

2013 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. ($^{\circ}\text{C}$)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 $\mu\text{S}/\text{cm}^{\text{A}}$	NA
06/23/2013	10:54	7.01	81.1	5.81	1.20	53.9	22.9
07/21/2013	10:17	6.14	75.2	5.82	0.91	54.3	25.4
08/18/2013	10:18	8.79	99.3	6.01	0.60	52.8	21.4

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 $\mu\text{S}/\text{cm}^{\text{A}}$	NA
05/19/2013	10:10	7.98	80.9	5.84	1.13	70.3	15.6
06/23/2013	10:33	7.23	81.4	5.69	3.07	60.2	21.3
07/21/2013	9:53	6.09	73.7	5.74	3.61	61.2	25.2
08/18/2013	9:58	7.67	84.9	6.27	2.12	64.3	20.4

07T-ISG, Isinglass River, Route 126, Barrington

Date	Time of Sample	DO (mg/L)	DO (% sat.)	pH	Turbidity (NTUs)	Specific Conductance ($\mu\text{S}/\text{cm}$)	Water Temp. ($^{\circ}\text{C}$)	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
06/17/2013	12:00	8.46	91.7	5.51	0.79	56.6	19.2	8.3	70	
07/12/2013	9:10	6.74	77.2	5.51	1.77	61.3	22.0	9	130	
08/09/2013	9:15	6.97	79.5	5.76	0.89	63.9	21.9	11	30	65
10/11/2013	11:30	8.23	77.1	5.91	1.68	74.8	12.5	16	30	

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
06/17/2013	12:00	0.0144	0.25	ND	0.275 ^C
07/12/2013	9:10	0.0286	0.35		
08/09/2013	9:15	0.0191	0.37	ND	0.395 ^C
10/11/2013	11:30	0.0197	0.31	ND	0.335 ^C

07-ISG, Isinglass River, Route 202 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 $\mu\text{S}/\text{cm}^{\text{A}}$	NA
05/19/2013	9:50	9.15	91.8	6.10	0.58	77.3	15.3
06/23/2013	10:18	8.31	93.7	5.92	1.78	62.8	21.4
07/21/2013	9:35	7.63	92.6	6.09	2.17	71.0	24.8
08/18/2013	9:42	8.73	95.3	6.32	0.89	68.7	19.6

04-ISG, Isinglass River, Green Hill Road 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 $\mu\text{S}/\text{cm}^{\text{A}}$	NA
05/19/2013	9:30	8.80	88.6	6.47	0.56	84.4	15.6
06/23/2013	9:52	8.50	96.3	5.99	1.91	66.5	21.6
07/21/2013	9:15	7.58	92.0	6.31	2.01	75.9	25.4
08/18/2013	9:20	9.23	99.8	6.48	0.95	75.9	19.2

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. ($^{\circ}\text{C}$)
Standard	NA	>5.0	>75% Daily Average	6.5-8.0	<10 NTU above background	835 $\mu\text{S}/\text{cm}^{\text{A}}$	NA
05/19/2013	9:10	7.53	77.4	6.18	1.42	104.9	16.4
06/23/2013	9:35	7.63	84.1	5.76	3.89	68.9	21.2
07/21/2013	8:50	6.15	75.2	5.95	4.22	85.5	26.2
08/18/2013	9:04	7.58	82.5	6.18	2.14	88.7	19.6

02-ISG, Isinglass River, Rochester Neck Road Bridge, Rochester

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
02/28/2013	15:05	14.5	101.1	5.97	3.90	108.6	0.6	15		
05/19/2013	8:35	8.58	82.5	6.10	1.23	104.9	14.8			
06/17/2013	11:10	9.14	99.7	5.90	1.59	56.3	19.5	12	30	
06/23/2013	9:10	7.78	86.8	6.05	4.57	79.90	20.8			
07/12/2013	10:30	8.23	94.9	5.83	2.72	78.20	22.4	13	140	
07/21/2013	8:30	6.59	78.7	6.10	0.74	94.0	24.7			
08/09/2013	9:15	7.61	85.3	6.00	2.39	96.8	21.0	17	80	70
08/18/2013	8:45	7.92	85.5	6.20	6.46	101.90	19.2			
10/10/2013	10:10	9.22	85.2	6.01	1.28	116.10	11.9	23	160	

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
02/28/2013	15:05	0.0160	0.25	0.12	0.37
06/17/2013	11:10	0.0169	0.25	ND	0.28 ^C
07/12/2013	10:30	0.0307	0.38	ND	0.41 ^C
08/09/2013	9:15	0.0217	0.47	0.09	0.56
10/10/2013	10:10	0.0212	ND	ND	0.15 ^C