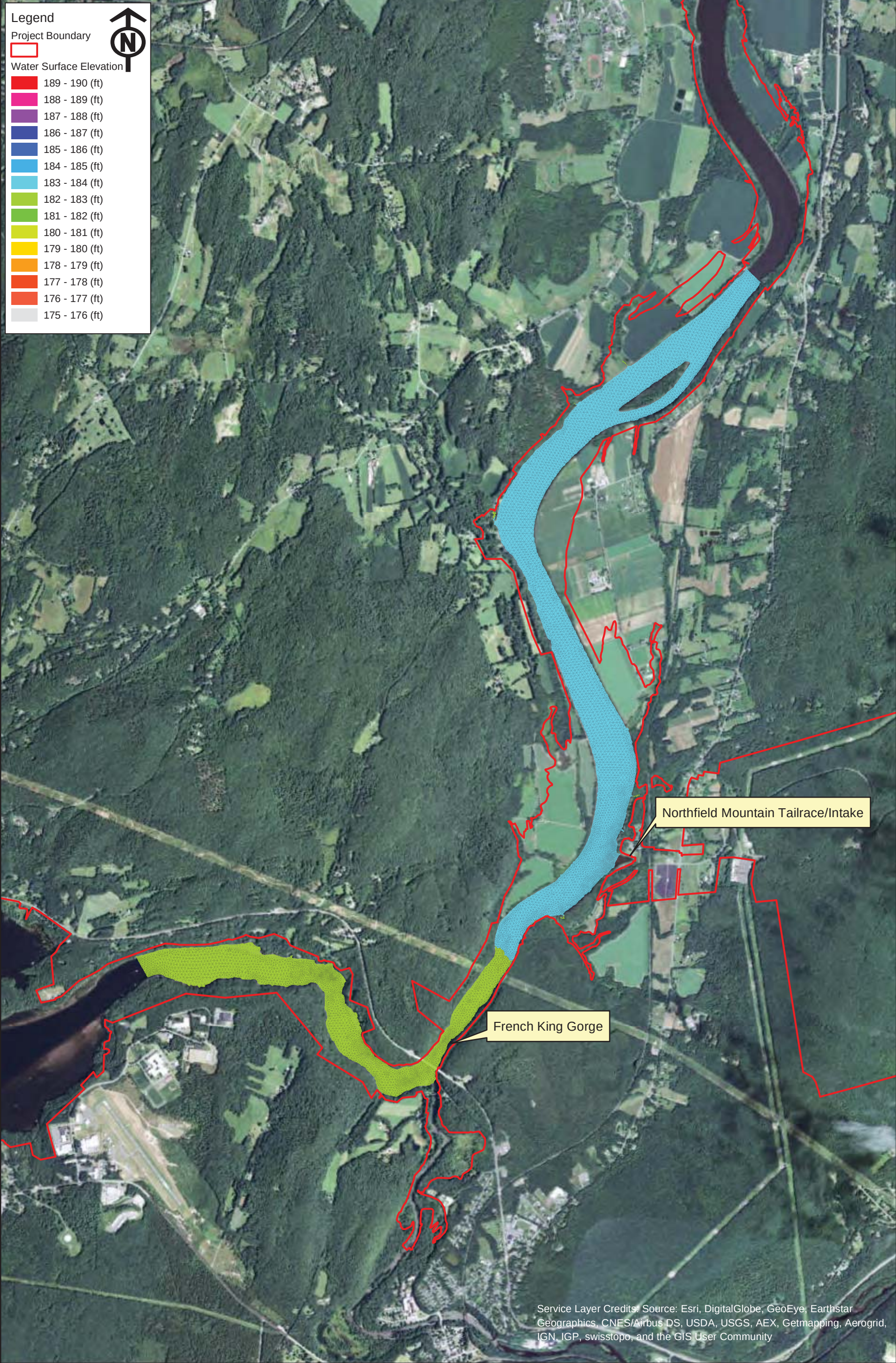
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 52
50% Exceedance Flow (8,440 cfs), 4 Units
Pumping (15,200 cfs), 181.3 WSEL at Dam



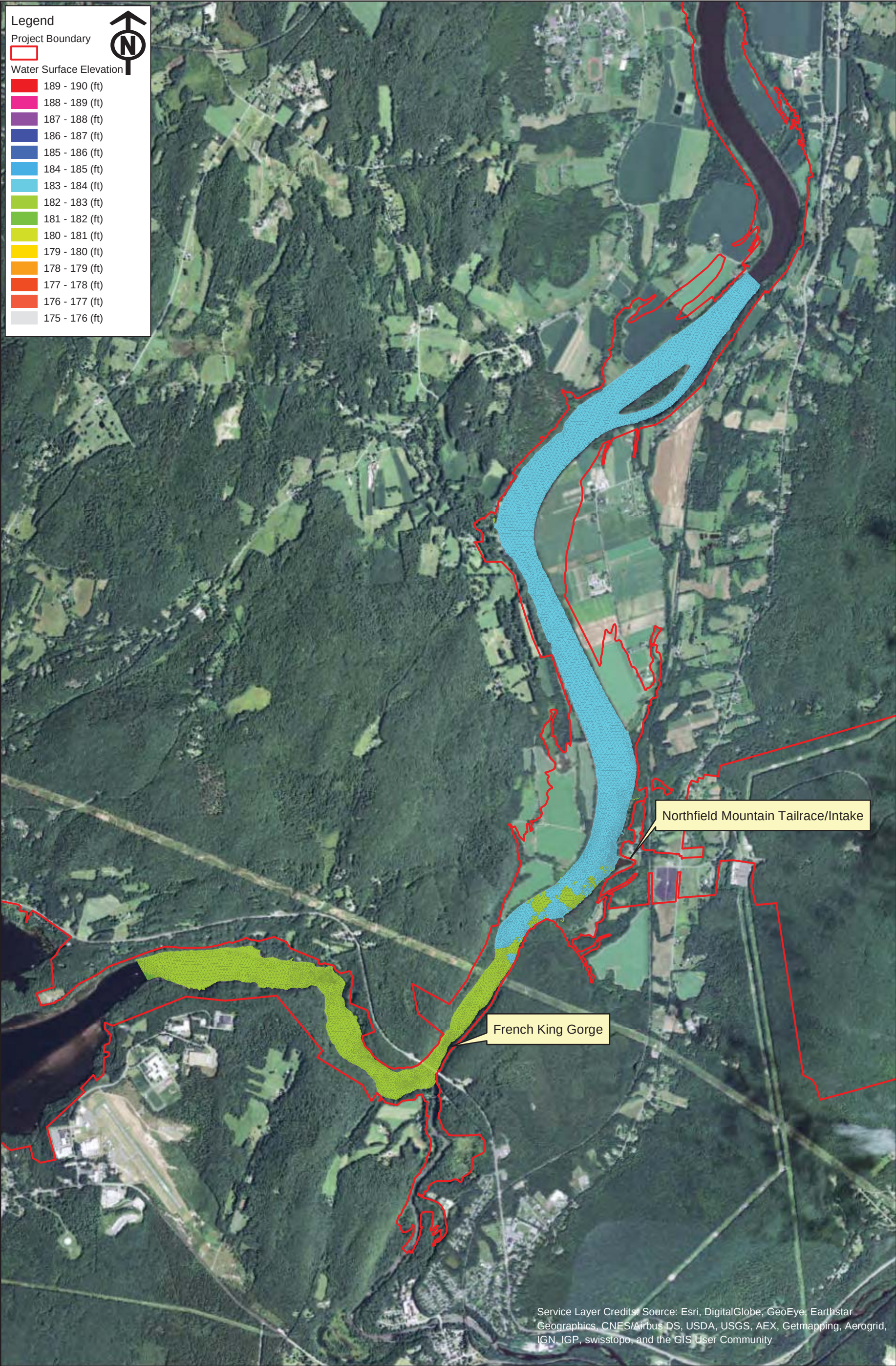
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

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RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000
Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 53
25% Exceedance Flow (15,700 cfs), 2 Units
Generating (10,000 cfs), 181.3 WSEL at
Dam



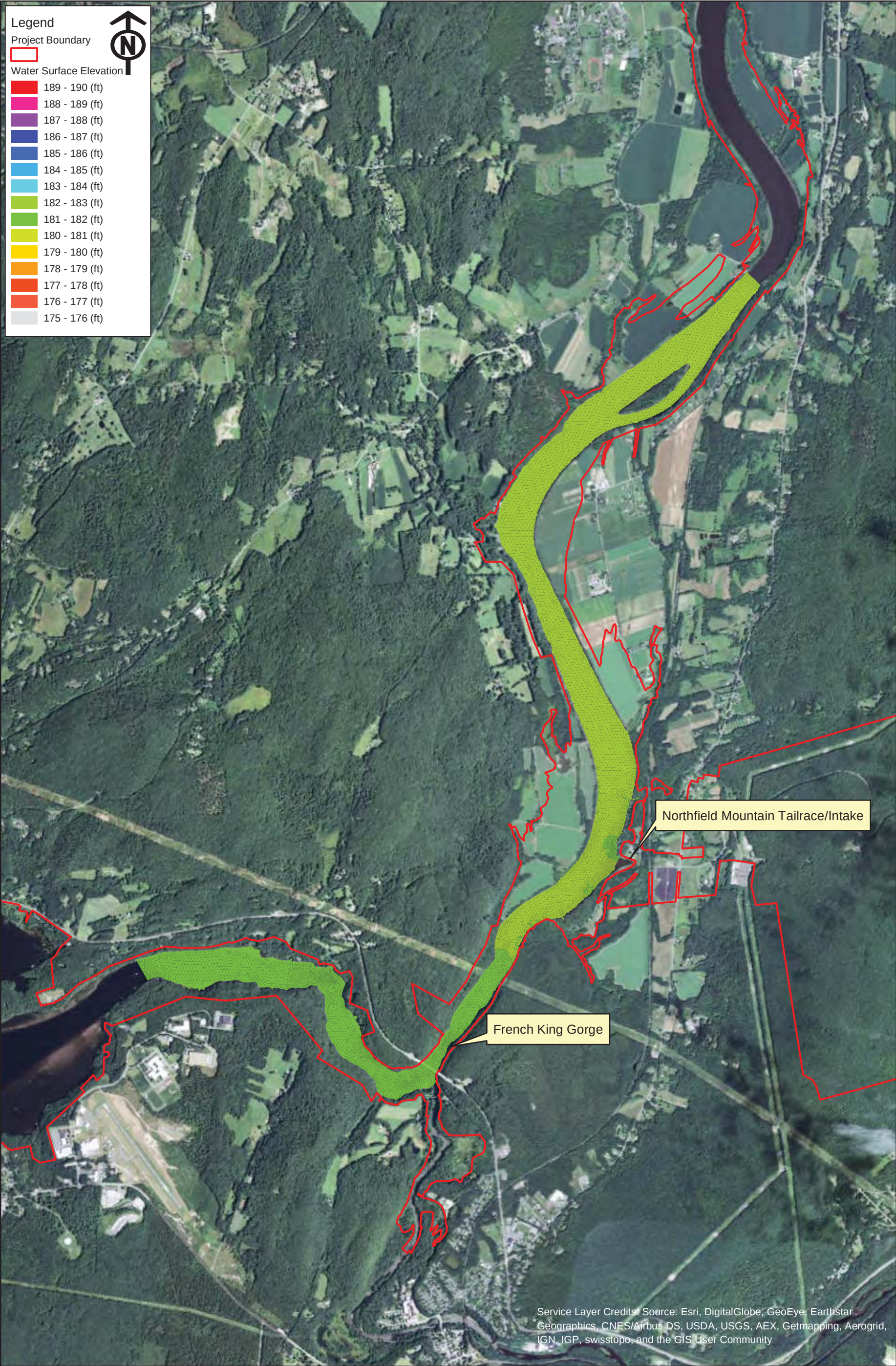
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 54
25% Exceedance Flow (15,700 cfs), 4 Units
Generating (20,000 cfs), 181.3 WSEL at
Dam



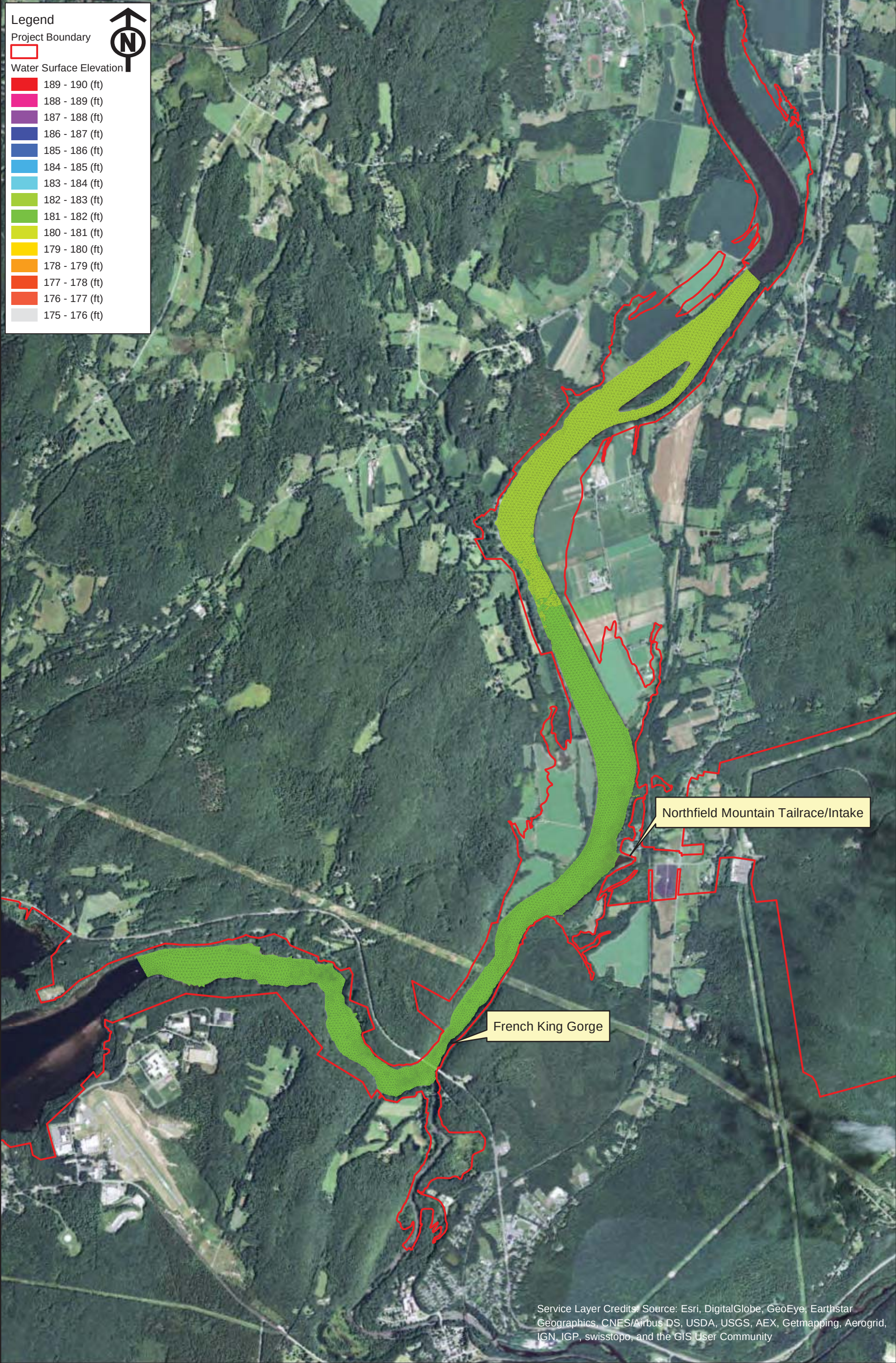
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 55
25% Exceedance Flow (15,700 cfs), 2 Units
Pumping (7,600 cfs), 181.3 WSEL at Dam



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

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 56
25% Exceedance Flow (15,700 cfs), 4 Units
Pumping (15,200 cfs), 181.3 WSEL at Dam

Legend

Project Boundary

Water Surface Elevation

189 - 190 (ft)

188 - 189 (ft)

187 - 188 (ft)

186 - 187 (ft)

185 - 186 (ft)

184 - 185 (ft)

183 - 184 (ft)

182 - 183 (ft)

181 - 182 (ft)

180 - 181 (ft)

179 - 180 (ft)

178 - 179 (ft)

177 - 178 (ft)

176 - 177 (ft)

175 - 176 (ft)

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

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GDF SUEZ

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

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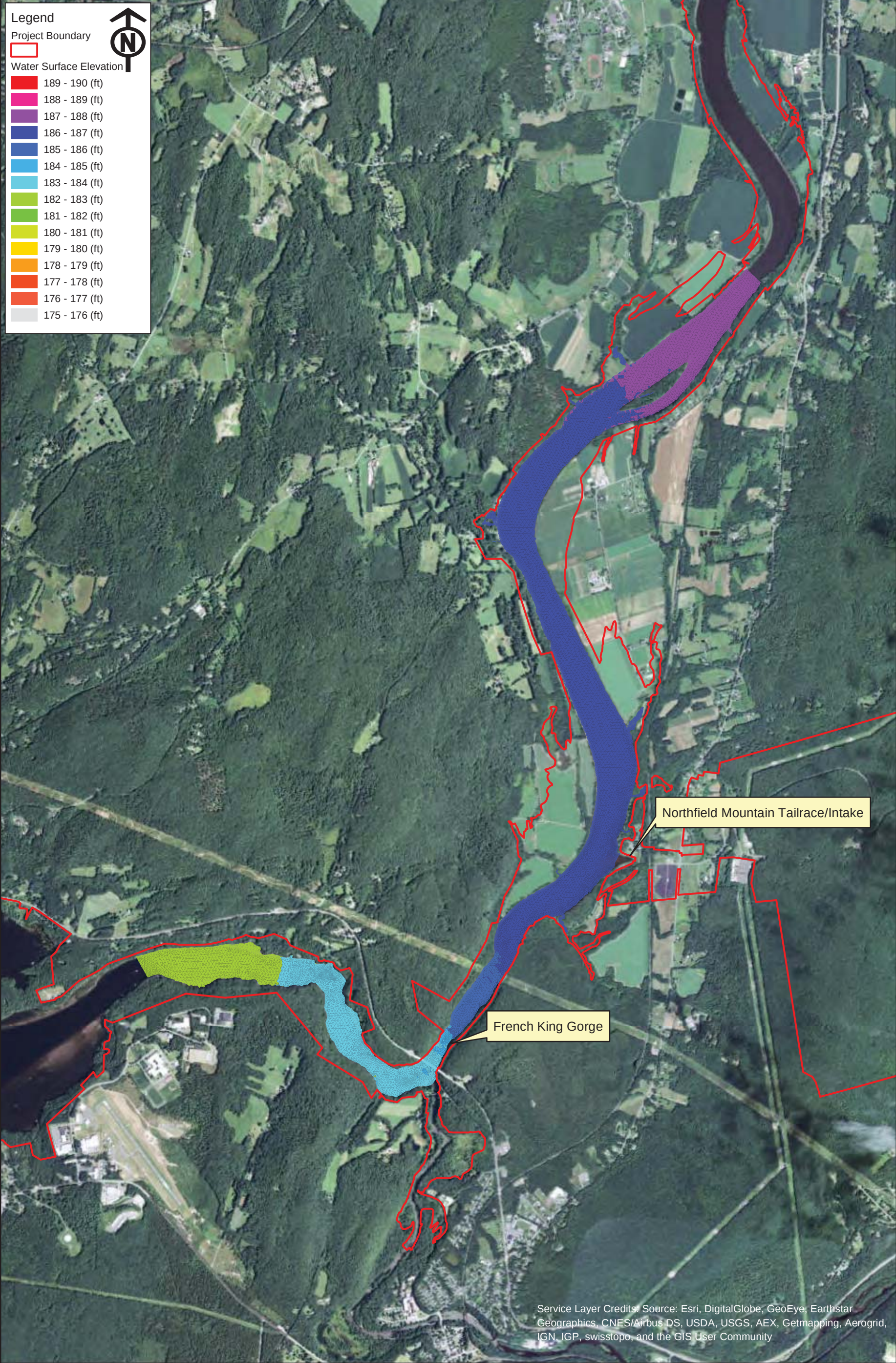
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Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 57
5% Exceedance Flow (40,100 cfs), 2 Units
Generating (10,000 cfs), 181.3 WSEL at
Dam

Path: W:\gis\studies\3_3_09\mapslappendix_b\water_surface.mxd



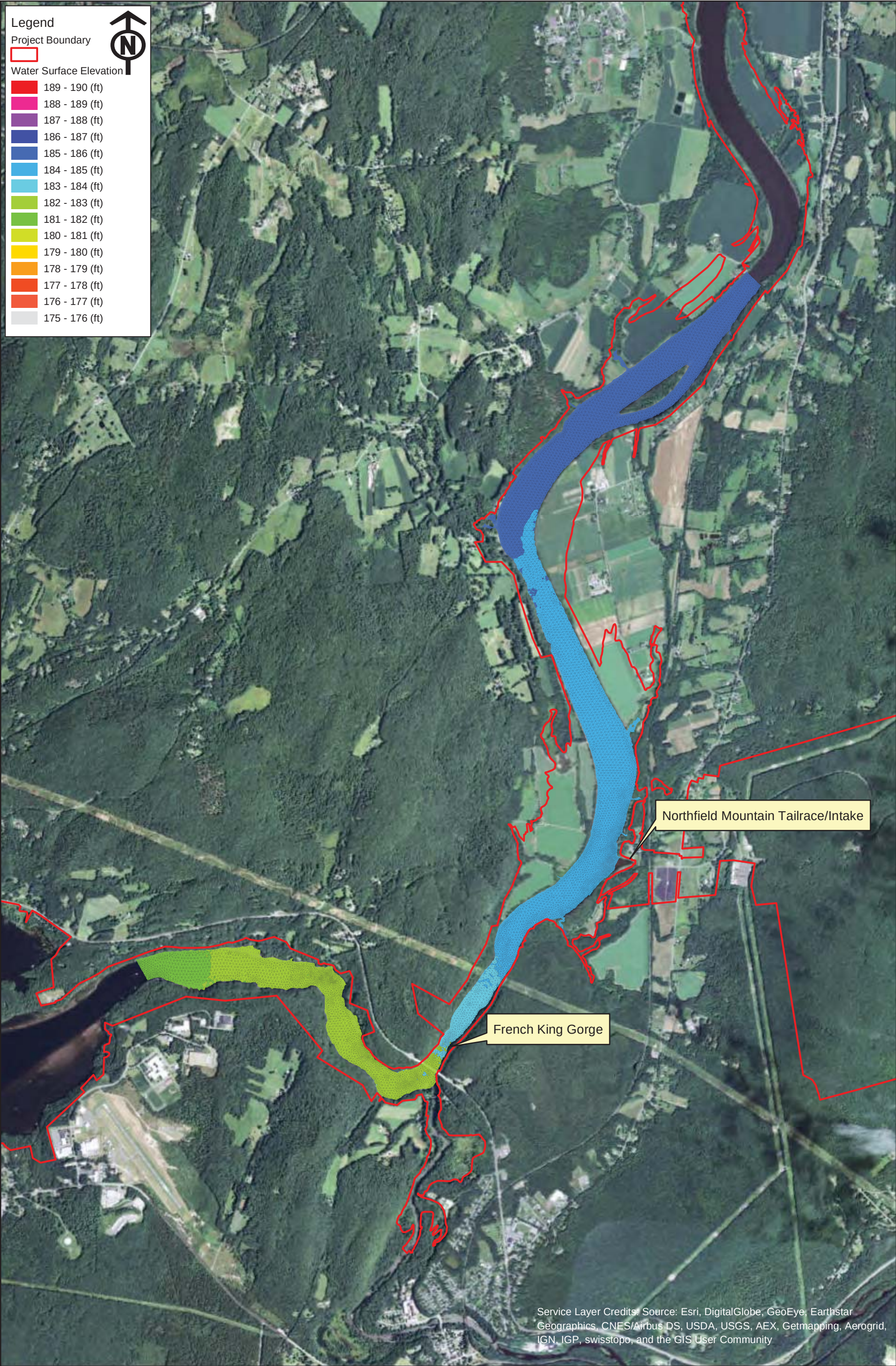
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

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RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000
Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 58
5% Exceedance Flow (40,100 cfs), 4 Units
Generating (20,000 cfs), 181.3 WSEL at
Dam



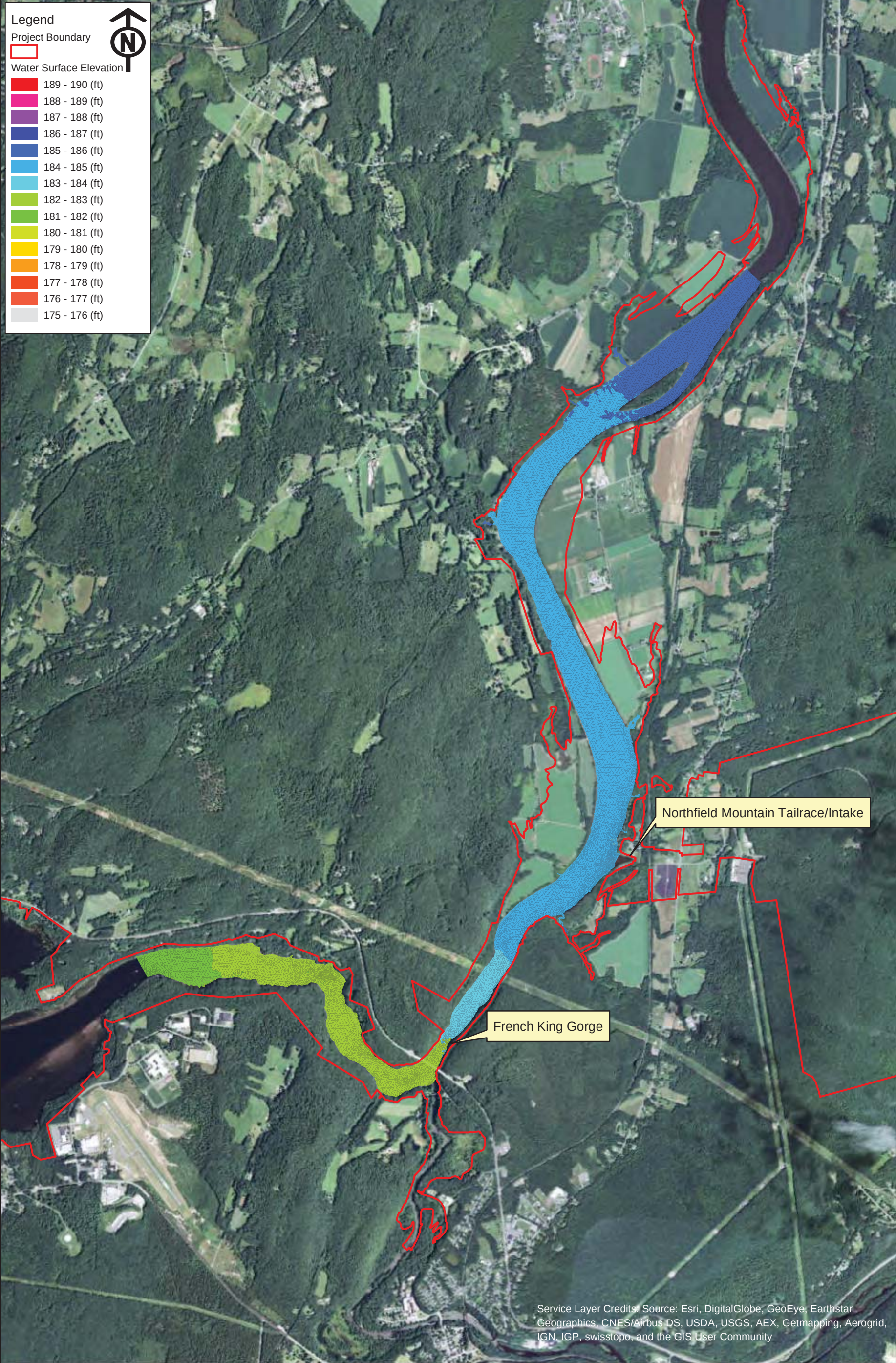
Northfield Mountain Pumped Storage Project (No. 2485)
and Turners Falls Hydroelectric Project (No. 1889)

STUDY REPORT
RELICENSING STUDY 3.3.9



Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 59
5% Exceedance Flow (40,100 cfs), 2 Units
Pumping (7,600 cfs), 181.3 WSEL at Dam



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

STUDY REPORT
RELICENSING STUDY 3.3.9

0 1,000 2,000 4,000 Feet

Appendix B - Water Surface Elevation in the
Turner Falls Impoundment 5 km Upstream and
5 km Downstream of the Northfield Tailrace

Scenario 60
5% Exceedance Flow (40,100 cfs), 4 Units
Pumping (15,200 cfs), 181.3 WSEL at Dam