



Waterhound Futures, Inc.
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Vision

If we are to ***eliminate contamination*** of freshwater resources, then operators need tools that ***add intelligence*** to wastewater processes and systems



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*turning Wastewater Treatment from a **liability** to an **asset***

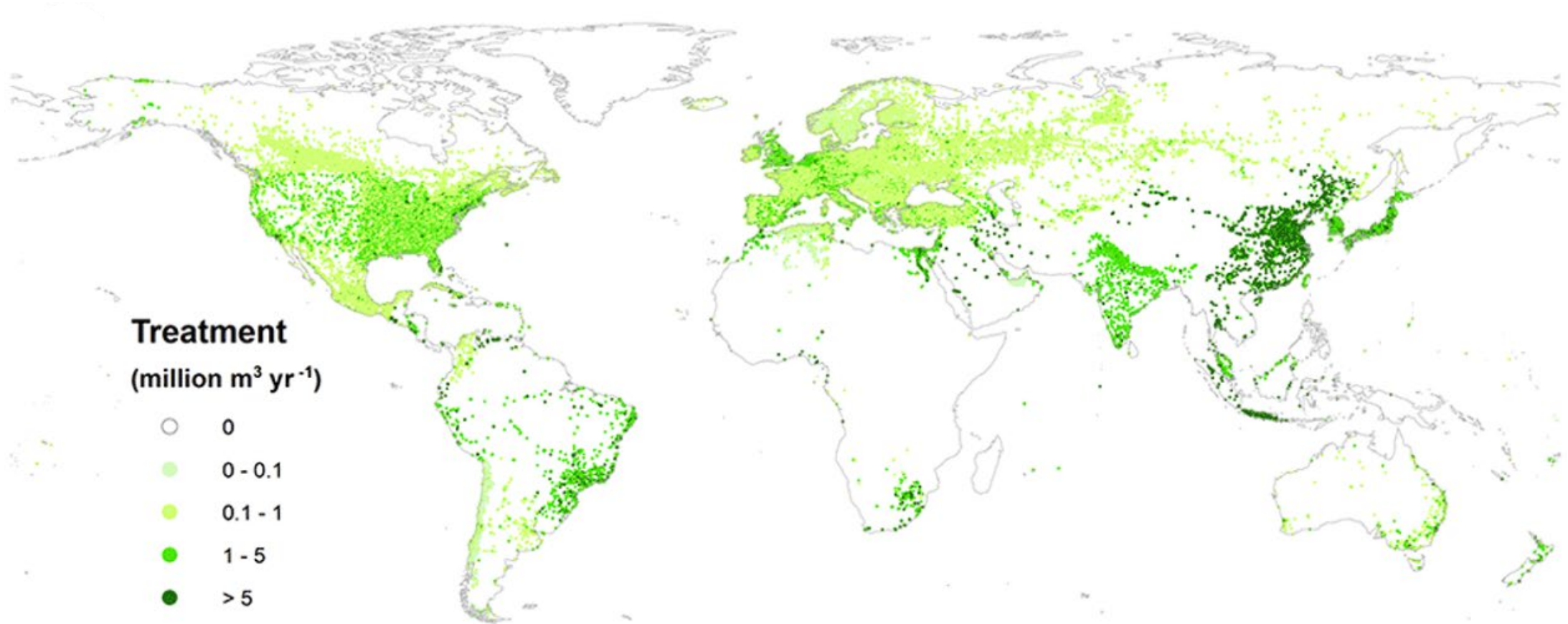


Steps

1. General Analysis and Requirements Gathering
2. Product Design
3. Coding
4. Testing
5. Deployment of product
6. Product Maintenance and Operations

Wastewater Treatment

gridded at 5 arcmin spatial resolution



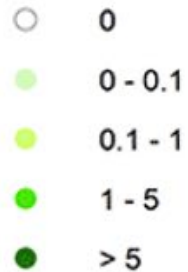
Earth System Science Data

Wastewater Treatment

gridded at 5 arcmin spatial resolution

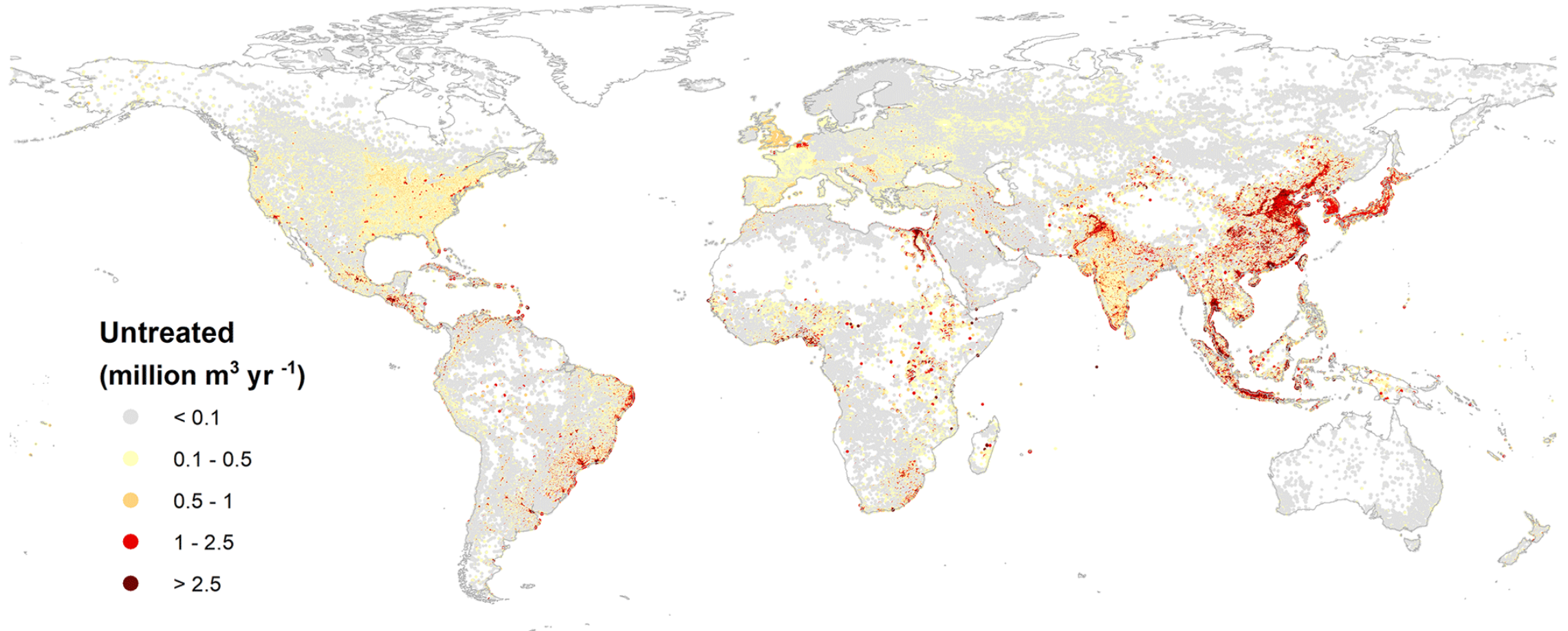
~48% released untreated

Treatment
(million m³ yr⁻¹)



Untreatment Wastewater

gridded at 5 arcmin spatial resolution



Team



Management



Julie King, Co-founder
Managing Director
Queen Mary, University of London,
Law (Hons.)
San Francisco/London



Dr. Tony Jones, Co-founder, Chairman
PhD, Oceanography, University of Hawaii; BA Univ. California, Berkeley
Sacramento



Michael Levey, Co-founder, CTO; software author
BSc Imperial College London
Aberdeen

Extended Team



Jacob Tompkins
The Water Retail
Company, London
Board Advisor



Stuart Orr
Head of Freshwater
Practice
WWF International,
Geneva
Board Advisor



Simon Wigzell
Senior Software Design,
Consultant
BSc. Mathematics
Stockholm Univ.

Partners



Microsoft
for Startups

Predictive simulation modelling **software to optimize** water and wastewater treatment **assets and processes**

- Based on 25 years of observation, data and the fundamentals of science and engineering



Not blue sky technology



Wastewater Treatment Plants Using Portfolio Manager



1,377 Properties



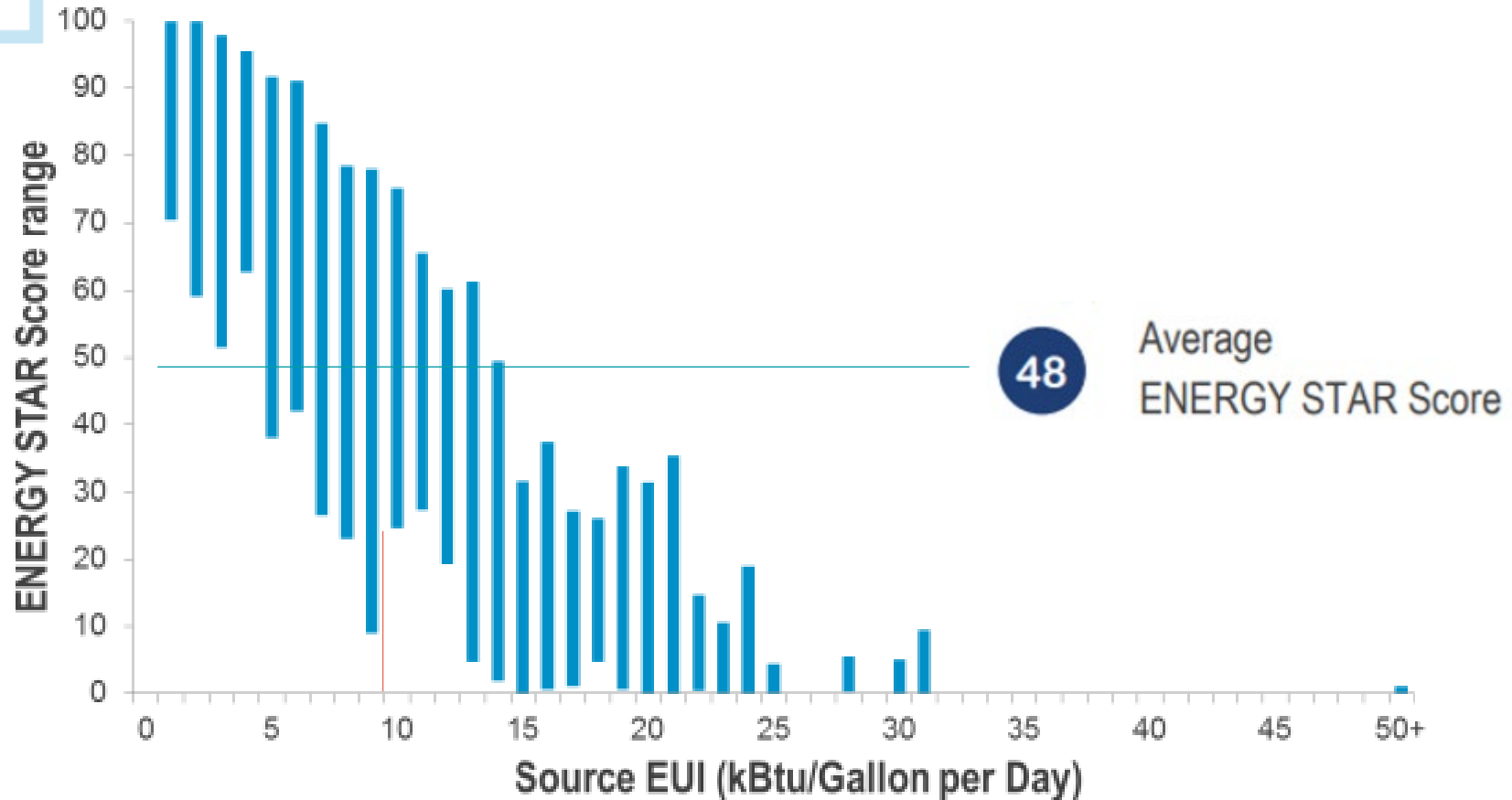
16.8 Billion Gallons per Day

48

Average
ENERGY STAR Score



Score Range for Wastewater Treatment Plants





Category USD	System		OPEX Reduction (%)
	Existing	Modified	
Energy	233,137	199,012	14.6%
WW disposal	189,809	167,712	11.6%
Maintenance	54,596	58,595	-7.0%
Chemical	121,740	105,290	13.5%
Total	599,283	530,599	11.5%

Accomplishments



Waterhound won the AI Tech Challenge
– January 2020.



Waterhound invited into the Global Entrepreneur Programme – June 2020.



Waterhound selected for a prestigious energy efficiency grant in wastewater treatment.
– November 2020.

How can WRF help?

Waterhound seeks wastewater operations (in California) to demonstrate treatment simulation.

Waterhound offers:

- Detailed functional and design specifications for your processes,
- Performance simulation,
- Opex simulation,
- Energy simulation,
- Chemical consumption simulation
- Water quality analysis



CalSEED

Contributions

Waterhound is developing software to add intelligence to wastewater systems so as to eliminate contamination of freshwater resources.

Software is in beta testing.

Waterhound is seeking collaborators to demonstrate the software.

