

2014 ISINGLASS RIVER WATERSHED VRAP DATA

	Measurements not meeting New Hampshire surface water quality standards
	Measurements not meeting NHDES quality assurance/quality control standards

^A Specific conductance > 835 $\mu\text{S}/\text{cm}$ indicate exceedance of chronic chloride standard of 230 mg/L

^B Chronic water quality standard

^C Calculated using 1/2 of the 0.25 mg/L detection limit of Total Kjeldahl Nitrogen (0.125 mg/L) and/or 1/2 of the 0.050 mg/L detection limit of Nitrate+Nitrite (0.025 mg/L)

11-ISG, Isinglass River, Route 202A Bridge, Strafford

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance ($\mu\text{S}/\text{cm}$)	Water Temp. ($^{\circ}\text{C}$)	Chloride (mg/L)	Total Phosphorus
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 $\mu\text{S}/\text{cm}$ ^A	NA	<230 mg/L ^B	Narrative
06/08/2014	10:10	7.15	79.5	6.11	1.6	61.3	20.6	9.9	0.0122
07/20/2014	10:20	6.71	77.7	5.87	0.4	55.6	22.7	9.7	0.0094
08/24/2014	10:25	7.98	87.8	6.02	0.6	54.4	20.3	9.9	0.0061
10/05/2014	10:20	8.10	78.8	6.05	0.6	60.7	14.2		

08-ISG, Isinglass River, Route 126 Bridge, Barrington

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance ($\mu\text{S}/\text{cm}$)	Water Temp. ($^{\circ}\text{C}$)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 $\mu\text{S}/\text{cm}$ ^A	NA
06/08/2014	9:35	7.52	81.4	5.97	2.6	82.2	19.5
07/20/2014	10:04	6.20	69.9	5.73	1.2	67.5	21.3
08/24/2014	9:56	7.91	83.7	5.65	2.1	69.6	18.4
10/05/2014	10:03	8.48	83.1	5.98	2.3	77.6	14.6

07T-ISG, Isinglass River, Route 126, Barrington - NHDES Trend Site

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance ($\mu\text{S}/\text{cm}$)	Water Temp. ($^{\circ}\text{C}$)	Chloride (mg/L)	<i>E. coli</i> (CTS/100mL)	<i>E. coli</i> Geometric Mean
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 $\mu\text{S}/\text{cm}^{\text{A}}$	NA	<230 mg/L ^B	<406	<126
01/29/2014	9:45	12.73	87.5	5.25	0.6	73.3	0.1	12		
06/27/2014	9:15	6.88	74.6	5.04	1.5	75.4	19.3	15	770	
07/18/2014	10:05	7.13	80.5	5.52	1.4	64.6	21.3	12	90	
08/22/2014	9:53	7.35	78.7	5.79	1.2	68.4	18.6	12	50	151

Date	Time of Sample	Total Phosphorus	Total Kjeldahl Nitrogen (TKN) (mg/L)	Nitrite (NO_2) + Nitrate (NO_3) (mg/L)	Total Nitrogen (mg/L)
Standard	NA	Narrative	Narrative	Narrative	Narrative
01/29/2014	9:45	0.0102	ND	0.073	0.198 ^C
06/27/2014	9:15	0.0316	0.490	ND	0.515 ^C
07/18/2014	10:05	0.0194	0.290	ND	0.315 ^C
08/22/2014	9:53	0.0246	0.360	0.440	0.800

07-ISG, Isinglass River, Route 202 Bridge, Barrington

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (µS/cm)	Water Temp. (°C)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA
06/08/2014	9:18	8.33	86.6	6.32	2.1	86.1	19.5
07/20/2014	9:45	7.79	87.7	5.96	0.7	70.1	21.4
08/24/2014	9:35	9.20	96.2	6.04	1.1	72.0	17.7
10/05/2014	9:39	8.88	86.1	6.20	0.7	88.5	13.9

04-ISG, Isinglass River, Green Hill Road Bridge, Barrington

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (µS/cm)	Water Temp. (°C)	Chloride (mg/L)	Total Phosphous
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA	<230 mg/L ^B	Narrative
06/08/2014	9:03	7.77	87.6	6.29	2.3	92.7	20.2	20	0.0187
07/20/2014	9:20	8.05	91.7	6.09	2.2	73.2	21.8	16	0.0199
08/24/2014	9:15	9.42	99.7	6.18	0.9	76.1	18.3	16	0.0171
10/05/2014	9:20	9.81	94.3	6.28	1.0	108.7	13.4		

03-ISG, Isinglass River, Route 125 Bridge, Rochester

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance ($\mu\text{S}/\text{cm}$)	Water Temp. ($^{\circ}\text{C}$)	Chloride (mg/L)	Total Phosphorus
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 $\mu\text{S}/\text{cm}^{\text{A}}$	NA	<230 mg/L ^B	Narrative
06/08/2014	8:45	8.06	89.3	5.97	2.3	103.3	19.5	22	0.0241
07/20/2014	9:00	7.44	83.8	6.02	2.9	80.8	21.3	17	0.0218
08/24/2014	8:50	8.37	89.0	5.90	0.2	86.7	18.4	18	0.0182
10/05/2014	9:00	7.21	69.6	5.97	2.2	125.0	13.7		

02-ISG, Isinglass River, Rochester Neck Road Bridge, Rochester NHDES Trend Site

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance (µS/cm)	Water Temp. (°C)	Chloride (mg/L)	<i>E. coli</i> (CTS/100mL)	<i>E. coli</i> Geometric Mean
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 µS/cm ^A	NA	<230 mg/L ^B	<406	<126
01/29/2014	11:35	14.75	101.1	5.60	0.2	91.2	0.1	15		
06/08/2014	8:15	8.39	89.3	6.21	2.6	112.6	18.5	22		
06/27/2014	10:30	8.70	94.3	6.28	2.2	83.6	20.3	18	980	
07/18/2014	11:30	8.30	96.3	5.86	2.4	79.7	22.8	15	40	
07/20/2014	8:40	8.22	92.8	5.99	4.2	83.5	21.2			
08/22/2014	10:45	8.29	89.2	6.30	2.2	98.4	18.8	19	190	195
08/24/2014	8:35	9.92	104.5	6.17	2.0	95.7	17.4			
10/05/2014	8:40	8.85	84.5	6.14	2.7	145.5	13.5			

Date	Time of Sample	Total Phosphous	Total Kjehldahl Nitrogen (TKN) (mg/L)	Nitrite (NO ₂) + Nitrate (NO ₃) (mg/L)	Total Nitrogen (mg/L)
Standard	NA	Narrative	Narrative	Narrative	Narrative
01/29/2014	11:35	0.0115	ND	0.097	0.222 ^C
06/08/2014	8:15	0.0258			
06/27/2014	10:30	0.0300	0.480	ND	0.505 ^C
07/18/2014	11:30	0.0221	0.370	ND	0.395 ^C
08/22/2014	10:45	0.0232	0.330	0.110	0.440