## SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY

## Grizzly Gulch Creek, Lawrence County

09-0061-00

2018

Table 1. Population and Biomass Estimates for Grizzly Gulch Creek

Site Number: 7	Date Sampled: 07/17/2018	Conductivity
Site Midpoint (Latitude, Longitude): 44.34325398, -103.73824594	Site Length (m): 100	(umhos/cm):
Survey Completed by: South Dakota Game, Fish and Parks	Mean Width (m): 1.3	pH:
Stream Classification: BK2, BR2		Water Temperature (C): 15.0
	Number of Pass: 3	Voltage:

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	38	38	39	38	2824	86	380	1144	76.68	611	126.2	30.4
Brook Trout	>=200mm	1	1	1	1	74	10	10	30	8.63	16	224.0	130.0
Brook Trout	All	39	39	40	39	2899	97	390	1174	86.51	628	128.7	33.4
Brown Trout	<200mm	1	1	2	1	74	3	10	30	2.46	16	148.0	37.0
Brown Trout	>=200mm	2	2	2	2	149	16	20	60	14.53	32	216.5	109.5
Brown Trout	All	3	3	4	3	223	19	30	90	16.99	48	193.7	85.3

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 Grizzly Gulch Creek, 2008-2018

## Site 7

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Aug 07, 2014	39	39-41	
	Aug 25, 2014	64	64-65	
	Jun 01, 2016	65	65-66	
	Aug 09, 2017	29	29-30	
	Jul 17, 2018	38	38-39	
Brook Trout >=200mm	Jul 17, 2018	1	1-1	BK2
Brown Trout <200mm	Aug 25, 2014	31	30-34	

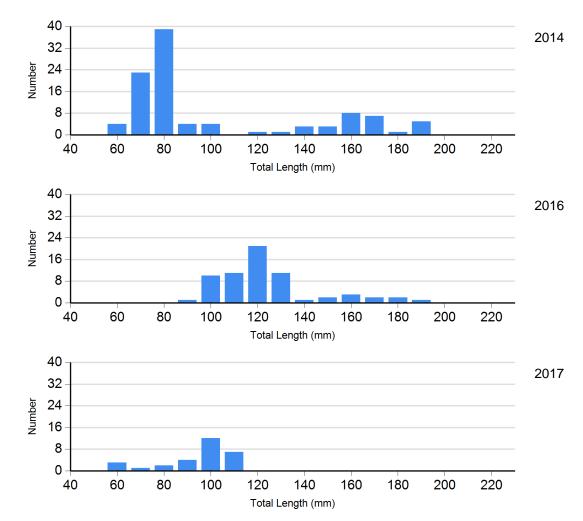
Brown Trout <200mm	Jun 01, 2016	10	10-10	
	Jul 17, 2018	1	1-2	
Brown Trout >=200mm	Aug 07, 2014	2	2-2	BR2
	Jun 01, 2016	3	3-3	BR2
	Jul 17, 2018	2	2-2	BR2

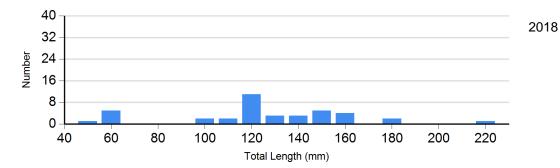
## **Length Frequency Distribution**

Length frequency histogram of species sampled by year.



Site: 7 Species: Brook Trout





Site: 7 Species: Brown Trout

