Review of Northern Cook Inlet King Salmon Stocks of Concern

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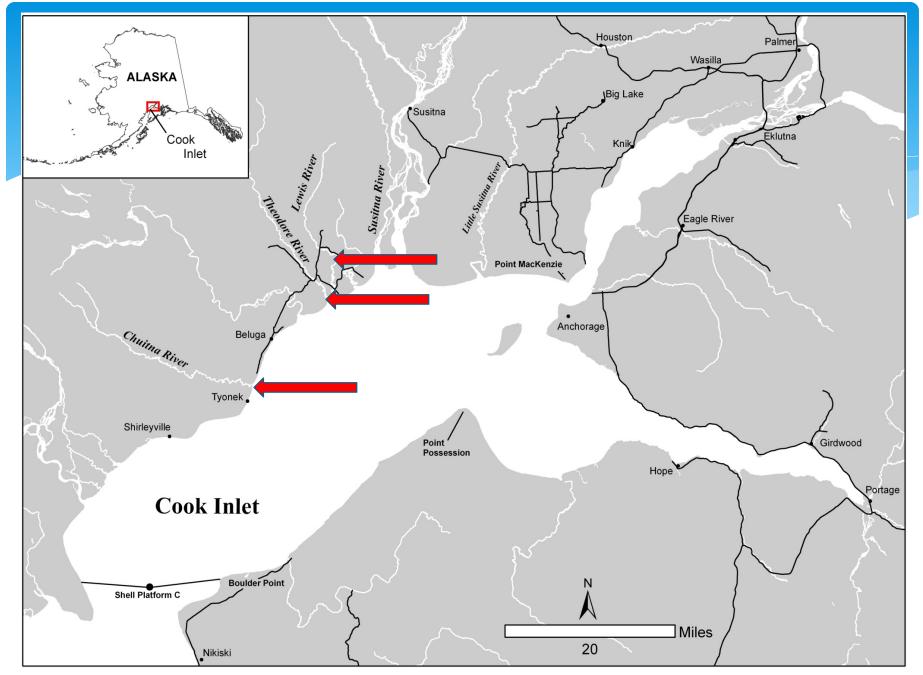
Alaska Department of Fish and Game

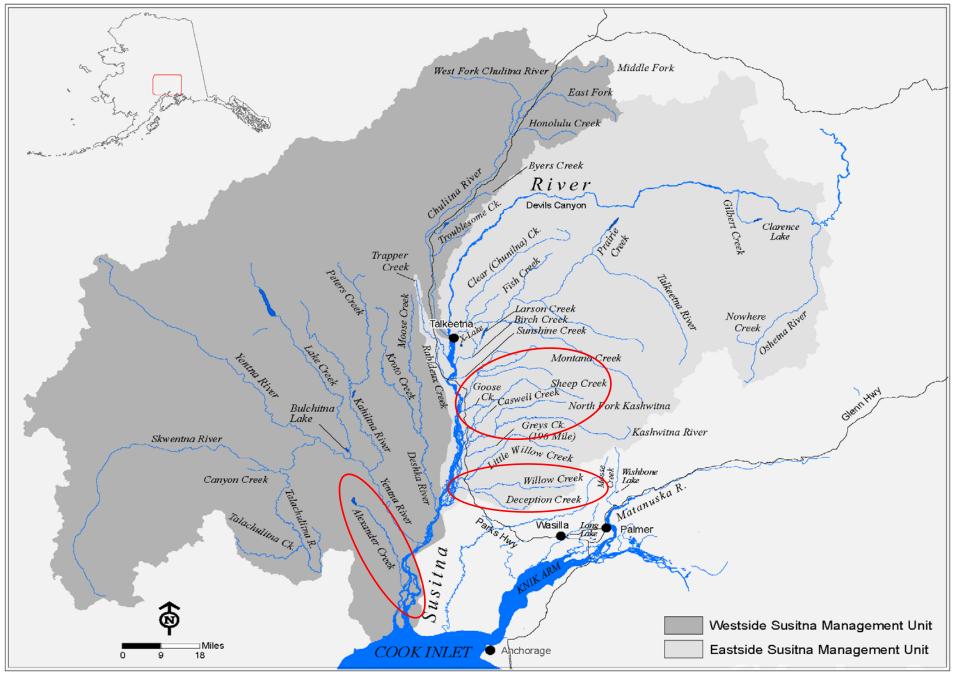
RC 4 - Tab 7



#### \* 7 King Salmon Stocks

- Theodore, Lewis, Chuitna
- Alexander, Willow, Goose, Sheep
- **\* Action Plans**

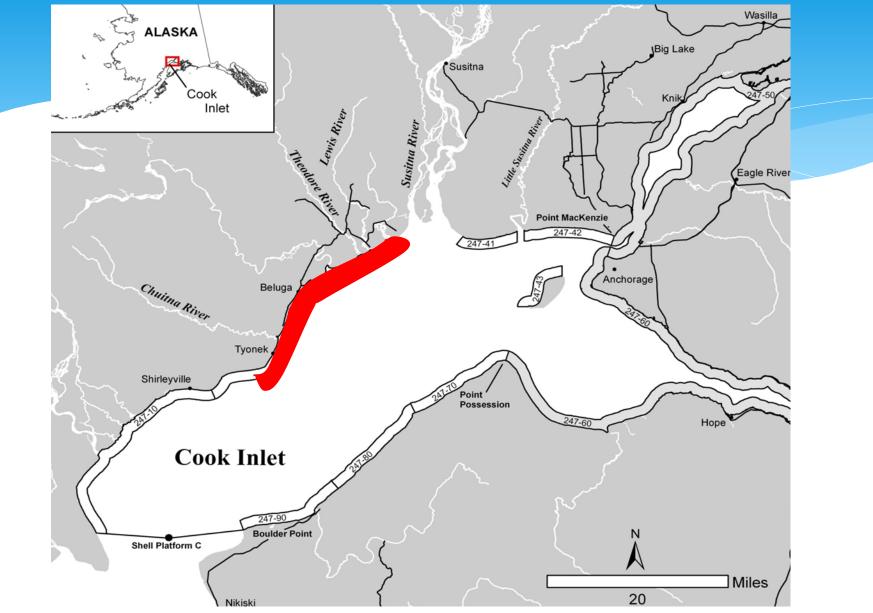




#### \* 2011 – Regulatory Changes

• Reduced area open to commercial fishing

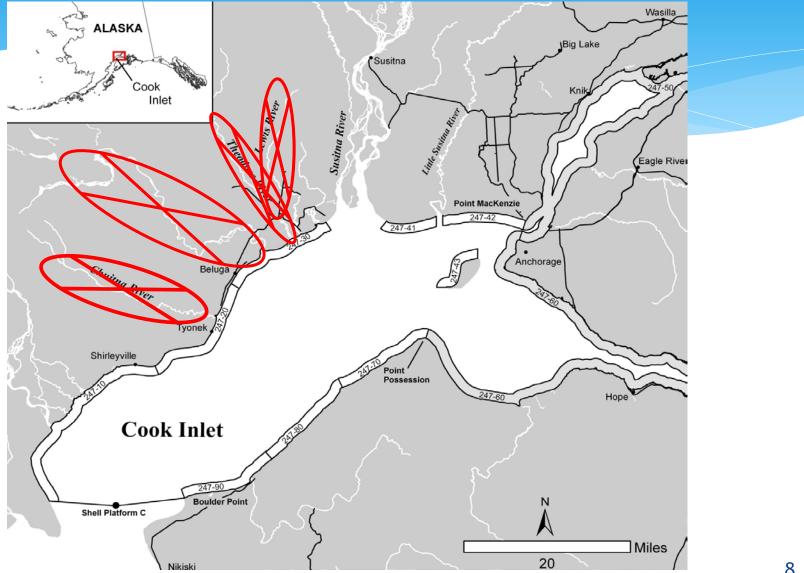
### Waters Closed to Commercial Fishing

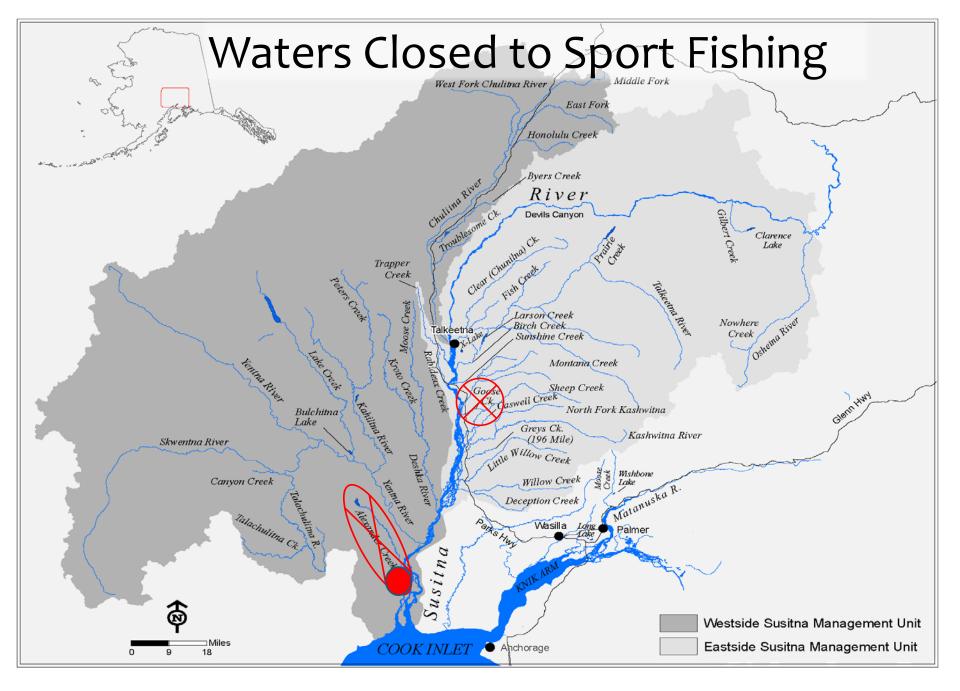


#### \* 2011 – Regulatory Changes

- Reduced area open to commercial fishing
- Closed rivers to sport fishing

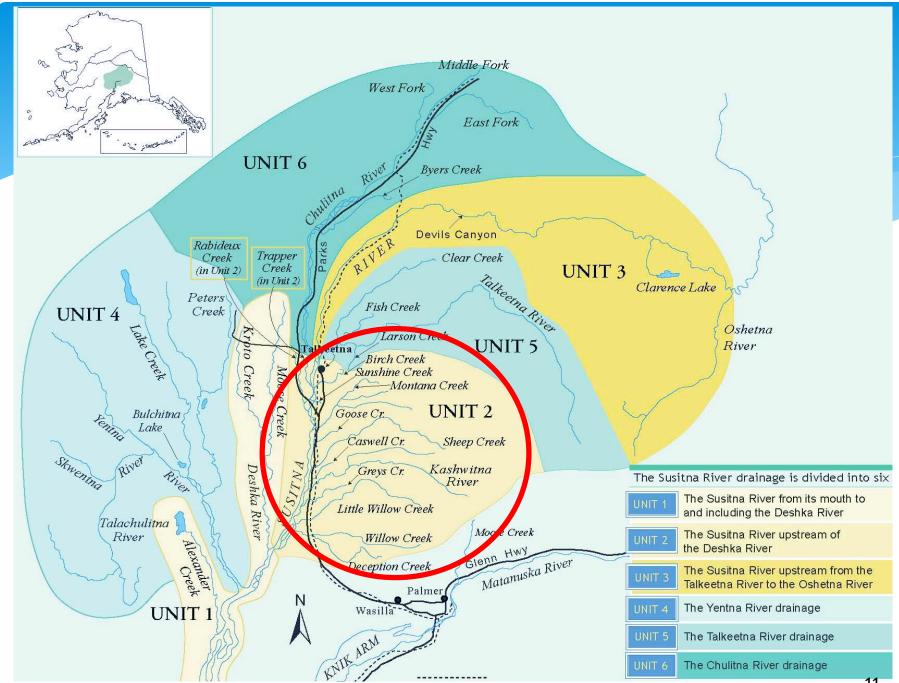
### Waters Closed to Sport Fishing





#### \* 2011 – Regulatory Changes

- Reduced area open to commercial fishing
- Closed rivers to sport fishing
- Reduced sport fishing season and daily hours on Parks Highway streams



#### \* 2013–2019 Preseason Emergency Order Actions

- Closed or restricted directed commercial king salmon fisheries
- Restricted subsistence fisheries
- Applied annual limit of two kings over 20 inches in length area-wide
- Restricted to unbaited single hook artificial lure only area-wide, except Eklutna
- Reduced days fishing is allowed
- Restricted to Catch and Release
- Closed sport fisheries

#### \* 2013–2019 Inseason Emergency Order Actions

- Deshka and Little Susitna River 2013-2016: Restrictions relaxed in part or in full.
- Area-wide 2017-2018: all sport fisheries closed.
- Little Susitna River 2019: Restored to regulation.

#### \* 2019 Preseason Emergency Order Actions

- Closed directed commercial king salmon fishing
- Restricted subsistence fisheries
- Closed Susitna Drainage to sport fishing for king salmon
- Closed Little Susitna Drainage to sport fishing for king salmon
- Eklutna Tailrace (stocked) remained open

#### \* 2019 Inseason Emergency Order Actions

• Little Susitna sport fishery restored to regulation

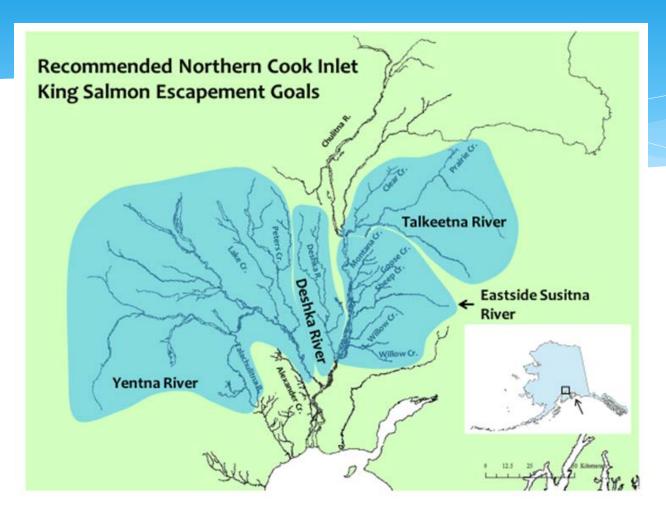
# King Salmon Harvest

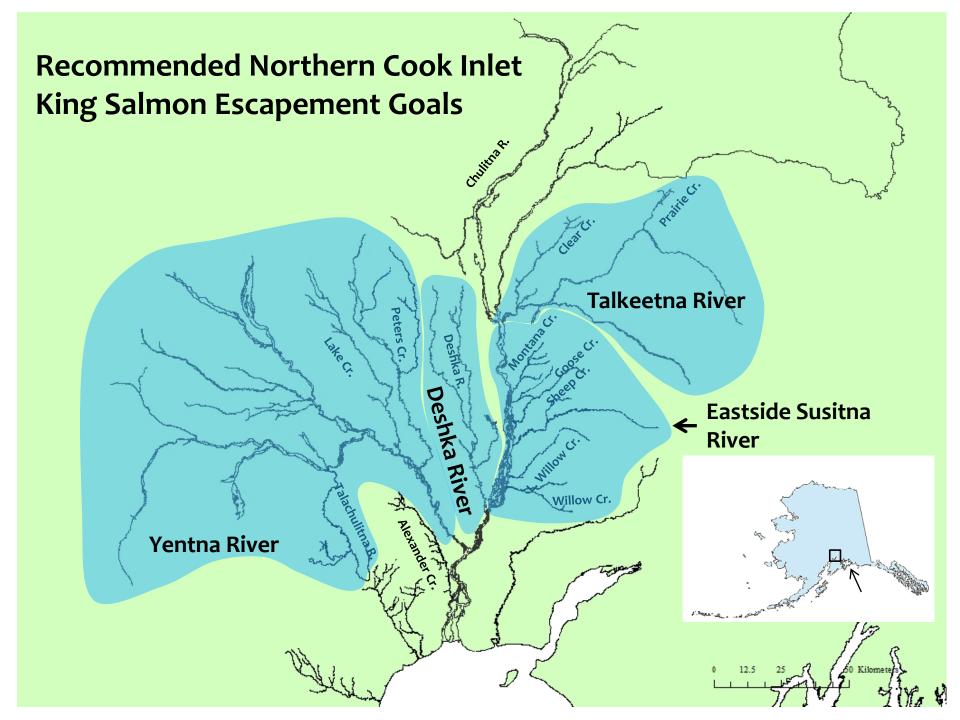
	Willow	Sheep	Goose		Total Unit 2	ND Set
Year	Creek	Creek	Creek	Total	Susitna	Gillnet
1999	4,988	2,558	371	7,917	12,910	2,812
2000	3,782	851	258	4,891	8,613	2,307
2001	4,573	1,420	160	6,153	10,210	1,811
2002	3,591	928	403	4,922	7,933	1,895
2003	3,922	1,284	350	5,556	8,028	1,683
2004	2,818	914	335	4,067	5,756	1,926
2005	2,466	878	150	3,494	6,441	3,373
2006	2,141	707	27	2,875	5,778	4,261
2007	2,258	964	31	3,253	5,830	3,818
2008	1,101	589	134	1,824	4,261	3,983
2009	499	393	0	892	1,463	1,631
2010	218	153	0	371	1,207	1,750
2011	282	213	0	495	1,078	2,299
2012	13	0	0	13	34	1,049
2013	0	0	0	0	0	1,327
2014	0	0	0	0	0	1,470
2015	0	0	0	0	0	1,923
2016	0	0	0	0	0	2,202
2017	0	0	0	0	0	2,230
2018	0	0	0	0	0	143
2019	0	0	0	0	0	202

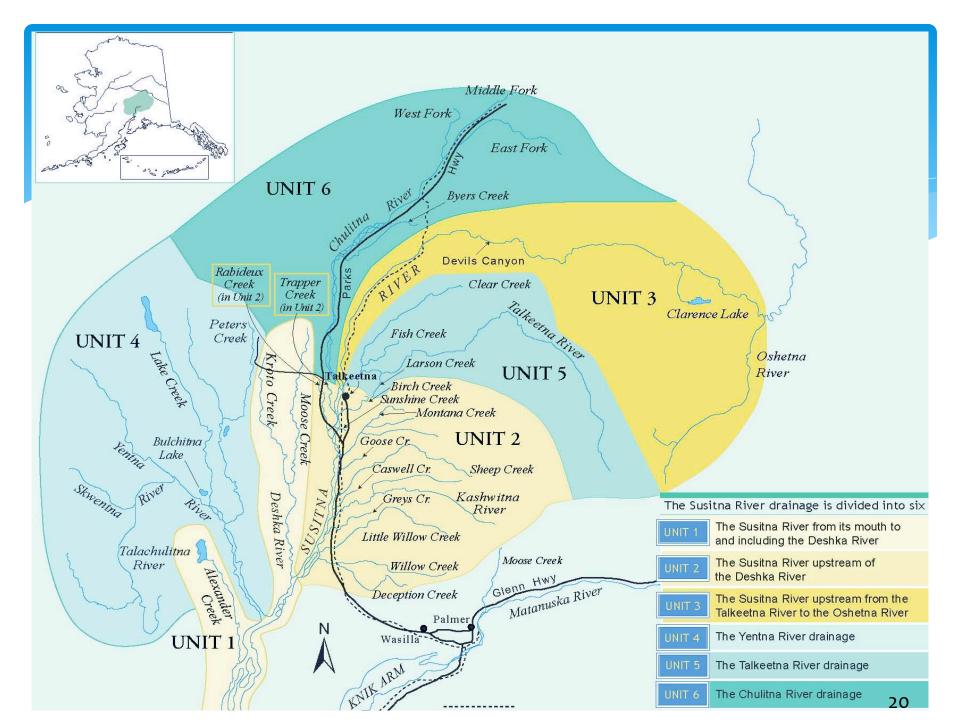
### **Research Implemented since 2011**

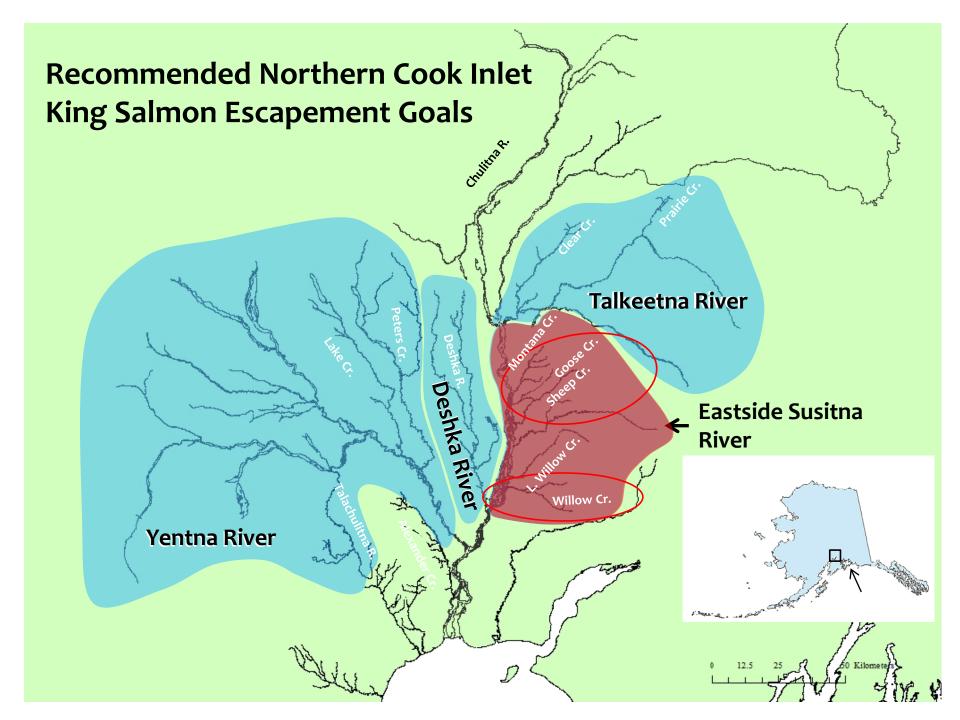
- \* Improved King Salmon Genetic Baseline
- \* King Salmon Weirs
  - Theodore River, Lewis River, Montana Creek
- \* Susitna King Salmon Tagging
  - Spawner location and distribution
- \* Abundance estimates for Susitna drainage
- \* Alexander Pike suppression
  - 23,000 northern pike removed
  - Increased juvenile abundance and rearing areas
  - Increased adult abundance in 2019
  - Adult salmon weir

### Establish Stock Goals









## **Action Plans**

#### \* 3 Plans Developed

- Western Cook Inlet
- Alexander
- Willow, Goose, Sheep

#### \* Action Plan

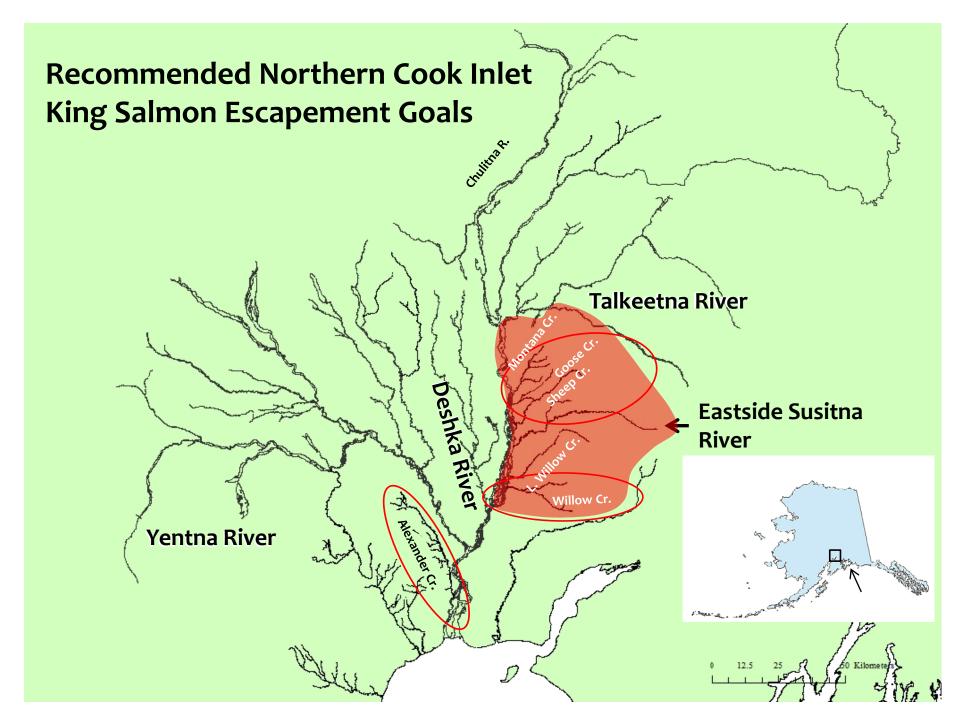
- Goal of Plan = Rebuild runs to achieve SEG
- Objective of actions = Reduce harvest
  - Sport Fishery
  - Commercial Fishery
  - Subsistence Fishery

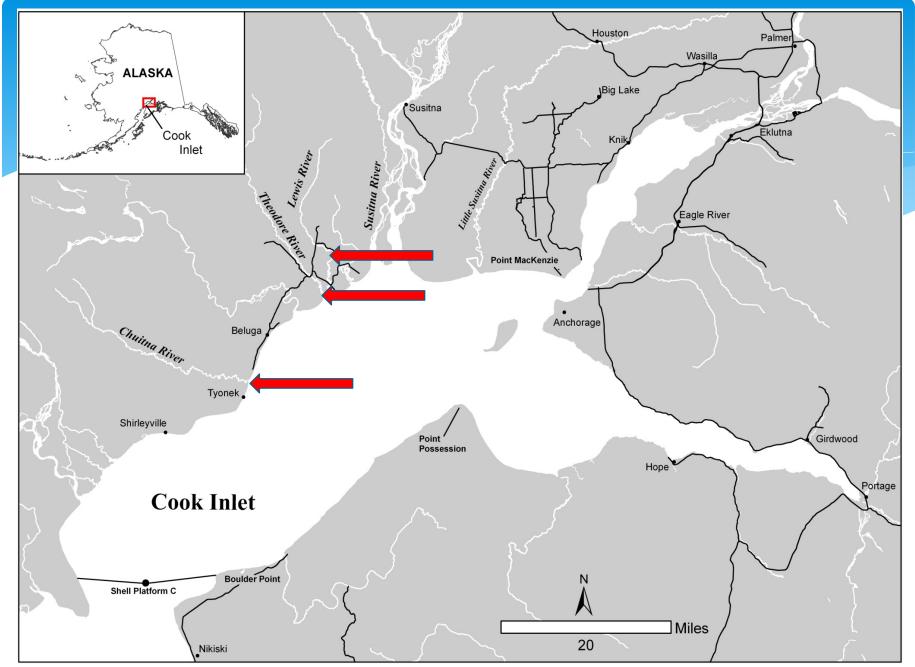
### Escapements of Stocks of Concern

Drainage	Esc. Goal	2011	2012	2013	2014	2015	2016	2017	2018	2019
Theodore River	500 – 1,700	327	179	476	312	426	68	21	18	201
Lewis River	250 – 800	92	107	61	61	5	ο	0	0	0
Chuitna River	1,200 – 2,900	719	502	1,690	1,398	1,965	1,372	235	939	2,115
Alexander Creek	2,100 – 2,900	343	181	588	911	1,117	754	170	296	1,297
Willow Creek	1,600 – 2,800	1,061	756	1,752	1,335	2,046	1,814	1,329	411	897
Goose Creek	250 – 650	80	57	62	232	NS	NS	148	90	NS
Sheep Creek	600 - 1,200	350	363	NS	262	NS	NS	NS	334	NS

### **Department Recommendations**

- Chuitna and Theodore Rivers King Salmon Stock Status and Action Plan, 2020 (RC XX)
  - Drop Lewis River as SOC
  - No change in SOC status, updated Plan
- \* Alexander Creek King Salmon Stock Status and Action Plan, 2020 (RC XX)
  - No change in SOC status, updated Plan
- \* Eastside Susitna King Salmon Stock Status and Action Plan, 2020 (RC XX)
  - Replace Willow, Sheep and Goose Creeks SOC with Eastside Stream Stock Group SOC, updated Plan





## Summary

#### \* 7 King Salmon Stocks

- Theodore, Lewis, Chuitna
- Alexander, Willow, Goose, Sheep
- \* Action Plans Created
- \* Regulatory Changes
- \* Preseason and Inseason Emergency Orders
- \* Research
- \* Reductions in Harvest
- \* Department Recommendations
  - Revised Action Plans

# Questions?



