

# THE LIFE SURE PROJECT: EVALUATING THE EFFECTS OF DREDGING ON MARINE BIOLOGY

*Stefan Tobiasson*

*Linnaeus University, Faculty of Health and Life Science, Kalmar, Sweden*

## **Abstract**

Conventionally performed dredging usually cause substantial impact on environment. Obviously, animals living in the bottom sediment and rooted plants will be removed but also plants and animals living in the water will be affected. Typically, the time for recovering will take at least five years. One of the expected advantages of the innovative dredging technology used in the LIFE SURE project is to be cautious and therefor have minor impact on environment. Furthermore, the expected time for recovery will be shorter. However, these advantages is still to be proven and therefor extensive studies will be performed to see how the activities will affect the marine life in the bay of Malmfjärden. So far baseline studies have been carried out 2016 to 2020 and include:

- Nutrients and planktonic algae in water
- Turbidity (cloudiness) in water
- Animals in sediment
- Plants
- Fish stock and recruitment

After completed dredging studies of the marine life will be conducted for at least two years. Furthermore a system for automatic monitoring of turbidity close to the dredging activity is developed.

**Keywords:** dredging, marine life, baseline, turbidity