SCIENCE BASED TARGETS NETWORK

Crosswalking SBTN Freshwater Requirements with CSRD Water Disclosures

A paper by members of the SBTN Freshwater Hub

The Nature Conservancy

CONSERVATION INTERNATIONAL

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UN GLOBAL COMPACT CEO WATER MANDATE

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Credits & Acknowledgments

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Abbreviations

AWS	Alliance for Water Stewardship
CDP	Carbon Disclosure Project
CI	Conservation International
CRSD	Corporate Sustainability Reporting Directive
CSDDD	Corporate Sustainability Due Diligence Directive
ESRS	European Sustainability Reporting Standards
EU	European Union
PWI	Positive Water Impact
SBTN	Science Based Targets Network
TNC	The Nature Conservancy
TNFD	Taskforce on Nature-related Financial Disclosures
WRI	World Resources Institute
WWF	World Wildlife Fund

Executive Summary

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The increasing convergence of voluntary sustainability frameworks and mandatory reporting requirements has created both challenges and opportunities for companies seeking to manage and disclose water-related impacts. This paper analyses the relationship between the Science Based Targets Network (SBTN) Freshwater framework and water components of the Corporate Sustainability Reporting Directive (CSRD), focusing on its technical specifications through the European Sustainability Reporting Standards (ESRS). It finds that the two frameworks, while fundamentally different in purpose, are highly complementary and can be effectively combined to improve both corporate water stewardship and sustainability reporting.

SBTN is a voluntary, science-based framework that enables companies to set basin-specific targets for water quantity and quality based on ecological thresholds, with a strong emphasis on environmental outcomes and real-world impact. In contrast, the EU's Corporate Sustainability Reporting Directive (CSRD) is a mandatory regulatory framework for large EU companies and non-EU companies with significant EU operations to disclose environmental, social, and governance information in a standardized, comparable, and transparent manner under the European Sustainability Reporting Standards (ESRS). Following recent EU simplification reforms, the rules now primarily apply to companies with more than 1,000 employees and substantial annual turnover.

Beyond the differences in scope and applicability, the frameworks align closely in their underlying logic. SBTN's five-step methodology, assessing impacts, prioritizing key areas, setting targets, taking action, and tracking progress, maps conceptually to the ESRS requirements under CSRD, particularly its double materiality assessment and structured disclosure requirements. Both frameworks emphasize the importance of identifying material water-related impacts and dependencies across operations and value chains, with a strong focus on context. In particular, both recognize that water challenges are location-specific, requiring attention to basin-level conditions rather than uniform, company-wide assumptions.

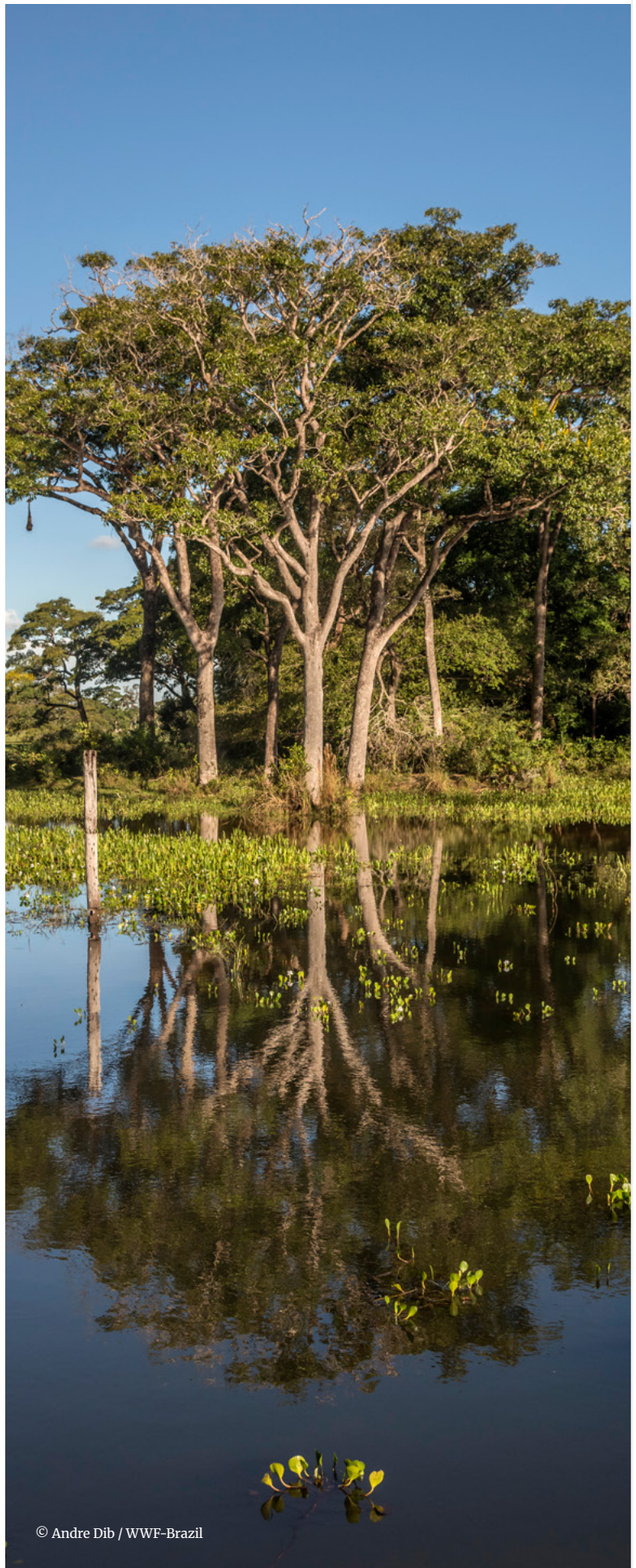
The strongest areas of convergence lie in how both frameworks address impacts and, to some degree, risk related to the management of water use, as well as to the pollution of water, including freshwater, supported by metrics and targets. The frameworks have complementary roles in action and disclosure. SBTN provides scientifically robust, basin-level targets (Step 3) aligned with ecological limits. These targets result in concrete actions (Step 4) to reduce environmental pressures, while ESRS ensures that these targets, along with associated actions and performance, are disclosed in a consistent and comparable format. This distinction is also evident in how water quantity and quality are treated. SBTN integrates both dimensions into science-based frameworks, linking water withdrawals and pollution to basin thresholds, whereas ESRS separates these issues into distinct standards for water and pollution. Nevertheless, SBTN outputs can directly strengthen disclosures under both standards by grounding them in scientific evidence.

The two frameworks have some differences in scope, depth, and intent. CSRD is primarily concerned with transparency and comparability at the company level, allowing for the use of estimates and modelled data where necessary and requiring disclosure of a broad range of pollutants. SBTN is closely aligned to ESRS through the materiality assessments in Step 1, also using estimates and modelled data for transparency and comparability. In some cases, there is full alignment between ESRS requirements and the SBTN, while in others, SBTN requires additional levels of granularity to implement the methods at the adequate geographic scale. It may contain a more granular, basin-level analysis to identify ecological hotspots and prioritize action, with a current focus on three pollutants, namely nitrogen, phosphorus and pesticides. It is designed to drive measurable environmental improvements rather than disclosure alone. Similarly, while CSRD mandates the disclosure of governance structures, policies, and stakeholder engagement processes, SBTN places less emphasis on formal reporting and more on achieving outcomes, including through multi-stakeholder action where basin-level challenges cannot be addressed by individual companies.

In practice, these differences enable a high degree of complementarity. Many companies are adopting SBTN as an analytical backbone to identify priority basins, set science-based freshwater targets, and implement actions, and they are then using CSRD and ESRS to disclose these efforts in line with regulatory expectations. This integrated approach allows SBTN to inform key elements of CSRD reporting, including double materiality assessments, target setting, action planning, and performance tracking, while CSRD provides the structure and discipline needed for external transparency and accountability.

The updates in SBTN Freshwater Version 2 further strengthen this alignment by expanding coverage to include groundwater and pesticides, and by enhancing guidance on implementation, monitoring, and validation. These developments will improve the applicability of SBTN outputs to ESRS disclosure requirements and support more coherent reporting across water quantity and quality dimensions.

Overall, this paper finds that SBTN and CSRD should be viewed as complementary, yet distinct, frameworks. SBTN enables companies to define and implement science-based actions grounded in ecological reality, while CSRD ensures that these actions are transparently and consistently communicated to stakeholders. When applied together, they provide a comprehensive approach that supports both improved environmental outcomes and high-quality sustainability reporting, enabling companies to move beyond compliance toward credible, science-aligned water stewardship.



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Introduction

This crosswalk paper is a comparison between freshwater components for SBTN and CSRD. It does not address other environmental or nature-related issues. The paper discusses overlaps, similarities and complementarity, and it highlights differences in water-related themes, pointing out any divergence in scope and intent. This paper follows on from a previous publication SBTN et al. (2024), that looked at the interoperability of SBTN and leading water stewardship approaches, including the Alliance for Water Stewardship Standard (AWS), Carbon Disclosure Project (CDP), Positive Water Impact (PWI), and Taskforce on Nature-related Financial Disclosures (TNFD).

The objective of this crosswalk paper is to help companies and practitioners understand how SBTN Freshwater guidance and ESRS water-related disclosure requirements conceptually relate to one another.

This crosswalk will help readers understand:

- How the frameworks are complementary despite serving different purposes;
- How science-based freshwater target setting can inform ESRS water-related disclosures, especially under ESRS E2 Pollution and E3 Water, and to a degree under ESRS 2 General Disclosures;
- How SBTN outputs, such as hotspot analyses, basin prioritization, and science-based targets, can support and strengthen ESRS reporting processes and disclosures;
- How the frameworks differ in scope and level of detail, particularly regarding:
  - Basin-level analysis
  - Geographic specificity
  - Value-chain assessment depth
  - Governance and policy disclosures
  - Pollutant coverage
- Companies can use both frameworks together by applying SBTN as the analytical and target-setting foundation, while using ESRS to disclose actions, targets, risks, and performance in a standardized way.
- The distinct roles of a voluntary, science-based framework like SBTN Freshwater and a mandatory disclosure regime like CSRD.

Scope and limitations of the crosswalk

This crosswalk describes areas of conceptual alignment and complementarity between SBTN Freshwater and CSRD/ESRS. It does not constitute regulatory guidance or a checklist for compliance. In particular, SBTN Freshwater Version 1.1 currently supports only a subset of ESRS E2 pollution disclosures (primarily nutrients and pesticides), and companies may need to apply additional methods to fully address other pollutants required under CSRD.

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Presenting the frameworks

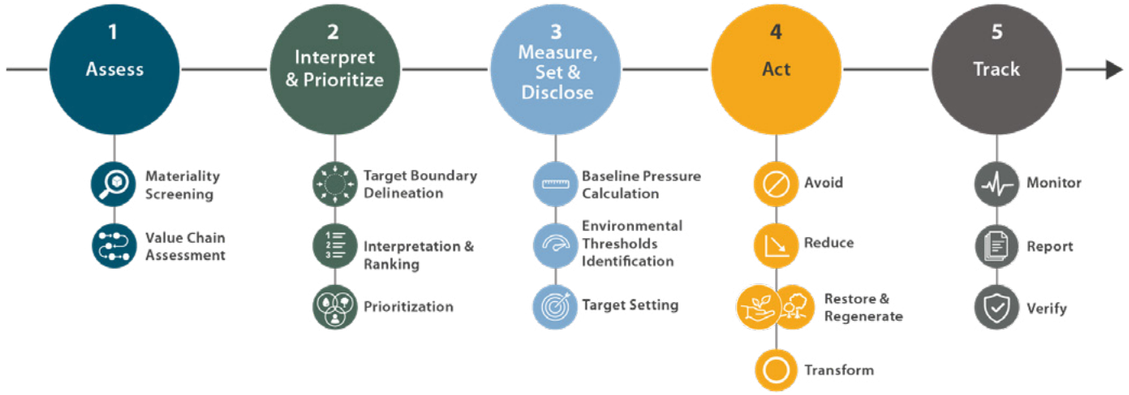
Science Based Targets Network (SBTN) and Freshwater Targets

The Science Based Targets Network (SBTN) is a global collaboration of environmental organizations that helps companies and cities measure, set, and disclose science-based targets aligned with Earth's ecological limits. Its methodologies translate global environmental goals into location-specific, actionable targets across land, ocean, and freshwater - addressing key drivers of biodiversity loss.

SBTN applies a standardized five-step process for target setting:

1. Assess impacts and dependencies on nature across operations and value chains;
2. Prioritize the most material locations and pressures;
3. Set targets grounded in scientific thresholds;
4. Act and implement mitigation and transformation actions; and
5. Track and publicly report progress.

Figure 1: Setting science-based targets for nature using SBTN's five-step approach



Within this broader framework, freshwater is a key domain because water risks and impacts are highly location-specific. SBTN's freshwater guidance therefore focuses on basin-level conditions, supporting companies in setting contextual targets for both water quantity (surface and groundwater pressures) and water quality (particularly nutrient and pesticide pollution). By grounding targets in locally relevant hydrological and ecological thresholds, the framework aims to address the dual challenges of water scarcity and pollution while guiding corporate action.

Through this basin-specific, science-based approach, SBTN provides a voluntary, structured pathway for companies to manage freshwater impacts and dependencies, with the option to align water stewardship efforts with broader sustainability and disclosure frameworks.

Corporate Sustainability Reporting Directive

The Corporate Sustainability Reporting Directive (CSRD) is a European Union regulatory framework designed to strengthen corporate transparency on environmental, social, and governance (ESG) issues. Building on the earlier Non-Financial Reporting Directive, the CSRD requires EU-headquartered companies and companies with significant activity in the EU to disclose sustainability information in a more structured, consistent, and comparable manner. The directive reflects increasing recognition that stakeholders, including investors, consumers, and regulators, require reliable information to understand how corporate activities affect society and the environment, including pressures on natural resources such as freshwater.

Central to CSRD is a double materiality assessment, through which companies evaluate both how sustainability issues affect their financial performance and how their activities impact people and the environment. When companies identify water-related risks or impacts as material, they must report in accordance with the relevant requirements of the European Sustainability Reporting Standards (ESRS). These disclosures provide information on policies, actions, targets, stakeholder engagement, and performance metrics related to water.

In February 2025, the European Commission introduced proposals to revise and consolidate sustainability-related disclosure requirements under an Omnibus Simplification Package, with the aim of reducing the regulatory burden on companies. As part of this process, EFRAG, the European Commission's technical adviser on sustainability reporting, developed technical advice on the revision of the ESRS. These proposals are progressing through the European Union legislative process. Subject to their adoption, the revised simplified standards are expected to apply from the 2027 financial year.

The CSRD framework pursues several key objectives:

Enhancing transparency: ensuring companies provide clear and comprehensive sustainability information to stakeholders.

Standardizing reporting: establishing common disclosure requirements through the ESRS to improve comparability across companies and sectors.

Improving accountability: strengthening corporate responsibility for environmental and social impacts, including pressures on natural resources such as water.

Promoting sustainable finance: enabling investors to direct capital toward more sustainable activities by providing reliable sustainability information.

European Sustainability Reporting Standards

The European Sustainability Reporting Standards (ESRS) provide the technical specifications for mandatory disclosures under the CSRD. Developed in parallel with the CSRD, the ESRS establishes consistent reporting expectations across ESG topics. ESRS includes two foundational standards (ESRS 1 and ESRS 2) that apply to all reporting, plus 10 specific topical standards covering Environment (E1 to E5), Social (S1 to S4) and Governance (G1).

Figure 2: Breakdown of European Sustainability Standards (ESRS) that inform CSRD

Water-related topics in the European Sustainability Reporting Standards

Among the 12 standards of the ESRS, the strongest focus on water lies in the topical standards E2 (Pollution) and E3 (Water). Some components of ESRS 1 (General Requirements) and ESRS 2 (General Disclosures) also overlap with SBTN around stakeholder engagement and collective action, which is an important component of water stewardship (Various Organizations, 2024), and consequently, SBTN.

Water-related disclosures also appear in other topical standards of the ESRS due to interconnected sustainability issues. For example, ESRS E4 (Biodiversity and Ecosystems) can include aquatic ecosystems, while ESRS E5 (Resource Use and Circular Economy) has explicit overlaps with on-site water recycling and reuse. WASH services – in themselves not a topic covered by SBTN, are addressed explicitly and implicitly as part of the three Social standards ESRS S1 (Own Workforce), S2 (Workers in the Value Chain) and S3 (Affected Communities) (WaterAid, 2025).

Finding alignment and complementarity

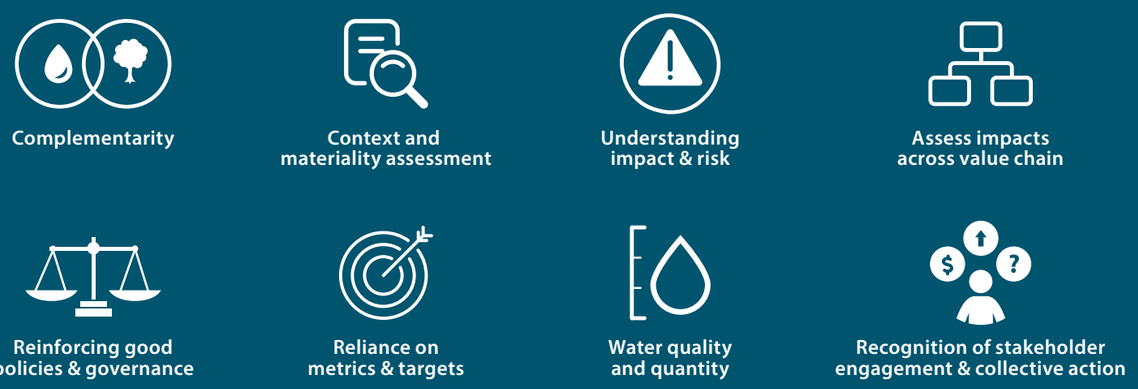
This section presents areas of alignment and convergence between ESRS and SBTN from overarching concepts to more detailed sub-standard sections. It is frequently noted that ESRS and SBTN overlap on common objectives while differing in their approach. Convergence and complementarity is often found for those who pursue both options. These connection points are useful to corporates and practitioners looking for entry points to implement both frameworks.

From Disclosure to Credible Water Action

CSRD and ESRS establish clear expectations for the disclosure of water-related targets, actions, and performance where water issues are material. Achieving meaningful progress on water sustainability, however, also depends on the quality and credibility of the targets that companies set. From an SBTN Freshwater Hub perspective, science-based, context-responsive approaches, such as SBTN Freshwater, can strengthen the analytical foundation behind disclosed targets. In this way, CSRD provides the reporting structure, while SBTN supports companies in defining targets that are grounded in basin-level realities and ecological thresholds (derived from WWF, 2024).

Overarching areas of alignment and convergence

Figure 3: Overarching areas of alignment and convergence



SBTN Freshwater and ESRS do share several common objectives (Figure 3), but typically they arrive there through different means. Both strive to drive corporate action on water management, with ESRS serving as a regulatory disclosure standard and SBTN supporting companies through a voluntary target-setting framework. Both encourage transparency around water impacts, strategies, and outcomes, with CSRD doing so through mandatory reporting, and SBTN through validated and publicly disclosed targets.

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Complementarity of roles between the two frameworks is evident: SBTN directs on "what to change in your activities based on targets set" through science-based, basin-specific targets and methods, while ESRS offers the "what to disclose of your current status and actions for change."

The frameworks share:

- the overall objective to ensure more standardized, comparable reporting across companies;
- They both encourage companies to identify and manage ESG-related environmental risks;
- They both support better decision-making and resilience;
- They link sustainability performance to financial and operational risk management;
- They use similar high-level processes:
    1. assess impacts,
    2. set targets/actions,
    3. disclose/track progress.

The frameworks share an incidental co-benefit in that they both indirectly support financially sustainable and de-risked ESG decision-making through structured assessment, target setting and disclosure. However, this is not a key focus. SBTN's core aim is ecological sustainability aligned with planetary boundaries, not investment optimization. Financial resilience is a co-benefit. ESRS does not prescribe investment pathways; it requires transparent reporting of sustainability impacts, risks, opportunities, and financial effects.

Context and materiality:

Both SBTN's freshwater science-based target framework and ESRS require companies to begin with a materiality assessment of where water-related issues are most significant. SBTN Freshwater emphasizes basin-level context, directing companies to focus on locations and set targets based on the level of stress that freshwater systems are under, especially where corporate activities contribute to material water quantity or quality pressures. ESRS similarly requires companies to assess material water-related impacts, risks, and opportunities through a double materiality process, considering both environmental and financial dimensions. While the methodologies differ, both frameworks stress the importance of contextualizing water impacts where they are material, rather than treating water as a uniform or site-agnostic issue.

Basin Context and Value Chain Relevance:

Water challenges are inherently local, and their significance often varies across sites, basins, and value chain stages. CSRD reflects this reality by encouraging companies to disaggregate information where necessary to reflect material impacts, risks, and dependencies. This aligns closely with widely accepted water stewardship practices. SBTN Freshwater's basin-level prioritization can therefore support more accurate identification of material water issues and provide a stronger basis for both action and disclosure under ESRS.

Impacts and risks:

Both frameworks encourage understanding of corporate water impacts and associated risks in a company's own operations and its value chain. SBTN Freshwater focuses on reducing corporate contributions to freshwater degradation by aligning surface and groundwater use and nutrient and pesticide pollution with scientifically defined thresholds. The framework is oriented toward environmental outcomes, prioritizing the reduction of pressures on freshwater ecosystems in relation to the basin thresholds. ESRS E3 and ESRS E2 require disclosure of actual and potential impacts related to water balance and quality. This includes impacts arising from water consumption, pollution, and operational dependencies on water availability and quality. ESRS is not prescriptive about how companies should reduce these impacts, but it requires transparency about their nature, scale, and implications. The area of convergence is that the scientifically robust methods of SBTN can inform and augment ESRS reporting.

Ecological Thresholds:

Connecting Science to Reporting: ESRS E2 and E3 ask companies to explain whether and how their water-related targets are linked to ecological thresholds, as well as the assumptions and methodologies used. While the standards do not prescribe how thresholds should be defined, they signal the importance of grounding targets in an environmental context. SBTN Freshwater offers one means of operationalizing this expectation by translating basin-specific limits for water quantity and quality into actionable corporate targets. This can help companies bridge the gap between scientific understanding of basin conditions and formal sustainability reporting.

Value chain:

The European Sustainability Reporting Standards and the Science Based Targets Network overlap on the principle that companies should assess impacts across the full value chain. However, they do differ in purpose, depth, and how value-chain assessment is operationalized (see more in section on Key differences).

Policies and governance:

SBTN Freshwater encourages corporate integration of freshwater target setting into policies and governance as part of the corporate nature strategy. ESRS, through its general and topical disclosure requirements, expects governance and strategy disclosures to provide oversight and accountability mechanisms related to water and other sustainability matters. Together, the two frameworks can reinforce both internal decision-making and external accountability for corporate water management.

Metrics and targets:

Both frameworks rely on metrics and targets, but their roles differ. SBTN Freshwater provides guidance to set science-based, basin-specific targets to address freshwater pressures, achieve meaningful environmental outcomes, and offer scientifically robust guidance for measurement and disclosure. ESRS requires companies to disclose water-related metrics, such as water withdrawal and consumption, with an emphasis on the reporting of targets and performance in a standardized format, thus supporting comparability across companies. SBTN's scientifically robust science-based targets for nature and associated metrics can therefore serve as a strong technical foundation for ESRS target and performance disclosures, especially because ESRS 2 stresses the importance of reporting context-specific information.

Water quantity and quality:

SBTN Freshwater is highly complementary to the ESRS requirements under ESRS E3 (Water) and ESRS E2 (Pollution) topical standards. While ESRS E3 focuses on water availability, abstraction, and impacts on aquatic ecosystems, ESRS E2 addresses environmental and human health impacts associated with the release of pollutants, as well as related risks and opportunities. SBTN integrates both perspectives by framing freshwater targets around basin-level ecological thresholds, thereby linking water quantity (surface and groundwater) and water quality (nutrients and pesticides) pressures into science-based approaches.

Stakeholder engagement and collective action:

Although framed differently, both SBTN and ESRS implicitly recognize the need for stakeholder engagement and collective action, particularly for freshwater and water pollution challenges that cannot be resolved by individual actors alone. SBTN acknowledges that achieving basin-level freshwater sustainability often requires collective action, including engagement with other water users, local authorities, watershed initiatives, and value chain partners. This is particularly relevant where basin thresholds cannot be met through unilateral corporate action or where shared infrastructure, agricultural practices, or municipal systems drive water quality outcomes. ESRS requires companies to disclose their policies, actions, and resources, including the use of relevant partnerships, supplier engagement, and community initiatives where relevant. Under ESRS 2 GDR-A, actions to manage impacts, risks and opportunities (which can include those connected with water and pollution) can also be taken in collaboration with other companies. ESRS 2 SBM and IRO disclosures also encourage transparency about dependencies on external stakeholders and interdependent socio-ecological and value-chain dynamics. SBTN acknowledges that collective action is necessary in some situations, while ESRS provides the disclosure framework through which such collaboration, its rationale, scope, and outcomes, can be transparently reported.

Strategic alignment-using ESRS architecture to disclose SBTN targets and progress

This section provides a more detailed mapping and comparison between the main ESRS headings (with focus on ESRS 2 General Disclosures, ESRS E2 Pollution and E3 Water) and the SBTN five-step approach. SBTN's freshwater science-based target framework aligns with parts of ESRS 2 and more closely with ESRS E3 and ESRS E2, reflecting the inseparable link between water quantity management and pollution prevention. While ESRS E3 captures water availability, withdrawal and consumption, ESRS E2 provides the complementary coverage for information on pollutants and chemicals emitted into water, including nutrients and pesticides that degrade freshwater systems. While Table 1 focuses on ESRS E2 (Pollution) and E3 (Water), freshwater-related impacts on ecosystems are also addressed under ESRS E4 (Biodiversity & Ecosystems), particularly for aquatic ecosystems. These connections are not fully mapped here due to the freshwater scope of this paper.

Table 1: Outlining key ESRS headings and how they relate to the five SBTN steps. The mappings below indicate conceptual alignment and potential use of SBTN outputs to support ESRS disclosures. They do not imply full equivalence or automatic compliance.

ESRS HEADING	DISCLOSURE REQUIREMENT (DR)	WATER-RELATED RELEVANCE	SBTN STEP
Impacts, risks and opportunities process	IRO-1 (ESRS 2)	Process used to identify impacts such as water abstraction, pollution, basin dependency and related risks	**Step 1 – Assess**
Strategy and business model interaction with environmental issues	SBM-1 / SBM-2 (ESRS 2)	How water scarcity, basin stress or pollution pressures influence business strategy and operations	**Step 1–2 – Assess / Prioritize**
Policies related to pollution	E2-1	Policies governing pollutant releases to water bodies and wastewater management	**Step 4 – Act**
Policies related to water	E3-1	Water stewardship or water management policies addressing withdrawals, consumption and basin protection	**Step 4 – Act**
Actions and resources related to pollution	E2-2	Measures to reduce pollutants entering water (e.g., wastewater treatment improvements)	**Step 4 – Act**
Actions and resources related to water	E3-2	Operational actions such as water efficiency, reuse, basin engagement, infrastructure improvements	**Step 4 – Act**
Targets related to pollution	E2-3	Quantified targets to reduce pollutant discharges affecting water quality	**Step 3 – Measure, Set & Disclose**
Targets related to water	E3-3	Targets on water withdrawal, consumption, basin conditions or water stress reduction	**Step 3 – Measure, Set & Disclose**
Pollution metrics	E2-4 / E2-5	Quantitative indicators on emissions to water and hazardous substances	**Step 5 – Track**
Water consumption metrics	E3-4	Total water withdrawal, discharge and consumption	**Step 5 – Track**
Water risk locations	E3 contextual disclosure (site/basin information)	Identification of facilities in water-stressed areas or sensitive catchments	**Step 2 – Interpret & Prioritize**
Stakeholder engagement & collective action	SBM-2 / IRO-1 (ESRS 2) and E3-2 actions	Engagement with basin stakeholders (communities, regulators, water users) and participation in catchment-level initiatives to address shared water challenges	**Step 4 – Act (collective basin action)**

SBTN's stepwise approach to target setting and ESRS's sustainability reporting process are structured differently and serve distinct purposes. However, at a high level, the SBTN Steps can be seen as broadly complementary to key phases of the ESRS process, particularly for water-related topics.

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Step 1: Assess

SBTN's initial step focuses on assessing corporate activities, value chains, and locations to identify where freshwater impacts and dependencies are most significant, with particular emphasis on basin-level context and freshwater pressures. This step aligns conceptually with ESRS's double materiality assessment, which requires companies to identify material water-related impacts, risks, and opportunities across their operations and value chains. While ESRS's materiality process incorporates both impact and financial perspectives, and SBTN's assessment is grounded in ecological relevance, both frameworks emphasize the importance of understanding context and prioritizing water issues before setting targets or making disclosures.

Step 2: Interpret & Prioritize

In SBTN, companies interpret assessment results to prioritize freshwater issues and locations where target setting is most relevant, based on scientific thresholds and contributions to freshwater pressures. This prioritization is consistent with how companies operationalize materiality findings under ESRS, where identified material water-related topics are carried forward into disclosures, management actions, and reporting scopes. Both frameworks require companies to focus resources and attention on the most significant water-related issues rather than addressing water impacts uniformly across all locations.

Step 3: Measure, Set & Disclose Targets

In Step 3, SBTN supports companies in quantifying water use and pollution pressures and setting science-based, basin-specific freshwater targets, including for water quantity and nutrient and pesticide pollution. Under ESRS, companies are required to disclose water-related targets, metrics, and progress where water is identified as a material topic. There is strong encouragement for science-based and ecological threshold-based target setting for water, but ESRS falls short of prescribing how targets should be developed for ESRS E2 and ESRS E3. SBTN outputs can strengthen the credibility and robustness of disclosures, particularly under ESRS E3 and, for nutrients and pesticides, ESRS E2. Disclosure obligations, however, remain governed by ESRS requirements rather than by SBTN.

Step 4: Act

SBTN emphasizes implementation of actions and strategies to achieve freshwater targets, including operational improvements and engagement across the value chain. This step complements ESRS requirements to disclose policies and actions implemented to manage material water-related impacts and risks. Although SBTN does not mandate specific disclosure formats, actions taken to achieve SBTN targets can be translated into ESRS-compliant descriptions of management approaches and mitigation measures.

Step 5: Track

The final SBTN step focuses on tracking progress against freshwater targets over time and updating actions as needed. This aligns with ESRS's expectation for ongoing reporting of performance, including metrics, progress against targets, and changes in impacts or risks over time. SBTN's tracking outputs can therefore support consistency and continuity in ESRS water-related reporting across reporting periods.

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Notable differences, despite alignment

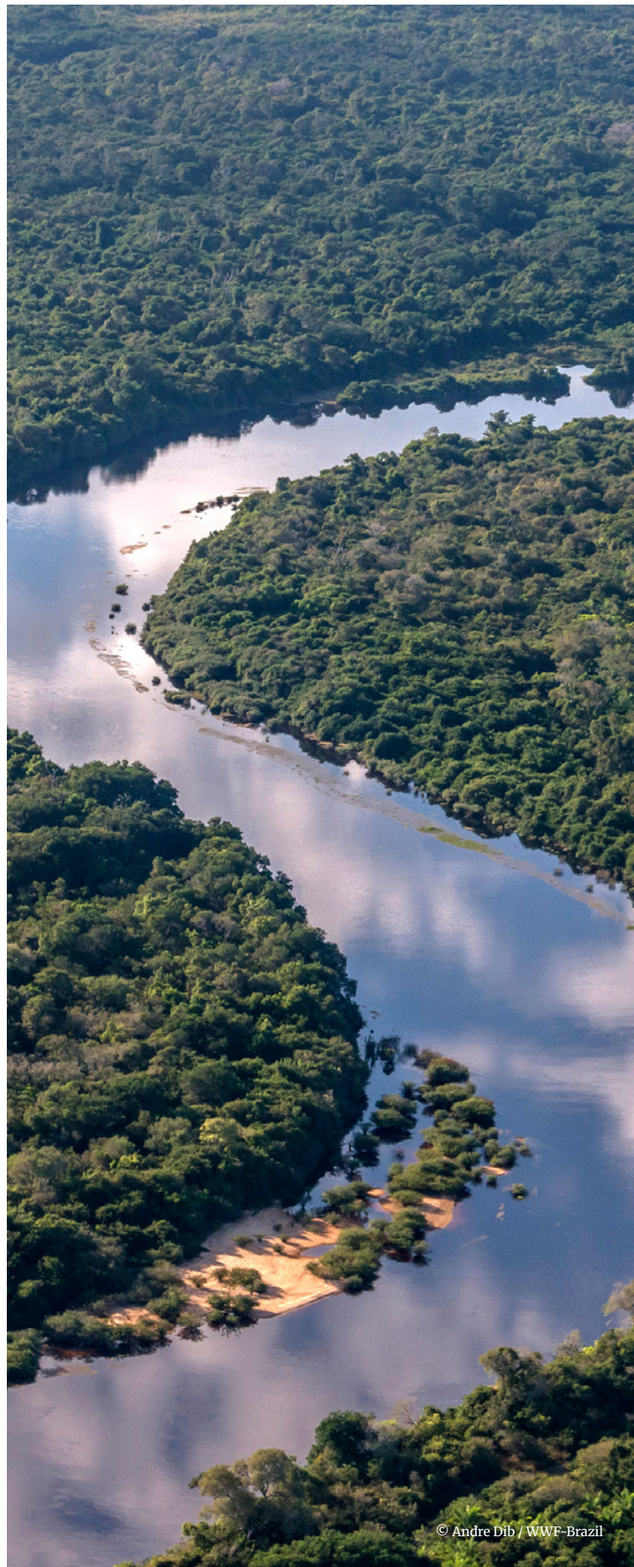
The above sections of this paper have clearly shown overlaps, alignment and overall complementarity between CSRD and SBTN. At the same time, it was noted clearly that there are fundamental differences in purpose, structure, level of analysis, scope and outcome. These are shown in Table 2.

Table 2: Notable differences between CSRD and SBTN

DIFFERENCES	CSRD/ESRS	SBTN
Purpose and outcome:		
Voluntary versus regulation	ESRS is a regulatory disclosure framework that focuses on transparency, requiring companies to assess and disclose water-related impacts across value chains based on double materiality, resulting in a high-level, company-wide view supported by estimated data.	SBTN emphasizes action toward measurable outcomes, requiring companies to identify specific high-impact locations, such as river basins, with prioritization based on environmental thresholds rather than financial or stakeholder materiality.
Use of metrics	Companies must disclose standardized and comparable operational metrics, such as water withdrawals, consumption and discharges under the water standard, and releases of pollutants, including chemicals, to water under the pollution standard. The metrics are designed to support transparency, comparability across companies, assurance, and year-on-year performance tracking.	SBTN requires companies to take action toward measurable freshwater outcomes by identifying high-impact basins and sites. Operational metrics such as water withdrawal, consumption, discharge, and pollutant loads (e.g., nutrients and chemicals) may overlap with ESRS metrics, but the emphasis is on whether activities remain within ecological and basin-level thresholds for water quantity and quality.
Structure		
Water quantity and quality	Water consumption and discharge are primarily reported under the water standard, while water pollution is addressed separately through the pollution standard.	Water quantity and water quality are both integral to target setting, meaning companies must establish measurable reductions or improvements where their activities contribute to unsustainable basin conditions.
Targets	ESRS allows companies to disclose environmental targets where they exist but does not prescribe specific science-based thresholds or mandatory performance levels.	SBTN requires companies to establish quantified targets aligned with ecological limits once priority basins and pressures have been identified. These targets are intended to drive concrete action, such as improving water efficiency or addressing pollution sources.
Policies and governance	Companies are required to explicitly disclose policies and actions addressing material water impacts and risks, and how these are integrated into governance and business strategy.	Less emphasis is placed on formal internal policies or mandatory disclosure. As a result, companies applying SBTN can translate their targets and integrate them into policies and action disclosures to fully meet ESRS requirements.
Level of analysis		
Value chain	ESRS requires more extensive public disclosure of governance, policies, metrics, and management approaches.	The depth of analysis is greater in SBTN, particularly in relation to value-chain hotspots and basin-level conditions.
Geographic resolution	ESRS emphasizes context- and location-specific disclosure of water-related issues, including aggregation/disaggregation by geography, basin, or water-stressed areas (similar to SBTN), while requiring assessment and disclosure of material impacts across upstream and downstream value chains.	SBTN requires companies to evaluate impacts at the basin or ecosystem level to determine whether withdrawals exceed sustainable limits or whether pollution contributes to water quality degradation. This involves identifying water hotspots in operations or the value chain, supported by more detailed data and basin-level analysis.
Stakeholder engagement	Companies have to disclose stakeholder identification, engagement processes, and how engagement informs policies, actions, and targets for both water availability (ESRS E3) and water pollution (ESRS E2), emphasizing process transparency.	SBTN treats stakeholder engagement as implicitly necessary where collective action is needed to manage shared basins or reduce water pollution, focusing on the effectiveness of engagement in achieving basin-level outcomes rather than the depth of formal disclosure.
Scope		
Pollutant types	ESRS E2 requires disclosure of a wide range of pollutants, which, based on a company's specific circumstances and materiality assessment, can include nutrients, heavy metals and others, whenever emissions are material.	SBTN focuses specifically on nutrients, nitrogen (N) and phosphorus (P), and pesticides as the key drivers of freshwater ecosystem degradation. Targets are science-based, basin-specific, and linked to ecological thresholds, providing a robust foundation for managing nutrient and pesticide pressures.

Forward-looking alignment: SBTN Freshwater V2

The upcoming SBTN Version 2 enrichment of Step 3 technical guidance is expected to improve alignment with CSRD/ESRS by expanding freshwater guidance to cover groundwater and pesticides. This evolution will broaden the range of water quality parameters relevant to pollution disclosures, making SBTN targets more directly applicable to ESRS E2 requirements, while better integrating water quantity and quality pressures to support coherent E2–E3 reporting narratives. Enhanced guidance on implementation pathways, including collaboration and collective basin-level action, will strengthen connections to governance and policy disclosure expectations under ESRS. Additionally, improved approaches to monitoring and validation will support the consistency and comparability that ESRS emphasizes, making SBTN V2 a more robust tool for companies seeking to align science-based freshwater targets with formal sustainability reporting obligations.



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Conclusions

In conclusion, SBTN Freshwater and the water-related ESRS sub-standards (ESRS E2 and ESRS E3) are broadly complementary yet distinct frameworks. SBTN provides a science-based, stepwise methodology for identifying priority basins, assessing impacts, and setting quantitative targets for water quantity and quality based on ecological thresholds. This approach allows companies to prioritize hotspots, define credible freshwater and pollution targets, and plan implementation actions in a way that is directly grounded in environmental science. ESRS, by contrast, establishes a mandatory disclosure framework that requires companies to report on material water-related impacts, risks, policies, actions, metrics, and targets, emphasizing transparency, comparability, and accountability.

Many companies combine these frameworks by using SBTN as the analytical backbone, conducting hotspot analysis, defining science-based targets, and implementing interventions, followed by ESRS reporting to communicate progress to stakeholders.

In practice, this integration allows SBTN outputs to inform double materiality assessments, target justification, action planning, and performance tracking, while ESRS ensures that these efforts are formally disclosed in line with regulatory expectations.

The overlap and synergy are most evident in areas such as nutrient management, water consumption, and basin-level prioritization, where SBTN targets provide ecological credibility that can strengthen ESRS disclosures. Differences remain in scope and emphasis: SBTN focuses on scientific sufficiency and ecological outcomes, whereas ESRS focuses on formal disclosure and comparability. By aligning voluntary science-based guidance from SBTN with mandatory reporting under ESRS, companies can present a coherent, science-aligned narrative across water use, water quality, and pollution, enhancing both corporate water stewardship and reporting quality. Ultimately, SBTN and CSRD together enable companies to move beyond disclosure toward demonstrable, outcome-oriented action on freshwater impacts.

SBTN Freshwater provides a framework for identifying priority basins, setting quantitative water and pollution targets, and guiding implementation, while ESRS E2 and E3 ensure mandatory disclosure of material impacts, policies, and performance. Together, they enable companies to align credible, outcome-oriented freshwater stewardship with transparent, regulatory reporting, bridging voluntary target-setting and mandatory disclosure in a coherent framework.

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References

European Financial Reporting Advisory Group (EFRAG). (2023). European Sustainability Reporting Standards (ESRS) Set 1 — Sector-agnostic Standards. EFRAG. www.efrag.org/en/sustainability-reporting/esrs-workstreams/sector-agnostic standards-set-1-esrs

Science Based Targets Network (SBTN), Alliance for Water Stewardship, CDP, WWF, Pacific Institute, World Resources Institute, & The Nature Conservancy. (2024). Corporate water stewardship and science-based targets for freshwater. Science Based Targets Network Freshwater Hub. Available at: https://science-basedtargetsnetwork.org/wp-content/uploads/Corporate-water-stewardship-and-science-based-targets.pdf

Various Organizations (2024) Unpacking Collective Action in Water Stewardship: Shared Solutions for Shared Water Challenges. Alliance for Water Stewardship, AstraZeneca, CEO Water Mandate, Global Water Partnership, Good Stuff International, IDH - Sustainability Initiative Fruit and Vegetables (SIFAV), Oxford Earth Observation, SHARE Sustainability, The Nature Conservancy, The Rivers Trust, Sustainability Initiative Fruit and Vegetables (SIFAV), Water Integrity Network, Water Witness International, WaterAid, Waste & Resources Action Programme and WWF. https://wwf.panda.org/wwf_news/?114194 66/Unpacking-collective-action-in-water-stewardship

WaterAid. (2025). Water, sanitation and hygiene in the evolving EU legislative environment: Corporate playbook. https://washmatters.wateraid.org/publications/water-sanitation-hygiene-evolving-eu-legislative-environment. Accessed May 20, 2025.

World Wide Fund for Nature. (2024). Living Planet Report 2024: A system in peril. WWF. https://wwfeu.awsassets.panda.org/downloads/wwf_a4_report_nt_2024_v04_compressed.pdf


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