

Accounting for climate change and uncertainty: experience from strategic adaptation projects in Sweden

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Abstract In Sweden, adaptation to climate change has been addressed in connection with some strategic projects of national significance. Hydrological upgrading of Swedish dam safety assessments has been in the forefront. This has been followed by studies of risks in the expanding metropolitan areas of Stockholm and Gothenburg, where assumptions about hydrological changes have been combined with considerations about future changes in sea level. The two big lakes, Mälaren and Vänern, and the River Göta älv have also been a focus. A key subject has been how to cope with the inevitable uncertainty, as illustrated by the range of results based on the set of regional climate scenarios available. The way forward has been close co-operation with stakeholders. In the case of dam safety, this was carried out in a joint committee including industry, responsible agencies and researchers. The dialogue within this committee may serve as a model for other sectors.

Key words climate change; dam safety; areal planning; user dialogue; uncertainty