



BUILDING WITH NATURE AND NATURA 2000:

FROM PARADOXAL POSITIONS TO STREAMLINED STRATEGY

Introduction

In the Netherlands large stretches of coastal areas are defined as NATURA 2000 areas: areas that provide rare and essential habitats for (migrating) bird populations – at European and even World scale. The government has an obligation to protect these habitats, and preferably to improve their quality and enlarge the area. As an instrument, a permit system exists, which orient all intervening activities that may have an influence on the stability of the essential habitats. Before the implementation of the activities, a permit should be granted. The basis of approval is an ex-ante impact research, and an expert judgement of being unharmed or not. If the activity is considered to be harmful, the permit is

refused or if the measure is essential for other prioritized aims of society (e.g. human safety), the realization of compensation measures elsewhere are mandatory.

In these coastal areas protection structures to prevent flooding are located: a lot of dikes, but also slick fore-shores, sand-dunes and beaches. Because of wear and sea level rise, periodically reinforcement measures are implemented. Dikes used to be reinforced by increasing its geometrical dimensions and the surface stone blocks and asphalt layering – emphasizing and enlarging the ecological and landscape division between sea and land. In the last two decades gradually reinforcement practices aim to soften

Building with Nature project

- Partners from the Netherlands, Belgium, Germany, Denmark, Sweden, Scotland and Norway work together.
- The project demonstrates BwN solutions at 7 coastal sites and at 6 catchment scale sites.
- The project is part of the Interreg VB North Sea Region programme.
- Project period: 2015 – 2020.



this division by using other reinforcement materials and by opting for protection measures that add habitats, and facilitate the migration of organisms from sea to shore and vice-versa. Natural materials and natural processes are increasingly applied: those are the Building with Nature measures. All reinforcement measures need to acquire a permit before being implemented.

The Waddensea Overarching Project Programme unites several research projects on improved reinforcement measures in the Waddensea and Eems Dollard Estuary. The results will be inserted in the future reinforcement projects that will be executed within the State Coastal Protection Programme. This Programme is coordinated by the Delta Commissioner. He coordinates the programme among all state secretaries involved in partial decisions about the projects.

Problem description:

The paradox and the urgency

Building with Nature measures, compared to the former commonly used measures, need more space to be implemented. Often it needs to cross the borderline of the adjacent NATURA2000 area. This complicates the permit issue – because formally the measure seems to diminish the size of the Natura 2000 area. By implementing the BwN measure, part of the coastal protection structure will be located in the Natura 2000 area. This often is considered as a loss of habitat area that should be protected and, preferably, be enlarged instead of decreased. Nevertheless, the creation of new habitats, the use of natural materials and the probable continuity of the existing habitats that are made possible by applying the BwN measure, are not being considered as compensating factors.

So, after thorough investigation and multiple expert judgement, permit granting is either denied or a long-lasting juridical procedure with a probable result that elsewhere, compensating measures should be realized. That causes delay and elevates costs. It may end in giving preference to the earlier commonly used reinforcement practices – and thus maintaining the hard division

between sea and shore – until eternity or until being swallowed by the sea level rise. Which is considered undesirable by society.

Policy Alternative

The alignment of the NATURA2000 aims and the Building with Nature measures as adequate means to meet both water safety and NATURA 2000 standards should provide great stimulus to prioritize the BwN measures. Also it would enhance research and development of new BwN measures, that are more effective and efficient to embody the joint approach. And lastly, it would stimulate the gradual but inevitable retreat of the hard and standard reinforcement measures as most frequently applied coastal protection measures.

Policy recommendations: development of solutions through a step-by-step approach

The recommended strategy to reach the desired result is to direct a bottom-up approach from creating awareness at expert and policy implementation level to advocacy at policy development and decision taking level. The structure of the State Coastal Protection Programme (HWBP) should be followed. The “poldering capacity” of this programme is used to raise the issue. The awareness building will succeed by :

1. Generating knowledge about the different aspects that integrate the process of ex-ante research and the judgment of the results.
2. Share and discuss the knowledge among the experts and policy implementing staff.
3. Draw conclusions and define the policy proposal
4. Present them at managing level of the State Coastal Protection Programme (HWBP).
5. Put the proposal at the agenda of the decision makers.



Step 1 Knowledge generation on N2000 procedures and interpretations

Generating knowledge requires research into different topics:

- a. The natural values of the Waddensea and Eems Dollard Estuary
What are they, how can they increase, which links exist with other adjacent areas and societal aims?
- b. The legal and judicial conditions of activities in and near NATURA 2000 areas
Distribution of responsibilities, permit requirements, case studies
- c. Evaluation of permit procedures that have been concluded
Four interventions will be evaluated : Twin Dikes, Rich Dike, Prins Hendrik Dijk, Wide Green Dike.

Step 2 Knowledge sharing and discussion

- a. Joint expert and policy implementing staff excursion to an intervention in execution
- b. Gathering of conclusions, elaborate factsheet and establish digital information access
- c. Preparation of the evaluation report and elaboration of the policy proposal

Step 3 Advocacy and decision

- a. The program managers of the Waddensea Overarching Project Programme contemplate the report and streamline the policy proposal
- b. The program managers of the State Coastal Protection Programme contemplate the report and streamline the policy proposal
- c. The Delta Commissioner receives the policy proposal and involves the involved state secretaries, among others the environmental and legal policy makers
- d. The policy proposal is polished and handed over for decision at proper political level



Lessons learned

Four projects will be evaluated on the interaction between Natura 2000 requirements & policy and new Nature based solutions of coastal defense. The findings have been introduced in the Step 1 and Step 2 actions and are to be integrated in the advocacy and decision phase in Step 3.

Policy recommendations

The paradox about the under-estimation of Building with Nature measures compared to mainstream hard-cover measures in cost protection has to disappear.

Therefore :

1. A sound evidence-base on short and medium-term impact on environment of Building with Nature measures should be developed
2. It should be mandatory that the selection criteria for decision making on the measures to be applied in coastal protection works should take into account the ecological and societal gains
3. Similar selection criteria must be applied to all alternatives from which the choice should be made in coastal reinforcement projects
4. In reinforcement projects adjacent to NATURA 2000 and within NATURA 2000 areas, the Building with Nature measures should be considered as standard and automatically admissible on condition of properly sustained ecological gains.