

[illegible]

Objectives

- Create systematic, transparent, and dynamic methods and techniques based specifically on the impacts of macrostructures (predefinedly made, scenarios, predictions, and building simulation)
- Different types of structures yield different impacts on well-being
- Enhance credibility regarding a reference conceptualization and strategies in a facility for strategic planning and land use decision-making

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Overall Process

- Calculate the duration of scenarios situations in Central England rate scenario/assess the risk
- Determine the duration of scenarios of scenarios that require refinancing
- Develop scoring system to evaluate each scenario/assess the risk they will require refinancing
- Determine the duration of scenarios for each period
- Create a risk rating system

no need of re-scoring - Rating score
and need of re-scoring - Rating score

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Database Construction Process

Creating a new comprehensive database

- Transfer of assigned database information
- Added any new information (as follows) [\[1\]](#)
- New reference number
- Assigned structure category
- Additional needed for creating forest (not a CD-ROM)

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- **Comprehensive database**
 - 688 total building structures
 - 15 (+ 12) structure categories
- **Impact Criteria (6)**
- **New Wilderness maps**

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Designing Discussions

- GIS mapping concepts are only as good as their inputs
 - Importance of accurate, baseline data (e.g. height for mobile apps)
- Shared output assessment
 - Order factors (amount of images, width, height)
- Hard vs. soft geography
 - Whether concepts are can be dimensional
 - What is the purpose/output of the map?

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Take!
Thank you!

2019-2020 Deliberations

Strategic

- **Investigate** West coast relief efforts
- **Completed** *deliberations* (see *great Western land*)

Deliberations – *deliberations* focus on their responsibility to build a world in the 21st century.

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- ## 2019-2020 Deliberations
- Strategic**
- **Investigate** West coast relief efforts
 - **Completed** *deliberations* (see *great Western land*)
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- ### Definition: Casualty Insurance Premiums
- Definition:** The amount of money that a policyholder pays to the insurance company for the right to be insured against a loss.
- Factors that affect the premium:**
- Age of the insured
 - Sex of the insured
 - Marital status of the insured
 - Occupation of the insured
 - Health of the insured
 - Driving record of the insured
 - Credit rating of the insured
 - Location of the insured
 - Type of property being insured
 - Amount of coverage being sought
 - Policy term (length of time the policy is in effect)
 - Policy renewal (whether the policy is renewed or not)
 - Policy cancellation (whether the policy is cancelled or not)

[illegible]

Clayton Kopp - **Asst. Managing Dir.**, **ASAC**

- Create a systematic, transparent, and dynamic method to map wilderness based specifically on the impacts of man-made activities on specific study roads, towns, communities, and building structures
- Different types of structures yield different impacts on wilderness
- Reduce conflict regarding wilderness conceptualization and strengthen its usability for strategic planning and land-use decision-making

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- Increased signal detection information
- Added new information (surface area, etc.)
- Used reference number
- Integrated on same category
- But: data need for moving the entire JND basally

- Comprehensive database
 - 623 total building structures
 - 13 (+ 17) structure categories

- New Wilderness maps

- GIS mapping: maps are only as good as their inputs
 - Importance of accurate, baseline data (e.g. heights for visibility)
- Road layout measurements
 - Other factors: season of usage, traffic, visibility
- Relative soft/sharp boundaries
 - Wilderness concept as scale of incremental
 - What is the purpose/scope of the map?

Table!

Thank you!

- **Statistical Science & Analytics**
- **Accounting & Finance** [www.pearson.com/au](#)
- **Healthcare & Nursing** [www.pearson.com/au](#)
- **Engineering** [www.pearson.com/au](#) **Education** [www.pearson.com/au](#) **Food & Culinary Arts** [www.pearson.com/au](#)
- **Arts & Design** [www.pearson.com/au](#) **Business & Economics** [www.pearson.com/au](#) **Health & Life Sciences** [www.pearson.com/au](#) **Math & Stats** [www.pearson.com/au](#)
- **Work & Professional Skills** [www.pearson.com/au](#) **Writing & Communication** [www.pearson.com/au](#)

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Wilderness Defined in Icelandic Law

Óbygggt víðerni - Act 60/2013, Art. 5(19)

- Svæði í óbyggðum sem er að jafnaði a.m.k. 25 km² að stærð eða þannig að hægt sé að njóta þar einveru og náttúrunnar án truflunar af mannvirkjum eða umferð vélknúinna farartækja og í a.m.k. 5 km fjarlægð frá mannvirkjum og öðrum tæknilegum ummerkjum, svo sem raflínum, orkuverum, miðlunarlónum og uppbyggðum vegum.
- An area of uninhabited land that is usually at least 25 km² in size or so that one can enjoy solitude and nature without disturbance from man-made structures or the traffic of motorized vehicles and at least 5 km away from man-made structures and other evidence of technology, such as power lines, power stations, reservoirs and built-up roads.

Objectives

- **Create a systematic, transparent, and dynamic method to map wilderness based specifically on the impacts of manmade structures** (predominantly roads, reservoirs, powerlines, and building structures)

*Different types of structures yield different impacts on wilderness

- **Enhance credibility regarding wilderness conceptualization and strengthen its usability for strategic planning and land use decision-making**

Overall Process

- **Consolidate databases** of manmade structures in Central Highland into one comprehensive database
- **Determine criteria**/characteristics of structures that impact wilderness
- **Develop scoring system** to evaluate each manmade structure and how they affect/reduce wilderness
- **Determine buffers** (based on the total scores) for each point
- **Create refined wilderness map**

1st round of mapping - Spring 2017

2nd round of mapping - Spring 2019

Database Consolidation Process

Creating a new, comprehensive database

- Preserved original database information
- Added any new information (surface area, etc...)
- New reference number
- Assigned structure category
- Raw data needed for scoring the criteria (GIS-based)

As it stands...

- **Comprehensive database**



- 623 total building structures
- 13 (+ 1?) structure categories

- **Impact Criteria (6)**

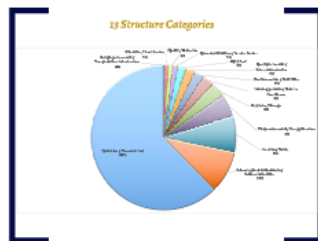


- **New Wilderness maps**

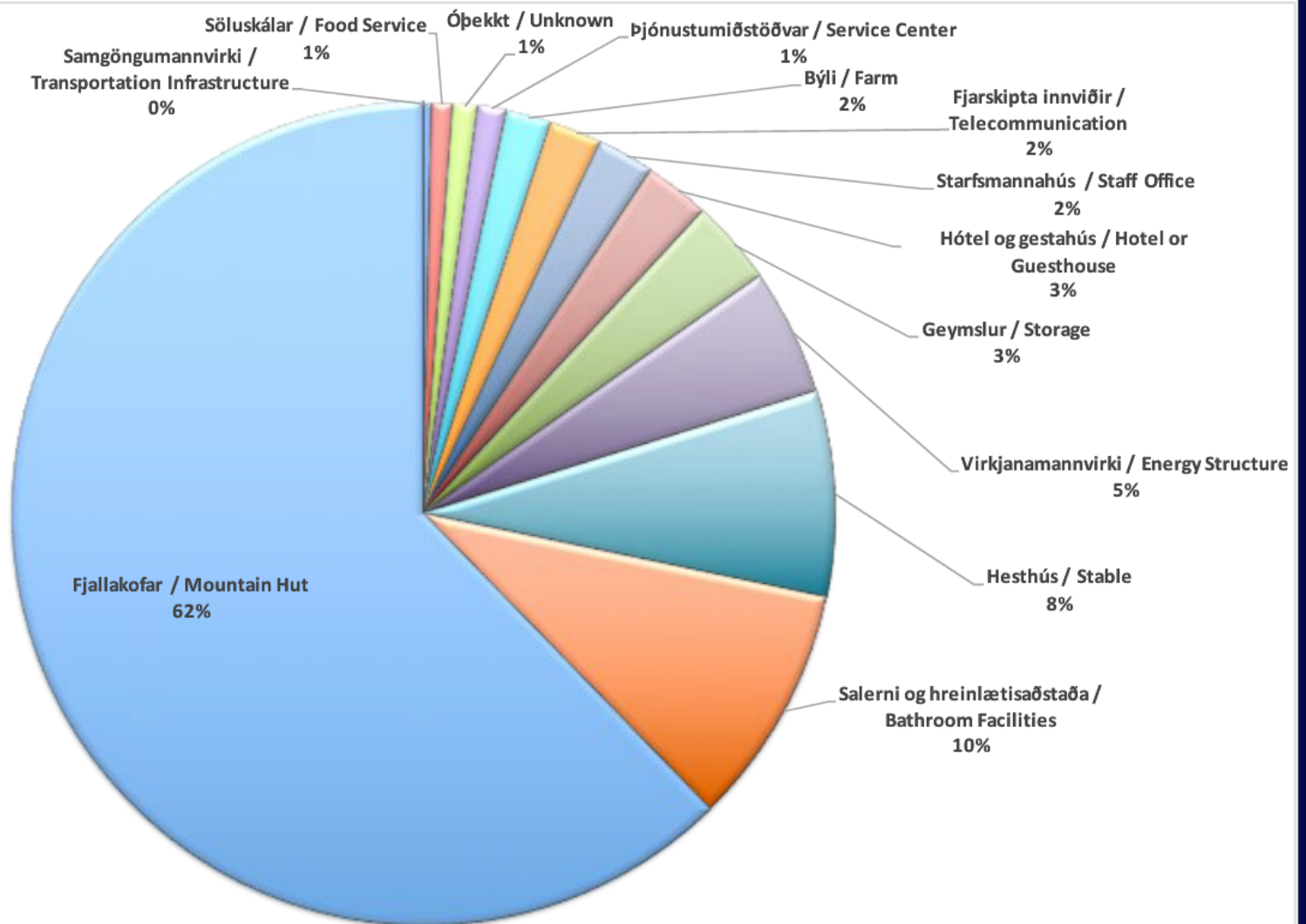


13 Structure Categories

Manmade Structure Categories	Count	% of Total Structures
Samgöngumannvirki / Transportation Infrastructure	2	0.32
Söluskálar / Food Service	5	0.80
Óþekkt / Unknown	6	0.96
Þjónustumiðstöðvar / Service Center	7	1.12
Býli / Farm	11	1.77
Fjaraskipta innviðir / Telecommunication	13	2.09
Starfsmannahús / Staff Office	14	2.25
Hótel og gestahús / Hotel or Guesthouse	16	2.57
Geymslur / Storage	21	3.37
Virkjanamannvirki / Energy Structure	31	4.98
Hesthús / Stable	50	8.03
Salerni og hreinlætisaðstaða / Bathroom Facilities	59	9.47
Fjallakofar / Mountain Hut	388	62.28



13 Structure Categories



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Criteria for Structures

- **Structure Category / Usage**
- **Clustering** (point statistics tool)
 - **# of points within a 1km radius**
- **Surface Area**
- **Connectivity** (near tool)
 - **Road type**
 - **Distance from road**
- **Visibility** (viewshed tool, cell count)
- Age
- Removability (Temporary vs. Permanent)
- Cultural Significance

Scoring for Building Structures

[0 1 4 8 13 20]

Impact Criteria (Point Structures)	Metric	Impact Range	Impact Score (0,1,4,8,13,20)
Structure Usage	Category	Transportation Infrastructure	4
		Bathroom Facilities	1
		Hotel or guesthouse	8
		Energy Structure	20
		Staff Office	1
		Service Center	13
		Food Services	8
		Farm	4
		Storage	1
		Stable	1
		Mountain Hut	1
		Telecommunication	8
		Unknown	1
Surface Area	m2	0 - 49	0
		50 - 99	1
		100 - 149	4
		150 - 199	8
		200 - 249	13
		250 +	20
Clustering	# of points within 1km radius	0 - 1	0
		2 - 3	1
		4 - 5	4
		6 - 7	8
		8 - 9	13
		10 +	20
Connectivity	Road Type	F3	0
		F2	1
		F1	4
		D	8
		C	13
		A-B	20
	Distance to closest road (km)	10 +	0
		8 - 9	1
		6 - 7	4
		4 - 5	8
		2 - 3	13
		0 - 1	20
Visibility	Cell Count	0 - 299.999	0
		300.000 - 599.999	1
		600.000 - 899.999	4
		900.000 - 1.199.999	8
		1.200.000 - 1.499.999	13
		1.500.000 +	20

Total Impact Score	Buffer Equivalent (0-7 km)
0 - 15	0
16 - 30	1
31 - 45	2
46 - 60	3
61 - 75	4
76 - 90	5
91 - 105	6
106 - 120	7

Scoring for Other Structures

Structure Type	Metric	Impact Range	Buffer (0-7 km)
Roads	Quality Type	F3	0
		F2	0
		F1	0
		D	0
		C (Excluding paved roads)	0
		C (Only paved roads) (#10)	5

Structure Type	Metric	Impact Range	Buffer (0-7 km)
Reservoirs	Category	Reservoir	5

Structure Type	Metric	Impact Range	Buffer (0-7 km)
Power Lines	Voltage (kV)	132	3
		220	5

Scoring Process Overview

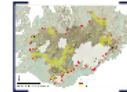
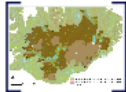
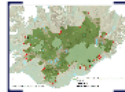
For each point structure....

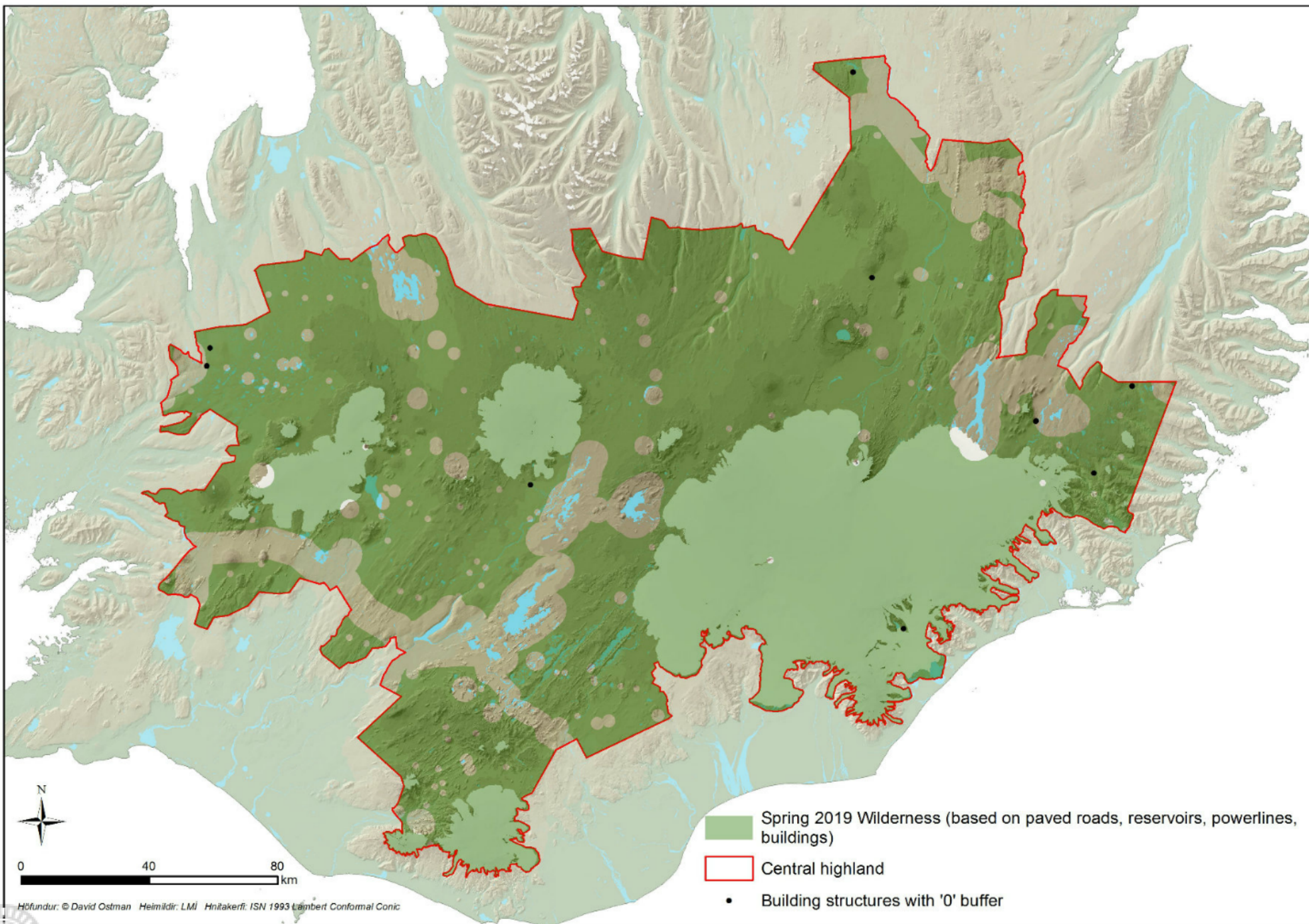
$$\begin{aligned} &\text{Impact Score for **Surface Area**} \\ &+ \\ &\text{Impact Score for **Cluster/Isolated**} \\ &+ \\ &\text{Impact Score for **Connectivity**} \\ &+ \\ &\text{Impact Score for **Category Type**} \\ &+ \\ &\text{Impact Score for **Visibility**} \\ &= \\ &\text{Total Impact Score (0 - 120)} \\ &= \\ &\text{Buffer Equivalent (0 - 7 km)} \end{aligned}$$

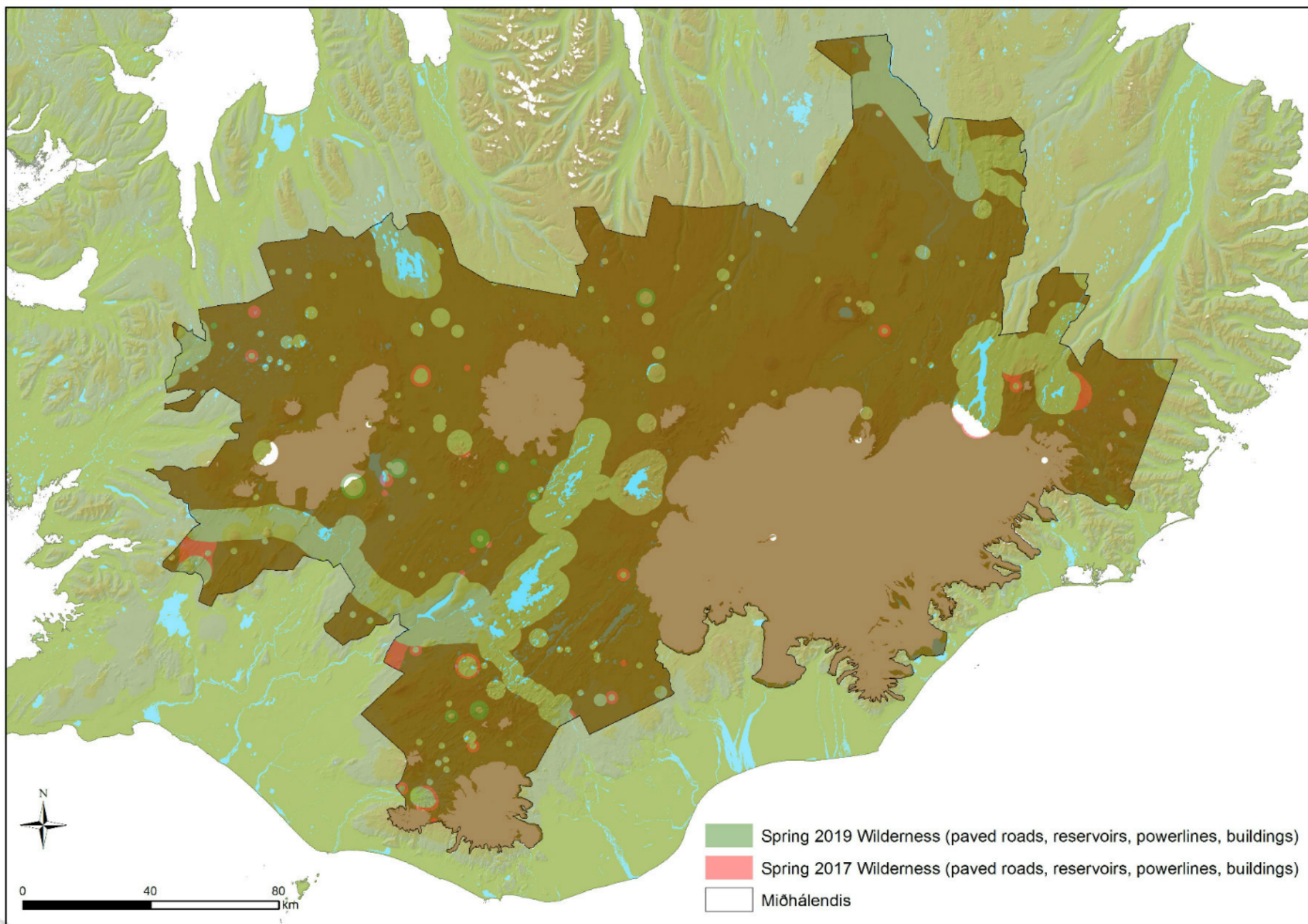
of structures in each buffer group

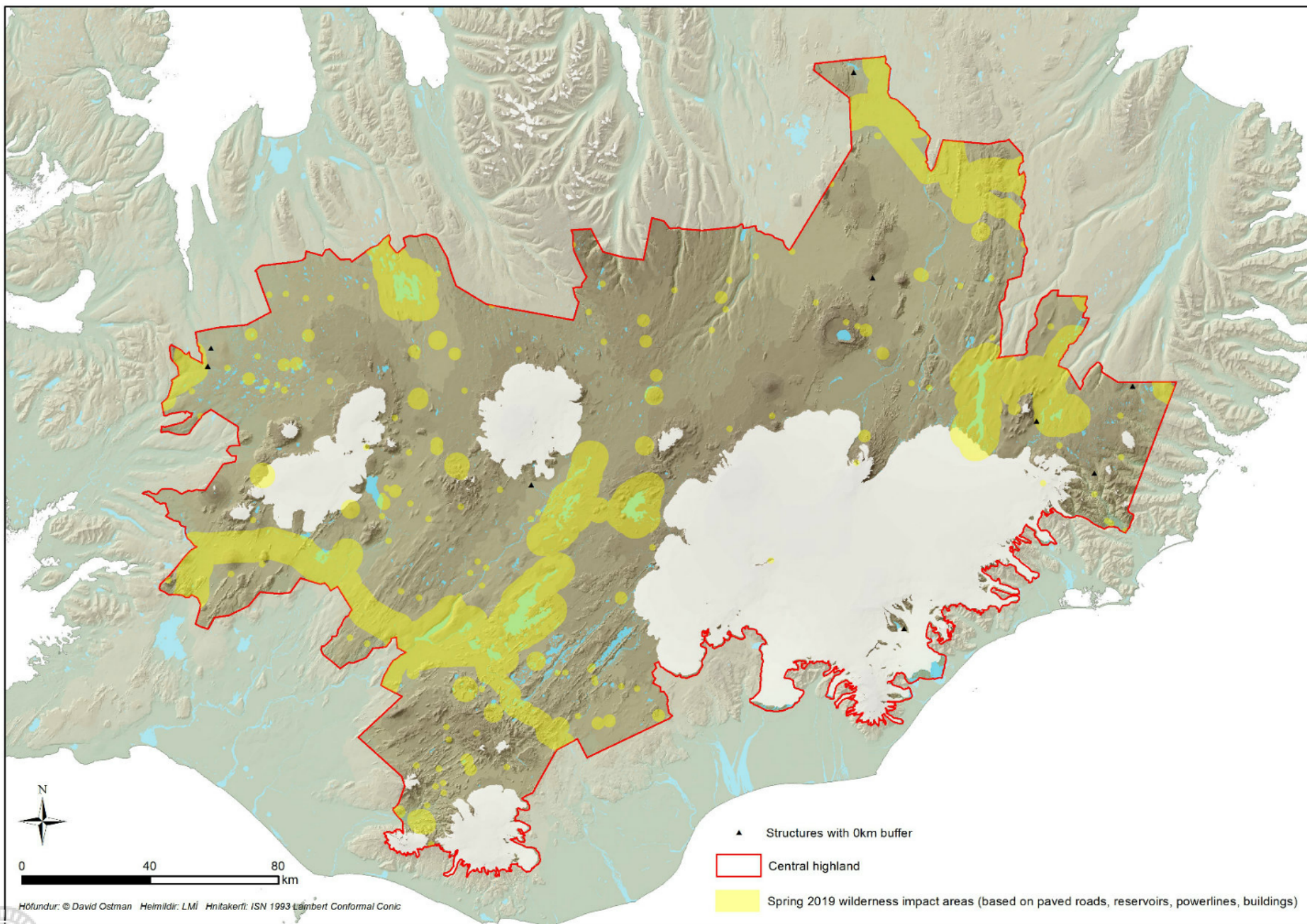
Impact Buffer (0 - 7 km)	Structure Category	Number	Total
0	Mountain Hut	10	13
	Stable	1	
	Unknown	2	
1	Bathroom Facilities	30	262
	Mountain Hut	186	
	Stable	32	
	Staff Office	2	
	Storage	8	
	Unknown	4	
2	Bathroom Facilities	25	219
	Energy Structure	1	
	Food Service	1	
	Mountain Hut	151	
	Stable	14	
	Staff Office	11	
	Storage	10	
	Telecommunication	5	
	Transportation Infrastructure	1	
3	Bathroom Facilities	4	85
	Energy Structure	4	
	Food Service	4	
	Hotel or Guesthouse	9	
	Mountain Hut	38	
	Service Center	5	
	Stable	3	
	Staff Office	1	
	Storage	3	
	Telecommunication	6	
	Transportation Infrastructure	1	
	Farm	7	
4	Energy Structure	24	39
	Farm	4	
	Hotel or Guesthouse	4	
	Mountain Hut	3	
	Service Center	2	
	Telecommunication	2	
5	Energy Structure	2	5
	Hotel or Guesthouse	3	
6			
7			

Resulting Wilderness Map

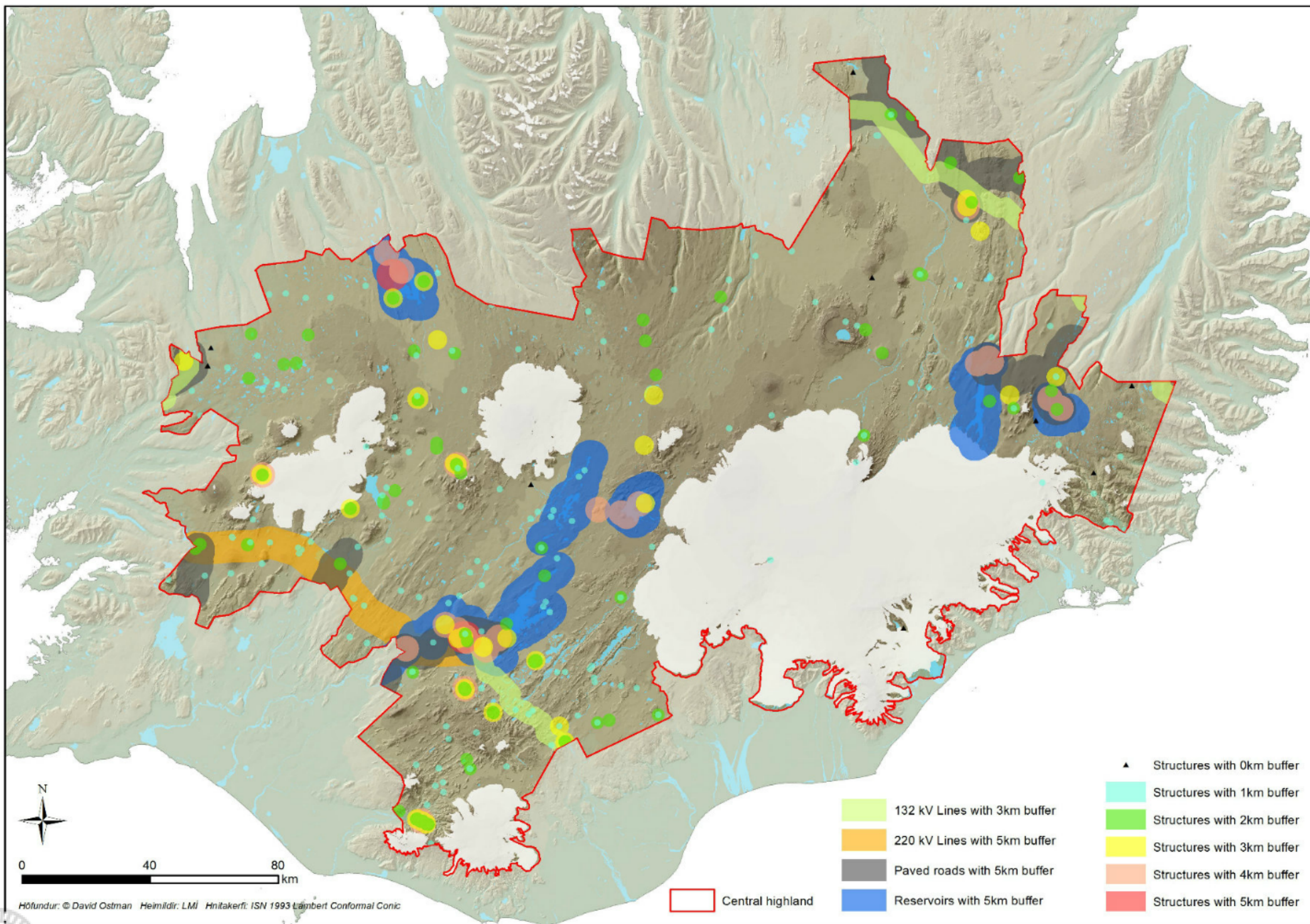








Höfundur: © David Ostman Heimildir: LMI Hnitakerfi: ISN 1993 Lambert Conformal Conic



Ongoing Discussions

- **GIS / mapping outputs are only as good as their inputs**
 - Importance of accurate, baseline data (e.g. heights for visibility)
- **Road impact assessment**
 - Other factors (seasonal usage, traffic, visibility)
- **Hard vs. soft (fuzzy) boundaries**
 - Wilderness concept as multi-dimensional
 - What is the purpose/usage of the map?

Takk!

Thank you!