



Freshwater Practice

Location
Date

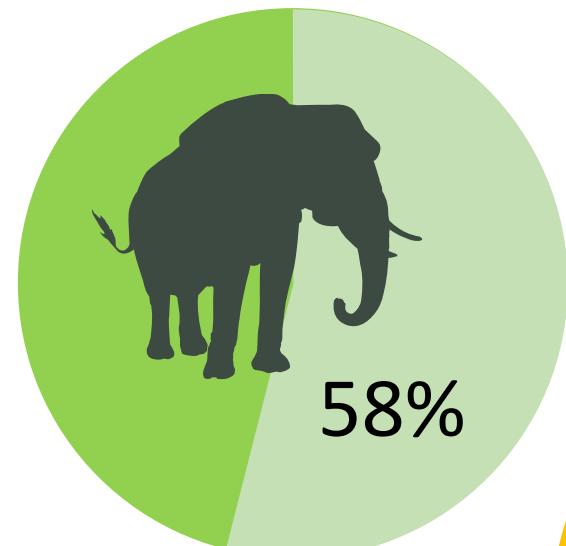
© COPYRIGH

Background.

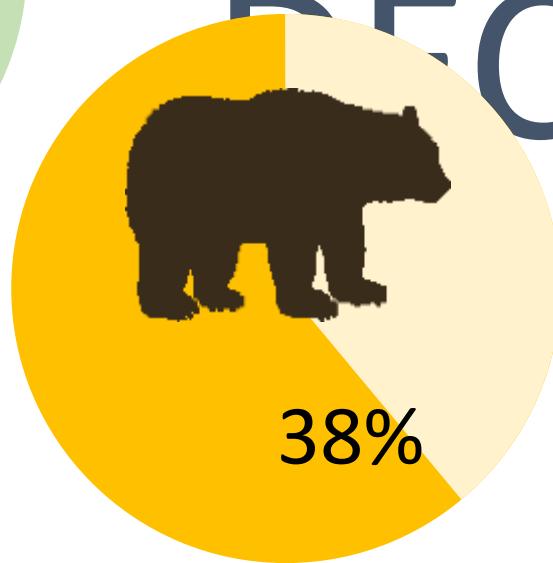


SPECIES IN DECLIN

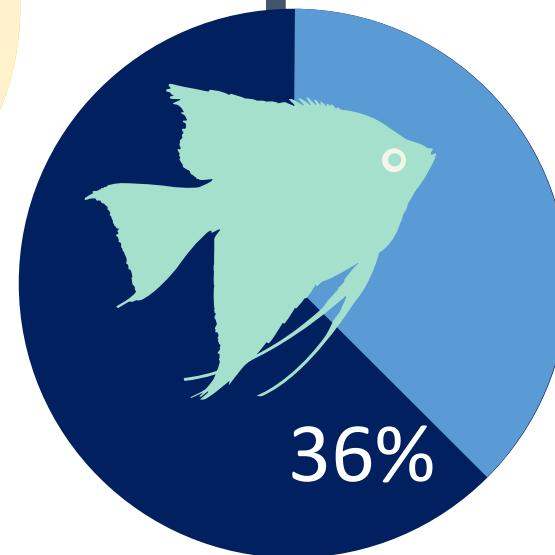
Marine
Species



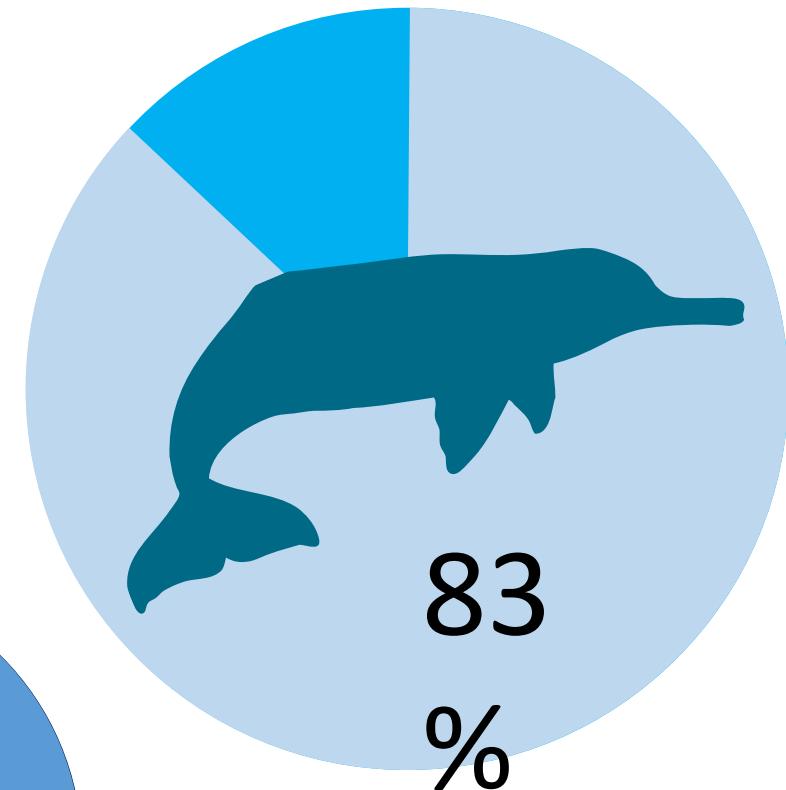
Global
Vertebrate
Species



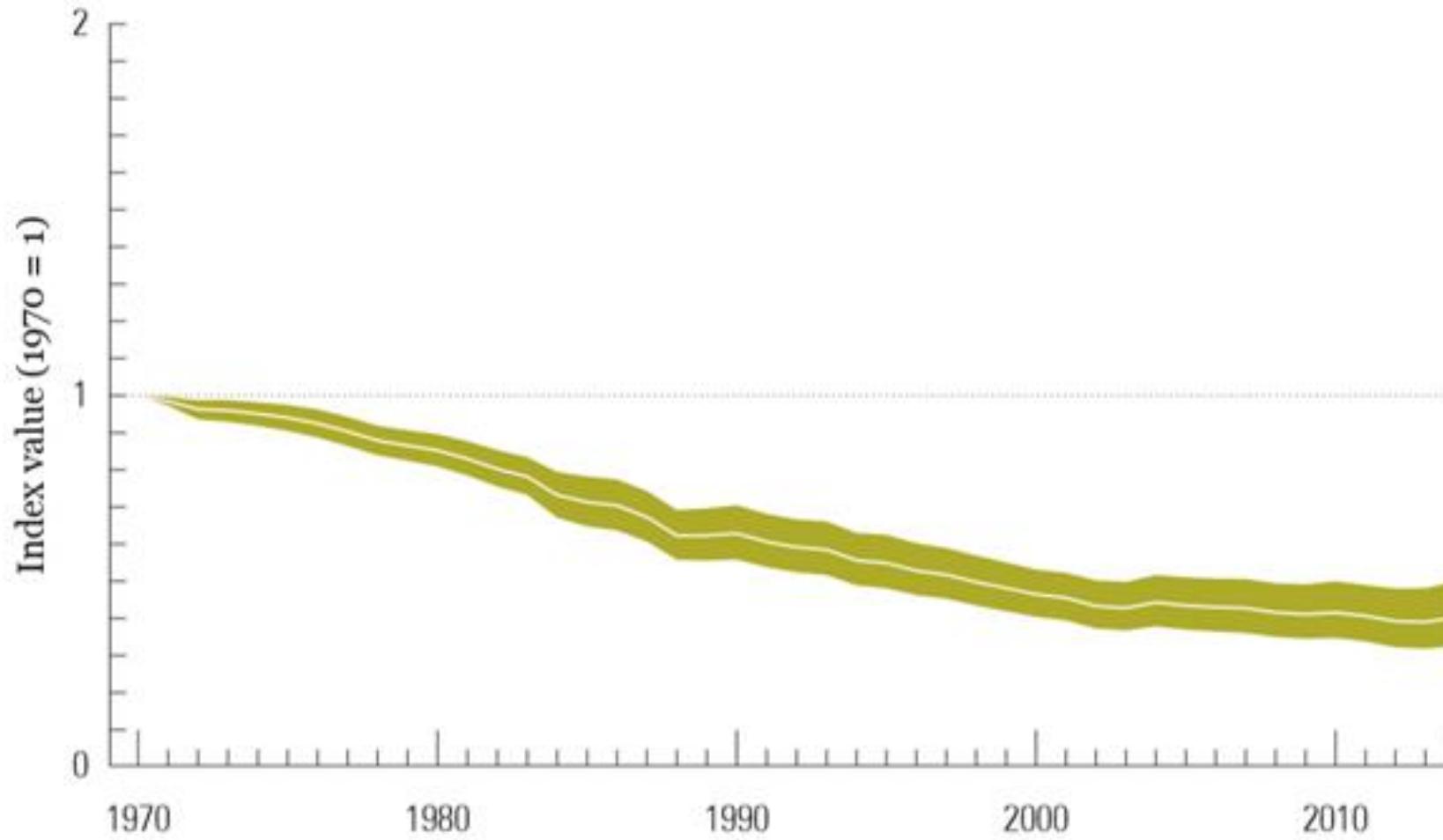
Terrestrial
Species



Freshwater
Species

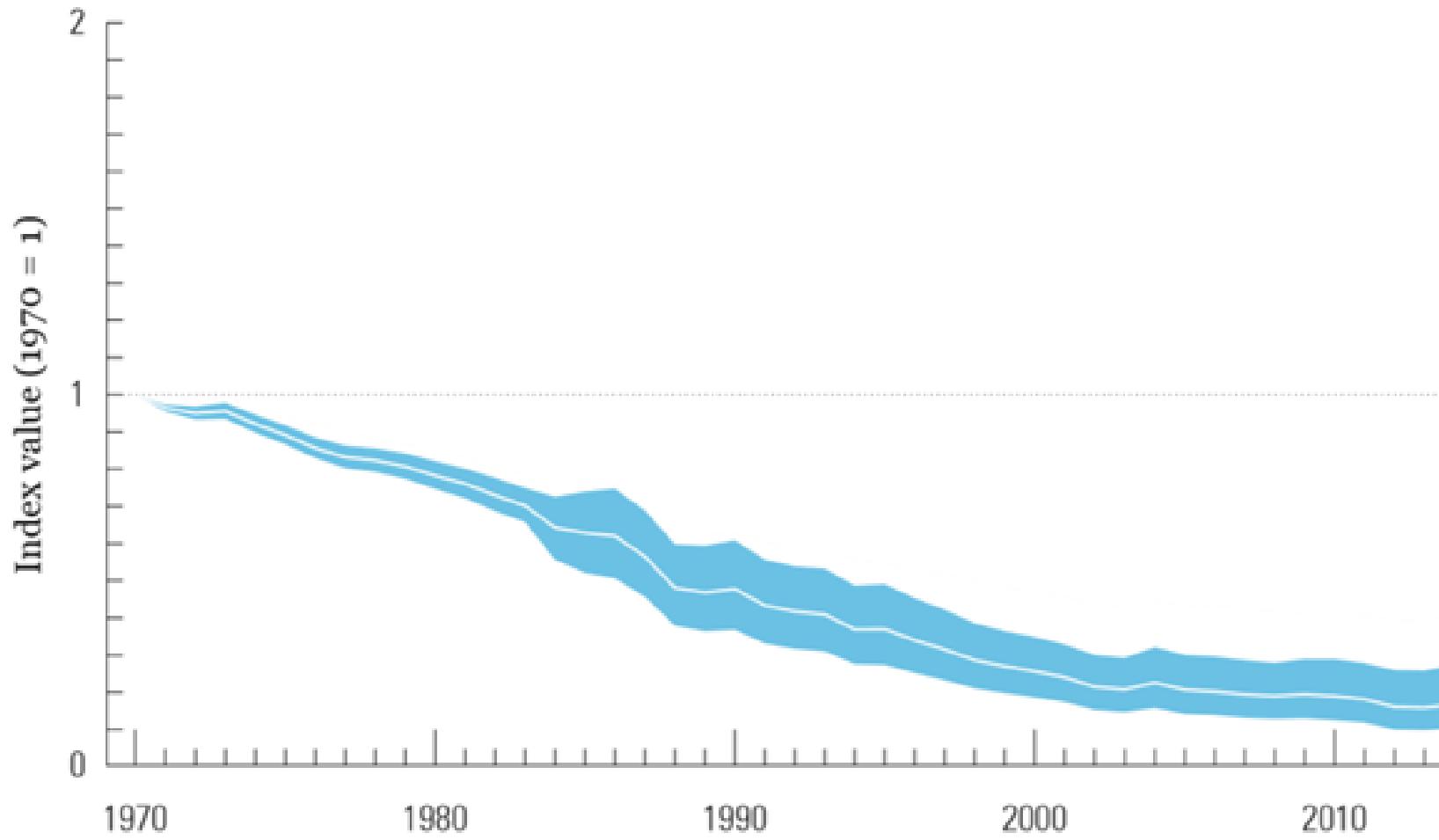


Living Planet index



**60%
DECLINE**

Living Planet index



81%
DECLINE

Water Crises

10% of the population lacks access to safe drinking water

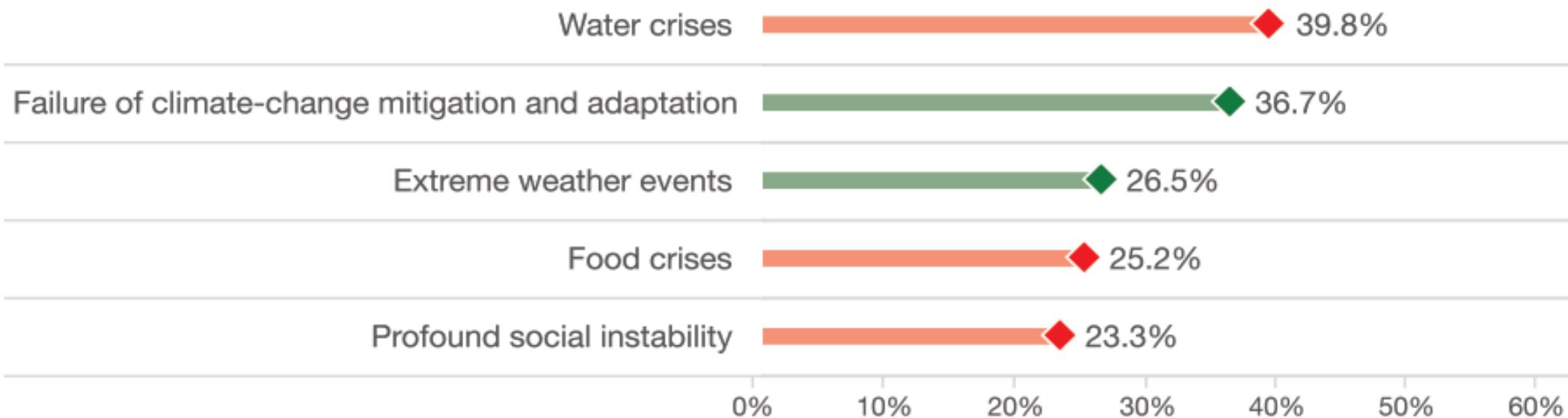
1/3 lacks access to improved sanitation

50% of the wetlands were lost in the last century

Climate change and population growth

Water Crises

For the next 10 years



Water Funding Gap

CURRENT
INVESTMENT

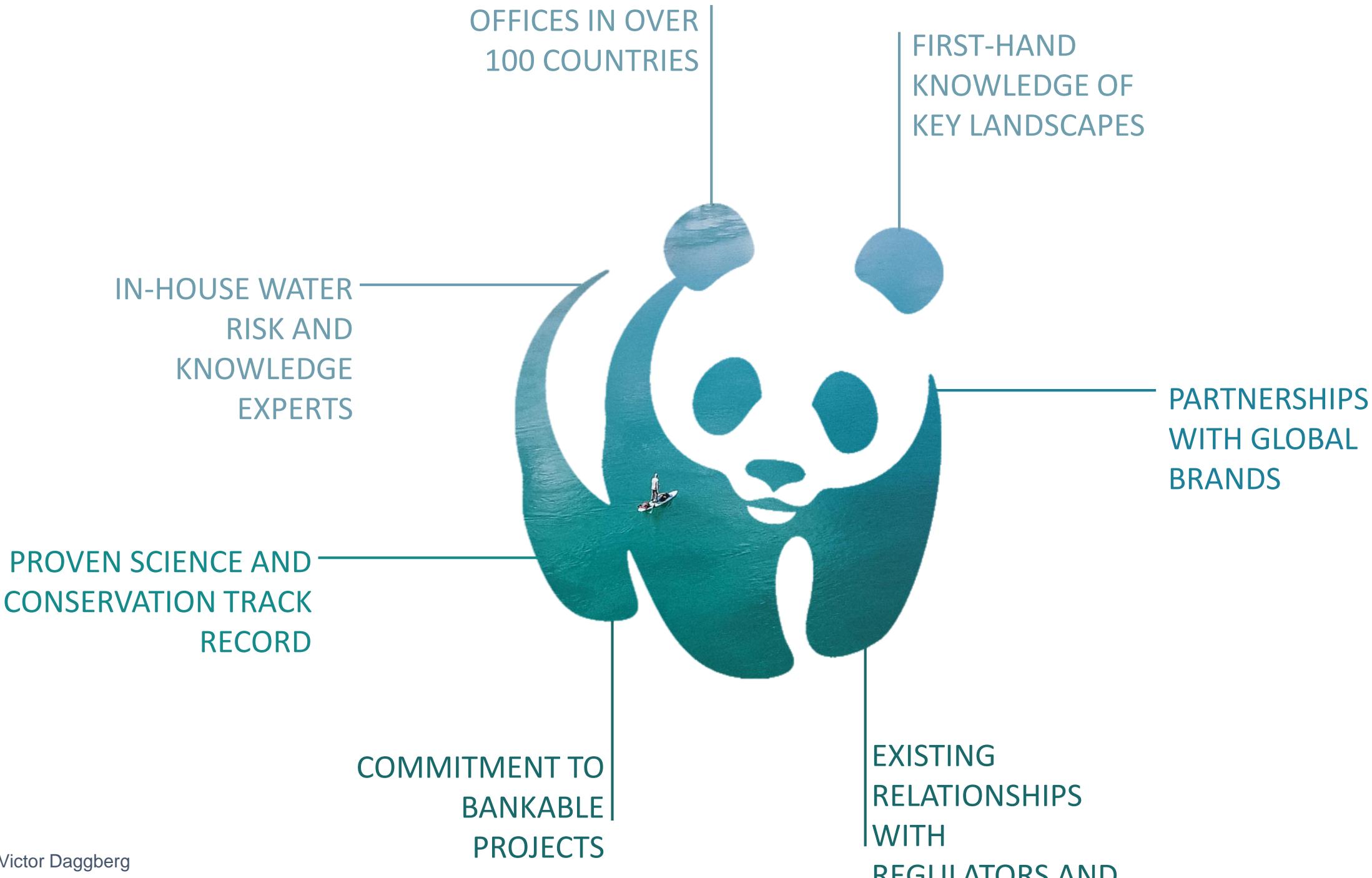
~\$0.3t



REQUIRED
INVESTMENT

~\$1t

FINANCE GAP



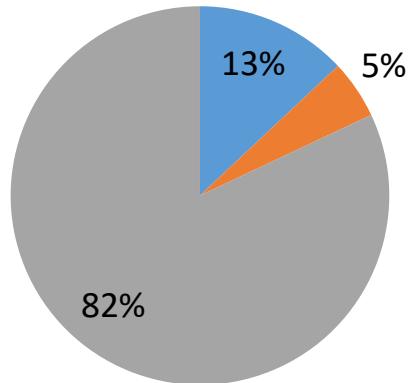


Outline

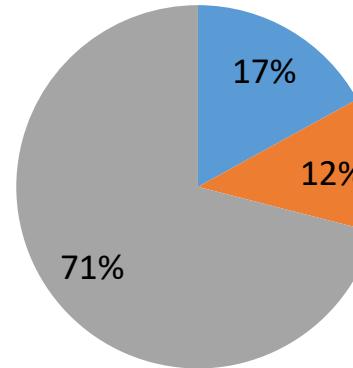
- Water risk
- Water Stewardship
- Water Risk Filter 5.0

Total water withdrawal per sector

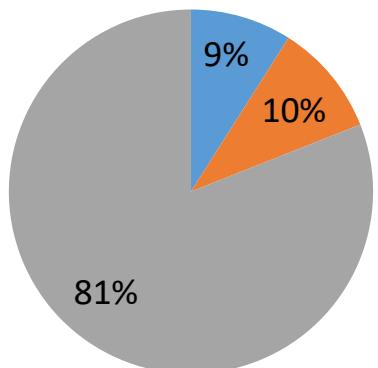
Africa



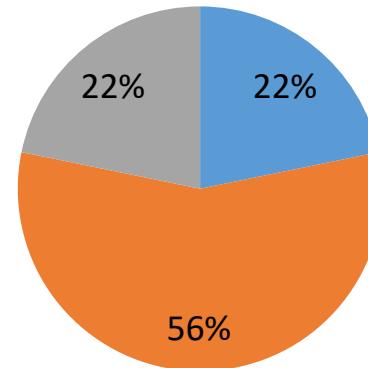
South America



Asia



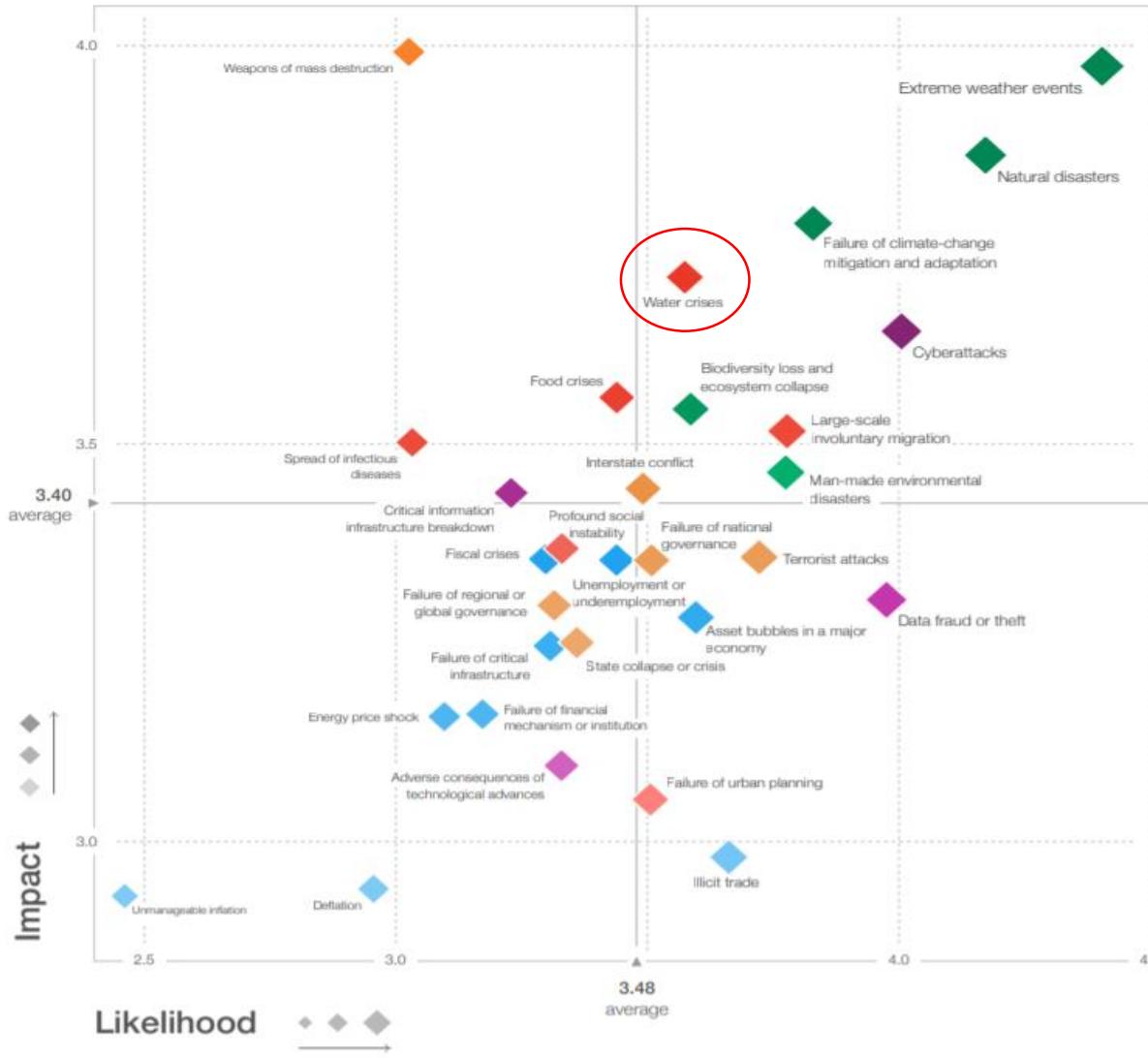
Europe



- Municipal
- Industrial
- Agricultural

FAO (2014)

Water Risk



World Economic Forum (2018)

Water Risk

2015 Drought in California:
2.7 bi \$ and 21,000 jobs



2015 Leather industry in India:
98 tanneries closed because of
water pollution



2013 Mining project in Peru:
Uncertainties on water supply
impact stopped Newmont project



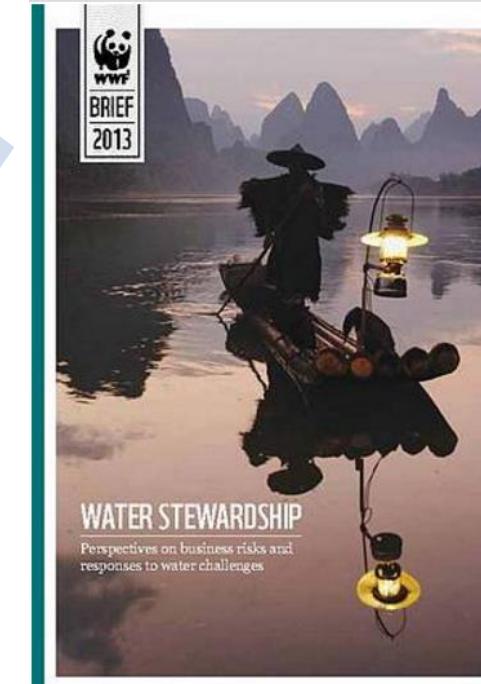
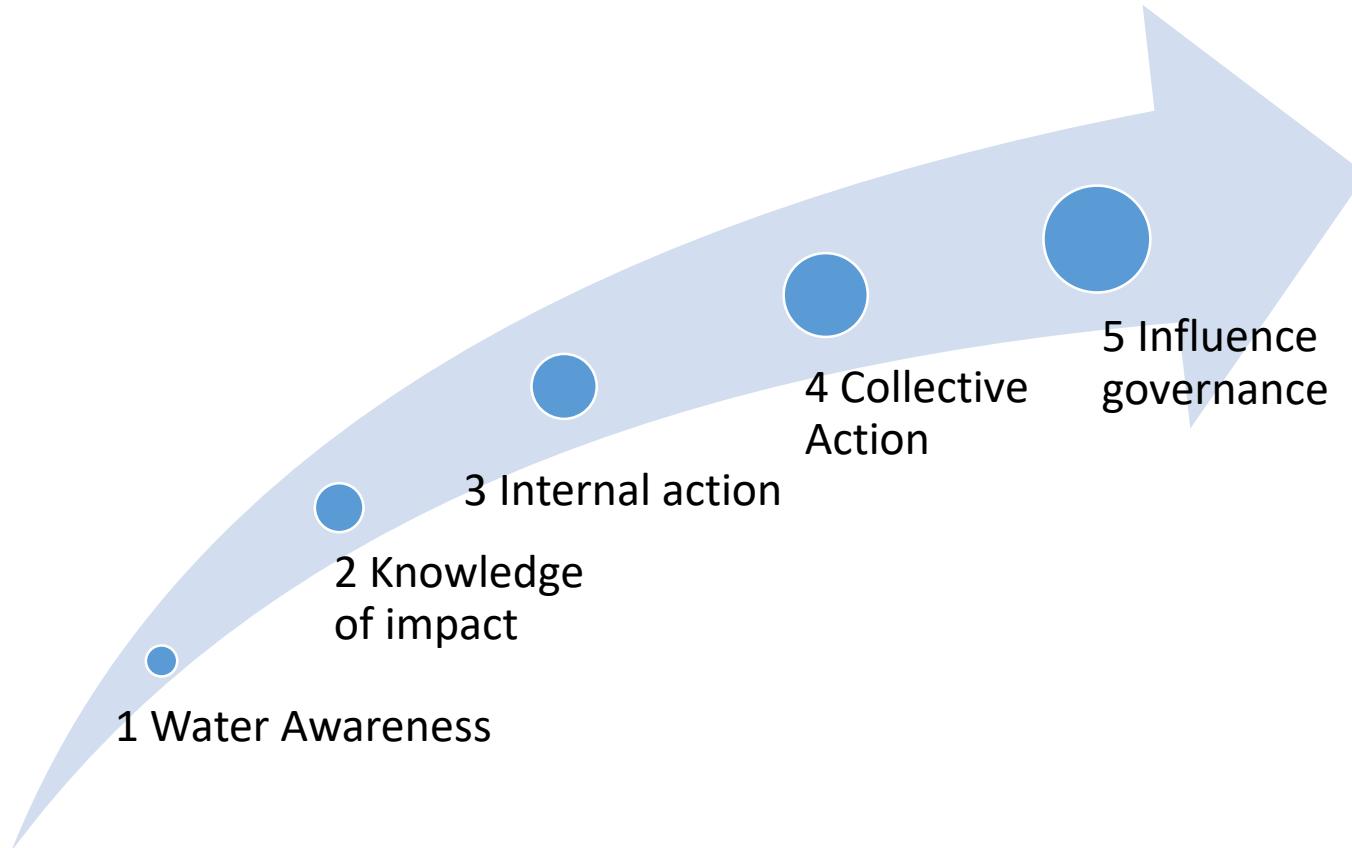
2013 India
Coca Cola cancels expansion project
after protests



Finance and Economics – What the Banks are Saying?

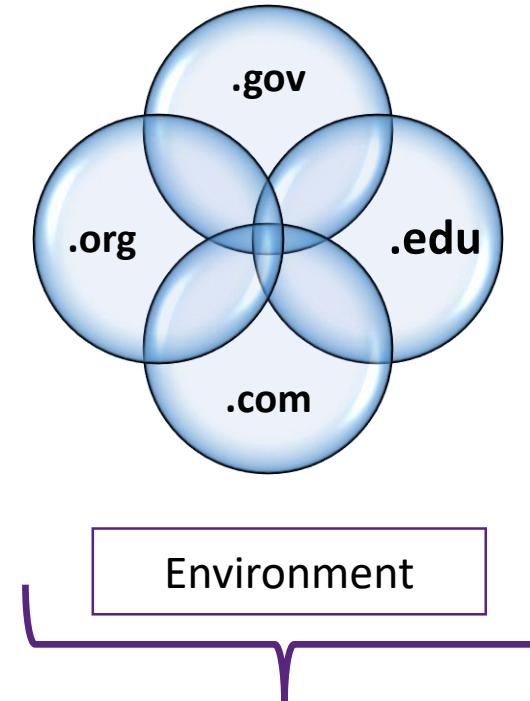
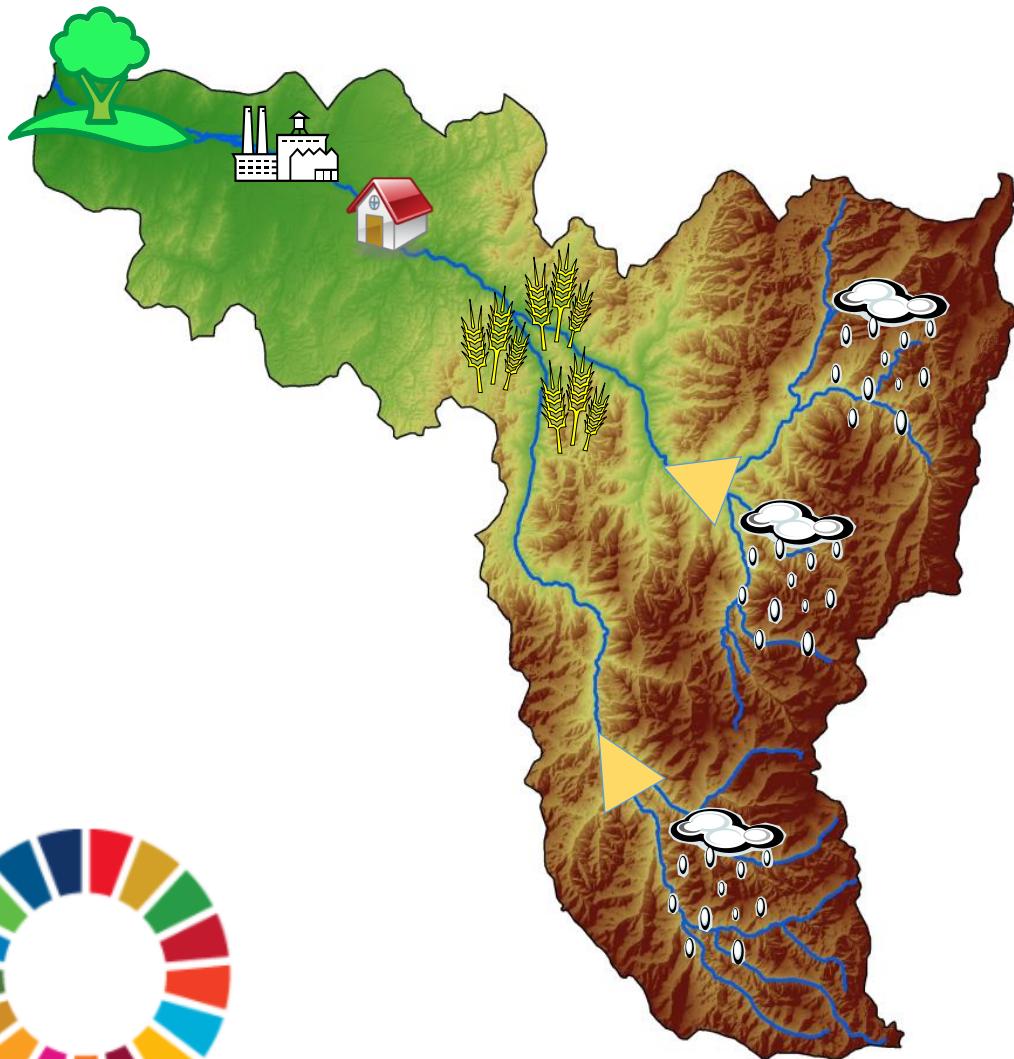
JP Morgan	<i>'Watching water: A guide to evaluating risks in a thirsty world'</i>
Citi	<i>'Water Worries: Climatic Consequences'</i>
Credit Suisse	<i>'Water: The Paramount Megatrend of our Time'</i>
Goldman Sachs	<i>'Water could be a constraint on growth'</i>
HSBC	<i>'GDP will be 'severely hampered by water scarcity'</i>
Citi	<i>'The Growing Impact of Water Scarcity on Mining'</i>
Merrill Lynch	<i>'Water scarcity a bigger problem than assumed'</i>
Morgan Stanley	<i>'Water: The Perfect Storm'</i>
Standard Chartered	<i>'Water – The Real Liquidity Crisis'</i>

Water Stewardship



*Water Stewardship is the use of water that is **socially** equitable, **environmentally** sustainable and **economically** beneficial, achieved through a **stakeholder-inclusive process** that involves site and catchment-based actions. (AWS , 2014)*

Water Stewardship



**Shared Risks
and
Challenges**

The Water Risk Filter

PRODUCED IN
COLLABORATION
WITH

KFW DEG



A free online tool to:

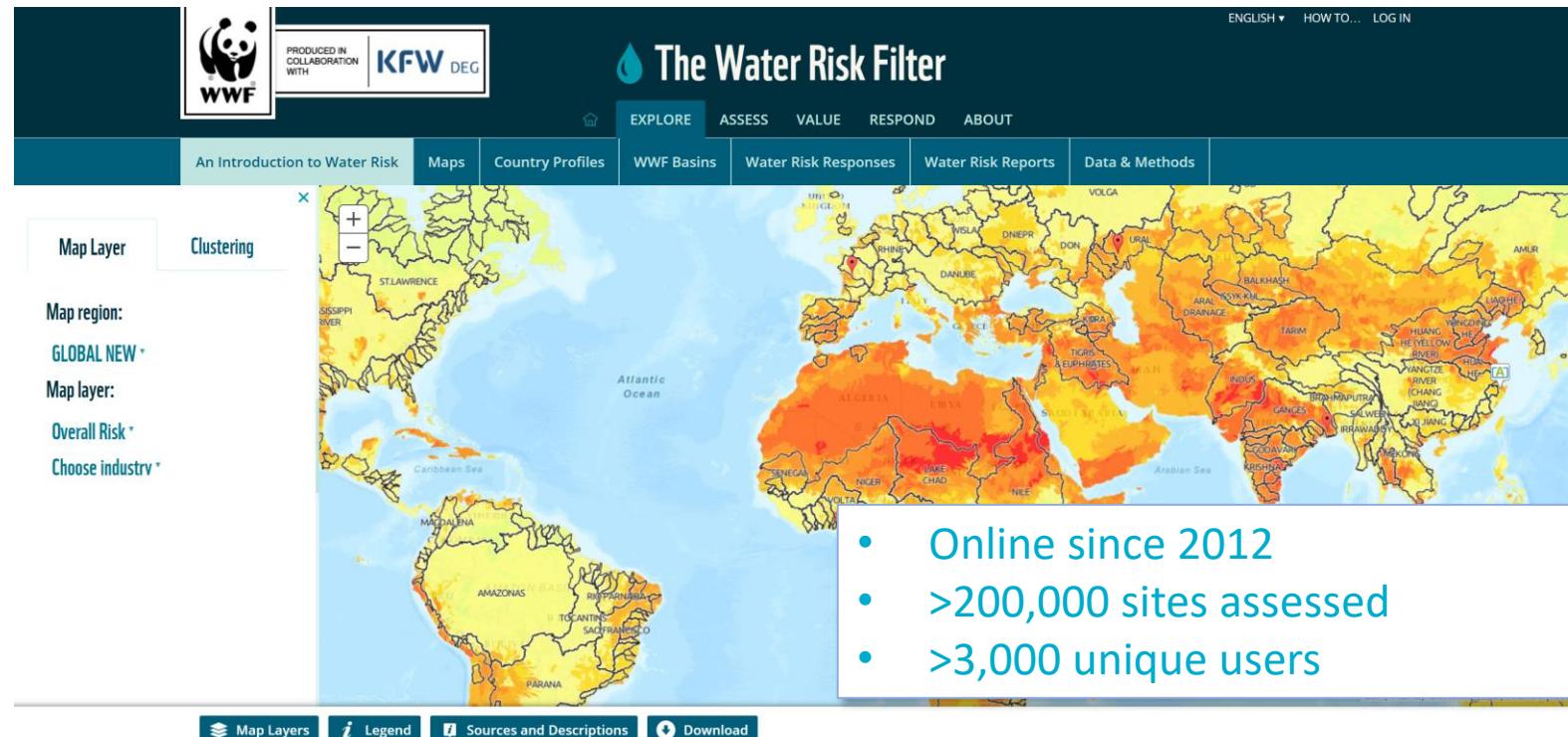
- Assess water risk
 - Analyse results



ALLIANCE FOR
WATER STEWARDSHIP

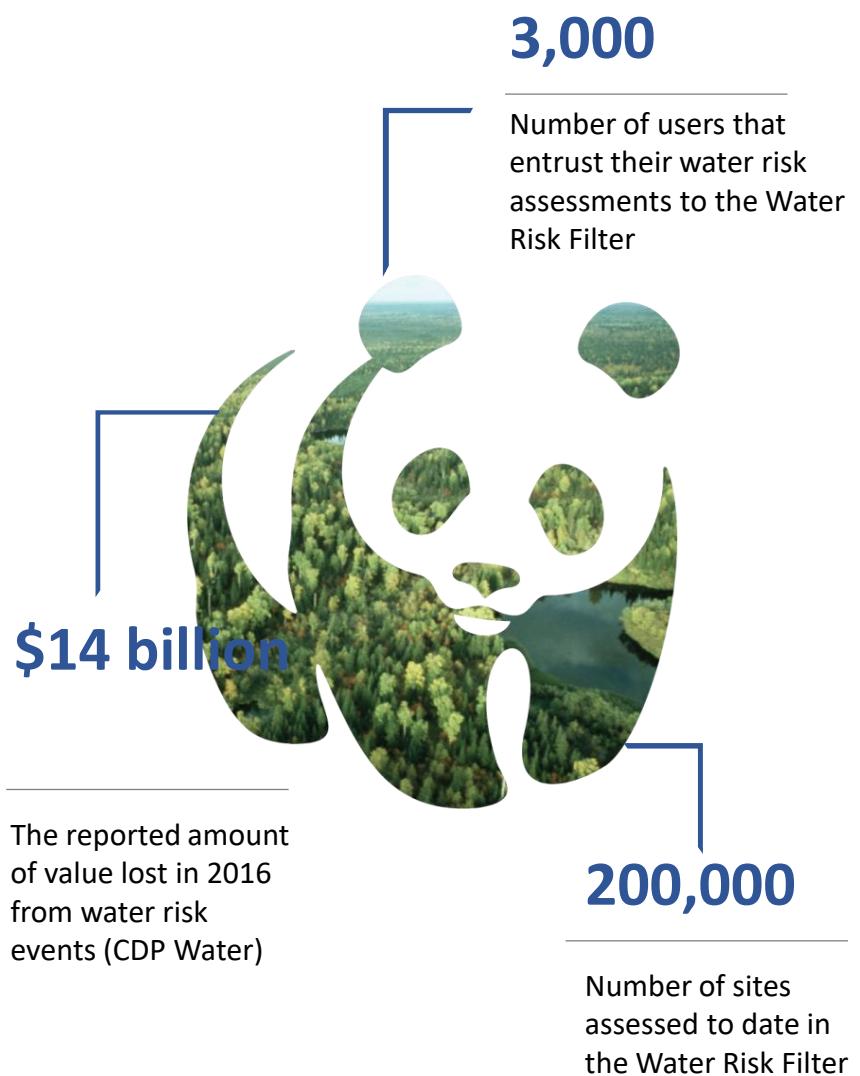


The CEO Water Mandate



The Water Risk Filter – Basin risk framework

Risk Type	Risk Category	
Physical	Quantity – scarcity*	
	Quantity – flooding*	
	Quality	
	Ecosystem service status*	
Regulatory	Enabling environment (laws & policy)	
	Institutions & governance	
	Management instruments	
	Infrastructure & finance	
Reputational	Cultural importance of water	
	Media scrutiny	
	Corporate trust	
	Water conflict	
		TOTAL: 32 Basin Risk Indicators



Thank you

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 [@WWFWaterRisk](https://twitter.com/WWFWaterRisk)

Thank you for visiting

<http://waterriskfilter.org>



A wide-angle aerial photograph of a lush, green wetland area. The landscape is a mix of dense tropical forest, bright green grassy fields, and numerous small, winding blue water bodies that reflect the sky. The horizon shows a distant line of trees under a cloudy sky.

June 14, 2019

WWF Water Risk Filter

Explore, Assess, Value & Respond to Water Risks

Felipe Coelho Costa
Water Risk Filter

Water Risk



Water scarcity and droughts



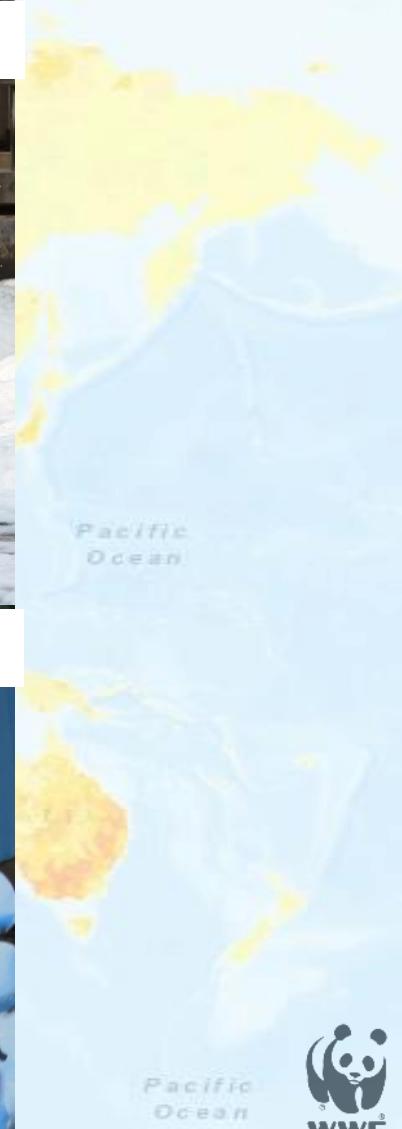
Regulatory risks



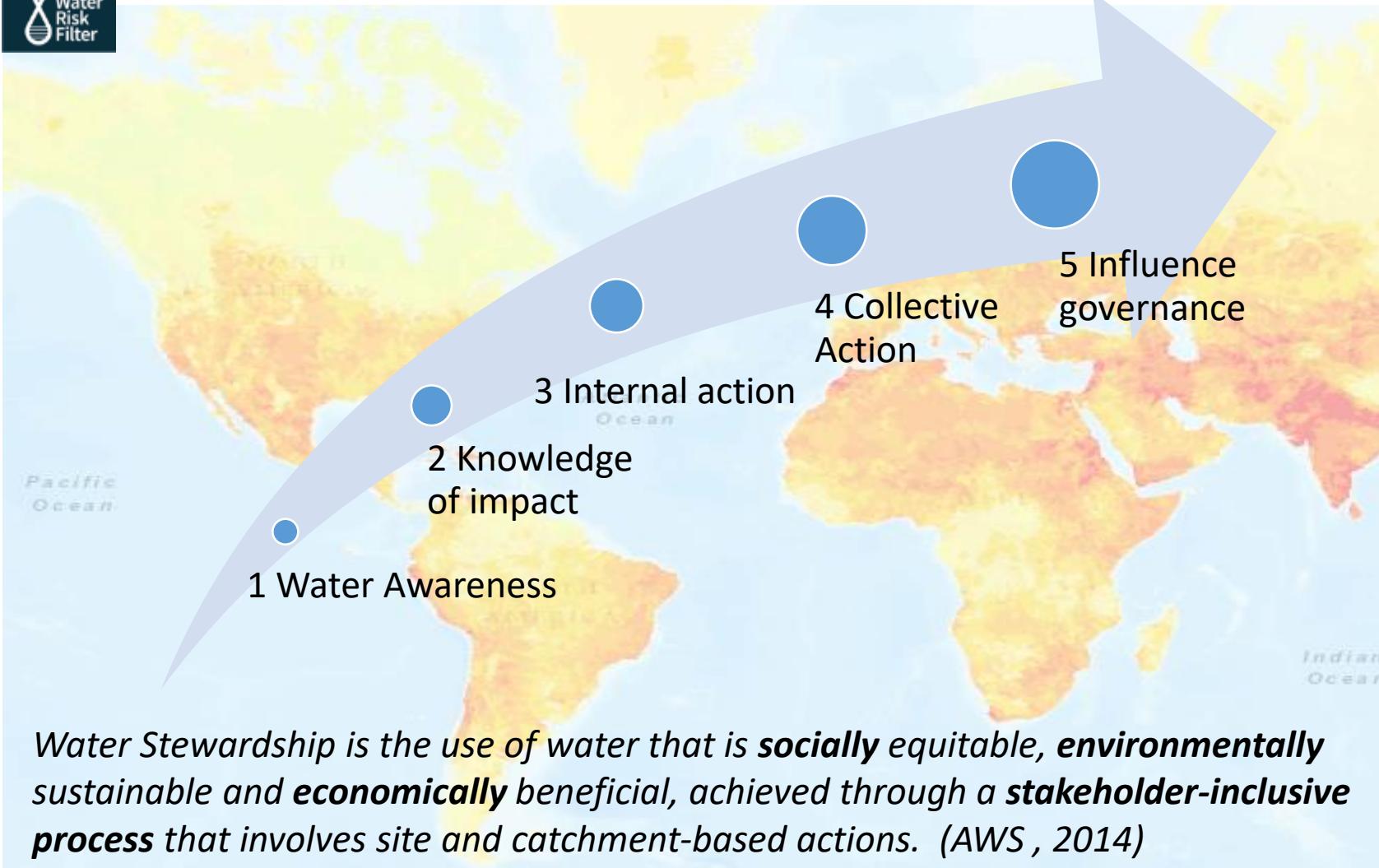
Water quality



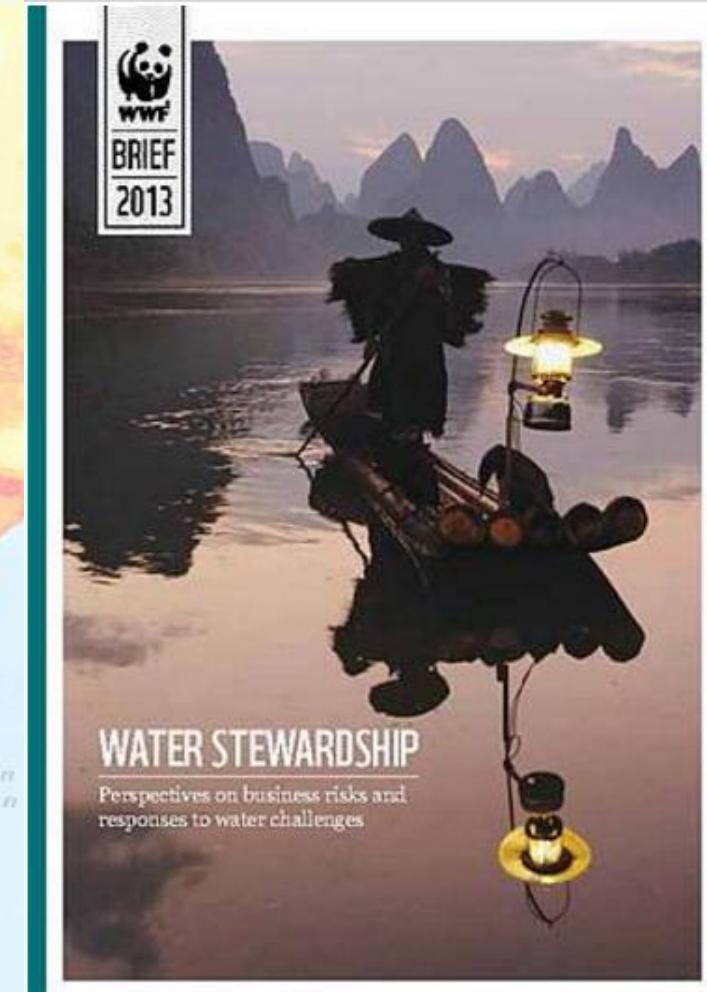
Reputational risks



Water Stewardship



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© Kevin Grieve / Unsplash

Water Risk Filter: Assess





The Water Risk Filter: Risk Assessment Framework



Basin water risk

(i.e., the nature of your basin – contextual water status & other users)

→ **WATER RISK
EXPOSURE** ←



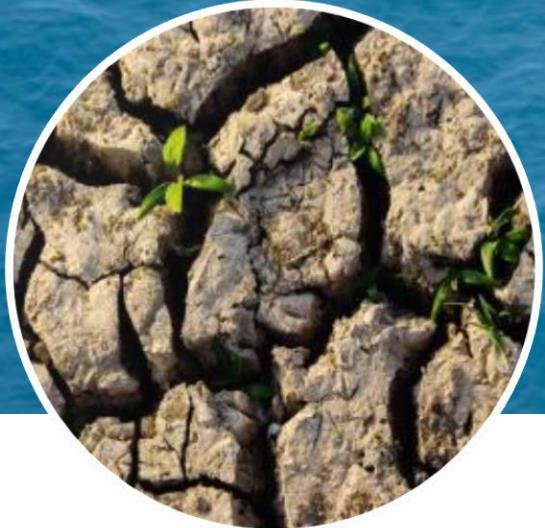
Operational water risk

(i.e., the nature of your business & your operational practices)





The Water Risk Filter: Risk Assessment Framework



WATER RISK EXPOSURE

32 Basin Risk Indicators
■ Geolocation data

Basin

- Physical risk
- Regulatory risk
- Reputational risk

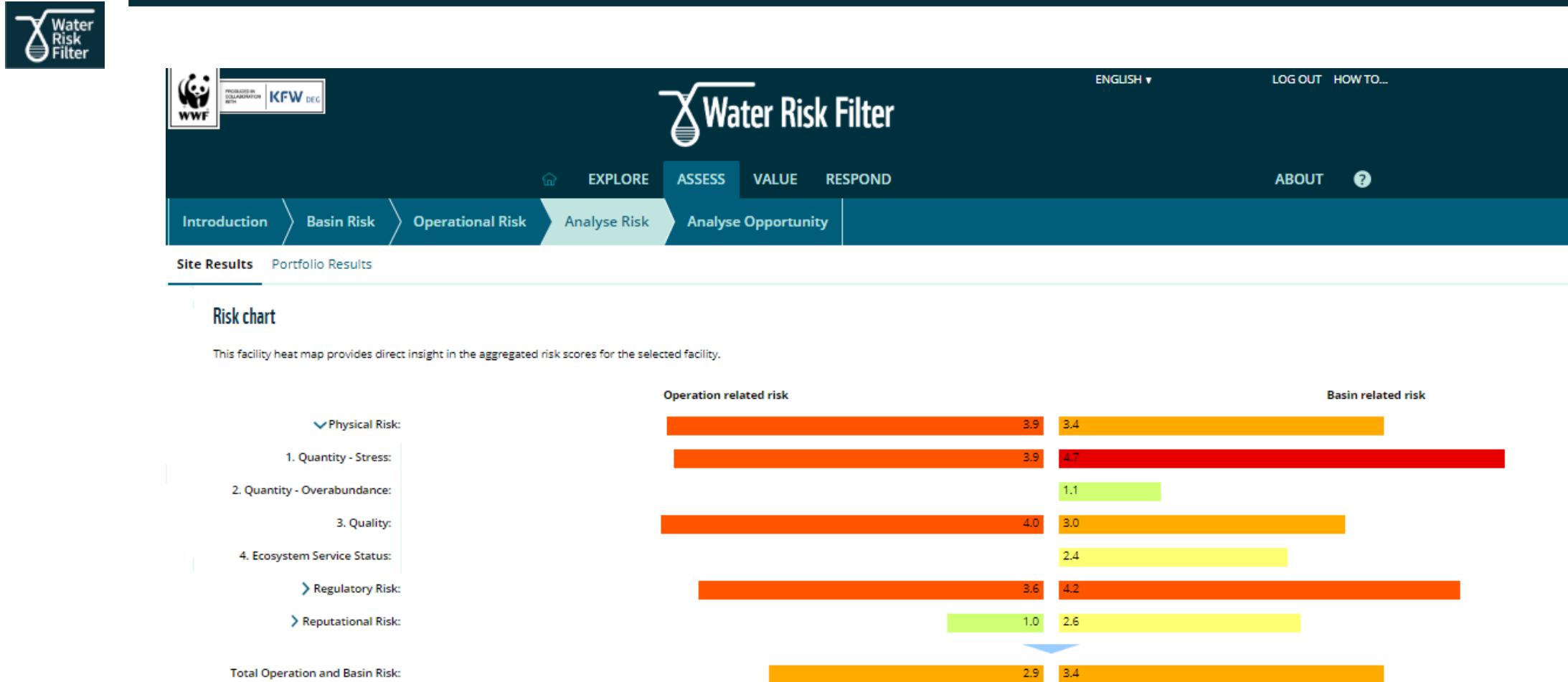
Operational

- Physical risk
- Regulatory risk
- Reputational risk

Operational Risk Questionnaire
■ Operational data



The Water Risk Filter – Assess section: Analyse





Water Risk Filter 5.0 - Assess



Risk Type	Risk Category	
Physical	Quantity – scarcity*	
	Quantity – flooding*	
	Quality	
	Ecosystem service status*	
Regulatory	Enabling environment (laws & policy)	
	Institutions & governance	
	Management instruments	
	Infrastructure & finance	
Reputational	Cultural importance of water	
	Media scrutiny	
	Corporate trust	
	Water conflict	

**TOTAL:
32 Basin Risk
Indicators**



© Aaron Burden / Unsplash

Challenges





#1 – Textile Industry Tracking



- Effective action requires knowledge about the sector
- We want to know what to do, where and with whom
- Sometimes even corporates can't really manage their supply-chain





#1 – Textile Industry Tracking



- Corporate engagement in WWF:





#1 – Textile Industry Tracking



- Water risk assessments are carried on along the corporate's supply chain
- And that is where the biggest problems show up
- Supply-chains are often unclear (even for corporates)

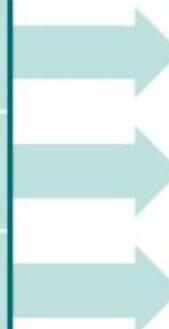




#1 – Textile Industry Tracking



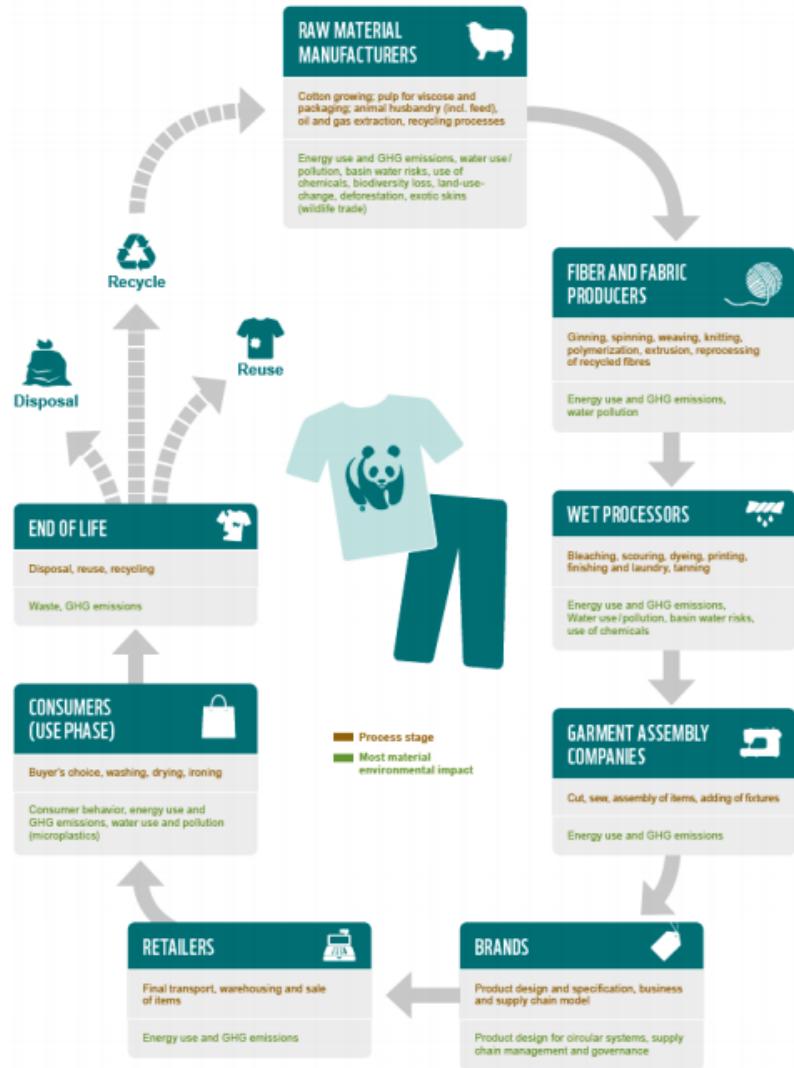
The clothing and textile industry
at the brink of radical transformation



The clothing and textile industry
respects the ecological
boundaries of our planet.



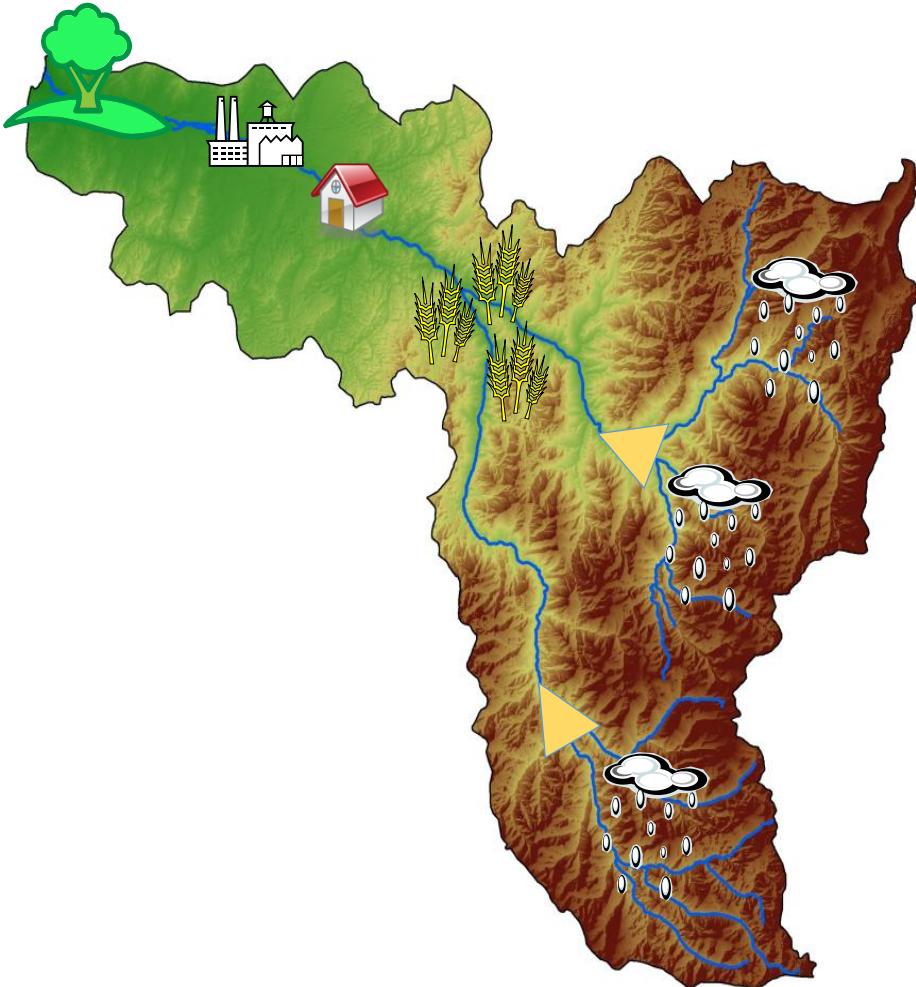
#1 – Textile Industry Tracking



- Main focus at wet processing or Tier 2
- Textile wet processing represents:
 - 65% of chemical consumption
 - 80% of energy consumption
 - 85% of water consumption



#1 – Textile Industry Tracking



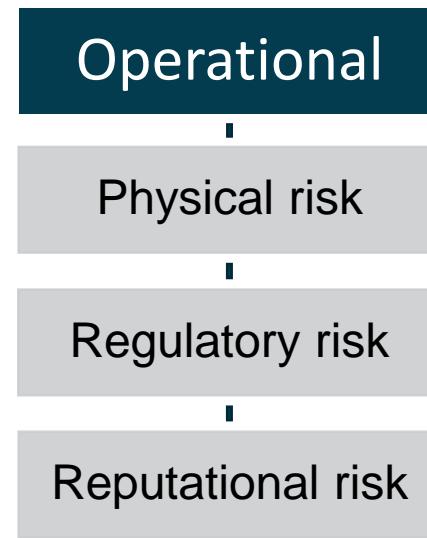
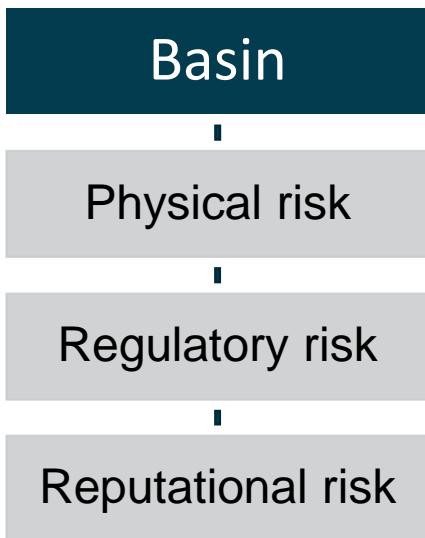
- Sector data shall include:
 - Location
 - Type of process
 - Water and energy consumption
 - Production volume
 - Buyers/owners/financial means
- Geographic regions shall be characterized
 - Water scarcity
 - Water pollution and river health
 - Groundwater
 - Wetlands and ecosystems
 - Etc..
- Science based Water Targets?
 - Limits for water use?
 - Limits for pollution?...



#2 – Water Risk Exposure



- Global framework for both basin and operational water risk:





#2 – Water Risk Exposure



..” that a reputational problem can cause short-term issues to develop into long-term impacts including reduced profits, loss of customers and key employees, and eventually a slump in share price.”

Reputation Institute, 2015





#2 – Water Risk Exposure



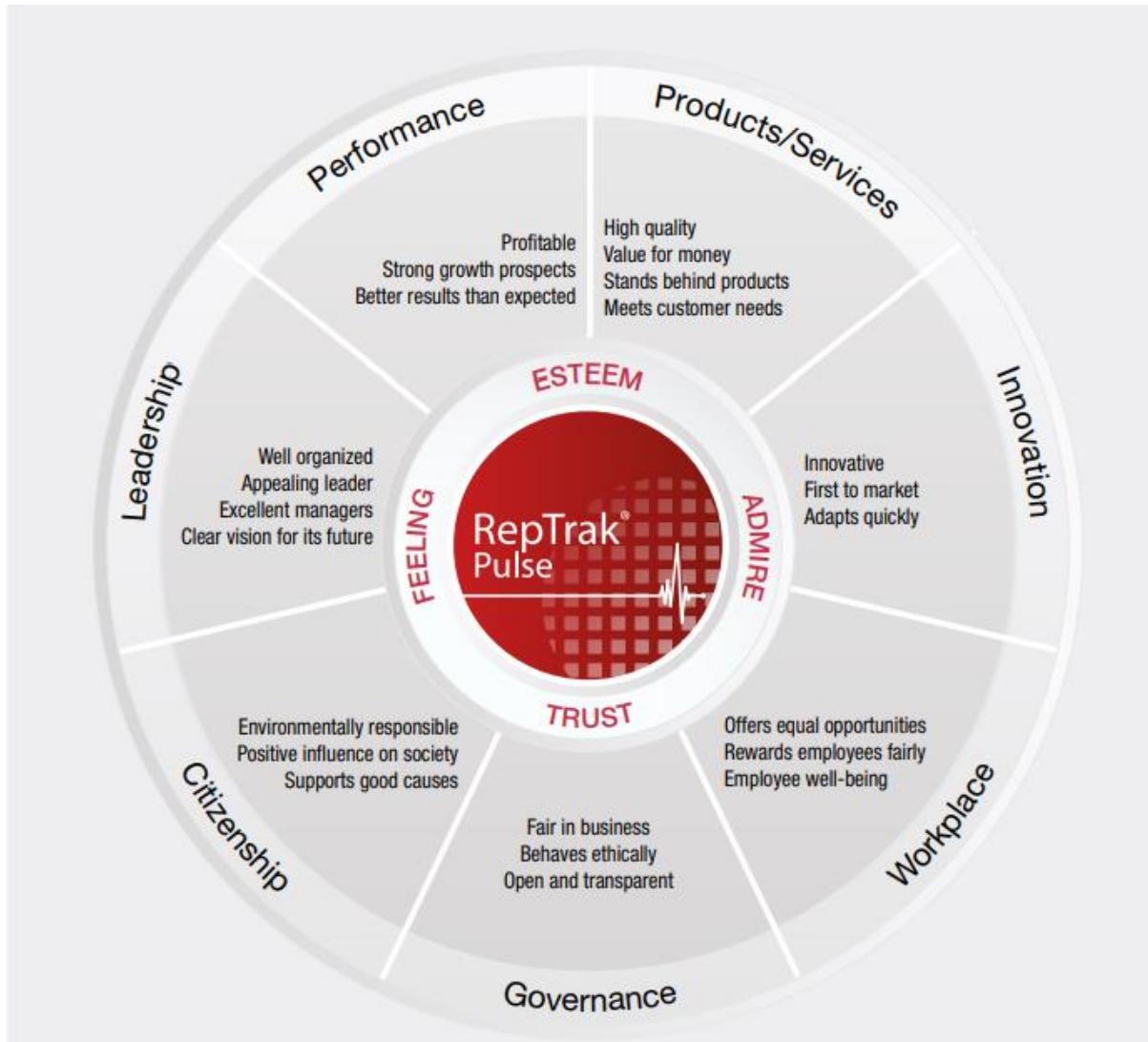
“Reputation is the perception others have of you. It’s a feeling, which makes it intangible. And managing something which is hard to define is difficult. To understand reputation you need to make the intangible tangible. You need to break down your reputation into **specific components** that you can **measure** and **manage**. Then you are able to identify the specific impact from a crisis or an issue on your reputation and manage it.”

Reputation Institute, 2015





#2 – Water Risk Exposure



Reputation Institute, 2015





#2 – Water Risk Exposure



- Governance: Issues that will reduce people's belief that corporates are open, honest, and fair in the way they do business
- Citizenship: Issues that will reduce people's belief that they are a good corporate citizen who cares about **local communities** and the **environment**





#2 – Water Risk Exposure



- Reputation risk is very important for corporates
- A value of a brand can be damaged by water-related operations
- There are several aspects that can influence reputational risk

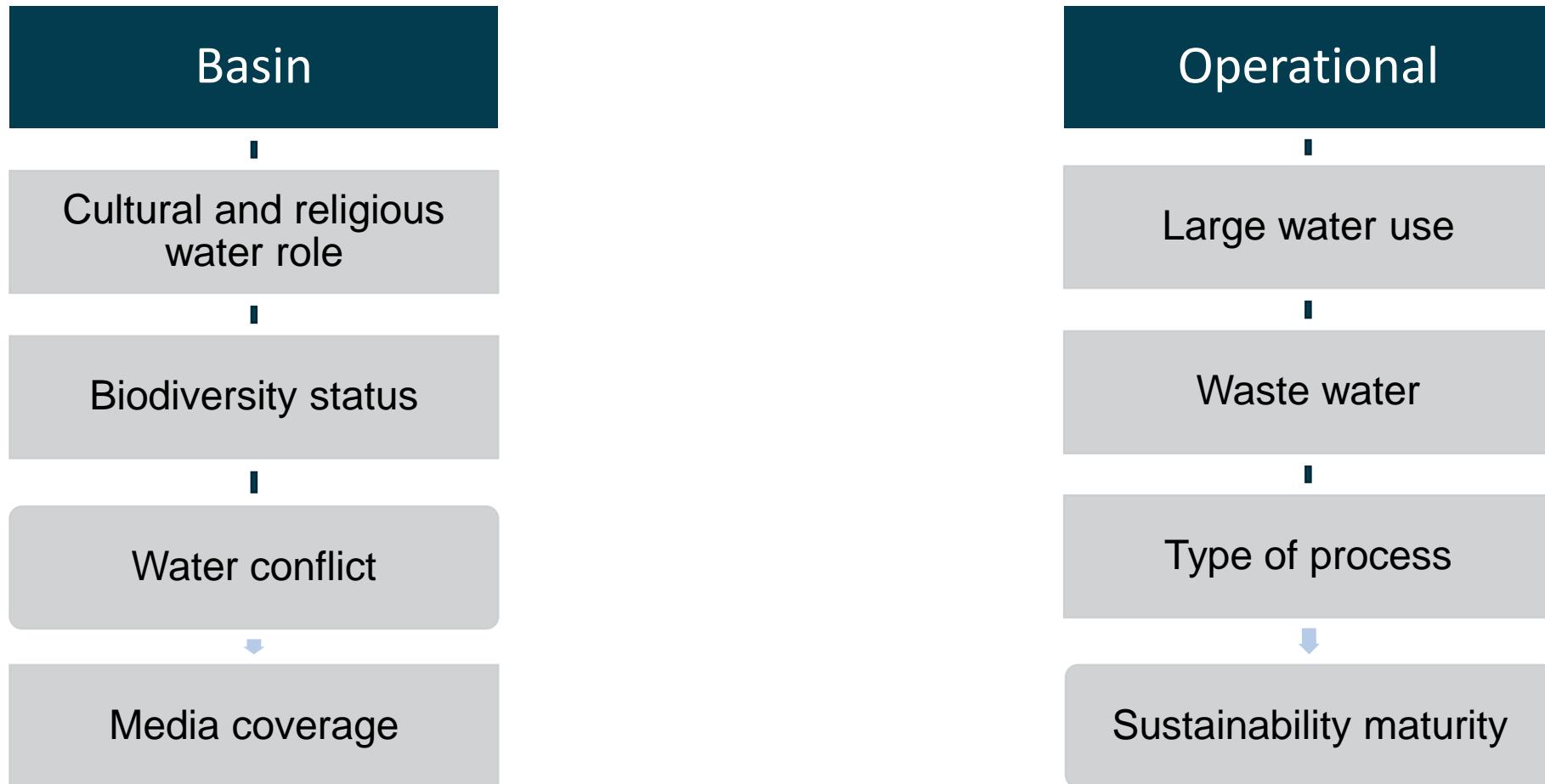




#2 – Water Risk Exposure



- Reputational risk:





#2 – Water Risk Exposure



- Particularly at the **basin level**, we want to:
 - Be able to inform companies about their (water related) reputational risks
 - Provide a clear framework for reputational risk
 - Near real-time updates?
 - Social media?





THANK YOU FOR YOUR ATTENTION!

For more information:

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<http://waterriskfilter.org>



@WWFWaterRisk

