



The CEO Water Mandate

CORPORATE WATER DISCLOSURE GUIDELINES

Toward a Common Approach to Reporting Water Issues

September 2014



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DISCLAIMER

All of the views expressed in this publication are those of the CEO Water Mandate and do not necessarily reflect those of the project sponsors or the members of the WDWG or CWDSAG.

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Foreword

Companies are fundamentally changing the way they address water. Increasingly, they are investing in water-efficient technologies, working with suppliers to encourage more responsible water use, designing cleaner and more efficient products (and thus helping consumers lower their water use), and seeking to advance sustainable water management outside their fencelines as a way to mitigate water-related risks and negative impacts. At the same time, corporate water disclosure—the act of reporting to stakeholders information related to the current state of a company’s water management, the implications of that state for the business and its stakeholders, and how the company develops and implements strategic responses—has emerged as a key component of corporate water management practice.

In response to the growing importance to businesses of both water management generally and disclosure specifically, a number of initiatives are seeking to provide guidance on how companies can:

- Measure their water performance
- Assess conditions in the river basins where they operate
- Understand their water-related challenges and opportunities
- Develop effective water management strategies
- Communicate these issues to stakeholders

These initiatives have catalyzed significant progress toward more sustainable corporate water management. However, the proliferation of water assessment and disclosure tools and methodologies has also led to:

- Companies diverting important resources to complete multiple water or sustainability surveys of varying content
- Companies using a variety of metrics that are not easily comparable, thereby weakening the value of disclosure offerings

Beyond this, current practice in corporate water disclosure (even among the most advanced reporters) typically does not adequately capture the incredibly complex and location-specific nature of water resource dynamics and corporate action on water. Many companies are therefore looking for detailed guidance on how to more effectively disclose the many elements of corporate water management practice.

The CEO Water Mandate's Corporate Water Disclosure Guidelines offer a common approach to disclosure. They put forward metrics that can begin to harmonize practice and also provide guidance for defining what to report. It is our hope these Guidelines drive convergence and harmonization with respect to how companies report their water management practices while helping to minimize reporting burdens, thus allowing companies to allocate more time and resources to actively manage water.

The Pacific Institute (representing the Mandate Secretariat) led the development of the Guidelines, seeking input from organizations and initiatives with expertise in this area. PricewaterhouseCoopers LLP served as a strategic adviser and provided input throughout this process. CDP (formerly the Carbon Disclosure Project), World Resources Institute (WRI), and Global Reporting Initiative (GRI) were project partners, offering insight regarding water disclosure practices and helping to ensure that the Guidelines built on existing approaches where possible and appropriate.

The project team regularly consulted with the Mandate's Water Disclosure Working Group (WDWG)—comprising representatives from many Mandate-endorsing companies—as well as with the Corporate Water Disclosure Stakeholder Advisory Group (CWDSAG), which included a variety of representatives from civil society groups, water-related tool developers, trade associations, government, and intergovernmental organizations. A complete list of WDWG and CWDSAG members can be found in Appendix D. Consultation with these individuals was geared toward ensuring that the Guidelines remain user-friendly while addressing the wide array of company and stakeholder interests in corporate water disclosure.

Given that corporate water management and disclosure practice are rapidly evolving, the CEO Water Mandate plans to revisit and amend the Guidelines as needed.

Table of Contents

SECTION 1 INTRODUCTION	4
Objectives	4
How To Use the Guidelines	4
SECTION 2 ALIGNING DISCLOSURE WITH CORPORATE WATER MANAGEMENT PRACTICES	8
The Business Case For Corporate Water Disclosure	8
How Disclosure Fits Into Corporate Water Management	10
The Long-Term Corporate Water Management Maturity Progression.....	12
How Disclosure Fits With Corporate Water Management Maturity	14
SECTION 3 COMPANY WATER PROFILE.....	17
SECTION 4 DEFINING WHAT TO REPORT	20
Relevance and Materiality: What Are They?	20
Assessing Relevance and Materiality For Water-Related Topics	21
SECTION 5 DETAILED DISCLOSURE	30
Understanding and Linking Components of the Framework.....	30
Basic and advanced reporting.....	30
Geographic/geopolitical scale of reporting	32
Connections between sections and subsections	32
Linkages across sustainability issues.....	33
Assessing the Current State	35
Considering the Implications.....	49
Developing a Strategic Response	60
APPENDIX A: Corporate Water Disclosure Glossary.....	78
APPENDIX B: Harmonizing Terminology— the Relationship between Water Scarcity, Water Stress, and Water Risk	83
APPENDIX C: Interactive Database of the World’s River Basins	85
APPENDIX D: Water Disclosure Working Group Members and Corporate Water Disclosure Stakeholder Advisory Group Members	88



SECTION 1

Introduction

SECTION 1 Introduction

OBJECTIVES

These Corporate Water Disclosure Guidelines seek to advance a common approach to **corporate water disclosure** that addresses the complexity and local nature of water resources. In order to achieve this overarching goal, the Guidelines:

- Identify common corporate water disclosure metrics that support harmonization and comparability over time and across companies
- Provide guidance on how companies can assess the water-related topics that are the most relevant to them and their **stakeholders** (as well as how to report this assessment process)
- Describe how companies can best report activities that are difficult to depict quantitatively, such as policy advocacy or engagement with nongovernmental organizations (NGOs), governments, suppliers, and communities
- Align corporate water management with disclosure so as to enable companies to understand which information is most appropriate to report and how to generate water disclosure content

HOW TO USE THE GUIDELINES

STRUCTURE AND APPLICABILITY

Corporate water management objectives and activities vary greatly depending on industry sector and geographic location. This dynamic leads to many possible disclosure approaches and metrics that are more relevant to certain companies than others. In the spirit of advancing harmonized reporting practices, all the suggested metrics and information provided in the Guidelines are designed to be applicable to a broad range of corporate water users, regardless of industry sector and region. However, many companies will likely choose to augment their reports with metrics and information particularly relevant to their specific industry or geography.

Corporate water disclosure also varies significantly depending on the relevance of water to the company and its stakeholders and the maturity of a company's water management practices. For this reason, some companies may not deem it necessary or helpful to report the full range of information suggested in these Guidelines. Others may be able to report only a limited amount of water-related information due to nascent water management practices. These Guidelines are designed to be applicable to this wide spectrum of prospective disclosers. They are divided into four sections.

Section 2: Aligning Disclosure with Corporate Water Management Practices discusses the processes that underpin a company's water disclosure. In doing so, it illustrates how companies generate water disclosure information within their broader water management practice, as well as how water disclosure is situated within their efforts to improve as water resource managers over time. This section can help a company assess the relative maturity of its water management practice and in doing so identify the water-related information that it will likely be able to report most robustly.

Section 3: Company Water Profile describes how a company can offer a snapshot of its water management that a broad spectrum of audiences will easily understand. The profile can be included in company sustainability reports, websites, financial reporting, and other publications.

Section 4: Defining What to Report provides guidance on how companies can determine what water-related topics are relevant to the company and its stakeholders and what information is material to report, as well as how companies can report this process itself. This section can help a company just beginning to consider its approach to water management to assess the extent to which it should report. It can help more advanced companies determine which specific water-related topics are material to them.

Section 5: Detailed Disclosure provides in-depth guidance on the specific types of information that can be included in corporate water disclosures and discusses how companies can structure this information in a coherent manner. To promote accessibility to a wide range of readers, the metrics and other information offered in Section 5 are organized according to maturity of practice.

- **Basic:** Metrics or indicators (quantitative or qualitative) that can demonstrate meaningful action. This information is defined in a way that enables most **SMEs** and those with nascent water management programs to collect and report it. In most cases, companies focus on building their capacity to assess and disclose these content areas before proceeding to reporting more advanced practices.
- **Advanced:** Aspirational guidance aimed at companies with mature water management practices. In addition to reporting basic practices, advanced reporters also provide a broader and richer look into their water-related topics that ultimately delivers greater value to disclosure audiences.

Section 5 also includes several excerpts from actual company water disclosures that serve to highlight good and innovative reporting practices.

The appendixes, some of which are found at the end of this document and some of which are available on the web-based version of these Guidelines, provide various types of detailed guidance, examples of practice, tools and resources, and other materials that support effective corporate water disclosure.

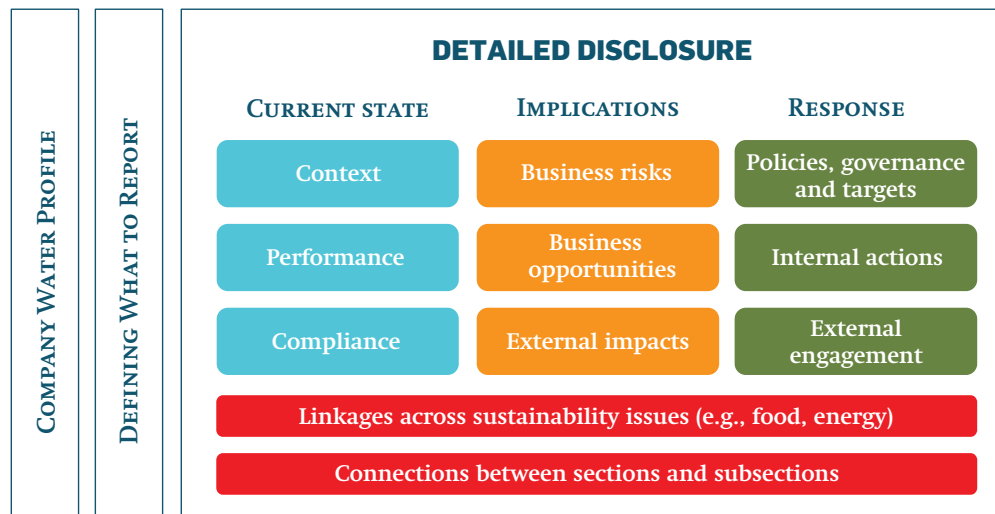
Terms in **purple bold font** throughout the Guidelines are defined in the glossary in Appendix A.



THE CORPORATE WATER DISCLOSURE FRAMEWORK

The full range of water-related information that companies report is summarized in the Corporate Water Disclosure Framework (Figure 1). The Disclosure Framework is divided into three broad pillars of information which track directly with the last three sections of these Guidelines (i.e., Company Water Profile, Defining What to Report, and Detailed Disclosure). The Disclosure Framework serves as a way to categorize the various types of content featured in comprehensive corporate water disclosure and to understand the structure of these Guidelines.

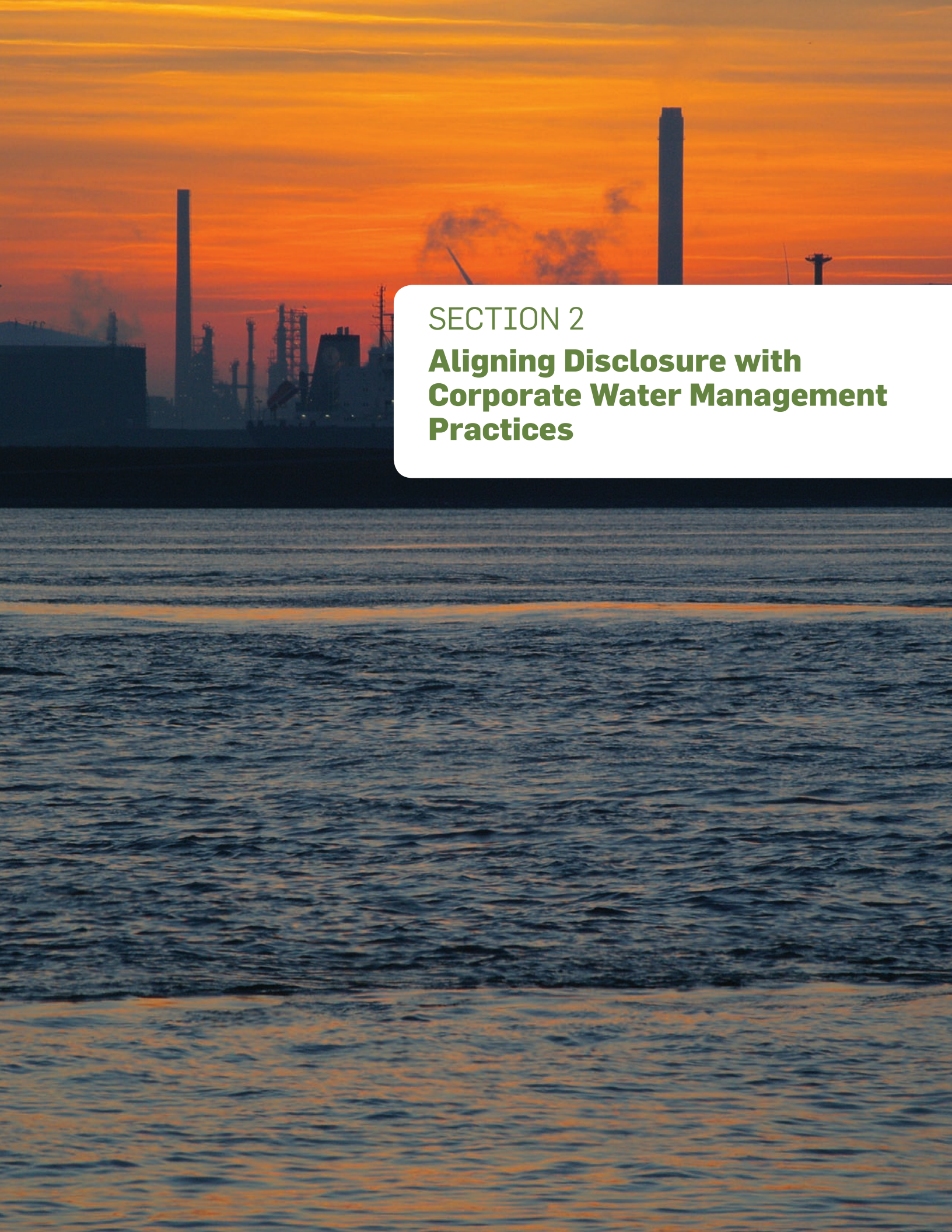
FIGURE 1: Corporate Water Disclosure Framework



HOW TO USE THE GUIDELINES IN CONJUNCTION WITH OTHER TOOLS

The Guidelines aim to inform existing and emerging work in the field of corporate water management, assessment, and disclosure. Specifically, CDP will seek to align future iterations of its Water Information Request with the Guidelines wherever possible. The metrics and information put forth in the Guidelines might also prove helpful in the development of future water-related aspects of Global Reporting Initiative's (GRI) G4 Guidelines. Finally, it is our hope that the Guidelines might be adopted by, or integrated into products being developed by, other corporate water initiatives, such as the Alliance for Water Stewardship (AWS), Ceres, Global Environment Management Initiative (GEMI), Water Footprint Network (WFN), World Business Council for Sustainable Development (WBCSD), World Resources Institute (WRI), World Wildlife Fund (WWF), and others.

The Guidelines reference other water and disclosure tools and resources at relevant points throughout the document. A list of these tools and resources is provided on the web-based version of the Guidelines. However, the Guidelines do not endorse any specific tools.

The background image shows an industrial facility, possibly a refinery or chemical plant, with several tall smokestacks and complex piping. The scene is set against a vibrant sunset sky with shades of orange, red, and yellow. In the foreground, there is a body of water with gentle ripples, reflecting the colors of the sky. A white rectangular box with rounded corners is positioned on the right side of the image, containing the section header text.

SECTION 2

Aligning Disclosure with Corporate Water Management Practices

SECTION 2

Aligning Disclosure with Corporate Water Management Practices

Corporate water disclosure is only one aspect of a company's overall water management programs and practices. Indeed, effective implementation of corporate water strategies relies on iterative management systems for different water-related activities, including those pertaining to internal corporate policies, governance, and operational performance as well as engagement with **stakeholders** outside the company fenceline.

This section describes how water disclosure is situated within and contributes to these broader management processes and how it provides business value. The section outlines the practical and administrative steps that make up a typical corporate water management cycle and then offers an overview of how the long-term maturity and evolution of a company's water management practices relate to its water disclosure efforts.

THE BUSINESS CASE FOR CORPORATE WATER DISCLOSURE

Companies are increasingly motivated to be proactive and comprehensive in managing their **water risks** and negative impacts,¹ seeing a number of advantages to doing so, including:²

1. Ensuring the company's legal and social license to operate in a specific location
2. Preventing or reacting to operational crises resulting from the inadequate availability, supply, or quality of water or water-dependent inputs in a specific location
3. Gaining an advantage over competitors because of stakeholder perceptions that the company uses natural resources responsibly and has a minimal negative impact on people and ecosystems
4. Assuring investors and markets that business operations will continue to be profitable by securing water availability for operations and reducing water-related costs
5. Upholding corporate values based on sustainable and equitable development by contributing to the well-being of the **basins**, ecosystems, and communities in which the company operates

1 Unless otherwise stated the terms *impacts* and *external impacts* refer to the significant economic, environmental and social effects, both positive and negative, of a company, its operations, or products.

2 For an in-depth discussion of water-related business risks and the business case for sustainable corporate water management, see the official CEO Water Mandate website at ceowatermandate.org.

Disclosure supports these goals in a variety of ways. Many companies have found that the disclosure process itself improves their internal understanding of water-related challenges and contributes to the development of effective response strategies. For those companies that have taken significant steps to manage their water-related risks and negative impacts, disclosure provides an opportunity to demonstrate progress and good practice to both internal and external **stakeholders**. This in turn helps companies strengthen their brand value and reputation, bolsters talent recruitment, and fosters increased investor confidence. Corporate water disclosure also offers a vehicle to establish a dialogue between companies and their stakeholders.

Showcasing progress and articulating future targets and commitments via disclosure (while allowing stakeholders to provide feedback on these aspects) strengthens corporate accountability and builds credibility with employees, local communities, civil society, and governments. Disclosure can also help companies hold other stakeholders accountable on water issues. For example, if a company can show that it has significantly reduced its water demand, it has a stronger position to call on governments to better manage water throughout a basin—instead of letting the government assume that the company's plant or supplier is the problem. Developing trust and accountability with these stakeholders reinforces a company's license to operate and serves as a starting point for partnerships and collective action in support of shared risks and sustainable water management.



The water-related interests of different stakeholder groups and potential disclosure audiences

[Click here](#)

“Water has been an important part of H&M's sustainability work for many years. As part of this, our water disclosure work helped us to more accurately identify our company's dependencies on water and the impact we have on freshwater ecosystems, and hence it helped us to address even more of the challenges and opportunities connected to water.”

—**HELENA HELMERSSON**
HEAD OF SUSTAINABILITY, H&M

HOW DISCLOSURE FITS INTO CORPORATE WATER MANAGEMENT

A typical corporate water management cycle features a series of practical steps that a company uses to understand its relationship with water, undertake response strategies, and eventually communicate both to **stakeholders**. Understanding each step and the type of information generated through this process allows for more effective reporting. This section describes how a typical corporate water management cycle aligns with the Disclosure Framework presented in these Guidelines.

Though corporate water management processes vary from company to company, they can be generalized as being iterative and having the following fundamental steps. The process depicted below as an illustrative example is derived from the [UN Global Compact Management Model](#)³ and adapted for water-related management.

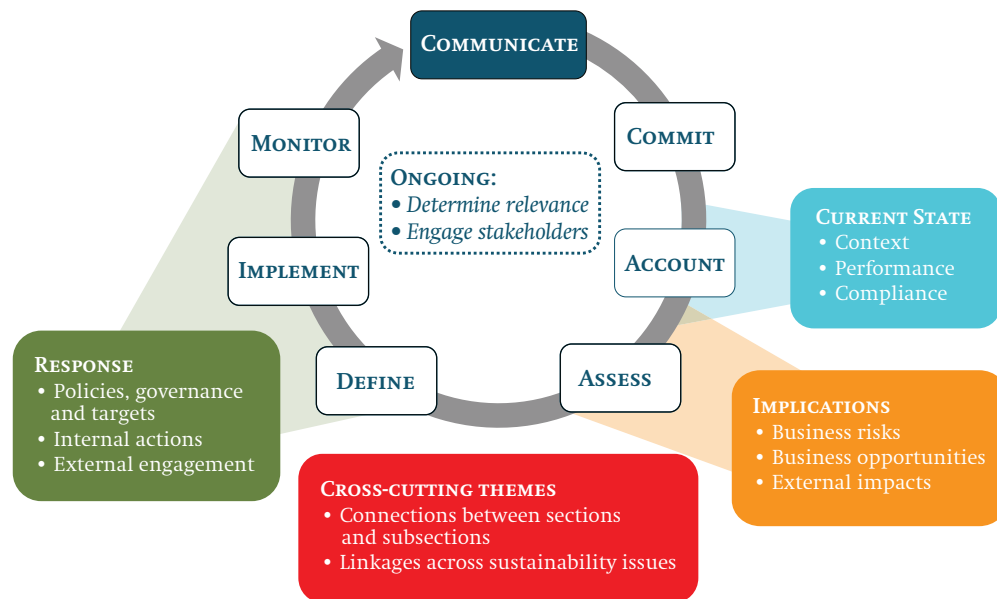
1. **COMMIT.** Commit to drive sustainable water management.
2. **ACCOUNT.** Collect data on internal water performance and the condition of the basins in which the company operates.
3. **ASSESS.** Use the data generated in the Account phase to identify water-related business risks and opportunities and negative impacts.
4. **DEFINE.** Define and refine corporate water policy, strategies, and performance targets that drive performance improvements and address risks and negative impacts.
5. **IMPLEMENT.** Implement water strategies and policies throughout the company and across the company's value chain.
6. **MONITOR.** Monitor progress and changes in performance and basin conditions.
7. **COMMUNICATE.** Communicate progress and strategies and engage with stakeholders for continuous improvement by means of corporate water disclosure. (This document provides a framework and guidance for conducting this step in an effective and harmonized manner.)

This process is sequential and iterative and might be conceptualized as an upward spiral driving a mindset of continuous improvement. It also includes two ongoing actions that reinforce each of the seven steps. First, a company continually engages with key stakeholders in order to better understand its water-related risks and impacts and receive input on the efficacy of its policies and response strategies. Second, a company continually assesses the relevance of various water-related issues to understand new trends and conditions and identify the issues of highest priority for the business and its stakeholders. The process of assessing relevance is discussed in detail in Section 4.

Figure 2 shows how this management cycle fits with the Disclosure Framework.

³ UN Global Compact, *UN Global Compact Management Model*, 2010.

FIGURE 2: A Corporate Water Management Cycle and Its Relation to the Disclosure Framework



NOTE: The UNGC Management Model's "Measure" step has been broken into two components: "Measure" and "Monitor" to align more closely with water-specific management processes

This general management cycle includes all the practical and administrative steps needed to generate the disclosure content described in the Disclosure Framework. In the Account phase, companies quantify their internal performance (e.g., **withdrawals**, **water consumption**, **water discharge**) and seek to understand basin conditions (e.g., water availability, **water quality**) to better understand the current state of their business with respect to water. In the Assess phase, companies interpret these data to better understand the implications for business viability (i.e., risks and opportunities) and the well-being of the people and ecosystems that the business touches (i.e., whether there are negative impacts on basin conditions). The Define, Implement, and Monitor phases of the management cycle comprise a series of actions whereby companies develop, operationalize, and evaluate response actions (corporate policies and strategies, internal actions, and external engagements) that address their water-related risks and negative impacts.



“Over the years, we have established a robust mechanism for annual water disclosure, which not only help us to abide with our commitment of transparency to the CEO Water Mandate but also enables us to identify gaps, explore possibilities of improvement and devise mechanisms for intra-company competition to achieve water use efficiency.”

—**AJIT GULABCHAND**
CHAIRMAN AND
MANAGING DIRECTOR,
HINDUSTAN
CONSTRUCTION
COMPANY

THE LONG-TERM CORPORATE WATER MANAGEMENT MATURITY PROGRESSION

While the management cycle offered in the previous section describes the various practical steps that companies conduct as part of their broader corporate water management processes, it does not speak to how water management practices evolve and mature over the long term.

For example, those companies just beginning to prioritize water issues often focus on water measurement and efficiency programs within their direct operations. Those with advanced water management programs might address a wider array of water-related issues such as a comprehensive corporate water strategy, value chain management, and engagement in sustainable water management activities outside the company fenceline.

Corporate water management can generally be categorized into the following types of activities:

- **Provide WASH services in the workplace⁴**
Providing and properly maintaining drinking water, sanitation, and hygiene (WASH) services in the workplace supports the health and well-being of a company's workers.
- **Measure and monitor water management practices**
Another early step is continuously tracking the extent to which direct operations use and affect water resources. Such measurement allows a company to identify facilities (and specific processes within facilities) that require priority action and to gauge progress.
- **Drive operational efficiency and reduce pollution**
A company can build on its understanding of its water management practices by implementing water efficiency and pollution reduction measures that improve its performance and begin to manage its risks and negative impacts.

⁴ The World Business Council for Sustainable Development's [WASH at the Workplace](#) website provides a variety of resources that help companies ensure they provide sufficient WASH services in their operations.

- **Identify and understand water-stressed and high-risk basins**

To fully understand and address its business risks and impacts and properly prioritize action among different geographic areas, a company must have a firm understanding of the contexts in which it operates. In particular, it identifies and investigates those areas that are experiencing **water stress** or might otherwise be considered high-risk. This knowledge is typically gained through internal data collection and assessment and the use of third-party datasets and tools.

- **Integrate water management into business strategy**

A nuanced understanding of river basins and the company's own operations within them positions a company to become strategic about developing policies and programs to address its top water priorities. Comprehensive strategies are integrally linked to core business and long-term business success. Strategy development can include many dimensions, such as establishing corporate governance and accountability mechanisms, setting goals, and defining a water management philosophy.

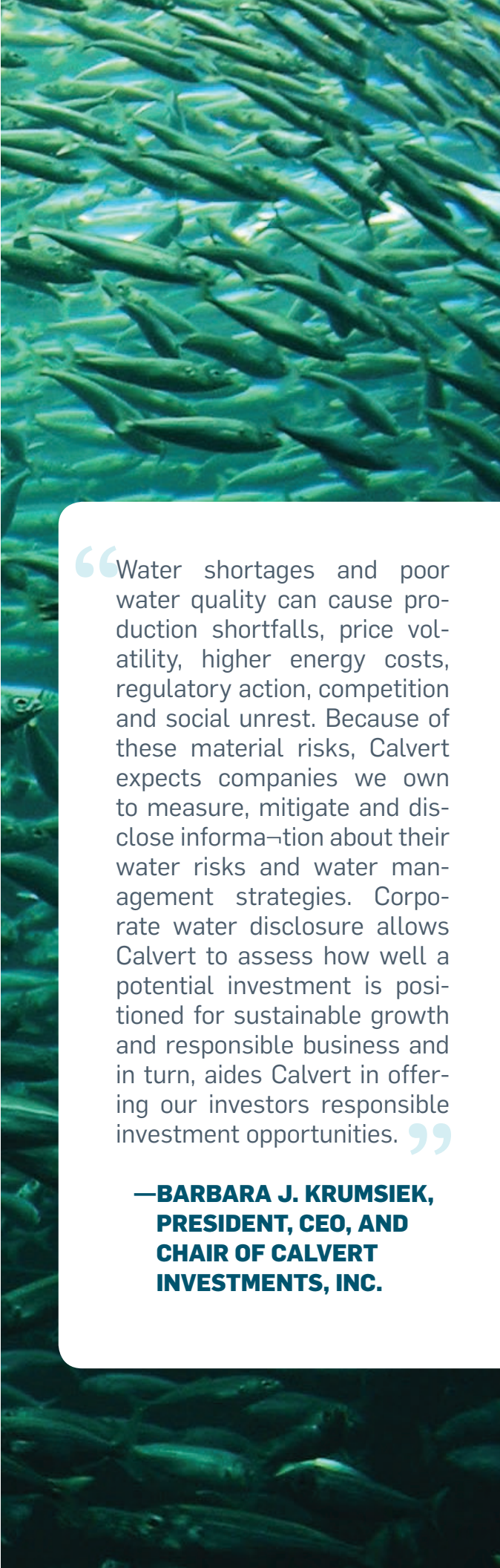
- **Leverage improved practices throughout the value chain**

More mature companies look beyond their direct operations to address water risks and negative impacts in the value chain. In order to address those risks and opportunities, a company assesses value chain exposure to **water risk** to consider the impacts its products may have on water resources and how its suppliers are affected by and contribute to water-related challenges. A company then uses its influence to drive improved practices throughout the value chain.

- **Advance sustainable water management and engage in collective action⁵**

A company with the most advanced water management practices may look to engage externally to ensure long-term business continuity by contributing to the sustainable management of shared water resources on which the company relies. Such place-based external

⁵ The CEO Water Mandate's 2010 publication *Guide to Responsible Business Engagement with Water Policy* offers detailed guidance on how companies can best engage with governments and others to advance sustainable water management.



“Water shortages and poor water quality can cause production shortfalls, price volatility, higher energy costs, regulatory action, competition and social unrest. Because of these material risks, Calvert expects companies we own to measure, mitigate and disclose information about their water risks and water management strategies. Corporate water disclosure allows Calvert to assess how well a potential investment is positioned for sustainable growth and responsible business and in turn, aides Calvert in offering our investors responsible investment opportunities.”

**—BARBARA J. KRUMSIEK,
PRESIDENT, CEO, AND
CHAIR OF CALVERT
INVESTMENTS, INC.**

engagement occurs in a variety of forms, ranging from information sharing, to community engagement and basin-restoration projects, to working with local and regional governments to strengthen the local water management capacity. In most cases, this requires collaboration with other organizations and actors (i.e., “collective action”), exposing the company to complex dependencies and increased expectations.

HOW DISCLOSURE FITS WITH CORPORATE WATER MANAGEMENT MATURITY

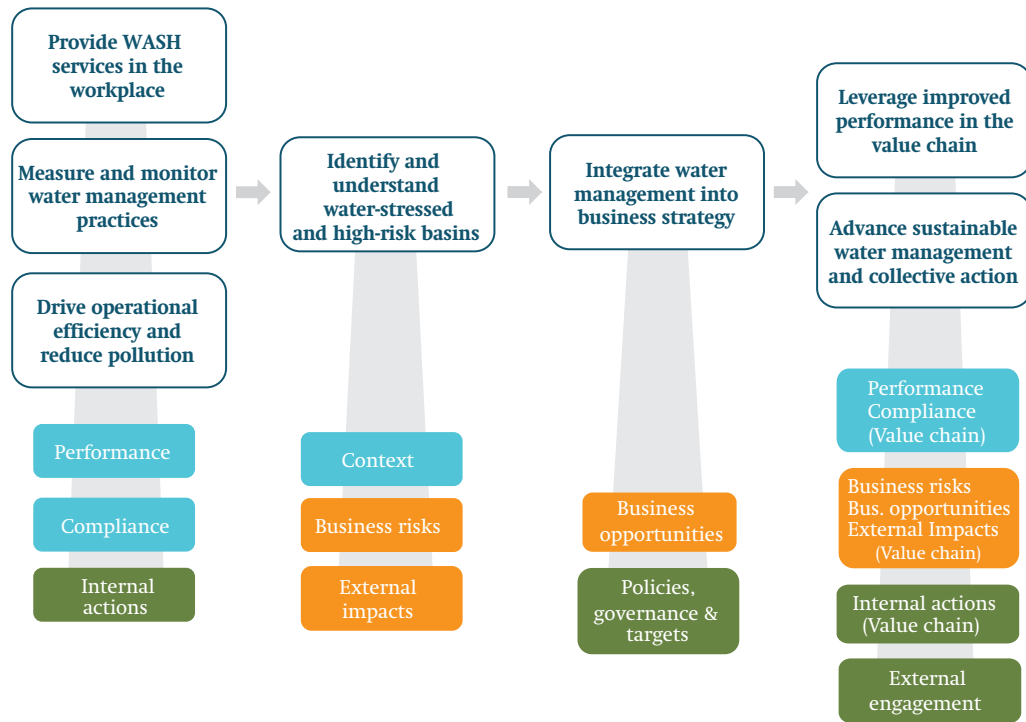
Ideally, companies work to advance all seven types of water management activities concurrently. However, due to the complexity of accounting for and managing water and the fact that for many companies water has only recently emerged as a high-priority corporate sustainability issue, many companies currently pursue only one or two activities.

Since water management activities differ with respect to time and resource commitments, as well as level of complexity and difficulty, companies tend to pursue them in a similar order (though this can vary from company to company within and among industry sectors). For example, improved operational performance is typically a prerequisite for effective collective action.

The maturity of a company’s water management practice is directly related to the maturity and comprehensiveness of its [corporate water disclosure](#). As the company expands its water management activities to address a wider range of risks and impacts, the scope of its disclosure practice expands as well. Thus, if a company identifies where it resides on this progression, it also gains insight into the types of information that it is able to report robustly, as well as how its water management and disclosure practice might expand over time.⁶ Figure 3 shows how the types of management activities described above align with and link to the various subsections of the Disclosure Framework.

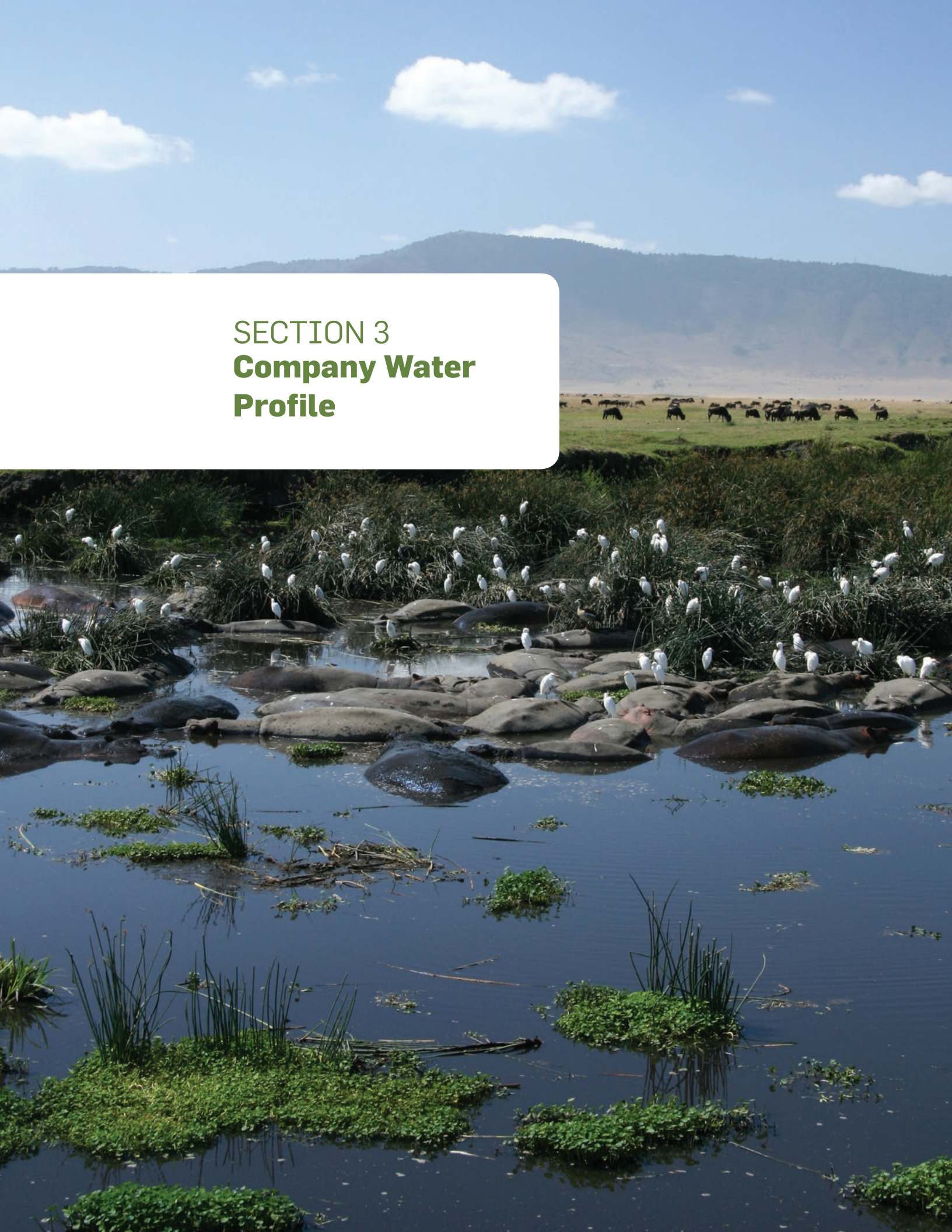
⁶ CDP provides a [Water Reporting Roadmap](#) that tracks the maturity of corporate disclosure relative to information being reported.

FIGURE 3: Linking Corporate Water Management Maturity and the Disclosure Framework



“Through regular and open disclosure, common goals can be established for shared rewards. Molson Coors believes that disclosure around our water use is imperative in order to provide a collective understanding and approach to effective water stewardship in the communities where we operate. We continue to realize the direct benefits of disclosure, through risk reduction, cost savings and water quality improvements, and together with positive community engagement, education and outreach, water stakeholders within our brewing and supplier communities benefit.”

**—PETER SWINBURN,
CEO, MOLSON COORS BREWING COMPANY**

A savanna landscape featuring a river with several hippos in the water. The banks are covered in tall grass and reeds, with many white birds, likely egrets, standing on the shore. In the background, a herd of wildebeest is grazing on the grass, and a range of hills is visible under a blue sky with scattered white clouds.

SECTION 3 **Company Water Profile**

SECTION 3 Company Water Profile

A key aspect of the Disclosure Framework is the Company Water Profile, a high-level overview of a company's water issues and management efforts. In essence, the profile provides an executive summary that, due to its brevity (one or two pages), adds context and meaning to the wider array of more detailed water-related information that the company offers. Profiles are designed to offer a snapshot of water performance, risks, impacts, and response strategies that nontechnical audiences can easily understand. For some companies, particularly **SMEs** or those for which water is only marginally significant, the profile may constitute the only water-related information disclosed.

Company Water Profiles will vary with respect to length and sophistication depending on the maturity of a company's water management; however, a profile should be brief and include the following basic information regarding the following components:

- **The company's interactions with water**
Companies describe generally how they utilize water resources (e.g., their operational uses for water, the nature of their **water discharge**, the importance of water to the value chain, the water use of their products). Ultimately, readers should come away with a clear idea of how the company utilizes water resources and why and to what extent water is important for business viability.
- **The company's water challenges and opportunities**
Companies then provide a high-level discussion of the opportunities and challenges that water poses to the business and the extent to which water-related issues are relevant for the company generally. This discussion synthesizes information about how the company uses water with a discussion of global water trends and specific **basin** conditions in order to provide an overview of the company's water-related business risks, opportunities, and impacts.
- **The company's commitment and response**
A profile can also summarize the steps the company is taking to address water-related risks and impacts and to seize water-related opportunities. Such a summary can touch upon many issues, ranging from a high-level commitment to water sustainability to specific company policies and strategies. Profiles will vary depending on the maturity of the management practices. Some companies may choose to situate the maturity of their water management practice within a broader continuum and articulate how they anticipate their strategies and programs will grow and evolve over time.



Profile metrics that provide a summary of companywide water performance and risk

A profile offers a chance to provide a quantitative snapshot of companywide water-related performance and risk. To do so, the company demonstrates its performance over time with respect to the profile metrics:

- 1) Total and percentage of withdrawals located in water-stressed or water-scarce areas
- 2) Percent of facilities with a water-related regulatory **compliance violation**
- 3) Percent of facilities adhering to relevant **water quality** standards
- 4) Average **water intensity** in water-stressed or water-scarce areas (as appropriate)⁷

Ideally, a company will display numerous years of data for these metrics (in chart or tabular format) in order to demonstrate performance over time, using a **base year** to track progress. The articulation of targets for one or more of the metrics can also serve to reinforce relevant policy commitments and strategies.

Comparability

In some instances, it may be appropriate to make comparisons of profile metrics and other data across companies, especially for companies within the same industry sector. However, companies and their **stakeholders** should be cautious when doing so. Company results may vary, and thus not be comparable with those of other companies, due to the datasets and tools they use to assess concepts such as **water stress**. Furthermore, metrics related to water intensity, though helpful for tracking a company's progress over time, may not be fit for comparison across companies due to different types of products that inherently require different volumes of water. Other reasons profile metrics may not be comparable between companies is that they depend on **report boundaries**. For example, data from a vertically integrated company and a company whose operations pertain to only one value chain segment are not comparable. These Guidelines support the approach to the reporting boundaries outlined in the Greenhouse Gas Protocol, which does not specify a single methodology but rather describes two common approaches (operational and organizational boundaries).⁸ The credibility of comparisons is enhanced when reported data are independently verified.⁹

A list of “hot spots” where risks and impacts are most likely

Lastly, profiles allow companies to shed light on the water-stressed and high-risk locations (or “**hot spots**”) where they are most likely to experience **water risks** or create negative impacts. Ideally, a company will provide a list of water-stressed (or otherwise high-risk) basins where it has operations. The Context subsection of Section 5 offers guidance on how companies can conduct a basic assessment of hot spots.

A Company Water Profile can serve several functions and can be presented in numerous formats, including the following:

- The executive summary of a water-specific sustainability report
- A water-related summary in short sustainability reports
- A page in the company website
- Part of the annual report

⁷ Water-intensity metrics may not be useful or appropriate for all companies and industry sectors.

⁸ World Resources Institute (WRI) and World Business Council on Sustainable Development (WBCSD), *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard*, rev. ed., 2004.

⁹ The European Union's *Guidance for the implementation of the EU Organisation Environmental Footprint (OEF) during the Environmental Footprint (EF) Pilot Phase* provides further instruction for data verification and how it can be applied for comparability purposes.

A scenic view of a traditional Chinese village. A river flows through the center, with people washing clothes on the banks. Old buildings with white walls and dark roofs line the river. A small bridge crosses the river in the distance. The background shows misty mountains.

SECTION 4

Defining What to Report

SECTION 4 Defining What to Report

Companies can report on a vast range of sustainability topics (use of water, energy, and land; waste; greenhouse gas emissions, and so on). Even within the realm of water, numerous issues affect, and are affected by, companies to varying degrees, depending on the geographic location, industry sector, and other circumstances. To be effective in its reporting, a company must determine which water-related topics (e.g., **water scarcity**, poor ambient **water quality**, inadequate access to drinking water or sanitation, flooding) are most important to its **stakeholders**, which topics have (or may have) significant impacts on people and ecosystems, and which have the potential to generate risks or opportunities for the business.

This section provides guidance on how a company can define which water-related topics and information it should disclose, as well as how it can effectively communicate this process and its outcomes.

RELEVANCE AND MATERIALITY: WHAT ARE THEY?¹⁰

In sustainability reporting, materiality is commonly thought of as a threshold at which certain sustainability topics become relevant enough for a company to report on. The Global Reporting Initiative (GRI) defines material topics as those that:

- Reflect the company's significant economic, environmental and social impacts or
- Substantively influence the assessments and decisions of **stakeholders** (such as employees, investors, suppliers, local communities, governments, investors, or consumers)

These material topics often have a significant financial impact in the short term or long term on a company. They are therefore also relevant for stakeholders who focus strictly on the financial condition of a company.

Materiality and *relevance* are often used interchangeably. However, they are two distinct terms whose subtle differences are critical to companies seeking to define which content to report:

- **Relevant** topics are those that may reasonably be considered important for reflecting the company's economic, environmental and social impacts, or influencing the decisions of stakeholders. They therefore potentially, but not necessarily, merit disclosure.
- **Material** topics are the subset of relevant topics that are ultimately determined to be sufficiently significant to report on.

Both terms, within the context of sustainability reporting, inherently require some subjective judgments. Reporting companies should be transparent about these judgments.

¹⁰ For more detailed guidance on defining report content for a sustainability report, see the Global Reporting Initiative (GRI) [Sustainability Reporting Guidelines](#) (G4) (pages 31-40 of the *G4 Implementation Manual*). Guidance in this section is drawn heavily from the process outlined in the G4 Guidelines.

ASSESSING RELEVANCE AND MATERIALITY FOR WATER-RELATED TOPICS

The process of determining a company's material water-related topics, and thereby defining which water-related information should be reported, has three key steps:

- 1) Identifying a list of relevant water-related topics based on the company's risks, opportunities, and impacts on people and ecosystems, and in what locations in the company and in the value chain these topics are relevant
- 2) Prioritizing the relevant water-related topics based on an assessment of the significance of the risks, opportunities, and impacts they pose and the views expressed by **stakeholders**
- 3) Validating the outcomes of the materiality assessment

In addition, a company reviews its materiality assessment as part of every reporting and management cycle. This will help it capture ongoing changes in global water challenges, specific **basin** conditions, stakeholder expectations and priorities, and how and where the company operates.

This process is underpinned by an ongoing stakeholder engagement that allows the company to identify emerging water-related topics and to better understand its water-related risks, opportunities, and impacts. A company may wish to integrate water into its broader materiality assessment for sustainability topics or undertake an in-depth materiality assessment focused specifically on water-related topics. Whichever method is used, a company should ensure that it does not assess water in isolation from other sustainability topics, because it may fail to identify relevant linkages and trade-offs between water and other sustainability issues. The GRI G4 Guidelines describe a generic process for defining a company's set of material sustainability topics to be managed and reported.

STEP 1: IDENTIFYING RELEVANT WATER-RELATED TOPICS

1.1 DETERMINING REPORTING BOUNDARIES FOR WATER

As a first step, a company determines the range of entities to be included in the relevance and materiality assessment. Basic disclosers provide information for the entities they own or control (those typically included in its consolidated financial statements, such as subsidiaries or joint ventures). Advanced water disclosers, in addition and separately, provide information for outside entities in the value chain (e.g. suppliers) where there are significant risks, opportunities, or impacts.

There are several methodologies available for defining the boundary of a topic for reporting purposes, notably those suggested by the [GHG Protocol](#) and the GRI [G4 Guidelines](#).

1.2 ASSESSING WHETHER WATER IS A RELEVANT SUSTAINABILITY TOPIC

Next, companies assess whether water is generally a relevant sustainability topic. Companies typically consider the general exposure of their industry sector to water-related risks and the likelihood that they will create negative water-related impacts. Then they assess the risk exposure and likelihood of creating negative impacts in the specific basins in which they operate.¹¹ Table 1, though likely not comprehensive, offers an overview of industry sectors typically exposed to significant water-related business risks due to the nature of their water use.

TABLE 1: Industry Sectors with High and Medium Exposure to Water-Related Risks

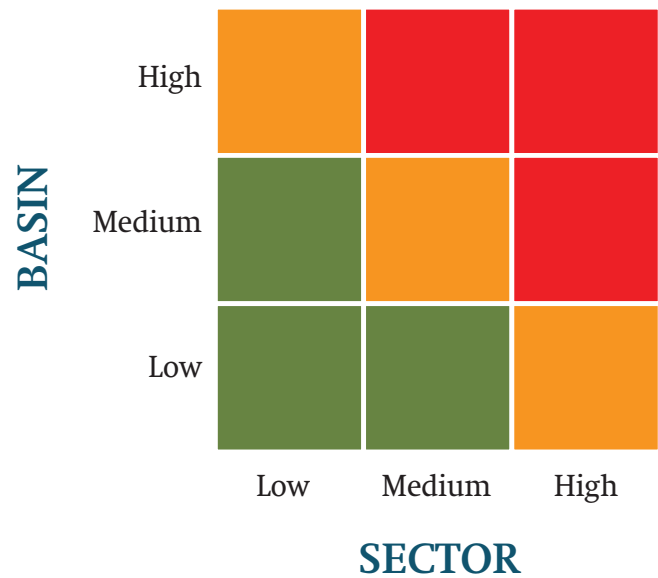
HIGH PRIORITY	MEDIUM PRIORITY
Agriculture	Construction & materials
Beverage producers	Gas distribution & multi-utilities
Biomass power production	Manufacturing of industrial household goods, home construction, leisure goods
Chemicals	Media (printed)
Clothing & apparel	Real estate (asset owners)
Electric power production	Transportation
Food producers	Travel & leisure
Food retailers	
Forestry & paper	
Freshwater fishing & aquaculture	
Hydropower production	
Mining	
Oil & gas	
Pharmaceuticals & biotech	
Technology hardware & equipment, semiconductors	
Water utilities and services	

Source: Ceres. The Ceres Aqua Gauge: A Framework for 21st Century Water Risk Management, 2011.

11 A variety of tools are available for such an assessment. The [Ceres Aqua Gauge](#) features a list of high- and medium-risk basins, while the [WBCSD Global Water Tool](#), [WWF-DEG Water Risk Filter](#), and [WRI Aqueduct Water Risk Atlas](#) all offer methods by which companies can assess water stress and water risk at a high-level. The [GEMI Local Water Tool](#) and [WFN Water Footprint Assessment Tool](#) offer more granular assessments of water stress. More information on all of these tools can be found in on the web-based version of the Guidelines.

After this high-level assessment of **water risks** based on industry sector and basin conditions, companies can locate themselves on the matrix in Figure 4.

FIGURE 4: Measuring Relative Exposure to Water Risk and Impacts



Companies that fall in the red areas will benefit from managing water in a robust manner and reporting on water in a detailed manner as described in Section 5 of these Guidelines. Those that fall in the orange areas will certainly want to consider their water-related challenges and seek, at a minimum, to prioritize reporting the information described in Section 3: Company Water Profile.

A company may also assess water as a relevant topic if it has identified opportunities to drive positive business value or generate positive water-related impacts for people and ecosystems.

1.3 IDENTIFYING SPECIFIC WATER-RELATED TOPICS TO REPORT

Reporting companies then seek to determine which specific water-related topics are of particular relevance by assessing the company’s water-related risks, opportunities, and impacts on people and ecosystems. At this level of assessment, a company considers at least the following broad considerations:

- Its impacts on water resources and access to WASH services
- Business risks stemming from basin conditions (e.g., **water scarcity**, pollution, regulatory uncertainty, etc.)
- Opportunities to contribute to sustainable water management
- Opportunities to adapt to ensuing changes in basin conditions (e.g., climate change or land use) and planned changes in policies and regulatory frameworks

Potential global-, regional-, and basin-level water-related topics that might be considered part of the identification step include, but are not limited to:

- Water scarcity and water stress
- Poor ambient water quality
- Regulatory uncertainty
- Insufficient infrastructure
- Inadequate access to water and WASH services
- Drought
- Flooding
- Climate change
- Changing demographics
- Limited management capacity
- Ecosystem vulnerability
- Total basin availability
- Supply variability
- Cultural and religious values
- Media awareness

STEP 2: PRIORITIZING RELEVANT WATER-RELATED TOPICS

In Step 2, a company prioritizes the water-related topics identified in Step 1 to develop a list of material topics to be reported. Fundamental to this step is assessing the significance of the risks, opportunities, and impacts associated with the topics identified in Step 1. Next, the company must determine the influence that these topics may have on stakeholders' assessments and decisions. Depending on their significance, topics are considered material regardless of the company's ability to effectively manage them.

When assessing the **significance of the risks, opportunities, and impacts** associated with a specific water-related topic to the business itself and to sustainable development generally, a company asks the following questions:¹²

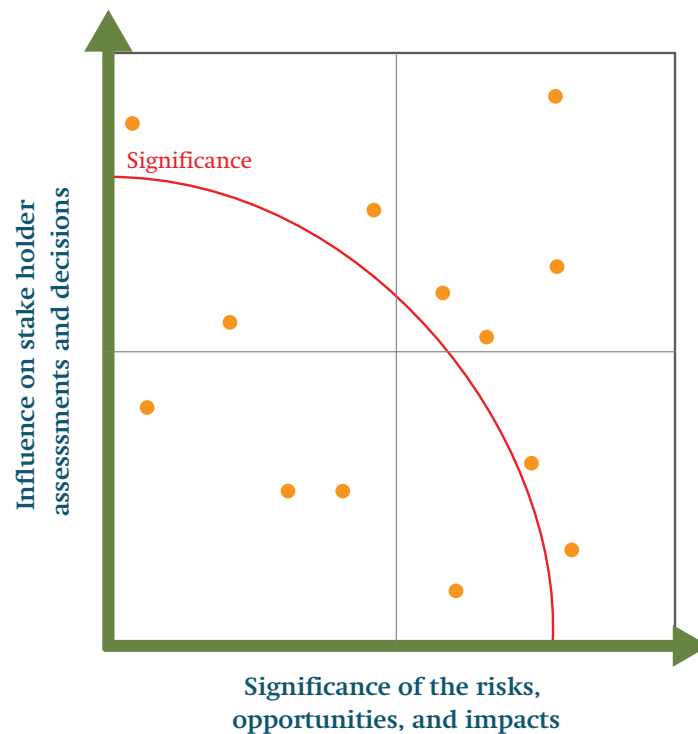
- What is the likelihood and severity of the impacts?
- Does this topic compromise the company's license to operate in a specific location?
- Might this trend or condition eventually disrupt the company's operations or its value chain?
- Is there an opportunity to gain competitive advantage through action in this area?
- Might action in this area further assure investors and markets that business operations will continue to be profitable?
- Does this topic compromise the company's ability to uphold its own values and ethics?

¹² For more guidance on analyzing the significance of a company's impacts related to a topic, see the GRI G4 Guidelines (pages 36–37 of the [G4 Implementation Manual](#)).

When assessing a specific water-related topic's **influence on stakeholder assessments and decisions**, the company proactively engages with stakeholders so that they can articulate their interests and values, their perceptions of the company's impact on that stakeholder group, or their expectations regarding the company's response to that topic.¹³

After completing this twofold analysis, a company can then determine which specific water-related topics are material. The matrix in Figure 5 may be useful to visually represent the significance of each topic. A company plots water-related topics relative to one another with respect to the significance of the risks, opportunities, and impacts and their influence on stakeholder assessments and decisions. Then, in order to determine which specific water-related topics are material, a company defines the thresholds and underlying criteria (depicted by the red line in the example in Figure 5) that render a topic material. Topics that exceed the significance threshold set by the company are material. A topic does not have to be highly significant in both viewpoints to be deemed material. High significance within one viewpoint is more important than convergence between the different viewpoints.

FIGURE 5: Visual Example of Prioritization of Topics



Once a company has identified its material water-related topics, it then determines the level of reporting coverage each one should receive. This refers to the prominence, amount of data, and narrative explanation disclosed for each material topic.

¹³ For more guidance on analyzing the influence on stakeholder assessments and decisions of a sustainability topic, see the Global Reporting Initiative (GRI) G4 Guidelines (page 36 of the [G4 Implementation Manual](#)).

STEP 3: VALIDATING THE OUTCOMES OF THE MATERIALITY ASSESSMENT

In the third step, the company ensures that the final selection of material water-related topics provides a reasonable and balanced representation of the company's significant water-related risks, opportunities, and impacts. To do so, the company assesses the proposed list of material water-related topics against:

- **Scope**—Are all significant water-related risks, opportunities, and impacts covered?
- **Boundary**—Has the company considered significant risks, opportunities, and impacts in entities both within the company and throughout its value chain?
- **Time**—Does the selected information cover the entire **reporting period**?

STEP 4: REVIEW

As the company is preparing for its next reporting and management cycle, it reviews its materiality assessment in order to capture ongoing changes in global water challenges, specific basin conditions, stakeholder expectations and priorities, and how and where the company operates.

COMMUNICATING THE PROCESS FOR DEFINING WHAT TO REPORT

Providing a description of the materiality assessment process itself allows readers to better understand and evaluate whether the company is managing and reporting the most important water-related topics. Reporting water-related materiality assessments comprises three main components:

- How important water is to the company (relative to other sustainability topics)
- How water-related topics have been prioritized
- How **stakeholder** engagement informed the materiality assessment process

REPORTING HOW IMPORTANT WATER IS TO THE COMPANY

The matrix provided in Figure 3 is a useful tool for illustrating the importance of water to the business. The matrix can be supplemented by a description of the industry's relative exposure to water-related risks. It can also provide a discussion of any water challenges facing the regions in which the company (or any other entities included within the reporting boundary) has operations.

The matrix in Figure 4 can also be used to depict the company's overall materiality assessment for sustainability topics and to show how important water is to the company relative to other sustainability topics.¹⁴

¹⁴ See the GRI G4 Guidelines (page 37 of the [G4 Implementation Manual](#)).

REPORTING HOW WATER-RELATED TOPICS HAVE BEEN PRIORITIZED

Next, a company indicates which specific water-related topics were deemed material—and which of those are most important. To do so, the company may choose to publish the matrix shown in Figure 4. This matrix provides a visual representation of how water-related topics have been assessed based on the significance of their risks, opportunities, and impacts, and their influence on stakeholder assessments and decisions.

In addition, the company can provide a table (for an example see Table 2) that lists the material water-related topics, in order of reporting priority, and briefly describe:

- 1) The company entities (e.g., subsidiaries, joint ventures) or entities in the value chain (e.g., suppliers) that face significant risks, opportunities, or impacts related to the topic
- 2) The geographic or geopolitical area(s) where the topic in question is material
- 3) The significant risks, opportunities, and impacts related to the topic
- 4) Stakeholders for whom the topic is important
- 5) The extent to which the company can influence the risks, opportunities, and impacts related to the topic
- 6) Where the topic is reported (e.g., a specific page in the company's sustainability report or on its website)

TABLE 2: Example of Material Topics List

Material Topic	Company or Value Chain Entities	Geographic/ Geopolitical Area(s)	Risks, Opportunities, Impacts Related to the Topic	Stakeholder Interest	Company's Ability to Influence	Reporting Location
		<i>Company Information Here</i>				

Though all material topics should be reported regardless of whether the company is actively managing them, companies are likely to report more detailed information for topics to which they are actively responding. For example, a company may deem both **water scarcity** and limited management capacity as material topics, but be more equipped to address water scarcity. In this case, the company would report both topics as material, but address water scarcity (and its associated responses) in more detail. The Corporate Water Management Maturity Progression (see Figure 3) is a helpful tool in identifying and communicating which topics the company may be most equipped to manage and report in detail. At the same time, the Maturity Progression offers insight into what additional management practices the company can implement in the next reporting cycle to better address material topics it is currently not equipped to manage and report robustly.

Reporting the materiality assessment process is inherently linked to reporting significant risks, opportunities, and impacts, as described in the Implications discussion in Section 5 of these Guidelines. In Section 4, the company reports the process for determining relevance and materiality and provides a *high-level* description of the significant risks, opportunities, and impacts related to each material topic. In Section 5, the company describes *in detail* the nature of the significant risks, opportunities, and impacts identified in the materiality assessment.

REPORTING HOW STAKEHOLDER ENGAGEMENT INFORMED THE MATERIALITY ASSESSMENT

Finally, a company explains how it engaged stakeholders to support the materiality assessment process. Specifically, the company describes which specific stakeholder groups were engaged, how this was done (e.g., through local water forums, unsolicited messages, working groups, etc.), and what the key outcomes of that engagement were and how the company addressed them. The company can also report the lessons learned and the stakeholder engagement plan for the next reporting cycle.

The image is a full-page background photograph. It shows a serene landscape with a calm, teal-colored lake in the middle ground, reflecting the surrounding dense green forest. The foreground is filled with large, vibrant green leaves, some with prominent red veins, which appear to be from a plant like a rhubarb. The background is a steep, densely forested hillside. A white rounded rectangle is positioned on the right side of the image, containing the section header text.

SECTION 5

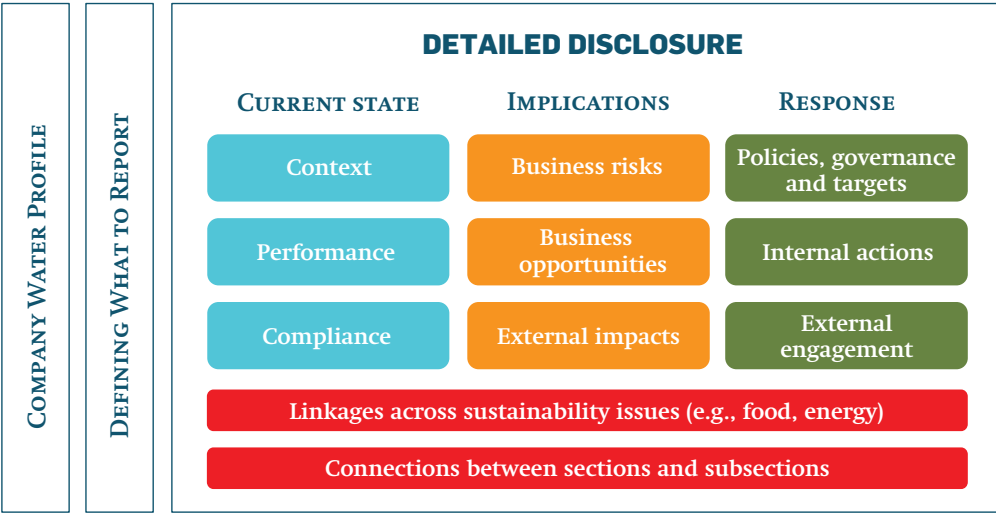
Detailed Disclosure

SECTION 5 Detailed Disclosure

UNDERSTANDING AND LINKING COMPONENTS OF THE FRAMEWORK

This section provides guidance on the Detailed Disclosure pillar of the Disclosure Framework. This pillar comprises the 11 information areas that should ideally be addressed in a company’s water disclosure. The framework is not intended to indicate what elements of corporate water management and disclosure are most important or the order in which companies should address them. Rather, it offers a way to categorize and understand the many types of water-related information that companies report.

FIGURE 6: Corporate Water Disclosure Framework



BASIC AND ADVANCED REPORTING

The guidance provided in this section is divided into *basic* and *advanced* practices. While basic practice provides a good starting point for companies with limited experience in water management, advanced practice represents the full range of information that companies ideally report. However, some companies, depending on their size and the importance of water to the business and **stakeholders**, may not deem it necessary or valuable to implement this full range of practices.

Advanced practices are inclusive of basic practices. In other words, advanced reporters disclose practices listed in both basic and advanced categories. Some companies, particularly **SMEs** or those for which water is only marginally significant, may opt to focus on reporting the information suggested for Company Water Profiles (see Section 3), and disregard basic and advanced practices altogether. In fact, some basic practices are included as Profile Metrics in Section 3: Company Water Profile. Table 3 summarizes the basic and advanced disclosure practices discussed in this section.

TABLE 3: Summary of Basic and Advanced Reporting Practices

SUBSECTION		BASIC	ADVANCED
CURRENT STATE	Context	High-level assessment of basins across a portfolio	- Detailed, location-specific assessment of basins where water challenges are pronounced - High-level assessment of basins in which key value chain actors are located
	Performance	- Total and percentage of withdrawals in water-stressed or water-scarce areas - Percent of facilities adhering to relevant water quality standards - Average water intensity in water-stressed or water-scarce areas (as appropriate) - Percent of facilities with fully functioning WASH services for all workers	- Location-specific performance data: - Water withdrawals by source type - Water intensity - Water consumption - Water discharge by destination type - Water performance in the value chain
	Compliance	Percent of facilities with a water-related regulatory compliance violation	- Adoption of internal and/or voluntary sustainability standards - Water-related regulatory compliance violations in the value chain
IMPLICATIONS	Business risks	High-level assessment of risks at a portfolio level	- Detailed assessment of risks based on extensive, location-specific analysis at the facility level - Value chain risks
	Business opportunities	High-level assessment of opportunities	- Detailed assessment of opportunities - Value chain opportunities
	External impacts	N/A (legal compliance used as proxy)	- Impacts on water availability, water quality, and access to water resources and WASH services (including human-rights-related impacts) - Prioritizing impacts
RESPONSE	Policies, governance, and targets	- Commitment to water stewardship and human rights to water and sanitation - Goals and targets	- Policies, strategies, and governance - Respecting the human rights to water and sanitation
	Internal actions	Improvements in direct operations	- Product innovation - Value chain prioritization, engagement, and improvements
	External engagement	Participation in global initiatives	- Consumer/public engagement and awareness building - Policy advocacy - Place-based collective action

GEOGRAPHIC/GEOPOLITICAL SCALE OF REPORTING

Many aspects of Detailed Disclosure call for companies to report actions, risks, impacts, etc., for specific geographic or geopolitical regions, as opposed to their global operations. For example, a company might report that it faces **water risk** due to ineffective water governance in a specific country, or perhaps discuss the water use efficiency of all its facilities in a specific river basin. The most appropriate and helpful scale for a region depends on a variety of factors, including the availability of data, the intended audience, and the nature of the challenge faced or action implemented. Below is a list geographic and geopolitical scales at which water-related information can be reported and a description of when each might be most appropriate and useful.

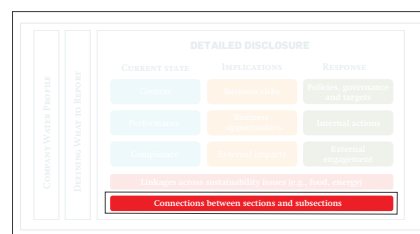
- **River basins.** Companies at times report at the **river basin** level when a water-related challenge or action is in response to hydrological or environmental issues that face an entire river basin. In Appendix C, we describe and provide a link to an interactive database that offers common nomenclature and boundary delineations for the world's river basins.
- **Subbasins.** Since water-related challenges can vary widely across entire river basin, the most insightful water-related reporting aggregates data by **subbasin**. Such granular reporting allows audiences to understand where specifically the most accurate water-related challenges are occurring and how responses can and should vary in different parts of one river basin.
- **Aquifers.** At times, water-related challenges and responses are focused around **groundwater** sources rather than **surface water**. In these instances, companies may want to report using **aquifer** boundaries as opposed to river basins.
- **Geopolitical.** Companies can also report water-related information around national boundaries. This is particularly salient when water-related challenges are due to governance issues or political conflict. Reporting can also be done at the state, province, or municipality levels.

CONNECTIONS BETWEEN SECTIONS AND SUBSECTIONS

One of the most important aspects of effective water disclosure relates to a company's ability to make connections among the information areas (the sections and subsections) within the Disclosure Framework.

In some instances the connections are inherent and are made automatically. For instance, it is not possible for a company to meaningfully convey business risks or opportunities without linking back to the company's water performance and operating context. In other instances, making the connections adds relevance and meaning to the information provided. For instance, response strategies should explicitly address the water-related risks, impacts, and opportunities the company has identified as material.

Throughout this section, tables labeled *Connected Reporting* provide examples of how a company might demonstrate how different types of water-related information relate to one another.



LINKAGES ACROSS SUSTAINABILITY ISSUES¹⁵

Though practice in this area is quite nascent, companies also endeavor to consider and report the linkages between water and other sustainability topics, such as food production, energy use, land use, and climate change. Figure 5 highlights some of these core linkages.

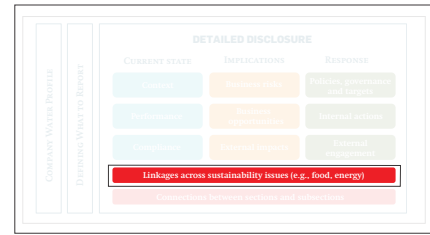
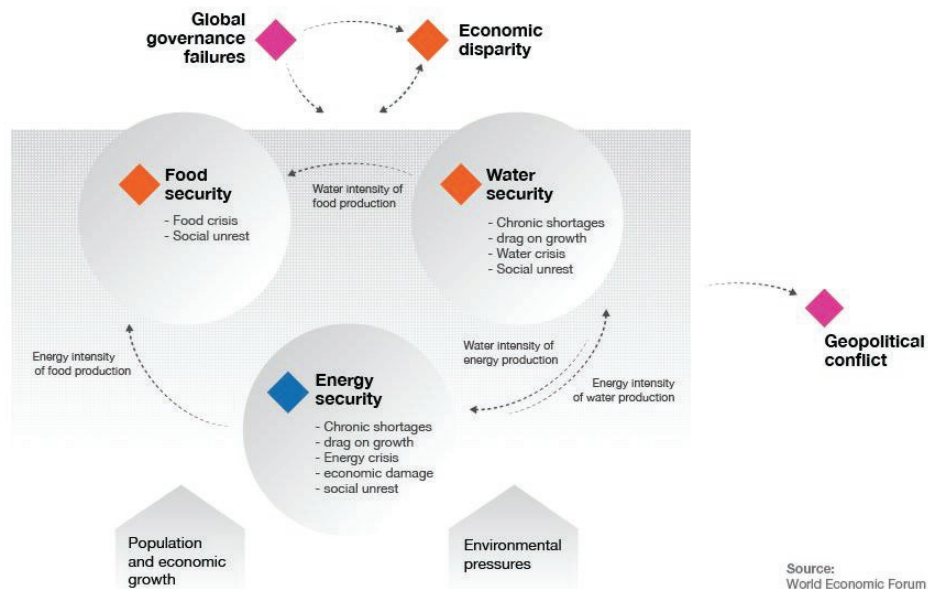


FIGURE 7: The Water-Energy-Food Nexus



15 Resources for learning more about these important linkages include the German government's [Water, Energy, and Food Security Resource Platform](#), the World Economic Forum's [Water Security: The Water-Energy-Food-Climate Nexus](#) report, World Bank's [Thirsty Energy](#), and the International Institute for Sustainable Development's report [The Water-Energy-Food Security Nexus: Towards a Practical Planning and Decision-Support Framework for Landscape Investment and Risk Management](#).

Examples of linkages and trade-offs across sustainability issues

Linkages and trade-offs across sustainability issues potentially affect each of the three major sections of Detailed Disclosure. Examples of the possible water-related linkages and trade-offs companies can report, depending on their relevance to the company and its stakeholders, are as follows:

1. Current state—the extent to which water-related challenges contribute to other corporate sustainability issues, including:

- The water used to generate energy on which the company relies
- Wastewater discharge resulting from the generation of energy on which the company relies

2. Implications—how other sustainability challenges may affect the company’s approach to water management and corporate risk assessment, including:

- The potential effects of drought on a company’s access to energy
- The potential effects of land use decisions (e.g., deforestation, agricultural practices) on runoff and therefore the company’s access to water
- The potential effects of upstream agricultural runoff on the company’s access to clean water

3. Response—the suitability and value of water-related response strategies (depending on the extent to which they create undesirable trade-offs):

- The energy requirements and greenhouse gas emissions of wastewater treatment and water recycling systems
- The water use implications of different crops and crop varieties
- The energy implications of different irrigation options
- The water use implications of alternative energy sources

The above list represents examples of linkages that companies might report. For many companies, reporting this full range of linkages is neither possible nor appropriate.

At a minimum, audiences should understand how water is inextricably linked to these other challenges and how companies must consider water management in the context of other sustainability issues. More robust reporting might include a description of the effects of such linkages on water-related business risks and how considerations related to sustainability trade-offs¹⁶ inform specific corporate strategies.

¹⁶ PwC’s [Total Impact Measurement and Management](#) framework incorporates nonfinancial considerations into business decisions while modeling the inherent trade-offs between different technologies and management strategies.

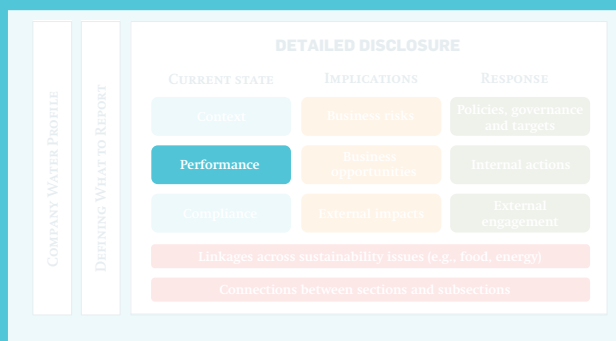


ASSESSING THE CURRENT STATE

This section describes the information that companies can use to assess and report the current state of their water management. This information spans three categories: context, performance, and compliance.

Unless clearly noted otherwise, Current State data should be consistent with the **reporting period** of the overall disclosure document. Companies also consider reporting historic data so as to build an understanding of how the situation has changed over time. Disclosing at least three years of historic data is necessary to allow disclosure audiences to meaningfully assess trends.

CONTEXT



OVERVIEW

Water is a uniquely complicated resource for companies to manage and report because its value, availability, and quality vary significantly depending on location. A critical component of the water disclosure process is assessing and reporting how location-specific factors relate to the business and its stakeholders.

Water scarcity and **water stress** are the most common contextual factors used to measure a company's susceptibility to water-related business risks as well as the likelihood of its creating negative impacts in a specific location. Though a variety of definitions exist, within the context of corporate water stewardship,¹⁷ *water scarcity* refers to the volumetric abundance, or lack thereof, of freshwater resources. *Water stress* refers to the ability, or lack thereof, to meet the human and ecological demand for freshwater. Stress comprises three primary components: availability, quality, and accessibility.

This section offers insight and resources for how a company can assess water-related basin conditions and report the degree to which it operates in water-stressed or high-risk areas. It also describes a variety of contextual factors and basin conditions that can expose a company to **water risks** or increase the likelihood of negative impacts.

The table below provides a summary of information collected and assessed at basic and advanced levels of disclosure practice. Each information area discussed in Section 5 features a table similar to the one on the next page.

	CONTENT	SCOPE	FORMAT
Basic	• Profile metric: High-level assessment of basins across a portfolio	Companywide	Tabular and narrative; quantitative
Advanced (includes basic reporting)	• Detailed, location-specific assessment of basins where water challenges are pronounced	Location-specific	Tabular; quantitative
	• High-level assessment of basins in which key value chain actors are located	Value chain	Narrative; quantitative

¹⁷ As part of the development of these Guidelines, the Mandate Secretariat collaborated with several other organizations with expertise in corporate water stewardship to develop a shared understanding of the terms *water scarcity*, *water stress*, *water risk*, and *water risk for business* within the context of corporate water stewardship. Appendix B summarizes the initial outcomes of this ongoing collaborative process.

BASIC

High-level assessment of basins across a portfolio

Basic reporters assess at a high level the extent to which their operations are located in water-stressed or high-risk regions. This information serves as a key component for many of the companywide metrics described in the ensuing Performance section. Such an assessment also helps companies identify and report water-related **hot spots** where sustainable water management practices may be prioritized.

Many companies use their own internal knowledge of the basins where they operate to assess hot spots. There are also a number of external datasets that can assist companies in this process. Many are accessible and relevant even to companies with quite limited water management practices and water-related data. Some companies make use of these datasets to make these calculations themselves. Others use free web-based tools that use these datasets to conduct these calculations for them; these include

- [WBCSD Global Water Tool](#)
- [WRI Aqueduct Water Risk Atlas](#)
- [WWF-DEG Water Risk Filter \(Quick View\)](#)
- [WFN Water Footprint Assessment Tool](#)



When reporting on this topic, companies should indicate the specific tool or methodology they used.

FORD: SUSTAINABILITY 2012/13

“Ford used the Global Water Tool developed by the World Business Council for Sustainable Development (WBCSD) to evaluate which of our operations are projected to be in water-scarce regions by 2025. According to the analysis, approximately 26 percent of our operations are projected to be in such regions (defined as areas of extreme scarcity or scarcity).”

Our facilities in Mexico are located in water-stressed regions; our manufacturing facility in Cuautitlan, Mexico, for example, is already subject to water-withdrawal limitations. Several of our facilities in our Asia Pacific and Africa region are in areas that are currently water-stressed, or are expected to be in the near future.”



ADVANCED

Whereas basic practice helps determine which basins are **hot spots**, advanced practice pertains to the assessment of and reporting on the conditions in specific basins, especially hot spots, to better understand what types of response strategies are most strategic for each location. As part of this process, companies consider a wide range of factors—including but not limited to water stress—that have bearing on their exposure to risk and likelihood to create negative impacts in a specific place. Advanced reporting on this topic also includes a discussion of the basin contexts in which key value chain actors operate.

Detailed, location-specific assessment of basins where water challenges are pronounced

Assessing various contextual factors in specific hot spots enables companies to formulate a nuanced depiction of the risks and impacts in those areas and ultimately to determine the most appropriate and effective response strategies. Reporting on this topic involves two key elements: the drivers and the relative severity of key water-related challenges.



Overview of the datasets and tools that can identify and assess the drivers of water related challenges

[Click here](#)

Drivers

Advanced disclosers describe the drivers contributing to water-related challenges in that basin, potentially included:

- Water scarcity and water stress
- Poor ambient **water quality**
- Regulatory uncertainty
- Insufficient infrastructure
- Inadequate access to water and WASH services
- Drought
- Flooding
- Climate change
- Changing demographics
- Limited management capacity
- Ecosystem vulnerability
- **Total basin availability**
- Supply variability
- Cultural and religious values
- Media awareness

Severity of challenges

In addition, companies describe the severity of the identified drivers. This type of assessment can be conducted using the datasets and tools described under Basic practice. Additional tools that involve a higher degree of sophistication are also available, including:

- [GEMI Local Water Tool](#)
- [WWF-DEG Water Risk Filter \(Full Assessment\)](#)
- [WFN Water Footprint Assessment Tool](#)

High-level assessment of basins in which key value chain actors are located

Advanced reporters share contextual data related to key value chain actors, most commonly suppliers. Companies can describe a high-level characterization of the extent to which basins in which key value chain actors are located are water stressed or otherwise at high risk by using one of the online tools listed above or a company's own proprietary analysis.

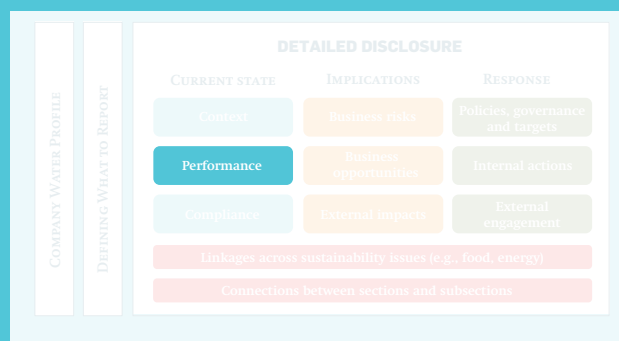
HESS CORPORATION: 2013 CORPORATE SUSTAINABILITY REPORT

“Our Seminole Gas Processing (SGP) plant in West Texas is our biggest single water user, accounting for 59 percent of our usage in 2013. The SGP plant uses water mainly for process cooling and sources it from a Hess owned and operated groundwater well field that withdraws from the Ogallala Aquifer.

SGP is located within a region where baseline water stress is categorized as “high risk” based on evaluations we have conducted using the World Resources Institute's Aqueduct water risk mapping tool. Water demand in the region is driven primarily by agricultural uses.

Additional Information is available at the Texas Water Development Board website (www.twdb.texas.gov). ”

PERFORMANCE



OVERVIEW

Understanding water performance (how much water companies use, how efficiently they use it, and so on) helps companies adopt more sustainable water management practices that minimize negative impacts (or create positive impacts), mitigate water-related business risks, and capture opportunities. It also enables **stakeholders** to better understand such issues and to make decisions accordingly.

This section provides guidance to help companies describe their water performance in quantitative, geographically explicit terms that allow disclosure audiences to understand how a company withdraws, consumes, and discharges water resources. It is designed to go hand in hand with the previous section on context.



	CONTENT	SCOPE	FORMAT
Basic	• Profile metric: Water withdrawals in water-stressed or water-scarce areas • Profile metric: Percent of facilities adhering to relevant water quality standards • Profile metric: Average water intensity in water-stressed or water-scarce areas (as appropriate) • Percent of facilities with fully functioning WASH services for all workers	Companywide	Tabular; quantitative
Advanced (includes basic reporting)	• Water withdrawals by source type • Water intensity • Water consumption • Water discharge by destination type	Location-specific	
	• Water performance in the value chain	Value chain	

BASIC

Companies relatively new to water disclosure should focus on collecting and reporting companywide performance data on **water withdrawals** and **water intensity** in water-stressed areas, their provision of WASH services in their direct operations, and their adherence to relevant **water quality** standards.

Total and percentage of withdrawals located in water-stressed or water-scarce areas

Companywide water withdrawals are often the first and only water metric that companies disclose. Given that withdrawals will present different risks and impacts depending on the conditions in which they occur, basic disclosers should report the volume and percentage of their withdrawals that occur in water-scarce or water-stressed areas. Companies can use the process described above in the Context subsection to assess **water scarcity** and **water stress**. These figures can provide additional insight into the company's risk when compared with their water withdrawals occurring in non-water-scarce or non-water-stressed areas. When able, many companies also find it valuable to report **water consumption** data in addition to withdrawals to provide further insight into their impacts.

Percent of facilities adhering to relevant water quality standards

Because water quality is informed and influenced by a variety of parameters (e.g., **BOD**, **COD**, levels of phosphorous and heavy metals, temperature, etc.), meaningful quantification and reporting on this issue is often elusive. Basic reporters manage this challenge by reporting the percent of their facilities adhering to one of the following types of water quality standards or benchmarks:

- Sector-specific industrial **wastewater** standard
- Internally developed wastewater quality standard
- Universal industrial wastewater standard (not yet developed)
- Primary, secondary, or tertiary treatment¹⁸

¹⁸ Wastewater treatment is often categorized into three levels of improving quality: primary, secondary, and tertiary. The World Bank offers a description of these levels of treatment [here](#). This approach is often helpful when sector-specific or internally developed standards are not available.

BAXTER: 2013 SUSTAINABILITY REPORT

Water issues vary significantly by location. Baxter used the World Business Council for Sustainable Development (WBCSD) Global Water Tool in 2012 to evaluate the availability of renewable water resources at Baxter's 51 largest water-consuming locations, which represent more than 96% of the company's total water use. Twelve of those sites are located in water-scarce* areas, 11 in water-stressed* areas and 28 in water-sufficient areas.

(Availability of renewable water supplies evaluated using the World Business Council for Sustainable Development Global Water Tool. Water-scarce areas have less than 1,000 cubic meters of renewable water supply per person per year. Water-stressed areas have at least 1,000 cubic meters but less than 1,700 cubic meters. Water-sufficient areas have at least 1,700 cubic meters.)

Doing so allows disclosure audiences to understand the extent to which a company is taking action to minimize pollution related to untreated or insufficiently treated wastewater discharged from their facilities.

When reporting compliance against a specific wastewater standard, it is essential that a company describes which parameters are assessed and the thresholds required to achieve compliance with each parameter. In this context, compliance is achieved when these thresholds are met, regardless of whether treatment occurs at wastewater treatment plants at the company's own facilities or at shared or municipal treatment plants, so long as the standard being met is based around a notion of "do no harm." For example, a company might report that 80 percent of its facilities adhere to an internally developed wastewater standard, and then describe the nature of that standard.

Average water intensity in water-stressed or water-scarce areas

Companywide water intensity provides insight into the efficiency of a company's water use. Improvements in intensity over time are a strong indication that the company is taking meaningful steps to improve its water management. Efficiency is most important in water-scarce and water-stressed areas, where companies are most likely to face risks or create impacts. Companies should therefore report their average water withdrawal intensity in water-stressed areas.

One way to report intensity is by using *product water intensity* (water withdrawal per unit of product). This is a meaningful metric for companies in sectors with discrete product outputs such as the food, beverage, or automobile industries. However, it is not as relevant for companies with diversified product portfolios or companies in service-oriented sectors. These companies may prefer instead to use *financial water intensity* (water withdrawal per dollar revenue).

As with water withdrawals, data on water intensity in water-scarce or water-stressed areas are particularly meaningful when presented in conjunction with the intensity of equivalent facilities in non-water-scarce and non-water-stressed areas. Some companies find value in reporting their **water consumption** intensity in addition to their water withdrawal intensity.

Percent of facilities with fully functioning WASH services for all workers

Providing consistent access to adequate WASH services in the workplace¹⁹ for all workers is critical in avoiding human rights impacts and fulfilling the corporate responsibility to respect human rights. Companies can report this issue by enumerating the percent of owned-and-operated facilities that offer access to fully functioning and consistently maintained drinking water and sanitation services to all workers.

19 The World Business Council for Sustainable Development's [WASH at the Workplace](#) website provides a variety of resources that help companies ensure they sufficiently provide WASH services in their operations.

ADVANCED

Companies at an advanced level of disclosure practice provide a wide range of location-specific data that provide insight into the performance of specific facilities and the contexts in which they operate, as well as performance in their value chain.

Location-specific performance data

Advanced reporters provide information on their water performance in specific geographic locations (see “Geographic/geopolitical scale of reporting” on page 34). Since many large companies have dozens, if not hundreds, of facilities across the world, companies may choose to report data only for the hot spots listed in their high-level assessment of basins (see Section 5: Context).

INTEL: 2013 CORPORATE RESPONSIBILITY REPORT

2013 Water Use ¹ by Manufacturing Location						
Location		Water Withdrawn	Water Discharged	Water Conserved	Evaporation Loss	Primary Water Source ²
China	Chengdu	120	90	30	30	Surface: Fuhe River
	Dalian	373	332	94	34	Surface: Biliu and Yingna Rivers
Costa Rica	San Jose	109	79	—	30	Ground: Colima Superior Aquifer
India	Bangalore	18	9	6	9	Surface: Kabini River
Ireland	Leixlip	816	769	172	47	Surface: River Liffey
Israel	Jerusalem	24	18	17	5	Surface and ground: Lake Kinneret, Coastal Aquifer, Mountain Aquifer (Yarkon-Tinanim), and local desalinization plant
	Qiryat-Gat	721	546	79	174	Surface and ground: Lake Kinneret, Coastal Aquifer, Mountain Aquifer (Yarkon-Tinanim), and local desalinization plant
Malaysia	Kulim	216	124	38	92	Surface: Muda River
	Penang	252	148	5	104	Surface: Muda River
United States	Chandler, Arizona	299	147	73	153	Surface and ground: Salt and Verde Rivers, local aquifer
	Ocotillo, Arizona ³	2,088	2,265	712	345	Surface and ground: Salt and Verde Rivers, local aquifer
	Folsom, California	161	22	—	136	Surface: American River
	Santa Clara, California	101	79	5	23	Surface: Tuolumne River
	Hudson, Massachusetts	145	110	70	35	Ground: Assabet River Basin Aquifer
	Rio Rancho, New Mexico	1,185	1,013	416	172	Ground: Santa Fe Aquifer
	Aloha, Oregon	227	184	10	44	Surface: Tualatin River
	Ronler Acres, Oregon	1,785	1,643	374	142	Surface: Tualatin River
Vietnam	Ho Chi Minh City	72	41	—	31	Surface: Dong Nai River

¹ In millions of gallons. Figures represent water use/withdrawals by site. ² For each water source, our 2013 water use did not exceed 5% of that source. All water sources are provided by municipal water providers, with the exception of our New Mexico facility, which uses both municipal and on-site well water. ³ In addition to fresh water used at the site, we used gray water from the local municipal water treatment facility, further reducing our use of fresh water.

Location-specific performance data include the following:

Water withdrawals by source type

Some advanced disclosers break down withdrawal data according to source type, including surface water, **groundwater** (renewable and nonrenewable), **municipal water**, **recycled water**, **runoff**, **saltwater**, and **wastewater**. This level of detail can be important. For example, pulling water from an overdrawn aquifer has significantly different consequences on local water stress than does withdrawing water from other sources, such as the ocean. Distinguishing between source types allows audiences to better understand the risks and impacts associated with a company's water performance.

Water intensity

Ideally, an advanced discloser also provides the **water intensity** of its operations in specific basins.

Water consumption

Water consumption, in many cases, generates greater negative impacts than withdrawals. For this reason, an advanced discloser reports consumption in addition to withdrawals.

Water discharge by destination type

Companies are also well served to report their **water discharge** on a location-specific basis. Discharge has two key components: quantity and quality. Quantity is important because companies must be able



OLAM: CORPORATE RESPONSIBILITY & SUSTAINABILITY REPORT 2013

“This year we completed the first water footprint of Olam's business, encompassing our 55 Tier 1 facilities, our own plantations, concessions and farms, as well as our farmer suppliers. The water consumption this year at our 55 Tier 1 facilities was measured as 4.6 million m³. Olam's company farms and plantations had a water footprint measuring approximately 350 million m³, largely from our almond orchards and rice farm.

...

Water consumption last year by Olam's farmer suppliers was estimated at 26.3 billion m³ per year, comprising 25 billion m³ of rainwater and 1.3 billion m³ of surface and ground water. Olam's greatest business-related water impacts and risks therefore clearly exist in our upstream supply chain rather than in our direct operations.”

to quantify the volumes of polluted water discharged to receiving bodies in order to understand their negative impacts. Many advanced disclosers report the volume of water discharged companywide and on a location-specific basis. Some break down the discharge data further by specifying destination type, including groundwater, sewers, and surface water. This level of detail helps interested audiences understand the specific water bodies that a company may be affecting. Destination-type data can be reported as a percentage of location-specific discharge.

Quality is also a key component of discharge but very difficult to disclose meaningfully. Discharge water quality varies significantly by industry. For example, companies in the food and beverage sector often discharge high levels of **BOD**, **COD**, nitrogen, and phosphorus. Meanwhile, companies in the extractives industry are usually more concerned with parameters such as total dissolved solids (TDS) or heavy metals. Advanced disclosers understand the parameters of concern in their industry and focus their water quality disclosure on those metrics, along with information relating to their compliance with relevant wastewater standards and levels of treatment, as described under Basic reporting, for each reported location.

Water performance in the value chain

Advanced reporters consider both water performance in their direct operations as well as their **indirect water footprint** in order to fully understand how their business relates to water and their exposure to risks. Indeed, for many companies, such as food producers or apparel manufacturers, the majority of their water withdrawals is embedded in the supply chain. For others, such as appliance manufacturers, a significant amount of their water withdrawals and water consumption occur in the product-use phase.

Reporting on this topic involves a few different considerations. First, a company accounts for its total withdrawals (including direct and indirect) in water-scarce or water-stressed areas and then breaks this down into various value chain stages by percentage of total withdrawals. The reported value chain stages may vary from sector to sector but should at a minimum include supply chain, direct operations, and product

NIKE, INC. FY12/13 SUSTAINABLE BUSINESS PERFORMANCE SUMMARY

“ In FY13, 793 material vendors and contract factories tracked and reported their water use and discharge to the NIKE Water Program. Of 260 facilities discharging more than 50m³/day in FY13, 48% met NIKE water quality guidelines (which require compliance with all local regulations and NIKE guidelines, whichever are more stringent), and another 47% were compliant with local regulations.

The remaining 5% needed improvement. The higher percentage needing improvement in FY13 (compared with the 1% noted in our FY10/11 report) is due to the expansion of the NIKE Water Program beyond apparel material vendors to include footwear materials suppliers for the first time. ”

use (even if some of these stages make up zero percent of the company's direct and indirect withdrawals). This high-level assessment allows disclosure audiences to better understand where the bulk of withdrawals occur within a company's value chain, and therefore where responses may be most needed. Methods available to assess value chain withdrawals include water footprinting (as managed by the Water Footprint Network) and Life Cycle Assessment (a methodology for which is offered in the [ISO 14046](#) guidance standard).

Companies can also report water consumption in their value chain, the percent of suppliers that adhere to relevant water quality standards (while making sure to describe the nature of the standards reported against), and the percent of suppliers with improved WASH services implemented and consistently maintained, much in the same way they do for their direct operations.

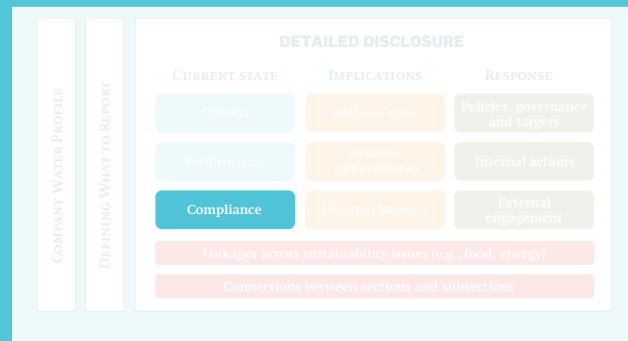
Companies that have difficulty obtaining value chain data make estimations by extrapolating data from a subset of suppliers. Companies should report the percent of their suppliers from which they are able to obtain data in order to provide insight into the reliability of their report information, as well as the extent to which they are able to robustly assess value-chain-related risks, opportunities, and impacts.



Data verification

Verification of water data provides greater credibility with disclosure audiences. The data verification process begins with an internal assessment of the quality of a company's own data collection and reporting processes and systems. Subsequently, a company may engage third parties to perform verification of its water data, as appropriate, depending on which metrics the company is seeking verification of.

COMPLIANCE



OVERVIEW

Compliance with water-related regulations as well as with voluntary standards or industry benchmarks may be used as a proxy for understanding a company's approach to managing water resources. For instance, companies that experience relatively few incidents of noncompliance over time are less likely to have negative impacts on communities and ecosystems and thus less exposure to reputational risk.

	CONTENT	SCOPE	FORMAT
Basic	• Profile metric: Percent of facilities with a water-related regulatory compliance violation	Companywide	Tabular; quantitative
Advanced (include basic reporting)	• Adoption of internal and/or voluntary sustainability standards • Water-related compliance violations in the value chain		
		Value chain	Narrative; quantitative

BASIC

Percent of facilities with a water-related regulatory compliance violation

Basic reporters discuss the extent to which they comply with water-related regulations (typically pertaining to **water quality**, but sometimes also to water quantity), providing information on the percent of facilities with any regulatory **compliance violations** incurred and the total monetary amount paid in associated **fines and penalties**. Companies should report all violations regardless of whether they are administrative (and therefore not likely to create negative impacts). Incidents that do indeed create impacts but do not result in a regulatory violation should be reported as External Impacts.



COCA-COLA HELLENIC BOTTLING CO.: 2013 INTEGRATED REPORT

“In 2013, our plant in the district of Ploiesti, just outside of Bucharest received the European Water Stewardship Gold Level certification following formal audits in 2012. Our Company was one of the first to gain certification and we have piloted further audits against this new European standard since then.”

Companies can also augment companywide compliance information by providing detailed information on their violations in tabular format, covering the following information:

- 1) the geographic or geopolitical area where each significant violation occurred
- 2) the quality parameters that were exceeded or administrative tasks that were not conducted, if relevant
- 3) the underlying causes of the violation
- 4) the monetary value paid in associated fines and penalties

TABLE 4: CONNECTED REPORTING: Linking Compliance Reporting to Appropriate Response Strategies

CURRENT STATE				IMPLICATIONS	RESPONSE
Geographic/ Geopolitical Area	Parameters Exceeded	Causes	Fines and Penalties	Description of Impact	Violation Resolution
		Company Information Here			

ADVANCED

Advanced disclosers consider reporting conformance with voluntary and internal standards and obtain and discuss verification of their compliance data.

Adoption of internal and/or voluntary sustainability standards

Many companies strive to meet performance standards that are voluntary as a way of achieving and demonstrating good performance. Third-party voluntary standards and guidelines that may be reported on include:

- [ISO 14001 certification](#) (can contain water-related aspects)
- [The Alliance for Water Stewardship standard](#)

Internally developed standards can pertain to a variety of water management topics, such as water use efficiency and operational management protocols. Reporting on this topic describes the nature of these standards, which entities within the business are encouraged or expected to meet them, and the extent to which those entities have achieved implementation goals.

Water-related regulatory compliance violations in the value chain

When possible, companies can also look to provide information on the percent of suppliers with any water-related regulatory compliance violations within the **reporting period**. As with other value chain reporting issues, when doing so, companies should indicate the portion of suppliers from which they are able to obtain such data.

Data verification

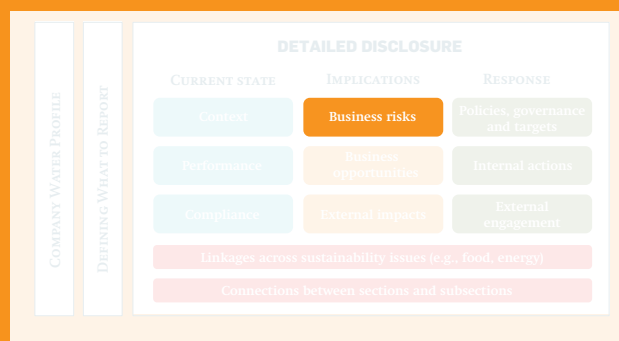
Advanced disclosers may conduct and report an internal or third-party assessment of the quality of its water-related compliance data collection and reporting processes and systems.



CONSIDERING THE IMPLICATIONS

This section describes how companies can interpret the data collected during Current State accounting in order to analyze and make statements about business risks, opportunities, and impacts. Such information, while often closely linked to quantitative metrics, is typically presented in narrative or tabular form. Information related to this second pillar is inherently linked to that in Section 4: Defining What to Report. While Section 4 pertains to understanding what water-related topics are material to report, this section offers guidance on how to report those risks, opportunities, and impacts based on the data generated via Current State reporting and in such a way that is meaningful to disclosure audiences.

BUSINESS RISKS



OVERVIEW

Water risk refers to the possibility of an entity experiencing a water-related challenge (e.g., water scarcity, water stress, flooding, infrastructure decay, drought). Many companies are exposed to water risks that can negatively affect business viability over the short or long term. Water risks can be grouped into three general categories:²⁰

- **Physical.** Having too little water, too much water, water that is unfit for use, or inaccessible water
- **Regulatory.** Changing, ineffective, or poorly implemented public water policy and/or regulations
- **Reputational.** **Stakeholder** perceptions that a company does not conduct business in a sustainable or responsible manner with respect to water

Water risk for businesses specifically is also sometimes divided into two categories that shed light on the source of that risk and therefore what types of mitigation responses will be most appropriate:

- **Risk due to company operations, products, and services.** A measure of the severity and likelihood of water-related challenges derived from how a company or organization, and the suppliers from which it sources goods, operate and how its products and services affect communities and ecosystems.
- **Risk due to basin conditions.** A measure of the severity and likelihood of water-related challenges derived from the basin context in which a company or organization and/or its suppliers from which it sources goods operate, which cannot be addressed through changes in its operations or its suppliers and requires engagement outside the fence.

Disclosure on water risks enables audiences to better understand what the performance and conditions described in Current State reporting actually mean for the company and its stakeholders.

²⁰ The CEO Water Mandate [website](#) offers more in-depth descriptions of the various types of water-related business risks.

	Content	Scope	Format
Basic	High-level assessment of risks at a portfolio level	Companywide	Narrative; qualitative
Advanced (includes basic reporting)	Detailed assessment of risks based on extensive, location-specific analysis at the facility level	Location-specific	Tabular; qualitative;
	Value chain risks	Value chain	Narrative; qualitative and quantitative

BASIC

High-level assessment of risks at a portfolio level

Basic disclosers offer a high-level overview of their companywide exposure to water risk. Such an overview is based on a general understanding of a company's industry sector and its exposure to water risks²¹ and key information described under basic Current State guidance, namely a list of the company's **hot spots** (see Context) and the extent to which the company's water withdrawals are located in water-scarce or water-stressed locations (see Performance).

Ultimately, disclosure audiences should come away with a sense of the extent to which water-related topics are relevant for the company generally, the nature and extent of specific water risks, and where risks are most pronounced geographically.

ADVANCED

Detailed assessment of risks based on extensive, location-specific analysis at the facility level

Advanced disclosers progress to a more nuanced and detailed assessment and depiction of water risks geared at specific locations (e.g., specific facilities, **basins**, **subbasins**, **aquifers**, etc.) and considering a much broader range of contextual factors and how they create various types of water risk. In the case that a company has dozens (or even hundreds) of potential water-related risks, it can identify a more manageable subset of risks such as those that are most acute or that the company is exposed to broadly. Ideally, a company also describes the methods and tools it uses to assess risks.

When reporting risks, advanced disclosers identify:

- 1) the location of identified risks
- 2) the types of risks they face
- 3) the potential consequences of those risks for the business
- 4) the timeframe in which the risks are anticipated to occur

Companies can provide this information in narrative or tabular form. Table 5 below provides an example of a tabular reporting format to connect how the company is responding to potential specific risks, and how those risks emanate from their current state.

²¹ Further insight into industry sectors that are particularly prone to water-related risks can be found in Section 4.

TABLE 5: CONNECTED REPORTING: Linking Water-Related Business Risks to a Company's Current State and Response

Geographic or Geopolitical Area	Risk Category and Driver	Consequence for Business	Time-frame	Company Response
	Company Information Here			

Geographic or geopolitical area

Advanced disclosers specify the geographic or geopolitical area to which each risk is relevant. In some cases, one type of risk may be applicable to a wide range of areas. In these cases, the company should list all relevant countries, river basins, etc.

Risk category and driver

Companies categorize the risk (e.g., physical, regulatory, reputational) as well as the specific conditions driving it (e.g., water scarcity, flooding, regulatory uncertainty). A list of potential risk drivers can be found on pg. 38. Companies can also categorize risks by source (i.e., risk due to company operations, products, and services and/or risk due to basin conditions) to provide insight into what types of response strategies are most appropriate. Ultimately, the audience should have an understanding of the water-related circumstances or conditions facing the business.

Potential consequences for business

Companies should provide a brief explanation of how each risk might affect production or business viability. They can do so by listing and expanding on broad types of consequences, such as

- Brand damage
- Closure of operations
- Constraint to future growth
- Decrease in shareholder value
- Delays in permitting
- Higher operating costs
- Fines and penalties
- Litigation
- Loss of license to operate
- Property damage
- Supply chain disruption
- Transport disruption

Where possible, companies discuss the likelihood and actual or anticipated magnitude of the consequences to the business for each risk identified.

Estimated timeframe

Advanced disclosers specify the timeframe in which they expect the risk described to have tangible effects on the company.

Value chain risks

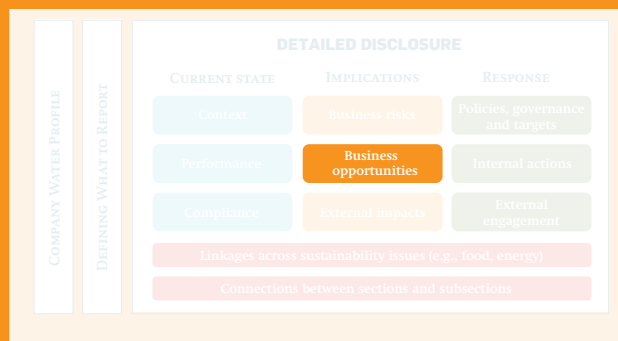
Advanced disclosers also include a description of water risks in the value chain. For many companies (particularly those relying on agricultural production), water risks embedded in the supply chain are of significant concern. However, the specific nature of such risks will vary depending on industry sector and the location of the companies' suppliers. When reporting on these risks, companies can speak broadly to the key inputs and suppliers that are most exposed to risk, the drivers of those risks, and how they may affect the company (e.g., insufficient materials to maintain production, increased input costs, reduction in product quality, reputational damage).

Because companies may source materials from a vast network of suppliers and also typically have limited ability to collect data from those suppliers, water-related supply chain reporting can typically only speak to the broad types and drivers of risk that are most significant in a company's supply chain or the regions where supply chain risks are most prevalent. When possible, companies also report the proportion of key inputs or the percentage of procurement spending that comes from water-scarce or water-stressed regions as a quantitative means of demonstrating their exposure to supplier risk.

TONGAAT HULETT (DRAWN FROM 2013 CDP WATER DATA)

GEOGRAPHIC OR GEOPOLITICAL AREA	RISK CATEGORY AND DRIVER	CONSEQUENCES FOR BUSINESS	TIME- FRAME	COMPANY RESPONSE
Mozambique; Incomati	Flooding	Reduced production	Current	Investment in research and engineering solutions to manage water during flooding period
Zimbabwe; Mutirikwi and Runde	Regulatory uncertainty	Higher operational costs	Unknown	Engagement with regulatory authorities

BUSINESS OPPORTUNITIES



OVERVIEW

For many companies, water may present opportunities to drive positive business value. Water-related opportunities can be grouped into three categories:

- **Operations.** Companies can take advantage of water-related opportunities by reducing the costs associated with procuring, pumping, heating, circulating, or treating water. Many companies capture such operational cost savings by reducing their water and energy needs and using alternative methods of treating or disposing of **water discharge**.
- **Brand value.** Companies that can positively associate themselves with water issues may be able to increase brand value in the eyes of consumers and customers. For example, customers in water-stressed areas may have more loyalty to companies that are known to have very water-efficient operations, to sell water-efficient products, or to invest in improving local water resources. Such an approach can help a company gain competitive advantage by increasing its market share or positioning itself more strongly in new markets.
- **New markets.** Markets are emerging around the world for products or services that provide solutions to water resources and WASH challenges. For instance, poor water quality in China may create greater demand for domestic water filtration systems. These opportunities are not limited to companies in the water technology sector, as some companies in other sectors may be able to capture new markets by redesigning products to be more water efficient. This approach has been demonstrated by some companies in the consumer products industry that have developed new detergents and shampoos that require less water per wash.

A description of a company's water-related business opportunities is an important component of comprehensive water disclosure for basic and advanced disclosers alike.

CONTENT		SCOPE	FORMAT
Basic	High-level assessment of opportunities	Companywide	Narrative; qualitative
Advanced (includes basic reporting)	Detailed assessment of opportunities	Companywide; Location-specific	Narrative and tabular; qualitative
	Value chain opportunities	Value chain	

BASIC

High-level assessment of opportunities

Basic disclosure focuses on providing brief descriptions of potential of the broad types of opportunities created by water sustainability challenges that are more prevalent to the company based on its industry sector and geographic/geopolitical location. In particular, basic disclosers focus on the following considerations.

Cost-saving opportunities

Most companies have the potential to reduce water-related costs in their operations by implementing capital projects, modifying processes, and instituting behavioral change. Even in areas with low water prices, facilities may find cost savings by reducing the amount of energy used to transport or treat water.

Revenue-generating opportunities

For some companies, the greatest water-related opportunities may stem not from operational cost savings but from revenue-generating opportunities (e.g., providing products that contribute to the alleviation of water sustainability challenges, expanding to new markets, building brand value by advancing sustainable water management).

ADVANCED

Detailed assessment of opportunities

Advanced disclosers provide a more detailed assessment of opportunities, describing whether they are globally applicable or specific to certain geographic or geopolitical areas, the nature of the opportunity (e.g., operations, brand value, new market) and potential business benefits, and how the company plans to seize it. Potential business benefits to discuss include

- Cost savings
- Increased brand value
- Improved water efficiency
- Regulatory changes
- Sales of new products and services
- Staff retention

Companies also specify the timeframe in which they expect the opportunity to affect the company and discuss the specific measures they are taking to exploit the identified opportunities.

Value chain opportunities

Much in the same way companies report value chain risks, they can also offer information on potential cost savings and revenue-generating opportunities generated by driving sustainable water management among its suppliers. Such disclosure allows audiences to better understand how the company can reduce the cost of its inputs, promote viability and effectiveness among key suppliers, and broaden its sphere of influence and therefore drive increased brand value.

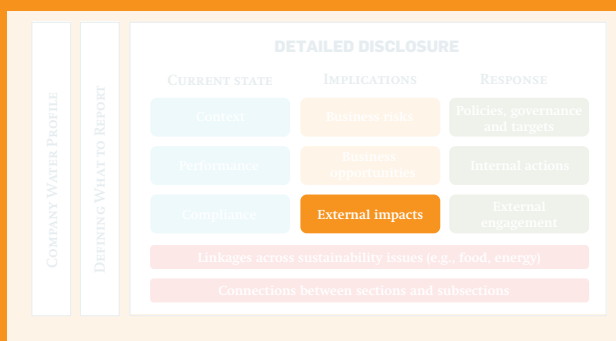
WOOLWORTHS (DRAWN FROM 2013 CDP WATER DATA)

“A new range of water efficient products or products from water efficient suppliers in foods (such as farming for the future), home and clothing will create new sales opportunities.”

SABMILLER (DRAWN FROM 2013 CDP WATER DATA)

“A new range of water efficient products or products from water efficient suppliers in foods (such as farming for the future), home and clothing will create new sales opportunities.”

EXTERNAL IMPACTS



OVERVIEW

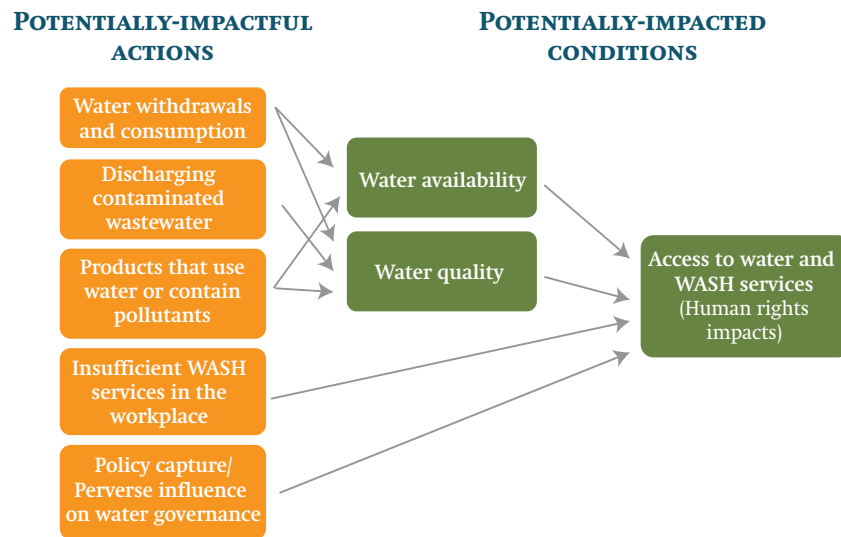
A company’s water practices may harm people and ecosystems, causing risk to the company, undermining sustainable water management, and potentially impinging on human rights. Company actions that can create negative impacts include:

- Water withdrawals and water consumption
- Contaminated wastewater discharges or polluted agricultural runoffs
- Products that use water or contain pollutants
- Insufficient WASH services in the workplace
- Policy capture or a perverse influence on public water governance

Key environmental and socioeconomic conditions that can be impaired by industrial and agricultural water practices are manifested in the three components of **water stress**: 1) water availability, 2) water quality, and 3) access to water and WASH services. Though companies are more likely to have impacts in water-stressed regions, an area need not be water stressed for a company to cause impacts in that location. The components of stress simply provide a helpful framework for understanding conditions that can be negatively affected in any given location. Any of the three components of water stress can have human rights implications; this is particularly true of access to water and WASH services. Impacts to water availability can lead to insufficient environmental flows. Figure 8 shows how company actions can affect these conditions.



FIGURE 8: How Corporate Actions Can Affect Basin Conditions



Disclosure on external impacts can be quite challenging for companies due to the high costs and scientific and technical limitations associated with carrying out impact assessments. At present, there is no standardized methodology for identifying a company’s water-related external impacts. The Growing [Blue Water Impact Index](#) (WIIX) is a helpful tool for understanding the impacts of activities on a local water resource. Assessing water-related impacts is made difficult by the fact that impacts are highly dependent on location-specific circumstances. The following discussion provides insight into how companies can begin thinking about their water-related impacts.

	CONTENT	SCOPE	FORMAT
Basic	N/A (compliance used as proxy)	N/A	N/A
Advanced <i>(includes basic reporting)</i>	- Impacts on water availability, water quality, and access to water resources and WASH services (including human-rights-related impacts) - Prioritizing impacts	Location-specific	Tabular; qualitative

BASIC

Basic disclosers are rarely able to report meaningfully on external impacts. Instead they can use compliance information discussed in detail in the Compliance subsection above as a rudimentary proxy for potential negative impact. Many water-related impacts stem from companies discharging contaminants into nearby water bodies that are used as a source of drinking water, recreation, or irrigation or that provide crucial ecosystem services or wildlife habitat. While imperfect, such compliance information should be available and reportable even for **SMEs**.

ADVANCED

Impacts on water availability, water quality, and access to water and WASH services

Companies with advanced disclosure practices can assess the negative impacts of their direct operations both by means of quantitative methods, robust **stakeholder** engagement, and **basin** assessment strategies. They can then use the format shown in Table 6 to describe the nature of their most significant external impacts. A company also describes the methods and tools it uses to assess its external impacts.

TABLE 6: CONNECTED REPORTING: Reporting the Causes of, and Appropriate Responses to, Harmful External Impacts

Geographic or Geopolitical Area	Impactful Action	Relationship to Impact	Impact Type	Description of Impact	Company Response
		<i>Company Information Here</i>			

Geographic or geopolitical area

Specify the country and/or river basin where each impact is located. Often, impacts are more pronounced in water-scarce and water-stressed basins. Ideally, a company will identify the specific communities in which the impact is relevant.

ANGLOAMERICAN: SUSTAINABLE DEVELOPMENT REPORT 2013

“We employ a five-tiered scale to report on the impact of an incident. Level 1 and 2 incidents are minor in nature and, while remedial action is taken for every incident, only those classified as Level 3 and above are reported publicly.

During 2013, we confirmed 15 Level 3 environmental incidents relating to water. No Level 4 or 5 incidents were reported. The incidents related mostly to unauthorised discharges at the coal businesses in South Africa and Australia, following heavy rainfall. There was also one case of botulism resulting in avian deaths, which was found to be a result of naturally occurring conditions.”



Relationship to impact

Describe the company's relationship to external impacts using the following framework:

- **Cause.** A company *causes* an impact if the impact is solely and directly a result of the company's own decisions and actions. A company can cause an impact within its own operations or within its value chain. For example, a company causes a negative impact on a community if it is discharging contaminated wastewater into the community's drinking water source.
- **Contribute.** A company can *contribute* to an impact in parallel with other actors or through a third party where it incentivizes or facilitates that party to cause a negative impact. An example of a contribution in parallel would be where a company may contribute to a river's chronic overextraction (and thus lead to impacts on water availability and accessibility) if it is one of many actors that source water from the river.
- **Linkage.** A company is *linked* to an impact when the impact is caused by an entity that it has a business relationship with (e.g., a supplier, distributor, collective action partner) and the impact is linked to the company's own operations, products, or services. An example of direct linkage could arise when there is excessive water use leading to negative impacts on a local community as part of a manufacturing process deep in a company's supply chain that provides an essential input to the company's products.

Impact type

Identify the aspect of water stress the company is negatively affecting (availability, quality, access to water and WASH services).

Description of impact

Provide a brief explanation of the impact's cause (e.g., **runoff** from agricultural or industrial effluent, spills to local water resources, utilization of nonrenewable **aquifer**) and who or what was adversely affected and to what extent.

Prioritizing impacts

Once a company identifies the negative impacts it is causing, contributing to, or linked to, it must then prioritize which of those impacts are most urgent to remediate and mitigate. Unlike risks and opportunities (which are typically prioritized based on their potential effect on business operations and a company's bottom line) impacts are prioritized based on their potential to harm key stakeholders. Four critical factors to consider when prioritizing impacts are their:

- 1) Actual or potential severity
- 2) Likelihood
- 3) Potential specifically to lead to human rights abuses
- 4) Importance and urgency in the eyes of local stakeholders

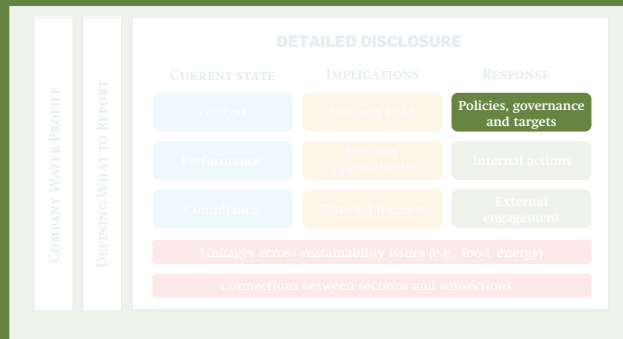
When reporting external impacts, companies should describe the process they use to prioritize which impacts they address, as well as what impacts it has identified as top priorities.



DEVELOPING A STRATEGIC RESPONSE

More than any other component of the Disclosure Framework, the value and meaning of the information provided in the Response section hinges on the degree to which it is meaningfully linked with other sections and subsections of the Disclosure Framework. Effective **corporate water disclosure** includes a description of what specifically the company is doing to improve its performance and to manage risks and impacts.

POLICIES, GOVERNANCE, AND TARGETS



OVERVIEW

One key element of Response reporting is a discussion of the company’s policies, governance, and goals or targets related to water management. This enables disclosure audiences to better understand and evaluate whether companies are adequately addressing water-related challenges.

	CONTENT	SCOPE	FORMAT
Basic	• Commitment to water stewardship and human rights to water and sanitation	Companywide	Narrative; qualitative
	• Goals and targets		Tabular; quantitative
Advanced (includes basic reporting)	• Policies, strategies, and governance • Respecting the human rights to water and sanitation		Narrative; qualitative

BASIC

Commitment to water stewardship and the human rights to water and sanitation

Commitments to action are the first step in building trust and accountability with **stakeholders** on water issues. Such commitments (often captured within the Company Water Profile) address why water is important to the business, what is being done to improve water performance and conditions, and how the company will address associated risks and impacts. Such policy commitments will extend to water stewardship practice generally, as well as acknowledging the human rights to water and sanitation and ensuring the company fulfills its responsibility to respect those rights. Commitments will ideally be endorsed and signed by the company’s chief executive or equivalent.

Goals and targets

Goals and performance targets provide benchmarks against which the company and its stakeholders can evaluate company progress. Key elements of reporting future ambitions include delineating the desired improvement in performance and a timeframe. The most effective goals and targets are measurable and drive clear action and accountability.

Companies provide updates on their progress toward reaching their goals and targets for the reporting cycle against a **baseline**. They specify whether the goal is companywide or specific to a facility or location. They also characterize the status of current progress. Progress status labels may include 1) Target accomplished, 2) Progress on track, 3) Insufficient progress, and 4) No progress or deterioration. Targets for which companies indicate

“Insufficient progress” or “No progress or deterioration” are often supplemented with an explanation of the factors that have contributed to lack of progress, as well as company plans to catalyze improvement.

Profile metrics (described in Section 3) offer a useful basis for companywide goals and targets. In addition, the following common metrics may be of use when developing targets:

- Percent of facilities with fully functioning WASH services for all workers
- Absolute reductions in water withdrawals or water consumption
- Percent reductions in water withdrawals or water consumption
- KPIs specific to water-stressed or high-risk locations
- KPIs related to value chain water withdrawals or water consumption
- KPIs related to community access to water resources and WASH services
- Absolute reduction in COD
- Percent reduction in COD
- Absolute reduction in BOD
- Percent reduction in BOD
- Percent of facilities implementing a specific water-related technology or practice

Table 7 demonstrates how to report goals and targets in such a way that links to Current State information and specific risks, opportunities, and negative impacts.

TABLE 7: CONNECTED REPORTING: Setting Goals and Targets in the Context of Risks, Opportunities, and Impacts

Geographic or Geopolitical Area	Parameter / Metric	Baseline Performance	Current Performance	Risks & Impacts Managed	Target	Progress Status
		Company Information Here				

ADVANCED

Policies, strategies, and governance

Advanced reporters disclose more detailed information regarding how the company incorporates water-related considerations and strategies into their core business decision-making and management processes.

Policies and strategies

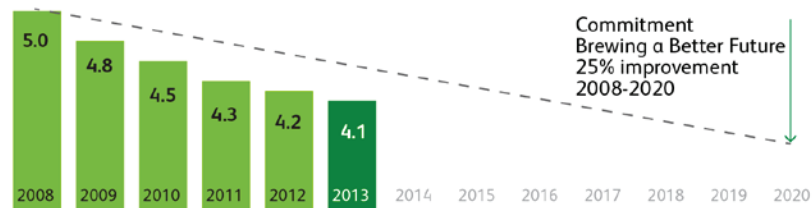
Water-related risks, like other business risks, can be managed through their explicit consideration in a range of core business activities including facility siting, mergers and acquisitions, capital expenditures, procurement contracts, product development, and research and development. Corporate water policies and strategies refer to mechanisms that allow companies to integrate water into their core management processes and business planning. Such strategies provide a unifying storyline that pulls together the

HEINEKEN: 2013 SUSTAINABILITY REPORT

“In 2013, we achieved a specific water consumption figure of 4.1 hl/hl, down from 4.2 hl/hl in 2012. This is a 20% reduction compared with 2008, the baseline year. This means we are well on the way towards our 2020 target. Without the newly acquired sites, the water consumption would be 4.0 hl/hl.”

Forty-four of our production units are already below the target of 3.7 hl/hl, representing more than 45% of total production volume in 2013. There are 21 smaller sites (representing just 3% of our volume) operating above 7 hl/hl.”

Specific water consumption: actual performance
hl/hl beer + soft drink + cider + water



¹Baseline 2008

²Twenty-three production units

NESTLÉ: COMMITMENT ON WATER STEWARDSHIP (WEBSITE)

“Nestlé recognises that the long term success of the company is built upon effective water stewardship in the watersheds where its raw materials are sourced from, where its factories are located, and where suppliers and consumers live.

...

Nestlé ... is committed to develop its business in a way that facilitates effective water stewardship in the geographies that it sources from and operates within, and is committed to focus upon measures that are cost effective and relevant within a watershed.

Specifically Nestlé commits to:

1. Work to achieve water efficiency across our operations
2. Advocate for effective water policies and stewardship
3. Treat the water we discharge effectively
4. Engage with suppliers, especially those in agriculture
5. Raise awareness of water access and conservation
6. Report publicly on a regular basis on the progress of meeting this Commitment ”

company's many specific water-related activities as part of the company's overarching priorities and actions. Reporting on these strategies includes:

- Describing types of activities in the context of the strategic objectives they support
- Locating specific regions where water management activities are focused
- Explaining how policies address the company's specific water-related risks, opportunities, and impacts

Governance

Many companies disclose the mechanisms that support corporate water-related decision making and enhance accountability. Effective governance structures (and reporting on this topic) include a description of the processes and systems used to assess water-related risks and impacts, determine material water-related issues, develop and implement water-related policies, and establish and enforce a chain of accountability for water-related performance. For example, companies can establish specifically designated bodies to bring together different aspects of water-related expertise and to coordinate water management activities. In some cases, companies give ultimate oversight of sustainability issues (and water-specific issues when relevant) to the board of directors. Lastly, companies are increasingly encouraging good governance by tying executives' compensation to sustainability targets, such as water efficiency.

Governance reporting should provide insight into which body in the company has ultimate oversight of water management and the mechanisms it uses to drive water-related accountability (e.g., compensation structures, or water committees or experts groups). Also critical to communicating governance is describing the processes through which the company engages with stakeholders to understand its impacts and establish water policies.

Respecting the human rights to water and sanitation

In 2011, the United Nations Human Rights Council endorsed a set of [Guiding Principles on Business and Human Rights](#). The Guiding Principles establish an authoritative global reference point on how companies should seek to ensure respect for human rights throughout their operations—both in their own activities and through their business relationships. Respecting rights means focusing on risks to people, rather than risks to the business. To put this into practice, companies need to implement due diligence to identify actual and potential impacts on human rights and to prevent, mitigate, and remediate them.

When a company considers how to report on its efforts to respect human rights²² to water and sanitation, relevant information may include:

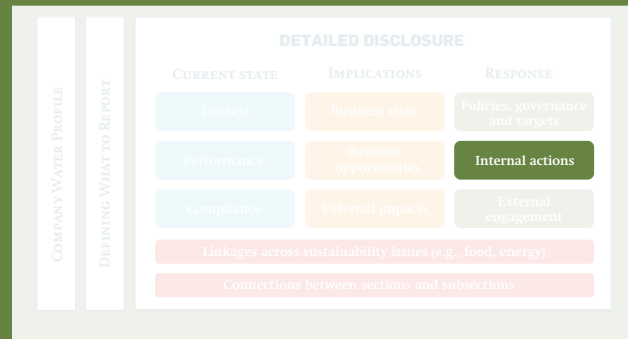
- Descriptions of the company’s policies and processes that address human rights risks and impacts on the rights to water and sanitation specifically
- Explanations of the company’s key business relationships and how the company addresses risks to human rights to water and sanitation arising from these relationships
- Information on any severe impacts on the rights to water and sanitation with which the business has been involved and how they have been addressed, as well as any lessons learned

Companies will need to consider both Internal Actions and External Engagement approaches (as presented in these Guidelines) to put into operation policies regarding their responsibility to respect the rights to water and sanitation. For example, a company might look to implement WASH services at the workplace to ensure adequate sanitation while also extending such expectations to other actors within its value chain. Or a company may need to collaborate with others in the basin to reduce their collective water use when withdrawals limit the water availability for local communities in a way that impacts their right to water.

The CEO Water Mandate is currently partnering with [Shift](#) to develop [practical guidance](#) on how companies can meet their responsibility to respect the rights to water and sanitation and bring a human rights lens to corporate water stewardship. The Guidance will be released in late 2014. The nature of robust reporting on this topic is evolving, and companies will want to pay attention not only to the forthcoming Guidance but also to broader developments in the human rights space that may affect their reporting.

22 GRI’s [A Resource Guide to Corporate Human Rights Reporting](#) provides guidance on reporting on human rights more broadly.

INTERNAL ACTIONS



OVERVIEW

The corporate water management programs, strategies, and goals described above are effective only insofar as they drive meaningful change at the facility and **basin** levels. One aspect of such change is action that improves the company's operational performance and mitigates the negative impacts associated with the company's operations and those of its suppliers.

	CONTENT	SCOPE	FORMAT
Basic	Improvements in direct operations	Companywide and location-specific	Narrative; quantitative and qualitative
Advanced (includes basic reporting)	- Product innovation - Value chain prioritization, engagement, and improvements	Value chain	

BASIC

Improvements in direct operations

Basic reporting of internal actions typically focuses on management and technology improvements within the company's direct operations. Management practices and technologies that are broadly applicable and beneficial across the company (and the industry sector) are typically the most meaningful to report. Companies may also disclose their plans to further implement these practices in other parts of the company or make them available to other companies.

Management practices and systems

Often the first water-related operational improvements relate to management practices, such as monitoring facility water use (and that of specific processes), regularly checking for leaks, establishing water committees, and strengthening employee awareness and training. These types of improvements often constitute the low-hanging fruit of water conservation efforts. Reporting on these topics is typically done briefly, with a short description of the practice and a quantitative description of its effect on water performance. Companies can also report on the implementation of facility water management systems that offer an internal protocol for implementing a wide range of the practices listed above. In doing so, companies describe the practices inherent to their facility water management systems and then the extent to which those systems have been implemented across the company, typically as a percentage of all facilities.

Technologies

Companies also invest in technologies²³ designed to drive efficiency and reduce pollution, such as water meters, systems for **water recycling and reuse**, treatment plants, and alternative production processes. Many companies disclose the volume of water recycled throughout their operations to demonstrate the degree to which they have implemented efficiency measures.

Quantifying the extent of implementation

Companies can report the degree to which these management practices and technologies drive performance improvements at specific facilities. However, particularly effective reporting describes the overall effect of the practice or technology on the company's water-related performance. Such reporting eliminates the possible perception that a sustainable practice has indeed been implemented on an isolated basis, but that less sustainable practices remain prevalent throughout the company. Specific metrics that companies can use to quantify achievement include:

- The percent of facilities fully implementing a certain practice or technology
- The effect of the practice or technology on the company's overall quantity of water **withdrawals** or **water consumption** or quality of **wastewater discharge**
- The overall financial costs of purchasing and implementing specific practices or technologies
- The cost savings achieved by implementing the practice or technology

Such metrics can also serve as the basis for company goals and targets. For example, a company might set a target of implementing water recycling systems at 80 percent of its facilities by 2017. Table 8 offers an example of how internal actions can be linked to current-state performance and subsequent water-related risks and impacts.

²³ The [Water Technology Product List](#), developed by the Department for Environment, Food and Rural Affairs (Defra) and HM Revenue and Customs, in partnership with AEA Technology, is a useful resource for identifying such technologies.

LEVI STRAUSS & CO.: SUSTAINABILITY (WEBSITE)

“ In 2013, we developed the first standard for water recycling and reuse in the apparel industry and we worked with one of our suppliers in China to set up a system that can produce high quality products using 100% recycled water. At the first approved production location, we made 100,000 pairs of Levi's women jeans with recycled water and our goal is to scale this innovative process to many of our wet finishing suppliers and collections. For more explanation on the process, click on the infographic below, and read our recycled water blog post. ”

TABLE 8: CONNECTED REPORTING: Linking Internal Actions to Current State and Implications

Parameter / Metric	Baseline Performance	Risk or Impact Addressed	Company Action	Percent of Facilities Implementing	Resulting Change in Performance
		Company Information Here			

ADVANCED

Advanced reporters often disclose issues beyond operational improvements (such as product design innovations) and the details of actions throughout the value chain, including prioritization and engagement of supply chain actors.

Product innovation

Product innovation with respect to water refers to any design changes that allow the company or its products to save water or reduce pollution, or otherwise seize water-related opportunities. Ideal reporting on this topic captures:

- The nature of innovation
- Quantified performance improvements during production and in the product-use phase
- Consumer reaction and product marketability
- Quantified analysis of the company's use of the product relative to its own comparable, less sustainable products

Quantifying positive impacts of internal actions on basin conditions

The first step in quantifying the effects of internal actions, as described above, is describing the extent to which they affect basic companywide metrics, like water withdrawals or cost. Advanced companies go beyond companywide metrics to explain how internal actions contribute to the alleviation of **basin** challenges, such as water pollution and water scarcity. However, such discussions should be mindful of the distinction between internal actions that improve a basin's condition relative to its original **baseline** (e.g., treating wastewater discharge to a higher quality than the source water) and those that reduce a company's negative impacts (e.g., minimizing the company's contribution to water scarcity by implementing water-efficient practices). Though both situations are valuable to report, this distinction will be of great importance to many disclosure audiences. For example, when evaluating a company's reputational risks, investors may want to know whether the basin is arguably more sustainable due to the company's presence in that location.

Considerations for reporting positive impacts on basin conditions created by company internal actions are available on page 76.

Value chain prioritization, engagement, and improvements

Companies also choose to engage with their suppliers and other value chain actors to encourage sustainable water practices. In reporting, descriptions of value chain engagement strategies and programs are typically located adjacent to value chain data (described on pg. 44-45). Since engaging hundreds or thousands of Tier 1, Tier 2, and Tier 3 suppliers is often impractical, companies ideally report how they prioritize engagement among a subgroup of suppliers.

Such prioritization efforts can take into account the extent to which suppliers face their own risks and create impacts (that is, whether they are located in water-scarce or water-stressed areas and what their water performance is). Companies will also want to determine the importance of the supplier to them, and their ability to influence the supplier's practice. (For example, Tier 1 suppliers may prove the most feasible starting point for value chain engagement efforts.) Companies should clearly describe the process and filters used in such prioritizations.

UNILEVER: SUSTAINABLE LIVING 2014 (WEBSITE)

“In those developing and emerging countries where water is scarce, around 40% of domestic water is used to wash clothes, a task which is done by hand. Our One Rinse fabric conditioner reduces the amount of water needed to rinse out the detergent to one bucket rather than three. This can save up to half the water per wash, around 30 litres, if used correctly.

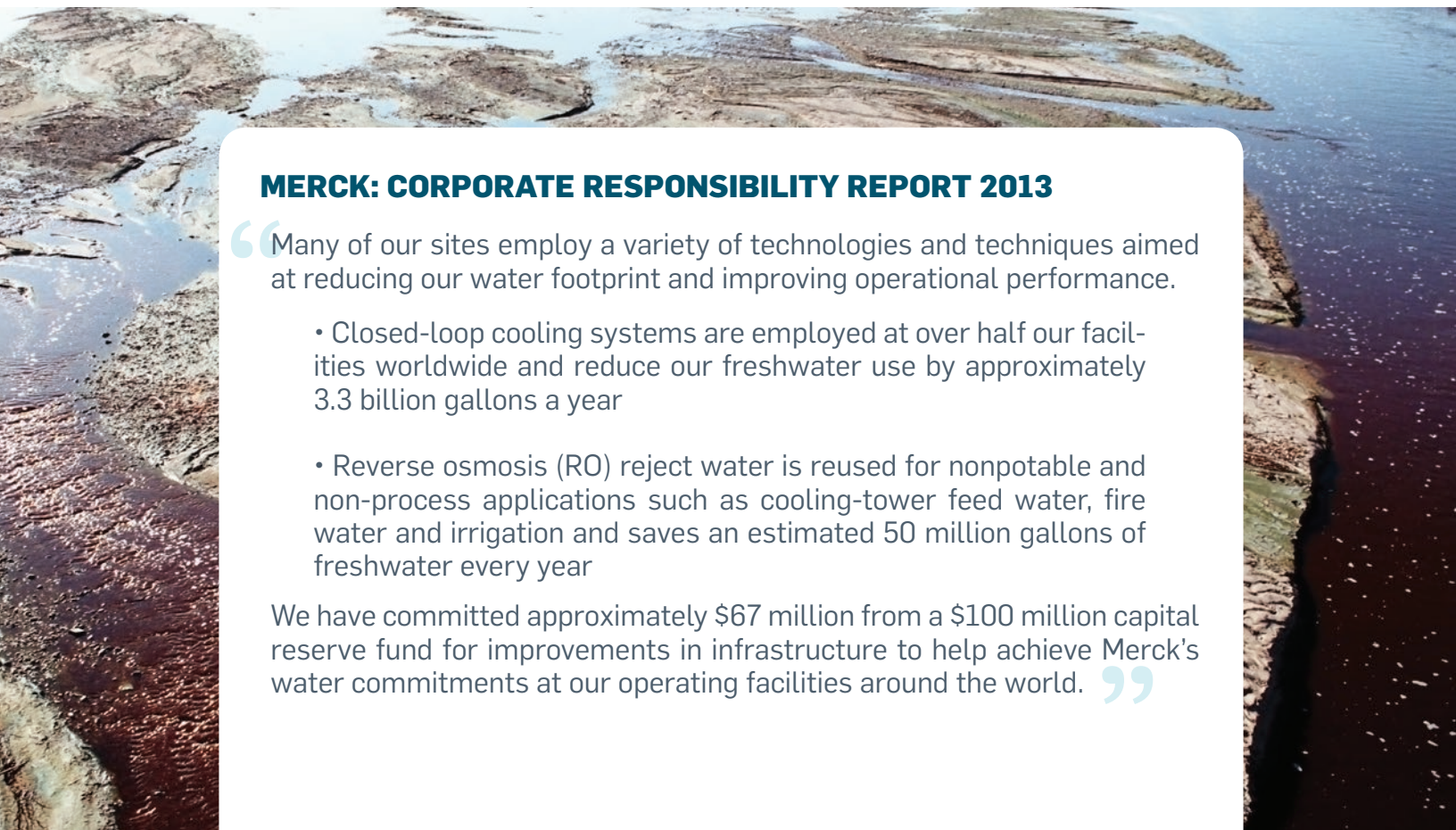
...
In 2013 we expanded our Comfort One Rinse fabric conditioner range in Indonesia, Thailand and Vietnam. It is also available in Cambodia, India and the Philippines.

In 2013, One Rinse products were used in 1.7 billion washes in 31 million† households worldwide, a 78% increase on 2010.”

Companies also report how they engage with value chain actors. Company efforts to leverage improved water performance in entities it does not own or control can include:

- Awareness-building campaigns
- Promotion of water technologies and good management practices
- Training materials and technical support
- Water use or **water discharge** requirements that are linked to procurement

Reporting on supplier engagement ideally notes the percentage of total suppliers engaged and the tangible improvements made, so as to articulate the extent to which a meaningful impact across the supply chain has been achieved. For example, a company might report that it has provided training materials and a water toolkit to 85 percent of its Tier 1 suppliers. Reporting on supplier engagement can also include a description of the efforts the company has made to encourage major suppliers themselves to report regularly on their progress in relation to the company's water-related goals. Companies can also discuss their plans to continue and expand value chain engagement.



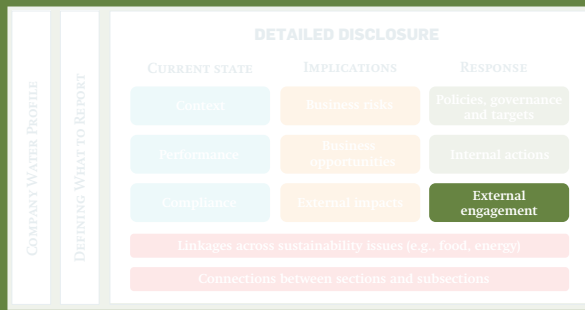
MERCK: CORPORATE RESPONSIBILITY REPORT 2013

“Many of our sites employ a variety of technologies and techniques aimed at reducing our water footprint and improving operational performance.

- Closed-loop cooling systems are employed at over half our facilities worldwide and reduce our freshwater use by approximately 3.3 billion gallons a year
- Reverse osmosis (RO) reject water is reused for nonpotable and non-process applications such as cooling-tower feed water, fire water and irrigation and saves an estimated 50 million gallons of freshwater every year

We have committed approximately \$67 million from a \$100 million capital reserve fund for improvements in infrastructure to help achieve Merck's water commitments at our operating facilities around the world. ”

EXTERNAL ENGAGEMENT



OVERVIEW

Many water-related business risks stem from the water-related conditions outside a company's fenceline. Because of this, companies are increasingly pursuing external engagement strategies geared toward improving water resource management at the local, regional, and national levels, thereby potentially mitigating **water risk**.

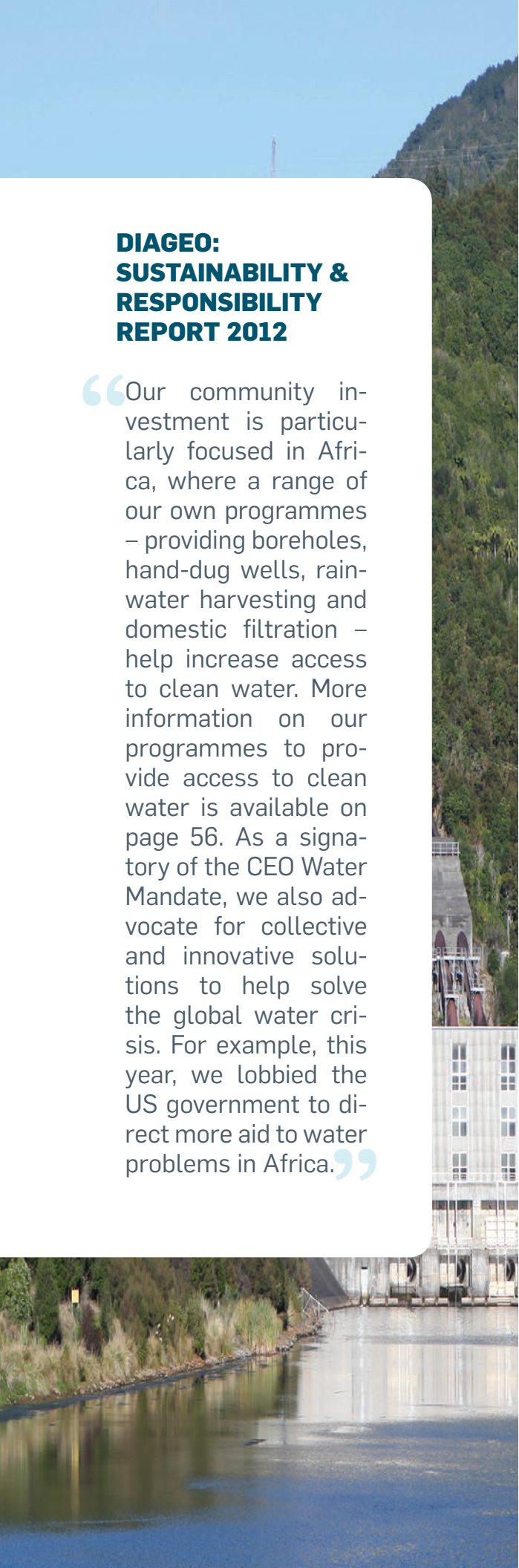
A company will ideally make linkages describing how specific external engagements align with or advance its water strategies and goals.

	CONTENT	SCOPE	FORMAT
Basic	Participation in global initiatives	Companywide	Narrative; qualitative
Advanced (includes basic reporting)	Consumer/public engagement and awareness building		
	Policy advocacy		
	Place-based collective action (e.g., community engagement, basin restoration, data sharing)	Location-specific	

BASIC

Participation in global initiatives

Many companies participate in water-related initiatives that seek to better understand specific water challenges and solutions, or otherwise offer platforms through which companies can assess or demonstrate their water-related activities. Examples of initiatives include the CEO Water Mandate, World Economic Forum's 2030 Water Resources Group, WBCSD, WFN, and GEMI. Companies often report on their participation in these initiatives to demonstrate action. Reporting in this area typically includes a commitment to that group's programs and a description of how involvement has shaped company water strategies and performance.



DIAGEO: SUSTAINABILITY & RESPONSIBILITY REPORT 2012

“Our community investment is particularly focused in Africa, where a range of our own programmes – providing boreholes, hand-dug wells, rain-water harvesting and domestic filtration – help increase access to clean water. More information on our programmes to provide access to clean water is available on page 56. As a signatory of the CEO Water Mandate, we also advocate for collective and innovative solutions to help solve the global water crisis. For example, this year, we lobbied the US government to direct more aid to water problems in Africa.”

ADVANCED

Consumer/public engagement and awareness building

A significant number of companies conduct awareness campaigns directed specifically at their consumers or the general public. These usually speak to global water challenges or provide information on how to use their products in a way that is responsible with respect to water. Such engagements can encourage more sustainable water management generally, but they can also be a way to minimize negative impacts associated with product use. Reporting on awareness-building campaigns speaks to:

- The aspect of water sustainability being addressed
- The medium or forum in which consumers or other interests are being engaged
- The campaign's effectiveness in influencing behavior patterns (quantitatively, when possible)

Policy advocacy

Many companies influence national- and subnational-level policy development so as to encourage more sustainable water management. Due to the pervasive mistrust of corporate lobbying (particularly in the United States), reporting in this area should be quite explicit regarding how the company's inputs and recommendations in the formulation of government policy and regulation help advance the water-sustainability agenda. Companies that disclose their lobbying activities often discuss specific key details of the legislation, the ways in which it contributes to more sustainable water management, and the amount of financial support given, if any.

Place-based collective action (e.g., community engagement, basin restoration, data sharing)

Disclosure in this area pertains to describing local-, basin-, or national-level activities in which companies collaborate with other organizations to advance shared goals related to one or more water challenges. Such on-the-ground engagements are typically difficult to report since they are heavily dependent on a nuanced discussion of the qualitative basin context and stakeholder dynamics. Furthermore, it is often difficult to communicate progress on such collective actions when they are addressing broad concepts and intangible issues such as improving

water governance capacity or alleviating water shortages. Reporting on key aspects of place-based engagement can be done consistently regardless of the location or type of entity involved in the collective action, however. Some of these aspects are discussed below.

The nature of the challenge

External engagement can address a vast array of water-related challenges that create risk for the company and the organizations the company is engaging with. Though certainly not exhaustive, a list of these challenges includes **water scarcity**, inadequate operation and management of water systems, insufficient infrastructure, ineffective or inconsistent regulatory frameworks and their implementation, water pollution, competition among water uses, and climate change. Disclosing companies should discuss the nature of the water-related challenge and how it affects the company (and others in the basin), as well as how the collective action aims to address the challenge.

The level and nature of engagement²⁴

The company should discuss the scope of the collective action, who it is engaging with (e.g., specific government agencies, civil society organizations, other businesses, or communities), the interests shared by those involved, and the type of collective action approach being utilized.

Disclosure audiences should be able to understand the respective roles of the company and the interested parties with whom it is engaging and the extent to which partner organizations are aware of and support company activities. In doing so, a company can describe the level of engagement pursued, whether it is sharing information, seeking advice, pursuing common objectives, or integrating decisions and resources. Describing the extent to which the company is contributing financial resources and technical expertise can also be helpful in demonstrating it is providing meaningful support to the project.

24 The CEO Water Mandate's [Guide to Water-Related Collective Action](#) offers more details on these collective action approaches, levels of engagement, and intervention areas.

THE COCA-COLA COMPANY: 2012/13 GRI REPORT

“In the town of Kok-Ozek, as in many communities in the former Soviet Union, the water system brought water as far as a central depot, but did not include infrastructure for delivering water to households. In partnership with UNDP and local authorities, we built a piping network designed to deliver water to every household and to schools and community health centers in the town center. More significantly, we helped the community establish a cooperative that will oversee water distribution, maintenance and sanitation, helping to support then sustainability of the new system. Our model was identified as a best practice by the UNDP board of directors and by the Kazakh government, and may be replicated throughout the country.”

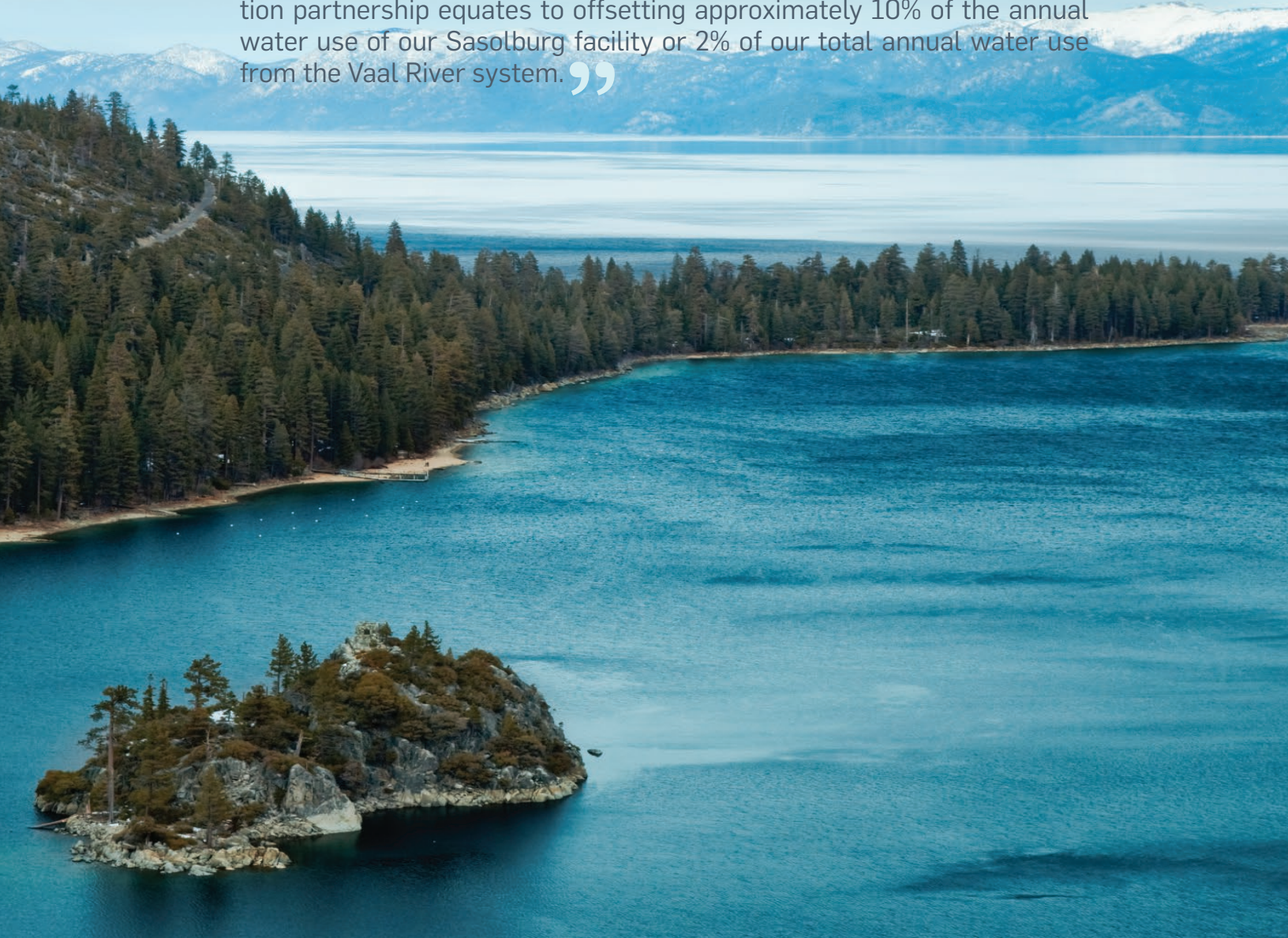
SASOL: SUSTAINABLE DEVELOPMENT REPORT 2013

“Our water conservation partnerships with municipalities in the Vaal River catchment area seek to drive municipal water conservation initiatives, increase public awareness of water conservation, stimulate job creation and realise cost savings for the municipality.

Our flagship partnership is with Emfuleni municipality and the German development agency Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). Through this partnership, we committed R5 million, and leveraged an additional R5 million, for the Boloka Metsi project.

...
If successful, this project will help Emfuleni reduce its annual water expenses by approximately R62 million, a portion of which will be re-invested in sustaining the project.

...
The water savings achieved to date with the Emfuleni water conservation partnership equates to offsetting approximately 10% of the annual water use of our Sasolburg facility or 2% of our total annual water use from the Vaal River system.”



The interventions pursued

Disclosure audiences will also want to know what specific interventions the collective action is pursuing. Examples of specific interventions that companies seek to engage collectively with others on include:

- Encouraging efficient water use
- Engendering the development of effective governance
- Supporting or sharing research, analysis, data, and monitoring
- Aiding and financing infrastructure development and maintenance
- Advancing public awareness
- Working on community-level WASH issues
- Supporting climate change adaptation and resilience
- Protecting or restoring ecosystem services and source water areas
- Promoting better on-farm practices
- Supporting effluent management and reuse
- Enhancing stormwater management and flood control

Ideally, a company will demonstrate how the intervention it is pursuing addresses the risks and interests of the organizations involved in the collective action as well as how it benefits others in the **basin** more broadly.

The effort's integrity

Collective action efforts and water stewardship initiatives rely on their integrity²⁵ to be credible and to achieve the desired win-win outcomes. For such efforts to have integrity, they have the three following components:

- 1) Trustworthy, credible, and accountable partners
- 2) Inclusive, transparent, and responsive processes that lead to informed and balanced decision making
- 3) Clear objectives and demonstrable outcomes that advance sustainable water management

When reporting on collective action efforts, companies will therefore be well served to articulate the range of partners participating, the roles they play, and how they are held to account. They should explain how the effort was designed and how it is governed. And they should link the effort's objectives and outcomes to the broader vision of sustainable water management.

The positive impacts of external engagement efforts on basin conditions

Lastly, when possible, a company either demonstrates how engagement has led to meaningful progress toward sustainable water management or offers a framework for evaluating the success of the engagement if the project is still being implemented or tangible results are not yet realized. Where possible, the company ideally reports quantitatively how the engagement has contributed to established water-related public interest objectives, as opposed to objectives set by the company itself.

²⁵ The CEO Water Mandate is currently developing work in collaboration with a wide range of partners that will help companies ensure that their efforts achieve integrity and have a long-term positive impact. The Guidelines will be updated in the future to reflect this more detailed guidance.

Considerations for reporting positive impacts on basin conditions created by external engagements are available in the following sidebar.

EVALUATING AND REPORTING POSITIVE IMPACTS OF RESPONSE STRATEGIES ON BASIN CONDITIONS

Companies ideally demonstrate the effectiveness of their internal actions and external engagements at improving **basin** conditions and advancing sustainable water management beyond their fencelines. However, doing so is typically quite complex and challenging due to a lack of data on basin conditions as well as inherent methodological difficulties. That said, companies can consider the following when attempting to report on their efforts.

Parameters and metrics for measuring progress and success

Evaluating positive impacts can be accomplished much in the same way that companies evaluate and report negative impacts, by describing the extent to which efforts affect the three components of water stress:

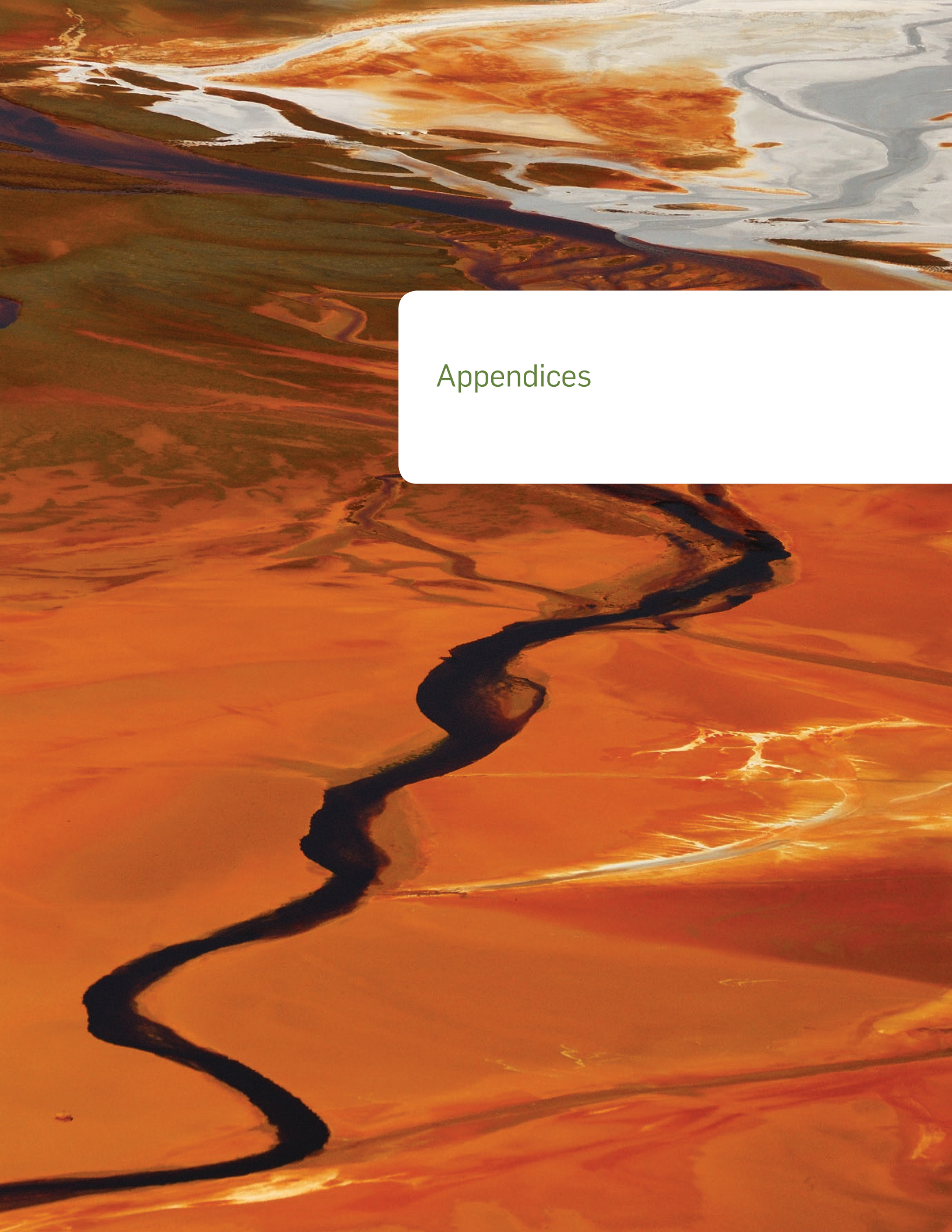
- Water availability (e.g., water scarcity)
- Water quality (e.g., **BOD**, **COD**)
- Water accessibility (e.g., access to water and WASH services)

Companies can also assess progress against water-related objectives that local **stakeholders** and government have already established. Many companies will also seek to measure the extent to which their response strategies contribute to the realization of international development goals, especially the Millennium Development Goals and possible Post-2015 Sustainable Development Goals. Companies may also want to demonstrate progress related to factors that elude easy quantification, namely, local and national water governance. For example, a company may seek to encourage better enforcement of water-related regulations. In such cases, companies ideally make use of government- or **stakeholder**-defined success indicators and parameters to track and report progress.

Defining “positive” and “sufficient” contributions and impacts

When evaluating their contributions to more sustainable water management, companies consider three key concepts that shed light on the extent of their contribution and the need for further action:

- *Positive impacts.* The effects of a company or operation on a specific water-related parameter lead to better conditions in a specific geographic area. For example, a company may discharge wastewater of higher quality than the water bodies it sourced from and is discharging to.
- *Reduction of negative impacts.* A company or operation is able to contribute to sustainable water management by reducing (but not eliminating) its contributions to a specific water-related parameter in a specific geographic area. For example, a company may implement water-efficient technologies so as to minimize its contribution to water scarcity in a given area. It is reducing negative impacts, but it is not creating positive impacts because it is still contributing to water scarcity.
- *Sufficiency.* “Sufficiency” can be understood through the gap between the current state of a specific location with respect to a specific water-related parameter and what is considered sustainable. Sufficient action is that which is able to fully close the gap between current and desired conditions.

An aerial photograph of a winding river in a dry, orange-hued landscape. The river is dark and meanders through the terrain, which is characterized by various shades of orange, brown, and tan. The river's path is highly irregular, with many loops and turns. The surrounding land appears to be a mix of dry earth and sparse vegetation, creating a textured appearance. The overall color palette is warm and earthy, dominated by the orange and brown tones of the landscape.

Appendices

APPENDIX A:

Corporate Water Disclosure Glossary

aquifer A geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Source: U.S. Geological Survey, *Glossary of Hydrologic Terms*

base year A historical datum (such as a year) against which an organization's progress is tracked over time.

Source: Adapted from GRI, *G4 Sustainability Reporting Guidelines*

baseline A starting point used for comparisons.

Source: GRI, *G4 Sustainability Reporting Guidelines*

basin See river basin.

BOD Biological oxygen demand. Index of water pollution which represents the content of biochemically degradable substances in the water.

Source: UNESCO, *International Glossary of Hydrology*

COD Chemical oxygen demand. Mass concentration of oxygen equivalent to the amount of a specified oxidant consumed by dissolved or suspended matter when a water sample is treated with that oxidant under defined conditions.

Source: UNESCO, *International Glossary of Hydrology*

compliance violation Administrative or judicial sanctions for failure to comply with environmental laws and regulations, including, as a minimum:

- International declarations, conventions, and treaties, as well as national, subnational, regional, and local regulations
- Voluntary environmental agreements with regulating authorities that are considered binding and developed as a substitute for implementing new regulations. In certain jurisdictions, such agreements are referred to as *covenants*
- Cases brought against the organization through the use of international dispute mechanisms or national dispute mechanisms supervised by government authorities

Source: Based on GRI, *G4 Implementation Manual*

corporate water disclosure The act of reporting to stakeholders (investors, NGOs, consumers, communities, suppliers, employees, and others) information related to the current state of a company's water management, the implications for the business and others, and how the company develops and implements strategic responses.

finances and penalties Monetary amount paid in response to compliance violations.

groundwater Water in soil beneath the soil surface, usually under conditions where the pressure in the water is greater than the atmospheric pressure and the soil voids are substantially filled with the water.
Source: CDP, *Guidance for companies reporting on water on behalf of investors & supply chain members 2014*

Note: This document makes a distinction between renewable and nonrenewable groundwater. Renewable groundwater sources can be replenished relatively naturally and are usually located at shallow depths. Nonrenewable groundwater sources are generally located at deeper depths and cannot be replenished easily or are replenished over very long periods of time. They are sometimes referred to as “fossil” groundwater sources.

hot spots Facilities or geographic/geopolitical areas where a company is most likely to experience water risks or create negative water-related environmental and social impacts

indirect water footprint The freshwater consumption and pollution “behind” products being consumed or produced. It is equal to the sum of the water footprints of all products consumed by the consumer or of all (nonwater) inputs used by the producer.
Source: Water Footprint Network, *WaterStat*

KPIs Key performance indicators

municipal water Water by a municipality or other public provider.
Source: CDP, *Guidance for companies reporting on water on behalf of investors & supply chain members 2014*

recycled water See water recycling and reuse.

reporting period The specific time span covered by the information reported.
Source: GRI, *G4 Sustainability Reporting Guidelines*

river basin Area having a common outlet for its surface runoff.
Source: UNESCO, International Glossary of Hydrology

runoff The part of precipitation that appears as streamflow.
Source: UNESCO, International Glossary of Hydrology

saltwater Water in which the concentration of salts is relatively high (over 10,000 mg/L).
Source: UNESCO, International Glossary of Hydrology

SMEs Small to medium enterprises. The main factors determining whether a company is an SME are the number of employees and either turnover or balance sheet total.
Source: European Commission

stakeholder Entities or individuals that can reasonably be expected to be significantly affected by the organization’s activities, products, and services, and whose actions can reasonably be expected to affect the ability of the organization to successfully implement its strategies and achieve its objectives. This includes entities or individuals whose rights under law or international conventions provide them with legitimate claims vis-à-vis the organization.

Stakeholders can include those who are invested in the organization (such as employees, shareholders, suppliers) as well as those who have other relationships to the organization (such as vulnerable groups within local communities, civil society).

Source: GRI, *G4 Sustainability Reporting Guidelines*

subbasin A geographic area representing part or all of a surface drainage area, a combination of drainage areas, or a distinct hydrologic feature. It is smaller than a river basin.

Source: U.S. Geological Survey, *Hydrologic Unit Maps: Water Supply Paper 2294*

surface water All waters on the surface of the earth, including fresh and saltwater, ice, and snow, as distinguished from water from the subsurface (i.e., groundwater). Surface waters include oceans, lakes, rivers, and wetlands.

Source: CDP, *Guidance for companies reporting on water on behalf of investors & supply chain members 2014*

total basin availability The amount of water available for ecological or human (e.g., industrial, agricultural, municipal) use within a basin. *See* blue water availability.

wastewater Water which is of no further immediate value to the purpose for which it was used or in the pursuit of which it was produced because of its quality, quantity, or time of occurrence. Wastewater from one user can be a potential supply to a user elsewhere. Cooling water is not considered to be wastewater.

Source: FAO, *Aquastat*

Note: In this document the term *wastewater* refers to one of the seven potential source types for water withdrawals (see the discussion under Performance in Section 5). This stands in contrast to water discharge.

water consumption The volume of freshwater used and then evaporated or incorporated into a product. It also includes water abstracted from surface or groundwater in a catchment and returned to another catchment or the sea. It is important to distinguish the term *water consumption* from the term *water withdrawal* or *water abstraction*.

Source: Water Footprint Network, *Glossary*

water demand The actual quantity of water required for various needs over a given period as conditioned by economic, environmental, and/or social factors.

Source: WBCSD, *Water for Business: Version 3*

water discharge Water effluents discharged to subsurface waters, surface waters, or sewers that lead to rivers, oceans, lakes, wetlands, treatment facilities, and groundwater either through:

- A defined discharge point (point-source discharge).
- Over land in a dispersed or undefined manner (non-point-source discharge).
- Wastewater removed from the organization via truck. Discharge of collected rainwater and domestic sewage is not regarded as water discharge.

Source: Adapted from GRI, *G4 Sustainability Reporting Guidelines*

water intensity This document uses the term *water intensity* to refer to the amount of water a company withdraws per a specific product unit or financial output. Product water intensity is the volume of water withdrawn per unit of product created. The product unit may be determined by the discloser. For

companies in the beverage sector, for example, a product unit may be one liter of beverage product. For companies in the automobile sector, a product unit may be one vehicle. Financial water intensity refers to the financial output produced per volume of water withdrawn. The financial output measure may be determined by the discloser. One commonly used measure is total revenue.

water quality *Water quality* refers to the physical, chemical, biological, and organoleptic (taste-related) properties of water.

Source: OECD, *Glossary of Statistical Terms*

water recycling and reuse The act of processing used water and wastewater through another cycle before discharge to final treatment and discharge to the environment. In general, there are three types of water recycling and reuse:

- Wastewater recycled back in the same process or higher use of recycled water in the process cycle
- Wastewater recycled and reused in a different process, but within the same facility
- Wastewater reused at another of the reporting organization's facilities

Source: GRI, *G4 Sustainability Reporting Guidelines*

water risk The possibility of an entity experiencing a water-related challenge (e.g., water scarcity, water stress, flooding, infrastructure decay, drought). The extent of risk is a function of the likelihood of a specific challenge occurring and the severity of the challenge's impact. The severity of impact itself depends on the intensity of the challenge, as well as the vulnerability of the actor.

Water risk is felt differently by every sector of society and the organizations within them and thus is defined and interpreted differently (even when they experience the same degree of water-related challenges). That notwithstanding, many water-related challenges create risk for many different sectors and organizations simultaneously. This reality underpins the notion of what some refer to as "shared water risk," which suggests that different sectors of society have a common interest in understanding and addressing shared water-related challenges. However, some contest the appropriateness of this term on the basis that risk is felt uniquely and separately by individual entities and is typically not shared, *per se*.

Source: CEO Water Mandate, *Corporate Water Disclosure Guidelines* (see Appendix B of this document)

water risk for businesses The ways in which water-related challenges potentially undermine business viability. It is commonly categorized into three interrelated types:

- *Physical*. Having too little water, too much water, water that is unfit for use, or inaccessible water
- *Regulatory*. Changing, ineffective, or poorly implemented public water policy and/or regulations
- *Reputational*. Stakeholder perceptions that a company does not conduct business in a sustainable or responsible fashion with respect to water

Water risk for businesses is also sometimes divided into two categories that shed light on the source of that risk and therefore what types of mitigation responses will be most appropriate:

- **Risk due to company operations, products, and services.** A measure of the severity and likelihood of water-related challenges derived from how a company or organization, and the suppliers from which it sources goods, operate and how its products and services affect communities and ecosystems.

- **Risk due to basin conditions.** A measure of the severity and likelihood of water-related challenges derived from the basin context in which a company or organization and/or its suppliers from which it sources goods operate, which cannot be addressed through changes in its operations or its suppliers and requires engagement outside the fence.

Source: CEO Water Mandate, *Corporate Water Disclosure Guidelines* (see Appendix B of this document)

water scarcity *Water scarcity* refers to the volumetric abundance, or lack thereof, of freshwater resources. Scarcity is human driven; it is a function of the volume of human water consumption relative to the volume of water resources in a given area. As such, an arid region with very little water, but no human water consumption would not be considered scarce, but rather “arid.” Water scarcity is a physical, objective reality that can be measured consistently across regions and over time. Water scarcity reflects the physical abundance of freshwater rather than whether that water is suitable for use. For instance, a region may have abundant water resources (and thus not be considered water scarce), but have such severe pollution that those supplies are unfit for human or ecological uses.

Source: CEO Water Mandate, *Corporate Water Disclosure Guidelines* (see Appendix B of this document)

water stress The ability, or lack thereof, to meet human and ecological demand for freshwater. Compared to scarcity, *water stress* is a more inclusive and broader concept. It considers several physical aspects related to water resources, including water availability, water quality, and the accessibility of water (i.e., whether people are able to make use of physically available water supplies), which is often a function of the sufficiency of infrastructure and the affordability of water, among other things. Both water consumption and water withdrawals provide useful information that offers insight into relative water stress. There are a variety of physical pressures related to water, such as flooding and drought, that are not included in the notion of water stress. Water stress has subjective elements and is assessed differently depending on societal values. For example, societies may have different thresholds for what constitutes sufficiently clean drinking water or the appropriate level of environmental water requirements to be afforded to freshwater ecosystems, and thus assess stress differently.

Source: CEO Water Mandate, *Corporate Water Disclosure Guidelines* (see Appendix B of this document)

withdrawals The volume of freshwater abstraction from surface or groundwater. Part of the freshwater withdrawal will evaporate, another part will return to the catchment where it was withdrawn, and yet another part may return to another catchment or the sea.

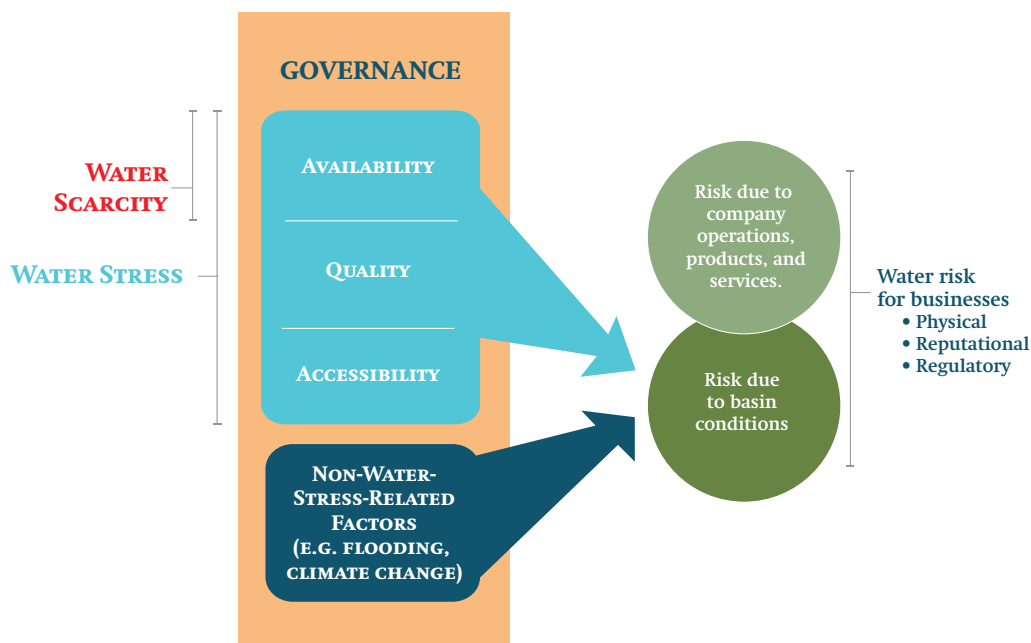
Source: Water Footprint Network, *Glossary*

APPENDIX B: Harmonizing Terminology— the Relationship between Water Scarcity, Water Stress, and Water Risk

Background

As corporate water assessment tools and stewardship initiatives continue to emerge and their underlying approaches and methodologies evolve, there has been a proliferation of sometimes conflicting interpretations and uses of key terms, such as *water scarcity*, *stress*, and *risk*, often used to indicate geographic locations where water-related challenges are more pronounced. As part of the development of these Corporate Water Disclosure Guidelines, the CEO Water Mandate began a dialogue with several other organizations to come to a shared understanding of these terms where possible. The resulting definitions for *water scarcity*, *water stress*, *water risk*, and *water risk for business* are offered in Appendix A. Below is a description and illustration of how these terms relate to one another.

FIGURE B-1: The Relationship between Water Scarcity, Water Stress, and Water Risk



Relationship between terms

Water scarcity is an indicator of a problem with water availability where there is a high ratio of water consumption to water resources in a given area. Water availability, water quality, and water accessibility are the three components that make up water stress. Thus, water scarcity and additional indicators (e.g., **biological oxygen demand**, access to drinking water) can be used to assess water stress. Scarcity and stress both directly inform one's understanding of risks due to basin conditions. Companies and organizations cannot gain robust insight into water risk unless they have a firm understanding of the various components of water stress (i.e., availability, quality, accessibility), as well as governance and other non-water-related stress factors. Figure B-1 illustrates these relationships.



APPENDIX C:

Interactive Database of the World's River Basins

These Corporate Water Disclosure Guidelines emphasize that a company's risks, opportunities, and impacts differ greatly depending on the river basin context(s) in which it operates. For example, a thousand gallons of water used in a water-rich region will likely have substantially less impact on ecosystems and people than a thousand gallons used in a water-scarce region. Thus, where possible, companies seek to report location-specific information in order to shed light on where water-related challenges are greatest and where action should be prioritized.

However, in the past, there has been no common nomenclature for river basin names or delineations for their boundaries on a global scale. This means that, for example, two companies might report on their water use in the Yellow River Basin, but be referring to two different (albeit likely overlapping) geographic areas, thus leading to results that are confusing for, and of limited use, to stakeholders. Understanding this deficiency, as part of the development of these Guidelines, the CEO Water Mandate—in collaboration with World Resources Institute—has developed the *Interactive Database of the World's River Basins* based on the most recent and publicly available information provided by HydroSHEDS, Global Runoff Data Centre, Watersheds of the World, WFN, WRI Aqueduct, and other sources in the public domain.

This database allows companies to enter the coordinates of their (and their suppliers') operations and understand in what river basins they are located (using a newly developed common nomenclature) and the boundaries of those river basins. Alternatively, companies can use interactive maps to manually locate their facilities on a map and learn more about the river basins in which they are located.

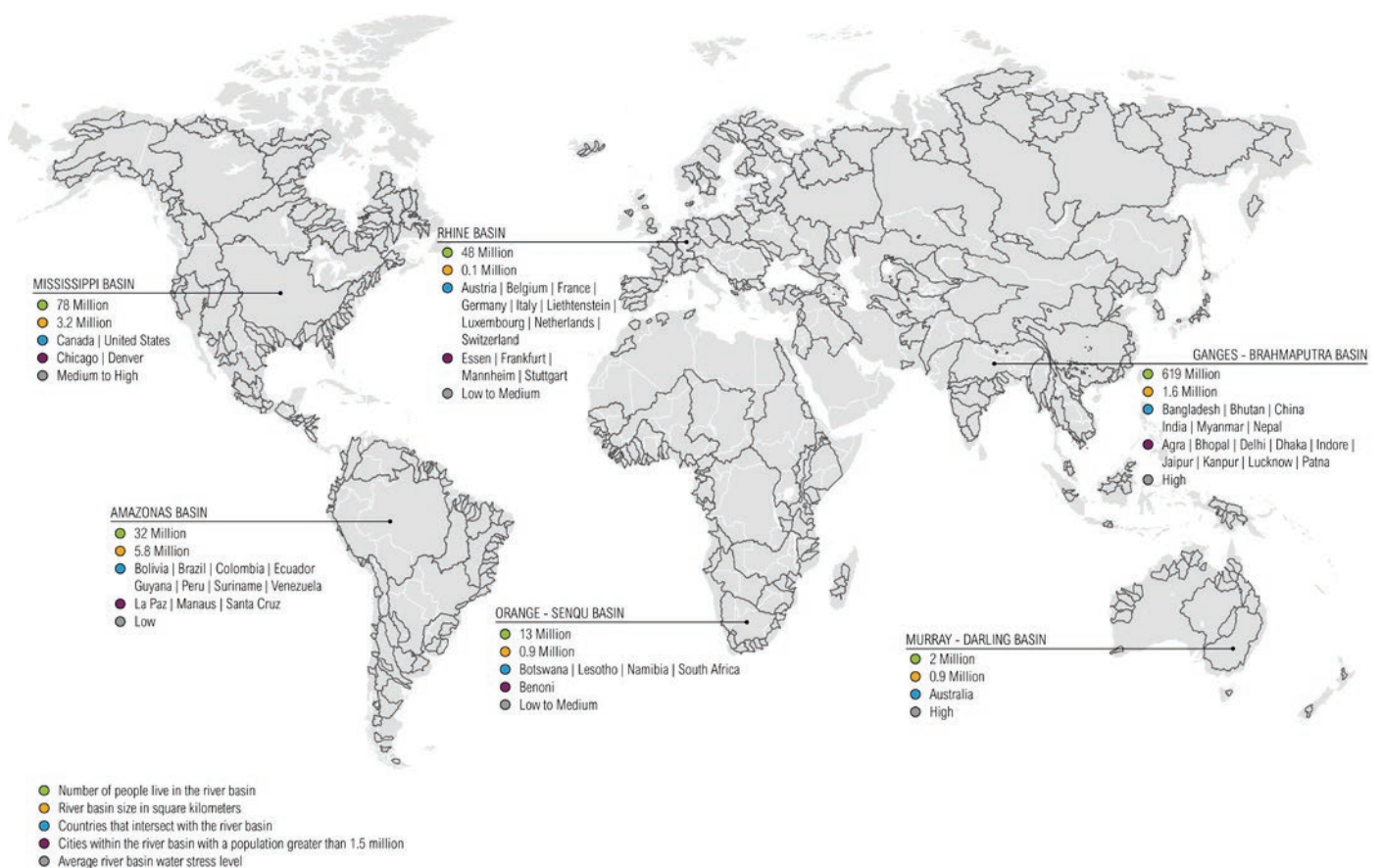
The Interactive Database can be found at: ceowatermandate.org/disclosure/riverbasins



The Interactive Database can be found at:
ceowatermandate.org/disclosure/riverbasins

[Click here](#)

FIGURE C1: Overview of the Interactive Database of the World's River Basins



Developed by: World Resources Institute | Sources: Columbia University, Global Runoff Data Centre, Natural Earth, World Resources Institute, World Wildlife Fund

Appendix D: **Water Disclosure Working Group Members and Corporate Water Disclosure Stakeholder Advisory Group Members**

During the development of the Guidelines, the project team regularly consulted with the CEO Water Mandate’s Water Disclosure Working Group (WDWG)—comprising representatives from Mandate-endorsing companies—and the Corporate Water Disclosure Stakeholder Advisory Group (CWDSAG), which included a variety of representatives from civil society groups, water-related-tool developers, trade associations, and government and intergovernmental agencies. The expertise of these groups enabled the project team to ensure it was building on existing disclosure practice as well as to ensure that the Guidelines addressed the wide range of company and stakeholder interests. The tables below list WDWG and CWDSAG members who have contributed to the Guidelines at some point during their development. In some cases, these representatives have moved on to different organizations or positions within their organizations during the development of the Guidelines and therefore no longer serve with these groups.

TABLE D-1: WDWG Members 2011–2014

NAME	ORGANIZATION
Michael Whaley*	Allergan
Christina Hillforth*	AkzoNobel
Martijn Kruisweg*	AkzoNobel
Ivonne Studer Noguez*	AkzoNobel
Bennett Freeman*	Calvert
Jules Frieder	Calvert
Ellen Kennedy*	Calvert
Greg Koch*	Coca-Cola Company
Lisa Manley	Coca-Cola Company
Serena Levy*	Coca-Cola Company
Suzannah Cooley*	Coca-Cola Enterprises
Maury Zimring	Coca-Cola Enterprises
Jens Rupp	Coca-Cola Hellenic
Roberta Barbieri*	Diageo
A. Q. I. Chowdhury*	Finlay Ltd.
Johan Firmenich*	Firmenich
Nancy English	GlaxoSmithKline
Brett Fulford*	GlaxoSmithKline
Bob Hannah	GlaxoSmithKline
Mikael Blomme	H&M
Felix Ockborn*	H&M
Manoj Chaturvedi*	Hindustan Construction Co.
Niyati Sareen*	Hindustan Construction Co.
Robert Drinane*	Merck
Bart Alexander*	Molson Coors
Michael Glade*	Molson Coors
Javiera Charad*	Nestlé
Christian Frutiger*	Nestlé
Naty Barak*	Netafim
Heather Rippman*	Nike
Kevin Agnew*	Reed Elsevier
Mark Gough	Reed Elsevier
Martin Ginster*	Sasol
David LoPiccolo	Siemens
Jochen Schweitzer*	Siemens
Johan Holm*	Stora Enso
Yapo Alle-Ando*	Teck Resources
Troy Jones*	Teck Resources
Jesse Rep	UPM-Kymmene
Dominique Heron	Veolia
Ed Piñero*	Veolia Water
Graham Paterson	West Pac
Paul Jones	Xstrata

* denotes currents WDWG members

TABLE D-2: CWDSAG members 2011–2014

NAME	ORGANIZATION
Adrian Sym*	Alliance for Water Stewardship
Alexis Morgan*	Alliance for Water Stewardship
Leslie Lowe	UCI Environmental Accountability
Tod Christenson*	Beverage Industry Environmental Roundtable
Dimitra Christakou	Bloomberg
Linda Hwang	EcoMetrix Solutions Group
Brooke Barton*	Ceres
Jan Dell	CH2MHill
Jens Hönerhoff*	DEG Invest
Amy Goldman*	Global Environmental Management Initiative
Kelly Davina Scott*	Institute for Human Rights and Business
Nadira Narine*	Interfaith Center on Corporate Responsibility
David Molden*	International Center for Integrated Mountain Development
Anne-Marie Fleury	International Council on Mining and Metals
Ross Hamilton*	International Council on Mining and Metals
Sabrina Birner*	International Finance Corporation
Paul Freedman*	LimnoTech
Victor Munnik	Mvula Trust
Loic Dujardin	Norges Bank Investment Management
Danielle Carreira*	Principles for Responsible Investment
Olivia Watson*	Principles for Responsible Investment
Lara Jacob	Robeco
Maite Aldaya*	UN Environmental Programme, Consultant
Ivo Mulder	UN Environment Programme Finance Initiative
Sharon Murray	US AID
Ruth Mathews*	Water Footprint Network
Nick Hepworth*	Water Witness international
Anne-Lennore Boffi	World Business Council on Sustainable Development
Dominic Waughray	World Economic Forum
Lindsay Bass*	World Wildlife Fund International
Stuart Orr*	World Wildlife Fund International
Jochem Verberne*	World Wildlife Fund International

* denotes current CWDSAG members



PACIFIC INSTITUTE

The Pacific Institute is one of the world's leading nonprofit research and policy organizations working to create a healthier planet and sustainable communities. Based in Oakland, California, it conducts interdisciplinary research and partners with stakeholders to produce real-world solutions that advance environmental protection, economic development, and social equity—in California, nationally, and internationally. Since its founding in 1987, the Pacific Institute has become a locus for independent, innovative thinking that cuts across traditional areas of study, helping make connections and bring opposing groups together. The result is effective, actionable solutions addressing issues in the fields of freshwater resources, climate change, environmental justice, and globalization. www.pacinst.org



PRICEWATERHOUSECOOPERS

PricewaterhouseCoopers LLP is a Delaware limited liability partnership. PwC refers to the United States member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. *Please see www.pwc.com/structure for further details.*



CARBON DISCLOSURE PROJECT

CDP is an international not-for-profit organisation that operates the only global system for the measurement, disclosure and management of corporate environmental information. It has harnessed the collective power of market forces including 655 institutional investors holding US\$78 trillion in assets to create the largest collection of self-reported climate change and water data. This information is used by investors, companies and governments to make informed business, investment and policy decisions. *For more information visit www.cdproject.net.*

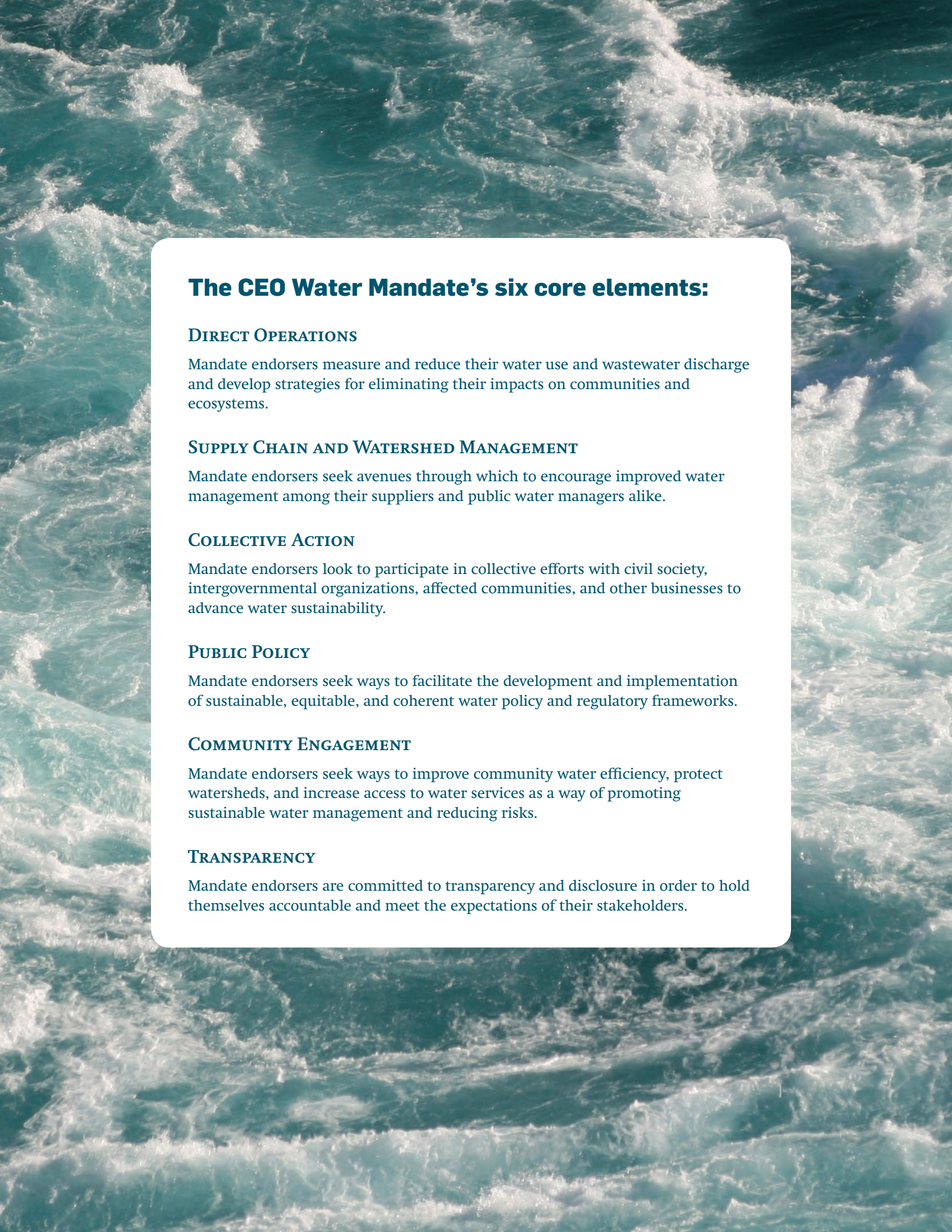


WORLD RESOURCES INSTITUTE

The World Resources Institute (WRI) is a global environmental and development think tank that goes beyond research to create practical ways to protect the Earth and improve people's lives. We work with governments, companies, and civil society to build practical solutions to urgent environmental challenges. WRI's transformative ideas protect the Earth and promote development because sustainability is essential to meeting human needs and fulfilling human aspirations for the future. www.wri.org



The CEO Water Mandate is a special initiative of the UN Secretary-General and the UN Global Compact, providing a multi-stakeholder platform for the development, implementation, and disclosure of corporate water sustainability policies and practices. The UN Global Compact is the world's largest corporate sustainability initiative with over 7000 corporate participants and other stakeholders from more than 140 countries. The UN Global Compact is based on ten principles in the areas of human rights, labour standards, the environment, and anti-corruption.



The CEO Water Mandate's six core elements:

DIRECT OPERATIONS

Mandate endorsers measure and reduce their water use and wastewater discharge and develop strategies for eliminating their impacts on communities and ecosystems.

SUPPLY CHAIN AND WATERSHED MANAGEMENT

Mandate endorsers seek avenues through which to encourage improved water management among their suppliers and public water managers alike.

COLLECTIVE ACTION

Mandate endorsers look to participate in collective efforts with civil society, intergovernmental organizations, affected communities, and other businesses to advance water sustainability.

PUBLIC POLICY

Mandate endorsers seek ways to facilitate the development and implementation of sustainable, equitable, and coherent water policy and regulatory frameworks.

COMMUNITY ENGAGEMENT

Mandate endorsers seek ways to improve community water efficiency, protect watersheds, and increase access to water services as a way of promoting sustainable water management and reducing risks.

TRANSPARENCY

Mandate endorsers are committed to transparency and disclosure in order to hold themselves accountable and meet the expectations of their stakeholders.