

Mat Su Salmon Habitat Partnership Project Mapper

Mapping MetaDATA

Marcus Geist, Geographer

November 13, 2019



Alaska Center for
Conservation Science
UNIVERSITY of ALASKA ANCHORAGE



\$3.5 million
NFHP

+

\$7 million
matched

- Science (34 projects)
- Restoration (29)
- Conservation (17)
- Coordination & education (15)

Project Narratives



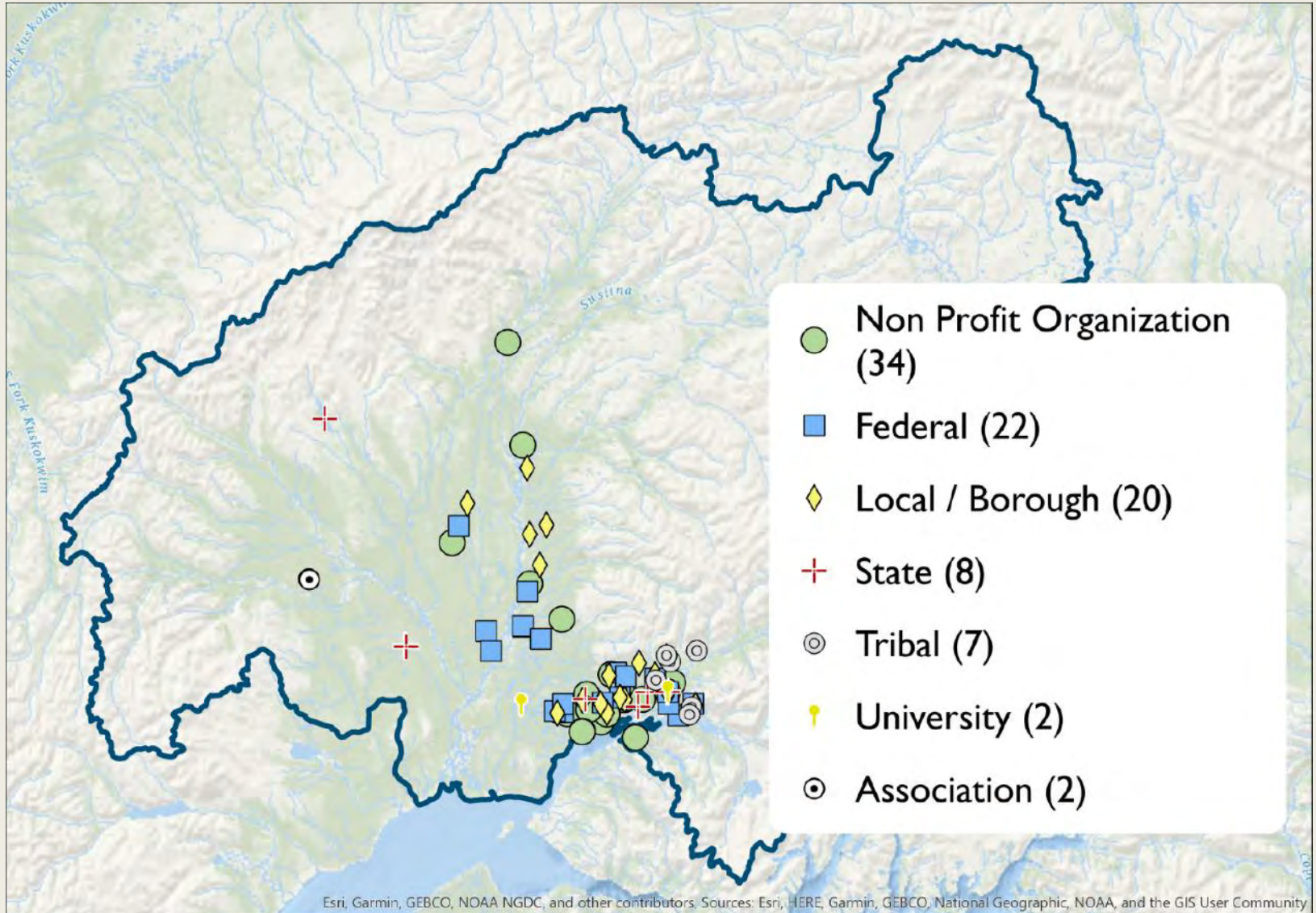
Projects

Projects Funded in 2012:

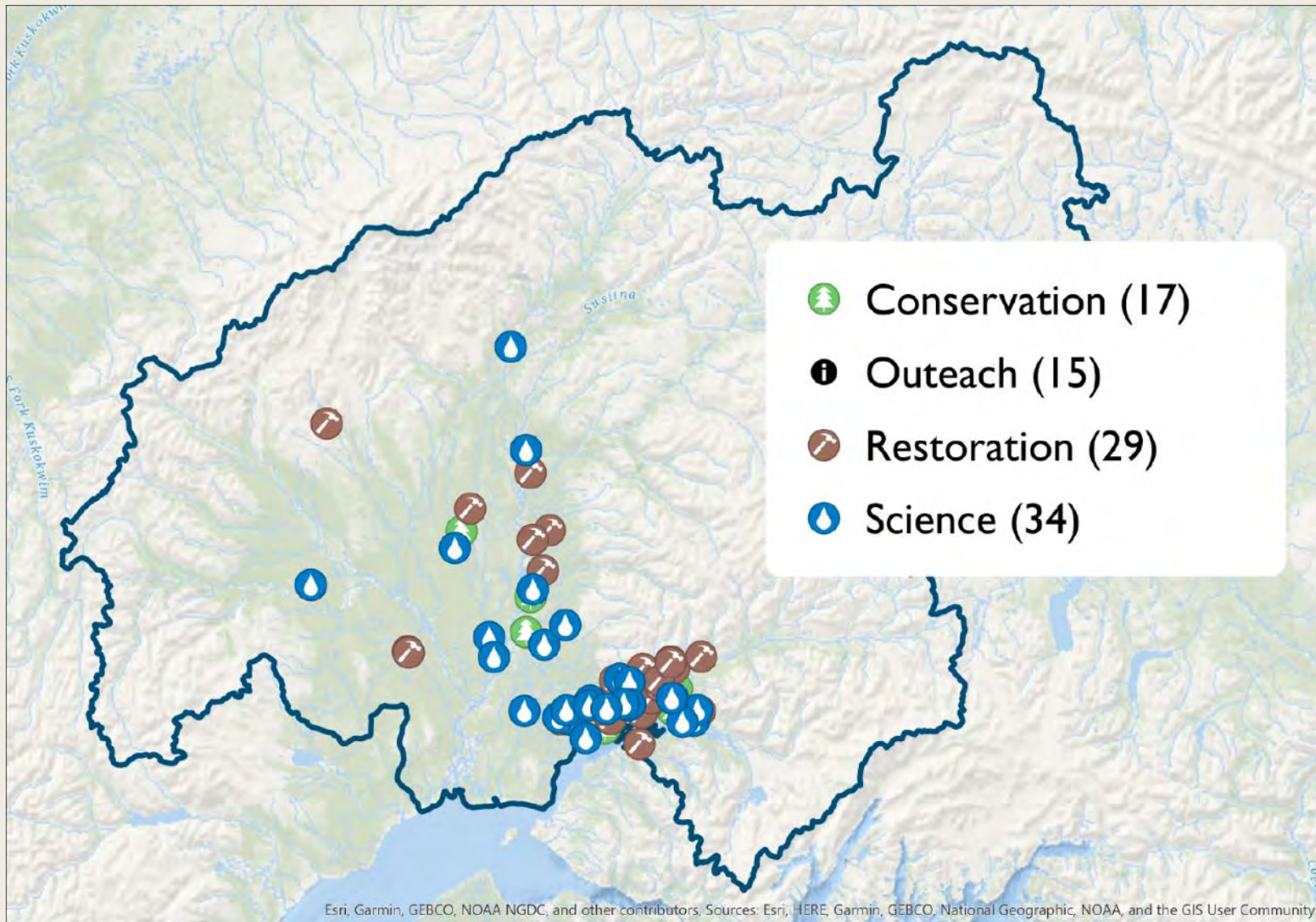
Matanuska River Clearwater Side Channel Habitat Conservation Project (*Great Land Trust*). Based upon assessment work conducted by the U.S. Fish and Wildlife Service, Great Land Trust and other members of the Partnership, streams and rivers were prioritized in the Mat-Su Borough and the Matanuska River side channel habitat was some of the top priority areas to conserve. The clear water side channels were identified as an important resource for juvenile salmon and other species under Strategic Plan Element 2 (Alteration of Riparian Areas). These channels are important spawning and rearing habitat for sockeye, chum and coho salmon and over 160 acres were preserved via conservation easements.

Mat-Su Water Reservation Program Flow Data Acquisition (*U.S. Fish & Wildlife Service & U.S. Geological Survey*). Obtaining water reservations to preserve salmon habitat is a priority objective under Strategic Action Element 9 (Loss or Alteration of Water Flow or Volume). For Partnership water reservations, an interagency group (U.S. Fish & Wildlife

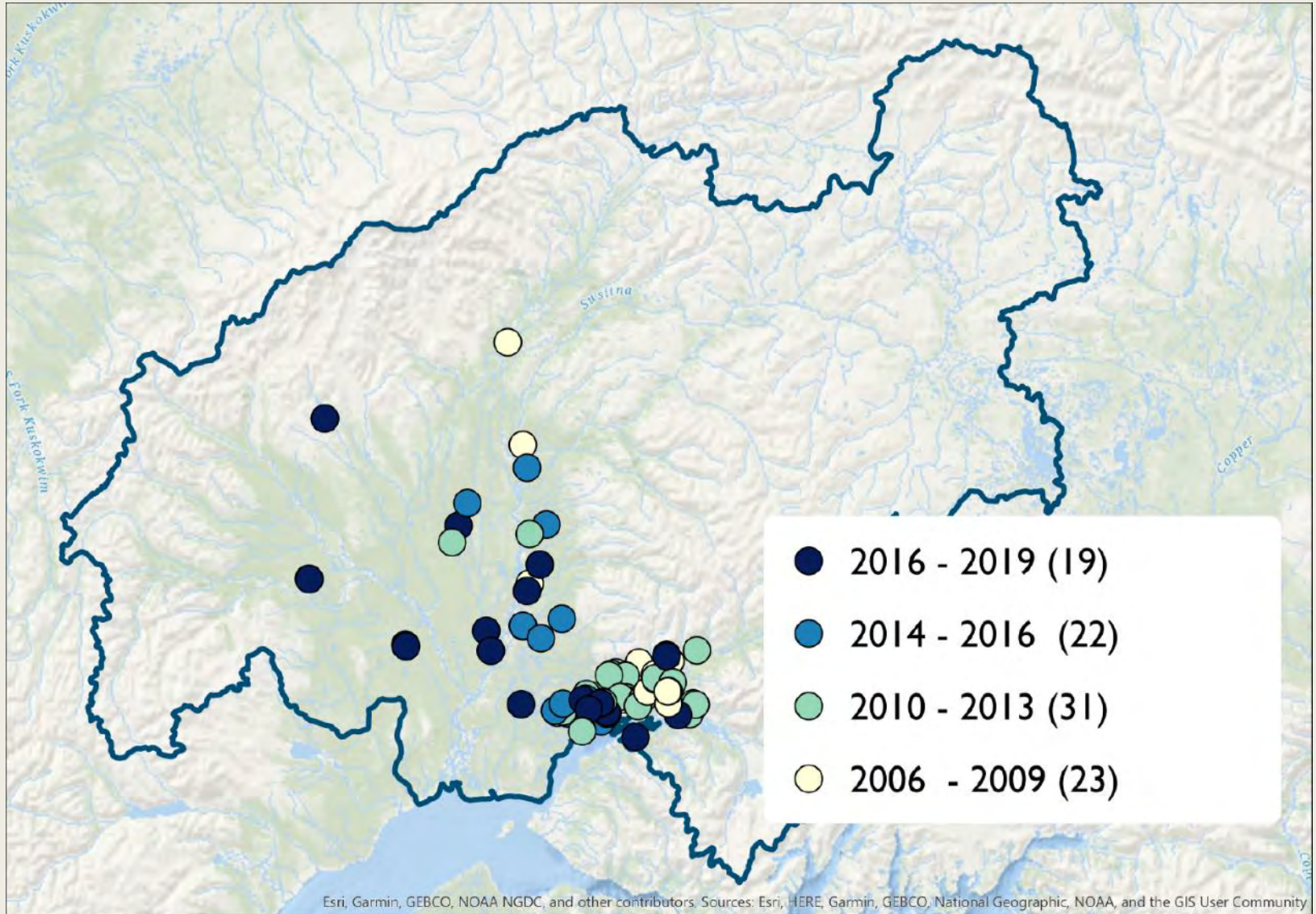
WHO



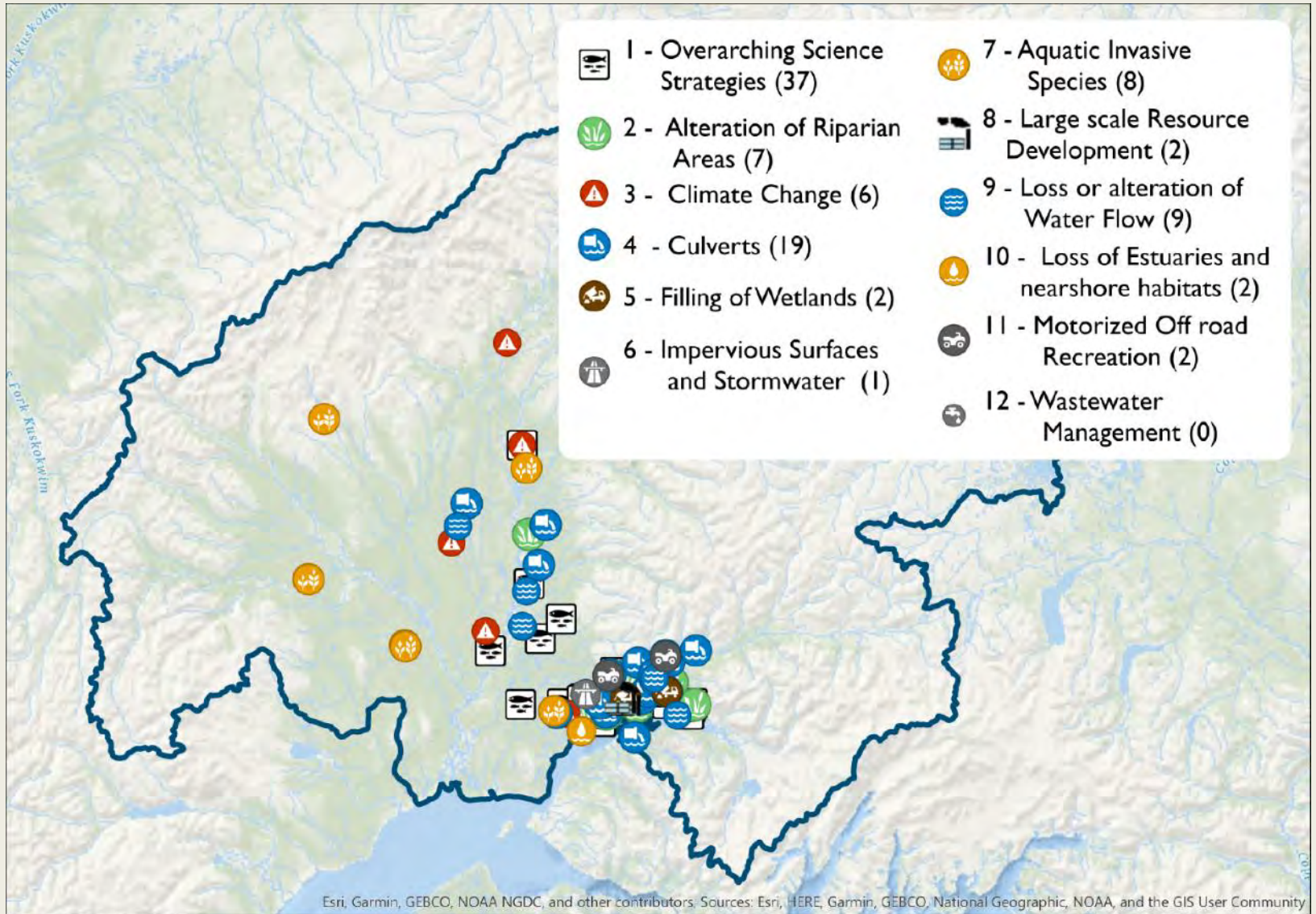
WHAT



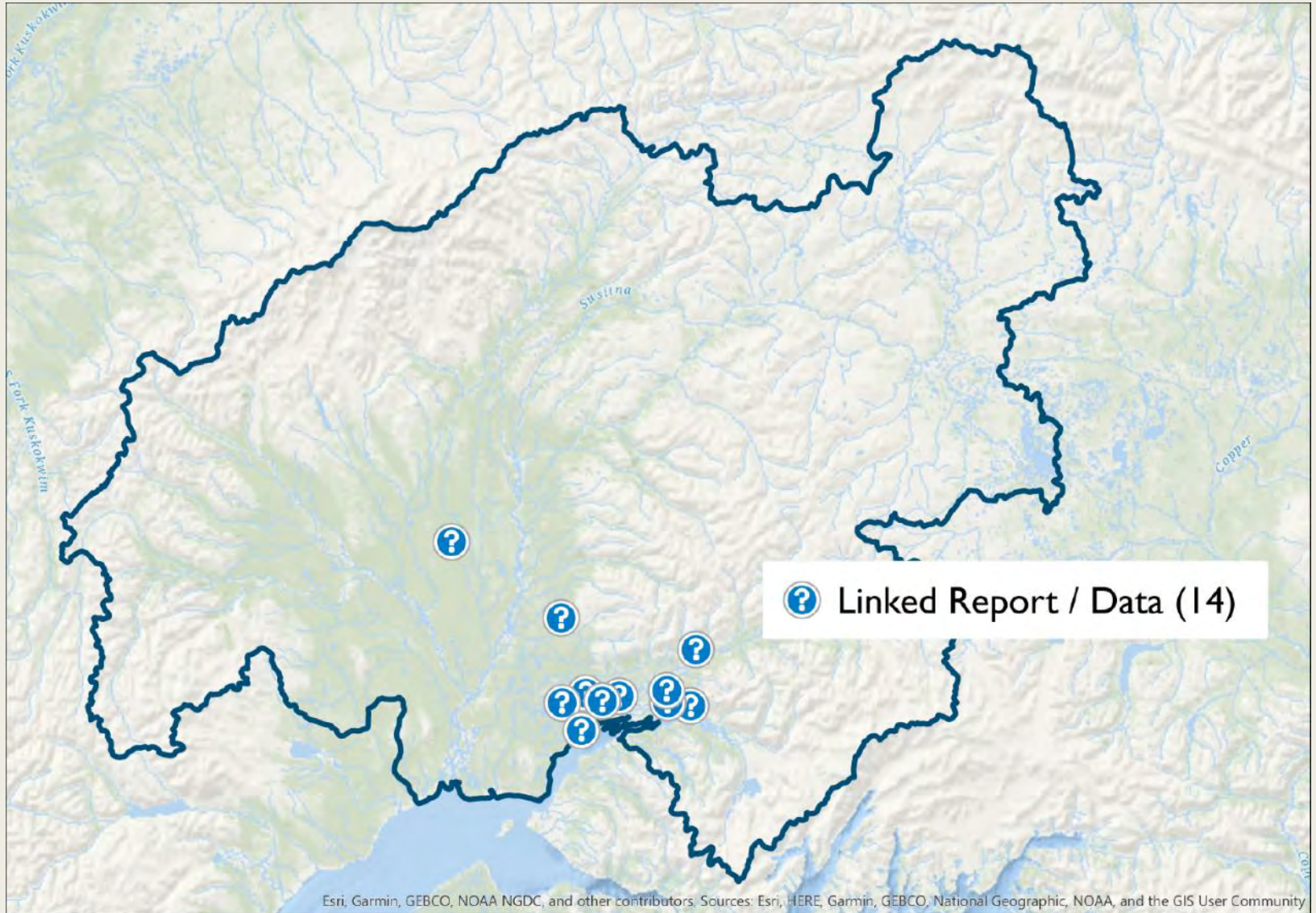
WHEN



WHICH - Strategy



HOW – to access more info



Web Map

Mat-Su Basin Salmon Habitat Partnership **Mat Su Basin Salmon Habitat Partnership Projects** Partnership Website Link

Find address or place

The map displays the Mat-Su Basin with a blue outline. Numerous project locations are marked with icons: blue water drops, brown pickaxe icons, green circles, and red circles. The map includes labels for 'N. Fork Knappton River' and 'S Fork Knappton River'. The 'Salsitna' river is also visible.

Info Summary

	Project Type	95
	Conservation	17
	Outreach	15
	Restoration	29
	Science	34
	Strategy	95
	Organization	95
	Years	95
	Project Sites - Field Locations	

Web Map - Search by Theme

Mat-Su Basin Salmon Habitat Partnership | Mat Su Basin Salmon Habitat Partnership Projects | Partnership Website Link

Find address or place

Info Summary

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Strategy	Count
Organization	95
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Project Sites - Field Locations

Web Map - Search by Strategy

Mat-Su Basin Salmon Habitat Partnership | **Mat Su Basin Salmon Habitat Partnership Projects** | Partnership Website Link

Find address or place

Info Summary

- Strategy: 6 - Impervious Surfaces and Stormwater 1
- Pollution
- Strategy: 7 Aquatic Invasive Species 8
 - Sub Objective: 7.2: Early Detection and Surveillance - Name: Distribution of Northern Pike in Meadow Creek, AK
 - Sub Objective: 7.2: Early Detection and Surveillance - Name: Mat-Su Basin Elodea Surveys
 - Sub Objective: 7.3: Rapid Response - Name: Rapid Response for MatSu Elodea: Alexander Lake Eradication Project to Restore Salmon Habitat
 - Sub Objective: 7.4: Control - Name: Upper Susitna Youth Conservation Corps Invasive Plant Control
 - Sub Objective: 7.4: Control - Name: Chelatna Lake Invasive Northern Pike Eradication
 - Sub Objective: 7.4: Control - Name: Shell Lake Invasive Northern Pike Suppression
 - Sub Objective: 7.4: Control - Name: Mat-Su Basin Elodea Eradication
 - Sub Objective: 7.4: Control - Name: Mat-Su Basin Elodea Eradication
- Strategy: 8 Large scale Resource Development 2
- Strategy: 9 - Loss or alteration of Water Flow or volume 9

Organization

Web Map – Search by Field Sites

Mat-Su Basin Salmon Habitat Partnership Projects Partnership Website Link

Find address or place

Caswell Creek

OBJECTID	84
NFHAP_ProjectID	498
SiteName	Caswell Creek
SiteLatitude	61.94748
SiteLongitude	-150.05572
SiteLocation	Downstream of Parks H crossing
OBJECTID_1	6
MSFHP_ProjectName	Biotic Assessment of St Quality
Partner	ARRI
ORG	ARRI
OrgName	Aquatic Restoration & R Institute

Zoom to

Info Summary 58

Project Sites - Field Locations

- Project: 2012 MatSu Water Reservation Program Flow Data Acquisition 2
- Project: 2014 Mat-Su Water Reservation Program Flow Data Acquisition Mod 2 2
- Project: 2015 MatSu Water Reservation Program Flow Acquisition to Protect Salmon Habitat 2
- Project: Biotic Assessment of Stormwater Quality 7
 - Project: Biotic Assessment of Stormwater Quality - ARRI - Colter Creek
 - Project: Biotic Assessment of Stormwater Quality - ARRI - Iron Creek 2
 - Project: Biotic Assessment of Stormwater Quality - ARRI - Iron Creek 1
 - Project: Biotic Assessment of Stormwater Quality - ARRI - Greys Creek
 - Project: Biotic Assessment of Stormwater Quality - ARRI - Caswell Creek**
 - Project: Biotic Assessment of Stormwater Quality - ARRI - Kroto Creek
 - Project: Biotic Assessment of Stormwater Quality - ARRI - Buddy Creek
- Project: Design McRoberts & Carnegie Creek Culverts 1
- Project: Habitat Selection by Spawning Salmon in Clearwater Side Channels of the Matanuska River, Alaska 30
- Project: Kroto Creek Stream Gaging 3

Web Map – Link to Resources

Mat-Su Basin Salmon Habitat Partnership

Mat Su Basin Salmon Habitat Partnership Projects

Partnership Website Link

Find address or place

Habitat Selection by Spawning Salmon in Clearwater Side Channels of the Matanuska River, Alaska

Partner	USGS
Link	More info
Year	2008
Strategy	1_Overarching_Science_Strategie
Sub Objective	1.2: Habitat Quality
Project Type	Conservation
Description	More than 100 kilometers of clearwater side channels within the braided mainstem of the Matanuska River were mapped for 2006 from aerial images and ground-based surveys.

Zoom to

Partner Resources



USGS Home
Contact USGS
Search USGS

Scientific Investigations Report 2011-5102

>> Pubs Warehouse > SIR 2011-5102

Prepared in cooperation with U.S. Fish and Wildlife Service and Chickaloon Village Traditional Council

Distribution, Persistence, and Hydrologic Characteristics of Salmon Spawning Habitats in Clearwater Side Channels of the Matanuska River, Southcentral Alaska

By Janet H. Curran, Monica L. McTeague, Sean E. Burrell, and Christian E. Zimmerman



Abstract

Turbid, glacially influenced habitats and, consequently, the distribution and characteristics of spawning habitats compared to spawning habitats within the braided mainstem ground-based surveys. In contrast, spawning habitats were appreciably between 1940 and 1990, typically positioned along mainstem channels, and at 19 side channel sites, Physical and geomorphic

conditions suitable for salmon spawning in side channels, respectively tributary or groundwater source water. Autumn salmon redds (nests) in three side channels and two tributaries, emergence of salmon in side channels and relatively low

- [Report PDF \(4.5 MB\)](#)
- [Appendix A. Description of Matanuska River Clearwater Side Channel Geographic Information System Products PDF \(100 KB\)](#)
- [GIS Shapefiles \(241 KB\)](#)

Next Steps

- Link Project Reports / Data
- Add Field Sites (monitoring, gages, etc)
- Metadata Standards for new Projects
- Additional Analysis – by Watersheds?



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Questions?

Marcus Geist, Geographer

mageist@alaska.edu

907-786-6325

[Web Map](#)

METHODS – boring but necessary

- WHO - *completed the project*
- WHAT – *type of project*
- WHEN – *year*
- WHICH – *Strategy*
- HOW – *can I discover more info, links*
- WHERE - *location*

WHO

- Organization Name
- Abbreviation – standardized list
 - *USFWS rather than FWS or Fish & Wildlife Service or Fish*
- Type - categories
 - *Federal*
 - *State*
 - *Local*
 - *Tribal*
 - *Non-profit*
 - *University*

WHAT

Project Type

– *Conservation*



– *Outreach*



– *Restoration*















– *Science*



WHEN

- Year – Partnership project funds were issued
- Multi year projects are flagged and noted in database

WHICH – Strategy?

- | | | | |
|-------------------------------------------------------------------------------------|--------------------------------------------------|---------------------------------------------------------------------------------------|------------------------------------------------|
|  | 1 - Overarching Science Strategies |  | 7 - Aquatic Invasive Species |
|  | 2 - Alteration of Riparian Areas |  | 8 - Large scale Resource Development |
|  | 3 - Climate Change |  | 9 - Loss or alteration of Water Flow or volume |
|  | 4 - Culverts |  | 10 - Loss of Estuaries and nearshore habitats |
|  | 5 - Filling of Wetlands |  | 11 - Motorized Off road Recreation |
|  | 6 - Impervious Surfaces and Stormwater Pollution |  | 12 - Wastewater Management |

*Partnership Strategic Action Plan 2013 with 2019 Addendum
<http://www.matsusalmon.org/sample-page/our-strategy/>

HOW – (to get more information)

- Project Links to Partner Websites
- Links to Reports (on MSFHP site)
- Links to zipped datafiles

WHERE

■ Basin wide, Single or Multi Site

