## SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY

## Burno Gulch, Lawrence County

09-0041-00

2018

Table 1. Population and Biomass Estimates for Burno Gulch

Site Number: 32 Site Midpoint (Latitude, Longitude): 44.42750061, -103.83980411 Survey Completed by: South Dakota Game, Fish and Parks Stream Classification: BK0						Date Sampled: Site Length (m): Mean Width (m): Number of Pass:		3.3	(um pH: Wat	Conductivity (umhos/cm): pH: Water Temperature (C): Voltage:		55.9 250	
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)
Brook Trout	<200mm	74	79	86	74	2407	60	790	975	53.99	1271	104.1	25.1
Brook Trout	All	74	79	86	74	2407	60	790	975	53.99	1271	104.1	25.1

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 Burno Gulch, 2008-2018

## Site 32

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Jun 16, 2014	101	92-112	
	Jun 30, 2016	185	185-187	
	Jul 08, 2017	342	335-349	
	May 23, 2018	79	74-86	
Brook Trout >=200mm	Jun 16, 2014	8	8-8	BK2
	Jun 30, 2016	4	4-5	BK2
	Jul 08, 2017	5	5-5	BK2

## **Length Frequency Distribution**

Length frequency histogram of species sampled by year.





