



 **Green** Inland Ports

# Good Practices

Funded by  
the European Union





Development of nature

# Development of nature

## 1.1 Description

Nature is a broad concept that involves flora and fauna on land, in water and everything in between. InterAction, (2011) has the following definition of what development of nature should entail as a measure of success: An integrated approach to conservation and development demands more sensitive and accurate measures of human well-being (as human systems are embedded in natural systems and vice versa) and environmental health. It also means applying new lenses and metrics to environmental and development initiatives, and evaluating their impacts on ecosystems, sustainability and equity. Examples of the development of nature may include areas that are/were used by industry or other purposes which can be completely restored by nature in a sustainable way, areas where economic and ecological objectives both play a central role in the design of the area, or certain measures that prevent the disturbance of flora and fauna both on land and in the water.

Measures that prevent the disturbance of flora & fauna are, for example, port areas that want to expand at the expense of nature compensating elsewhere. The so-called Natur auf Zeit policy, applicable in Germany and Switzerland, enables ports to temporarily give space for nature as an interim use of a plot of land. When something must be built on that plot of land, nature can be removed again without compensation. Allowing the development of nature in temporarily unused industrial areas is a new method and has untapped potential to achieve the goal of halting the loss of biological diversity (Stiftung Rheinische Kulturlandschaft & Cornelius Bartenbach Haesemann & Partner, 2019).

The port of Den Helder used an area in the southern part of the port to store dredged material (called the Oostoever). This area is currently under development to become a restored natural area. The island will be made with concrete walls, which will be filled with cleaned soil. Materials have been dredged within the vicinity and have been cleaned by VOF 't Oost. Based on an idea of Landschap Noord-Holland, which is an organisation that protects landscapes in the Netherlands, the area was acquired, recovered and developed into a nature reserve. Since then, it has become a breeding ground for birds.

In line with its 2030 Port Vision, the port of Rotterdam has created a nature vision. The vision sets out an approach to nature within the port of Rotterdam, also looking at surrounding areas where the port has an (in)direct impact. Within the nature vision, the future of the port of Rotterdam is being outlined, in which nature is being supported through policy and actions, to let industry and nature go hand in hand within the port area (Port of Rotterdam, 2023).

Another area called the Drepte lowlands, situated in the Bremerhaven port area, Germany, has been converted into an area with an acceptable balance between tidal landscape, nature conservation, agriculture, energy generation, tourism and recreation.

Multiple inland ports have indicated that within nature development the creation of compensation areas when construction projects are being carried out is an important topic.

According to the EIA Directive 2011/92/EU, which applies to all European Union countries, it is part of the construction permit procedure that an environmental impact assessment study must be carried out for projects that are likely to have significant effects on the environment. Other examples include consistent monitoring of green spaces (which shows overlap with the good practice “[differentiated management of green spaces](#)”), areas for species protection, which may include lizard or bird habitats, and re-using dredged sediments for aquatic bird breeding grounds (which shows overlap with the good practice “[re-use of sediments in multiple ways](#)”).

## 1.2 The aim of nature development

The aim of nature development is to prevent the reduction of nature within port areas. Port areas attract flora and fauna (even endangered species), due to specific soil conditions for example that may apply in port areas, and the flora and fauna not being disturbed as much as elsewhere. A way must be found for nature and economic activities to coexist.

## 1.3 Ports that develop nature

- Port of Den Helder
- Bremerhafen
- Port of Basel
- Niedersachsen Ports
- Port of Mulhouse Rhine
- Port of Brussels
- Port of Switzerland (Basel)
- Compagnie Nationale du Rhône (Port of Lyon)
- DeltaPort (Wessel)
- Bayernhafen
- Port of Belgrade
- Port of Giurgiulesti
- Port of Mannheim
- Haropa Port
- Port of Seville

## 1.4 Stakeholders

- Port authority: The port authority serves, in many inland ports, as the landlord of the port area. This means that they are responsible for what happens to land within the port area, and what function un-used land within the port area will have.
- Companies that want to expand or be located within the port area: When nature will have a more important place or be more valuable within the port area, there will be less land that can be used for other purposes.
- Local population: More nature and a higher biodiversity within port areas will increase the liveability in the area and may also make the area more attractive for recreational purposes.

## 1.5 Voluntary or mandatory

Mainly mandatory as many governmental authorities for ports within the country/area require ports to compensate the amount of nature that has been removed to expand the port area. However, ports can compensate more than necessary to comply with rules and regulations, which makes it partly voluntary. It may also happen that industrial areas that are not being used anymore are being converted back into nature, which oftentimes is not mandatory, but happens in cooperation with multiple stakeholders, such as nature conservation parties, as is the case with the Oostoever located near the port of Den Helder.

## 1.6 Realised/potential impact

The impact depends on the size of the area. For example, in the case of Den Helder, a bird breeding island of around two hectares was discovered.

## 1.7 Possible obstacles

- It can be an expensive and time-consuming task to let nature return to its original state.
- In many cases the natural environment is still considered as an obstacle for economic growth. This will mostly be an issue in the relatively less prosperous countries, as there will be fewer financial resources to commit to tasks that are viewed as a marginalised issue and will not financially benefit them. The additional benefits of natural capital in ports need to be released, while ensuring that they fulfil their primary role as gateway (Taljaard, S. et al., 2021).
- In many ports, space is becoming scarce. Due to the competition for space, development of nature would be an additional demand.
- According to Wuczowski, M., (2023) and Roethlingshoefer, F., (2023), without the Nature auf Zeit policy, nature needs to be re-planted in an area that is left unused for a longer period of time. Because of this, some ports choose to pave the area to prevent nature development.
- When nature is being recovered in a certain area, it would include a change of the currently existing state of the area, which could mean that a building or environmental permit is necessary. Even when an activity is conducted with good intentions, such as restoring nature, rules regarding spatial planning are still applicable. Due to lack of experience among involved officials regarding environmental permits for giving back to nature, this process could be more difficult than regular permits.
- The majority of the inland port authorities regard this as relatively difficult to implement, as it scores an average of 6,7 (1 means very easy, 10 means very difficult), but it differs a lot between parties. The large differences may be explained through different local or national laws and policies regarding nature development.

## 1.8 Key learnings

- Currently, nature programmes that have been created are very effective, such as rules for building within port areas and protecting nature that is already present.

- In many cases nature is still seen as a competitor for space, but without the economic benefits. This is a persistent vision.
- Many ports are currently struggling with space related problems. A programme that demands compensation for removed nature for building purposes makes sense, however ports can struggle with such programmes.

## 1.9 Sources

**InterAction**, 2011. The Nature of Development, Washington:

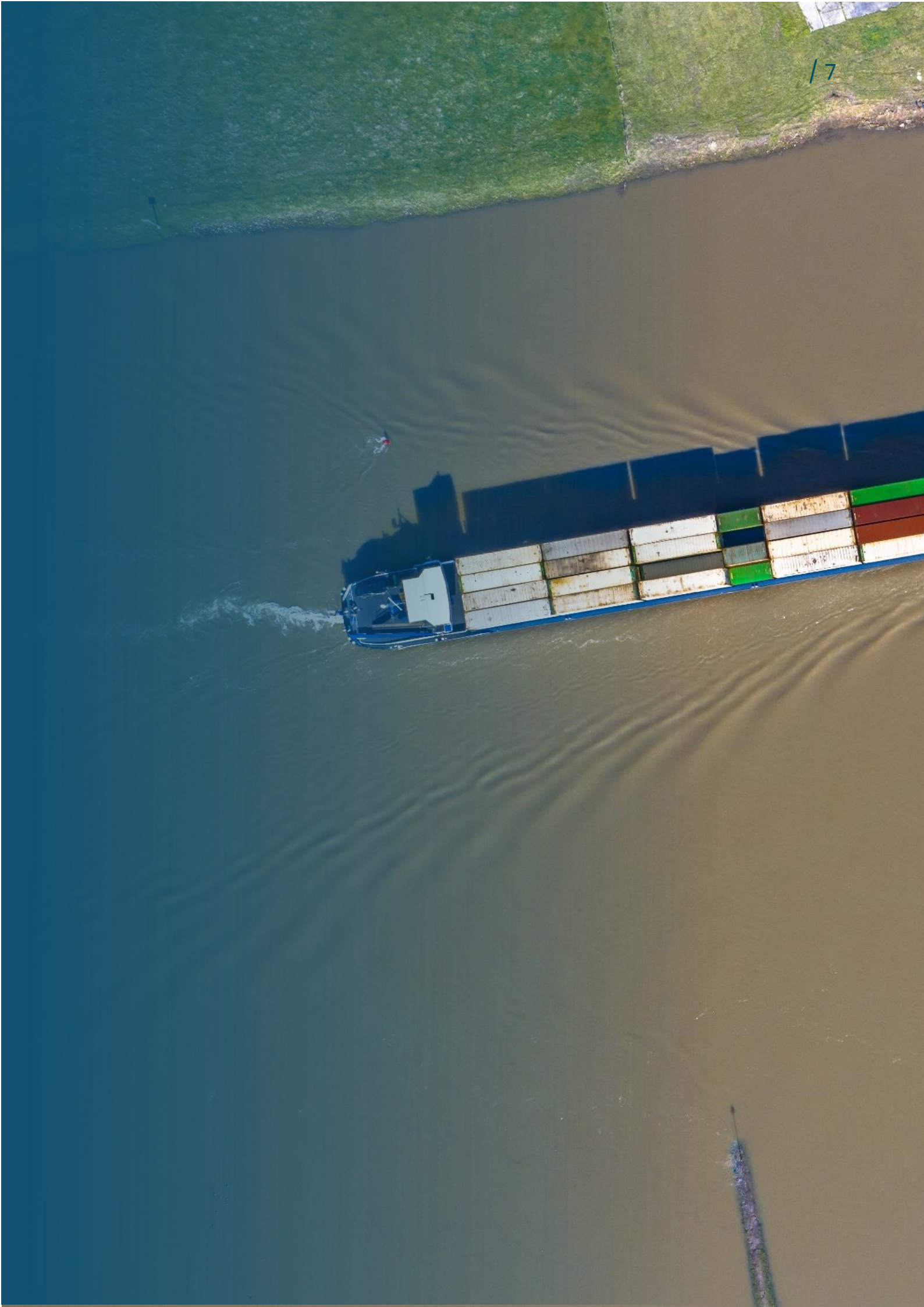
**Port of Rotterdam**, 2023. Nature Vision, Rotterdam:

**Roethlingshoefer, F.**, 2023. Interview Port of Switzerland (Basel) 16-11-2023.

**Stiftung Rheinische Kulturlandschaft & Cornelius Bartenbach Haesemann & Partner**, 2019. Natur auf Zeit, Bonn: Stiftung Rheinische Kulturlandschaft

**Taljaard, S., Slinger, J. H., Arabi, S., Weerts, S. P. & Vreugdenhil, H.**, 2021. The natural environment in port development: a 'green handbrake' or an equal partner? Elsevier, 2021.

**Wuczowski, M.**, 2023. Interview Niedersachsen Ports 20-11-2023.



17