



Adaptive Flood Risk Management

City of Karlstad, Sweden

Main Idea

Karlstads SAWA project is a proceeding of the interreg IIIB North Sea project FLOWS with the continuing of the investigation of how groynes can change the distribution of the flow in the river Klarälven. We have had three projects:

- Further numerical modeling of groynes to produce the necessary information to invest in groynes upstream the branching point of the river Klarälven.
- Producing an EIS for permit for installation of groynes.
- In-depth studies using Risk Cost Analysis to improve the decision support system for better planning of future exploitation of housing and other buildings. Improve the knowledge about the economic consequences of floods and costs for flood resistance in the city of Karlstad.

In addition to these three projects Karlstad municipality is a pilot area in the Sweden.

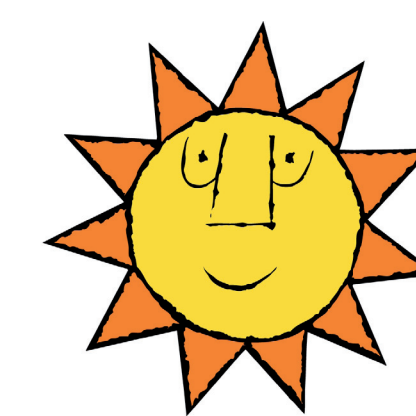
Results

- » The study of the effect of groynes in Klarälven is now finished and showed that groynes will not have the desired effect as hoped for. Therefore the City of Karlstad will not proceed with the EIS (environmental impact statement) for groynes. The advanced models built for the groynes project have also been used to study the impact of extensive dredging in Klarälven delta. This has proved to be a very effective adaptation measure. The municipality will carry out further preparations for extensive dredging in the river. The aim for project B have therefore changed to be an EIS for dredging the river instead of an EIS for groynes. The EIS will be finished in januari 2012.
- » The cost-benefit analysis project is running, and will be finished on time. The project aim has turned from being a cost-benefit analysis of Skåre to be a guidance for how to do a cost-benefit analysis with Skåre as a case study. This guidance of how to do a cost-benefit analysis will be an excellent tool for officials who work with flood projects.
- » Karlstad has also made a flood risk management plan where Karlstads experience have been used in Sweden 1 project, Where the use of different floods and their consequences according to the directive 2007/60/EC of the assessment and management of flood risks are considered.

Link for further information: www.karlstad.se/oversvamning

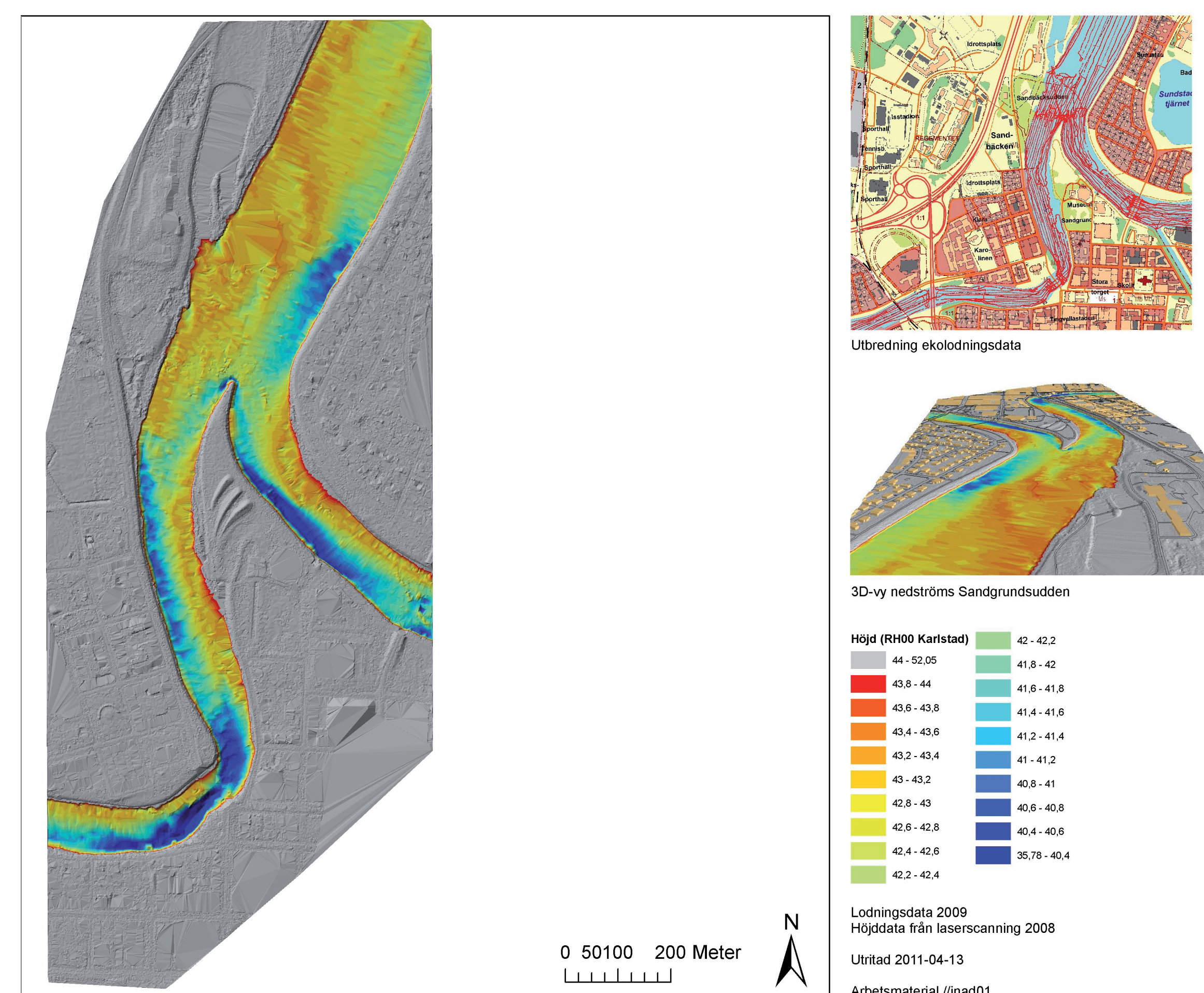
Contribution to SAWA

To assist with a stakeholders view of how to make a flood risk management plan. To show how to make a cost-benefit analysis guidance and how you can make an EIS for extensive dredging in a river where you have both flood risk and nature protecting to care for.

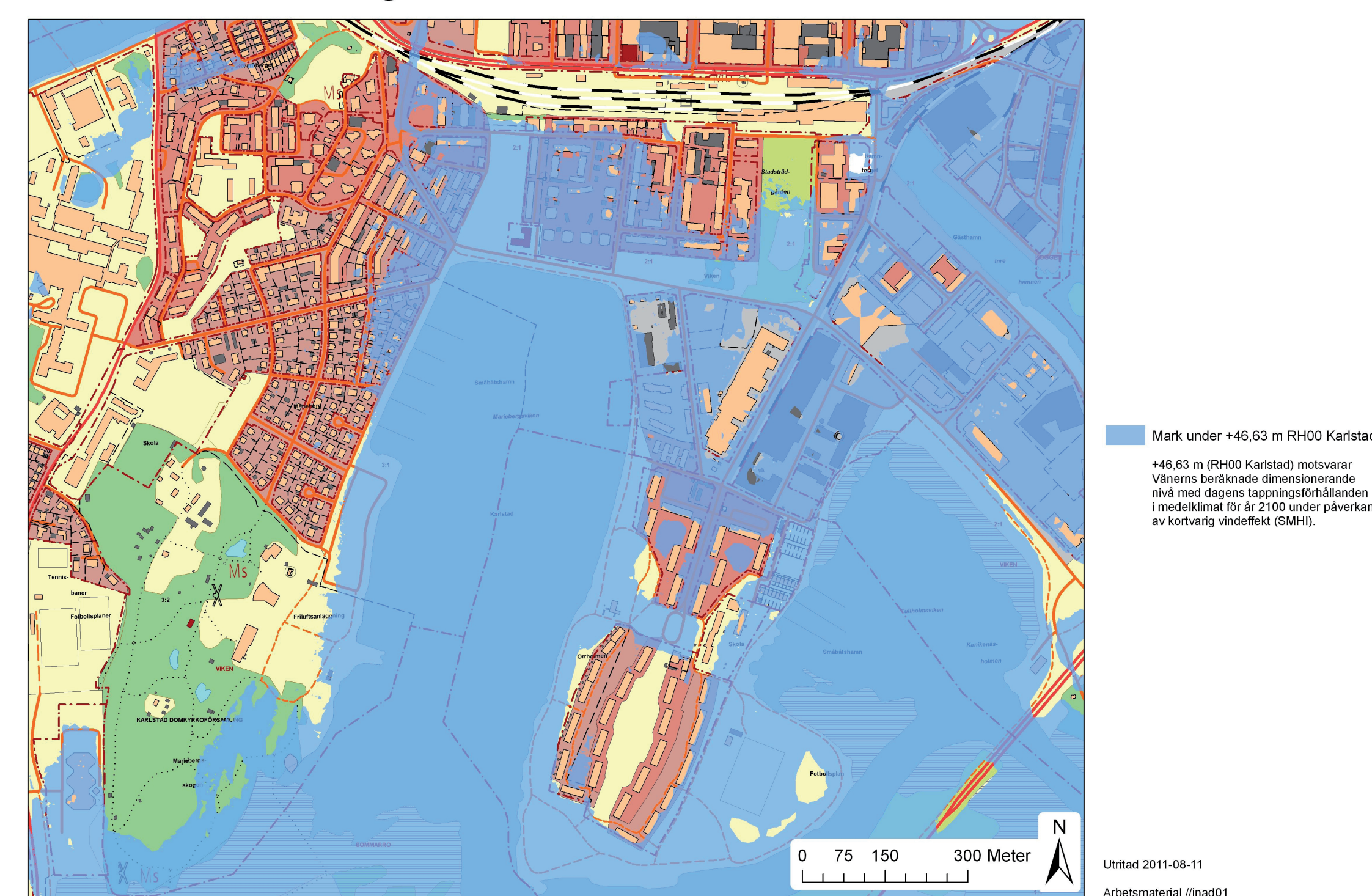


CITY OF KARLSTAD

Sandgrundsudden



Mariebergsviken - Vänerns dimensionerande nivå



CITY OF KARLSTAD
SAWA co-worker Anna Sjödin

