

USE CASE

# Healthy Watersheds

# Healthy watersheds are critical to healthy communities and healthy economies.

## The Problem: Unhealthy watersheds are costly.

In fact, the cost is staggering;

- Watershed degradation costs global cities roughly **\$5.4 billion per year** in water treatment.
- Health costs for recreating in polluted waters is an estimated **\$2.9 billion per year** nationally.
- Since 1960, U.S. public and private entities have spent over **\$1.9 trillion** to abate surface water pollution.

These are big numbers. Rightly so: mitigating these costs requires a substantial investment in data collection, aggregation, delivery, and use. For decades, that investment has been piecemeal, resulting in disparate data systems capable of providing information relevant to specific watershed components or issues but with large gaps in efficiency and application.

**Until now...**

## The Solution: We've created a next-generation water quality intelligence service.

Healthy watersheds come with incredible cost savings and investing in them is necessary to protect and maintain this vital resource. As a shared asset providing benefits to over 40 million people, the worth of the Colorado River Basin, for example, is estimated between **\$69.2 and \$496.4 billion annually**.

Healthy watersheds mean healthy communities, both physically and economically.

Sources: McDonald, R.I., Weber, K.F., Padowski, J., Boucher, T. & Shemie, D. (2016). Estimating watershed degradation over the last century and its impact on water-treatment costs for the world's large cities. PNAS; DeFlorio-Barker, S., Wing, C., Jones, R.M. et al. (2018). Estimate of incidence and cost of recreational waterborne illness on United States surface waters. Environ Health; Keiser, D. A., Kling, C. L., Shapiro, J. S. (2019). The low but uncertain measured benefits of US water quality policy. Proceedings of the National Academy of Sciences; Earth Economics (2014). Nature's Value in the Colorado River Basin.



# Our work helps you overcome the challenges you face.

## Your Challenge:

## Our Solution:



Persistent lack of data on water quality

- Easy to use, comprehensive data service to allow agencies and stakeholders to solve water and land management problems. Our **TrueQ<sub>i</sub>** (water quality index) provides one simple score from 1-100 for everywhere in the United States.
- Users can easily identify water quality and land use issues and make comparisons in water quality between different times and locations
- Help users to detect, in near real time, potentially dangerous or expensive risks in water quality and affected land and prepare for necessary mitigation measures



Integration of disparate data

- Standardized data on all water system discharges
- Access to online probes that are either riverkeeper owned or owned by chemical companies in charge of National Pollutant Discharge Elimination Systems (NPDES)



Constantly shifting pollutants as economies grow and diversify

- Standardized data on all water system discharges
- Access to online probes that are either riverkeeper owned or owned by chemical companies in charge of National Pollutant Discharge Elimination Systems (NPDES)



Outdated Source Water Protection practices and plans

- A living, breathing Source Water Protection Plan (SWPP), replacing the need to update or add onto the old, fragmented plans
- Dynamic and consistent technical approach
- Consistently updated and actualized to save you the time and money of adding updates to the original SWPP

**It's time to drastically reduce the ongoing rampant cost of unhealthy watersheds. True Elements is your first step and ongoing partner in the solution.**



Confidential and intellectual property of True Elements.  
Subject to non-disclosure. ©Copyright 2022

To learn more: [kinnels@trueelements.com](mailto:kinnels@trueelements.com)