

# Prioritizing Riparian Habitat Protection and Restoration:

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## What Strategic Habitat Conservation Looks Like on the Ground

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Anchorage Field Office



# Background:

## Mat-Su Salmon Strategic Action Plan (adopted in 2008- current update process)

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- Conservation Strategy #2 Alteration of Riparian Areas
  - Objective 2.1 Identification
    - 50% of salmon riparian areas field surveyed, mapped and prioritized
  - Objective 2.2 Protection
    - Secure long-term protective status of at least 10% of priority riparian habitats
  - Objective. 2.3 Restoration
    - Restore 5% of altered priority riparian habitats

# Background:

## Habitat Prioritizations 2009 - 2013

- Based on the work of Great Land Trust with the assistance of other partners
- 1st iteration - upper Knik Arm
- 2<sup>nd</sup> iteration - entire Mat-Su Borough – broader conservation focus
- 3<sup>rd</sup> iteration - focus on salmon habitat and identifying priority water bodies

# Salmon Habitat Specific Prioritization Process

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Objective: Identify water bodies and lands adjacent to them that are important salmon spawning, rearing or overwintering habitat.

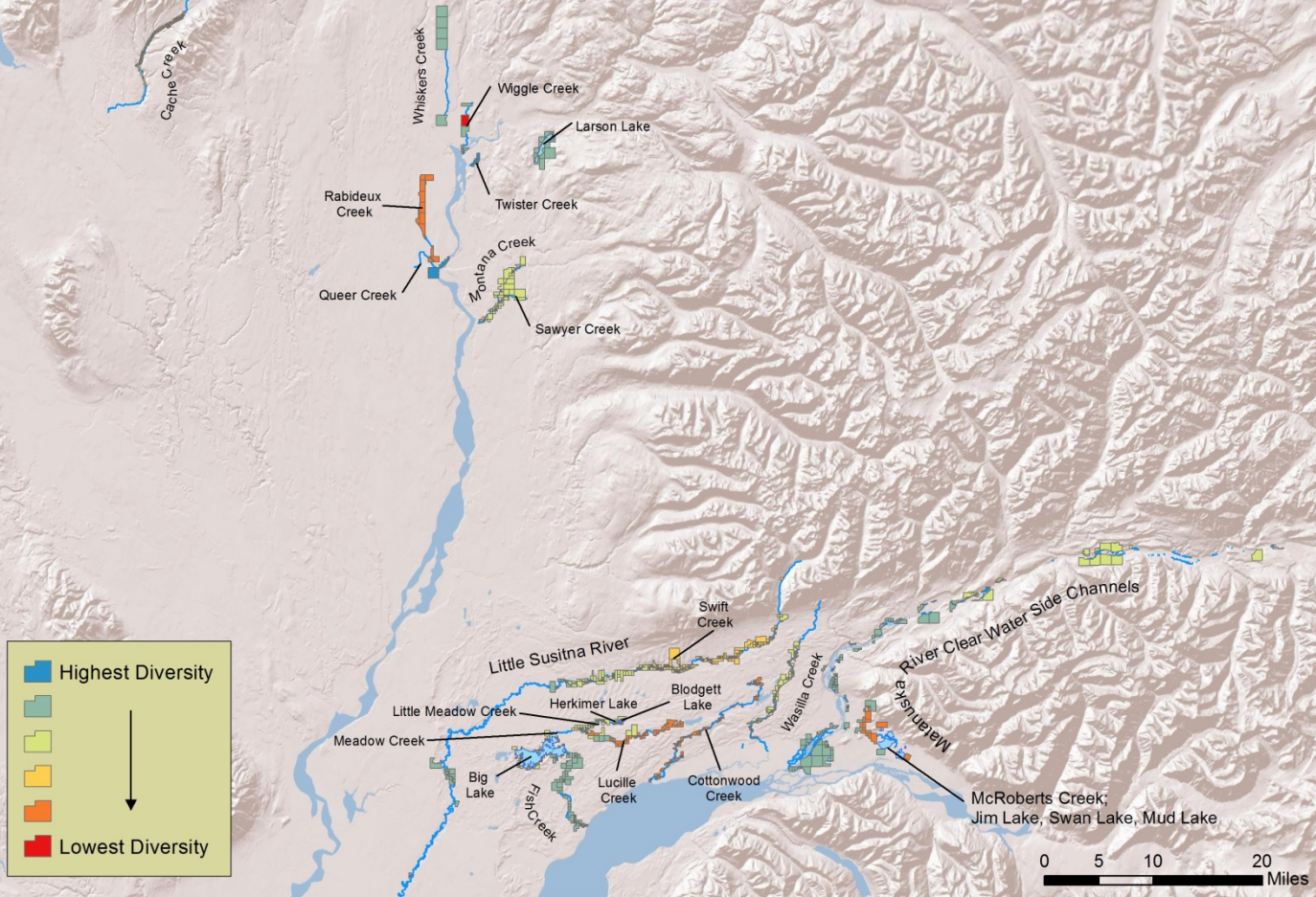
- GLT solicited input from partnership members and other stakeholders:
  - ADF&G
  - ARRI
  - EPA
  - Fishing Guides
  - MSB
  - TNC
  - Tribal Gvmnts
  - USFWS
  - USGS

# Salmon Habitat Specific Prioritization Process (cont.)

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- 6 criteria used for GIS analysis
  - 24 priority water bodies
  - 300' riparian zone buffer
- Filters applied:
  - Parcels greater than 5 acres
  - Land ownership = Private, Native Corporation, Mental Health Trust, Public University, Borough

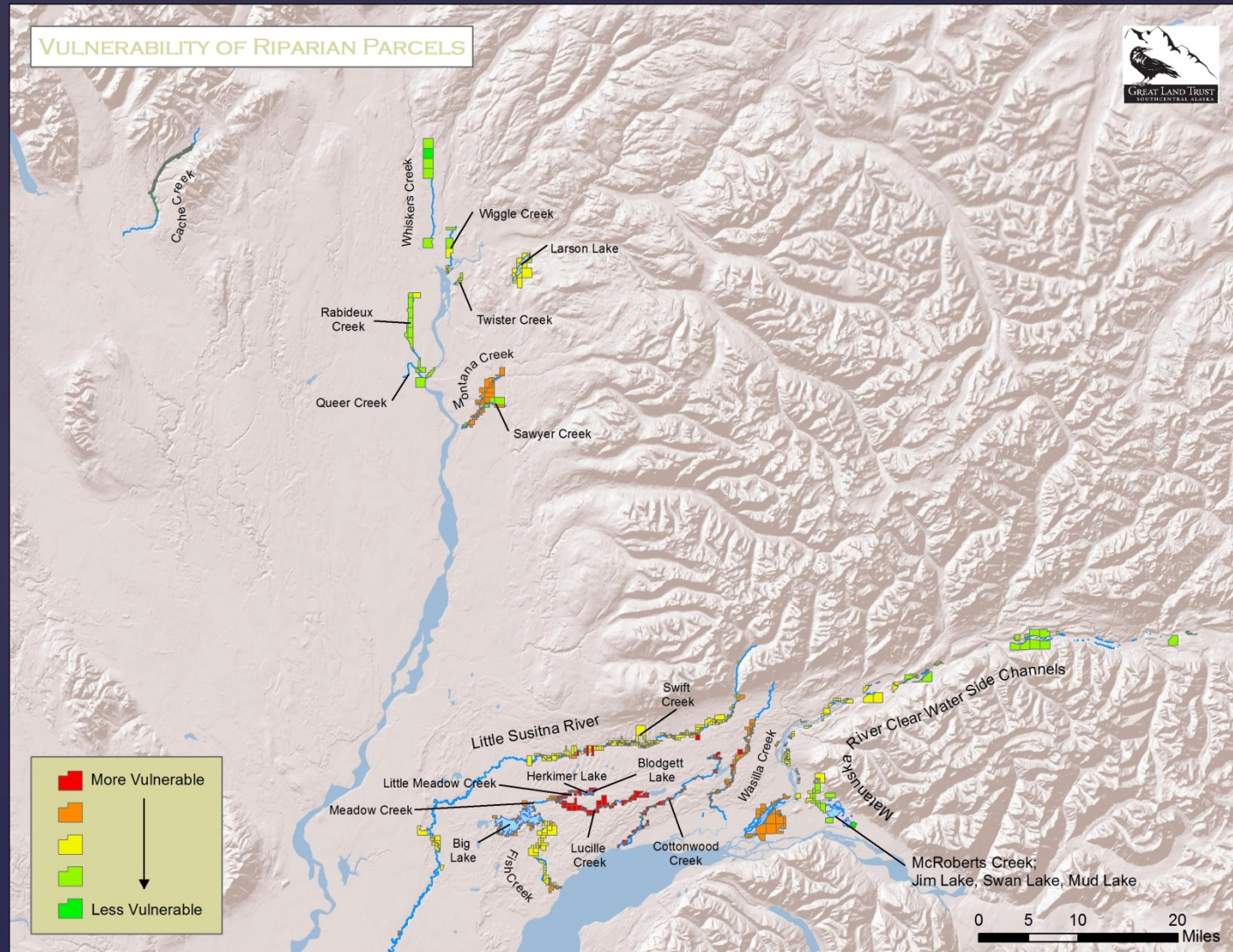
## ADJACENT ANADROMOUS SPECIES DIVERSITY



Anadromous Waters Catalog - Count of species documented in a given stream reach; 0 – 9 species possible (ADF&G)

# Anadromous Species Diversity

Vulnerability score derived from Road Density, Impervious Land Cover, & Subdivisions (TNC)



Vulnerability by Subwatershed

## ADJACENCY TO PROTECTED AREAS



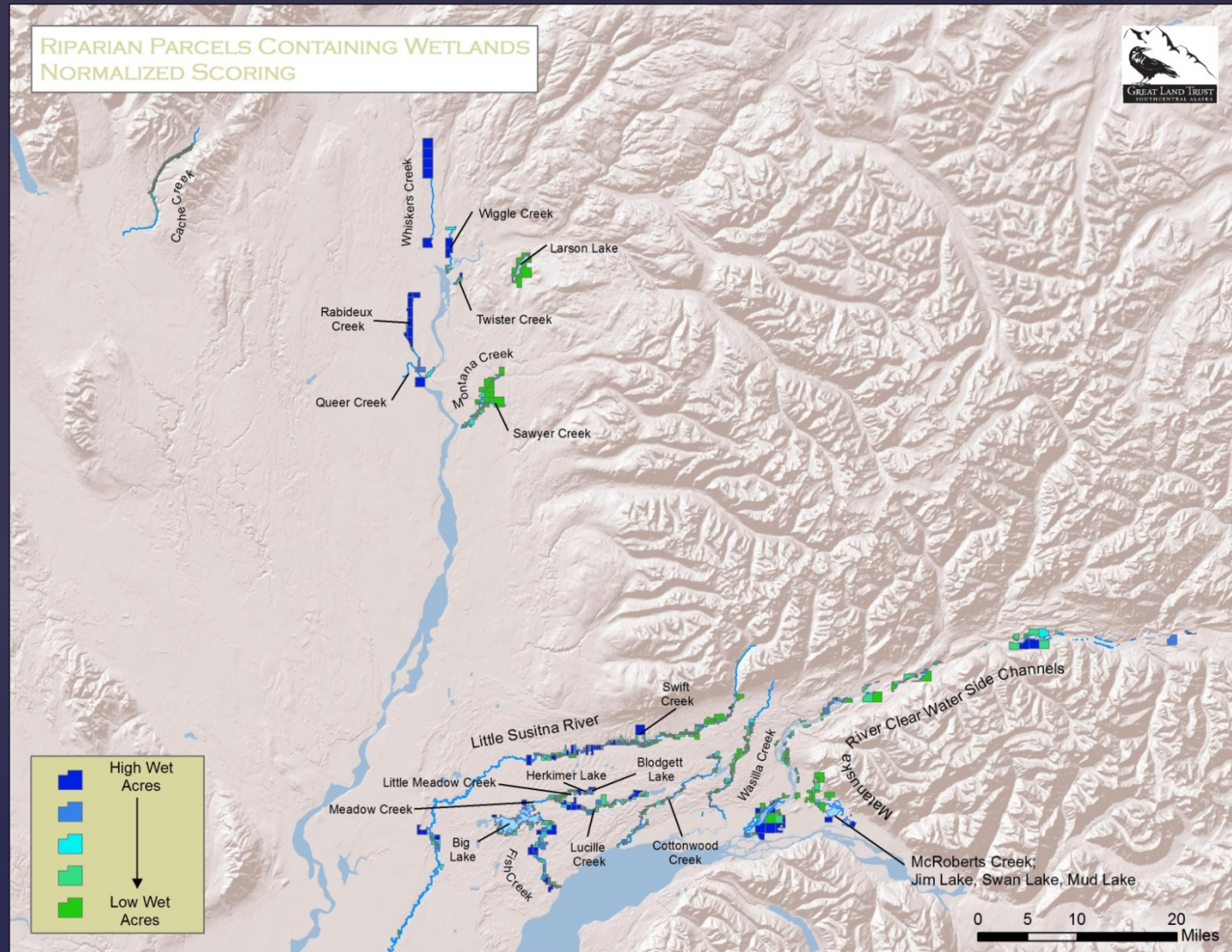
Protected status includes:  
Parks,  
Preserves,  
Refuges,  
Mitigation bank parcels and  
Conservation easements

# Adjacency to Protected Lands

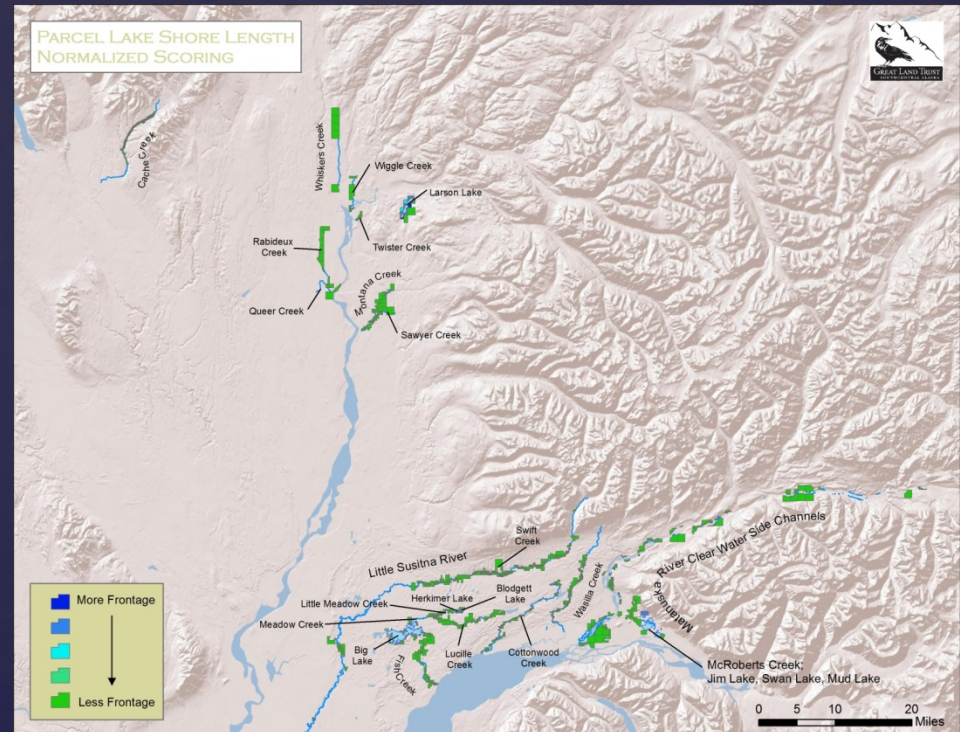
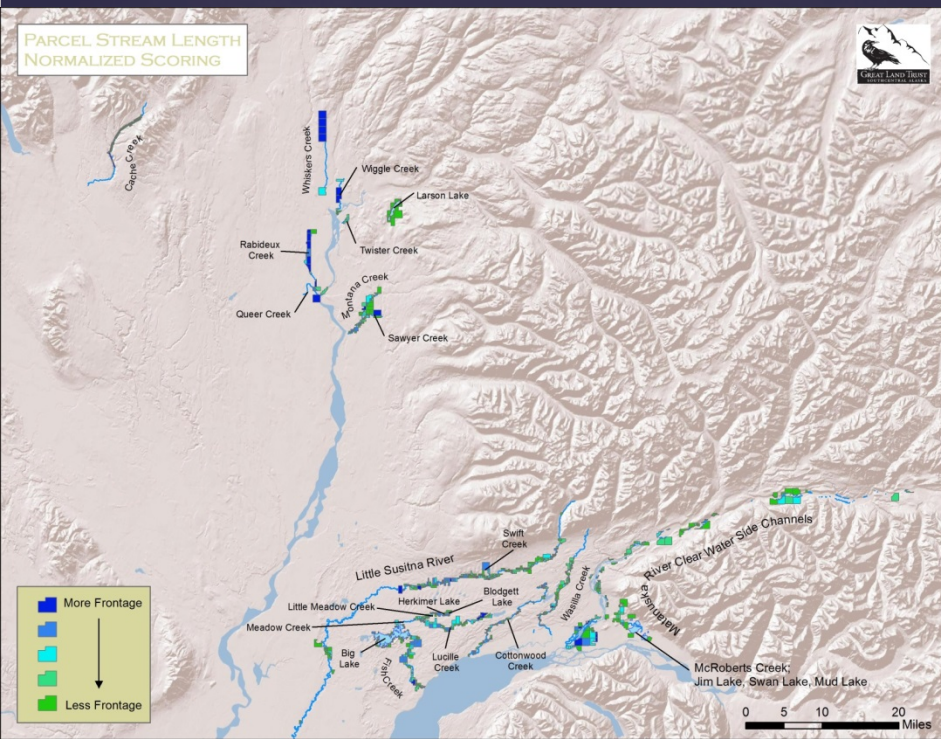


Wetlands identified by:

- National Wetlands Inventory (USFWS)
- Cook Inlet mapping project (Mike Gracz)



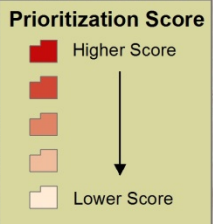
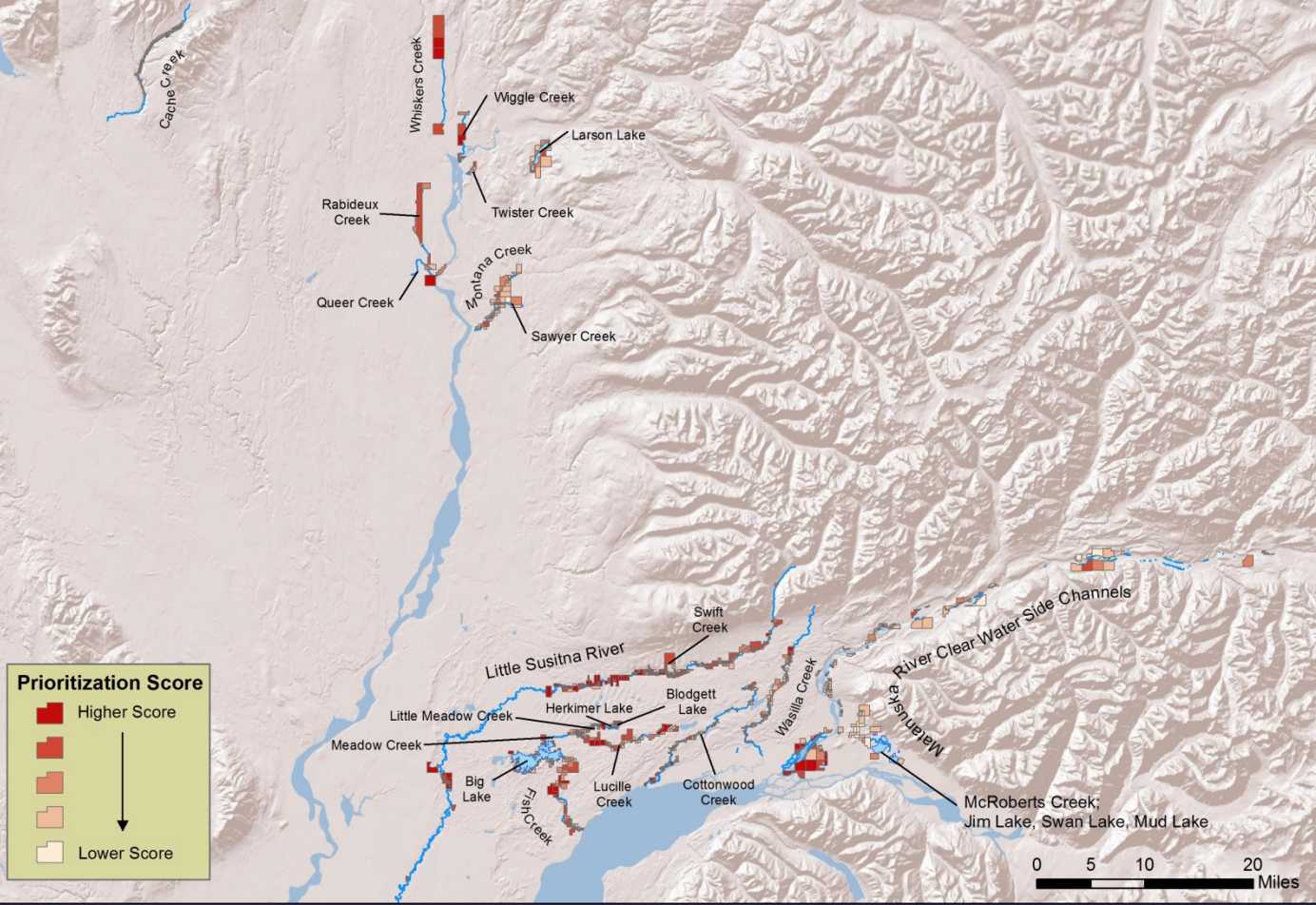
Normalized Area of Wetlands



# Normalized Stream & Lake Shore Lengths

## SALMON HABITAT PRIORITIZATION

All 1,099 Parcels greater than 5 acres w/in 300' of selected anadromous waterbodies



Protection  
Work:  
1,099  
parcels  
identified

Restoration  
Work:  
mapping &  
inventory  
work  
underway

# Salmon Habitat Priority Water Body Map

# So what have we accomplished...

- Obj 2.1 Identification and prioritization –
  - 50% Complete? Yes, field mapping still needed
- Obj 2.2 Protection - 10% Complete? Maybe...

Habitat Type	Priority Habitat Identified	10% Threshold	Priority Habitat Protected
Upland & Wetland Habitat	59,522 Acres	5,952 Acres	6,274 Acres (10.5%)
Streams	141 Miles	14.1 Miles	3.5 Miles (2.5%)
Lake shore	10 Miles	1 Mile	0

- Obj 2.3 Restoration - 5% Complete? TBD
  - Restoration projects identified & on-going

This continues to be an iterative process - we would like your input...

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If you have data or information to contribute towards improving the prioritization or project ideas please contact us:

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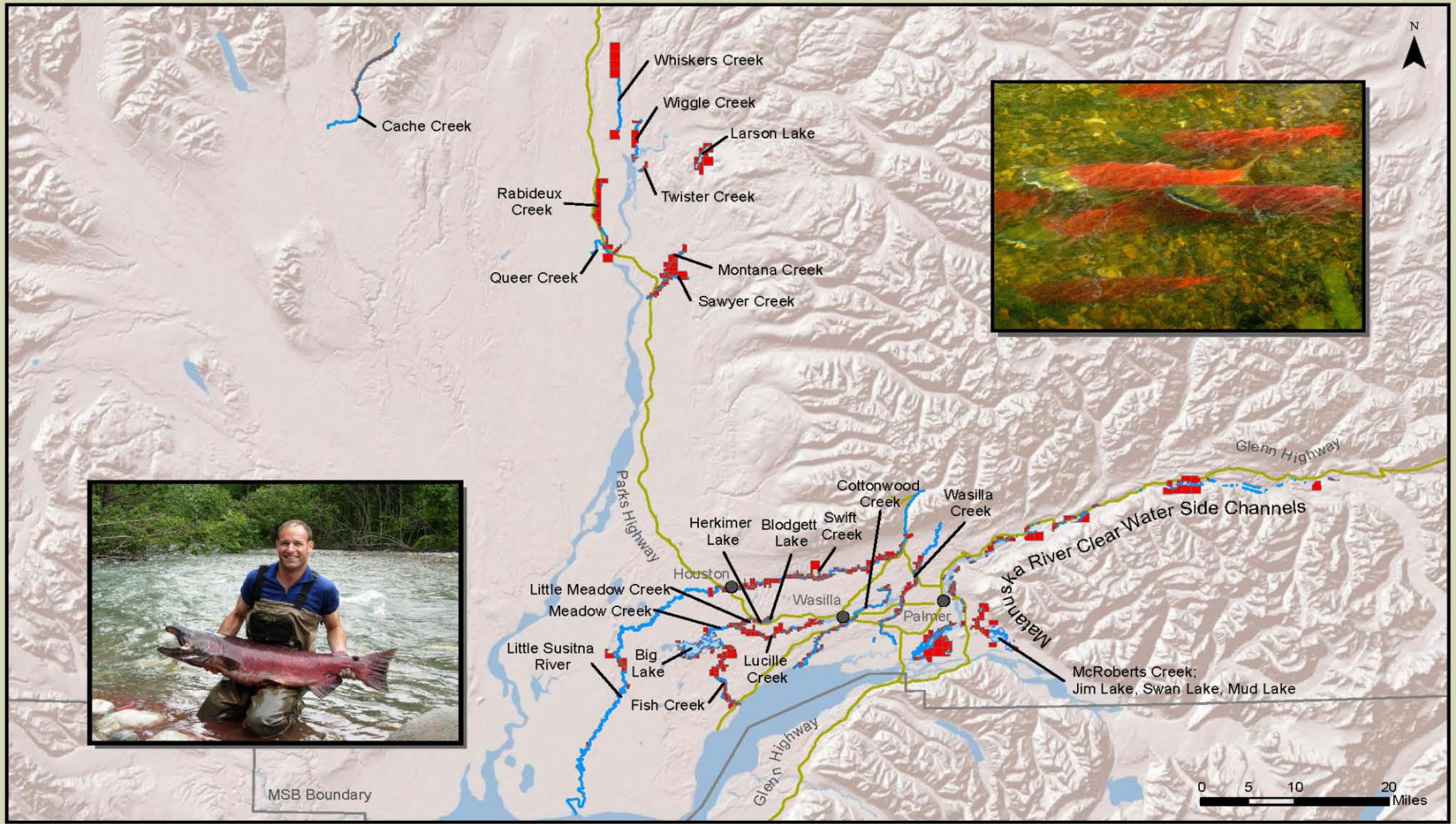
[ksollien@greatlandtrust.org](mailto:ksollien@greatlandtrust.org)

THANKS! Questions?

# MAT-SU SALMON HABITAT PRIORITIZATION

Parcels highlighted in red signify high value salmon spawning, juvenile rearing, and overwintering habitat in 24 priority waterbodies in the MSB

- Selected Parcels
- Selected Rivers and Streams
- Major Roads
- Mat-Su Borough Boundary
- Selected Lakes
- Selected Lakes
- Cities



MSB Boundary

0 5 10 20 Miles