

2016 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
06/12/2016	10:15	8.44	90.7	6.36	0.41	61.5	19.0	11	0.010
08/07/2016	10:15	7.37	85.4	6.27	0.72	68.4	22.6	13	0.008
09/25/2016	10:30	9.45	90.2	6.16	0.26	65.3	13.4	13	0.005

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
06/12/2016	09:55	6.86	70.6	6.02	1.61	82.5	17.0
08/07/2016	09:54	6.74	77.2	6.32	1.01	100.8	22.4
09/25/2016	10:04	8.54	83.2	6.22	1.65	98.3	14.4

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)
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
06/22/2016	12:15	7.63	86.7	6.57	1.03	98.5	21.6	18	< 10
07/13/2016	09:00	6.58	74.5	6.53	1.58	99.6	21.5	15	20
08/17/2016	09:15	6.31	72.9	6.44	0.90	133.9	22.5	32	
10/20/2016	09:20	7.18	66.9	6.34	1.20	114.3	12.1	20	

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
06/22/2016	12:15	0.0247	0.44	< 0.05	0.47 ^c
07/13/2016	09:00	0.0233	0.46	< 0.06	0.49 ^c
08/17/2016	09:15	0.0134	< 0.25	< 0.07	0.15 ^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
06/12/2016	09:40	8.80	91.6	6.25	0.55	89.6	17.3
08/07/2016	09:39	6.85	77.6	6.41	0.78	150.7	22.1
09/25/2016	09:45	9.45	89.2	6.28	0.73	119.1	12.8

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. ($^{\circ}\text{C}$)	Chloride (mg/L)	Total Phosphous
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
06/12/2016	09:15	9.35	97.8	6.24	0.66	94.4	17.4	20	0.024
08/07/2016	09:15	7.05	79.8	6.63	0.85	152.0	21.5	36	0.015
09/25/2016	09:30	8.72	80.8	6.25	0.77	177.1	12.1	44	0.009

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 Phosphous
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
06/12/2016	09:05	7.77	80.5	6.21	1.11	105.1	17.2	23	0.026
08/07/2016	09:00	6.89	79.2	6.42	1.90	171.1	22.2	38	0.020
09/25/2016	09:20	4.71	46.8	5.98	3.21	176.4	15.1	41	0.024

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 ($\mu\text{S}/\text{cm}$)	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
06/12/2016	08:30	8.57	87.3	6.30	1.74	113.8	16.3			
06/22/2016	11:15	6.48	72.6	6.49	3.14	148.5	20.9	29	80	
07/13/2016	10:35	6.90	77.5	6.53	3.10	172.6	21.2	35	20	
08/07/2016	08:35	6.51	73.1	6.25	3.08	188.9	21.1			
08/17/2016	10:00	6.39	72.6	6.47	3.38	222.8	21.6	51	160	63
09/25/2016	09:05	7.79	75.5	6.10	2.73	196.7	13.9			
10/20/2016	10:00	5.76	52.7	6.32	1.46	224.5	11.4	43		

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
06/22/2016	11:15	0.0320	0.57	0.13	0.70
07/13/2016	10:35	0.0269	0.34	0.13	0.47
08/17/2016	10:00	0.0186	< 0.25	0.09	0.22 ^c