# Aqueduct Water Management Atlas

## Proof of Concept

Stockholm World Water Week
Sunday, August 26, 2018

MIT MANAGEMENT Sustainability Initiative

WORLD RESOURCES INSTITUTE

25 YEARS PACIFIC INSTITUTE

# The Project in a Nutshell

INFORMATION ON PUBLIC WATER MANAGEMENT

CROWDSOURCE INFORMATION

OPEN SOURCE GLOBAL GEODATABASE + DATA + API

# We developed and piloted the method…

**Method Development**

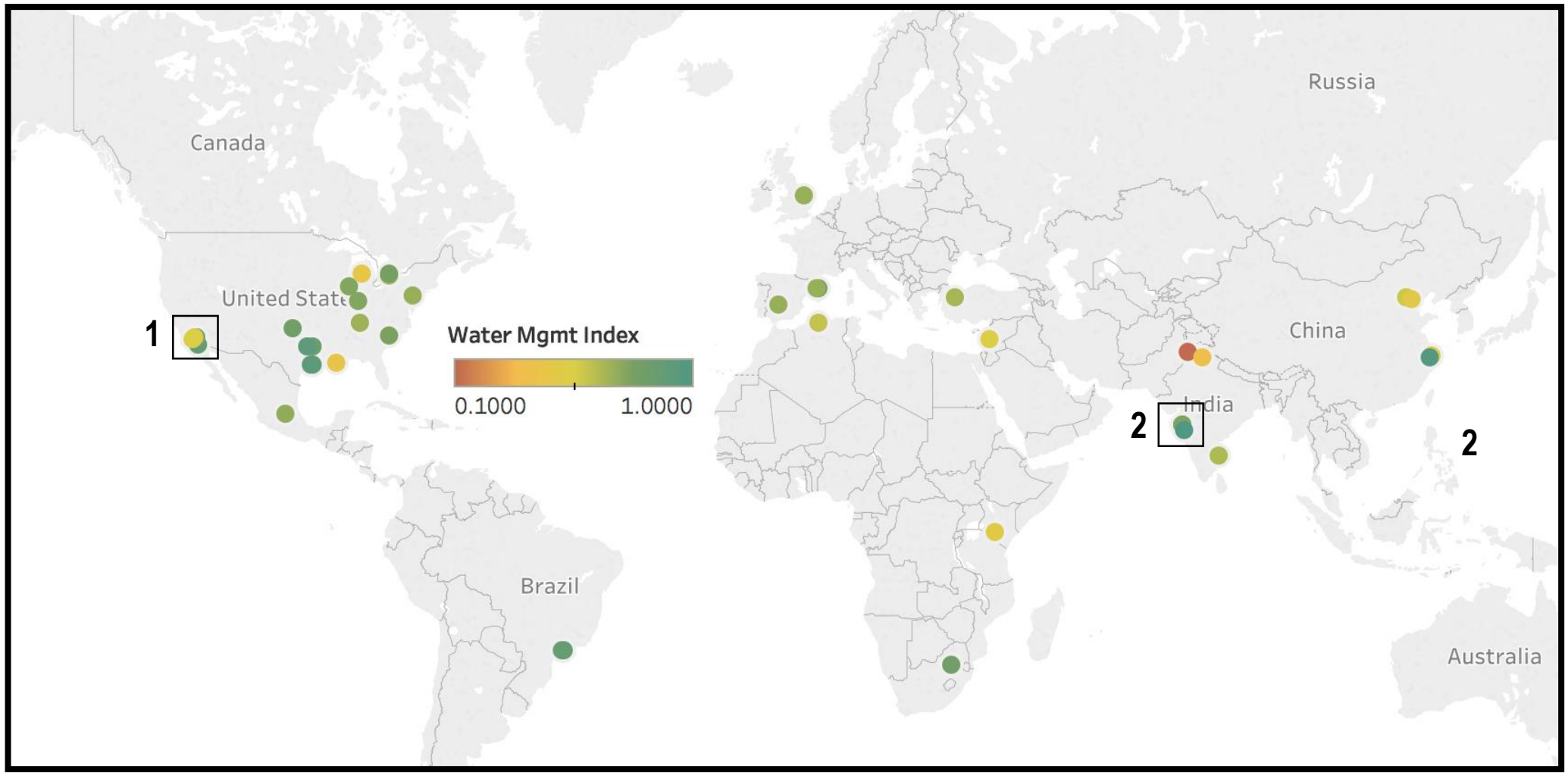
- Collaboration between MIT Sloan and WRI
- Published in a first whitepaper last March

**Pilot Test**

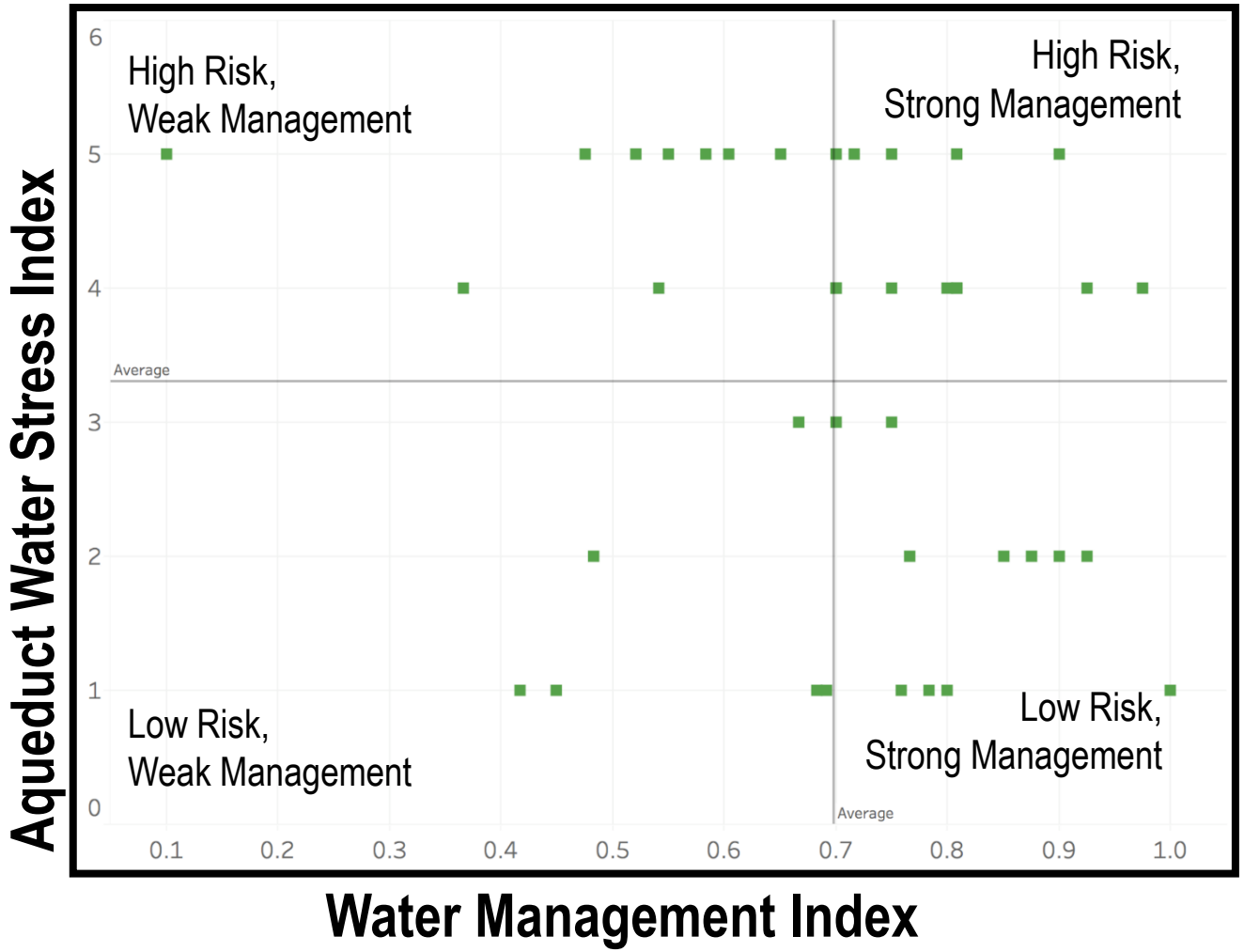
- with 6 corporate partners
- 41 locations
- in 14 countries

… and here come the results →

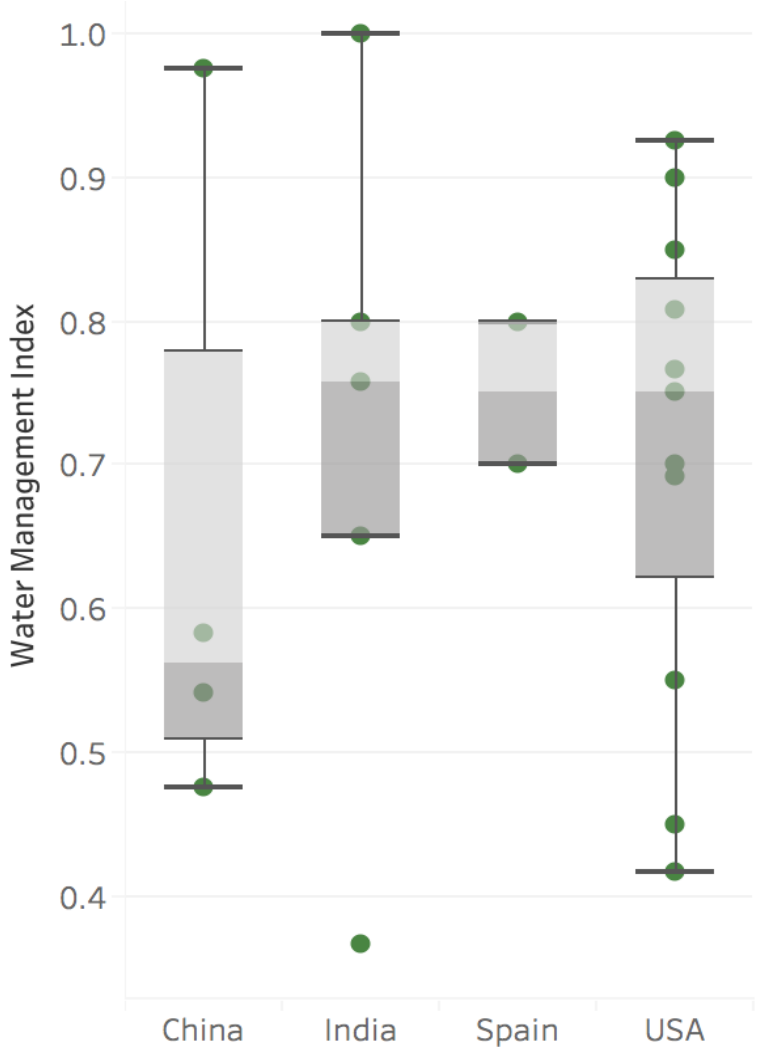
# The data allows for computing and mapping of a global water management index



# The data adds an additional dimension to current water risk assessments



# The data reveals strong variation at the sub-national level

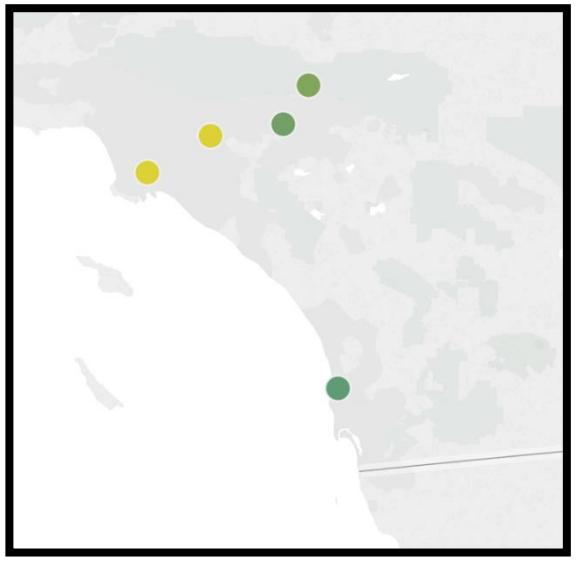


# The data quickly reveals site-specific issues and provides starting points for action

| Indicators | Responses for location X |
|---|---|
| Information on Quantity | Not publicly available |
| Information on Quality | Not publicly available |
| Supply interruptions per year | None |
| Wastewater infrastructure | Collection and Treatment |
| Water Access regulations for Groundwater | + Permit required<br>+ Costs increase with Volume<br>- No Volumetric Limits<br>- No Mandatory Metering |
| There are regular inspections | Usually true |
| There is systematic enforcement | Usually true |
| Water users comply with regulations | Usually true |
| Is there a crisis response mechanism | Yes |
| Type of mechanism | In case a severe drought arrives the authorities will limit access to potable water. |
| Did the mechanism work during the last water crisis | No |

# Is the data valid?

- MIT Master Student Cristina Logg travelled to 8 pilot locations
  - 5 in California, San Diego Area
  - 3 in India, Mumbai Area
- Discussed survey results with 27 local experts (water regulators, NGOs, academics)
  - 3% of the data points were inaccurate
  - Most of these errors can be avoided in the future through adaptation of the survey tool



# Conclusions

1. The approach is feasible
2. The data provide novel and actionable insights
3. The data is valid

… let’s discuss the potential of scaling this method

# Introducing the panelists

Dr. Jutta Hellstern,

Head Water Resources,

Novartis Pharma AG

Dr. Håkan Tropp,

Head Water Governance Programme,

OECD

Jacques Rey

Head of Network Operations

Global Water Partnership

# Appendix for Panelists

# Questions for the panel

- The company experience:
  - Why did Novartis participate in the project?
  - How difficult was it to collect the data?
  - Would you recommend other companies to join going forward?
- The water governance and management landscape:
  - How does this initiative fit into the greater effort to improve water governance?
  - What gaps (in information?, in transparency?, in data sources?) does it fill?
- Multi-stakeholder action on water management:
  - How would multi-stakeholder processes benefit from this project?
  - What are concrete scenarios how the Aqueduct Water Management Atlas could drive better water management?