#### **Evaluation of the Oesterdam monitoring**

On the 19<sup>th</sup> of December, 35 students of the course Water System Analysis went to the Oesterdam sand nourishment to help with the Building with Nature monitoring. The nourishment is specially designed so that hydrological forces displace the nourished sand to the unnourished areas with high nature values. In some areas the nourished sand is stabilized with artificial oyster reefs. By measuring the elevation, benthos, sediment compactness, grain size and chlorophyll at 50 points, the students inventoried the first effect of the nourishment (T1). In April 2014, the same students are in the course Ecological Engineering. They will repeat all measurements (T2) and compare the results. This way changes in the morphology and the colonization of organisms are monitored.

Picture 1)

# Evaluation

Evaluation of the Material:

- At the beginning of the day we could not find one GPS. Another one was broken. We therefore advice to bring two extra GPS devices next time.
- The PVC corers were very effective and relatively cheap.
- The water proof paper was important and worked very well

Evaluation of Supervision:

- Supervision was OK, but could be better. Therefore the instruction for supervisors must be improved. Due to the movies students were well prepared to perform the monitoring action of the sediment and the benthos.
- Before the groups started the monitoring at the Oesterdam. All the monitoring was explained again in the field. This worked very well.
- There must be special attention to the students groups most North and most South. They have points low in the intertidal and have to finish in time(the available time in these cases is less than the available time for other groups).

Clarity of the assignment:

- It should be better explained that there are spare jars for every group. These can be used when the residue of the benthos cores does not fit in one jar.
- The explanation for supervisors must be improved. Not all groups answered all questions on the forms(regarding the extra information on the bottom).

## Student satisfaction

- The student satisfaction about the monitoring should be evaluated with the course leader (Alco & Jan)

## Overall:

- To improve this monitoring in the future, there should be better communication between the HZ, IMARES and the NIOZ. They have to agree on when, where, how and how often to monitor.
- We have to evaluate how this monitoring support the education and how the education supports the monitoring.
  It has to become clear how this monitoring supports/overlaps the monitoring that has to be done by the Centre of Expertise for RWS

## Points to improve:

Regarding material:

- Maybe the jars could be better quality?

Regarding supervision:

- The instruction for supervisors must be improved. Regarding their tasks and how to help students in the field (e.g. filling in the forms)
- instruct the supervisor of the groups responsible for the points far north and south that the time available in these areas is less than in other areas.

Clarity of the assignment:

- Include in the monitoring plan an explanation about the existence of sparing jars and their function(these can be used when the residue of the benthos cores does not fit in one jar).

Overall:

- Better communication between the HZ, IMARES and the NIOZ. They have to agree on when, where, how and how often to monitor.
- We have to evaluate how this monitoring support the education and how the education supports the monitoring.
- It must become clear how this monitoring supports/overlaps the monitoring that has to be done by the Centre of Expertise for RWS