
SCIENCE BASED TARGETS NETWORK
GLOBAL COMMONS ALLIANCE
WEBINAR
PUBLIC CONSULTATION
Science-based targets for Freshwater | Version 2 Draft
SEPT 11, 2025 | 10-11 AM ET

SBTN INTRODUCTION

Dr. Varsha Vijay
Technical Director
Science Based Targets Network (SBTN)

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AN INTEGRATED APPROACH TO NATURE ACTION

5 key action areas

Reducing carbon emissions

Preserving freshwater resources and water security

Supporting biodiversity and ecosystem services

Preserving and regenerating land systems

Securing healthy, diverse oceans

SBTN enables companies to take **enough** of the **right actions** in the **right places** at the **right time** to do their part to halt and reverse nature loss by 2030

SBTN'S 5-STEP APPROACH TAKES COMPANIES THROUGH TARGET SETTING

1 Assess

- Materiality Screening
- Value Chain Assessment

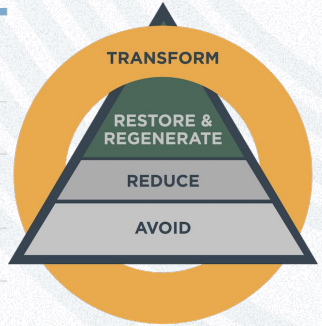
2 Interpret & Prioritize

- Target Boundary Delineation
- Interpretation & Ranking
- Prioritization

3 Measure, Set & Disclose

- Baseline Pressure Calculation
- Target Setting
- Submission for Validation
- Target Disclosure

4 Act



5 Track

- Monitor
- Report
- Verify

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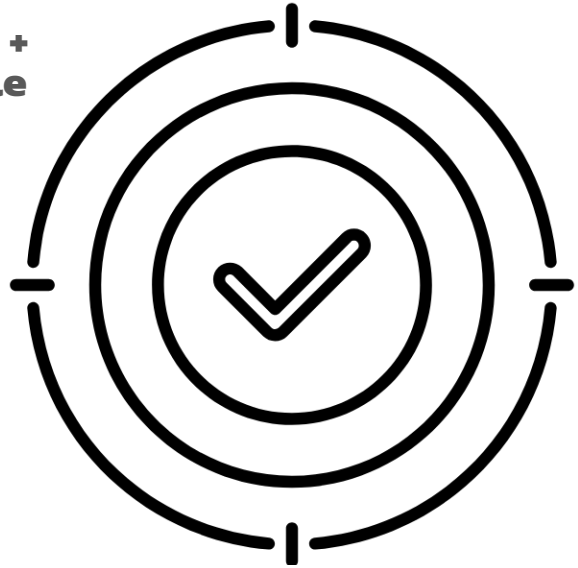
HOW SCIENCE BASED TARGETS CAN STRENGTHEN CORPORATE ACTION



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WHY FRESHWATER TARGETS MATTER

Water risks are escalating – droughts, pollution, aquifer depletion, and competition for scarce resources threaten operations and supply chains.

Why science-based targets?

- Move beyond disclosure
- Resilience and credibility
- Stakeholder alignment
- Prepared for regulation

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COMING SOON: ACCELERATED PATHWAYS
HELPING COMPANIES TAKE CREDIBLE ACTION SOONER

Available late September: SBTN's first offering under Accelerated Pathways supports credible target-setting with a more focused scope from the outset: helping companies move faster by starting where they have the most traction and where nature needs it most.

Why it matters

Get to credible action sooner

Begin value chain assessment and target-setting with a narrower scope

Focus where it counts most

Initial efforts where companies have greatest traction, influence and data – aligned to where their activities have biggest impact on nature

Prove what's possible, then scale

Demonstrate early results, build internal buy-in, and lay the foundation for full target coverage over time

How it works

- ➔ After completing a high-level sector screening (*Step 1a*), companies can focus the next steps (*Step 1b onward*) on:
  - → Specific environmental realms (e.g., land, freshwater)
  - → Targeted value chain segments (e.g., direct operations, upstream)
  - → Distinct business units
- ➔ This *modular target-setting* approach ensures companies can start where they are ready, without compromising credibility

HELP SHAPE VERSION 2 FRESHWATER TARGETS

Your collective insights will help ensure the final guidance is both scientifically robust and practical for corporate action.

We invite broad and inclusive feedback on the draft methods **until October 9**.

REVIEW THE DRAFT GUIDANCE AND PARTICIPATE IN THE PUBLIC CONSULTATION

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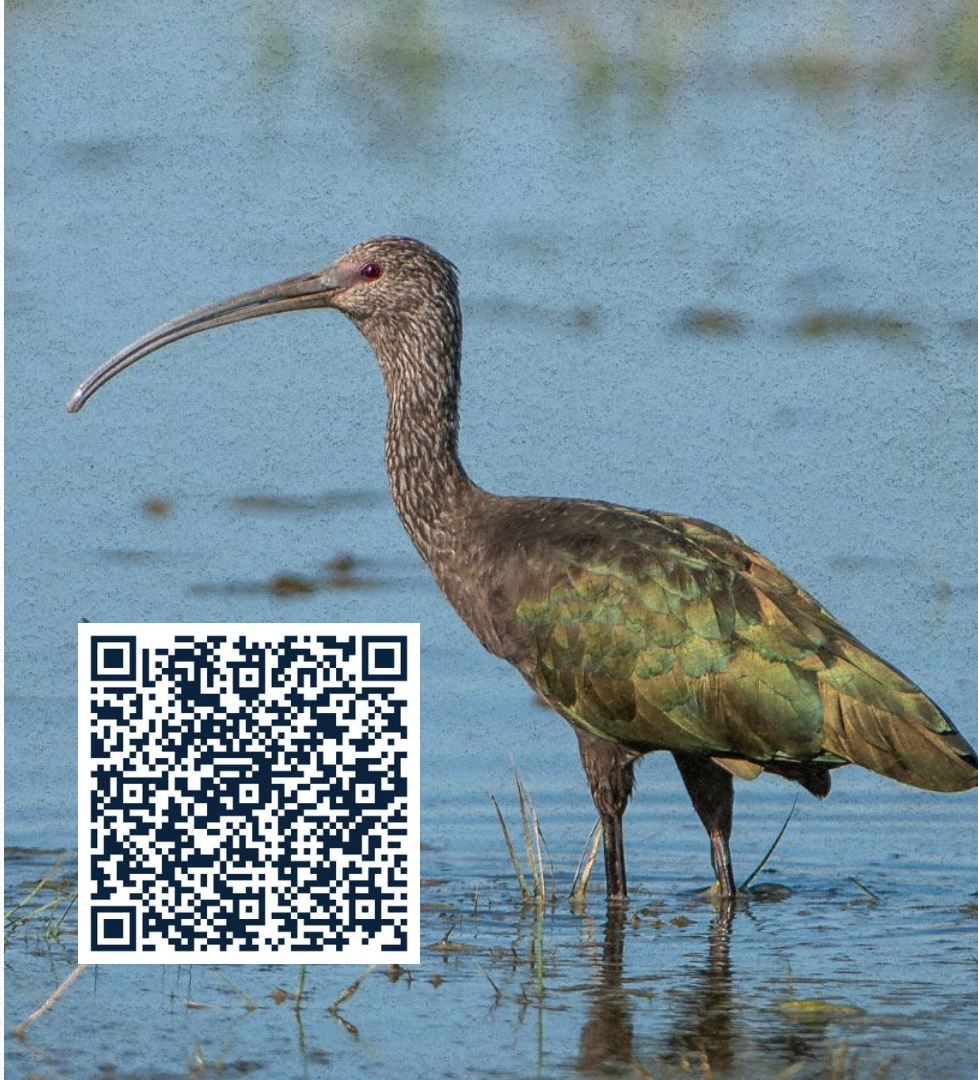

VERSION 2 FRESHWATER TARGETS

Sara Walker
Director, Corporate Water Engagement
World Resources Institute

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SBTN FRESHWATER HUB MEMBERS

WWF

WORLD RESOURCES INSTITUTE

CDP

The Nature Conservancy

PACIFIC INSTITUTE

CONSERVATION INTERNATIONAL

SBTN FRESHWATER HUB FUNDERS

WALTON FAMILY FOUNDATION

GORDON AND BETTY MOORE FOUNDATION

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FRESHWATER TARGETS | WHERE ARE WE

40%

of water disclosers have set water-related targets*

+30%

increase from 2023 in the number of companies setting water-related targets*

SBTN Stats:

3

Companies with publicly validated freshwater targets

10

Companies with validated freshwater targets

150+

Companies actively setting SBTs

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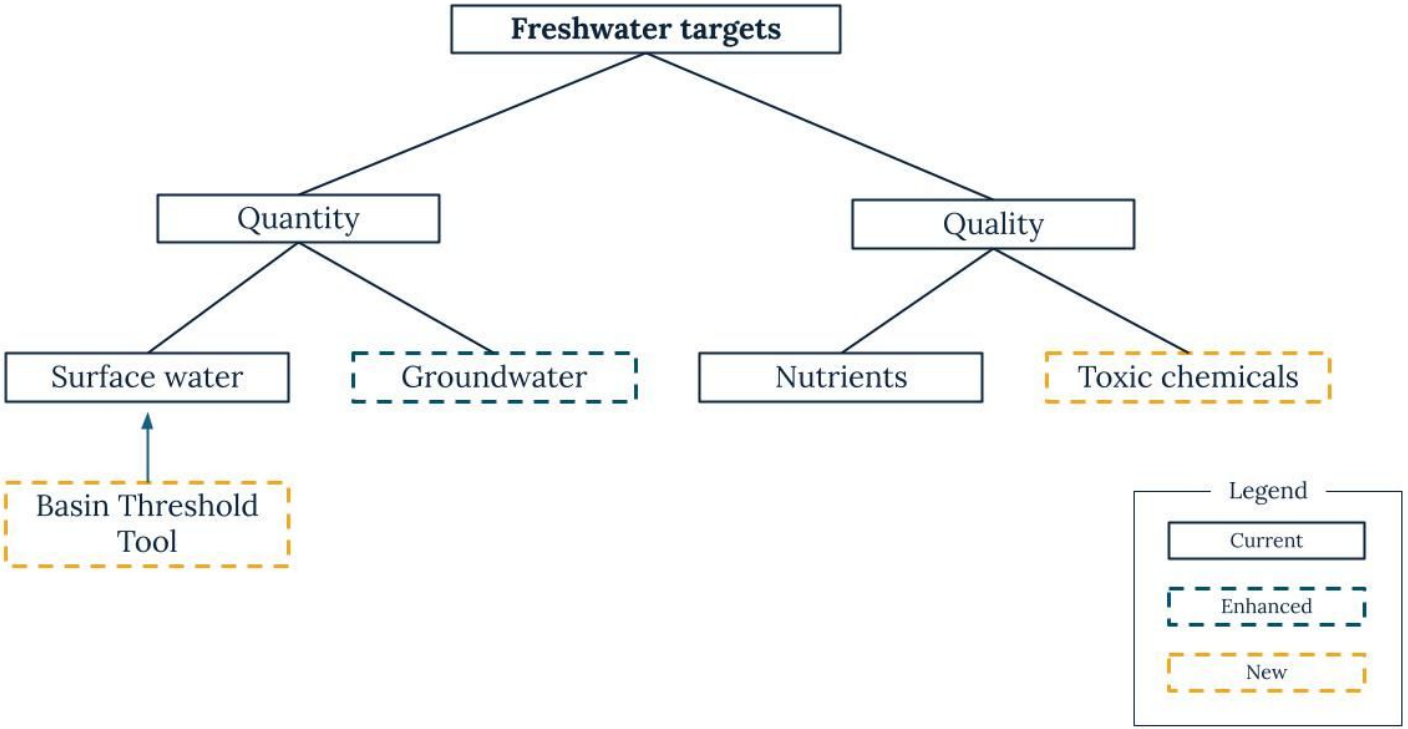
* CDP 2024 Disclosure data

FRESHWATER TARGETS | EXPANSION



VERSION 2 WILL EXPAND THE SCOPE, VERSION 1 ENABLES CORPORATE ACTION NOW

Version 2 (mid-2026): Expands coverage beyond the current set of freshwater targets to include toxic chemicals and groundwater.

Action now: Companies don't need to wait – Version 1 provides a stable framework addressing surface water withdrawals and nutrient pollution (nitrogen and phosphorus)

Continuity: Version 1 will remain available until 6 months after Version 2 launch, ensuring stability and giving companies confidence to act today

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TOXIC CHEMICALS

Sara Walker
Director, Corporate Water Engagement
World Resources Institute

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FRESHWATER QUALITY GUIDANCE EXPANSION | TOXIC CHEMICALS - PESTICIDES

Why do we focus on pesticides?

- Pesticides are intentionally toxic
- Relative data availability
- Complementing SBTN's focus on food and textile
- Supporting global frameworks:
  - **Global Biodiversity Framework - Target 7b** on reducing the overall risk from pesticides and highly hazardous chemicals by at least half until 2030
  - **Global Framework on Chemicals - Target 7** on phasing out highly hazardous pesticides by 2035

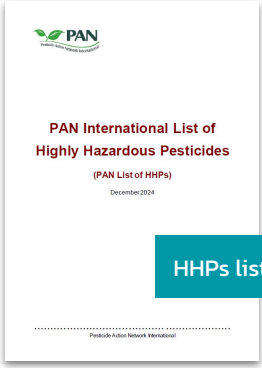
How does the guidance connect to the freshwater nutrient targets?

- Adding a major aspect of water pollution through agriculture
- Separate pathway focusing on pesticide impacts on farm and basin level
- Synergies in data collection - existing local engagement with farmers and other stakeholders can be leveraged
- Pesticides and nutrients have drivers, loss pathways and leverage points in common and should be tackled together

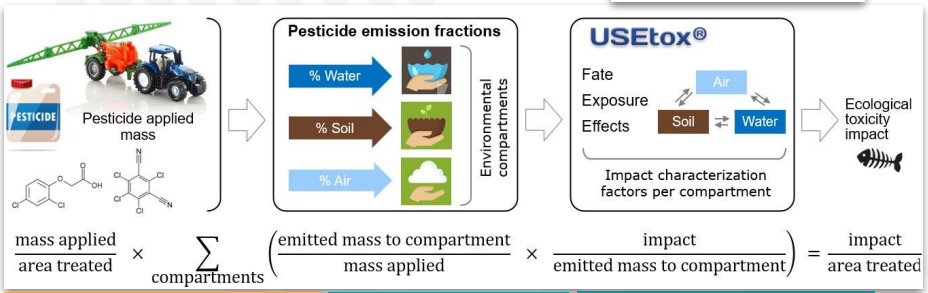
MAIN TASKS AND DATA REQUIRED

1. Identify pesticides and check against highly hazardous pesticides (HHP) list
2. Where possible, collect farm-level data on pesticide use and emissions and quantify impacts with the Pesticide Impact Quantification Tool
3. Consult with local water authorities on threshold concentration transgressions

Pesticide name and CAS number



HHPs list



Primary farm-level data on use (and emissions if available)

Generic emission fractions from the PestLCI model

Impact characterization factors from the USEtox model

Primary data

Secondary data

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TARGET TYPES | HIGHLY HAZARDOUS PESTICIDES CESSATION AND PESTICIDE IMPACT REDUCTION

Highly Hazardous Pesticides Cessation Target

- Commitment to stop the usage and production/trade of highly hazardous pesticides

Relevant for: Companies producing or sourcing agricultural commodities and companies producing or trading pesticides or plant protection products.

Pesticide Impact Reduction Target

- Commitment to a 50% reduction of pesticide impact in a basin and not contributing to local threshold transgressions

Relevant for: Companies producing agricultural commodities and companies sourcing agricultural commodities with close ties to farmers (at specific locations).

PUBLIC CONSULTATION

Example questions:

- Do you think the targets will result in positive impacts without resulting in or encouraging negative impacts on other aspects of nature or societal concerns?
- Would you like to see value chain engagement targets for the draft guidance? (Including examples)
- Are there models, datasets, or other resources not referenced in the guidance that you would recommend for baselining or target-setting?
- How can this guidance be made more practical to account for differences in value chain position and archetype on reducing pesticide impacts?

We are specifically looking for insights and feedback from:

- Companies which are producing agricultural commodities or procurers with close relationships to suppliers and farmers
- Farmers and farming associations, specifically if there are ongoing interactions with downstream companies
- Local water authorities and water quality experts
- Ecotoxicology experts
- Agricultural and pest management experts

Public consultation resources

GROUNDWATER

Dr. Allen Townsend

Senior Program Officer, Freshwater Metrics & Stewardship

World Wildlife Fund

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FRESHWATER QUANTITY GUIDANCE EXPANSION | GROUNDWATER

Why are we expanding groundwater?

- Drinking water supply
- Fosters groundwater-dependent ecosystems
- Important contributor to stream flows
- Supports agriculture and industry
- Broader applicability and alignment with leading frameworks

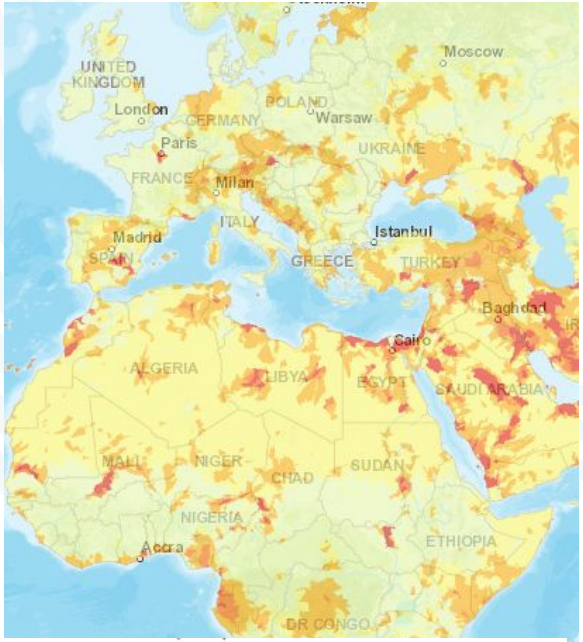
How will the guidance change?

- v1.1 defined the amount of water use a company can have in a basin while being protective of environmental flow requirements
- v2 will define the amount of water use a company can have in a basin while being protective of environmental flow requirements and groundwater levels
- The approach remains consistent with SBTN's existing methodology

CHANGES TO V1.1 PROCESS | SCOPE

Groundwater-specific targets are only required for basins experiencing groundwater decline

Water Risk Filter:
Groundwater Depletion



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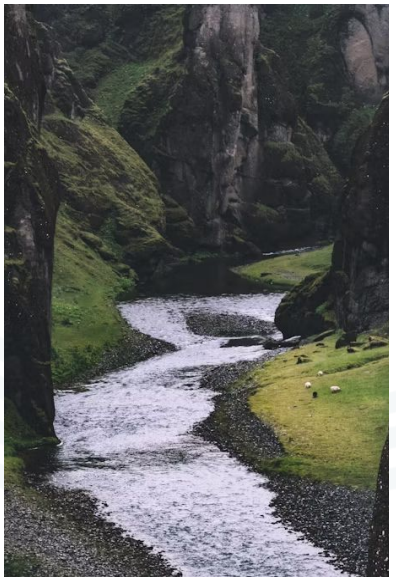
CHANGES TO V1.1 | INPUTS

Companies are required to compile their water use over the previous five years ("Baseline water use")

- v1.1 required only total water use, regardless of source
- v2 **requires disaggregation** to distinguish whether water supply comes from groundwater and/or surface water

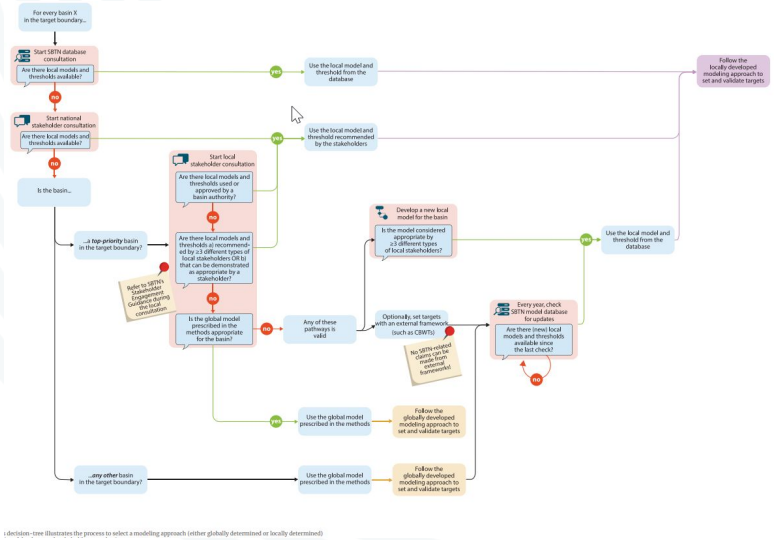


CHANGES TO V1.1 PROCESS | MODEL SELECTION

As in v1.1, companies must choose whether to use a local or global model for target-setting

V2 will not require obtaining and running local groundwater models

- If a groundwater management plan exists, use it as the basis for setting targets
- If no management plan exists, use global model (if appropriate)



A decision-tree illustrates the process to select a modeling approach (either globally determined or locally determined)

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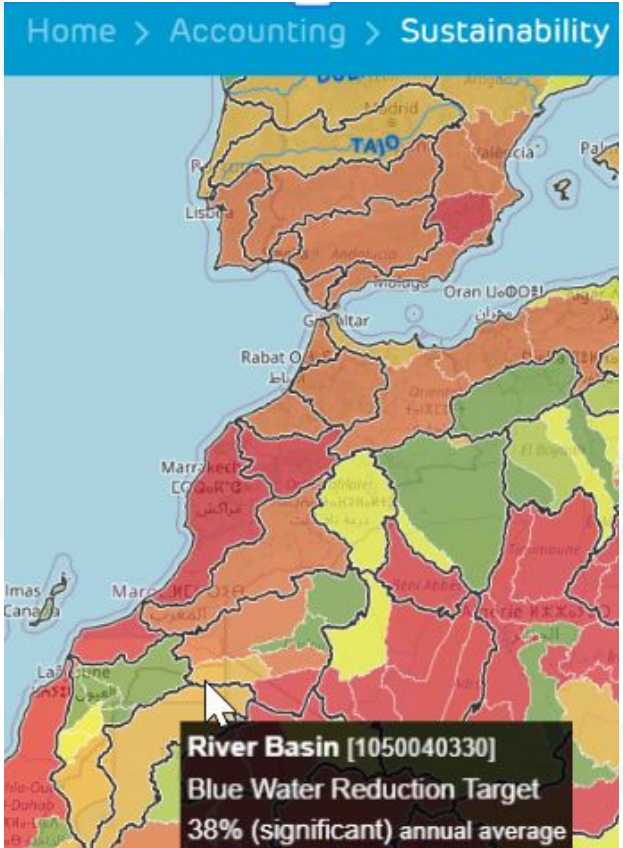
CHANGES TO V1.1 PROCESS | REQUIRED REDUCTION

Apply Global-scale Surface-water Groundwater Model (GSGM) to define the percent reduction in groundwater pumping required to:

- Maintain stable future aquifer levels
- Maintain aquifer levels within root zone for groundwater-dependent ecosystems

Results to be provided in a similar interface as global hydrology model



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CONSULTATION | QUESTIONS

11 groundwater-specific questions

2. The proposed global modeling approach uses two models to determine groundwater targets (Global-scale Surface-water Groundwater Model (GSGM) and Hogeboom). Are there other models or threshold approaches that you firmly believe we should consider?
6. The proposed approach for setting targets to restore a depleted aquifer is based on reductions necessary to attain long-term, steady state acceptable levels. Should system response time be considered, i.e. set targets at levels that attain acceptable conditions within a specific time period?

BASIN THRESHOLD TOOL

Dr. Angela Bowman
Director, Freshwater Metrics & US Waterscapes
World Wildlife Fund

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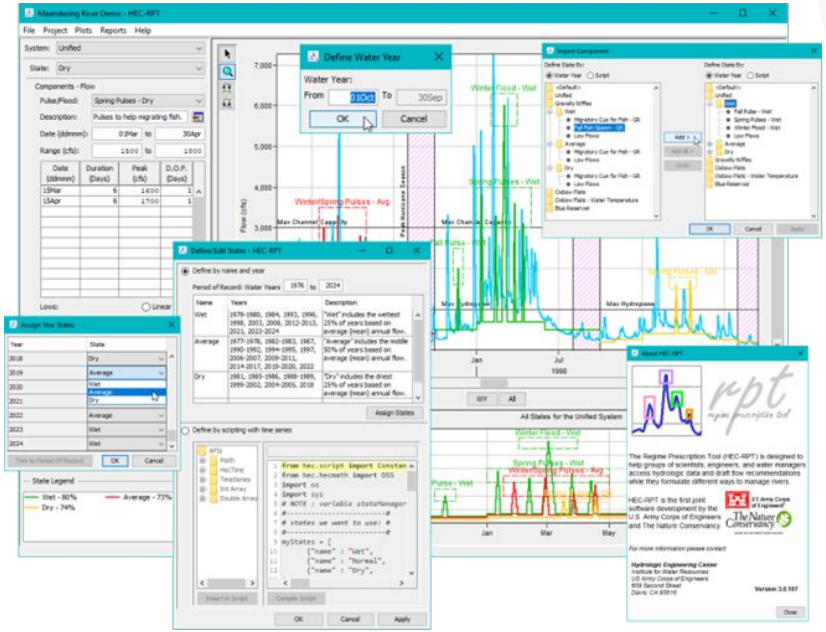
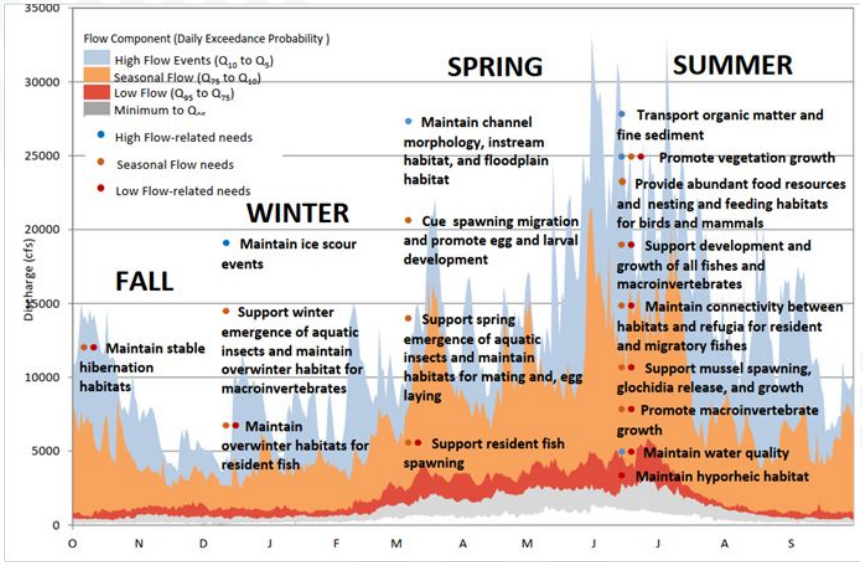
What is the Basin Threshold Tool?

At its core, the Basin Threshold Tool is a DATABASE of information





(Source: Iowa River Environmental Flows Report)

BASIN THRESHOLD TOOL VERSION CONTROL

Version *alpha*

- Excel-based global environmental flows database
- 1,345 local e-flows assessments
- **1,194 unique sites across 25 countries**
- Focus on e-flows threshold for surface water quantity.

Version 0.1

- Builds on version *alpha*
- **Relational database** framework, sets the stage for web-based infrastructure
- Select US Mississippi basin sub-watersheds in the database; includes GW, WQ.
- **First public release**, available on SBTN resources.

Future

- BTT versions will coincide with FW Technical methods V.2 timeline.
- Fully web-based interface.
- **Accelerate populating the BTT with priority basins identified through corporate water stewardship programs.**
- Continue testing and refining in real-world application with companies.

BASIN THRESHOLD TOOL SCALING

- Data collected or derived at different scales
- Important to provide data in native scale, while acknowledging not all data appropriate for target setting
- Connecting scales critical for end users to make the most informed decisions
- Framework report provides more detail

Spatially nested basin sales
Pfafstetter Coding System | HydroBASINS Level | Hydrologic Unit Code (HUC)

Pfafstetter | HUC | HydroSHEDS Basin Level (level determined by scale adopted in local approach)	HydroBASIN varies globally	HUC2 (Upper Mississippi)	
Pfafstetter 5 - Freshwater **Quantity** Surface Water and Groundwater (global approach)	HydroBASIN 5	HUC2-4 (Iowa-Skunk-Wapsipinicon)	
Pfafstetter 6 - Freshwater **Quality** (global approach)	HydroBASIN 6	HUC6 (Iowa)	
(Local approach)	HydroBASIN 7	HUC8 (Middle Cedar)	

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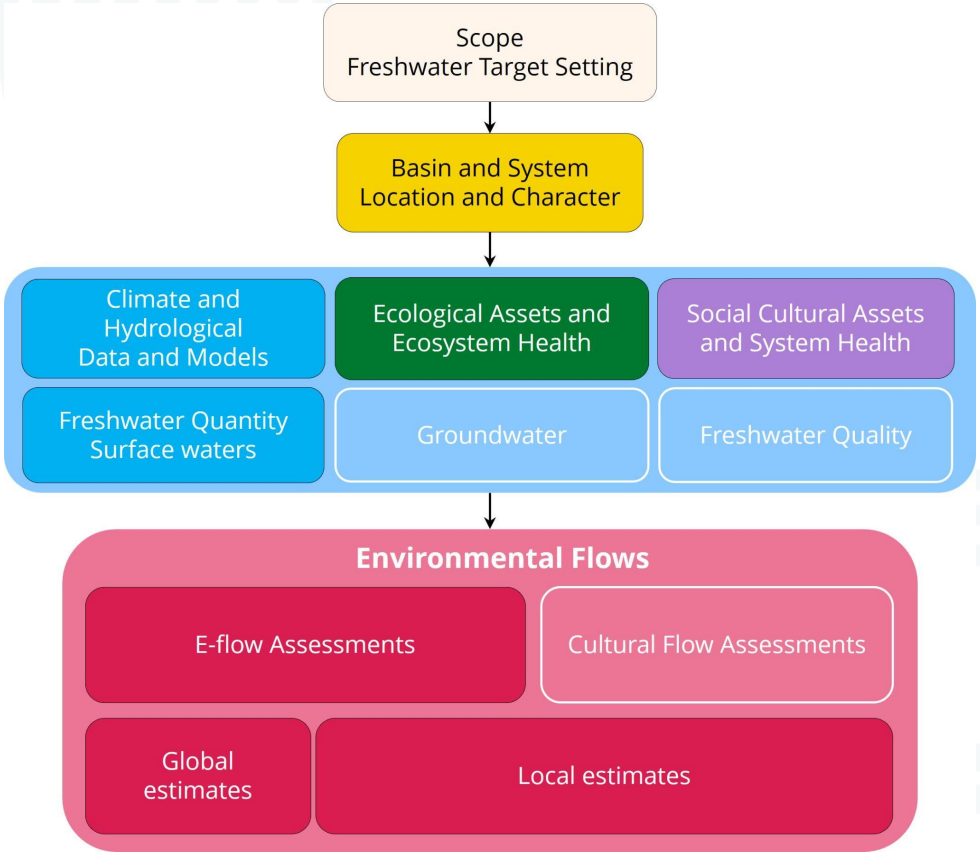
BASIN THRESHOLD TOOL FRAMEWORK

- Core components of the BTT framework as part of v.0.1 release
- Continue to build on the core components
- Each component is its own table in Excel-based relational database
- More detail in the framework report and v.0.1 available in SBTN resources.



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OTHER UPDATES

Dr. Allen Townsend

Senior Program Officer, Freshwater Metrics & Stewardship

World Wildlife Fund

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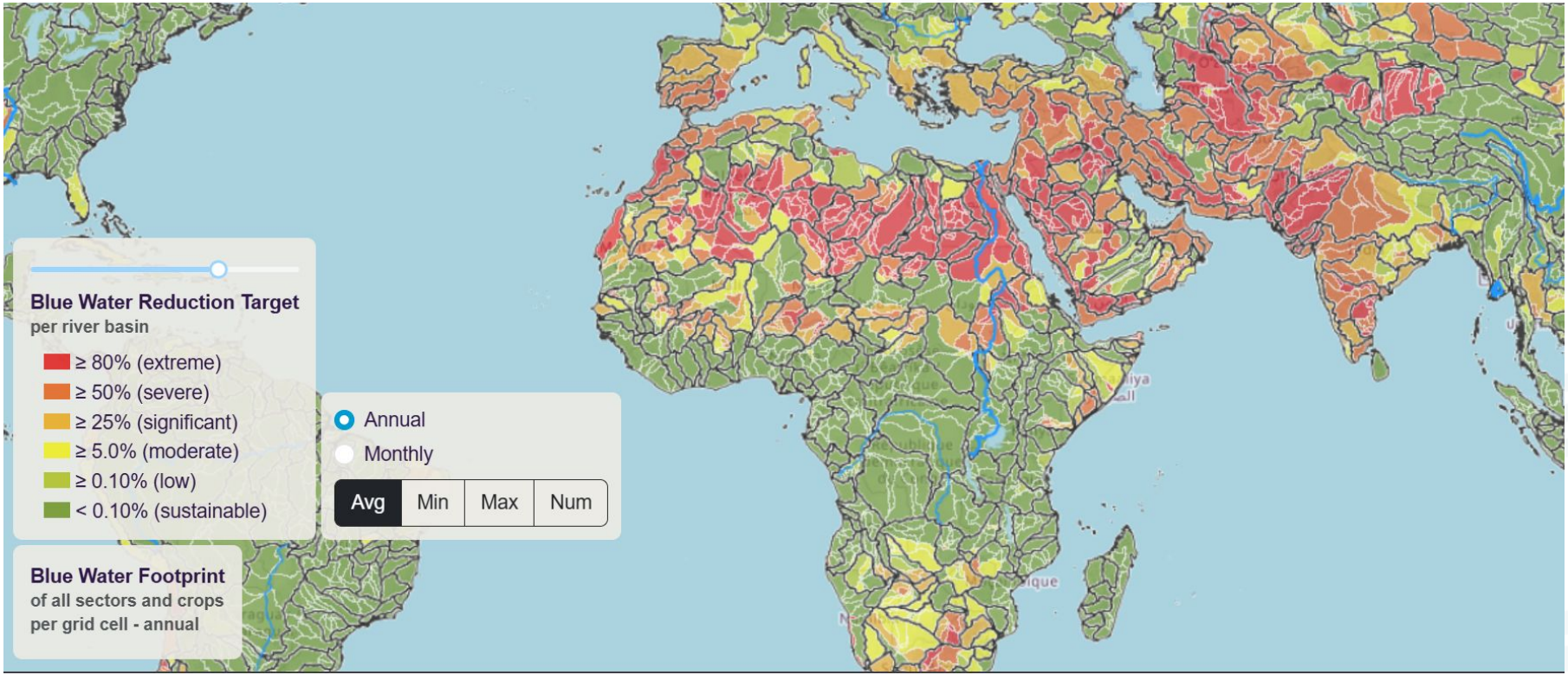
GLOBAL WATER QUANTITY MODEL UPDATE



UPDATE OVERVIEW

Blue Water Availability (BWA) replaces the prior global dataset (1971–2010) with the latest (1971–2019). This means a gain of almost a decade of time series data.

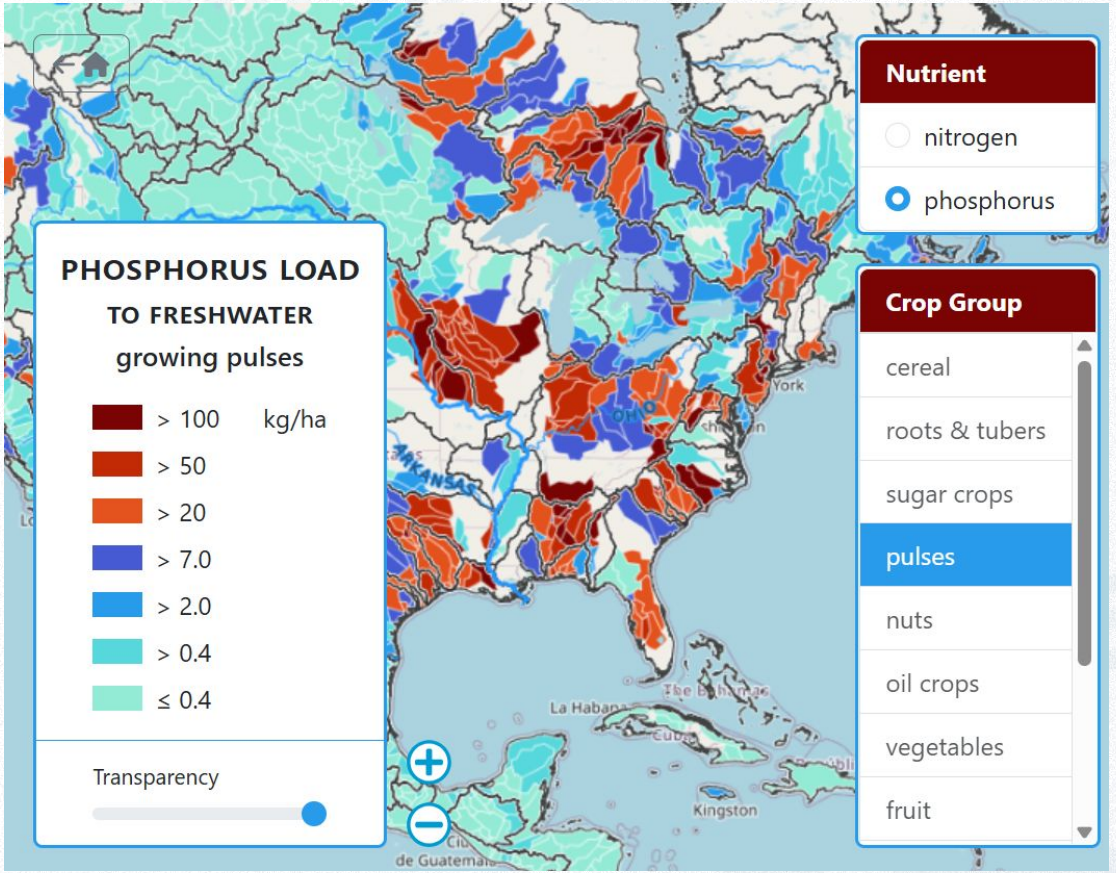
Blue Water Footprints (BWF) replaces the prior dataset with a state-of-the-art dataset (2010–2019) to represent recent historical water consumption patterns.

In **late September**, this update will roll out with Steps 1 & 2 V1.2 updates

NUTRIENT NAVIGATOR

An interactive map that shows nutrient loads lost to freshwater across different crop groups and regions.

A resource for the SBTN Step 1b pressure assessment.



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STEP 4: ACT FAQ

- **Response Options Database** helps companies act on targets now.
- Additional Step 4: Act resources, available later in 2025, will include **technical content** and **safeguards**.
- SBTs for nature emphasize actions across the mitigation hierarchy, which includes **avoid, reduce, regenerate, restore, and transform** actions.
- SBTN is considering how to clarify the linkages with the **wider sustainability reporting landscape**.
- Step 4: Act will continue to emphasize **collective action** and precompetitive sharing among corporate actors.
- SBTN will *not* provide prescriptive technical guidance, and the topic of validation is still under internal discussion.

UPCOMING: IN 2026

- Version 2 of Steps 1, 2, and 3 for Freshwater and Land
- SBTN Step 4
  - Freshwater response options – continued review and alignment with new materials and across other hubs
  - Pilot test ROs with corporates planned to ensure clarity and practicality
- SBTN crosswalk paper
  - By corporate request
- Lowering barriers of uptake
  - Review of first-mover company perceptions
  - Addressing identified barriers

AUDIENCE Q&A

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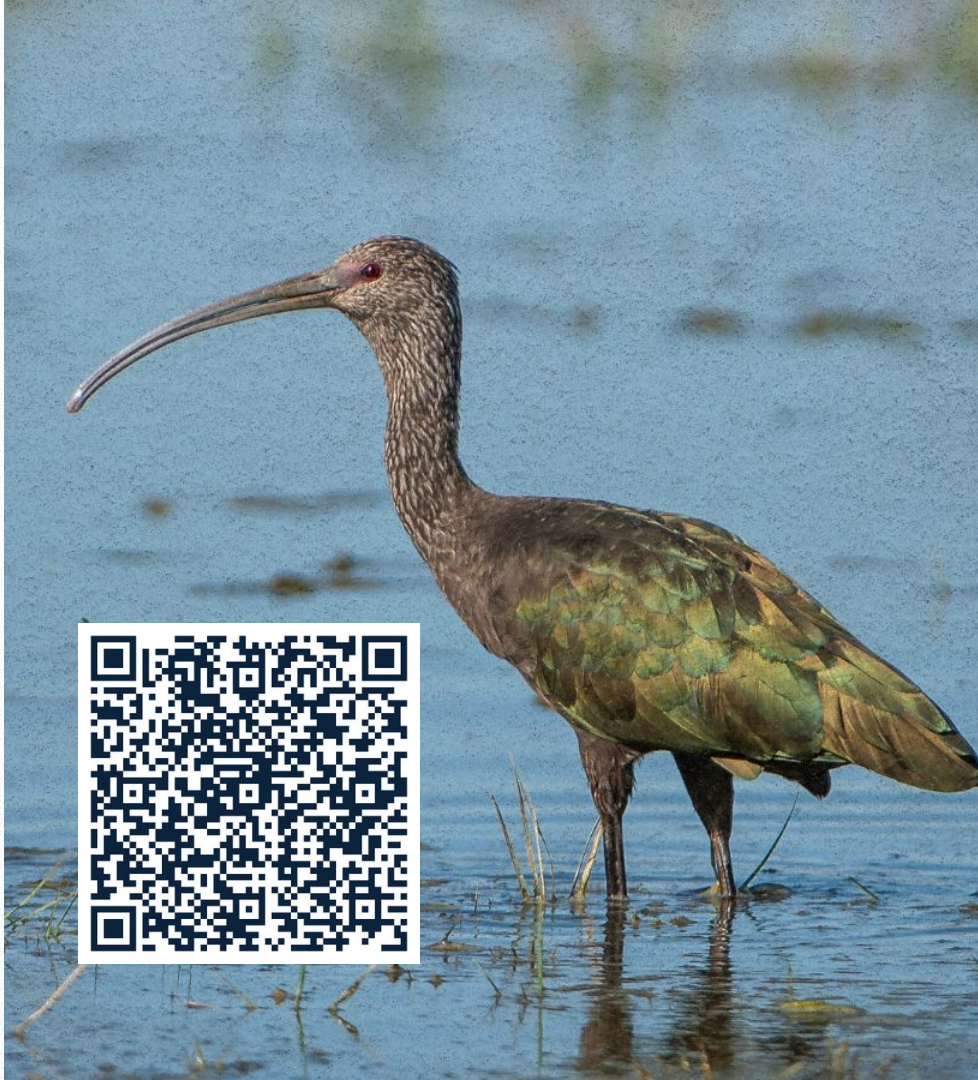


THANK YOU
Ready to explore your company's next step in the SBTN process?
Contact corporate-engagement@sbtnetwork.org