

# Polder2C's - Emergency Response

Climate change is affecting countries in the 2 Seas area, the Netherlands, Belgium, France and the United Kingdom, faster and to a greater extent than was previously expected. The rising sea level is a serious threat to these countries. The Polder2C's project is aiming for climate adaptation in a unique way. An important goal of this project is to improve our knowledge of how we organise our emergency response in practice.

## Polder2C's project

The INTERREG Polder2C's is an international research project. Within the framework of the updated Sigmaplan for the river Schelde, the Hedwige-Prosperpolder will be transformed into tidal nature. Thirteen project partners, led by the Dutch Foundation of Applied Water Research (STOWA) and the Flemish Department of Mobility and Public Works (DMOW, Flanders Hydraulics Research), are working together to improve the 2 Seas regions' capacity to adapt to the challenges caused by climate change.

## Living Lab Hedwige-Prosperpolder

If extreme circumstances present a danger to our water defences, we must take the right measures against flooding. Transforming the Hedwige-Prosperpolder offers a unique testing ground, the Living Lab Hedwige-Prosperpolder, to exercise emergency management under controlled but realistic circumstances.

## Emergency Response Activities

Activities that are part of the project in the field of emergency response are:

### 1. Inspection Exercises

We want to develop tools for and train levee guards to improve their current inspection methods. We share ideas on and perform levee observations together. We develop, test and validate a new app, App2C, to easily assess and report damages on the levee.



## 2. Emergency Response Exercises

These exercises are organised to implement different levee repair techniques under different circumstances for five main damages: local crest lowering, erosion holes or fallen trees, sand boils caused by piping, cracks due to slope instability and animal burrowing, such as badger or fox holes.

## 3. Breach Closure Strategies

We want to explore different breach closure strategies under different circumstances, such as wide or small breaches, high or low water velocity, accessible from land, water or air.

## 4. Controlled Breach Initiation

Controlled breaching of a levee may be necessary to release the overall pressure on a levee system and prevent uncontrolled breaching. A possible initiating way is demolition (explosives). Research is conducted into this technique.

## 5. Flood Risk Perception Study

The Polder2C's exercises and the final breach of the Hedwige-Prosperpolder levee provide a real-life situation that we embed in a flood crisis scenario. This provides a unique opportunity to study risk perception among citizens and decision makers.

### More information

Want to learn more about the Emergency Response activities and results? Visit [Emergency Response Activities](#).

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**“Flooding of properties and land has an enormous impact on people. It is our duty to minimise the flood risks. This means that we have to recognise flood threats and be able to mitigate these in time. That is what the Emergency Response team works on.”**

*Bart Vonk, Rijkswaterstaat - Project Manager Emergency Response*

### Project partners



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