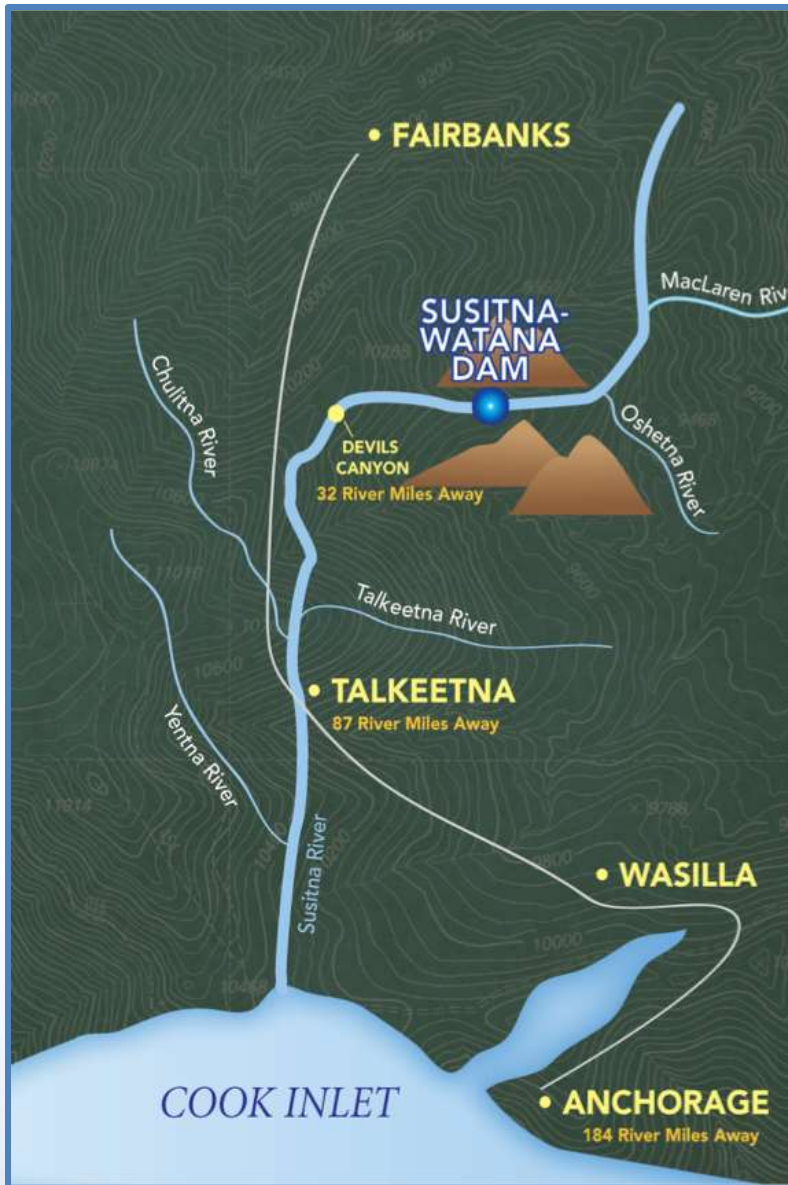


Technical Team
Meeting
*Riverine Modeling
Proof of Concept*
Slough 8A
1980s Information
April 15-17, 2014

Prepared by
R2 Resource Consultants



1980s Slough8A Site Description

- Two miles in length, and separated from main channel by two large vegetated islands.
- Overall gradient of the slough was 10.5 ft/mi.
- Slough had a broad basin above the mouth which extended to a fork. Above the fork, a network of braided channels.
- Base flow ranged from 1-20 cfs and was maintained by surface runoff, groundwater seepage, and upwelling. During overtopping events, maximum flow was 70 cfs.



Juvenile and Adult Salmon Species Abundance During 1981-1984 (Hoffman 1985, APA 2749)

“Slough 8A is a side slough habitat stretching over a mile along the right bank of the river. Extensive sampling occurred all four years for both adult and juvenile salmon, with the exception that no juvenile sampling was conducted in 1984. Four of the five species of salmon spawn in this site. High numbers of chum were recorded regularly. Sockeye salmon spawn in moderate numbers, and pink and coho were also recorded as spawning in this site. This site is a good rearing area for both chinook and coho juvenile, and both chum and sockeye fry were captured here”



Observed Fish Species

- Chinook (juveniles),
- Chum (spawning and juveniles),
- Sockeye (spawning and juveniles),
- Coho (spawning),
- Pink (spawning),
- rainbow trout, arctic grayling, round whitefish, slimy sculpins, longnose suckers

1980s Studies

- ADF&G Resident and Juvenile Anadromous Fish Investigations
- ADF&G Aquatic Habitat and Instream Flow Investigation
- ADF&G Winter Aquatic Investigations
- HSC for spawning chum and sockeye salmon, rearing juvenile salmon, and adult resident fish



Slough 8A 1980s Fish Distribution Data

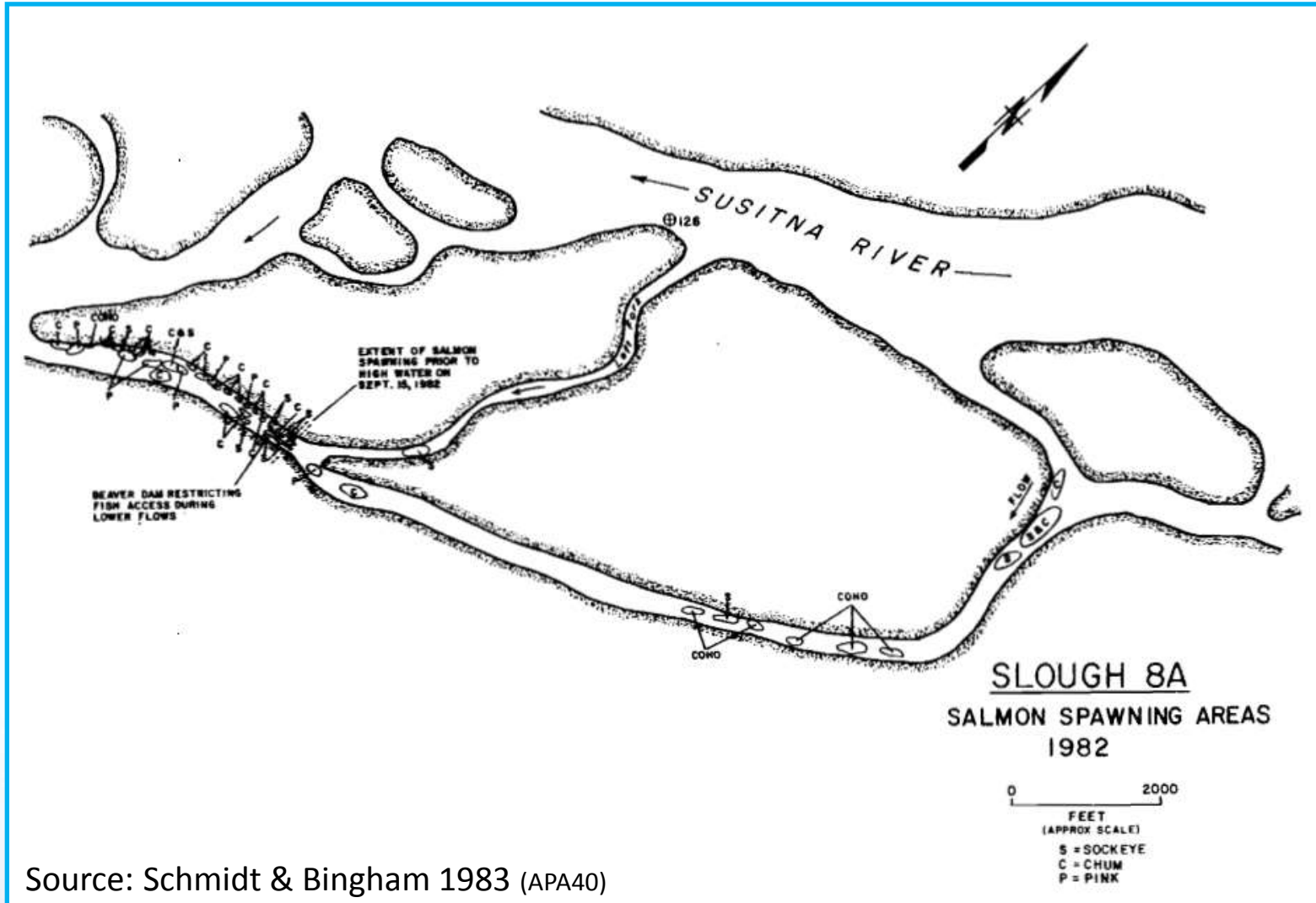
(Hoffman 1985,
APA 2749)

Table 35. Seasonal occurrence of salmon at Recon site 126.0 R.

		CHINOOK	COHO	CHUM	SOCKEYE	PINK
1984	JUVENILE	-----	-----	-----	-----	-----
	ADULT	JFMAMJJASOND -----000--	JFMAMJJASOND -----000--	JFMAMJJASOND -----+++ -----++ -----++	JFMAMJJASOND -----+++ -----++	JFMAMJJASOND -----++0-- -----+
1983	JUVENILE	-----0+++--	-----00++--	-----+++0--	-----+++0-- -----+	-----0000--
	ADULT	JFMAMJJASOND -----0000--	JFMAMJJASOND -----0000--	JFMAMJJASOND -----0+++ -----++	JFMAMJJASOND -----0+++ -----+++	JFMAMJJASOND -----0+00--
1982	JUVENILE	-----+++--	-----00++--	-----+000--	-----+++-- -----+	-----0000--
	ADULT	JFMAMJJASOND -----000--	JFMAMJJASOND -----0+++	JFMAMJJASOND -----+++ -----++ -----++	JFMAMJJASOND -----+++ -----++	JFMAMJJASOND -----+00-- -----+
1981	JUVENILE	-----++ ++--	-----+ ++--	-----0000--	-----0000--	-----0000--
	ADULT	0+++0+++-- JFMAMJJASOND -----00--	00++0+++-- JFMAMJJASOND -----00--	0000-0000-- JFMAMJJASOND -----+++ -----+	0000-0000-- JFMAMJJASOND -----0+-- -----+	0000-0+00-- JFMAMJJASOND -----00--

- = No data collected, 0 = No fish observed, + = Low numbers, ++ = Medium numbers,
+++ = High numbers

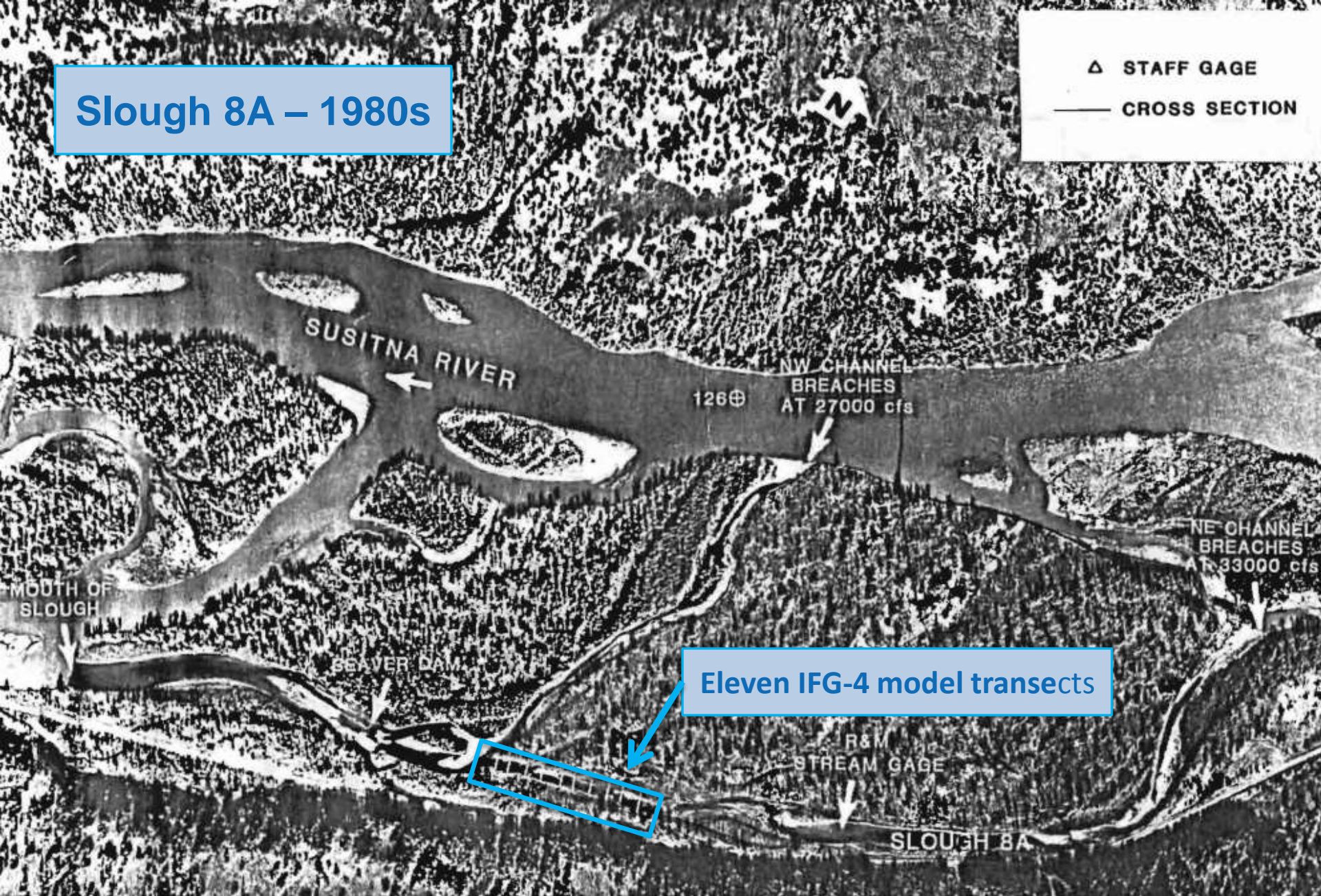
Slough 8A 1980s Salmon Spawning Areas



Source: Schmidt & Bingham 1983 (APA40)

Slough 8A – 1980s

△ STAFF GAGE
— CROSS SECTION





Slough 8A – 2011



Orthophoto Source: 2011 Matanuska-Susitna Borough LIDAR & Imagery Project



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