

Experimental ecosystem accounting in the Oslo Region

Technical Brief 2017-1

URBAN EEA

URBAN EEA is a collaboration between the Norwegian Institute for Nature Research (NINA), Statistics Norway (SSB) and the Oslo School of Architecture and Design (AHO). The project reference group includes the Oslo Region, Oslo-Akershus County Governor, and the municipalities of Oslo, Bærum and Ås.

FUNDING:



PARTNERS:



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KARTPORTAL:

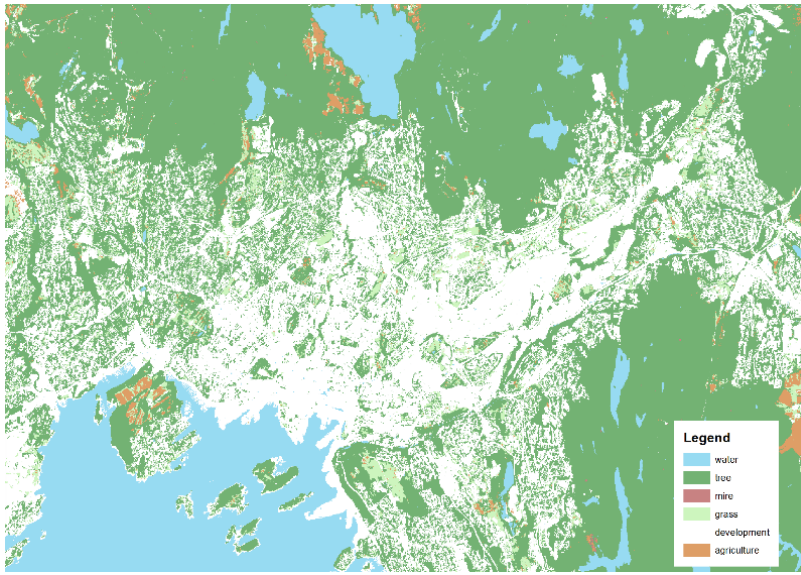
<http://urban.nina.no>



Figur 1. Oslo Region study area in URBAN EEA. Map: Espen Aukrust Hauglin

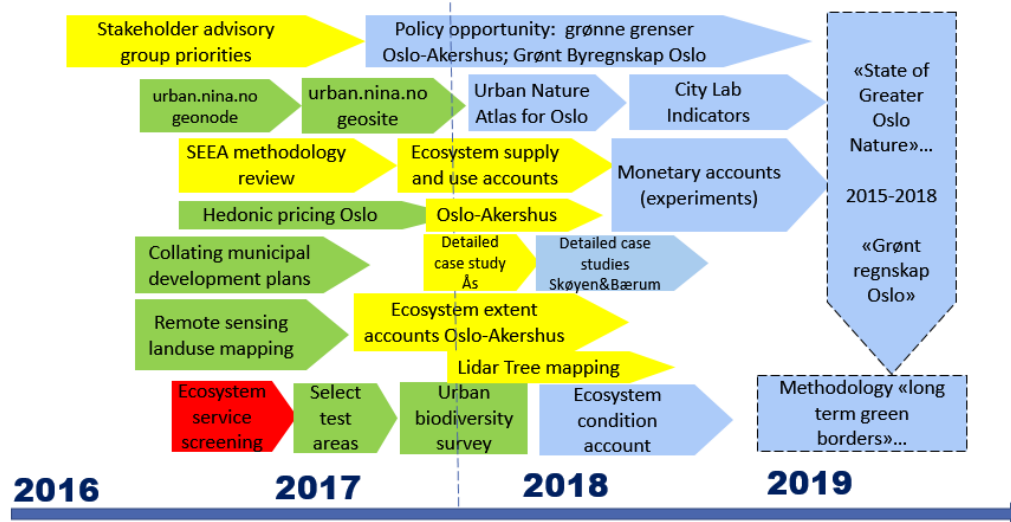
Oslo is one of the fastest growing capitals in Europe. Greater Oslo has forest remnants and other biodiversity hotspot remnants within the built zone, coastline and islands, active agricultural landscapes and large forest areas with nature reserves within municipal boundaries, providing strong wilderness-rural-urban gradients both within and between Oslo and its neighbouring municipalities. A scoping study carried out in 2015 estimated cultural ecosystem services from green infrastructure in Oslo Municipality alone to be worth billions of Norwegian kroner annually. Despite these high per unit area ecosystem services values, small, fragmented urban ecosystems may not be recognized by ecosystem accounting units designed for national indicators and focusing mostly on natural resources found outside cities. The Office of the Auditor General in Norway has asked for better control and monitoring of loss of urban green infrastructure. The URBAN EEA project demonstrates synergies between experimental ecosystem accounting (EEA) for the national system of economic and environmental accounts (SEEA), and municipal level mapping of urban ecosystems and their services to the population.





Figur 1. Blue-green infrastructure in Oslo as seen from Sentinel-2 satellite.. Map: Megan Nowell

Project progress



URBAN EEA is a collaboration between the Norwegian Institute for Nature Research (NINA), Statistics Norway (SSB) and the Oslo School of Architecture and Design (AHO). The project reference group includes the Oslo Region, Oslo-Akershus County Governor, and the municipalities of Oslo, Bærum and Ås.

Some highlights from our first year 2016-2017: URBAN EEA has collated municipal landuse plans from the Oslo Region as a basis for focused landuse accounting studies. We have mapped green structures at 10 meter resolution for the whole Oslo Region for 2015 using Sentinel-2 data. We will repeat this mapping for 2016-2018 to demonstrate ecosystem accounting over time. The project has estimated

a hedonic property pricing model for Oslo municipality with walking distance to blue and green spaces as one of the variables explaining property prices. This model will be upscaled to Oslo-Akershus counties during the coming year. URBAN EEA has during the summer 2017 mapped vegetation diversity across Oslo and parts of Bærum in collaboration with the NGO SABIMA and the Norwegian University of Life Sciences (NMBU). Vegetation mapping in urban areas is contributing to method development for Nature types in Norway (NiN) in heavily modified areas. The project has a geonode <http://urban.nina.no> for sharing map products with municipalities and collaborators in the region. For further information contact: david.barton@nina.no

