

# ***Oral Report to the Alaska Board of Fisheries***



## **Review of Salmon Escapement Goals in Upper Cook Inlet**

**By**

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SF**

**and**

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CF**

**RC 5**

**Oral Report:  
Tab 1**

**Written Report:  
RC 4, Tab 1**



## ***Presentation Objectives***

- Introduce escapement goal policies
- Explain review process
- Review existing escapement goals
- Describe general methods
- Highlight key stocks
- Summarize results for all goals with in-depth description for those that changed

# *Escapement Goal Policies*

- Policy for the Management of Sustainable Salmon Fisheries (SSFP; 5 AAC 39.222)
- Policy for Statewide Salmon Escapement Goals (5 AAC 39.223)
- Adopted to ensure salmon stocks are conserved, managed, and developed using the sustained yield principle

Two important terms defined in the SSFP:

*biological escapement goal (BEG):*

- ***“escapement that provides the greatest potential for maximum sustained yield”***
- ***“expressed as a range based on factors such as salmon stock productivity and data uncertainty”***

## *sustainable escapement goal (SEG):*

- *“a level of escapement, indicated by an index or an escapement estimate, that is known to provide for sustained yield over a 5 to 10 year period, used in situations where a BEG cannot be estimated or managed for”*
- *“will take into account data uncertainty and be stated as either a "SEG range" or "lower bound SEG”*

## *Approach and Process for Review Team*

- Three-year interval
- Review available information for stocks
- Determine appropriate goal type and methods
- Perform analysis, assess goal range, review by team
- Develop draft recommendations for directors of divisions of Commercial Fisheries and Sport Fish
- Write report and present to board
- Post-meeting memo signed by directors

# *Existing UCI Escapement Goals*

## **King salmon: 21 stocks**

Alexander, Campbell, Clear, Crooked, Goose, Lake, Little Willow, Montana, Peters, Prairie, Sheep, and Willow creeks; and Chuitna, Chulitna, Deshka, Kenai (early and late run), Lewis, Little Susitna, Talachulitna, and Theodore rivers

## **Chum salmon: 1 stock**

Clearwater Creek

## **Coho salmon: 3 stocks**

Fish and Jim creeks; and Little Susitna River

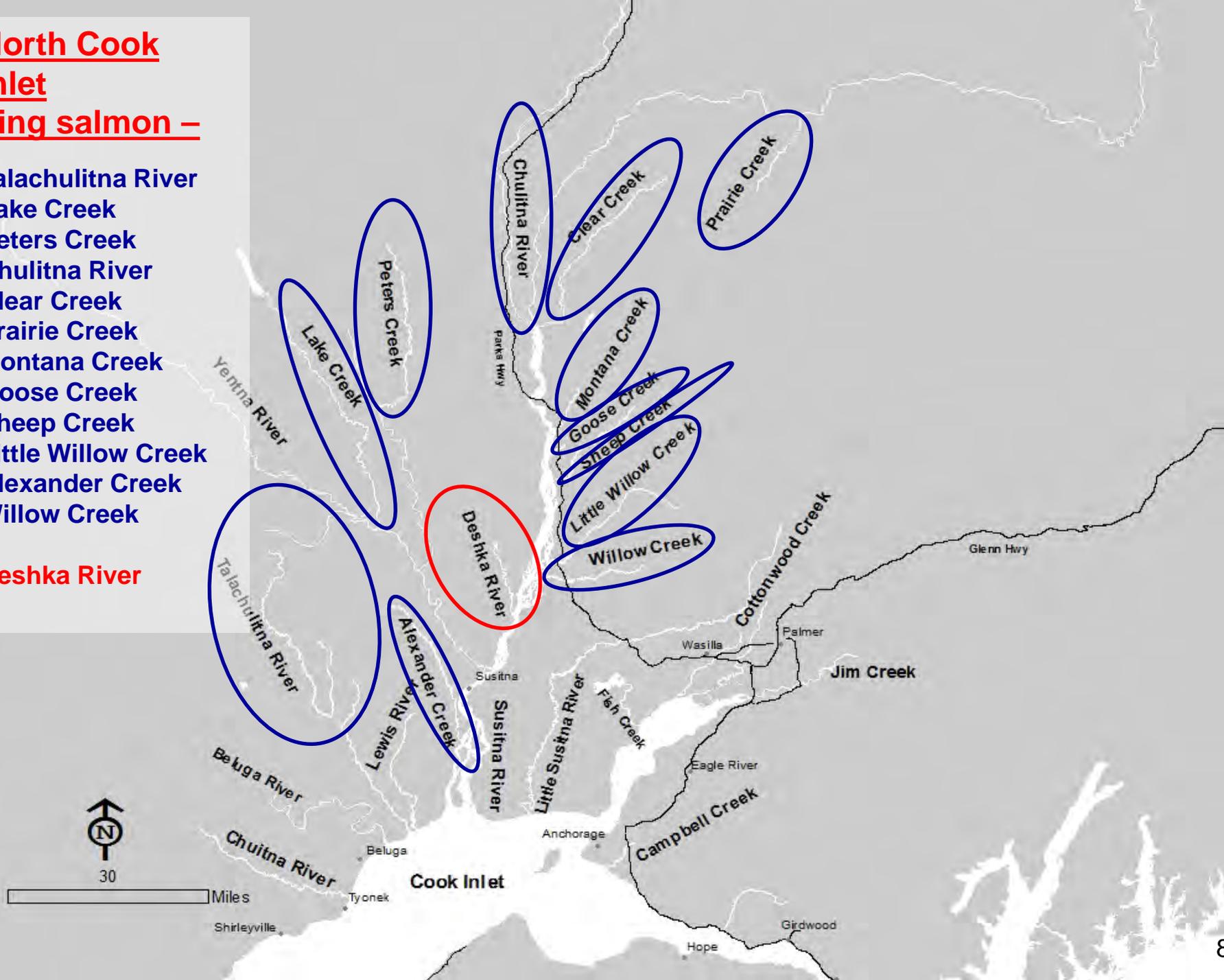
## **Sockeye salmon: 10 stocks**

Fish and Packers creeks; Chelatna, Judd, and Larson lakes; and Crescent, Kasilof, Kenai, and Russian (early and late run) rivers

**North Cook  
Inlet  
king salmon –**

- Talachulitna River
- Lake Creek
- Peters Creek
- Chulitna River
- Clear Creek
- Prairie Creek
- Montana Creek
- Goose Creek
- Sheep Creek
- Little Willow Creek
- Alexander Creek
- Willow Creek

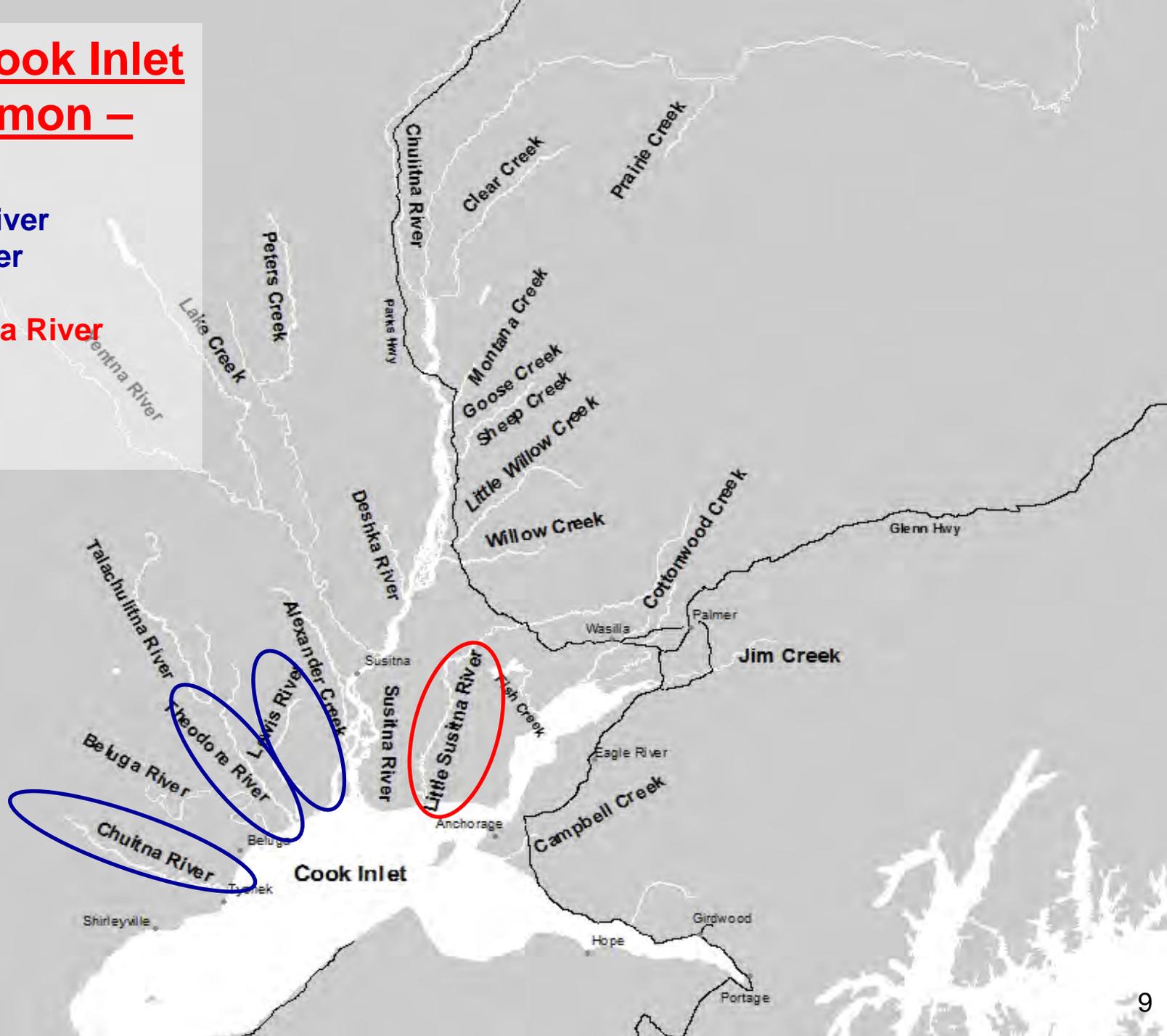
**Deshka River**



# North Cook Inlet king salmon –

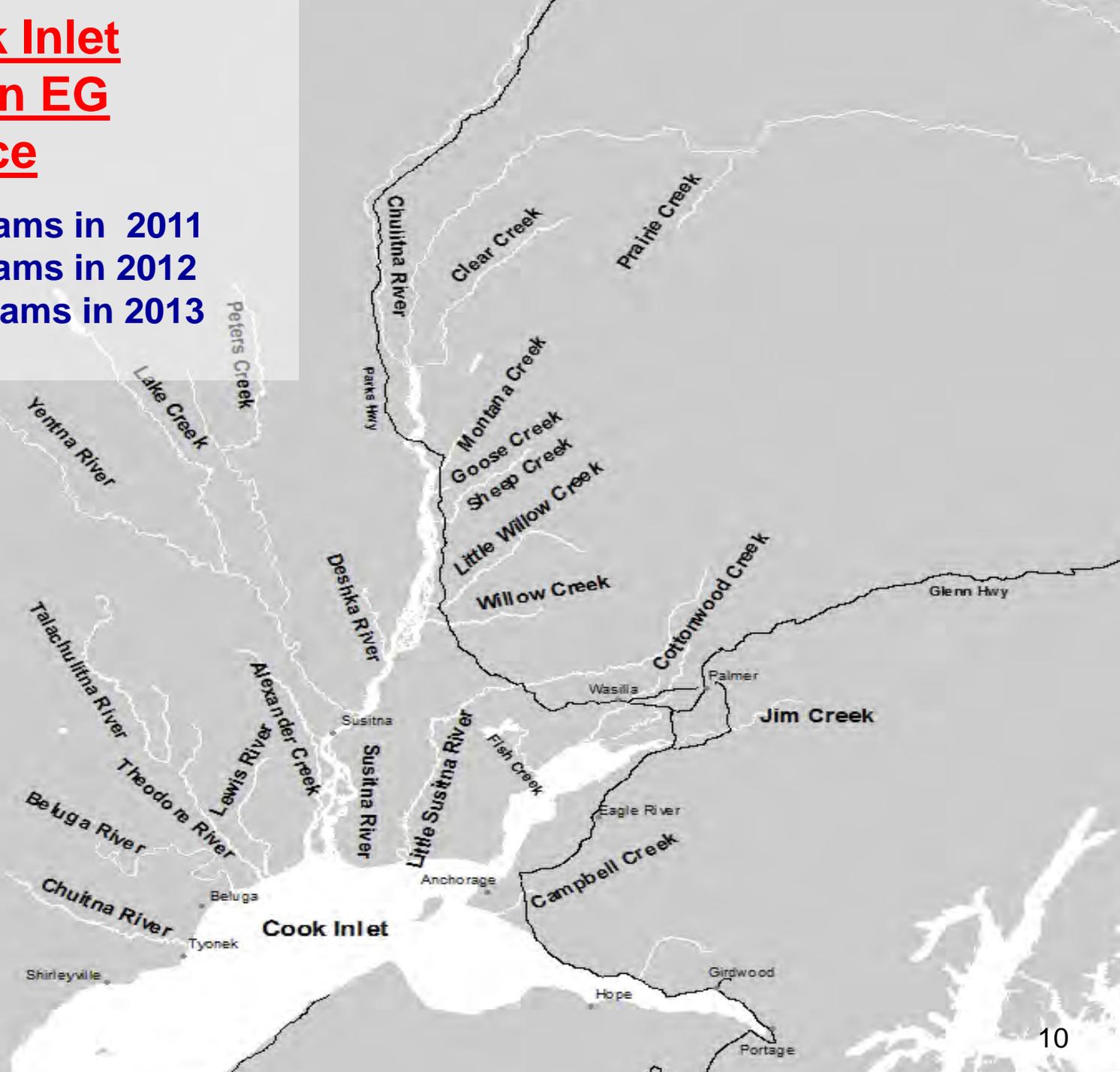
Lewis River  
Theodore River  
Chuitna River

Little Susitna River



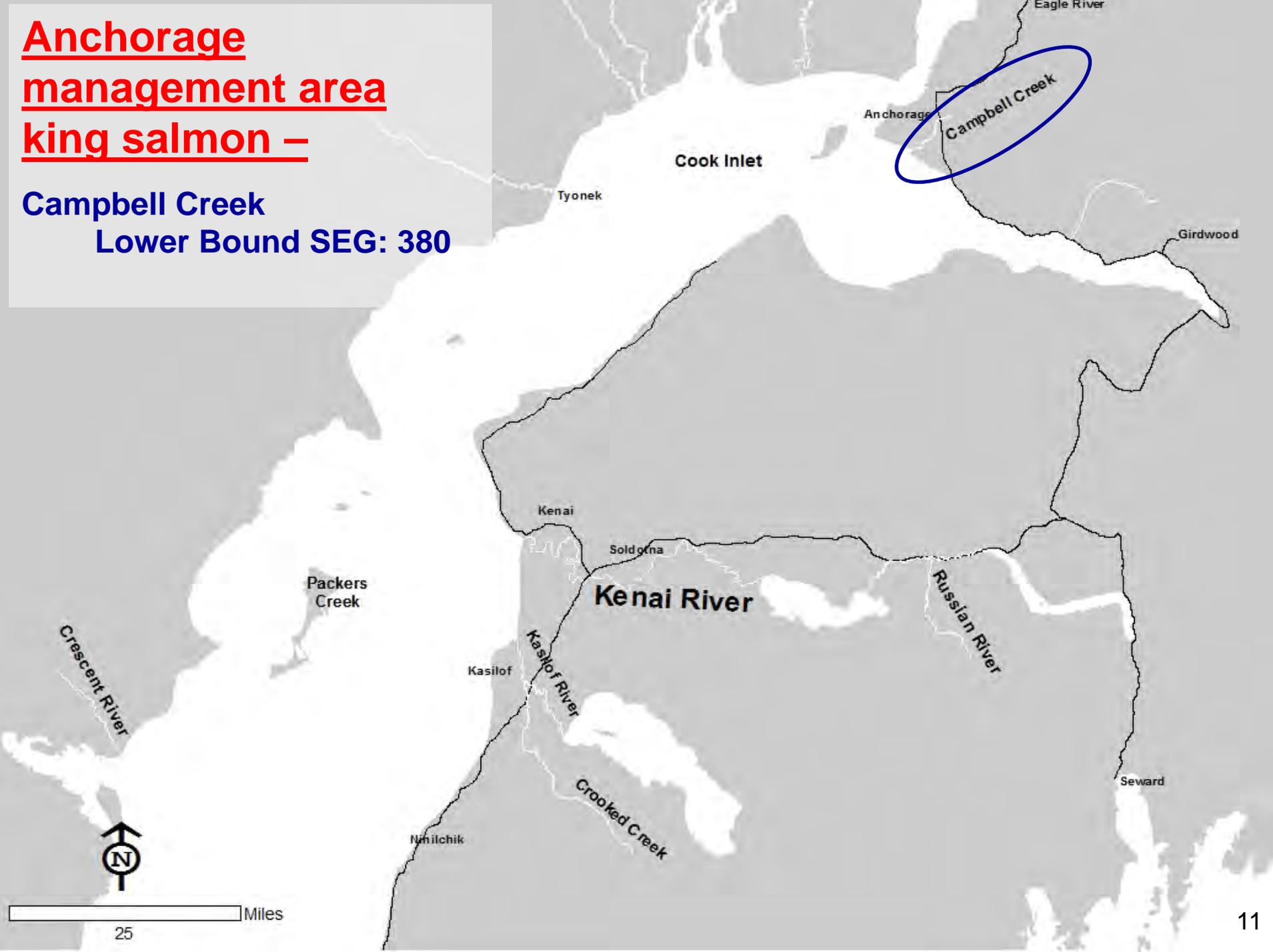
# North Cook Inlet king salmon EG performance

- 5 of 17 streams in 2011
- 4 of 17 streams in 2012
- 11 of 16 streams in 2013



**Anchorage  
management area  
king salmon –**

**Campbell Creek  
Lower Bound SEG: 380**



# North Kenai Peninsula king salmon –

Kenai River – early run

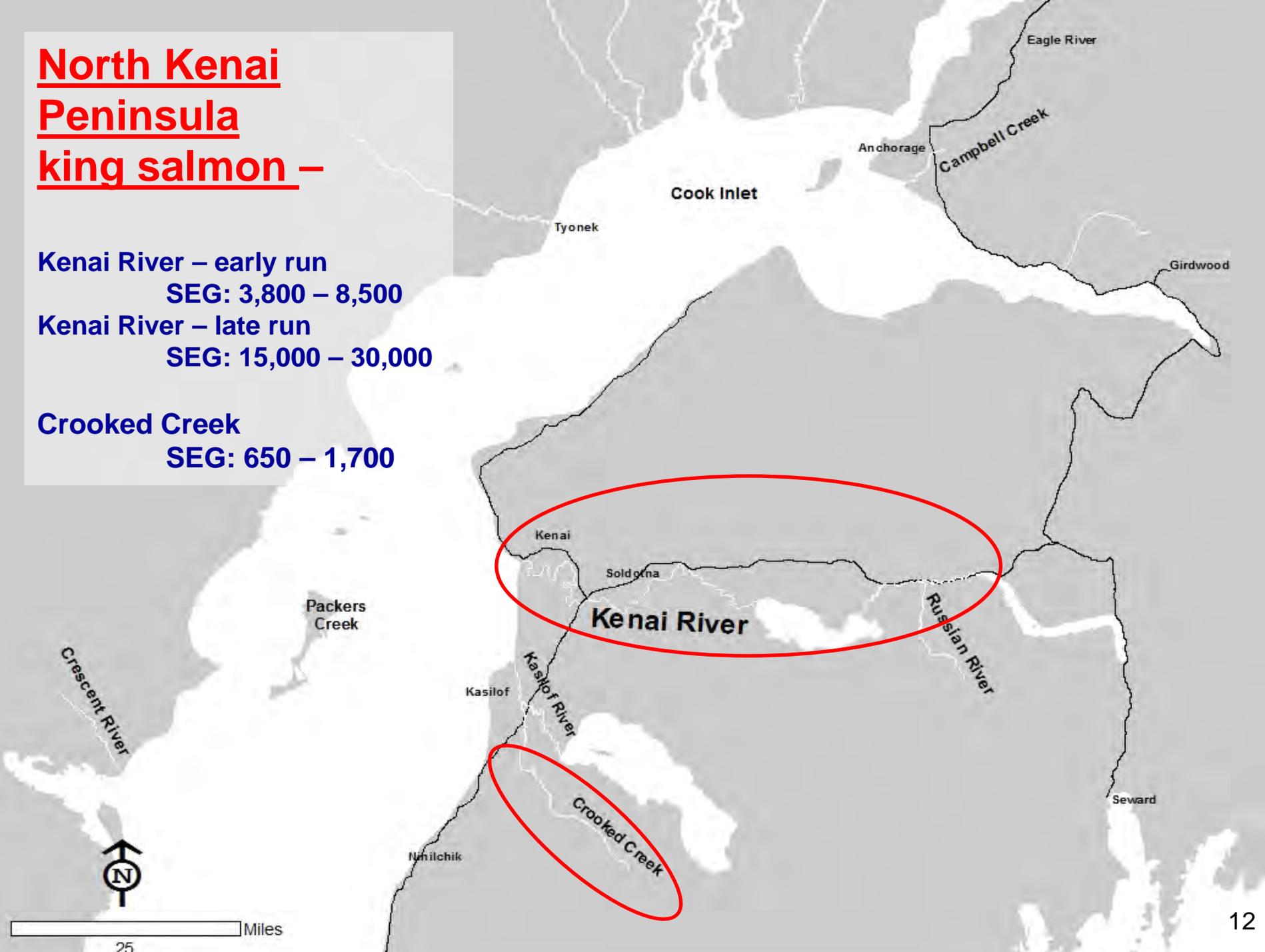
SEG: 3,800 – 8,500

Kenai River – late run

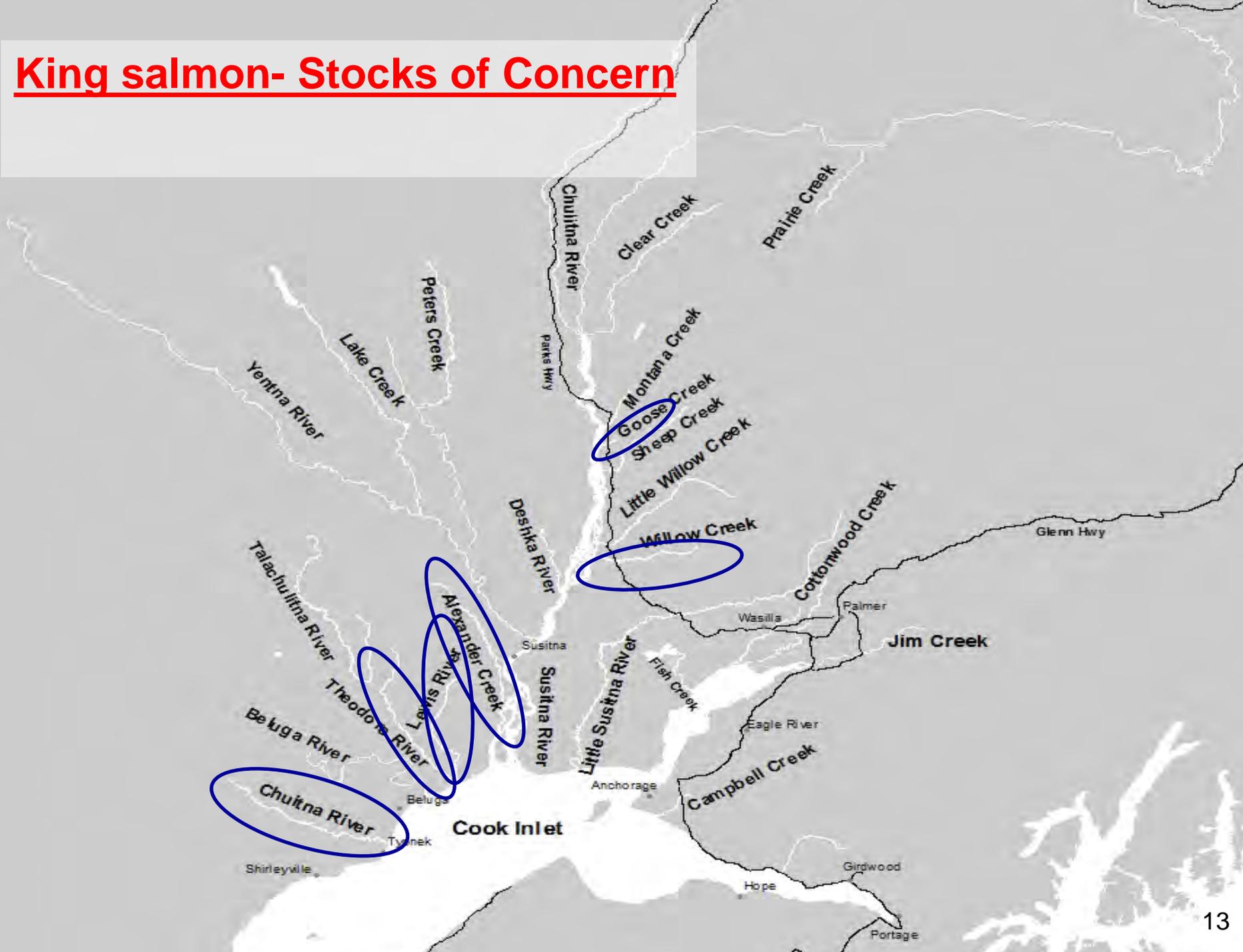
SEG: 15,000 – 30,000

Crooked Creek

SEG: 650 – 1,700



# King salmon- Stocks of Concern

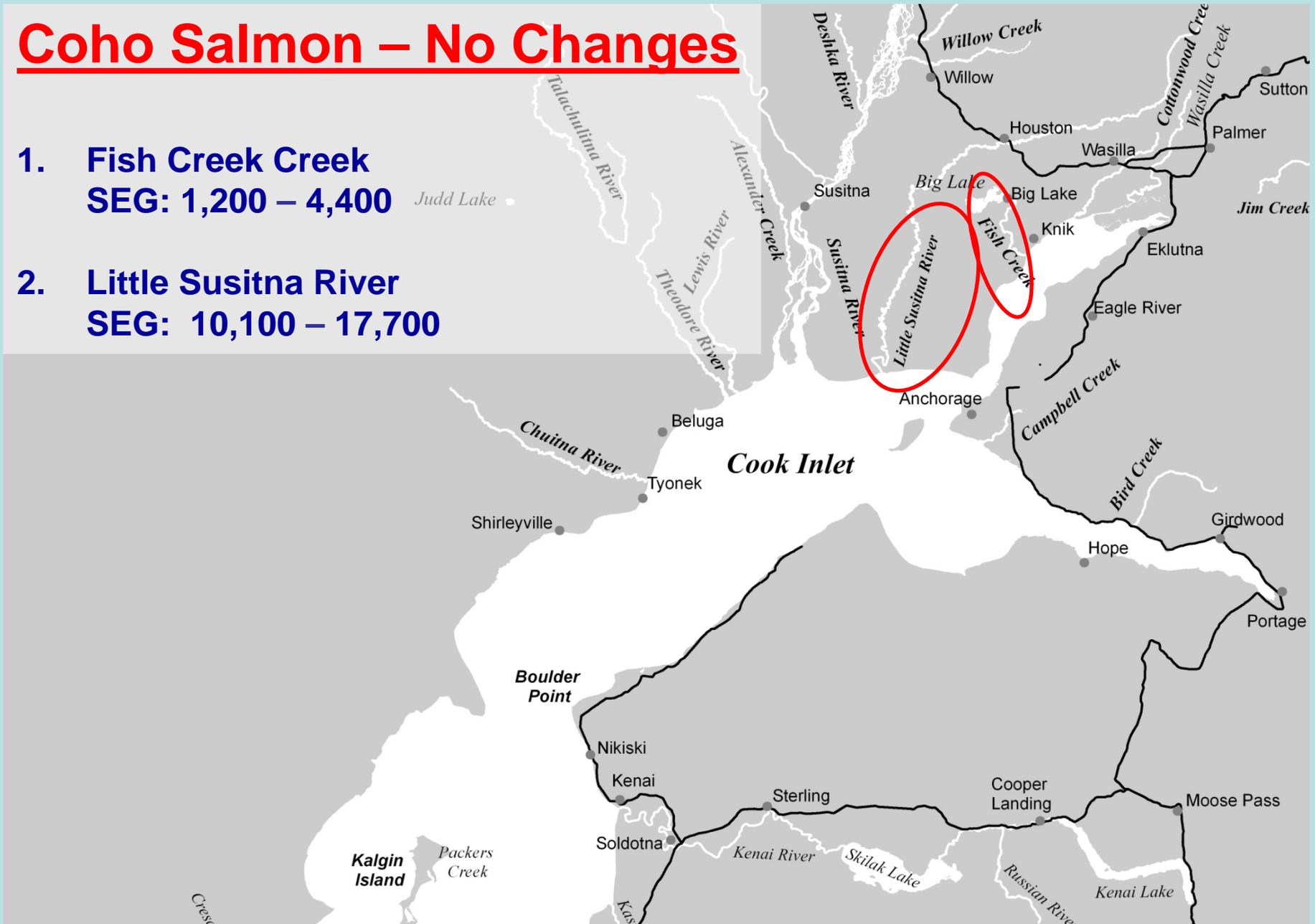


# King salmon- Stocks of Concern

<u>Stock</u>	<u>Goal Range</u>	<u>2009</u>	<u>2010</u>	<u>Escapements</u>			<u>2013</u>
				<u>2011</u>	<u>2012</u>		
Alexander Creek	2,100–6,000	275	177	343	181	588	
<u>Chuitna River</u>	1,200–2,900	1,040	735	719	502	1,690	
Goose Creek	250–650	65	76	80	57	62	
Lewis River	250–800	111	56	92	107	61	
Theodore River	500–1,700	352	202	327	179	476	
<u>Willow Creek</u>	1,600–2,800	1,113	1,173	1,061	756	1,752	

# Coho Salmon – No Changes

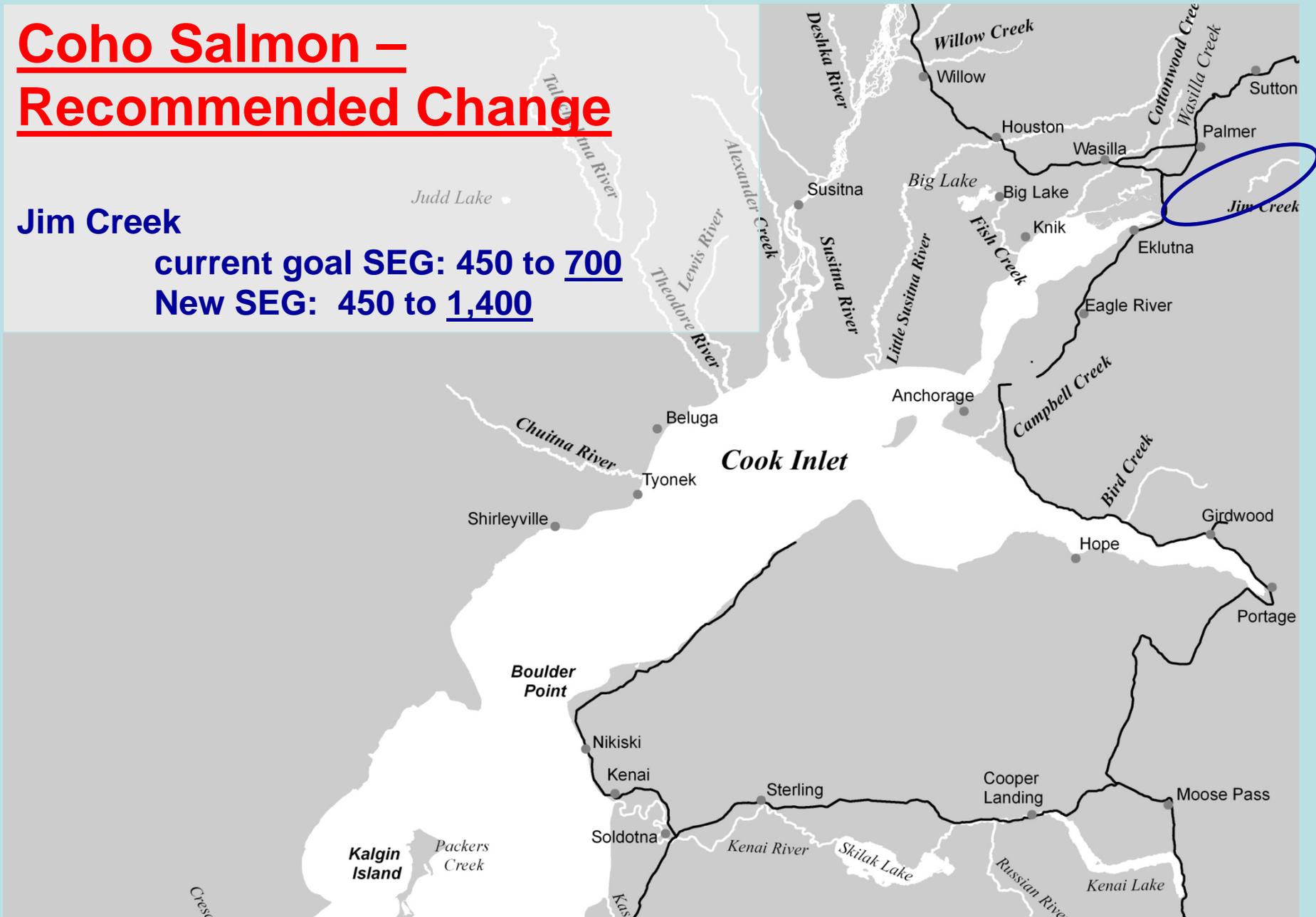
1. **Fish Creek Creek**  
**SEG: 1,200 – 4,400**
2. **Little Susitna River**  
**SEG: 10,100 – 17,700**



# Coho Salmon – Recommended Change

## Jim Creek

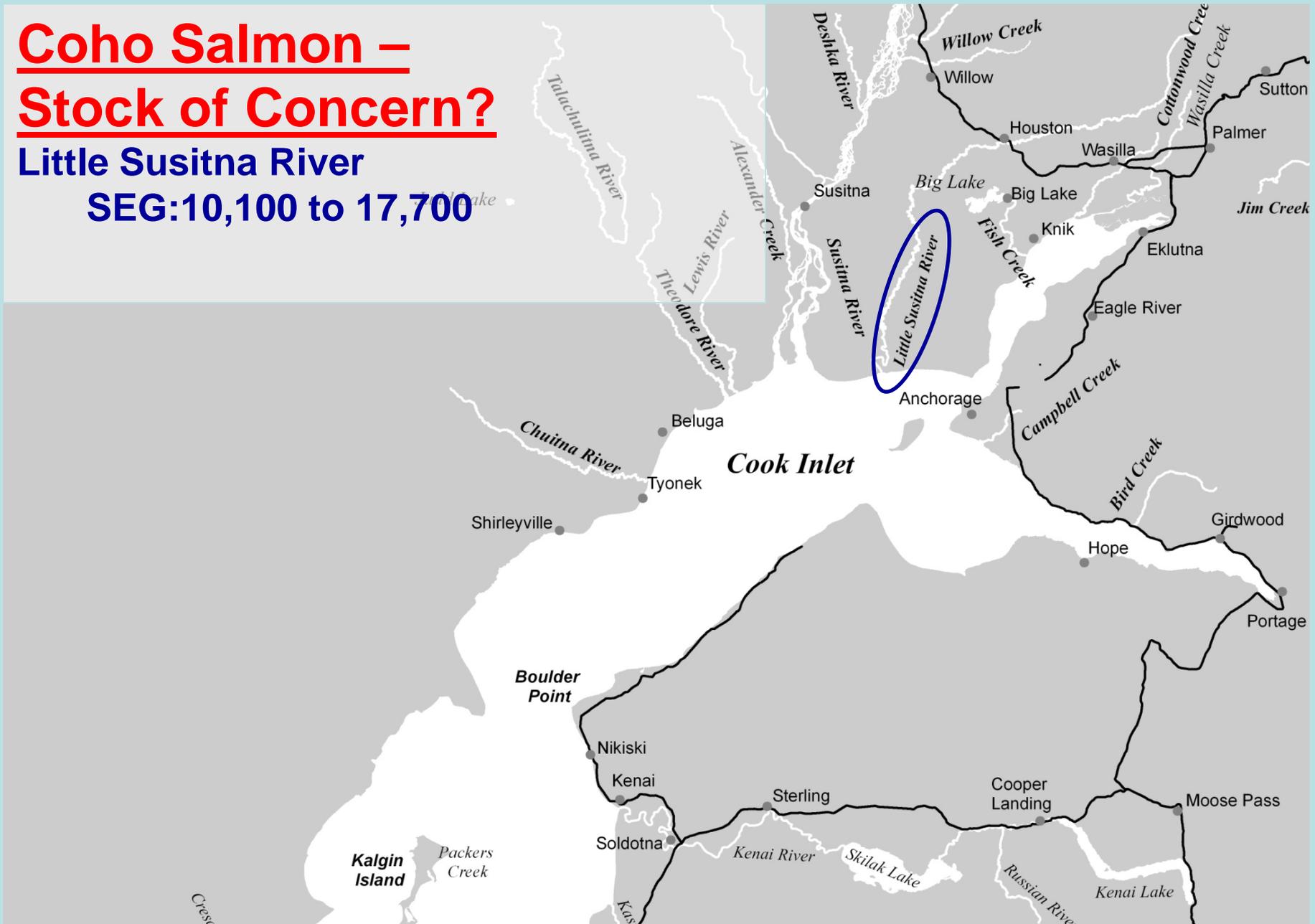
current goal SEG: 450 to 700  
New SEG: 450 to 1,400



# Coho Salmon – Stock of Concern?

Little Susitna River

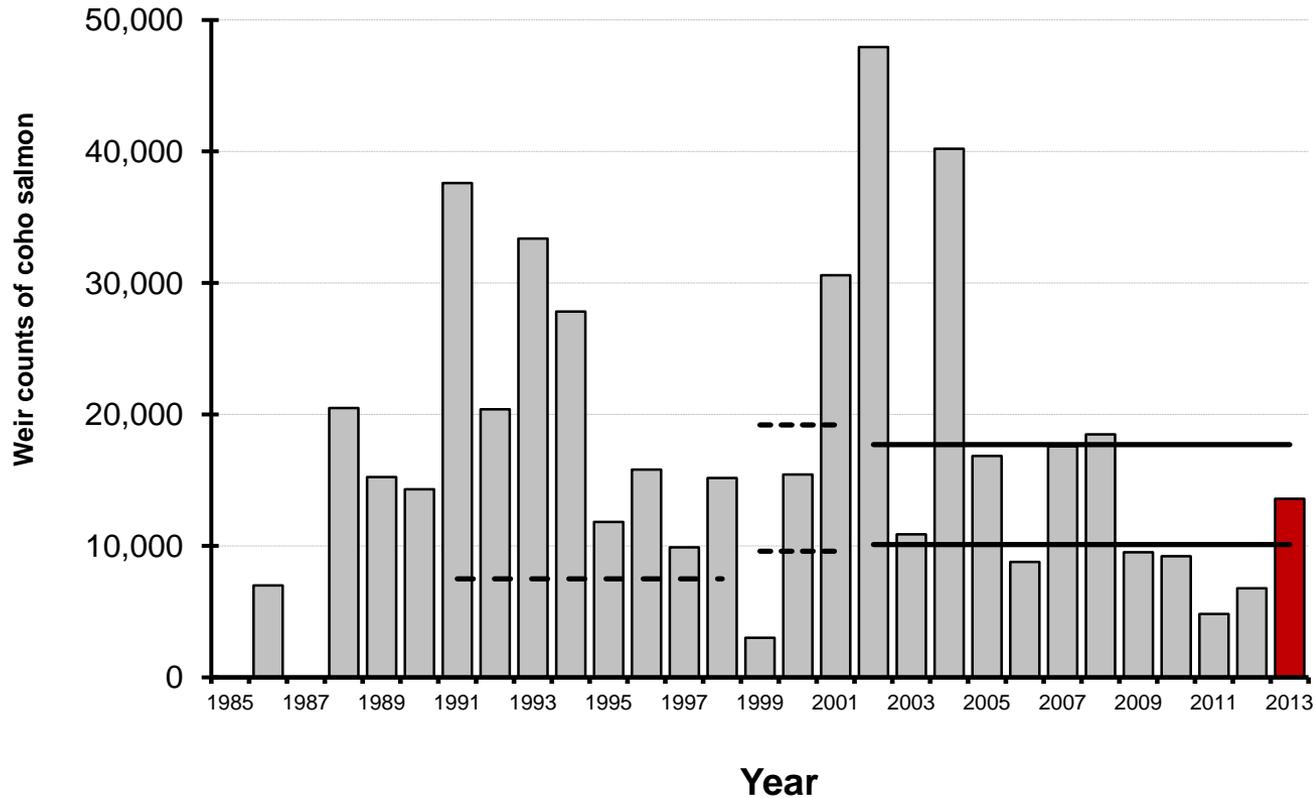
SEG:10,100 to 17,700



# Coho Salmon – Stock of Concern?

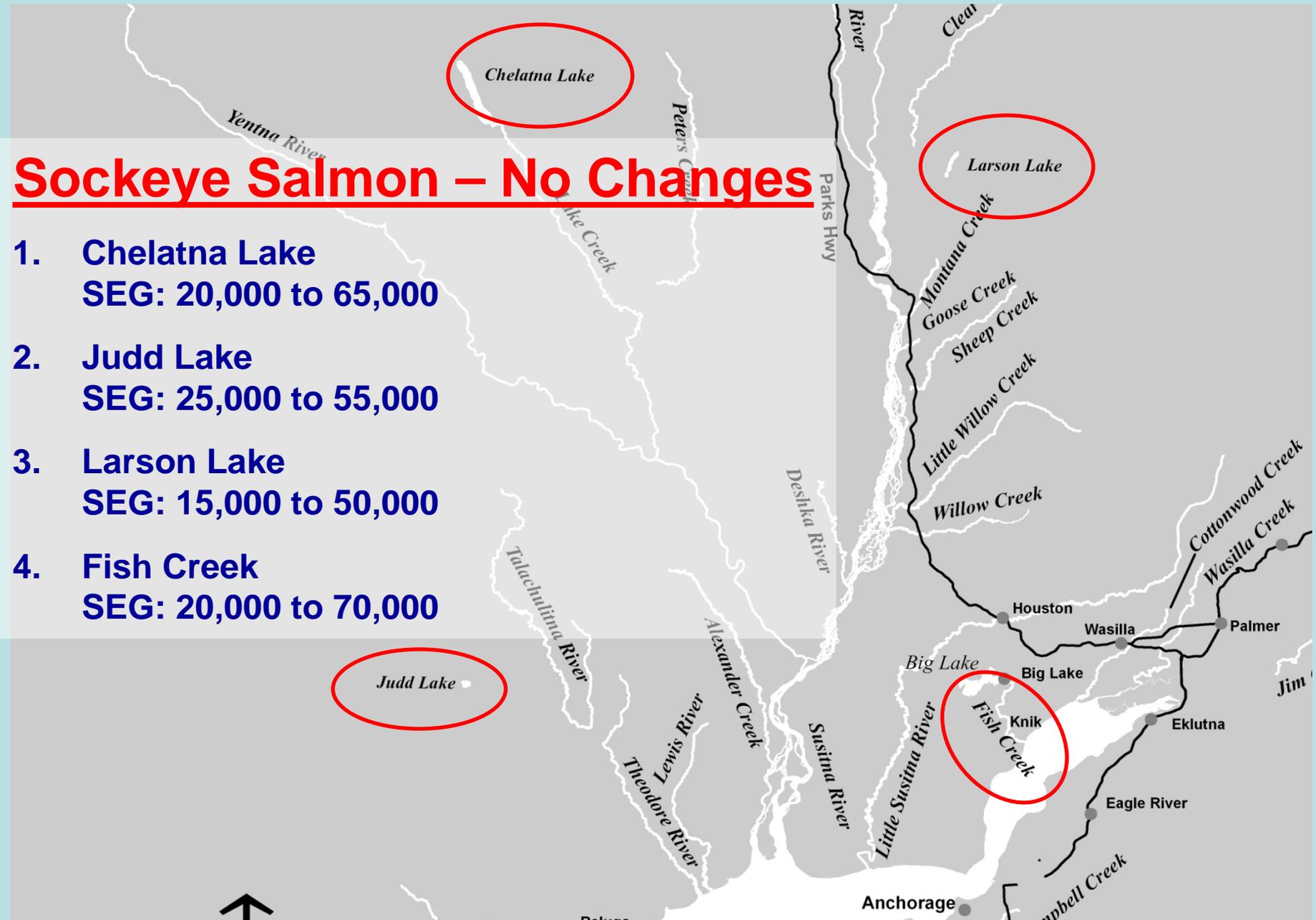
Little Susitna River

SEG:10,100 to 17,700



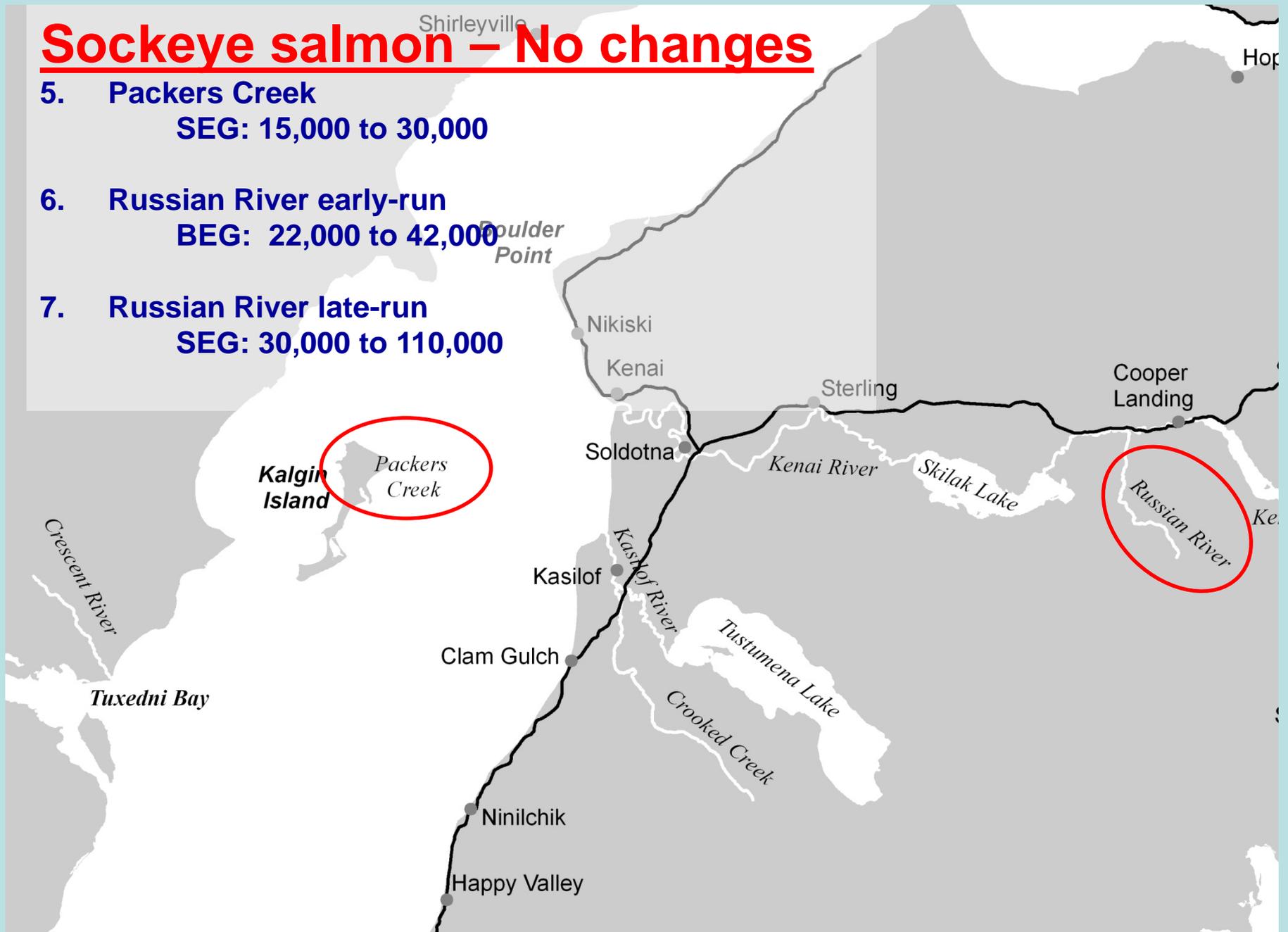
# Sockeye Salmon – No Changes

1. Chelatna Lake  
SEG: 20,000 to 65,000
2. Judd Lake  
SEG: 25,000 to 55,000
3. Larson Lake  
SEG: 15,000 to 50,000
4. Fish Creek  
SEG: 20,000 to 70,000



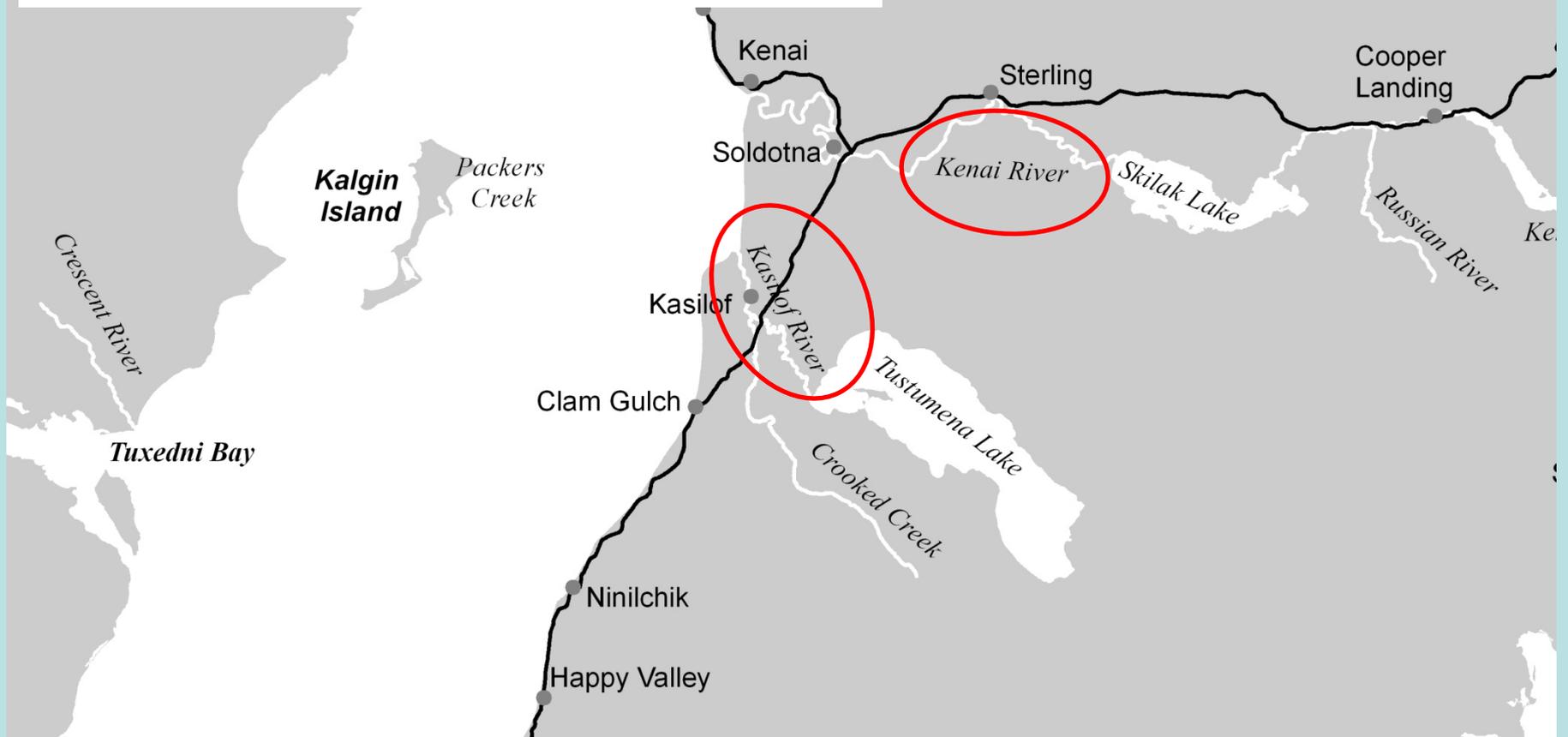
# Sockeye salmon – No changes

- 5. Packers Creek  
SEG: 15,000 to 30,000
- 6. Russian River early-run  
BEG: 22,000 to 42,000
- 7. Russian River late-run  
SEG: 30,000 to 110,000



# Sockeye Salmon – No Changes

- 7. Kasilof River  
BEG: 160,000 to 340,000
- 8. Kenai River  
SEG: 700,000 to 1,200,000

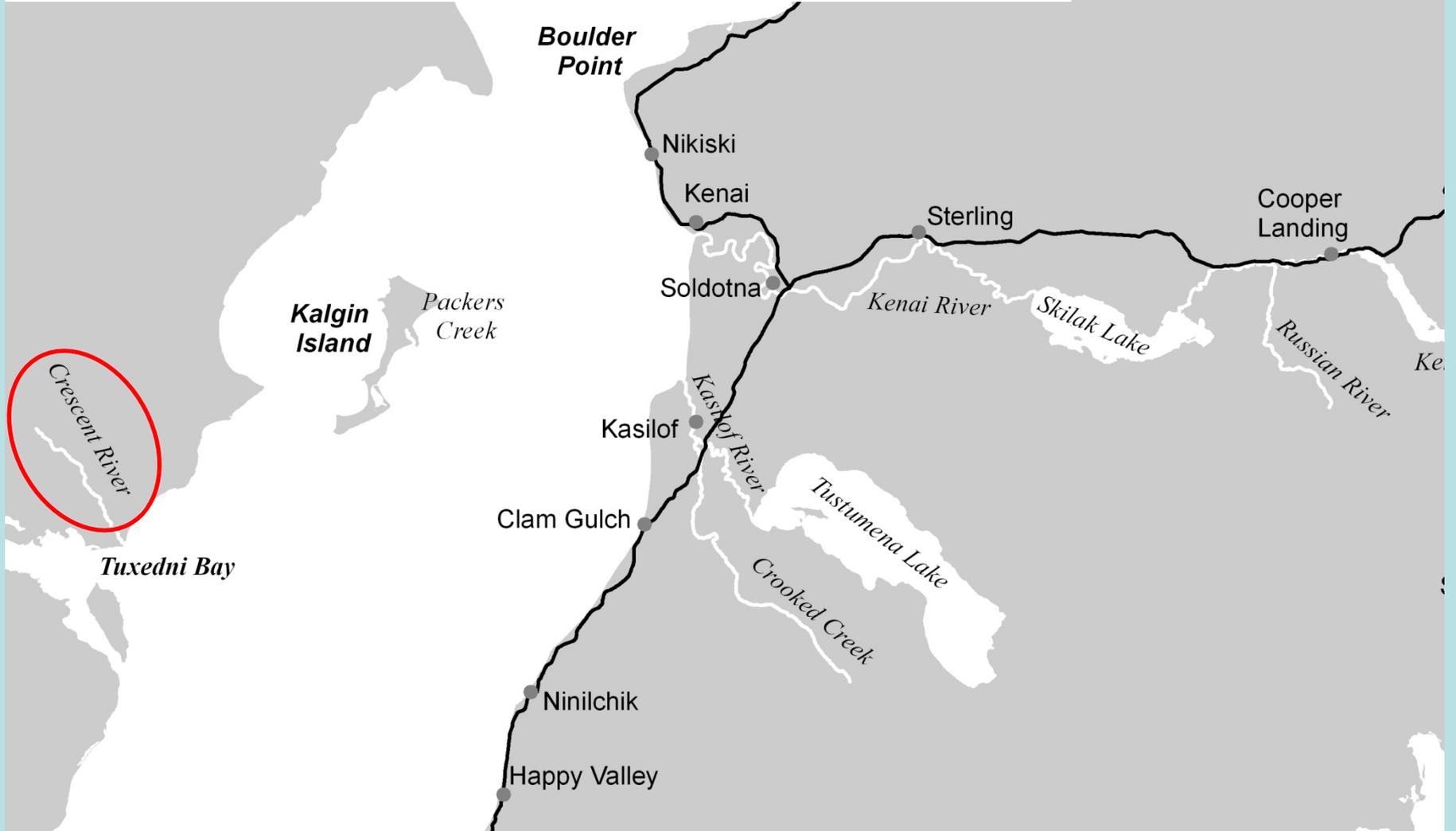


# Sockeye Salmon – Recommended change

## Crescent River

BEG: 30,000 to 70,000

Recommendation: Eliminate Goal



# Review Summary

## No changes to 34 Goals

- Clearwater Creek chum
- Fish Creek coho
- Little Susitna River coho
- Chelatna Lake sockeye
- Crescent River sockeye
- Fish Creek sockeye
- Judd Lake sockeye
- Kasilof River sockeye
- Kenai River sockeye
- Larson Lake sockeye
- Packers Creek sockeye
- Russian River early-run sockeye
- Russian River late-run sockeye
- Alexander Creek king
- Campbell Creek king
- Chuitna River king
- Chulitna River king
- Clear Creek king
- Crooked Creek king
- Deshka River king
- Goose Creek king
- Kenai River early-run king
- Kenai River late-run king
- Lake Creek king
- Lewis River king
- Little Willow Creek king
- Little Susitna River king
- Montana Creek king
- Peters Creek king
- Prairie Creek king
- Sheep Creek king
- Talachulitna Creek king
- Theodore River king
- Willow Creek king

# Review Summary

## 2 Recommended changes

- Crescent Creek sockeye: **discontinue goal**
- Jim Creek coho: **SEG 450-1,400**

## 7 Stocks considered

- Deshka coho
- Big River lake
- Kustatan River coho
- Kashwitna king
- Moose Creek king
- Little Susitna sockeye
- Little Susitna River chum

# Questions?

