NoFloods
By Environment Solutions

EASY AND LOGIC
REVOLUTIONIZING
THE WAY TO STORE UNLIMITED AMOUNTS OF LIQUIDS

NOFLOODS BARRIERS
By Environment Solutions

KNOWLEDGE, RESEARCH AND INNOVATION

AGENDA

- **Mobile Barrierer - Case I Roskilde**
- **MUDP – “Stormtubes”**
- **NoFloods EWS – Smart Barriers**
- **Beredskab på abonnement – NoFloods Resilience Center (Vandet fra Landet)**

NoFloods
By Environment Solutions

CASE – STORM

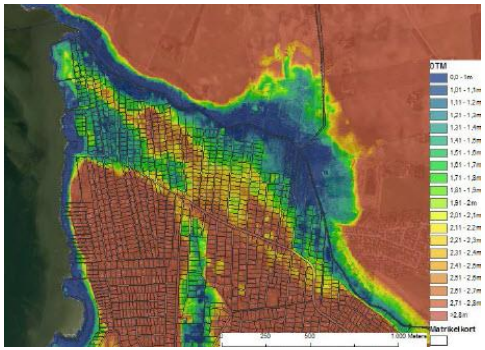
Jyllinge, Danmark 2015

Flood / Storm warning!

- Jyllinge / Roskilde in threat…. Again!
- 83.000 inhabitants
- People still not recovered from last flooding in 2014
- No permanent solutions has been implemented since last flooding.
- Flooding expected in 24-48 hours!

Crisis center established

- The storm is expected in 16 hours!
- Detailed action planning
- Mobilizing resources
- Decide level and protection
- Prioritize efforts
- ES to bring all Flood Barriers available!



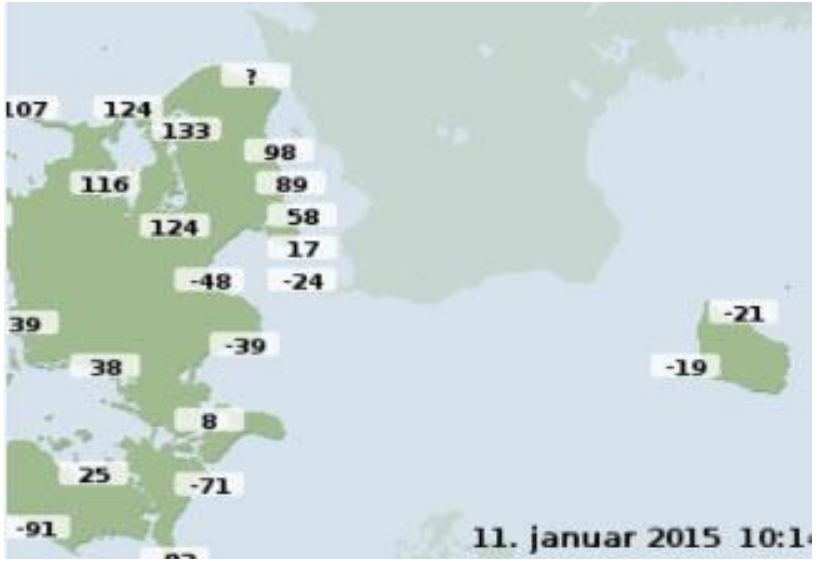
Mobilise ressorces

- Approx. 1,6 km of protection needed
- Physical inspection at deployment area
- ES to bring all available stock at warehouse.
- ES to bring all Flood Barriers available!
- DEMA to control pumps

Deployement 850 m + 125 m

850 m NoFloods Barrier = 2.040.000 liters of water (l/kg)

Constant surveillance



NoFloods
By Environment Solutions

Fighting floods

NoFloods
By Environment Solutions

Fighting floods

NoFloods
By Environment Solutions

Winding up - Removal

Key learnings

1. Flood Risk Maps are valuable (a “must have”)

2. Clear action plan – who, when, where

3. Deployment in storm need special equipment and methods of deployment (storm tubes) and monitoring (sensors)
   => MUPD-Project

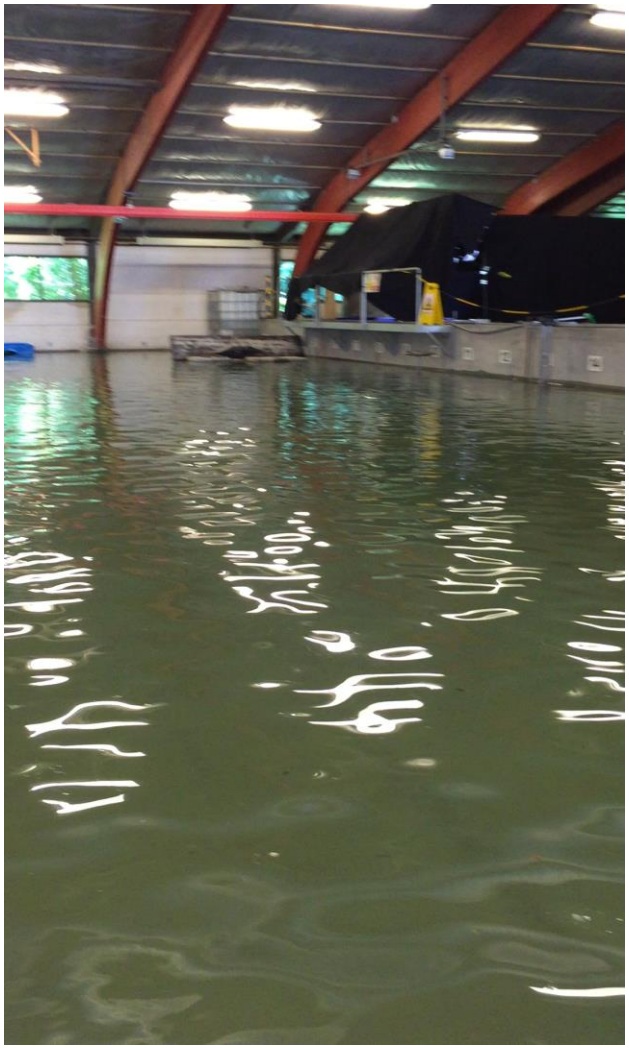
4. Easy access to equipment - and plenty of equipment => NFRC (vandet fra landet)

MUDP

Udvikling af en stormsikker, omkostningseffektiv løsning til sikring af mennesker, infrastruktur og miljø mod ødelæggelser

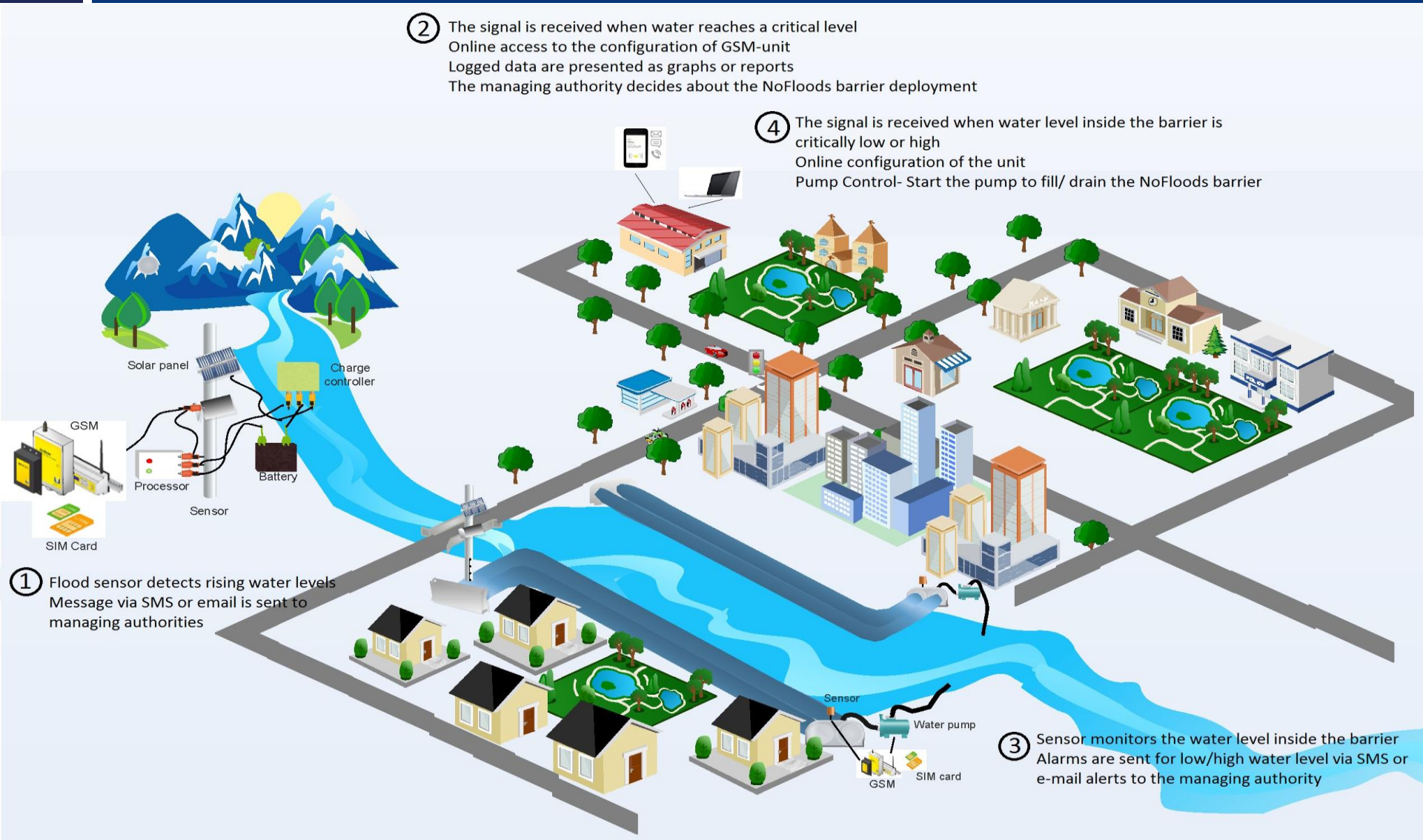
- ⇒ ***Nye tubes, Nye udlægningsmetoder, modulerbare, større sikkerhed og nem overvågning.***
- ⇒ ***Projekt løber frem til medio 2017***

Test of Seepage and deployment

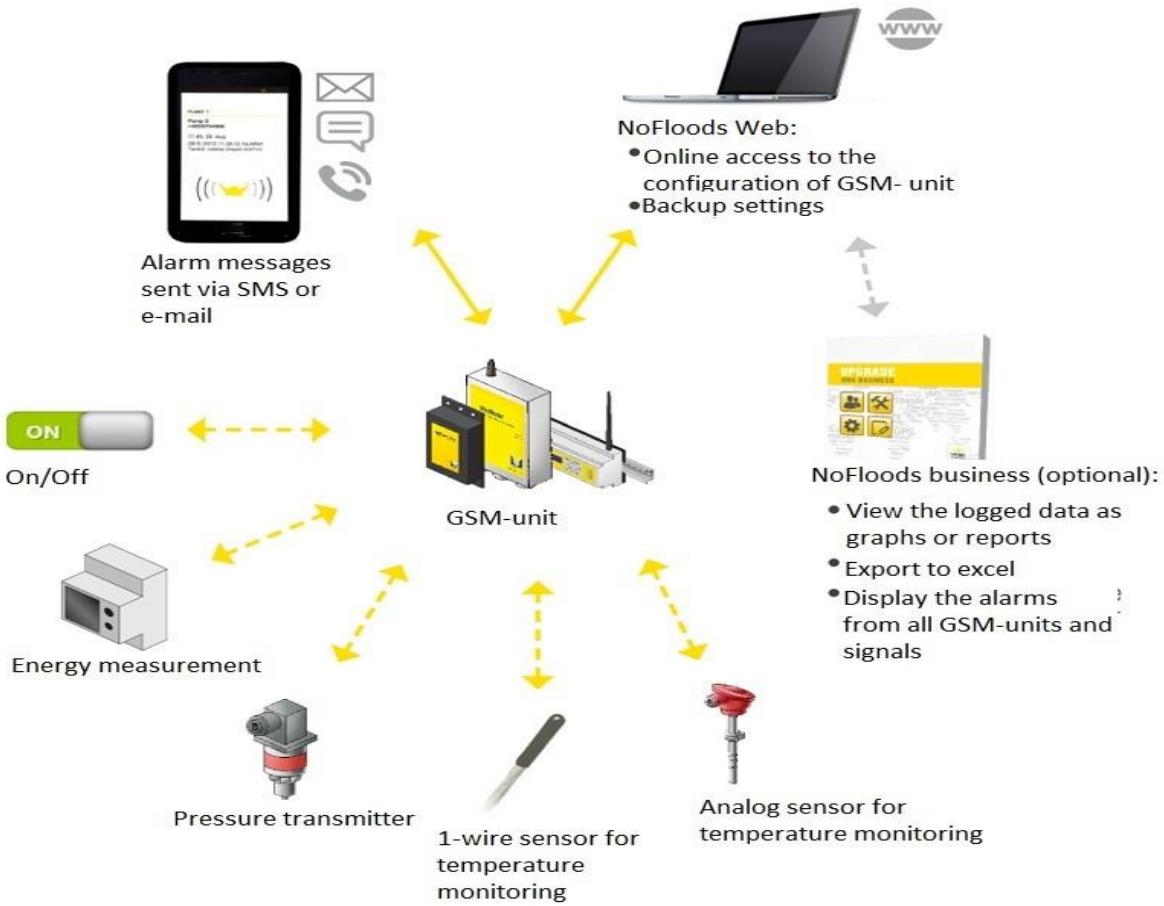


Test udlægningsmetode

NoFloods EWS steps



Communication



NFRC – NoFloods Resilience Center

THE NEW WAY TO BUY FOR ULTIMATE FLEXIBILITY

NO REGRET OPTION

Benefit under any climate scenario

NO UNNECESSARY INVESTMENTS

Reduce the risk of over and/or under adaption

Given the climate realized.

EASY SUBSRIBTION BASED MODELS

✓ FLAT RATE SUBSCRIPTION:

✓ USAGE BASED SUBSCRIPTION:

GUARANTIED OR DEDICATED STOCK

Immediate response = Immediate benefit.

24/7 access to the latest Flood protection technology

PERFORMANCE GUARANTIED

Access to the most advanced and innovative

Flood protection solutions with a proven performance From live cases.

NOFLOODS FLOOD RESILIENCE CENTER

=

Subscription based flood protection.

We understand the challenges associated with choosing the best climate adaptions strategies. No one can at this point of time disagree that it is time to take action and not having a flood protection strategy in place is risky business.
We have taken the risk of over – and under adaption out of the equation by adding flexibility!
By subscribing to the NoFloods Flood Resilience Center you have 24/ 7 access to the most advanced and innovative flood protection solutions on the market, without having to worry about huge, unnecessary investments and keeping stock.

NOFLOODS SUBSCRIPTION FLAT RATE MODEL

Subscribing to the NoFloods Flat Rate Model you have the advantage of a fixed payment for a specific period of time. *

- ✓ Advantage of unlimited access and use of Equipment
- ✓ No unnecessary investments
- ✓ Take advantage of technology a low cost
- ✓ Option to spread the yearly cost of the subscription over monthly payments
- ✓ Low cost of entry compared to outright purchase
- ✓ No unforeseen or hidden costs
- ✓ Help to build long-term flexibility into your flood management plans
- ✓ Option to bye at the end of the Subscription Period

NOFLOODS SUBSCRIPTION PLUS USAGE MODEL

Subscribing to the NoFloods Subscription Plus Usage Model you have the advantage of a low subscription payment and only paying for the flood protection you use. *

- ✓ No unnecessary investments
- ✓ Take advantage of technology a low cost
- ✓ Low monthly payments
- ✓ Pay only for what you use
- ✓ Low cost of entry compared to outright purchase
- ✓ No unforeseen or hidden costs
- ✓ Help to build long-term flexibility into your flood management plans
- ✓ Option to bye at the end of the Subscription Period

*Terms and conditions apply

Environment Solutions ApS
Universitetsparken 7, DK-4000 Roskilde, Denmark
Telefon +45 36959734 CVR nr. 34078633
info@environmentsolutions.dk www.environmentsolutions.dk www.nofloods.com

NFRC – NoFloods Resilience Center

NOFLOODS FLOOD RESILIENCE CENTER (NFRC)
SUBSCRIPTION AGREEMENT
(NOFLOODS FLAT RATE

5. PICK UP AND RETURN
Environment Solutions will upon request from the Customer make available the Equipment Items as specified in Schedule B of this Agreement in accordance with the provisions stated in the General Terms and Conditions.

The Customer is solely responsible for the pick-up and return of the Equipment Items in accordance with the provisions set in the General Terms and Conditions.

6. EQUIPMENT USE
Environment Solutions agrees to place the Equipment on temporary loan to the Customer for the limited use by the Costumer within the terms of this agreement and the provision stated in Schedule A. If at any time Environment Solutions delivers additional Equipment Items to the Customer, such additional Equipment shall be subject to the terms and conditions of this Agreement unless specifically agreed by the parties in writing.

6.1 USE OF THIRD PARTY LABOR
The Customer is entitled the use of Third party labor according to the provisions stated in the General Terms and Conditions.

In witness whereof the parties hereto have duly entered above written and represent and warrant that the party authorized

[CUSTOMER]

Authorized signature

Print name and title

Subscription Packages (specified):

NoFloods PRO – 1 km *(maximum deployment length 1000 meters)*
NoFloods PRO Single Terminal (FB) 125
NoFloods PRO Single Terminal 125
NoFloods PRO Single Junction 125
NoFloods PRO Twin tube 125 – 200 m
NoFloods Hydraulic Winch 125 exch. drums
Exchangeable drums
NoFloods deployment and Storage Box
NoFloods Pump box 800
Container 20'

NoFloods PRO – 500 meter *(maximum deployment length 500 meters)*
NoFloods PRO Single Terminal (FB) 125
NoFloods PRO Single Terminal 125
NoFloods PRO Single Junction 125
NoFloods PRO Twin tube 125 – 200 m
NoFloods PRO Twin tube 125 – 100 m
NoFloods Hydraulic Winch 125 exch. drums
Exchangeable drums
NoFloods deployment and Storage Box
NoFloods Pump box 400
Container 20'

NoFloods ALU – 1000 meter *(maximum deployment length 1000 meters)*
NoFloods Alu Barriers
NoFloods Pump box 400
Delivered in boxes of 50 m.

NoFloods ALU – 250 meter *(maximum deployment length 250 meters)*
NoFloods Alu Barriers
NoFloods Pump box 200
Delivered in boxes of 50 m.

NoFloods BASIC – 100 m *(maximum deployment length 100 meters)*
NoFloods BASIC Twin 125 – 5 m
NoFloods BASIC Twin 125 – 10 m
NoFloods BASIC Twin 125 – 15 m
NoFloods BASIC Twin 125 – 25 m
NoFloods Deployment and Storage Box
NoFloods Pump box 200

NoFloods Training Box
NoFloods PRO Single Terminal 60
NoFloods PRO Twin Terminal 60
NoFloods PRO Single Terminal 125
NoFloods PRO Twin Tube 125 – 10 m
NoFloods PRO Twin Tube 60 – 50 m
NoFloods BASIC Barrier Single 60 – 10 m
NoFloods Alu Barrier complete
NoFloods Pump box 200
Trailer 750 kg

NoFloods Training *(2 days of Training Program – accommodation and transport not included)*
NoFloods Training level 1

ENVIRONMENT SOLUTIONS

NOFLOODS SUBSCRIPTION PLUS USAGE
Packages and payment overview:
Please mark the package that compliments your needs.

☐ NoFloods PRO – 1 km (2 x 400 m and 1 x 200 m)*

Activation payment	€ 5000
Monthly Subscription	€ 2065
Minimum subscription period	36 months
Rent of 1 km	€ 75.576
Purchase price:	*€ 158.144*

☐ NoFloods PRO – 500 meter (1 x 400 m and 1 x 100 m)*

Activation payment	€ 5000
Monthly Subscription	€ 1275
Rent of 500 m	€ 41.557
Minimum subscription period	36 months
Purchase price:	*€ 92.598*

☐ NoFloods ALU – 1000 meter *

Activation payment	€ 5000
Monthly Subscription	€ 3942
Rent of 1 km	€ 43.331
Minimum subscription period	36 months
Purchase price:	*€ 286.665*

☐ NoFloods ALU – 250 meter *

Activation payment	€ 5000
Monthly Subscription	€ 1020
Rent of 250 km	€ 11.325
Minimum subscription period	36 months
Purchase price:	*€ 74.126*

☐ NoFloods BASIC – 100 m *

Activation payment	€ 5000
Monthly Subscription	€ 254
Rent of 100 m	€14.176
Minimum subscription period	36 months
Purchase price:	*€ 18.4446*

☐ NoFloods Training Box and Training **

	€0
Purchase price:	*€ 11.909*

* All packages include everything you need to deploy the solution. For detailed description please see the backside.
** Please remember, that the Training Box and Training Sessions are mandatory and already included in the Activation Fee of the Subscription. The Training Equipment must be returned to Environment Solutions at the end of the subscription period. Exemption can only be given if agreement with a trained third party is in place.

Environment Solutions ApS
Universitetsparken 7, DK-4000 Roskilde, Denmark

NoFloods
By Environment Solutions

5 reasons to use deployable barriers

1. When deployable is simple the best option

2. When no other options are economic feasible (best cost /benefit)

3. When permanent structures are planned – but not yet implemented

4. When permanent structures (eg. dikes) can be combined with deployables to a) better integration in the environment b) reduce cost of construction.

5. As a back up for unpredicted disasters (dike erosion, overtopping, etc.)

NoFloods
By Environment Solutions

Thank you

Questions?

www.NoFloods.com
www.environmentsolutions.dk