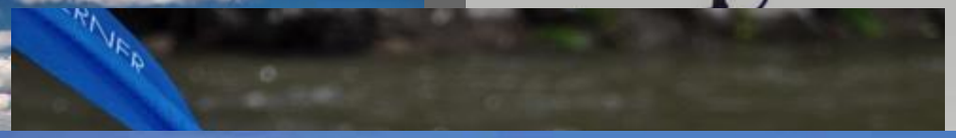
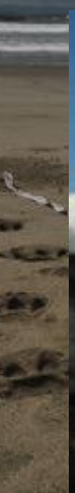
ADVENTURE SCIENTISTS

RIVER MANAGEMENT SYMPOSIUM | OCTOBER 25 2018

VOLUNTEER-COLLECTED WATER QUALITY DATA IN SUPPORT OF DECISION MAKING

What can be accomplished with data collected by volunteers?



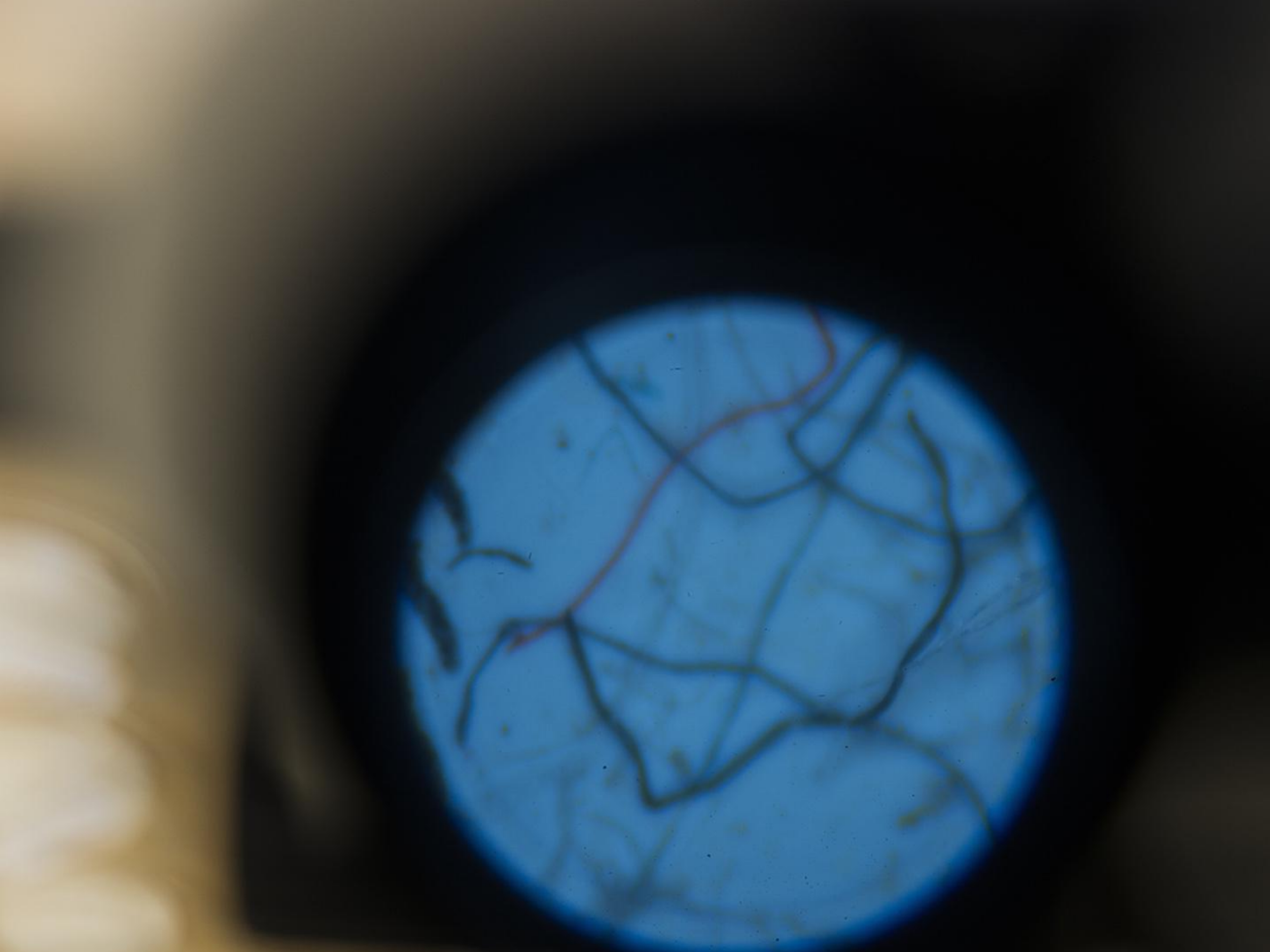


SCIENTIFICALLY VIABLE DATA
AT ANY SCALE. ANYWHERE.

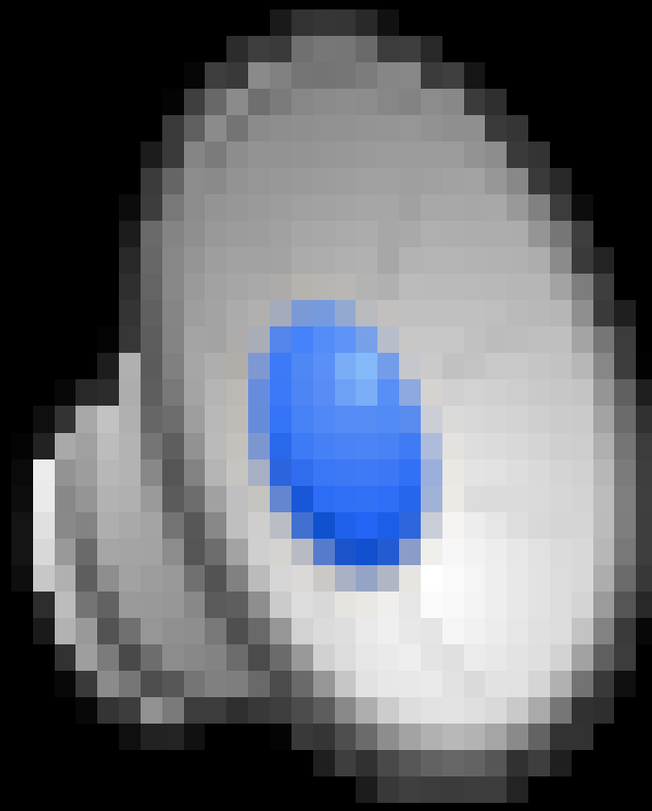
Projects That Fit Our Model

- Environmental or human health issue
- Solution depends on access to data
- Clear pathway to tangible outcomes
- Need for the skills of the outdoor community

PJ 6/11/15 1.35
Micro-ww-11112014-1-Gaia
Blank - tap H2O
old viral
method
6/5/15 1.2L
PJ 6/11/15 1.3L
Micro-ww-11262014-1-Sasquatch
PJ 6/11/15 1.3L
Micro-ww-11262014-1-Sojourner
PJ 6/12/15 1.2L
Micro-ww-11282014-1-Matilda
Micro-ww-11242014-4-
Gaia PJ 6/11/15 1.3L
Blank filtered
sea H2O w/
old viral method
6/5/15 1.2L
PJ 6/11/15 1.3L
Micro-ww-12062014-4-Sasquatch
PJ 6/11/15 1.3L
Micro-ww-12052014-4-Sojourner
PJ 6/12/15 1.25L
Micro-ww-12082014-4-Matilda

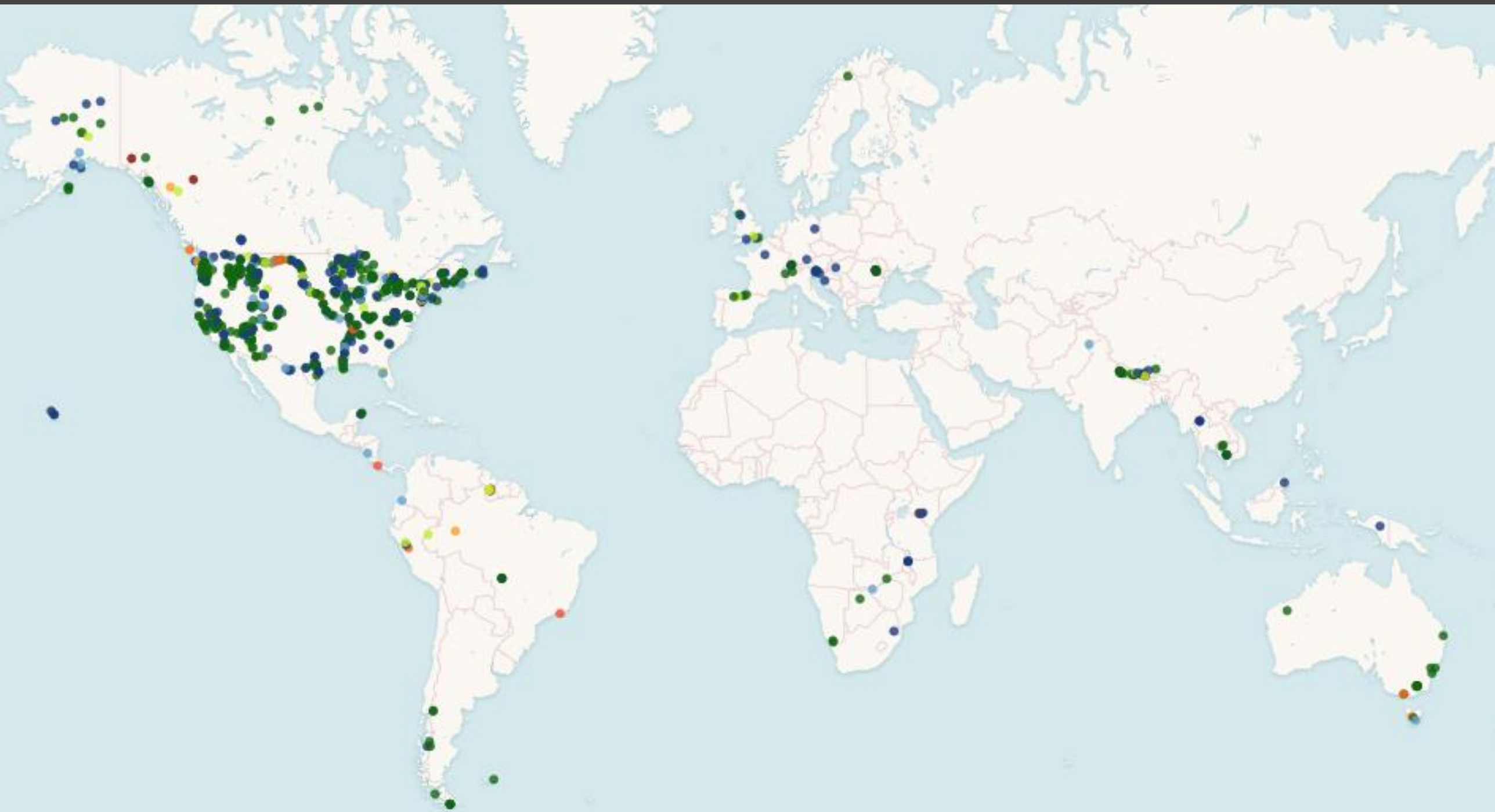


SAMPLE #3



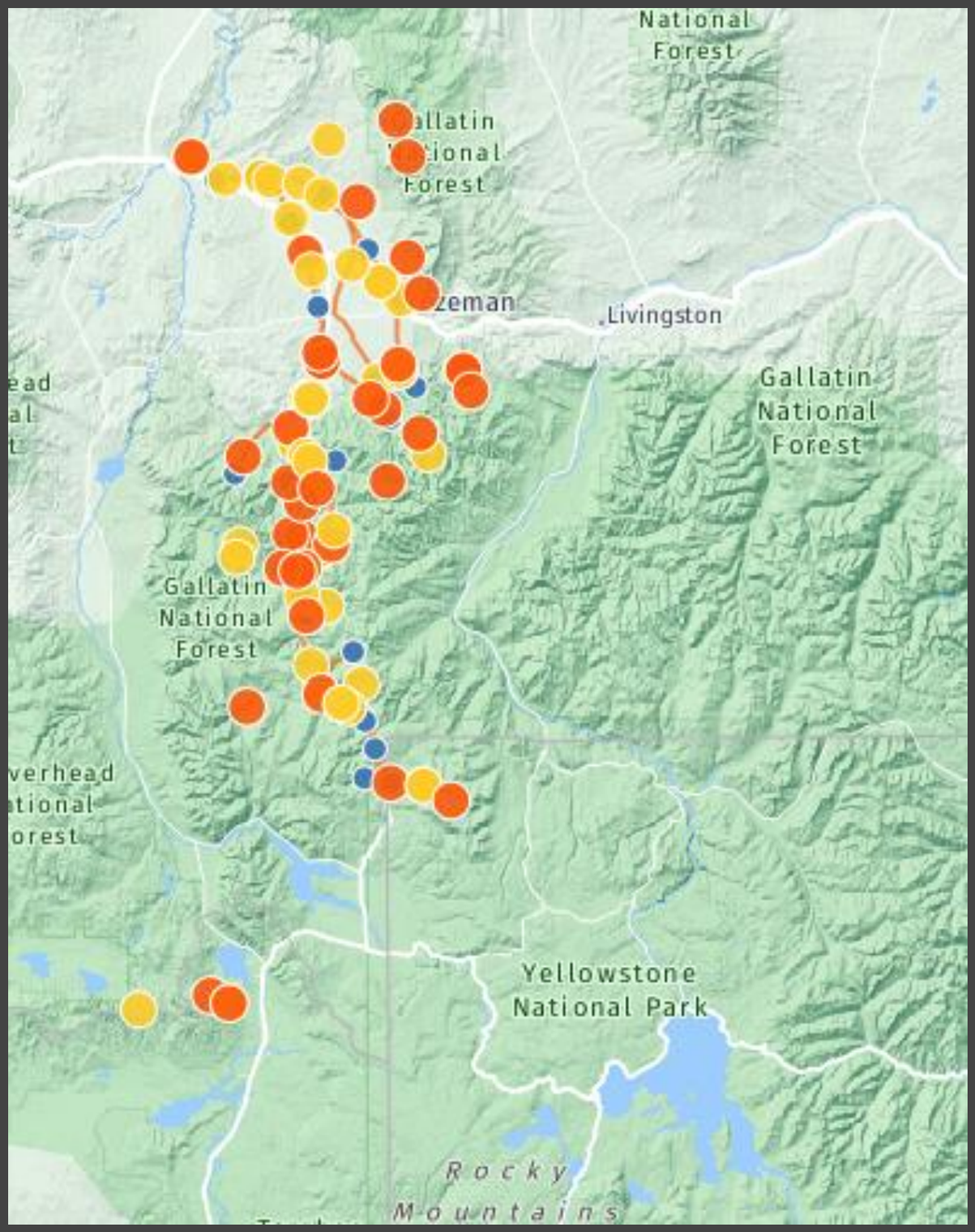
Global Microplastics Initiative

Freshwater Microplastics Dataset



Gallatin Microplastics Initiative

- 72 field sites
- Sampled 4 times/year
- 2 consecutive years
- 117 volunteers
- Final dataset includes 774 samples



What has been accomplished so far?

Microplastics Project Outcomes

- The first maximum contamination limits by the EPA

- Data supported the creation of world's largest Marine Protected Area

- Reduction or elimination of single-use plastics

- Additional volunteer action

Our Wild & Scenic Rivers System

Explore Opportunity With Partners

- What data gaps exist on these river sections?
- What role does water quality data play in decision-making and who is responsible?
- Is there a clear need for Adventure Scientists' volunteer network?

What will be the outcomes of this project?

Clean Water Act

Local river management and planning

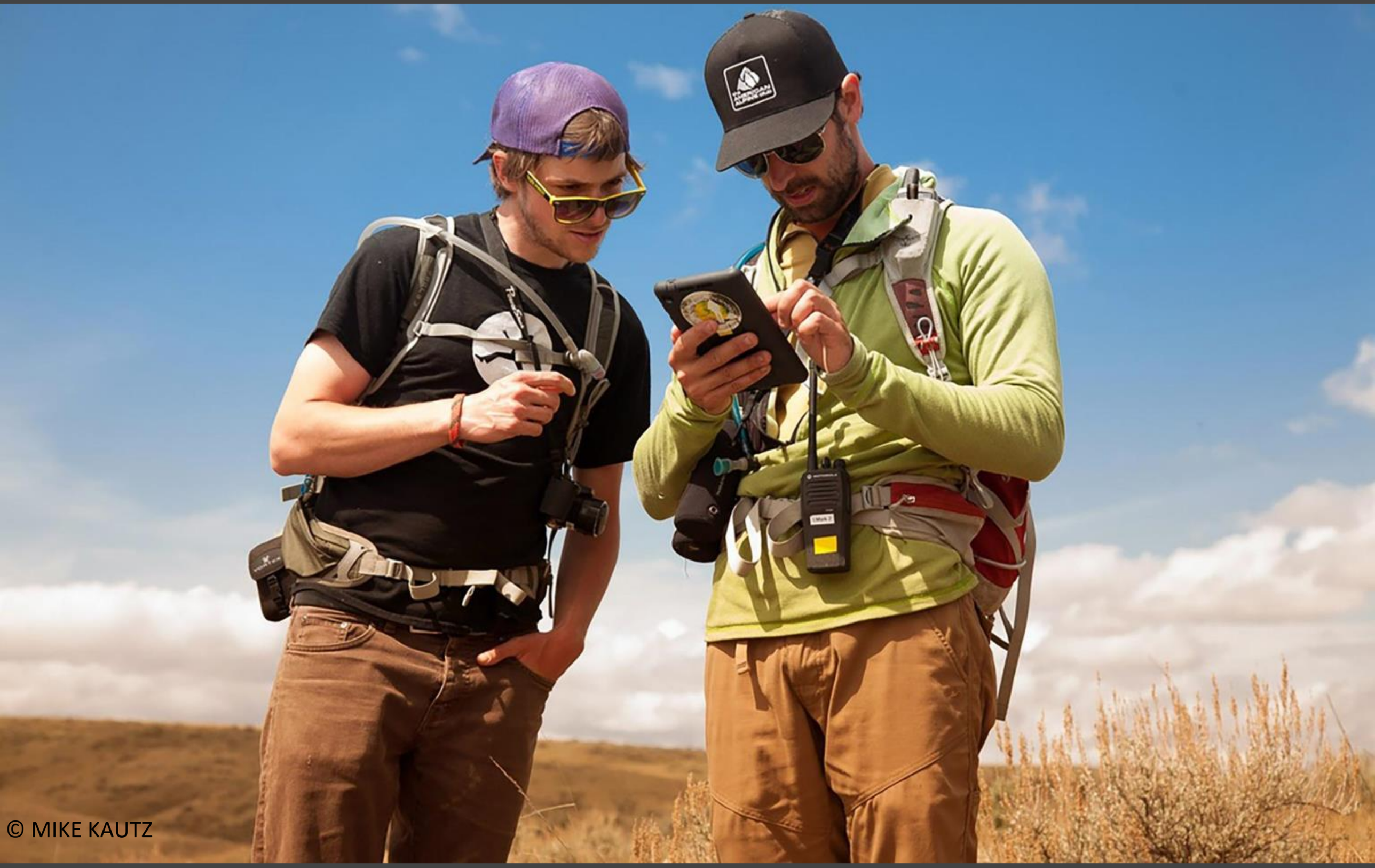
Improved conservation

State and federal agencies' decision-making

Invasive species management

Fisheries health

Collaboration and Discovery



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Partnership Takeaways

1. Patience & persistence

2. Clear objectives & questions

3. Creativity & optimism

DATA. YOU NEED IT. WE GET IT.

WHAT CAN WE HELP YOU ACHIEVE?

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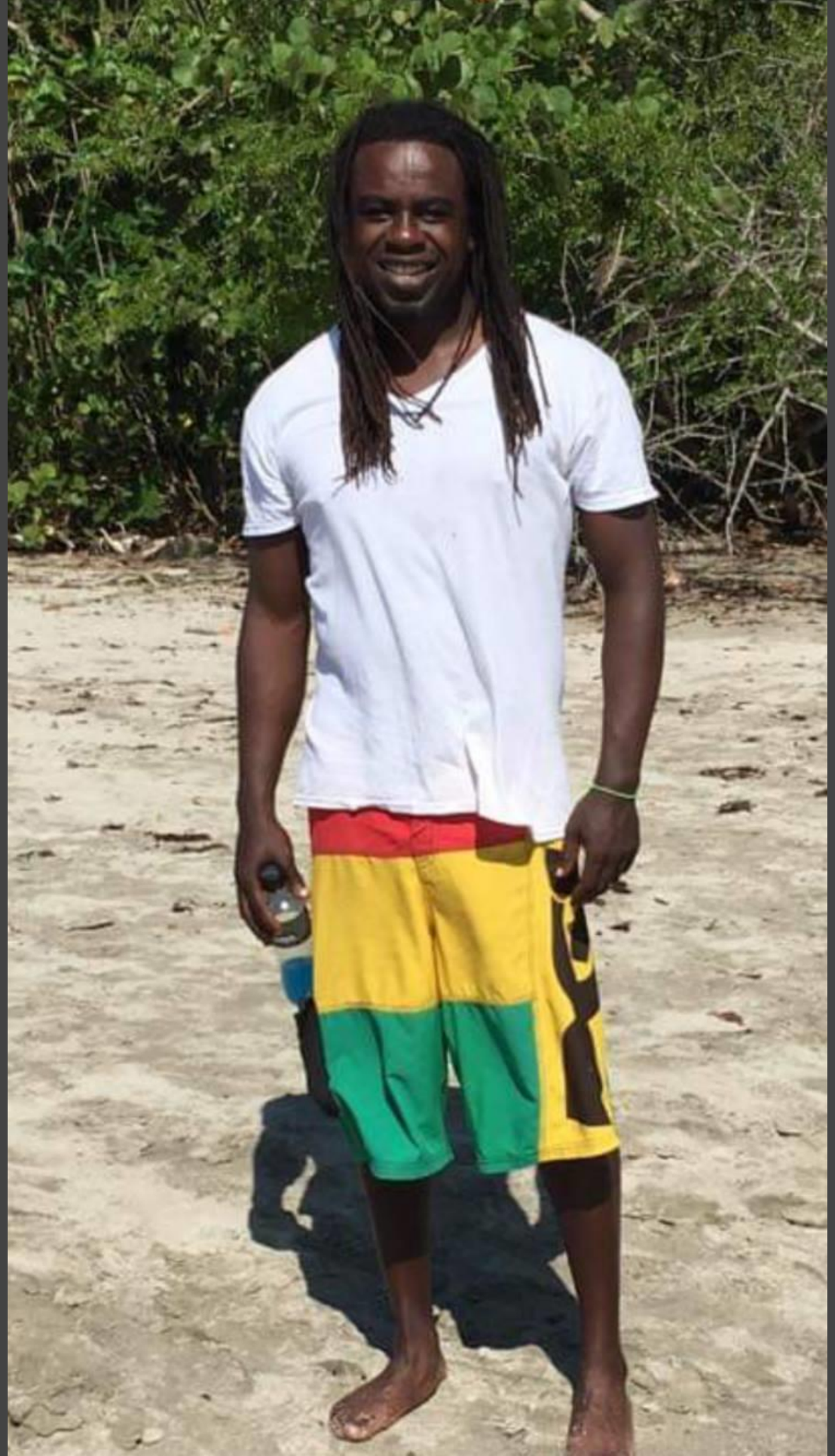

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