

**WHAT  
DESIGN  
CAN DO**

 **waternet**  
waterschap amstel gooi en vecht  
gemeente amsterdam

**RADICAL COLLABORATION** 

**WATER**  
  
**IS LIFE LAB**

**LAB RECAP**

# ABOUT THE RADICAL COLLABORATION LABS

On 6 December 2019, more than 200 participants from various disciplines came together in the Nemo museum in Amsterdam for a pilot programme entitled 'Radical Collaboration'. The labs are intensive full-day R&D workshops in which creatives and multidisciplinary experts join forces to collectively address issues that are too complex for individuals or a single organisation to tackle on their own. The labs are a hands-on application of research through design, focused on gaining a deep understanding of a wicked problem and co-creating new perspectives on it.

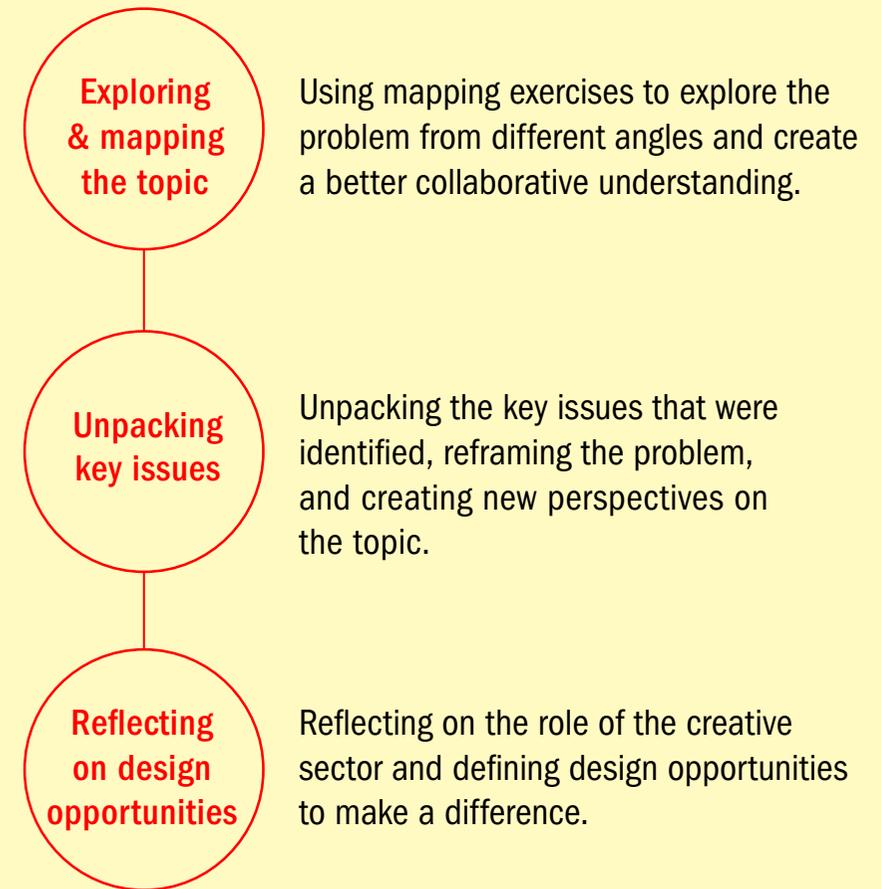
## COLLABORATIVE AND OPEN PROCESS

The programme took place in two blocks: a morning and an afternoon session, in which we rolled up our sleeves and delved deep into the key issues raised and prepared in collaboration with various partners.

Though each lab had a tailored programme with a very different focus, the outline of the process was comparable.

The results of the labs not only inspire and connect the participants, but by openly sharing they hopefully also inspire others. This collaborative and creative R&D approach can provide essential connections between key stakeholders related to each topic, and open doors for new partnerships, projects, challenges and further events.

## PROCESS DURING THE RADICAL COLLABORATION LABS



# WHAT CAN DESIGN DO

What Design Can Do believes that design is more than making pretty things. Design and creativity can play an important role in transforming society. We need design and creativity to come up with fresh ideas, alternative strategies and provocative thoughts to address the urgent issues we are currently facing. What Design Can Do connects creative communities with public and private sectors utilizing design as a tool for social change.

## EVENTS

WDCD events are a vital tool for people to meet live, exchange knowledge and ideas, share stories (as they are so important), get inspired, connect different nationalities, cultures and sectors, and start collaborations. The WDCD events are organized in Amsterdam, São Paulo, Mexico City, Nairobi, Delhi, and are important moments in time to research, develop and accelerate ideas.

## CHALLENGES

The objective of the challenges is to actively call upon creative makers to use the power of design to come up with innovative solutions to global problems. The aim is to demonstrate the potential impact that design can have on society, and to activate designers and creative entrepreneurs to use their skills to address pressing issues.

We help to develop and accelerate the winning projects to make their ideas reality and create real impact.

## RADICAL COLLABORATION LABS

The Radical Collaboration Labs are a first step in exploring and developing new design challenges. Through formulating questions such as 'How might we ..?' we aim to pinpoint the issues that are raised by our partners. Moving forward, we can continue the research and narrow down real opportunities for design. The questions, discussions and insights of today will be summarized and shared with everyone who contributed.



# RADICAL COLLABORATION



ZERO SUICIDE

WATER IS LIFE

DOUGHNUT ECONOMY

SAFER CITIES LAB

NO WASTE

IKEA

WHAT



# INTRODUCTION

## WATER IS LIFE

In the Water is Life Lab, experts and creatives came together to create a shared understanding of and new perspectives on the wicked water challenges facing Amsterdam. Waternet, the water company for Amsterdam and surroundings, serves 1.3 million people. It is partnering with What Design Can Do to address some of these challenges in new, creative ways. Waternet covers the entire water cycle and presented its most acute issues: the lack of biodiversity in Amsterdam's waters, the low quality of open water, and the consequences for climate change in Amsterdam. All of these are connected and part of the same ecosystem crisis.

## THREATS TO BIODIVERSITY AND WATER QUALITY IN AMSTERDAM

As a result of increased heat in the city, caused by more and more heat waves in summer and longer warmer periods with high temperatures, many people in Amsterdam flock to water spots to cool down. But the capacities of these places will soon reach their limits. Both residents and tourists in Amsterdam go swimming, travel on boats, and relax near the many waterways in the city. People spend time in, on and next to canals, lakes, former docks and the IJ waterway. The increased use of open water is one of the main threats to biodiversity and water quality in Amsterdam. This has knock-on effects on biodiversity on land. In addition to leisure, heat, droughts and extreme rainfall all threaten biodiversity. All this is worrying, according to Waternet, because Amsterdam's waters are the last 'virgin areas' in the city, and they are crucial in combating climate change.

Water is Life Lab documentation and report are shared on the basis of Creative Commons (CC BY-SA).

# WATER LAB

## EXPLORING AND REFRAMING WICKED WATER PROBLEMS

We started the day by exploring and unpacking water quality and biodiversity in Amsterdam, and the effect on climate change. Participants told personal and professional stories about water in Amsterdam. From these stories we defined issues that need to be addressed urgently. Mapping exercises led to identifying key issues worth diving deeper into. Dissecting these key issues to discover symptoms and root causes resulted in a better, shared understanding of the problem in each group. This helped us to reframe the problem five times and create new stepping stones towards calls to action. The aim was to come up with a Call to Action (and collaboration!) across disciplines that could be shared with the wider creative community of What Design Can Do.

## TAKING AN HOLISTIC APPROACH TO WATER

It was clear from the outset that we should approach the use and appearance of water in Amsterdam as one integral system. In the end, rain is connected to our tap water and the water in the Amstel, and the many different uses of water also influence one another. Waternet takes a holistic view of water, and so did we in the workshop.

The lab was prepared and moderated by STBY, the research partner of WDCD.



# EXPLORING WATER IN AMSTERDAM

**WATER &  
RECREATION**

**WATER &  
BIODIVERSITY**

**WATER &  
AWARENESS**

**WATER &  
WASTE**

**WATER &  
INFRASTRUCTURE**

**WATER &  
EDUCATION**

# EXPLORING WATER IN AMSTERDAM

## WATER & EDUCATION

## WATER & AWARENESS

### ISSUE:

image of the state of water is too positive



### STORIES:

from consumer perspective, water is mostly seen as drinking water and taking care of water



### ISSUE:

tragedy of the commons - no ownership



### STORIES:

biomimicry as starting point. Nature / water as guide



### ISSUE:

water is a public space



### ISSUE:

need for more awareness (state of) water



### ISSUE:

people are not aware of how much they pollute water and nature.



### ISSUE:

lack of knowledge of the many functions of water.



### ISSUE:

need for co-ownership of water



### ISSUE:

ownership of balance - using and taking care of water



### ISSUE:

invisibility of water quality



### ISSUE:

people have to take responsibility and own the water problems



### ISSUE:

people don't feel they are a part of the (city) nature



### ISSUE:

missing a certain level of ecoliteracy - education in the actual field / landscape at primary schools is needed



# EXPLORING WATER IN AMSTERDAM

## WATER & INFRASTRUCTURE

**ISSUE:**  
parks aren't 'future proof'



**ISSUE:**  
design for people, not for nature



**ISSUE:**  
need for better building materials to decrease water pollution more - emissions and toxic free materials



**ISSUE:**  
Industrial pollution in water



**ISSUE:**  
need for more awareness about (state of) water



**ISSUE:**  
trend paving of gardens - blocking water



# EXPLORING WATER IN AMSTERDAM

## WATER & WASTE

### ISSUE:

garbage in water. E.g. medical waste



### ISSUE:

fireworks deposit heavy metals in water



### ISSUE:

lack of water - land is sinking. Water getting low in dry summers. Drought & flood



### ISSUE:

heavy rain causes flooding of sewers, and this causes waste in water



### ISSUE:

lash flooding - lack of absorptive spaces in dense cities. How to get water back into the ground.



### ISSUE:

contamination of water - caused by recycling plants Nieuw West. Super algae blooms in Zuid-Oost



### ISSUE:

the use of pesticides, drains down into the water. For example pesticides used by private people in city gardens



### ISSUE:

intrusion of salty water in fresh water. Bad for water quality



# EXPLORING WATER IN AMSTERDAM

## WATER & RECREATION

### ISSUE:

parks are and have a low biodiversity. More movement is less biodiversity - less diversity



### ISSUE:

where can I swim?



### ISSUE:

pressure on water and water quality from the numerous activities



### ISSUE:

pressure of tourism on water quality, e.g. boats



### ISSUE:

recreation has impact on water and diversity



### ISSUE:

pollution caused by swimming



# EXPLORING WATER IN AMSTERDAM

## WATER & BIODIVERSITY

**ISSUE:**  
transparency of water  
communicates poor quality  
of water



**ISSUE:**  
Change in the diversity of  
(meadow) birds



**ISSUE:**  
too many carp in the water  
indicates in water



**ISSUE:**  
unhealthy ecosystem  
= unhealthy water



# MAIN ISSUES AND QUESTIONS AFTER EXPLORATIONS

The average person's knowledge of water is limited. **They know little about water, its quality,** its effects on health, and the many times of it that exist.

**The visibility of water is hidden.** When we look at water we only perceive the surface. The biggest part of water and biodiversity is invisible for our eyes. moet worden: Most water is invisible to us, as is its biodiversity. How can we create more visibility of something that is partially hidden?

People are becoming detached from nature. Many people live in cities and can't read the landscape around them. Even a city has nature and a landscape. How can we read and understand the landscape of water?

**Can we give water a voice?**

**The connection between human and water is broken.** Several ways of living and city lifestyles make it easy to disconnect from water and nature while remaining extensive users of water and nature. We tend to consume more than to care about water and nature. How can people become both users and caretakers (of water and nature) at the same time?

# FIVE THEMES

**WE ARE WATER**

**THE VISIBILITY OF  
THE BALANCE:  
USE AND NATURE**

**TOURISTS,  
VISITORS  
AND WATER**

**WATER AS  
AN EXPERIENCE  
(PARK)**

**HUMANIZING  
WATER -  
MAKING WATER  
PERSONAL**

# THEME 1

## WE ARE WATER

### FROM STORIES AND ISSUES TO INSIGHT

#### STORIES

##### USE OF WATER IN AMSTERDAM

People don't feel that they are part of (urban) nature.



#### STORIES

##### USE OF WATER IN AMSTERDAM

People ARE nature and that makes people dependent on water. So people do have something at stake!



#### ISSUE

##### WHAT ISSUE IS MOST IMPORTANT TO ADDRESS IF YOU THINK OF BIODIVERSITY AND WATER QUALITY IN AMSTERDAM?

Objects and surroundings are designed for people, not for nature. Human interest is primary.



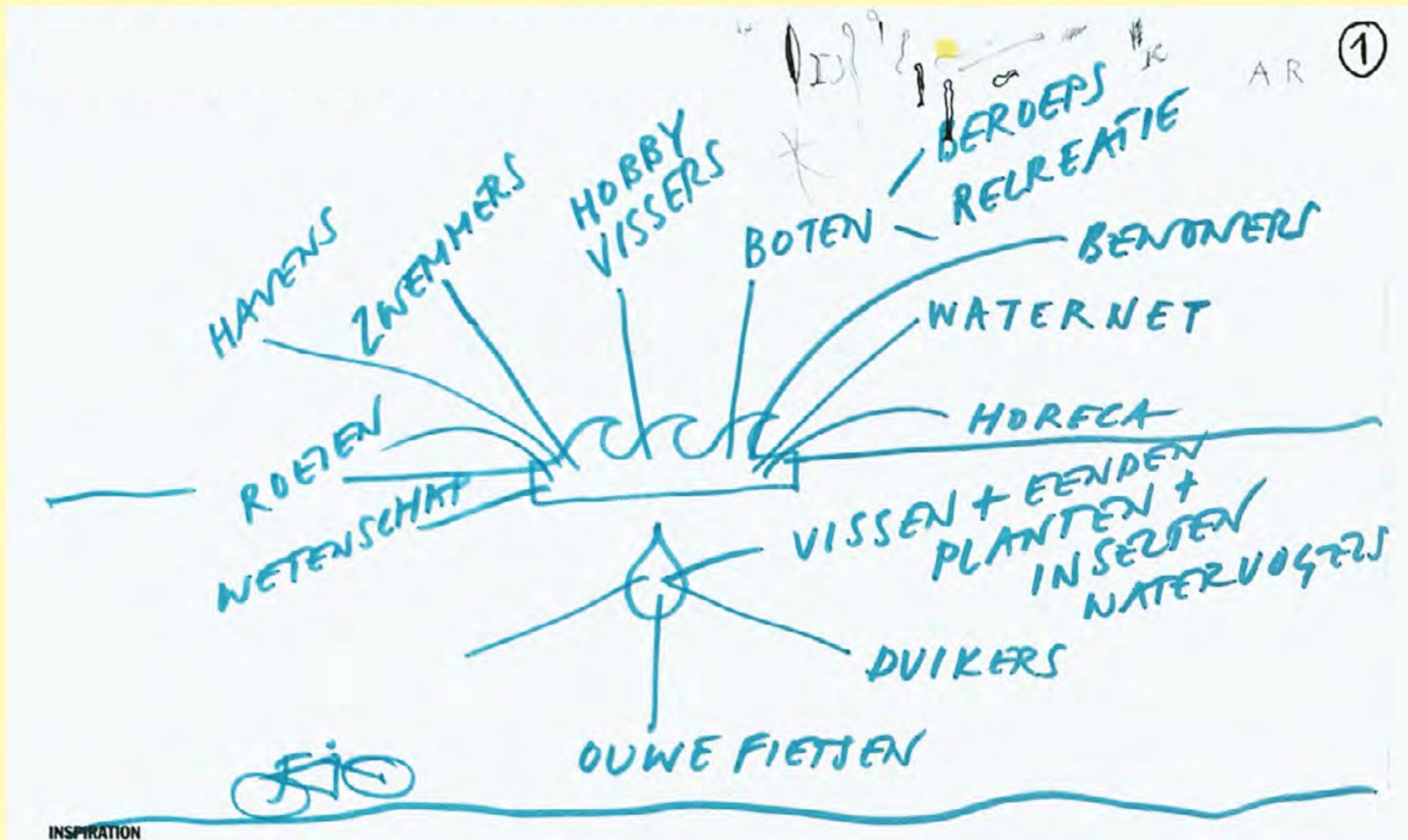
### INSIGHT

#### THE DEEPER VALUE OF WATER IS ONLY SUPERFICIALLY VISIBLE FOR THE INHABITANTS OF AMSTERDAM.

We are water. Water isn't an isolated external thing. Water is literally a part of human beings - our bodies are water. We live every day thanks to water.

HMW (How might we) make people experience water as a part of their bodies and their lives, and not as an external thing.

# DEEP DIVE ISSUE: LIFE CENTRED



# KEY ISSUE 1 - PROBLEM DEFINITION

## THE DEEPER VALUE OF WATER IS ONLY SUPERFICIALLY VISIBLE FOR THE INHABITANTS OF AMSTERDAM

The problem definition tool works to both open up a problem - presenting it in a way that can be examined from a number of angles - and to help define the wider context and associated issues involved. This is particularly effective when trying to focus a team of people on the key problems at hand.

source: diytoolkit.org

### WHICH 'LIFE' IS IT A PROBLEM FOR?

- Fish
- Animals
- Bacteria
- Micro organism
- Waterplants
- Children
- Vulnerable people



### WHY IS IT WORTH OUR ATTENTION, ANY EVIDENCE?

Sick people, flora and fauna.  
Climate change, imbalance of the ecosystem (eco guideline)  
Levels of blue algae, smell, hormones, chemicals.



### REFRAMING THE ISSUE, OFFERING NEW PERSPECTIVES ON THE MATTER:

- From water as an external thing towards a mindset in which humans are part of water. Approaching water and humans as a relationship.
- Water: from enemy to friend. A positive and active approach. Engaging in the relationship with water and taking care of each other.

## THEME 2

# THE VISIBILITY OF THE BALANCE: USE AND NATURE

### FROM STORIES AND ISSUES TO INSIGHT

#### STORIES

WHAT ISSUE IS MOST IMPORTANT TO ADDRESS WHEN YOU THINK ABOUT BIODIVERSITY AND WATER QUALITY IN AMSTERDAM?

People have to take ownership of water issues



#### STORIES

USE OF WATER IN AMSTERDAM

People are unaware of how much they pollute water.



#### ISSUE

WHAT ISSUE IS MOST IMPORTANT TO ADDRESS WHEN YOU THINK ABOUT BIODIVERSITY AND WATER QUALITY IN AMSTERDAM?

We do everything, everywhere.  
'If we eat all the candy, the bowl will be empty'



#### STORIES

USE OF WATER IN AMSTERDAM

We need proper motherhood instead of social control.



### INSIGHT

**NOBODY IS OWNER OF THE BALANCE,  
THE BALANCE BETWEEN USAGE AND NATURE.**

The role of water in the ecosystem is a 360-degree seesaw. It's a dynamic balance, like a plate on a stick. At this moment the balance isn't visible and the environment is being heavily consumed. Humans and water should have a relationship that is maintained and cared about. Understanding and integrating this mindset is priority. Isolated water interventions won't solve the problem. We need to change the mindset first.

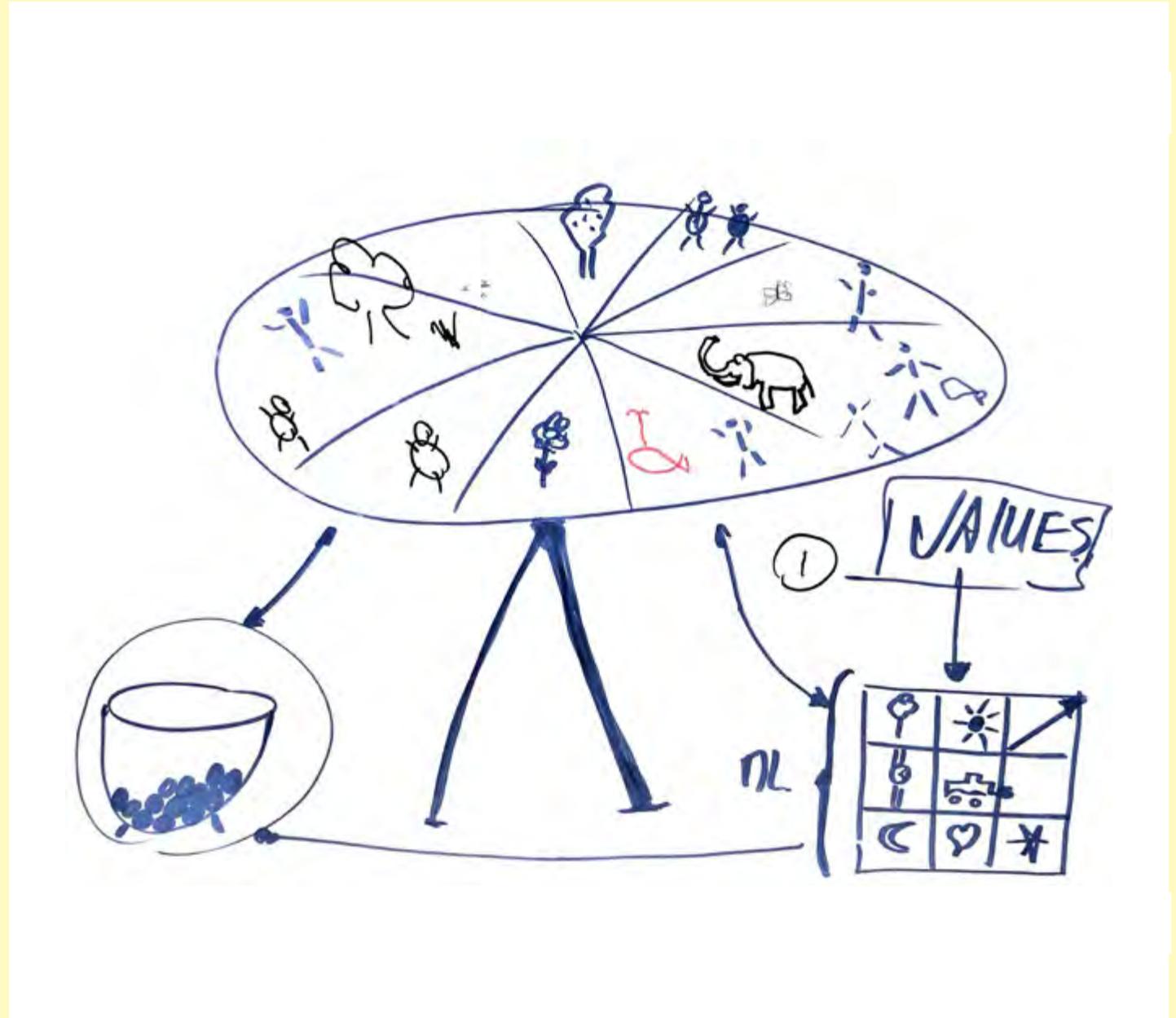
# DEEP DIVE ISSUE: LIFE CENTRED

A 360-degree seesaw. A dynamic balance with many stakeholders connected to values.

Everyone feels owner of our shared living environment. We should not only use the environment but also take care of it.

Making the USE visible.

Finding a balance between taking from and giving back to nature.

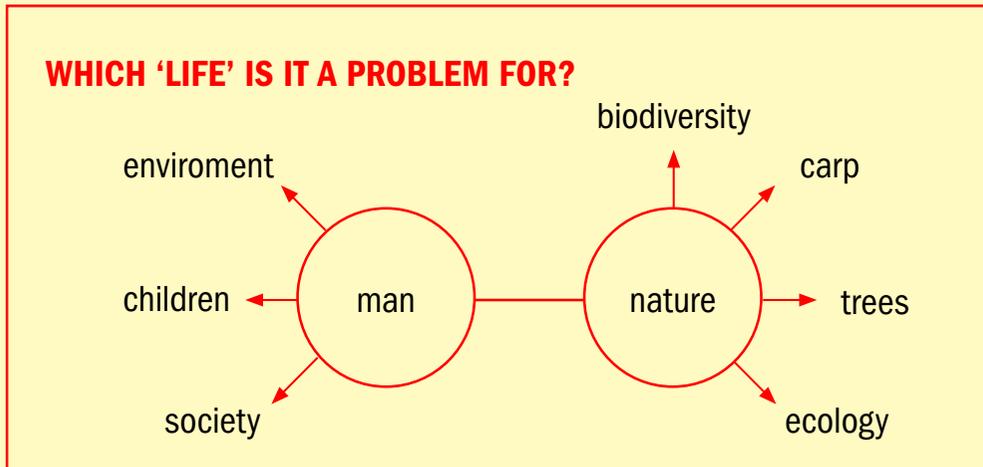


# KEY ISSUE 2 - PROBLEM DEFINITION

## NOBODY IS THE OWNER OF THE BALANCE BETWEEN 'USE AND NATURE'

The problem definition tool works to both open up a problem - presenting it in a way that can be examined from a number of angles - and to help define the wider context and associated issues involved. This is particularly effective when trying to focus a team of people on the key problems at hand.

source: diytoolkit.org



### REFRAMING THE ISSUE, OFFERING NEW PERSPECTIVES ON THE MATTER:

#### REFRAME

From nobody owns the water issues towards everybody owns the water issues. Everybody has to sense / experience / feel the balance.

#### LIQUID OWNERSHIP

From a static goal of clean and healthy water towards a dynamic and liquid goal of shared ownership.



# THEME 3

## TOURISTS, VISITORS AND WATER

### FROM STORIES AND ISSUES TO INSIGHT

#### STORIES

WHAT ISSUE IS MOST IMPORTANT TO ADDRESS WHEN YOU THINK ABOUT BIODIVERSITY AND WATER QUALITY IN AMSTERDAM?

There is no awareness of water and water quality.



#### STORIES

USE OF WATER IN AMSTERDAM

(Tourism) awareness education. How to educate tourists about water quality?



#### ISSUE

WHAT ISSUE IS MOST IMPORTANT TO ADDRESS WHEN YOU THINK ABOUT BIODIVERSITY AND WATER QUALITY IN AMSTERDAM?

Canals are freeways. Need for other locations that can function as freeways.



### INSIGHT

**THE VISITORS OF AMSTERDAM LACK RESPECT FOR AND KNOWLEDGE OF WATER (QUALITY) IN AMSTERDAM.**

Topic approached from the visitor and tourist perspective. Water is polluted partially because of recreation and tourism. This is a disadvantage but could be seen as an opportunity. Water is a huge attraction in Amsterdam. It can play a bigger role in tourism and eventually create profit instead of only being polluted.

# KEY ISSUE 3 - PROBLEM DEFINITION

## VISITORS (TOURISTS) LACK AWARENESS OF WATER AND BIODIVERSITY

The problem definition tool works to both open up a problem - presenting it in a way that can be examined from a number of angles - and to help define the wider context and associated issues involved. This is particularly effective when trying to focus a team of people on the key problems at hand.

source: diytoolkit.org

### WHICH 'LIFE' IS IT A PROBLEM FOR?

- For Amsterdam - municipality
- Tourism & hospitality industry
- Aquatic Life



### WHY IS IT WORTH OUR ATTENTION, ANY EVIDENCE?

- Low-quality water affects tourism
- Pollution
- Water devoid of life



### REFRAMING THE ISSUE, OFFERING NEW PERSPECTIVES ON THE MATTER:

Respecting water in Amsterdam is an opportunity for the tourist and hospitality industry. It can offer many possibilities for tourists, the city and water.

# THEME 4

## WATER AS AN EXPERIENCE(PARK)

### FROM STORIES AND ISSUES TO INSIGHT

#### STORIES

WHAT ISSUE IS MOST IMPORTANT TO ADDRESS WHEN YOU THINK ABOUT BIODIVERSITY AND WATER QUALITY IN AMSTERDAM?

There is need for co-ownership of water



#### STORIES

USE OF WATER IN AMSTERDAM

Water is public space - water as public space is still a blind spot



#### ISSUE

WHAT ISSUE IS MOST IMPORTANT TO ADDRESS WHEN YOU THINK ABOUT BIODIVERSITY AND WATER QUALITY IN AMSTERDAM?

Not enough support for water



### INSIGHT

**CITIZENS OF AMSTERDAM HAVE TOO LITTLE KNOWLEDGE, SUPPORT AND OWNERSHIP OF WATER**

Instead of creating a rational understanding of water, working towards understanding through experiencing water. Public spaces as parks connect people to nature, especially to green nature. They make people experience nature. Inhabitants often feel as co-owners of these spots. This could be applied to water. For example, a park where water plays the main role and is experienced by of visitors to create more knowledge and awareness of water.

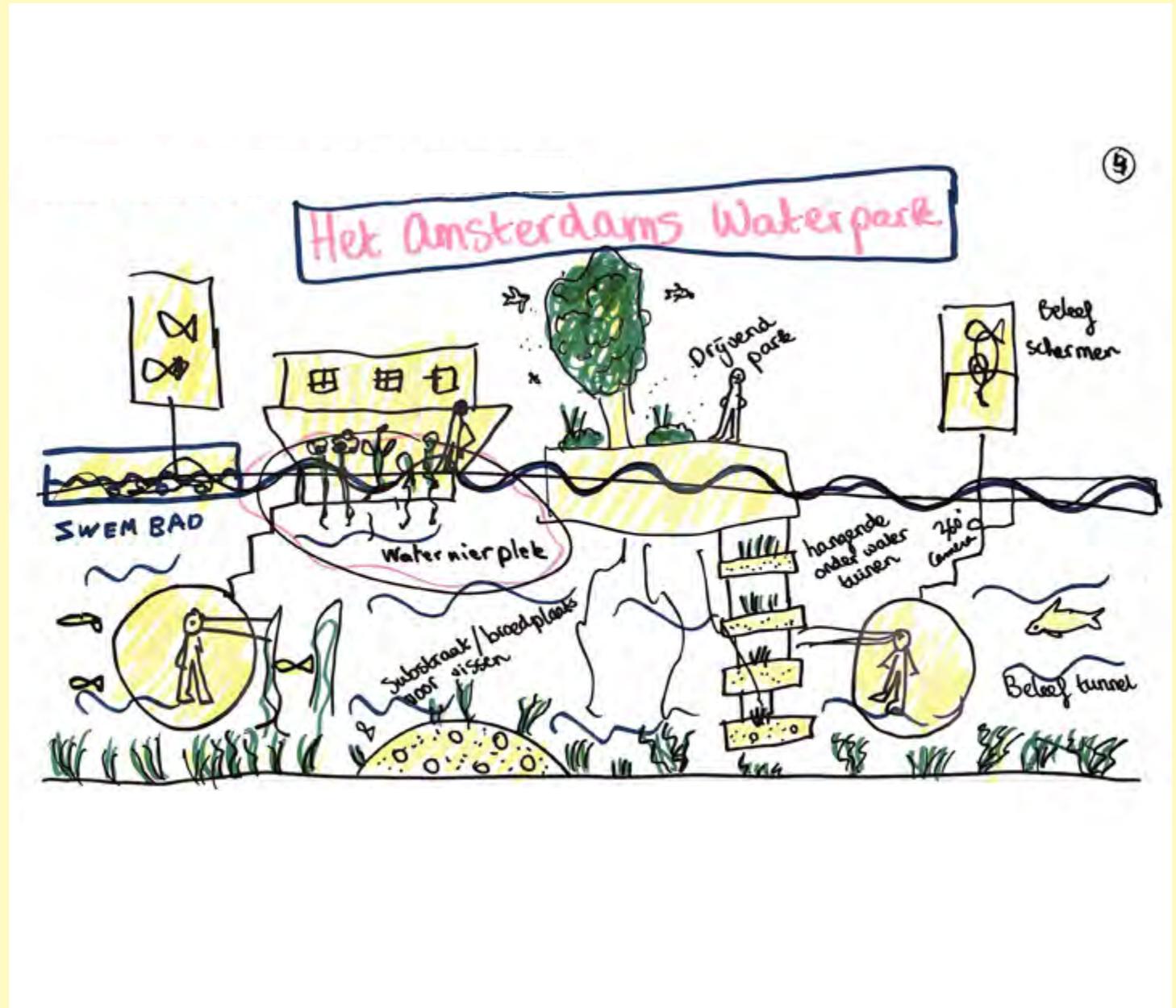


# DEEP DIVE ISSUE: LIFE CENTRED

**Direction:** How can citizens of Amsterdam develop knowledge and ownership of water by experiencing water?

How to give water a bigger stage and role in the city. For now mostly 'green parks'

(Idea: water park to experience water)



# KEY ISSUE 4 - PROBLEM DEFINITION

## CITIZENS OF AMSTERDAM HAVE TOO LITTLE KNOWLEDGE AND OWNERSHIP OF WATER AND DO NOT SUPPORT IT.

The problem definition tool works to both open up a problem - presenting it in a way that can be examined from a number of angles - and to help define the wider context and associated issues involved. This is particularly effective when trying to focus a team of people on the key problems at hand.

source: diytoolkit.org

### WHICH 'LIFE' IS IT A PROBLEM FOR?

- Citizens
- Water plants, macro fauna, fish
- Water authority (Waterschap)
- Municipality



### WHY IS IT WORTH OUR ATTENTION, ANY EVIDENCE?

- Chemical quality versus ecological quality and diversity
- There are indicators above and below water. Both indicate a lack of diversity.
- Water quality is poor.
- Water seen as something decorative, something obvious.



### REFRAMING THE ISSUE, OFFERING NEW PERSPECTIVES ON THE MATTER:

- Moving away from taking water for granted towards water as public interest. **WE ARE WATER**
- Experience of, interest in and care for water
- Shifting from knowledge and understanding of water issues towards experiencing issues

# THEME 5

## HUMANIZING WATER - MAKING WATER PERSONAL

### FROM STORIES AND ISSUES TO INSIGHT

#### STORIES

##### USE OF WATER IN AMSTERDAM

- quality
- quantity
- movement

All different types of water



#### STORIES

##### USE OF WATER IN AMSTERDAM

Water is a container. Containing different content > composition, profiles and personalities. Big variety



#### STORIES

##### WHAT ISSUE IS MOST IMPORTANT TO ADDRESS WHEN YOU THINK ABOUT BIODIVERSITY AND WATER QUALITY IN AMSTERDAM?

People don't see or experience the different types of water.

- Lack of awareness
- Waste of clean water - inefficient use
- Goals are too high
- Potential of water not used

Have to learn about water



### INSIGHT

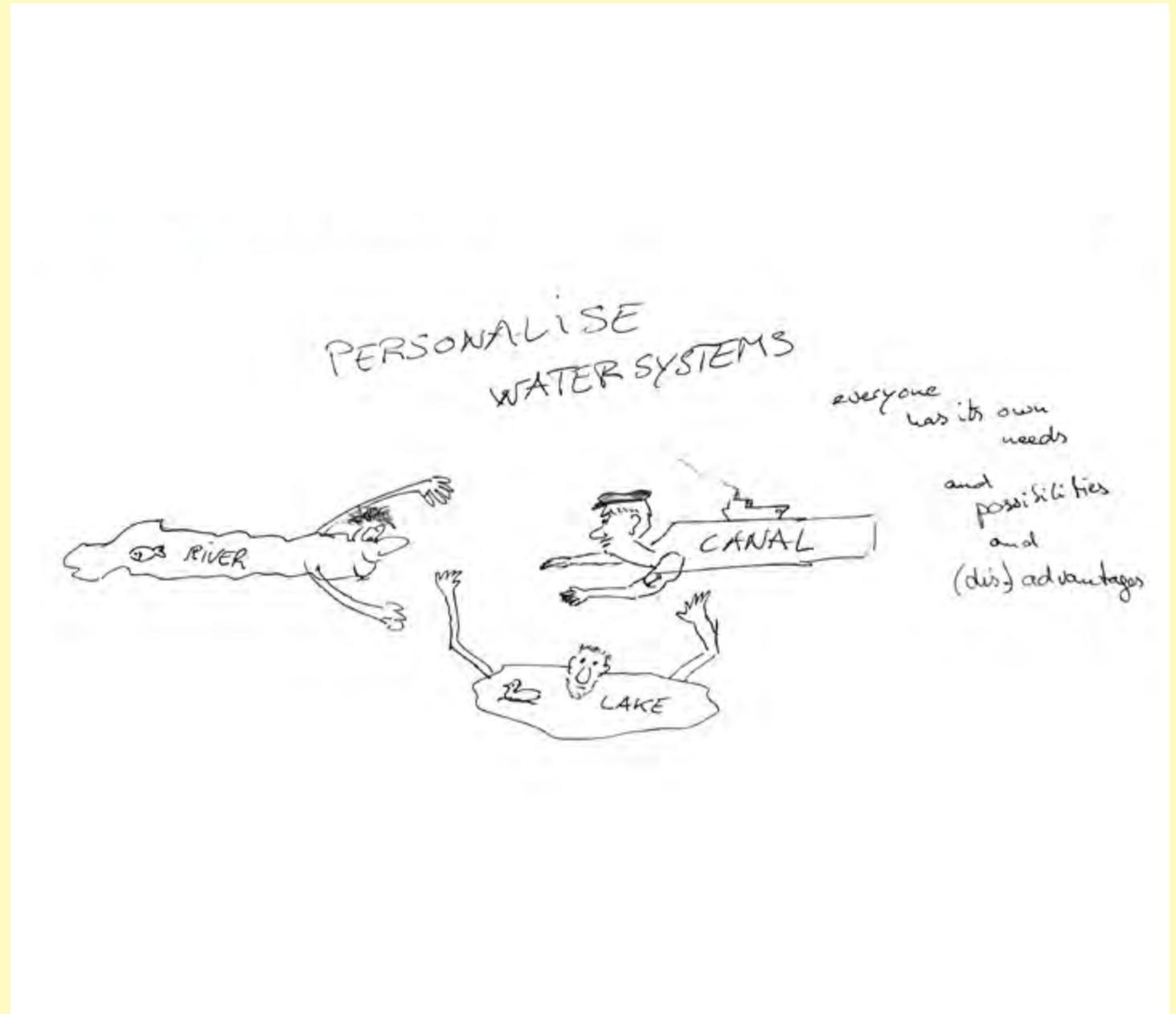
#### WATER IS A BLACK BOX AND THEREFORE PEOPLE DON'T DIFFERENTIATE BETWEEN DIFFERENT TYPES OF WATER.

There are many different types of water: tap water, swimming water, waste water, canal water, river water, ....

There are many types of qualities of water. 'Good quality water' depends on the type of water. There is not one standard to apply and measure. Water is like a black box. We don't know which standards apply to which types of water. Many missed opportunities by looking at water from one perspective and from one type of knowledge.

# DEEP DIVE ISSUE: LIFE CENTRED

The different types of waters approached as different personalities. We need to get to know these personalities. Many missed opportunities by looking at water from one perspective and from one type of knowledge.



# KEY ISSUE 4 - PROBLEM DEFINITION

## WATER IS A BLACK BOX AND THEREFORE PEOPLE DON'T DIFFERENTIATE BETWEEN DIFFERENT TYPES OF WATER.

The problem definition tool works to both open up a problem - presenting it in a way that can be examined from a number of angles - and to help define the wider context and associated issues involved. This is particularly effective when trying to focus a team of people on the key problems at hand.

source: diytoolkit.org

### WHICH 'LIFE' IS IT A PROBLEM FOR?

Problem for all life and source of all life



### WHY IS IT WORTH OUR ATTENTION, ANY EVIDENCE?

- We are going the wrong way
- Even in a country with a lot of water we are struggling
- Decrease in biodiversity
- Attention leads to broader range of perspectives and solutions



### REFRAMING THE ISSUE, OFFERING NEW PERSPECTIVES ON THE MATTER:

- Make the black box personal
- Shift from water as one entity towards many waters, each of them with its own qualities. Approaching waters as characters, personalities. Each one is unique and can play a different role. Humanizing water, giving it a face and connecting with people.

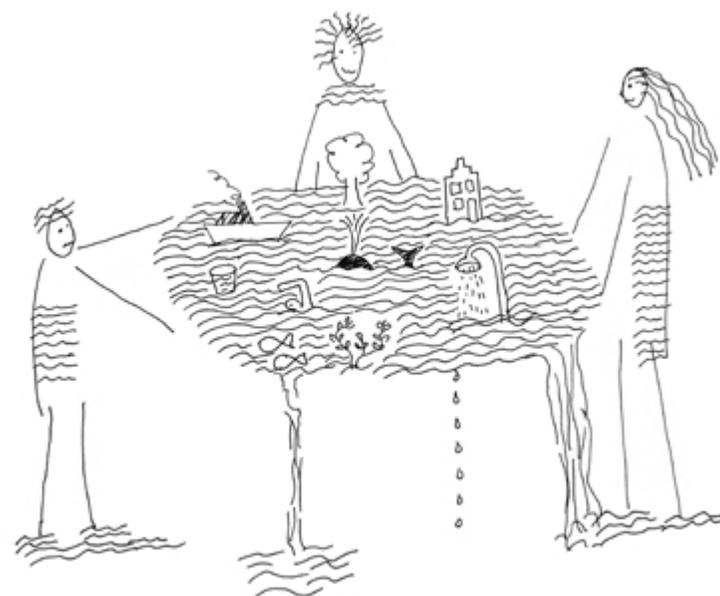
# WATER LAB CALL TO ACTION

What stood out in the results was the need to **explore water and biodiversity in general to create a deep and shared understanding of how important water is to human life**, something we normally take for granted.

We need to:

- understand and see the deeper value of water. We are no longer able to read the landscape around us. Water needs a voice to tell us its story, allowing us share the water story too.
- connect and build a new relationships with water that move beyond people just using water as they see fit.
- see water as diverse and dynamic. We need to embrace all types of water and its many different qualities.
- find a better balance between using water and maintaining the quality of water.
- empower and encourage people to embrace a fluid ownership of and responsibility for water with the goal of taking care of water.

These calls to action and collaboration reflect the precariousness of water and our multifaceted relationship with it. We need to shift from using and consuming water to **living with water**, to **supporting water the way it supports us**. Water isn't an isolated resource but part of a big and complex system that we are also part of. People, water and climate change are interconnected, and we need to take much better care of the balance between them.



**MORE INFO:  
WHATDESIGNCANDO.COM**

**WHAT  
DESIGN  
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**IN COLLABORATION WITH**



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