

Thomas
Schumann
Capital

TSC
Water
Risk
Index

TSC
Water
Security
Fund

Advancing UN Sustainable Development Goal #6 “Water Security” by 2030

Prepared for



Water **Action** Hub



CORNER OFFICE



Katie Gilbert

Investors Tackle the Impact of Water Scarcity on Their Portfolios

Dutch pension manager PGGM and U.S. bond shop Breckinridge Capital Advisors are confronting corporate water risk.

INTERACTIVE

Commentary: Wall Street and water — getting a grip on a slippery risk

BY PENSIONS & INVESTMENTS · NOVEMBER 8, 2018 1:00 PM · UPDATED 10:00 AM



Why investors need to be alert to water risk

Channels: Water

Companies: Ceres

People: Monika Freyman

06 December 2017



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Water crises are a top global risk

THE WALL STREET JOURNAL.



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Water: The New Screen for Investment Risk

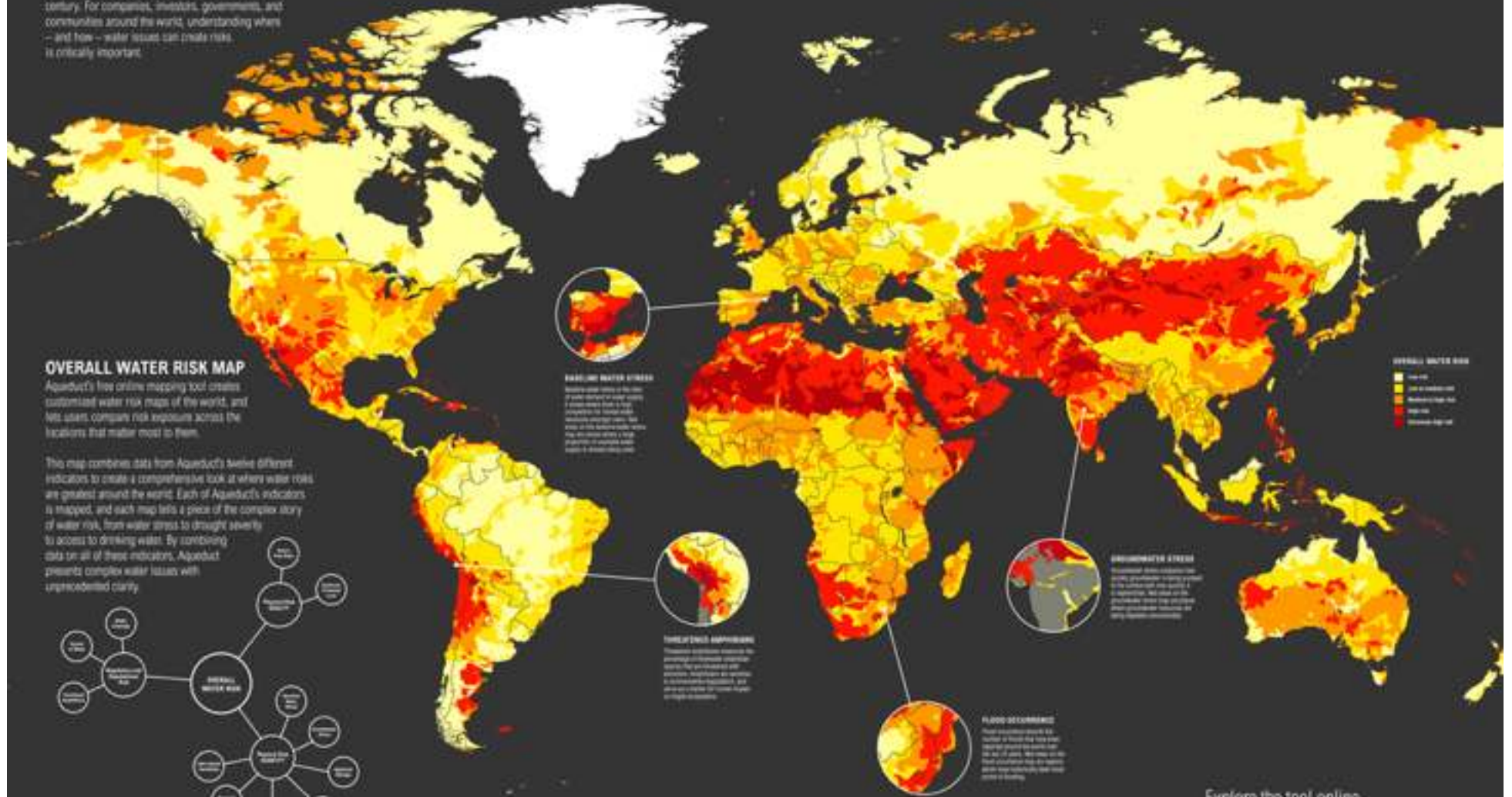
Focus on potential water shortages is part of investors' interest in 'sustainable' investing

WATER RISK

AQUEDUCT™

WORLD RESOURCES INSTITUTE

Water scarcity is one of the defining issues of the 21st century. For companies, investors, governments, and communities around the world, understanding where — and how — water issues can create risks is critically important.



OVERALL WATER RISK MAP

Aqueduct's free online mapping tool creates customized water risk maps of the world, and lets users compare risk exposures across the locations that matter most to them.

This map combines data from Aqueduct's twelve different indicators to create a comprehensive look at where water risks are greatest around the world. Each of Aqueduct's indicators is mapped, and each map tells a piece of the complex story of water risk, from water stress to drought severity to access to drinking water. By combining data on all of these indicators, Aqueduct presents complex water issues with unprecedented clarity.



BASILINE WATER STRESS
Baseline water stress is the risk of water shortage or usage exceeding a country's water supply. It is the most fundamental indicator of water risk, and is the primary driver of water scarcity. High water stress areas are at high risk of water shortages.



GROUNDWATER STRESS
Groundwater stress is the risk of groundwater depletion. It is the risk of groundwater being used faster than it is replenished. High groundwater stress areas are at high risk of groundwater depletion.



FLOOD OCCURRENCE
Flood occurrence is the risk of flooding. It is the risk of water overflowing its banks and causing damage to property and infrastructure. High flood occurrence areas are at high risk of flooding.

OVERALL WATER RISK
Low Risk
Moderate to High Risk
High Risk
Very High Risk



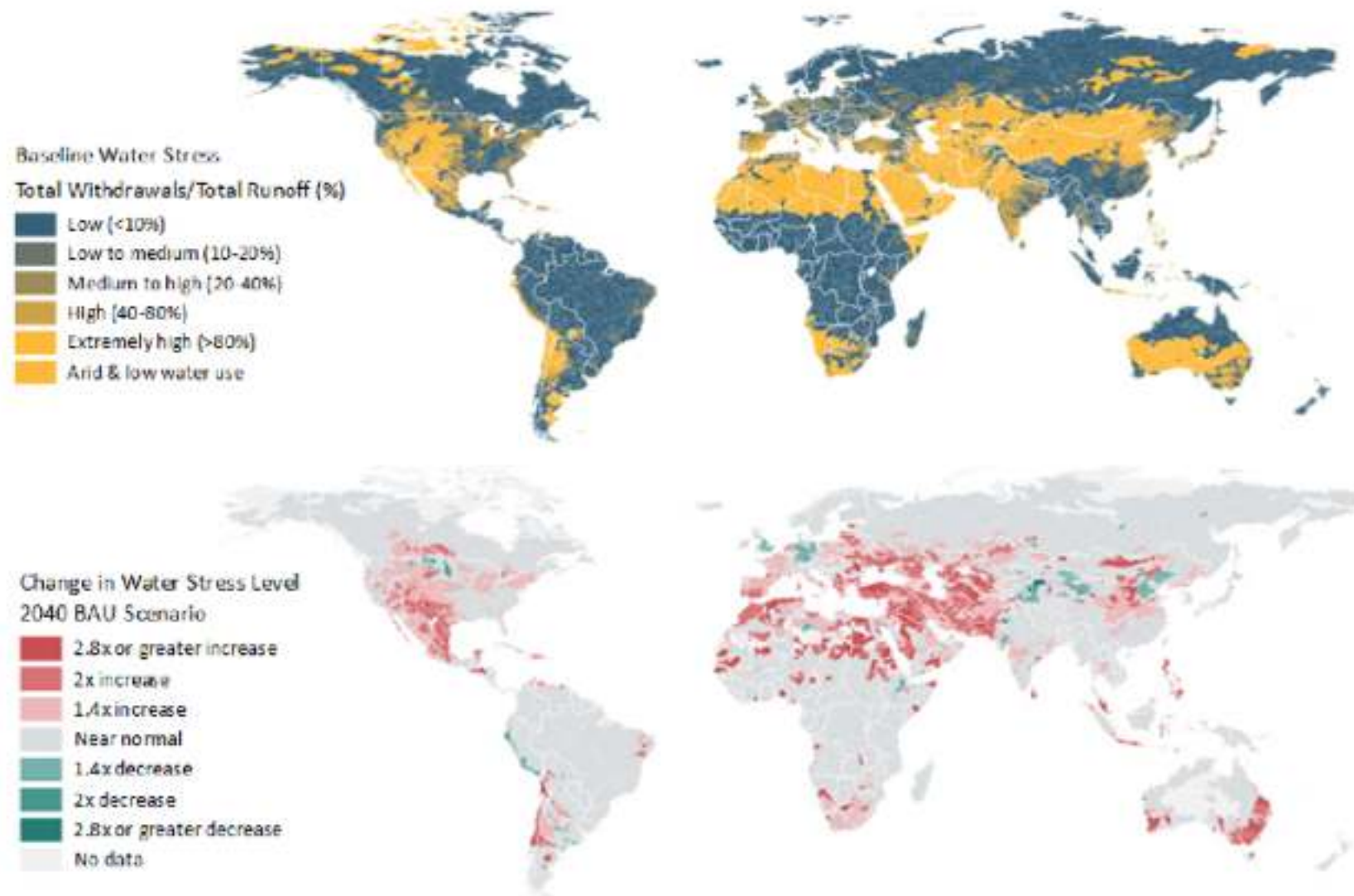
Explore the tool online
WRI.org/Aqueduct

COMPETITION FOR WATER RESOURCES: A CEILING ON ECONOMIC GROWTH

- Climate change and rising demand for freshwater puts greater pressure on existing water supplies and introduces extra uncertainty for companies that are dependent on freshwater.
- On average, 41% of assets owned by companies which are constituents of MSCI ACWI are located in regions of high water stress.



GLOBAL WATER STRESS LEVELS AND 2040 PROJECTIONS



Top 5 risk drivers

No. of risks



-  Increased water scarcity (218)
-  Flooding (204)
-  Drought (197)
-  Increased water stress (184)
-  Climate change (164)

Top 5 risks

No. of risks



-  Higher operating costs (1357)
-  Supply chain disruption (762)
-  Water supply disruption (443)
-  Constraint to growth (269)
-  Brand damage (169)



**Thomas Schumann Capital LLC,
Santa Monica, CA (Index & Fund
Sponsor)**

- Global thought leadership, authority "water risk/water security"
- Proprietary intellectual, human, technological, reputation capital
- Strong global network with all leading NGO's advancing a water-secure world
- Strong relationships with world's leading media and organizations in ESG, environmental & sustainable finance, SRI, RI
- 35 years track record in international business, finance



**Equarius Risk Analytics LLC,
University of Michigan, Ann Arbor
(Index Data Provider)**

- Respected water risk data services firm
- Top quality academic and professional credentials
- 100+ years in water risk and financial risk analytics
- Differentiated Analytical Expertise
- Developer of waterBeta™, an idiosyncratic factor investment strategy
- Integration of machine learning models for risk exposures
- Strong partnerships in FinTech and corporate water risk networks



**LIMEYARD Ltd. Zurich (Benchmark
Index Provider)**

- Experienced team with strong partnerships
- Vienna Stock Exchange (real-time calc. & dissemination)
- Deloitte Switzerland (regulation & compliance)
- Compassites (cloud hosting & management)
- End-of-day & real-time calculation
- Fully compliant set-up:
- IOSCO Principles for Financial Benchmarks EU Benchmark Regulation
- Compliant processes ISAE-3000 certified risk control framework

- World's first benchmark index family capturing core portfolio risk in securities from water exposures
- Capture excess short term non-systemic price volatility
- Integrating geographically granular risk exposures in corporate productivity, efficiency and cost
- Weighing intangibles risk from water using unstructured data
- Targeting \$145 Trillion global AUM by 2025 all of which is exposed to financial water risk
- Serving financial institutions, asset managers, investors, SWFs, Central Banks, insurance & risk

Investor benefits

- Participate in the focus on the companies' excess volatility risk from water events
- Rules-based and transparent
- Factor investment strategy – portfolio risk diversification

- World's first non-thematic fund family capturing sustainable, long-term alpha by mitigating financial water risk
- Capturing global capital flows seeking sustainable long-term alpha, ESG, SRI, financial outperformance
- *First fund family advancing UN's Sustainable Development Goal #6 (sustainable management of water)*
- Housed and distributed ex Luxembourg, world's hub of sustainable finance into all eligible global markets
- Fund and share classes for qualified, institutional and retail investors
- Targeting \$145 Trillion global AUM by 2025 all of which is exposed to financial water risk
- Strong collaborations: United Nations, CDP, PNRI, World Resources Institute, LuxFLAG



WORLD RESOURCES INSTITUTE



SUSTAINABLE DEVELOPMENT GOALS



The CEO Water Mandate



LUXFLAG Supporting Sustainable Finance

THE LEGAL BIT DISCLAIMER

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