



**HAFRANNSÓKNASTOFNUN**

Rannsókn- og ráðgjafarstofnun hafs og vatna

# Búðarháls Hydro project

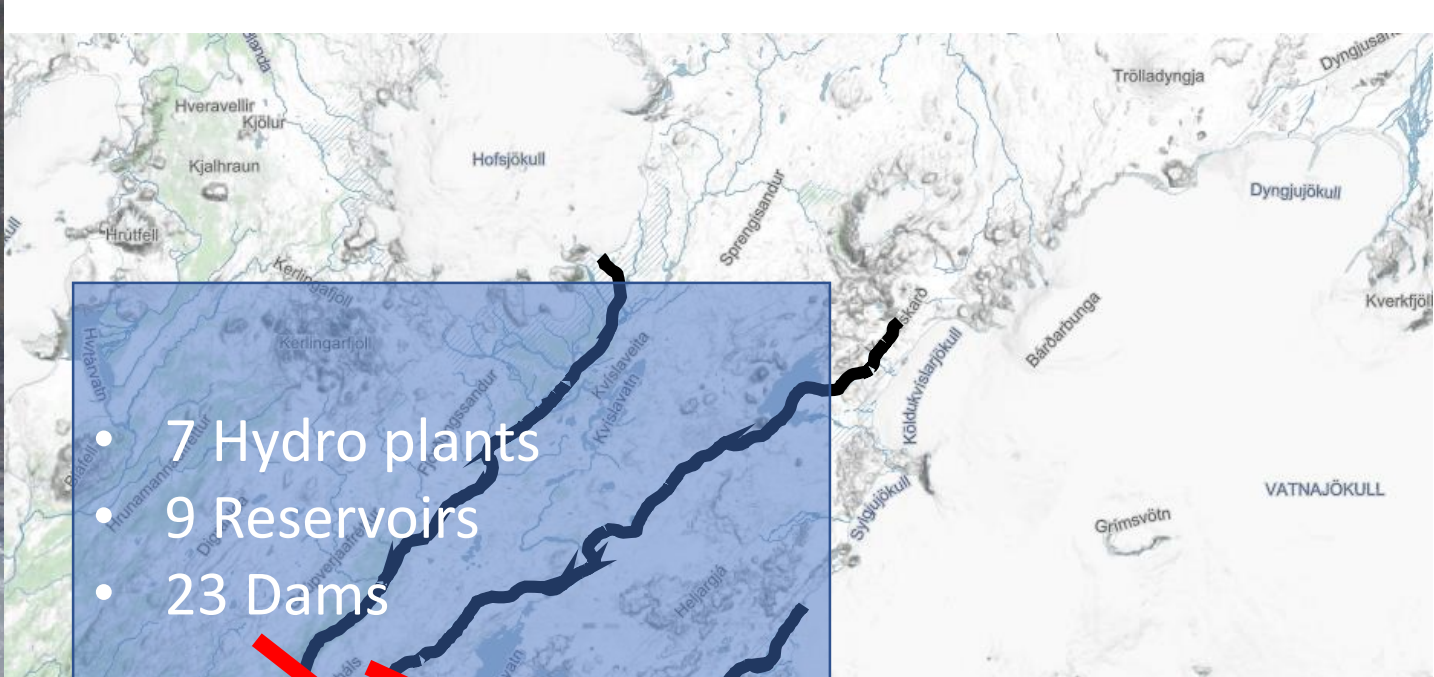
And its impact on Arctic char population

Benóný Jónsson

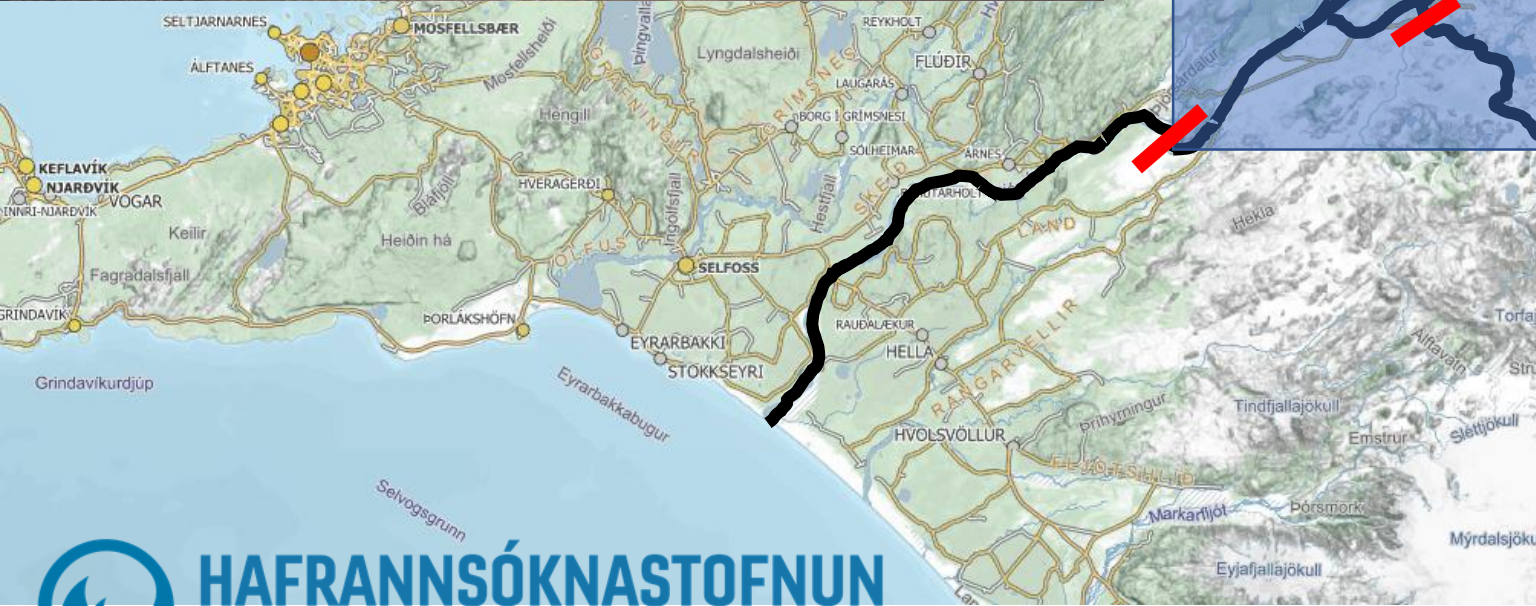
9th Nordic Water Framework Conference in Vaasa  
May 2019

# My talk:

- Þjórsá – watershed and its fish stocks
- Telemetry studies before construction of Sporðöldulón reservoir
- Mitigation related to Búðarháls Hydro project
- Arctic char migration after construction – second telemetry study

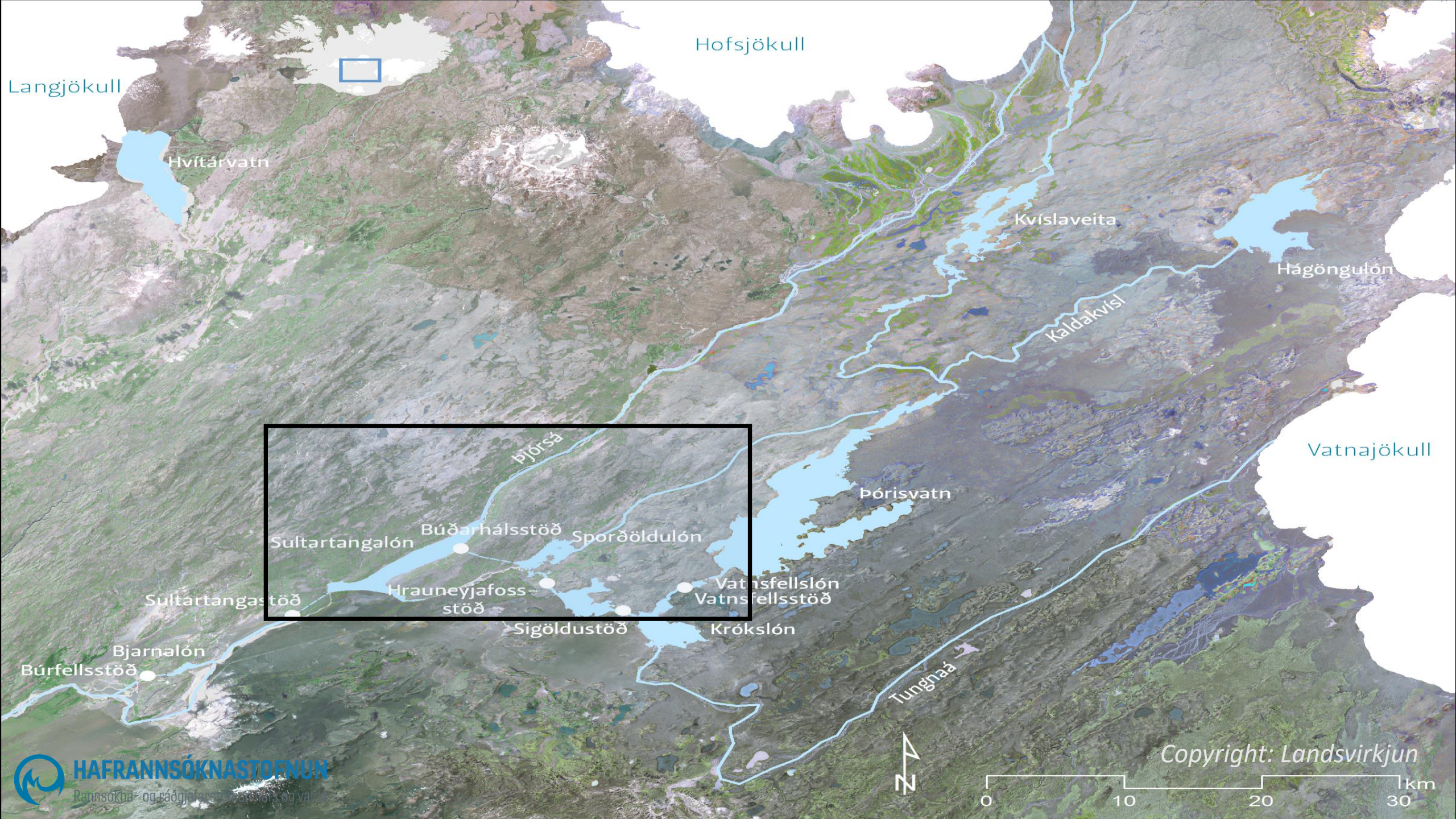


- 7 Hydro plants
- 9 Reservoirs
- 23 Dams



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Hofsjökull

Langjökull

Hvítárvatn

Kvíslaveita

Hágöngulón

Kaldakvísl

Vatnajökull

Björnsá  
Sultartangelón  
Búðarhálsstöð  
Sporðöldulón  
Hrauneyjafossstöð  
Vatnsfellslón  
Vatnsfellsstöð

Þórisvatn

Sultartangastöð

Sigöldustöð

Krókslón

Bjarnalón

Búrfellsstöð

Tungnaá

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Þjórsá river

Kaldakvísl river

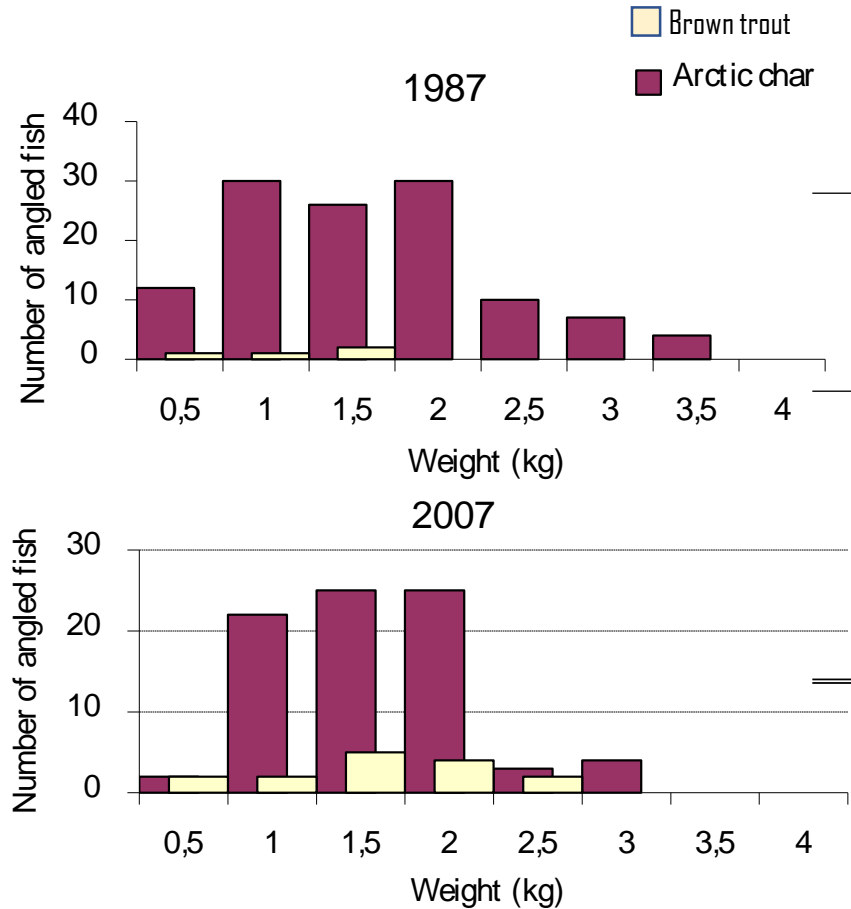
Tungnaá river



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# Arctic char in Kaldakvísl



Year	Trout			Char			Comment
	<i>Number of angled fish</i>	<i>Total weight (kg)</i>	<i>Ave.-weight (kg)</i>	<i>Number of angled fish</i>	<i>Total weight (kg)</i>	<i>Ave.-weight (kg)</i>	
2004	53	64	1,2	99	149	1,5	
2005	46	64	1,4	108	173	1,6	
2006	13	21	1,6	160	288	1,8	
2007	36	54	1,5	178	285	1,6	
2008	61	165	2,7	163	310	1,9	Catch & release
2009	54			258	645	2,5	Catch & release
Average	44	73,5	1,68	161	308	1,8	

There was no angling in Tungnaá river – was too turbid!





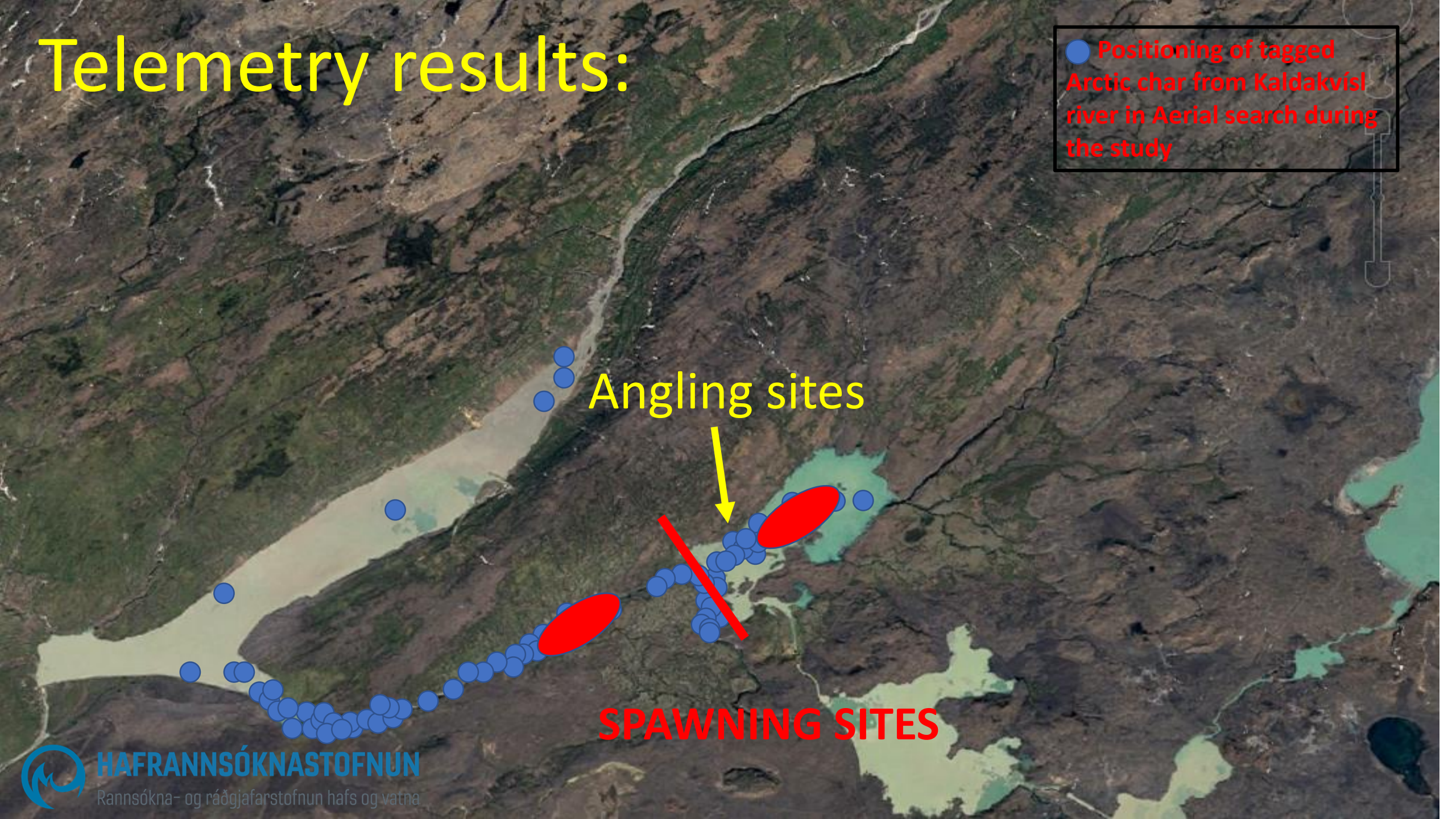


# Telemetry results:

● Positioning of tagged Arctic char from Kaldakvisi river in Aerial search during the study

Angling sites

**SPAWNING SITES**







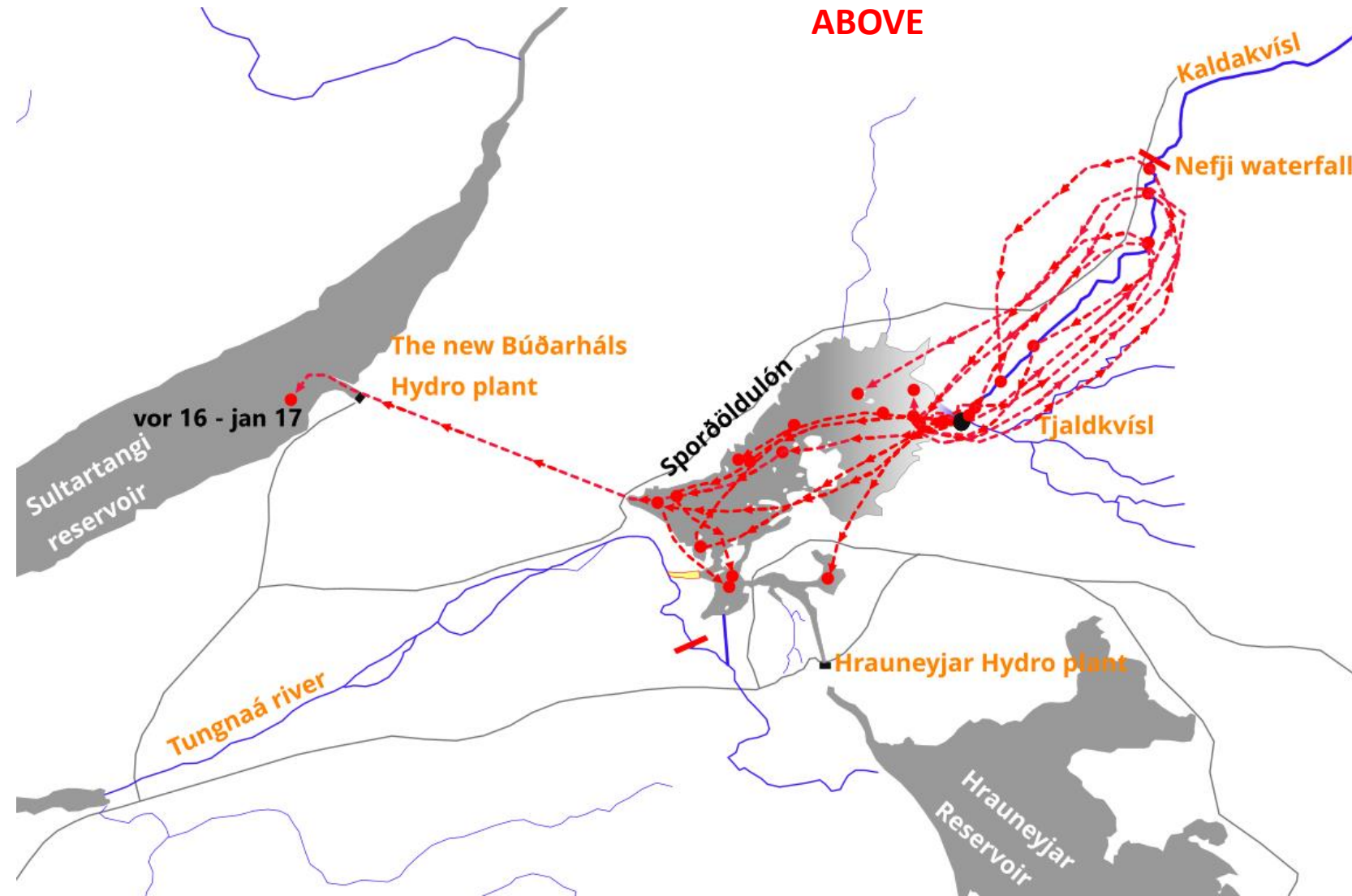
Highly modified  
water body!



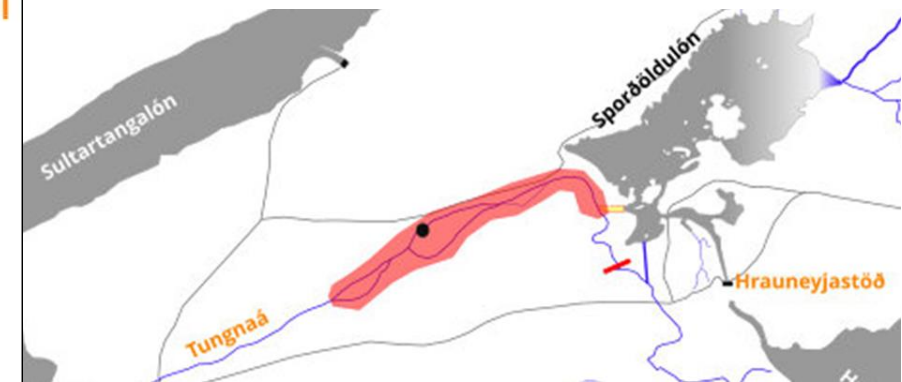
Older riverbank of the glacial Tungnaá river

# Telemetry – After constructions:

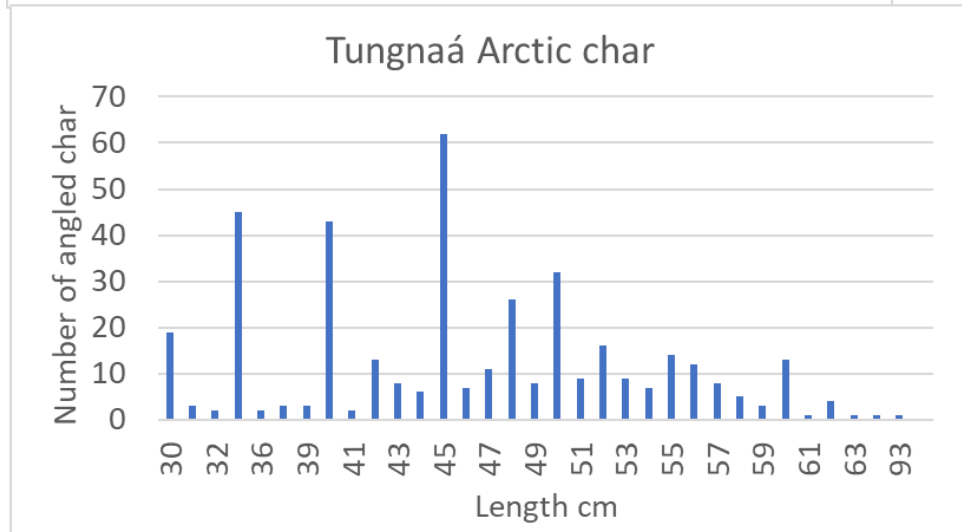
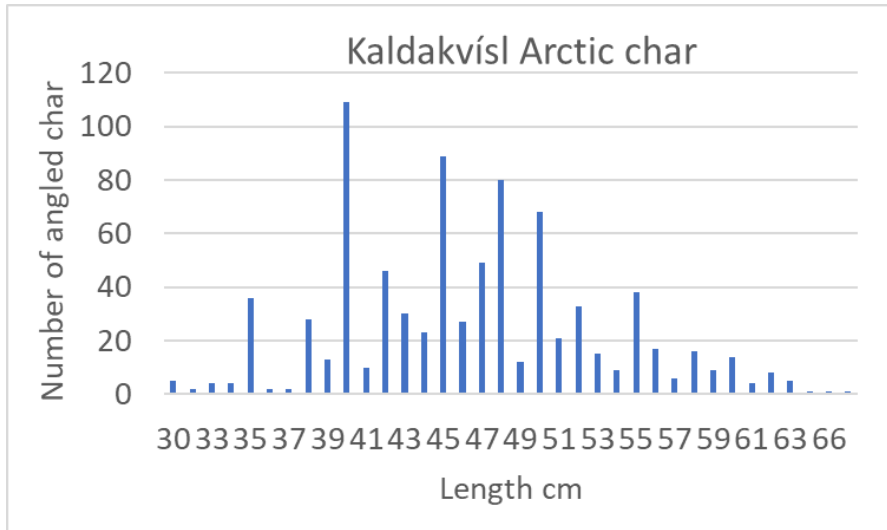
ABOVE



BELOW



# Angling reports after construction



Angling reports: Number of angled char and brown trout in 2016 and 2017

Year	Kaldakvísl ↑		Tungnaá ↓	
	Char	Trout	Char	Trout
2016	144	7	427	49
2017	1044	60	73	2

Thank  
you!

