

## STREAM ASSESSMENT



### MINNESOTA DEPARTMENT OF NATURAL RESOURCES DIVISION OF FISH AND WILDLIFE

Report Date: March 16, 2009

Region	Area	Stream Name	Tributary No.	Stream Length
3	Lake City	Zumbro River	M-34	57.6 Miles

County	Watershed Name, No.	Source (T, R, S)	Mouth (T, R, S)
Wabasha	Zumbro, 41	109-14-27	110-9-31

**Date(s) of Assessment:** May 13, 2008  
September 2, 5, & 13, 2008

**Assessment Purpose:** Determine abundance and size structure of smallmouth bass in the plunge pool below the Lake Zumbro dam.

Station	Similar Reach	Stream Mile	Length (ft)	Mean Width (ft)	Acres	Water Temp (F)	Air Temp (F)	Downstream UTM's	
								utm <sub>x</sub> (↔)	utm <sub>y</sub> (↑)
Plunge	2	57.6	NA	Variable	NA			541592	4895692

**Summary:**

Smallmouth bass population estimates were attempted in the plunge pool below the Lake Zumbro dam in May and September of 2008. A single marking run was completed in May, but subsequent recapture runs could not be completed. A total of 87 smallmouth bass and 18 largemouth bass were collected during May sampling. A three-run Schnabel mark-recapture estimate in September yielded a population estimate of 118 smallmouth bass (7" and larger) with a 95% CI of 63 to 212.

Plunge Pool sampling was conducted as part of a review of the catch-and-release regulation that is in place on this portion of the Zumbro River. A public meeting was held in the Fall of 2008. Comments received were decidedly in favor of keeping the regulation, so no changes were proposed. The regulation (immediate release of all smallmouth bass) will remain in effect from the Lake Zumbro Dam downstream to the Highway 63 bridge in Zumbro Falls.



Length Class Distributions – PLUNGE POOL, SPRING 2008

May 13, 2008

Stream Main Zumbro

Tributary Number M-34

Species	SMB	LMB						
Station	Plunge	Plunge						
Length (in)								
< 6.0								
6.0 - 6.9								
7.0 - 7.9								
8.0 - 8.9	11	1						
9.0 - 9.9	10	2						
10.0 - 10.9	14	3						
11.0 - 11.9	13	6						
12.0 - 12.9	3	3						
13.0 - 13.9	5	2						
14.0 - 14.9	4							
15.0 - 15.9	11							
16.0 - 16.9	9	1						
17.0 - 17.9	3							
18.0 - 18.9	1							
19.0 - 19.9								
20.0 - 20.9								
21.0 - 21.9								
22.0 - 22.9								
23.0 - 23.9								
24.0 - 24.9								
25.0 - 25.9								
26.0 - 26.9								
27.0 - 27.9								
28.0 - 28.9								
29.0 - 29.9								
30.0 - 34.9								
35.0 - 39.9								
40.0 - 44.9								
45.0 - 49.9								
<b>Total No.</b>	87	18						
<b>Mean Length</b>	12.2	11.6						

Length Class Distributions – PLUNGE POOL, FALL 2008

September 2, 5, & 13, 2008 (combined)

Stream      Main Zumbro

Tributary Number    M-34

Species	SMB	LMB						
Station	Plunge	Plunge						
Length (in)								
< 6.0								
6.0 - 6.9								
7.0 - 7.9	5	8						
8.0 - 8.9	4	4						
9.0 - 9.9	6	3						
10.0 - 10.9	19	2						
11.0 - 11.9	6	4						
12.0 - 12.9	4	2						
13.0 - 13.9	6							
14.0 - 14.9	5							
15.0 - 15.9	4							
16.0 - 16.9	1	1						
17.0 - 17.9		1						
18.0 - 18.9								
19.0 - 19.9		1						
20.0 - 20.9								
21.0 - 21.9								
22.0 - 22.9								
23.0 - 23.9								
24.0 - 24.9								
25.0 - 25.9								
26.0 - 26.9								
27.0 - 27.9								
28.0 - 28.9								
29.0 - 29.9								
30.0 - 34.9								
35.0 - 39.9								
40.0 - 44.9								
45.0 - 49.9								
<b>Total No.</b>	60	26						
<b>Mean Length</b>	11.2	10.2						

Stream Main Zumbro

Tributary Number M-34

**Credits and Signatures**

**Field Crew:** Jeff Weiss, Jonathan Meerbeek, Randy Binder, Dan Dieterman

**Approved by:**

**Area Fisheries Supervisor**

**Date**

**Regional Fisheries Manager**

**Date**



3/20/09

 05/22/09

