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Region Interior USGS Quad(s) Circle (C-1, B-1, B-2)
 Anadromous Waters Catalog Number of Waterway 334-40-11000-2860-3030-4080
 Name of Waterway Birch Creek USGS Name Local Name
 Addition Deletion Correction Backup Information

For Office Use

Nomination #	<u>120048</u>	<u>MC</u>	<u>9/4/12</u>
Revision Year:	<u>2013</u>	Fisheries Scientist	Date
Revision to:	Atlas _____ Catalog _____	<u>Whit Post</u>	<u>9/4/12</u>
	Both <input checked="" type="checkbox"/>	Habitat Operations Manager	Date
Revision Code:	<u>B-2, B-6</u>	<u>SDG</u>	<u>5/31/12</u>
		AWC Project Biologist	Date
		Cartographer	<u>9.11.12</u>
			Date

OBSERVATION INFORMATION

Species	Date(s) Observed	Spawning	Rearing	Present	Anadromous
Chinook salmon	8-6-11	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
<i>spawning</i>					
<i>Replace Chinook salmon project w/ Chinook salmon project and extend Chinook salmon spawning in stream</i>					

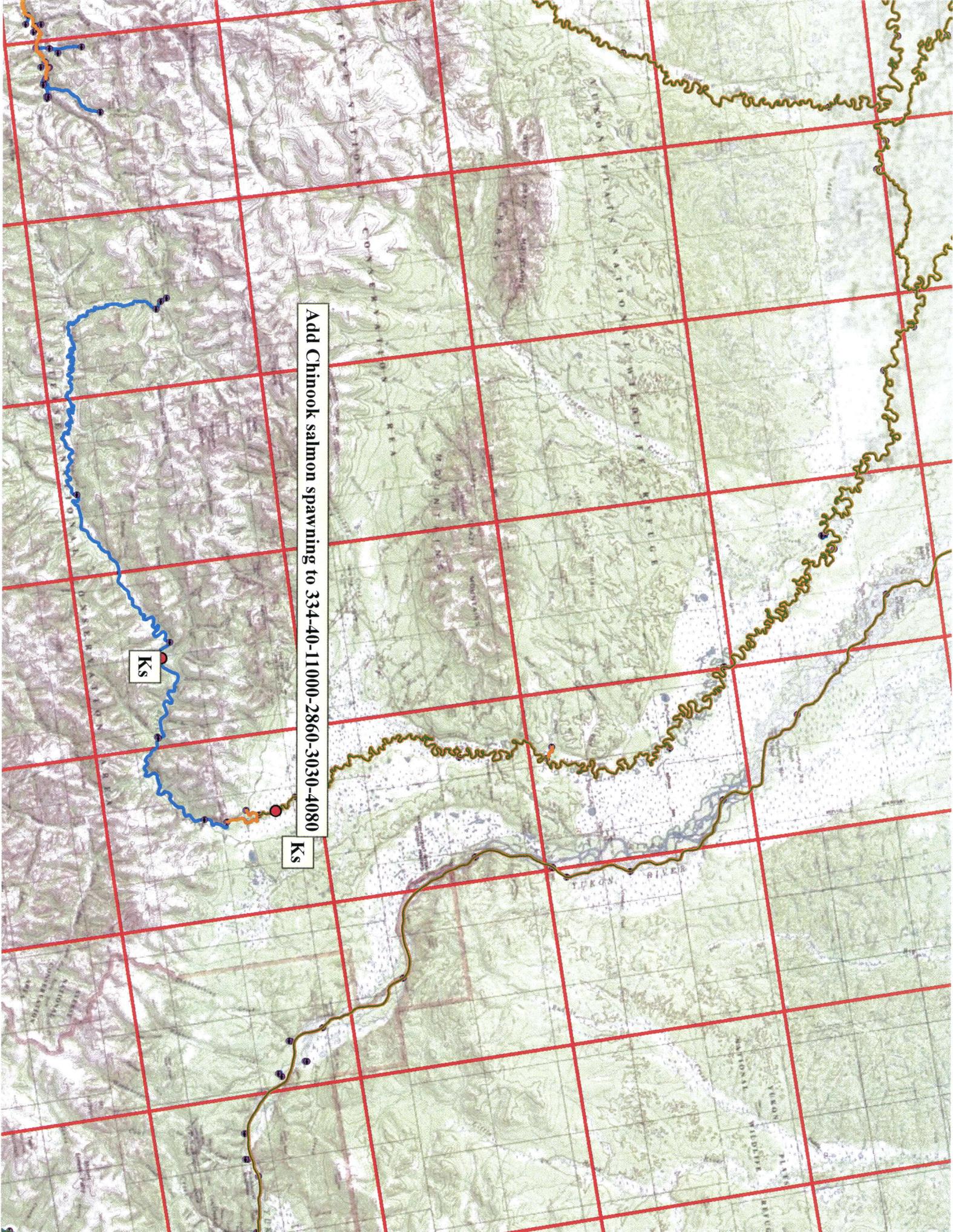
IMPORTANT: Provide all supporting documentation that this water body is important for the spawning, rearing or migration of anadromous fish, including: number of fish and life stages observed; sampling methods, sampling duration and area sampled; copies of field notes; etc. Attach a copy of a map showing location of mouth and observed upper extent of each species, as well as other information such as: specific stream reaches observed as spawning or rearing habitat; locations, types, and heights of any barriers; etc.

Comments: I'm the fish biologist for BLM's Fairbanks District office, Eastern Interior Field Office. We flew (helicopter) a salmon spawning survey on Birch Creek on 8-6-11. We counted 22 adult chinook and 2 summer chum salmon. See attachments for gps locations. Call if you have any questions - thanks.

Name of Observer (please print): Jason Post (907-474-2381)
 Signature: [Signature] Date: 1-25-12
 Agency: BLM
 Address: 1150 University AVE
Fairbanks, AK 99709

This certifies that in my best professional judgment and belief the above information is evidence that this waterbody should be included in or deleted from the Anadromous Waters Catalog.

Signature of Area Biologist: _____ Date: _____ Revision _____



Add Chinook salmon spawning to 334-40-11000-2860-3030-4080

Ks

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TEKON RIVER

NATIONAL WILDLIFE REFUGE



Birch Creek Aerial Salmon Survey_August 6, 2011

Date: August 6, 2011

Crew: Jason Post & Carl Kretsinger

Aircraft: A-Star (N6015S), Pilot (Jerry Mosimann), Rt. rear door removed

Survey speed ~ 35mph, 2x tree height or ~ 150ft

Conditions:

Visibility: tannin stain between start point and WPT 301.

Water: well below bankfull - good

Lighting: good sun first half survey, partly cloudy 2nd half.

Bottom effect: some dark bottom in pools, mostly good in runs and tailouts

Surface Turbulence: none

Spawn Stage: no carcasses observed, 4th quarter?

Time: 1205-1610 (includes re-fueling)

Overall Rating: good.

Begin survey: N65.58228°, W-144.40921° (tannin stain to dark downstream of this point to survey - start DS of MTs)

End survey: N65.39001°, W-145.72009° (at Birch Cr put-in at 12 Mile Cr)

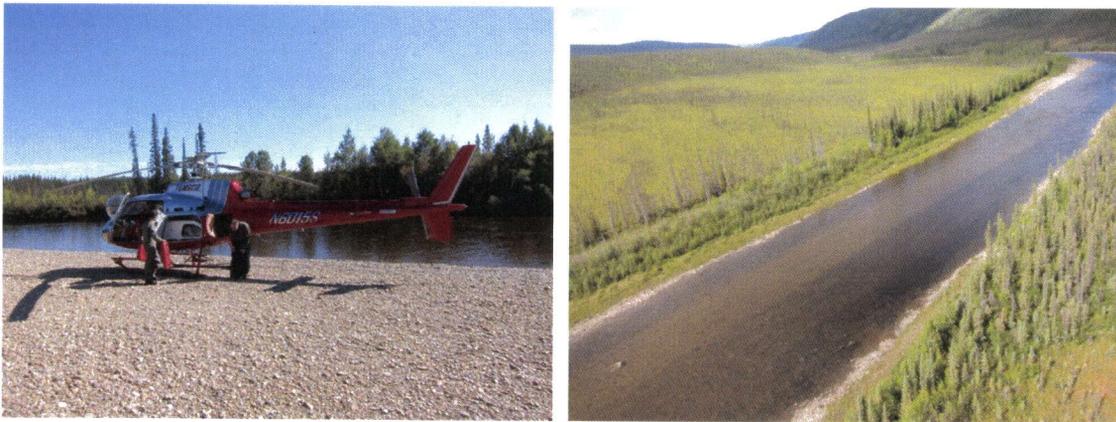
We started survey DS of Mts, flew up to Harrison Cr, stopped survey, flew to 12 Mile put-in to refuel, resumed survey at 12 mile and headed DS back to Harrison Cr, end. Yukon R. Chinook return below avg for 2011.

WPT	Chinook (live)	Chum (live)	LAT	LONG	Comments
300		2	65.50291	144.33054	
301			65.50002	144.31015	Good visibility starts here - dark tannin DS of here
302	1		65.44791	144.28133	
303	1		65.44303	144.27586	
304	1		65.44131	144.27536	
305	6		65.40804	144.27240	
306			65.39019	144.27060	Peregrine in cliffs - river left
307			65.33632	144.33105	Peregrine in cliffs - river right
308			65.28554	144.42268	End survey S. Fork Birch Cr - no fish observed
309	2		65.32971	144.55403	Adult and Jack on redd
310	3		65.33559	144.58693	
311	2		65.35141	144.66956	
312	4		65.35824	144.68892	4 kings on 2 redds, 2 peregrine in cliffs river left
313	2		65.34061	144.74916	tails white, been digging awhile
314			65.37273	144.78249	End survey on Harrison Cr - no fish observed
315			65.27426	145.41687	End survey Great Unknown Cr - no fish observed
316			65.25179	145.25885	End survey Clums Fork - no fish observed
317			65.26251	145.21535	1 canoe with 2 souls
318			65.28616	145.08492	Shotgun rapids
319			65.33958	144.74535	End survey at mouth Harrison Cr (see notes above)

Birch Creek National Wild River Salmon Spawning Ground Survey – 2011

The Birch Creek watershed is known to support, Chinook, chum, and coho salmon, but limited information exists as to the extent or exact locations of spawning activity within the drainage. In 2011, BLM fish biologists used a helicopter to locate and document (GPS) salmon spawning activity within the upper 100 miles of the Birch Creek National Wild River and its tributaries. The survey was performed in early August to match the timing of Chinook spawning activity. Survey conditions were generally favorable, but tannic water conditions (coffee color) dictated the starting point of the survey. This was the first salmon spawning ground survey performed on Birch Creek by BLM.

22 Chinook and 2 summer chum salmon were documented during the survey. Chinook salmon were observed soon after the survey began and Chinook carcasses have been found downstream of the starting point in previous years. This information suggests that additional Chinook salmon spawning occurs downstream of this survey's starting point and therefore not all spawning activity was documented during the survey. The below average Yukon River Chinook escapement in 2011 may also influence the number of Chinook salmon observed during the survey.



Birch Creek aerial salmon spawning ground surveys, 2011.

A - Y - K SALMON ESCAPEMENT OBSERVATIONS

Latitude (North)	Longitude (West)	Month - Day - Year	Stream/River Name	Drainage
65.58228	144.40921	8/6/2011	Birch Creek	Yukon River

Index Areas	Live Kings	King Carcass	King Redds	Live Chum	Chum Carcass	Chum Redds	Pink Carcass	Live Sockeye	Sockeye Carcass	Live Coho	Coho Carcass
Total	22	0		2	0						
101											
102											
103											
104											
105											
106											
107											
108											
109											
110											
111											
112											

Observer (Initials)	Survey Method	Wind	Weather	Water	Visibility	Bottom	Time	Distance Surveyed	Spawn Stage	Rating	Observing Agency
J.Post	7	1	2	2	1	2	1	~100 miles	2	2	BLM

Start survey: N65.58228; W144.40921. This is DS of the Mts.

End survey: N65.38998; W145.72038. This is at the BLM wayside - Birch Creek put in at 12 Mile Cr.

We could not start the survey at the Birch Cr bridge or at the BLM take-out due to water being dark tanin color. We started DS of the Mts, flew upstream to Harrison Cr, surveyed Harrison, stopped survey and flew to 12 Mile put-in to re-fuel, resumed survey at 12 mile and headed downstream to Harrison Cr. end. We also flew 1/2 - 1 mile up the following trips looking for salmon: S.Fork Birch, Harrison, Great Unknown, and Clurns Fork. No salmon observed upstream of Harrison or in any trips. We observed kings on 3 redds. Some white on their tails indicating been digging awhile. We started seeing kings soon after water clarity allowed, found carcasses futher DS in previous yrs, indicating more spawning DS of this survey. Aircraft: A-Star with left rear door removed.

A - Y - K SALMON ESCAPEMENT OBSERVATIONS

Description of Survey Codes

Method	
F - Float Equipped	10- Counting Tower
1 - PA-18 Super Cub	11 - Weir
2 - C-185	12- Sonar
3 - C-180	13- Population Estimate
4 - Helio Courier	14- Personal Interview
5 - Maule	15- Literature Review
6 - Other fixed wing	16- Test Fishing
7 - Helicopter	17-Swimming or Snorkeling
8 - Boat	
9 - Foot	

Wind	
1 - No affect on counting	
2 - Slight adverse affects on counting from riffles or turbulence	
3 - Moderate adverse affects on counting from riffles or turbulence	
4 - Extreme adverse affects on counting from riffles or turbulence	

Weather	
1 - Clear	
2 - Scattered (60% Cloud Cover)	
3 - Broken (60% to 90% Cloud Cover)	
4 - Overcast (100% Overcast)	

Water	
1 - Clear, no turbidity or stain affecting counts	
2 - Slightly turbid or stained, bottom visible in most areas, deeper pools obscured	
3 - Moderately turbid or stained; bottom visible only in gravel bars and shallow areas	
4 - Extremely turbid or stained with fish counts not acceptable	

Time	
1 - No adverse affect on survey	
2 - Slight affect on survey	
3 - Moderate affect on survey	
4 - Extreme affect on survey	

Visibility	
1 - Good	
2 - Fair, fish slightly obscured by glare, shadows, timber, etc.	
3 - Poor, fish moderately obscured by glare, shadows, timber, etc.	
4 - Unacceptable, fish extremely obscured by elements	

Spawning Stage	
1 - Before peak spawning	
2 - At peak spawning	
3 - After peak spawning	

Bottom	
1 - No adverse affect on survey	
2 - Slight adverse affect on survey	
3 - Moderate adverse affect on survey	
4 - Extreme adverse affect on survey	

Rating	
1 - Good	
2 - Fair	
3 - Poor	
4 - Incomplete	
5 - Survey too early	
6 - Survey too late	

Notes

Mark 0 for a particular count ONLY if that species was actively looked for. Otherwise, leave blank.
 In most cases, you will record the predetermined lat/long for that stream on the survey form.
 In the event of an new stream or tributary, record the lat/long in *degrees/minutes* format i.e. 65° 14.42