

# Ecosystem accounting towards policy use in Norway

By Trine Randen, Senior Advisor and Kristine Grimsrud, Senior Researcher



## Ecosystem accounting in Norway

- **Ecosystem Extent Accounts:** the Ecosystem extent map was published in December 2023 and will be updated in 2024 to meet all the Eurostat requirements.
- **Ecosystem Condition Accounts:** these accounts are under development. Preliminary indicators exist; they need to be updated more frequently to follow EU regulation.
- **Ecosystem Services Accounts:** physical accounts are under development for the 7 ecosystem services relevant for the EU regulation, plus recreation. A systematic review of existing studies on monetary valuation has been carried out for the monetary accounts.

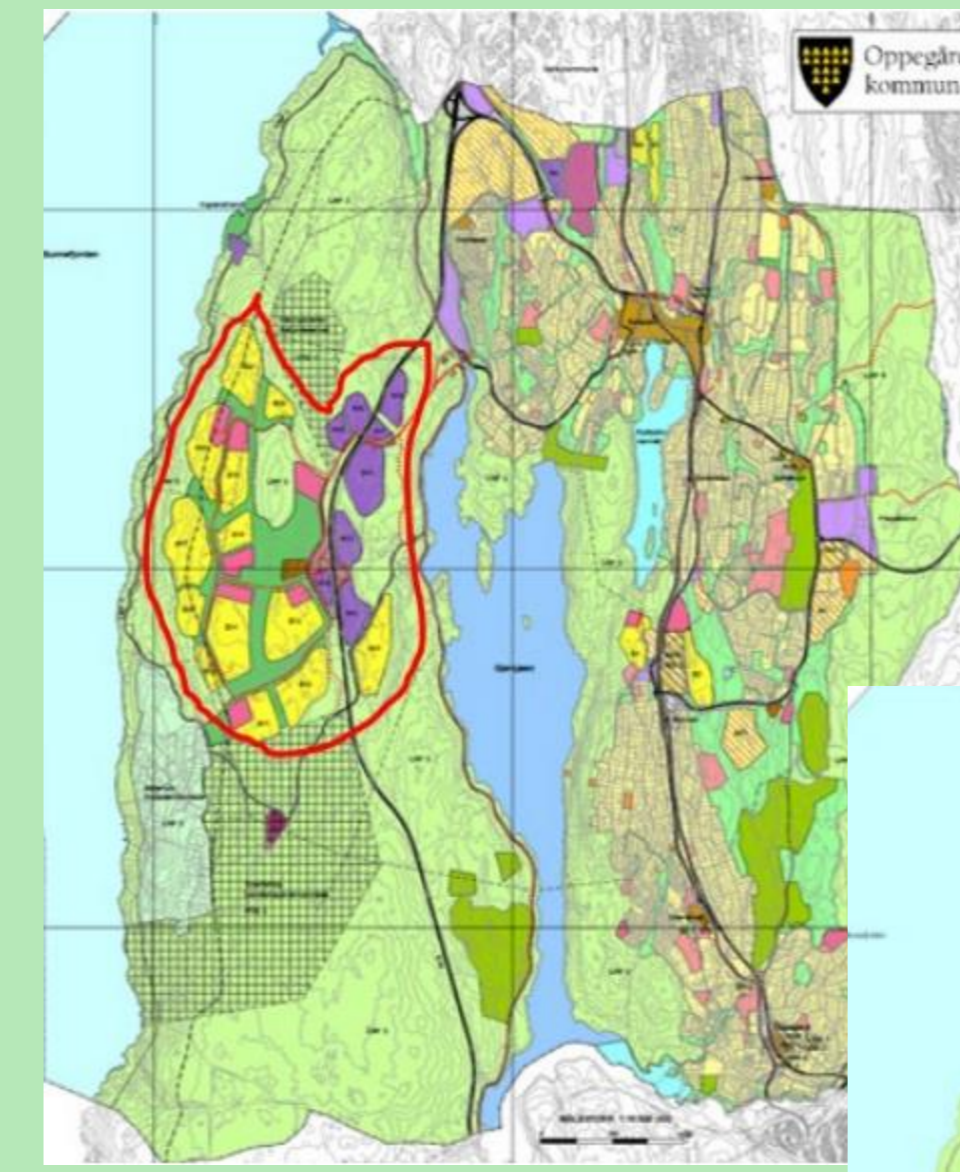
## Ecosystem Extent Map

The Norwegian Ecosystem Extent map was developed by the Norwegian Environment Agency and NIBIO

The Norwegian ecosystem extent map is a combination of existing maps. As these maps follow other criteria than the Eurostat typology, the ecosystem categories have been adjusted to the Norwegian context

Code, name of ecosystem	km2	%
01 Settlements and other artificial areas	3 294	1.0
02 Cropland	10 641	3.3
03 Grassland	1 740	0.5
04 Forest and woodlands	131 520	40.6
05 Heathlands and shrub	62 639	19.4
06 Sparsely vegetated ecosystems	76 688	23.7
07 Inland wetlands	17 554	5.4
08 Rivers and canals	1 136	0.4
09 Lakes and reservoirs	17 344	5.4
10 Marine inlets & transnational waters	1 073	0.3
11 Coastal beaches, dunes and wetlands	933 333	
12 Marine ecosystems		

## Ecosystem accounting at municipal level



Municipal plan for land use 2019

Nordre Follo Municipality set the target to become **area-neutral** outside today's built-up areas in the 2023 municipal plan.

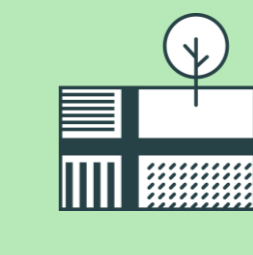
### How?



They mapped the quality and function of ecosystem types, species, functional areas, ecosystem services, and watercourses in the municipality



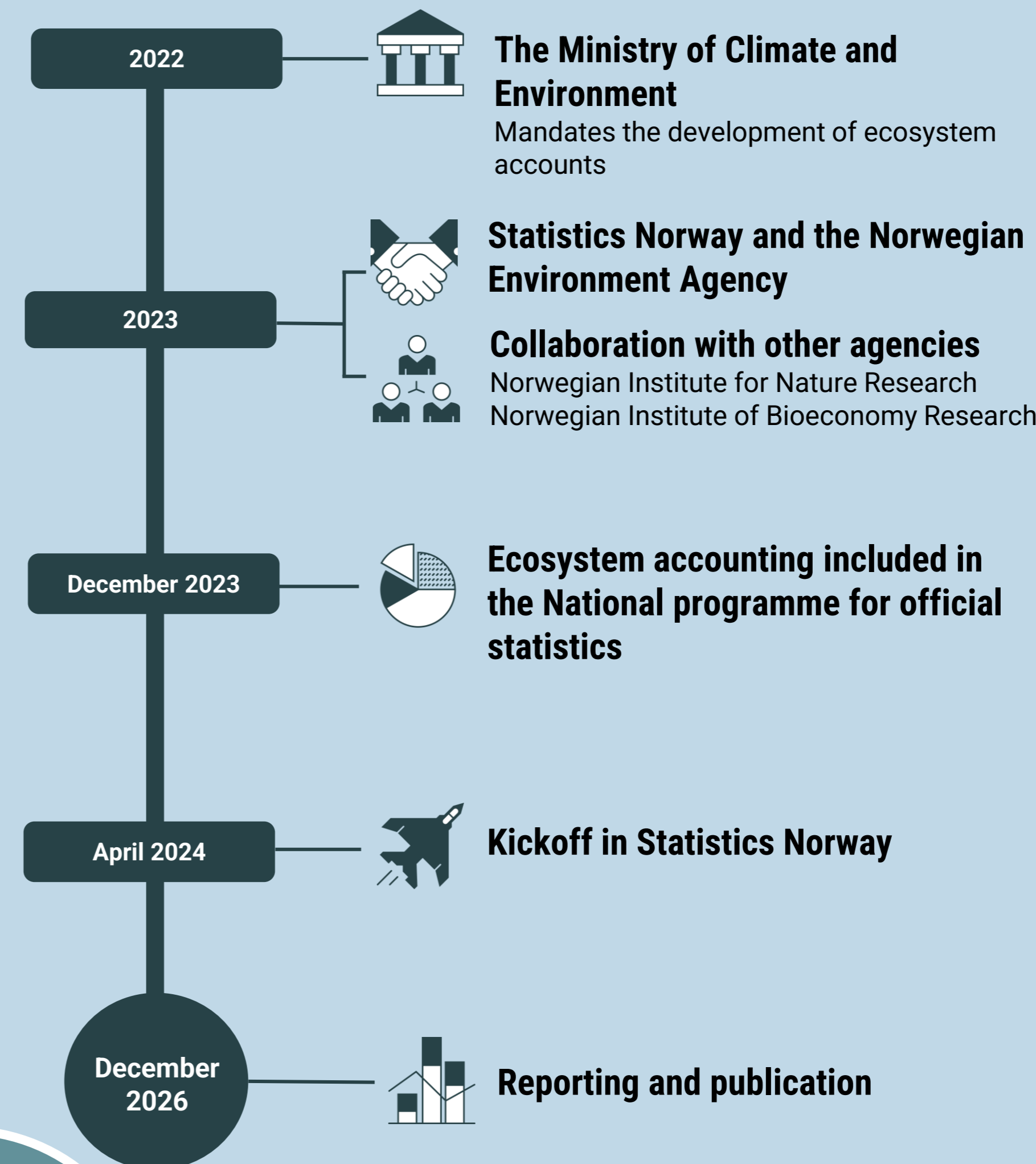
They selected the **areas suitable for construction** based on several criteria, including the values obtained in the **ecosystem accounts**



They concluded that **2600 acres** that were previously considered suitable for construction should instead be protected. In the 2023 municipal plan these acres are **no longer available for construction**.



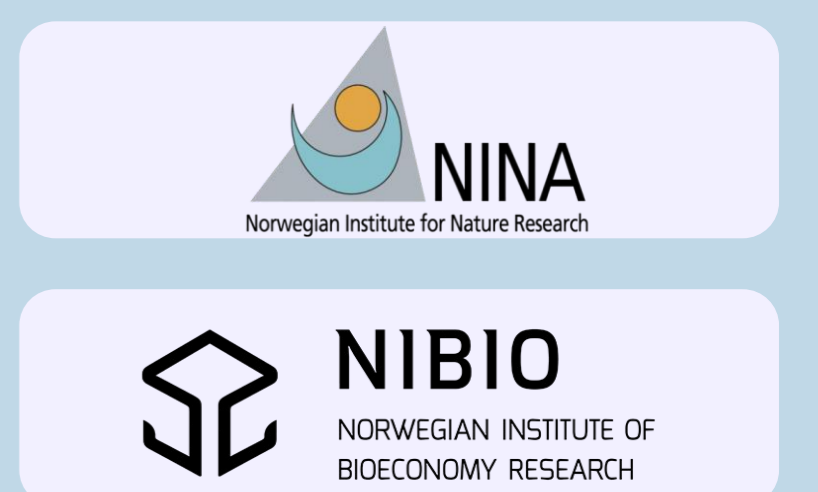
## The governance process



### Lead Institutes



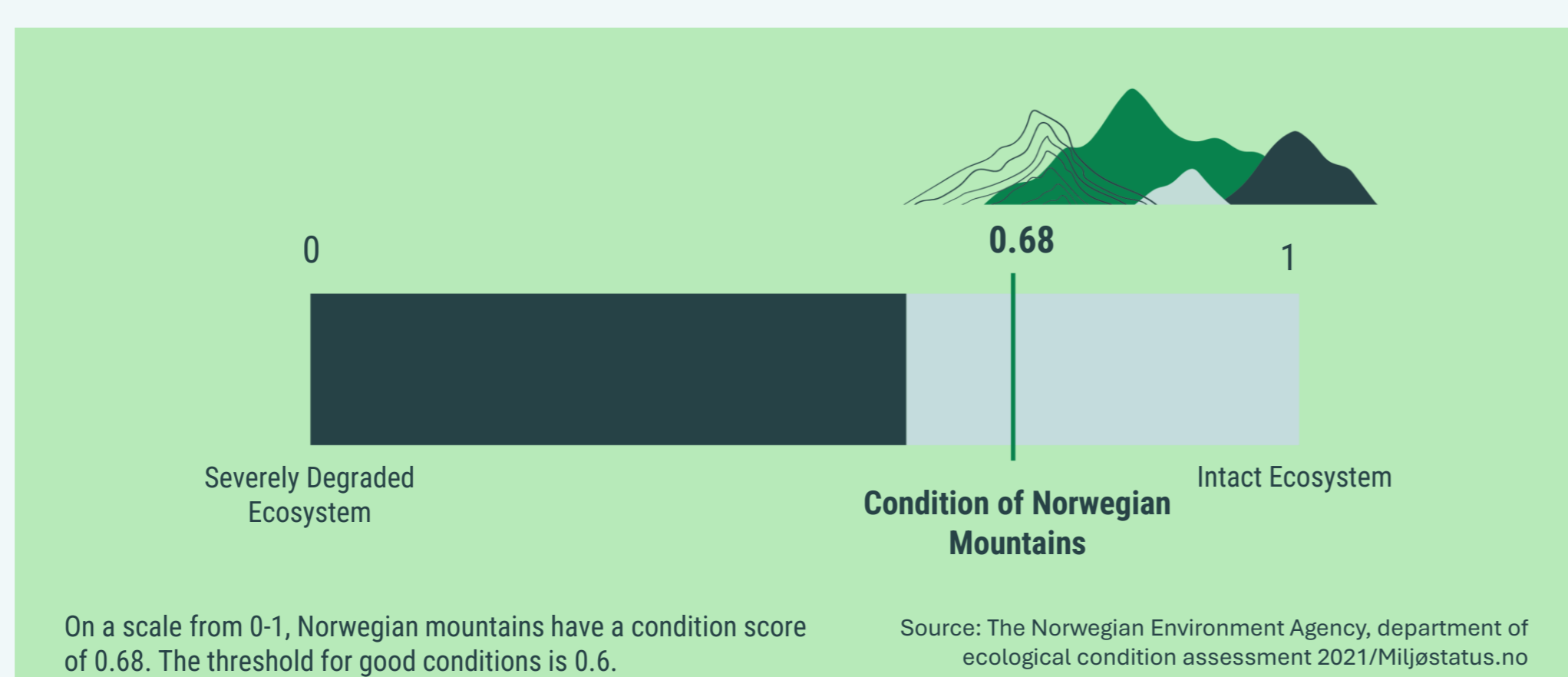
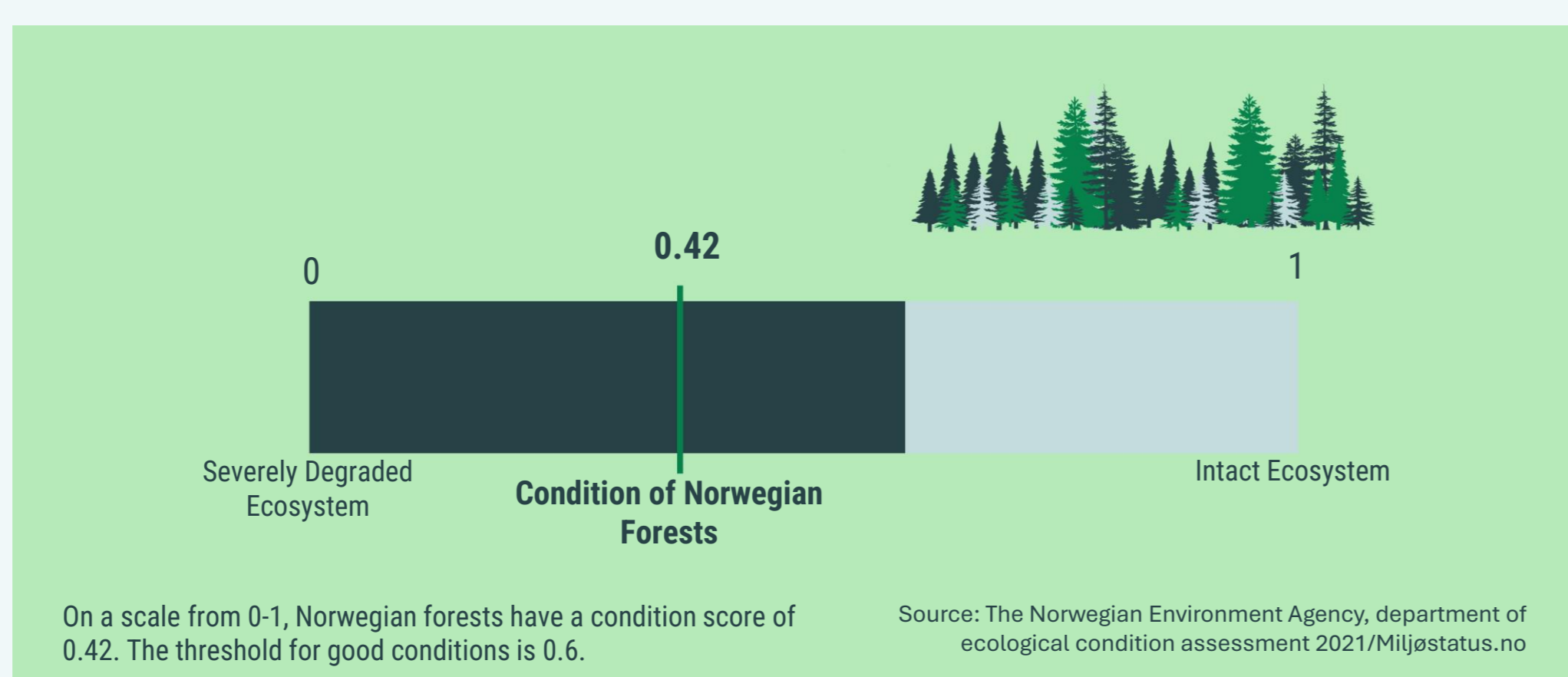
### Supporting Institutes



## Ecosystem condition accounts

- The **ecosystem condition accounts** are developed based on the System for Ecosystem Condition Assessment and on the Nature Index.
- The **Nature Index**, updated every 5<sup>th</sup> year, combines **260 indicators** to measure the condition and development of biodiversity and ecosystems in Norway.

New statistics will be published in 2026

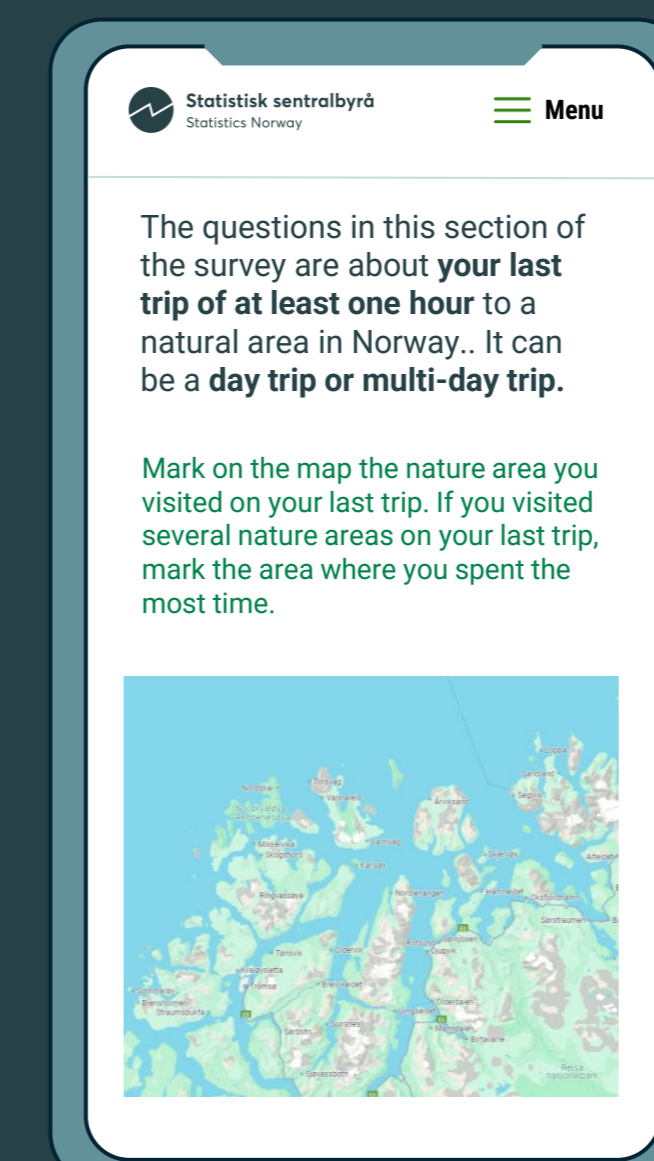
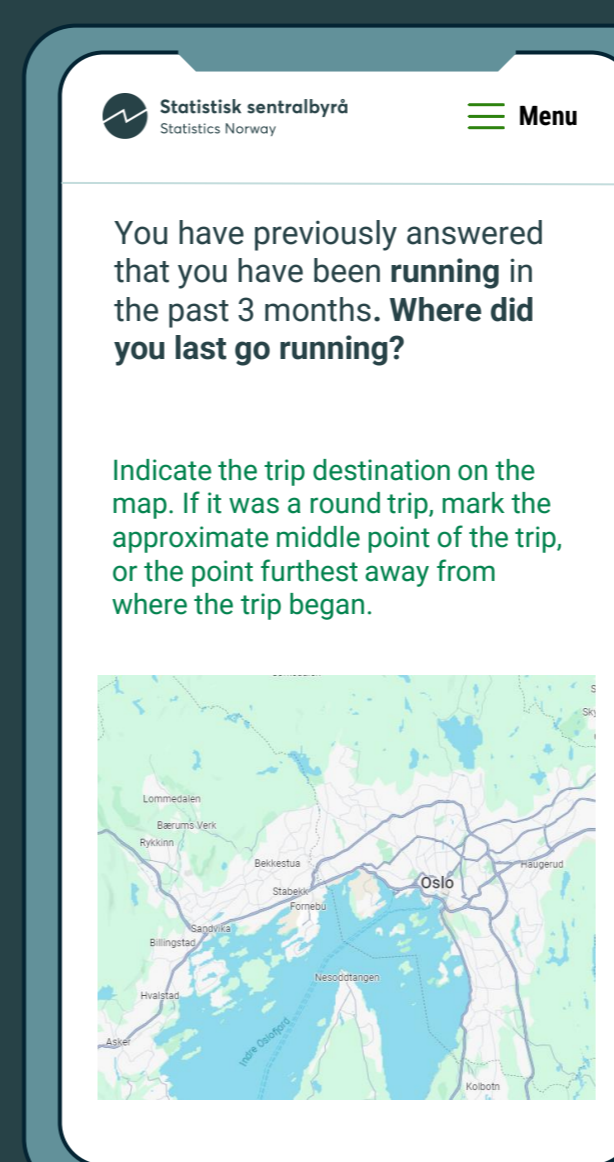


## Ecosystem services accounts

An example about recreation and nature-based tourism

### What have we developed?

- 1 A survey about recreation and tourism in nature areas
- 2 Questions making a direct connection between nature-based tourism and the ecosystem extent accounts
- 3 Questions about travel expenditures



Spring 2024

Summer 2024

Autumn 2024

Spring 2025

Development of pilot survey

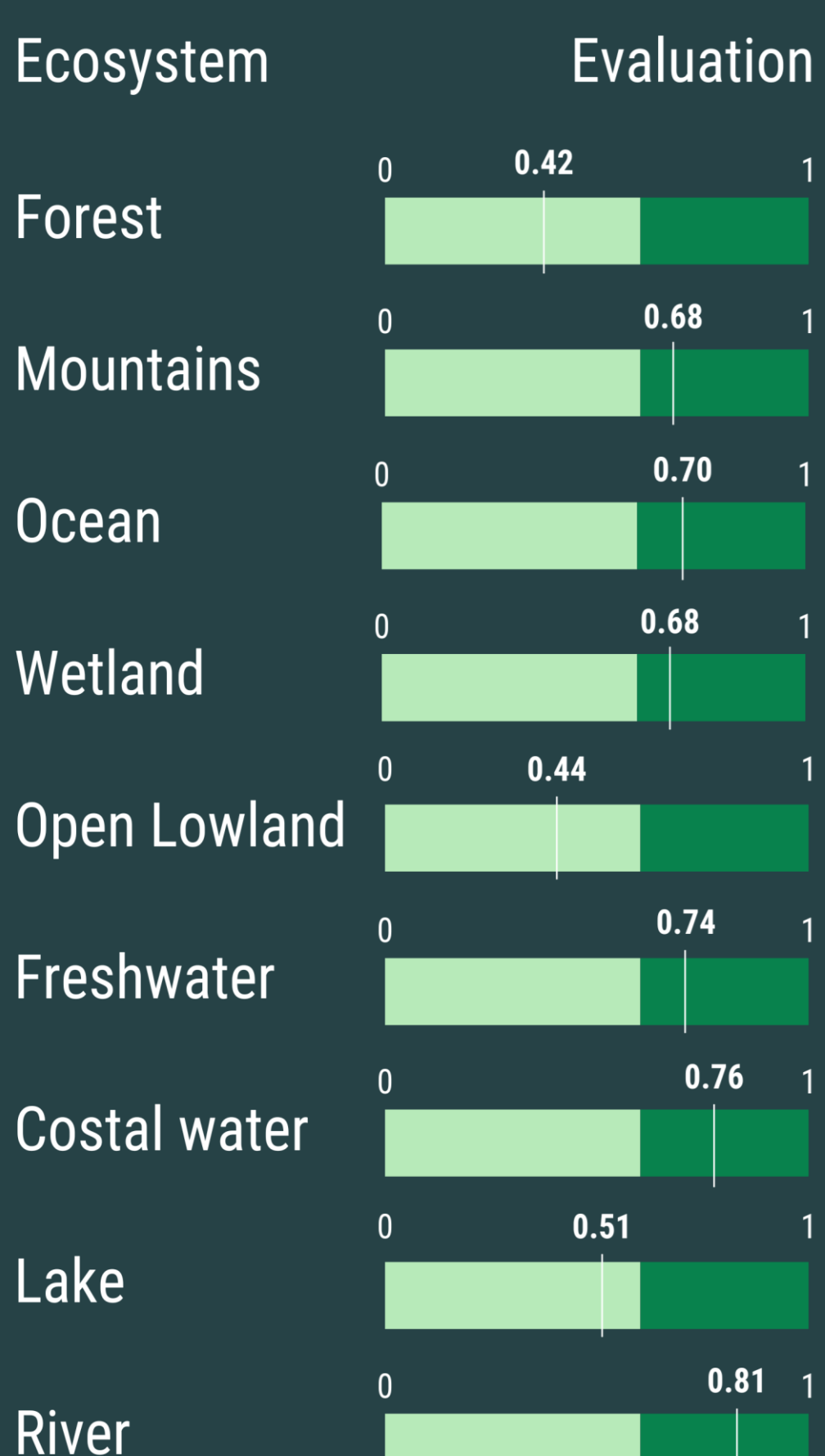
Testing and development Cognitive interviews, feedback from interviewers

Data collection 1<sup>st</sup> round

Data collection 2<sup>nd</sup> round



Existing data for ecological conditions



On a scale from 0-1, where 0 is a severely degraded ecosystem and 1 is an intact ecosystem. The threshold for good conditions is 0.6.