## SOUTH DAKOTA BLACK HILLS COLD STREAM SURVEY

Lime Creek, Pennington County 02-0099-00 2014 Table 1. Population and Biomass Estimates for Lime Creek

Site Number: 12 Site Midpoint (Latitude, Longitude): 44.07911882, -103.27234080 Survey Completed by: South Dakota Game, Fish and Parks Stream Classification: BR1						Date Sampled: Site Length (m): Mean Width (m): Number of Pass:		3.0	Conductivity (umhos/cm): pH: Water Temperature (C): Voltage:		724 12.0 125		
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	105	117	95	3448	83	1050	1396	73.85	1689	113.0	24.0
Brown Trout	>=200mm	25	25	26	25	821	144	250	332	128.18	402	244.4	174.9
Brown Trout	All	120	128	137	120	4203	234	1280	1702	208.99	2060	140.4	55.7
White Sucker	All	12	13	18	12	427	143	130	173	127.87	209	287.2	335.5
Site Number: 3	39				937980		Date Sa	•	09/04/2014		nductivity hos/cm):		117
	39 (Latitude, L leted by: So	<b>ongitude):</b> buth Dakota	44.089143	35, -103.28			Site Len Mean W	•	100 2.0	(um pH: Wat	hos/cm):	rature (C):	117
Site Number: 3 Site Midpoint ( Survey Compl	39 (Latitude, L leted by: So	<b>ongitude):</b> buth Dakota	44.089143	35, -103.28		# per Hectacre	Site Len Mean W Number Kg per	gth (m): idth (m):	100 2.0	(um pH: Wat	hos/cm): ter Tempe	rature (C): Mean Length (mm)	117 Mean Weight (grams)
Site Number: 3 Site Midpoint ( Survey Compl Stream Classif	39 (Latitude, L leted by: So fication: BF Size	ongitude): buth Dakota R2, RB0 Total Number	44.089143 Game, Fis <b>Est. # in</b>	35, -103.28 h and Parks <b>Upper</b>	s Lower		Site Len Mean W Number Kg per	gth (m): idth (m): of Pass: # per	100 2.0 3 <b># per</b>	(um pH: Wat Volt	ihos/cm): ter Tempei tage: # per	Mean Length	Mean Weight
Site Number: 3 Site Midpoint ( Survey Compl Stream Classif Species	39 (Latitude, L leted by: So fication: BF Size Class <200mm	ongitude): buth Dakota R2, RB0 Total Number Captured	44.089143 Game, Fis Est. # in site	35, -103.28 h and Parks <b>Upper</b> 95% Cl	S Lower 95% Cl	Hectacre	Site Len Mean Wi Number Kg per Hectacre	gth (m): idth (m): of Pass: # per Km	100 2.0 3 <b># per</b> Acre	(um pH: Wat Volt Ib. per Acre	ihos/cm): ter Temper tage: # per Mile	Mean Length (mm)	Mean Weight (grams)
Site Number: 3 Site Midpoint ( Survey Compl Stream Classif Species Brown Trout	39 (Latitude, L leted by: So fication: BF Size Class <200mm	ongitude): buth Dakota R2, RB0 Total Number Captured	44.089143 Game, Fis <b>Est. # in</b> <b>site</b> 14	35, -103.28 h and Parks <b>Upper</b> <b>95% CI</b>	S Lower 95% CI 14	Hectacre 691	Site Len Mean W Number Kg per Hectacre	gth (m): idth (m): of Pass: # per Km 140	100 2.0 3 <b># per</b> Acre 280	(um pH: Wat Volt Ib. per Acre	ihos/cm): ter Temper tage: # per Mile 225	Mean Length (mm) 121.9	Mean Weight (grams) 23.8
Site Number: 3 Site Midpoint ( Survey Compl Stream Classif Species Brown Trout Brown Trout	39 (Latitude, L eted by: So fication: BF Size Class <200mm >=200mm All	ongitude): buth Dakota R2, RB0 Total Number Captured 14 5	44.089143 Game, Fis <b>Est. # in</b> <b>site</b> 14 5	35, -103.28 h and Parks <b>Upper</b> <b>95% CI</b> 15 5	S Lower 95% Cl 14 5	<b>Hectacre</b> 691 247	Site Len Mean Wi Number Kg per Hectacre	gth (m): idth (m): of Pass: # per Km 140 50	100 2.0 3 <b># per</b> Acre 280 100	(um pH: Wat Volt Ib. per Acre 14.67 90.77	ihos/cm): ter Temper tage: # per Mile 225 80	Mean Length (mm) 121.9 322.2	Mean Weight (grams) 23.8 412.2

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 Lime Creek, 2004-2014

## Site 12

Sep 04, 2014			
0cp 04, 2014	105	95-117	
Sep 04, 2014	25	25-26	BR1
Sep 04, 2014	13	12-18	
Date	Pop Est.	(95% C.I.)	Stream Classification
Sep 04, 2014	14	14-15	
Sep 04, 2014	5	5-5	BR2
Sep 04, 2014	1	1-2	
	Sep 04, 2014 Date Sep 04, 2014 Sep 04, 2014	Sep 04, 2014 13   Date Pop Est.   Sep 04, 2014 14   Sep 04, 2014 5	Sep 04, 2014 13 12-18   Date Pop Est. (95% C.I.)   Sep 04, 2014 14 14-15   Sep 04, 2014 5 5-5

## **Length Frequency Distribution**

Length frequency histogram of species sampled by year.











