## SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY Cascade Creek, Fall River County

27-0026-01

2016

Table 1. Population and Biomass Estimates for Cascade Creek

Site Number: 13 Site Midpoint (Latitude, Longitude): 43.31378317, -103.56617780 Survey Completed by: South Dakota Game, Fish and Parks Stream Classification: None						Date Sampled:08/15/20Site Length (m):100Mean Width (m):2.5Number of Pass:3		2.5	16 Conductivity (umhos/cm): pH: Water Temperature (C): Voltage:		1424 19.0		
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)
Longnose Dace	All	4	4	6	4	158	2	40	64	1.84	64	76.0	13.0
White Sucker	All	9	9	10	9	356	18	90	144	16.11	145	164.4	50.7

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 Cascade Creek, 2006-2016

## Site 13

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Longnose Dace	Aug 15, 2016	4	4-6	
White Sucker	Aug 15, 2016	9	9-10	

## **Length Frequency Distribution**

Length frequency histogram of species sampled by year.







