

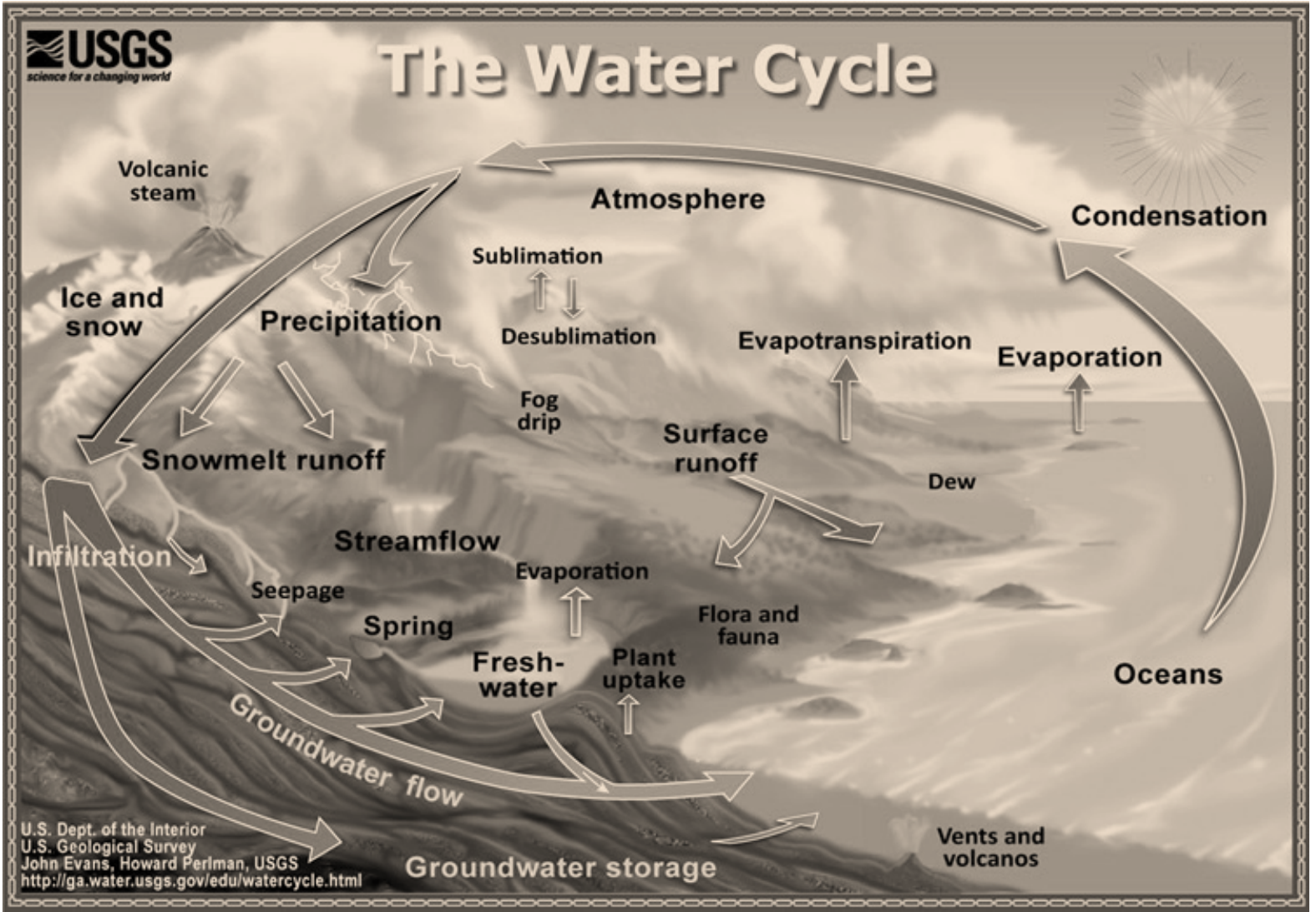
ECOSYSTEM PARTICIPATION  
VULNERABLE GEOGRAPHIES  
EXTREME WEATHER



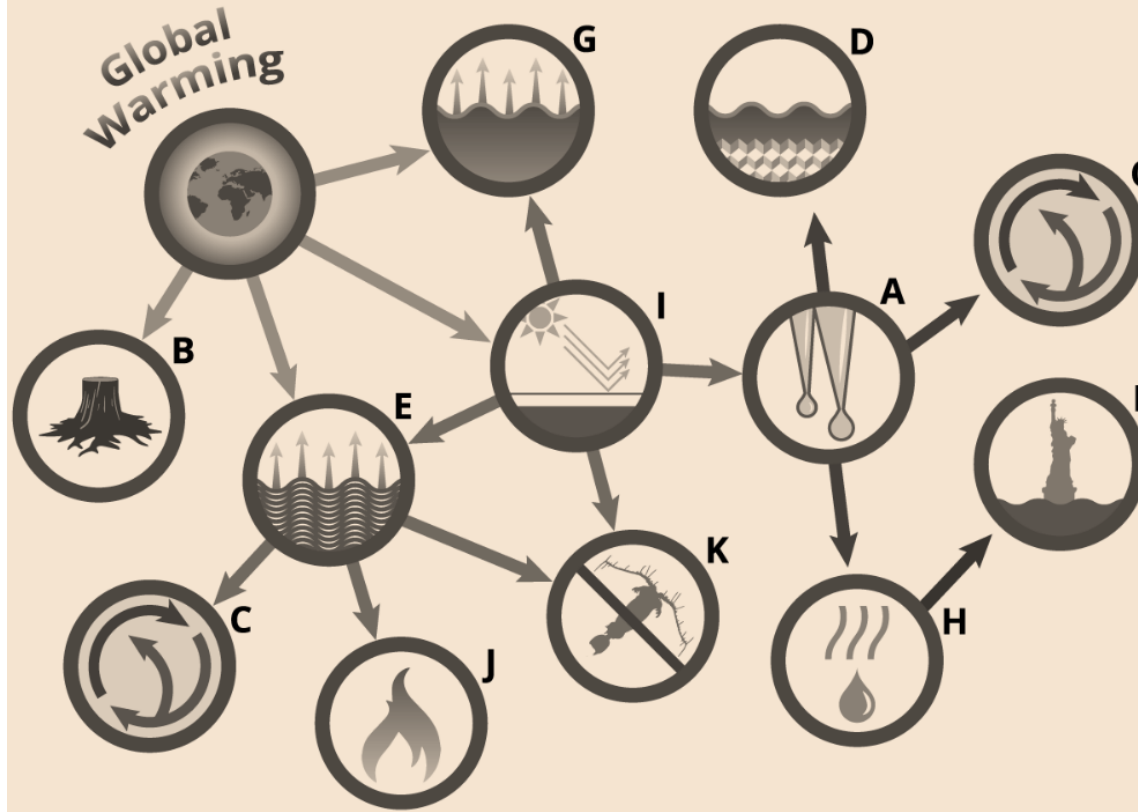
# OUT OF BALANCE

## VULNERABLE





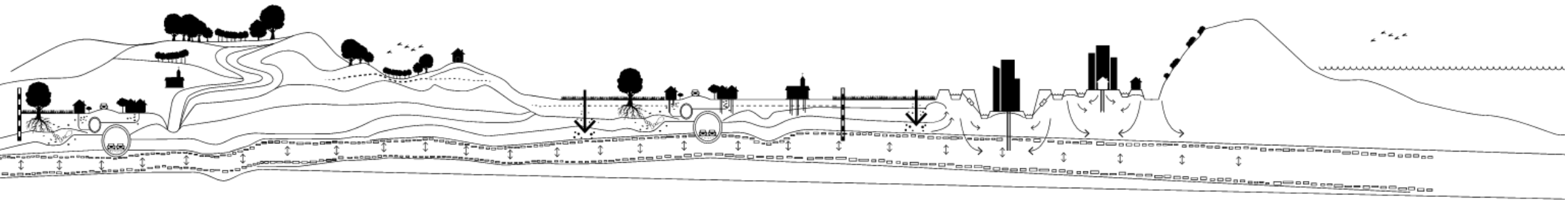
# Interacting Global Warming Tipping Points



- A** - Melting Ice
- B** - Forest Loss
- C** - Ocean Current Change
- D** - Permafrost Pandemic
- E** - Ocean Heating
- F** - Weight of Rising Seas
- G** - Soils Overheating
- H** - Water Vapor Increase
- I** - Albedo Effect
- J** - Methane Release
- K** - Plankton Dying



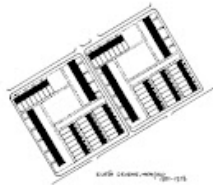
# OUT OF BALANCE



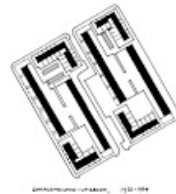
*Modernism*

# URBANIZATION

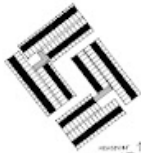
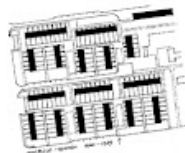
Hengelo - Klein Driene



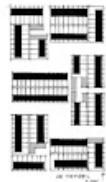
Utrecht - Kanaleneiland



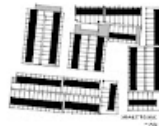
Emmen - Angelsio



Eindhoven - Mensfort



Eindhoven - De Tempel



Eindhoven - Vaartbroek

**Modernism**  
**Industrial Revolution**  
Superimposition technology

- seeking new relations and transformation
- Systematic connection of domains (patterns)
- creation of new forms of art, religion, philosophy, and even social organization

*Reference : Sabine Meier and Arnold Reijndorp, Bussum, 2010*







# CREATING A NEW BALANCE

ECO SYSTEM PARTICIPATION



# IE DESIGN Ecosystem Participation in Extreme Landscapes (2020)



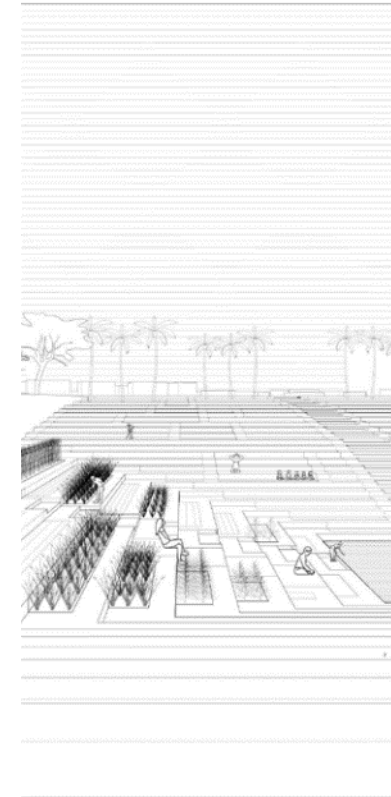
Bahamas



Houston



Egypt



India

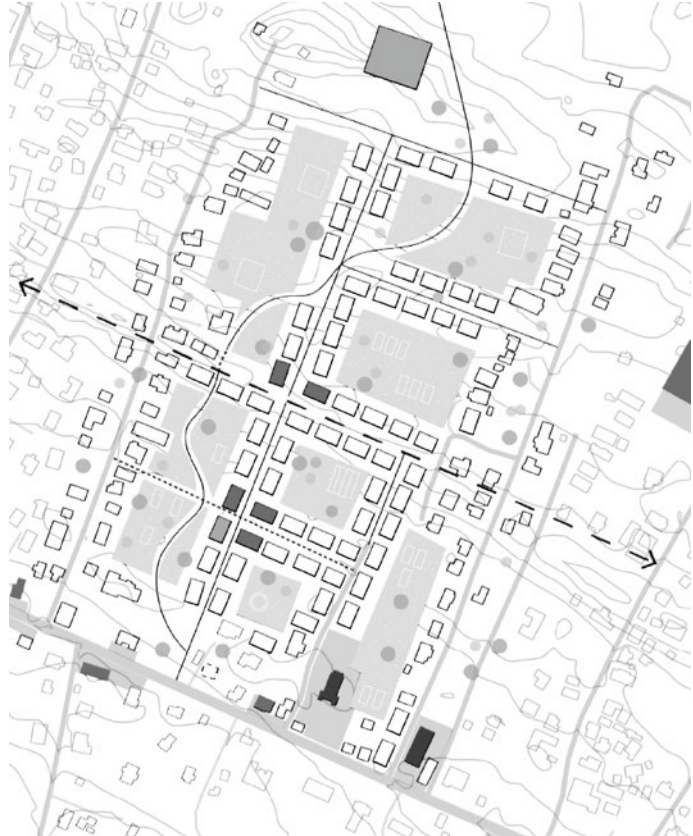
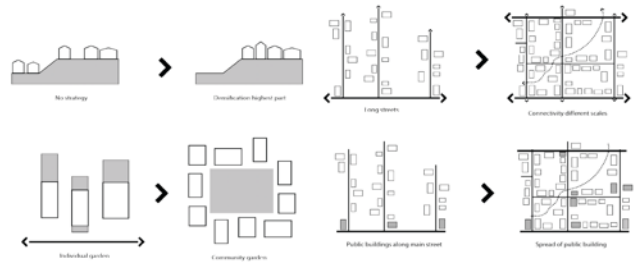
A world map with a dotted texture. Several regions are highlighted with different patterns: North America (solid grey), South America (horizontal lines), Europe (dotted), Africa (dotted), Asia (dotted), and Australia (dotted). A dashed line curves across the map, passing through North America, Europe, and Asia. The text "What is specific for vulnerable geographies?" is centered over the map.

• *What is specific for **vulnerable geographies?***



• *What is specific for **vulnerable geographies?***

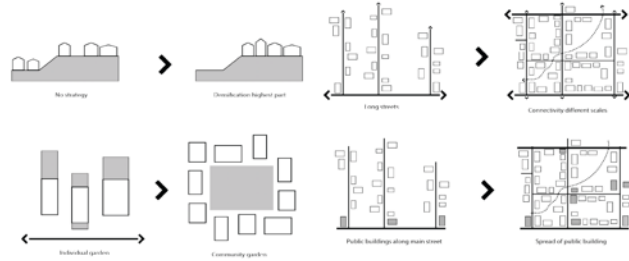
• Relation between the fertility of the landscape and the human response to this in socio-economic system = *venecular*



*Ilse van Milaan*  
***Grand Bahama, Bahamas***







## *Ecologism as New Modernism*



### *Ilse van Milaan* *Grand Bahama, Bahamas*

- seeking new relations and transformation
- Systematic connection of domains (patterns)
- creation of new forms of art, religion, philosophy, and even social organization



# IE DESIGN Ecosystem Participation in Extraction Landscapes (2021)



NL Zeist



Norway



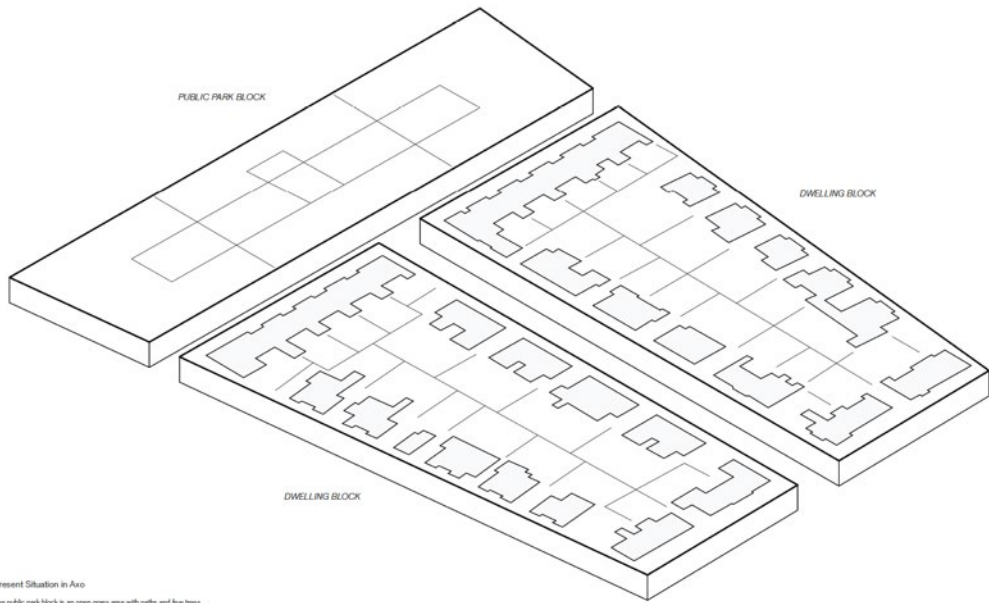
Amazone

# Ecosystem Extraction

*Participation is determined by the position of the action: are we the aggressor or the victim?*



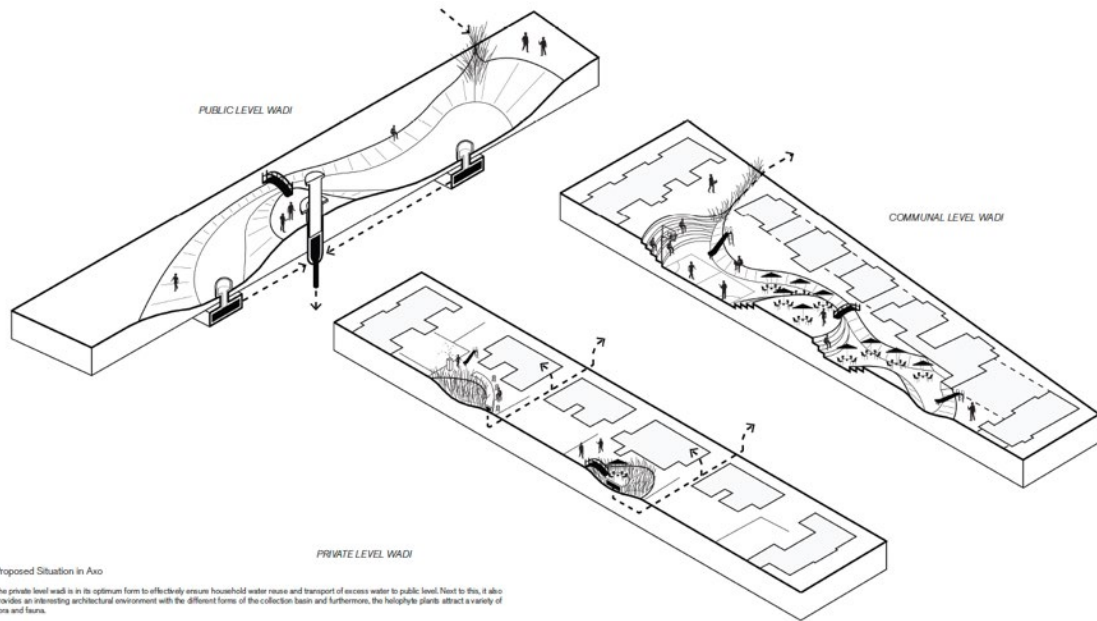




Present Situation in Aso

The public park block is an open green area with paths and few trees.

The dwelling blocks are made up of rowhousing, duplex dwellings, and individual homes and they all have backyards on their interior.



Proposed Situation in Aso

The private level wadi is in its optimum form to effectively ensure household water reuse and transport of excess water to public level. Next to this, it also provides an interesting architectural environment with the different forms of the collection basin and furthermore, the heliophyte plants attract a variety of flora and fauna.

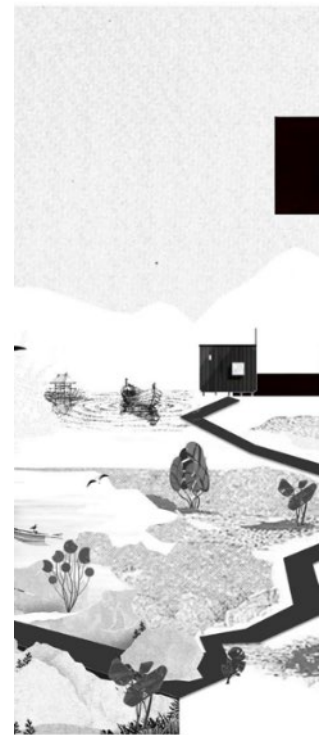
The communal level wadi is in its optimum form to effectively ensure surface water distribution and transport of excess water to public level. Next to this, it also provides a resilient communal environment with the ability to realize sport courts, patios, terraces, and stairs along the edges that people can sit on.

The public level wadi is in its optimum form to effectively ensure aquifer storage & recharge and therefore increase drinking water supply. Next to this, the water reflects that are needed to drain and pump water to the aquifer stimulate water awareness. By making the aspect play at the most public scale level, a trickle down effect will result that stimulates water awareness at the lower communal and private levels. This perhaps encourages more building blocks in the urban fabric to transform their open spaces into private or communal wadis and the city as a whole can work toward becoming even more future proof.

# *Jolt Wiersma* *Zeist drink water extraction*



*Position on the globe and of the human action*



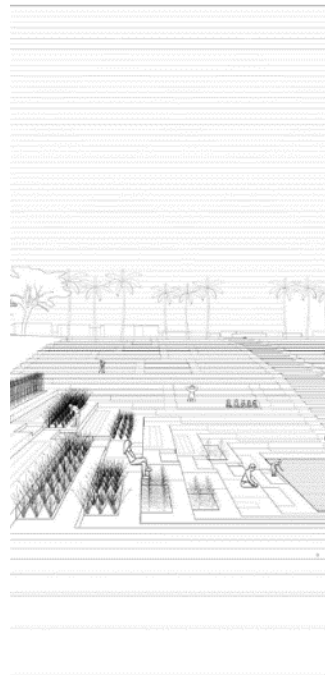
Bahamas  
Amazone



Houston



Egypt



India



NL Zeist





# *new geography of ecosystem participation*



**Policy integration**  
*NL soil and water systems as steering*



**Spatial intervention**  
*RTM Creating a buffer area for flood and draught by the municipality*



**Community practice**  
*RTM Creating and maintaing sponge streets by communities*

# ECOSYSTEM PARTICIPATION

## VULNERABLE GEOGRAPHIES

### EXTREME WEATHER

Vernacular – relation to the landscape  
Local knowledge  
Levels of participation  
Synthesising design attitude



ECOSYSTEM PARTICIPATION  
VULNERABLE GEOGRAPHIES  
EXTREME WEATHER

