

### **MONITORING SURVEY FRAMES**

- Baseline measurement
- Pilot: Zeeland / Reimerswaal

#### Important:

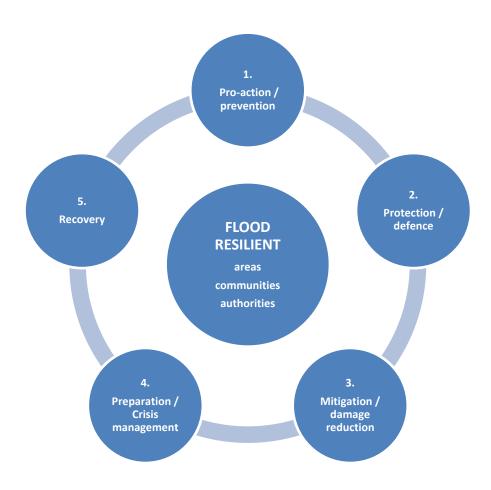
We kindly ask the pilot manager to complete this questionnaire in consultation with relevenant experts/stakeholders in the pilot/region. The pilot manager can send this questionnaire and ask these experts/stakeholders to complete (certain) questions, or ask them to review answers. Per pilot we would like to have 1 questionnaire returned.

Who contributed to completing this questionnaire? Please provide names of persons and their organizations:

	Person	Organization
1	Ruben Akkermans	Province of Zeeland
2	Ingrid de Kubber	Province of Zeeland

# **Short explanation**

FRAMES is about improving flood resilience by taking different types of actions. A common and well known typology in flood risk management is the disaster management cycle, as shown in the diagram below. This survey first focuses on the flood resilience of areas by considering the five elements proaction (1), protection (2), mitigation (3), preparation (4) and recovery (5). Hereafter, a few questions will be asked with regard to the flood resilience of communities and authorities.



### 1. Pro-action/prevention

Negative consequences of flooding can be avoided by pro-active spatial planning or land use policies ("keeping people away from water"), aimed at building only outside areas that are prone to flooding.

To what extent is proaction/prevention currently a strong characteristic of the pilot area?



#### Please shortly explain your answer:

People are living in this area and are not kept away. Spatial planning in this low risk area is based on prevention by safe dikes.

### 2. Flood protection/defence

Keeping water away from people by (combinations of) hard infrastructural works (dikes, dams, etc.) or softer (nature based) solutions (dunes, retention in nature areas, etc.).

To what extent is flood protection/defence currently a strong characteristic of the pilot area?

Not									To a great
at all									extent
1	2	3	4	5	6	7	8	9	10

#### Please shortly explain your answer:

In Zeeland water safety is very important. We have high and strong sea defences along the coasts including the coasts of the Easter- and Westerschelde. But the area is characterised by high sea levels and quick flooding when a flooding may occur.

# 3. Flood risk mitigation

Consequences of floods can be mitigated by a smart design of the flood-prone area including spatial orders, constructing flood compartments, or (regulations for) flood-proof building.

To what extent is flood risk mitigation a strong characteristic of the pilot area?

Currently	Not at all 1	2	3	4	5	6	7	8	9	To a great extent 10	
Expectation after Frames	1	2	3	4	5	6	7	8	9	10	

#### What will be done in FRAMES with regard to flood risk mitigation, that improves the

... physical resilience in the pilot area?

In FRAMES we investigate in possible measures to be more resilient to flooding by good spatial planning. Resilience will improve when these measures will be executed

... capacities of local organisations / institutions in the pilot area?

Awareness rises and possible better policy

... capacities of local communities (citizens, businesses) in the pilot area?

Awareness of the community. Self-resilience grows

### 4. Flood preparation

Consequences of floods can be mitigated by preparing for adequate response to a flood event. Measures include flood warning systems, disaster management and evacuation/rescue plans, and managing a flood when it occurs by taking last call emergency measures (e.g. sand bags).

#### To what extent is flood preparation a strong characteristic of the pilot area?

	Not at all									To a great extent
Currently	1	2	3	4	5	6	7	8	9	10
Expectation after Frames	1	2	3	4	5	6	7	8	9	10

#### What will be done in FRAMES with regard to flood preparation, that improves the

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... capacities of local organisations / institutions in the pilot area?

Awareness rises and possible better policy

... capacities of local communities (citizens, businesses) in the pilot area?

Awareness of the community. Self-resilience grows

### 5. Flood recovery

Facilitates a good and fast recovery after a flood event. Includes plans for draining / pumping away flood water and restoring safety and security, plans for reconstruction or rebuilding critical infrastructure, damage compensation/insurance systems, return of evacuated communities and social-psychological support.

#### To what extent is flood recovery a strong characteristic of the pilot area?

	Not at all	To a great extent								
Currently	1	2	3	4	5	<mark>6</mark>	7	8	9	10
Expectation after Frames	1	2	3	4	5	6	7	8	9	10

#### What will be done in FRAMES with regard to flood recovery, that improves the

... physical resilience in the pilot area?

In FRAMES we will investigate possible measures to be more resilient to flooding by good spatial planning. Resilience will improve when these measures will be executed

... capacities of local organisations / institutions in the pilot area?

Local organisations and institutions will be involved and will help us with our investigation and to make the area more resiliient

... capacities of local communities (citizens, businesses) in the pilot area?

Results of the investigations and measures to improve resilience will be communicated with citizens and businesses

# Flood resilience of authorities

Please name the organisations / stakeholders that will be involved in your pilot:

	Organization
1	Province of Zeeland
2	Municipality of Reimerswaal
3	Rijkswaterstaat
4	Veiligheidsregio
5	HZ University of Applied Sciences
6	Owners vital infrastructure (gas, water, railway, highway, electricity, communication)
7	Waterboard
8	
9	
10	

In general, to what extent is flood <u>risk mitigation</u> embedded in policy and practice of these organisations, in your opinion?

	Not									To a great
	at al	l								extent
Currently	1	2	3	4	5	<mark>6</mark>	7	8	9	10
Expectation	1	2	3	4	5	6	7	8	9	10
after Frames										

#### Please shortly explain your answer:

Flood risk mitigation is embedded in policy and practice of the involved organisations. Together we aim to improve this.

In general, to what extent is flood <u>preparation</u> embedded in policy and practice of these organisations, in your opinion?

, ,	Not at al	To a great extent								
Currently	1	2	3	4	5	<mark>6</mark>	7	8	9	10
Expectation after Frames	1	2	3	4	5	6	7	8	9	10

#### Please shortly explain your answer:

Flood preparation is embedded in policy and practice of the involved organisations. Together we aim to improve this.

In general, to what extent is flood <u>recovery</u> embedded in policy and practice of these organisations, in your opinion?

,	Not at al	I								To a great extent
Currently	1	2	3	4	5	6	7	8	9	10
Expectation after Frames	1	2	3	4	5	6	7	8	9	10

#### Please shortly explain your answer:

We will investigate how flood recovery is imbedded in policy and practice within the FRAMES project.

# Flood resilience of local communities

Please name the communities (e.g., neighbourhoods, municipalities) that will be involved in / informed about your pilot(s), and how many citizens they consist of:

	Community	Number of citizens (approximately)
1	Municipality of Reimerswaal	22.000
2		
3		
4		
5		
6		
7		
8		
9		
10		

In general, to what extent is flood <u>risk mitigation</u> embedded in the behaviour of these communities, in your opinion?

, ,	Not at ali	I								To a great extent
Currently	1	2	3	4	5	6	7	8	9	10
Expectation	1	2	3	4	5	6	7	8	9	10
after Frames								_		

#### Please shortly explain your answer:

Inhabitants are aware of risks living below sea level, but feel save behind the dykes.

In general, to what extent is flood <u>preparation</u> embedded in the behaviour of these communities, in your opinion?

·	Not at al	I								To a great extent
Currently	1	2	3	4	5	6	7	8	9	10
Expectation	1	2	3	4	5	6	7	8	9	10
after Frames						_				

#### Please shortly explain your answer:

Awareness of the community and self-resilience grow when they are aware of what happens and what measures will be taken to reduce risks

In general, to what extent is flood <u>recovery</u> embedded in the behaviour of these communities, in your opinion?

·	Not at all									To a great extent
Currently	1	2	3	4	5	6	7	8	9	10
<b>Expectation</b> after Frames	1	2	3	4	5	6	7	8	9	10

#### Please shortly explain your answer:

We will investigate this - what happens when the area is flooded and how can we improve recovery is the aim of our pilot

# END OF SURVEY THANK YOU!