



LIFE Nature project “Marine Protected Areas in the Eastern Baltic Sea”

Reference number: LIFE 05 NAT/LV/000100

Executive summary: Action C2: Assessment of possible impact of constructions and dumping of dredged material on habitats of community importance

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Goal of action:

The action serves to gain comprehensive information on the extent and characteristics of impacts of dumping of dredged material or other mechanical activities in marine Natura 2000 sites in Latvia, Estonia and Lithuania. To assess the vulnerability of different biological communities or habitat types, a study was undertaken using the basic approaches of analysing existing information and modelling exercises.

Activities implemented:

- During this activity the assessment of impact of possible dredging and dumping activities in project areas of all three countries were carried out. For this purpose extensive hydrodynamical modelling was performed describing sediment dispersion from dumping and dredging sites located inside the project areas. Based on the information gathered from the inventories projects the assessment of the extent of the impact was carried out.
- Series of workshops were conducted with the aim of development and harmonisation of methodology and assessment approach.
- Habitat sensitivity matrix against the impact of three levels of sediment disturbance was developed for the identified habitats. This matrix was applied on the modelling and observation results and on this basis the final assessment was made.

Results achieved:

- Sediment dispersion from the known dumping and dredging sites was modelled for all project areas in Latvia and Lithuania.
- Known dumping sites were described based on the dumping statistics for all Estonian project areas.

- Assessment of the impact from the different levels of dumping activity was carried out for all project areas and the results were quantified for different dumping activity scenarios.
- General conclusion is that impact from the current level of dredging and dumping activity on benthic communities and habitat types protected in marine Natura areas is low in most locations. At the same time intensification of these activities may cause loss of habitat quality in different project areas.

Main lessons learned:

- Assessment techniques and methods used in the project were adequate and enabled the fulfillment of goals.
- Intensive hydrological modelling and impact assessment using habitat sensitivity matrix should be carried out prior to every planned new dredging and dumping project especially in the vicinity of Natura 2000 sites
- The general impact of dredging and dumping activities was lower than expected prior to the project start.