# MORPHOLOGICAL EVOLUTION OF A SMALL-SCALE BEACH NOURISHMENT IN A NON-TIDAL AREA

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# MORPHOLOGICAL EVOLUTION OF A SMALL-SCALE BEACH NOURISHMENT IN A NON-TIDAL AREA


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## Objective with the nourishment

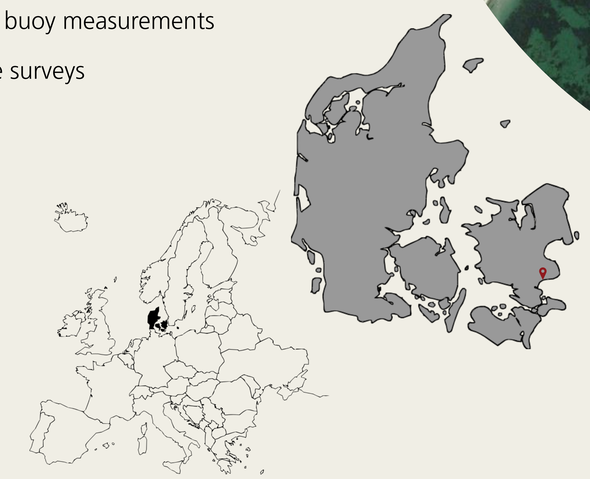
- Reduce wave overtopping onto adjacent road
- Combine hard and soft coastal protection
- Re-establish beach for recreation

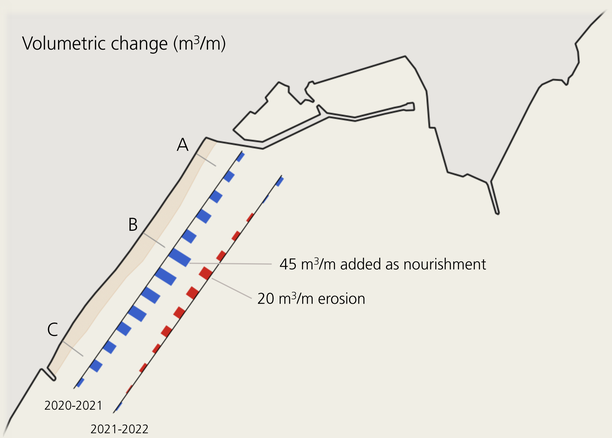
## Nourishment details

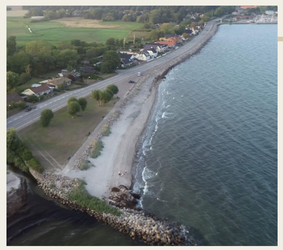
- 600 m long stretch
- Initial nourishment October 2018
  Volume 70.000 m³
- Maintenance nourishment July 2021
  Volume 20.000 m³

## Monitoring techniques

- Profile surveys with RTK-GPS, single beam
- Wave buoy measurements
- Drone surveys



Aug 2018

Initial nourishment
70.000 m³

Dec 2018

Mar 2020

Jul 2021

Maintenance nourishment
20.000 m³

May 2022


## Conclusions

- Large spatial variation in re-distribution patterns, due to varying gradients influenced by hard structures
- Cross-shore volume changes between storm (erosion) and calm (recovery) conditions
- Re-occurring maintenance nourishment required to maintain critical beach width

## Contact

Let's connect on LinkedIn!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