

## **Shore zone statistics using 3D**

Refining and expanding the existing statistics on the shore zone

Erik Engelien Statistics adviser / Cand.scient. Statistics Norway Otervegen 23 N - 2225 Kongsvinger Tel : ++47 / 62 88 52 93 Fax : ++47 / 62 88 54 59 E-mail : eer@ssb.no Margrete Steinnes Statistics Norway Otervegen 23 N - 2225 Kongsvinger Tel : ++47 / 62 88 52 93 Fax : ++47 / 62 88 54 59 E-mail : ste@ssb.no



### **Overview of the presentation**

- Background introduction
- Data sources used so far
- Existing method
- New data sources and methods
- Further work

## **Background - introduction**

**Statistics Norway** 

- Everyone shall have the opportunity to take part in outdoor recreation as a healthy and environmental sound leisure activity that provides a sense of well-being, both near their homes and in the countryside.
- Several key indicators have been defined as a tool for supervising the development in the national environmental targets. Access to the shore zone is one of the key indicators.
- The shore zone is very valuable, offering opportunities for outdoor recreation. At the same time these areas are under great pressure from development that are restricting the public access to the areas.
- § 17-2 of the Planning and Building act is restricting developments in the shore zone. Aside from designated areas in municipal land use plans, building and development has to be carried out through dispensations.



### Data sources used so far

- National register of buildings
  - Building type
  - Coordinates
- National map data base of the coast line
  - Scale 1 : 50 000



#### **Existing method – building influenced coastline**





#### **Existing method – building influenced coastline**





#### **Existing method – building influenced coastline**



# Simple indicator: Accessible shore zone area

Use registers and existing map data bases

Statistics Norway

- Not increase the burden for municipalities for reporting statistics
- Routines and production line with low maintenance cost



## Study area:





#### Too steep areas





#### Too steep areas





#### Too steep areas





• Agriculture

**Statistics Norway** 

- Main roads
- Railways
- Within certain distances from buildings
  - Dwellings; 50 metre
  - Other buildings; building area only



# Not accessible land cover





# Accessible shore zone







### Some key choices:

- How steep is a slope when an average person can no longer do common recreational activities?
- How long should the influence distance from dwellings (and other buildings) be?



### **Possible further work**

- Combine with property maps to calculate intensity of use
- How are the best, most accesible areas used?
  - Combine with other map data bases
- Combine with information on dispensation reports from the municipalities
- Try to identify areas accessible for disabled persons (from parking lot to shore zone)