### SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY

## **Nevada Gulch Creek, Lawrence County** 10120202050007 2014

Table 1. Population and Biomass Estimates for Nevada Gulch Creek

Site Number: 1

Site Midpoint (Latitude, Longitude): 44.33592912, -103.78719294

**Survey Completed by:** 

Stream Classification: BR1

Date Sampled: 06/30/2014

Conductivity (umhos/cm):

Site Length (m): 100

Mean Width (m): 3.4

Number of Pass: 3

Water Temperature (C):

Voltage:

pH:

Species	Size Class	Total Number Captured	Est. # in site	Upper 95% CI	Lower 95% CI	# per Hectacre	Kg per Hectacre	# per Km	# per Acre	lb. per Acre	# per Mile	Mean Length (mm)	Mean Weight (grams)
Brown Trout	<200mm	94	100	108	94	2965	106	1000	1201	94.51	1609	100.6	35.7
Brown Trout	>=200mm	18	18	18	18	534	84	180	216	75.29	290	240.5	158.0
Brown Trout	All	112	116	122	112	3439	224	1160	1393	199.77	1866	123.1	65.1

Site Number: 8

Site Midpoint (Latitude, Longitude): 44.33807262, -103.79460727

Survey Completed by: South Dakota Game, Fish and Parks

Stream Classification: BK2

**Date Sampled:** 08/27/2014

Site Length (m): 100

Mean Width (m): 1.1

Number of Pass: 1

Conductivity (umhos/cm):

pH:

Water Temperature (C): 15.0

201

8.3

Voltage: 300

Species	Size Class	Total Number Captured	Est. # in site	Upper 95% CI	Lower 95% CI	# per Hectacre	Kg per Hectacre	# per Km	# per Acre	lb. per Acre	# per Mile	Mean Length (mm)	Mean Weight (grams)
Brook Trout	<200mm	11	11	11	11	976	52	110	395	46.47	177	137.3	53.3
Brook Trout	>=200mm	1	1	1	1	89	8	10	36	7.52	16	200.0	95.0
Brook Trout	All	12	12	12	12	1065	61	120	431	54.65	193	142.5	57.5

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 Nevada Gulch Creek, 2004-2014

## Site 1

Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brown Trout <200mm	Jun 30, 2014	100	94-108	
Brown Trout >=200mm	Jun 30, 2014	18	18-18	BR1

#### Site 8

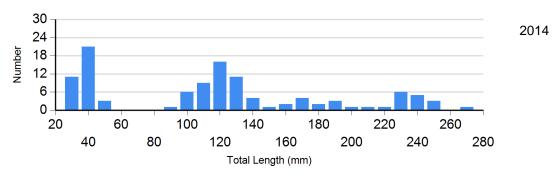
Species/Size	Date	Pop Est.	(95% C.I.)	Stream Classification
Brook Trout <200mm	Aug 27, 2014	11	11-11	
Brook Trout >=200mm	Aug 27, 2014	1	1-1	BK2

# **Length Frequency Distribution**

Length frequency histogram of species sampled by year.

Site: 1

Species: Brown Trout



Site: 8 Species: Brook Trout

