SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY

Cement Plant Creek, Pennington County

10120110001112

2007

Table 1. Population and Biomass Estimates for Cement Plant Creek

Site Number: 2 Site Midpoint (Latitude, Longitude): 44.08264819, -103.25740833 Survey Completed by: South Dakota Game, Fish and Parks Stream Classification: BR3							Date Sampled: Site Length (m): Mean Width (m): Number of Pass:		2.3	Conductivity (umhos/cm): pH: Water Temperature (C): Voltage:		1220 8.2 24.0 300	
Species	Size Class	Total Number Captured	Est. # in site	Upper 95% Cl	Lower 95% Cl	# per Hectacre	Kg per Hectacre	# per Km	# per Acre	lb. per Acre	# per Mile	Mean Length (mm)	Mean Weight (grams)
Brown Trout	<200mm	95	107	121	95	4562	48	1070	1848	43.13	1722	85.1	10.6
Brown Trout	>=200mm	1	1	1	1	43	5	10	17	4.26	16	223.0	112.0
Brown Trout	All	96	108	122	96	4605	54	1080	1865	47.88	1738	86.5	11.6
Green Sunfish	All	5	5	6	5	213	6	50	86	5.22	80	105.2	27.4
Largemouth Bass	All	3	3	4	3	128	2	30	52	1.94	48	96.5	17.0
Rock Bass	All	2	2	2	2	85	4	20	35	3.73	32	80.5	49.0

Stream sites are classified based on the estimates of adult trout over eight inches that exist within the site. Estimates are derived from 3-pass backpack electrofishing surveys at 100-meter sites within streams. While all fish in the site are collected and measured, only trout species are used for classifications. Sites are numbered in accordance for the distance (m) from the stream confluence of a higher order stream/river.

Based on number of trout in excess of eight inches				
Class BR1	Number of wild Brown Trout exceeds 150 per acre			
Class BR2	Number of wild Brook Trout ranges from 25 to 150 per acre			
Class BR3	Number of wild Brown Trout is less than 25 per acre			
Class BK1	Number of wild Brook Trout exceeds 150 per acre			
Class BK2	Number of wild Brook Trout ranges from 25 to 150 per acre			
Class BK3	Number of wild BrookTrout is less than 25 per acre			
Class RB1	Number of wild Rainbow Trout exceeds 25 per acre			
Class RB2	Number of wild Rainbow Trout is less than 25 per acre			

Table 2. Species composition and population estimates on Cement Plant Creek, 1997-2007

Site 2

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Aug 15, 2007	107	95-121	
Brown Trout >=200mm	Aug 15, 2007	1	1-1	BR3
Green Sunfish	Aug 15, 2007	5	5-6	
Largemouth Bass	Aug 15, 2007	3	3-4	
Rock Bass	Aug 15, 2007	2	2-2	

Length Frequency Distribution

Length frequency histogram of species sampled by year.

Site: 2

Species: Brown Trout





