ERM

The Brewers of Europe

Operational Water Source Vulnerability

Developed by Alec Tang and Marianne Fernagut
Project number: 0157302

Issue Date: 16/07/2012

Operational Water Source Tool Library

Introduction

Stresses resulting from water-related impacts such as water shortage, declining water quality and excess water flows, have the potential to cause widespread disruption to an organisation's operations and profitability by increasing production, development and maintenance costs, incurring revenue losses, and acting as a constraint to growth. In addition, mismanagement of community water resources can lead to significant reputational cost for businesses that can have broader implications. Without any sense of water stresses and associated risks, companies are inadvertently betting that water will be available in the long term.

The brewery industry is one sector that is particularly exposed to water stress, as water forms a fundamental component of its product – both as ingredient and in the brewing process – and a significant aspect of its value chain. It is therefore of particular importance for the industry to understand the water challenges, stresses and risks it faces to make better management decisions. The importance of understanding water stress to organisations operating in the brewery and broader beverage industry is reflected in the level of understanding exhibited by participants in the sector. Respondents to the 2011 CDP Water Disclosure from the 'Consumer Staples' sector reported high performance levels in water management and governance and significantly higher levels of water risk awareness than the average of all sector respondents.

To enable organisations to respond more effectively to the diversity of water stresses and water risks affecting modern business, a broad range of guidance documents, tools, standards and schemes focussed on more sustainable and integrated water management practices have been developed.

Purpose and Scope of this study

The objective of this study is to address the diversity in approaches to sustainable water management by providing further clarity to the Brewers of Europe on the most applicable and relevant water stress identification and assessment tools and methodologies for the brewery sector. The purpose is to equip Brewers with the knowledge and understanding of the tools currently available to assess effective and potential water risks now and in the futures and that meet the needs of individual companies. The tools and methodologies reviewed focus on evaluating risks of production facilities (and not the supply chain e.g. agriculture).
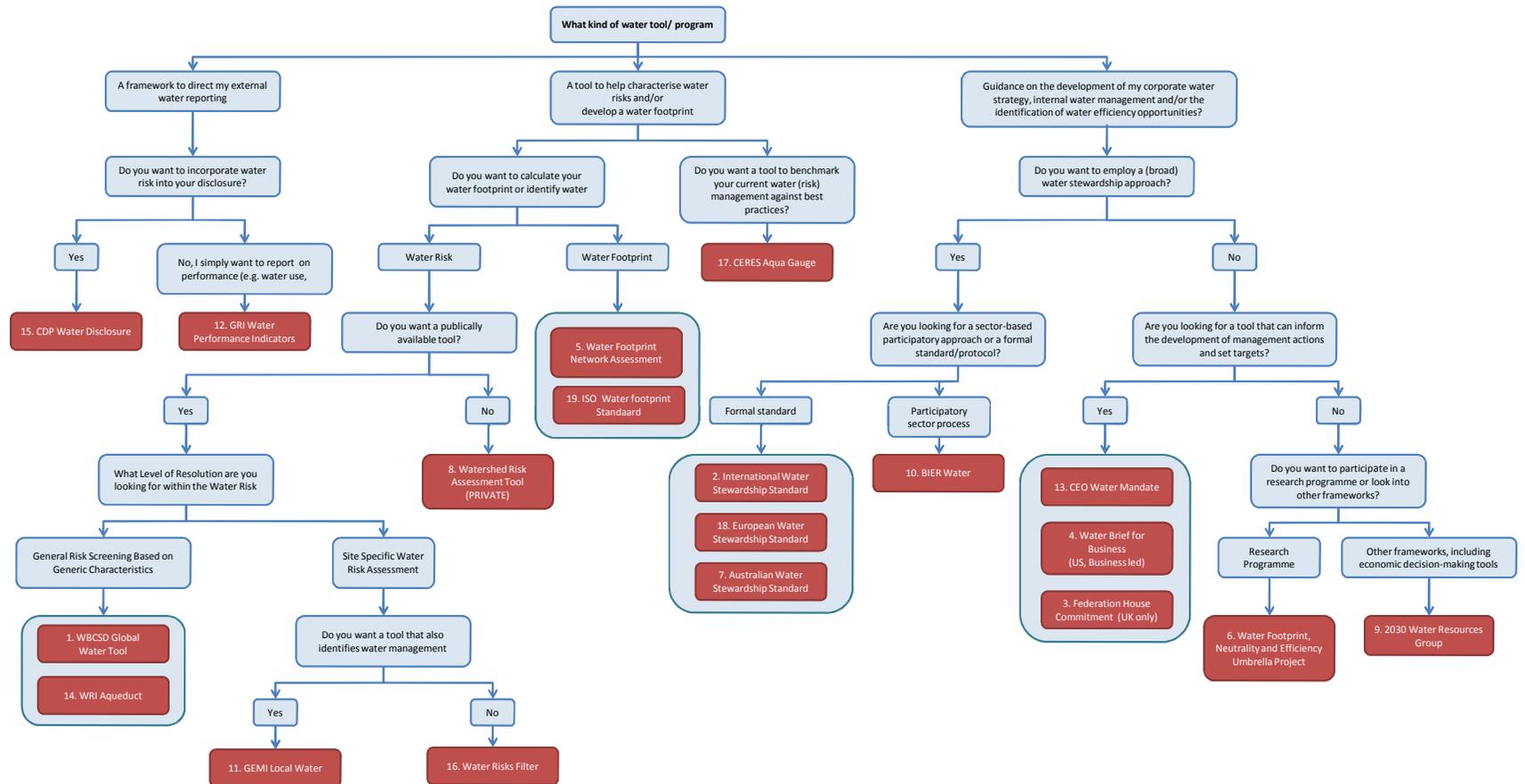
Library

This library contains a description of various state of the art tools and methodologies that focus on assessing water vulnerability and associated risk. Some of these tools have been used/piloted by companies within the beverage sectors to measure their water vulnerability and assess associated risks. This library is by no means exhaustive and may require updating in the future as tools are further developed and new tools and methodologies become available. The library also includes a decision tree to guide users through the different tools.

Table of contents
Introduction
Decision chart
Summary of tools
Tools (in individual tabs)
Overview
Glossary

ERM

Operational Water Source Tool Library - Decision Tree

The Brewers of Europe

What kind of water tool/ program

- A framework to direct my external water reporting
- A tool to help characterise water risks and/or develop a water footprint
- Guidance on the development of my corporate water strategy, internal water management and/or the identification of water efficiency opportunities?

Do you want to incorporate water risk into your disclosure?

- Yes
- No, I simply want to report on performance (e.g. water use,

15. CDP Water Disclosure

12. GRI Water Performance Indicators

Do you want to calculate your water footprint or identify water

- Water Risk
- Water Footprint

Do you want a tool to benchmark your current water (risk) management against best practices?

17. CERES Aqua Gauge

Do you want a publically available tool?

5. Water Footprint Network Assessment

19. ISO Water footprint Standaard

- Yes
- No

8. Watershed Risk Assessment Tool (PRIVATE)

What Level of Resolution are you looking for within the Water Risk

- General Risk Screening Based on Generic Characteristics
- Site Specific Water Risk Assessment

1. WBCSD Global Water Tool

14. WRI Aqueduct

Do you want a tool that also identifies water management

- Yes
- No

11. GEMI Local Water

16. Water Risks Filter

Do you want to employ a (broad) water stewardship approach?

- Yes
- No

Are you looking for a sector-based participatory approach or a formal standard/protocol?

- Formal standard
- Participatory sector process

2. International Water Stewardship Standard

18. European Water Stewardship Standard

7. Australian Water Stewardship Standard

10. BIER Water

Are you looking for a tool that can inform the development of management actions and set targets?

- Yes
- No

13. CEO Water Mandate

4. Water Brief for Business (US, Business led)

3. Federation House Commitment (UK only)

Do you want to participate in a research programme or look into other frameworks?

- Research Programme
- Other frameworks, including economic decision-making tools

6. Water Footprint, Neutrality and Efficiency Umbrella Project

9. 2030 Water Resources Group

Brewers of Europe
Water Stress Identification and Assessment Tools and Methodologies

Tool Index

	Tool Name	Tool Developer	Tool Type	End purpose
1	WBCSD Global Water Tool	World Business Council for Sustainable Development/CH2MHill	Water Stress/Risk Mapping Tool	Water Vulnerability/Scarcity Risk Assessment
2	International Water Stewardship Standard	Alliance for Water Stewardship (AWS)	Formal Standard/Protocol	Overarching Water Strategy Development Support
3	Federation House Commitment	UK Food and Drink Federation/WRAP	Participatory Initiative with Defined Commitments	Internal Process Modification
4	Water Brief for Business	Business Roundtable	Participatory Initiative with Defined Commitments	Overarching Water Strategy Development Support
5	Water Footprint Network Assessment Manual and WaterStat Database	Water Footprint Network	Formal Standard/Protocol	Water Vulnerability/Scarcity Risk Assessment
6	Water Footprint, Neutrality and Efficiency Umbrella Project	United Nations Environment Programme, Division of Technology, Industry and Economics	Other (please state under 'additional comments')	Internal Process Modification
7	Australian Water Stewardship Standard	Water Stewardship Australia (WSA, formerly Water Stewardship Initiative)	Formal Standard/Protocol	Overarching Water Strategy Development Support
8	Watershed Risk Assessment Tool	The Nature Conservancy and Pepsi-Co	Water Stress/Risk Mapping Tool	Water Vulnerability/Scarcity Risk Assessment
9	N/A	2030 Water Resources Group	Other (please state under 'additional comments')	Overarching Water Strategy Development Support
10	BIER Water Stewardship Programme	Beverage Industry Environmental Roundtable (BIER)	Participatory Initiative with Defined Commitments	Overarching Water Strategy Development Support
11	GEMI Local Water Tool (GEMI LWT)	Global Environmental Management Initiative (GEMI)	Water Stress/Risk Mapping Tool	Water Vulnerability/Scarcity Risk Assessment
12	GRI Water Performance Indicators	Global Reporting Initiative (GRI)	Formal Standard/Protocol	External Reporting
13	CEO Water Mandate	United Nations Global Compact (UNGC)	Participatory Initiative with Defined Commitments	Overarching Water Strategy Development Support
14	Aqueduct	World Resources Institute (WRI)	Water Stress/Risk Mapping Tool	Water Vulnerability/Scarcity Risk Assessment
15	CDP Water Disclosure	Carbon Disclosure Project (CDP)	Participatory Initiative with Defined Commitments	External Reporting
16	Water Risk Filter	World Wildlife Foundation and DEG	Water Stress/Risk Mapping Tool	Water Vulnerability/Scarcity Risk Assessment
17	Aqua Gauge	Ceres	Water Stress/Risk Mapping Tool	Water Vulnerability/Scarcity Risk Assessment
18	European Water Stewardship Standard	European Water Partnership	Formal Standard/Protocol	Overarching Water Strategy Development Support
19	ISO 14046 Water Footprint	International Standard Organisation	Formal Standard/Protocol	Internal Process Modification

1,0 General Tool Information

1,1	Tool Name	WBCSD Global Water Tool
1,2	Tool Developer	World Business Council for Sustainable Development/CH2MHill

Additional Comments

Launched in 2007, the Global Water Tool was developed under the leadership of WBCSD member and global engineering company CH2M HILL. An advisory board of 21 other global companies in a wide range of industries provided oversight and pilot testing. Expertise was provided by The Nature Conservancy and the Global Reporting Initiative.

The advisory board included: Air Products and Chemicals, Alcoa, Anglo American, Borealis, ConocoPhillips, Degussa, Dow Chemical Company, DuPont, GrupoNueva, Holcim, ITT Corporation, Kimberly Clark, Lafarge, PepsiCo, Rio Tinto, Sanyo, Shell, Suncor Energy, Suez, Syngenta and Unilever.

The WBCSD is a CEO-led organization of companies that seeks to galvanize the global business community to create a sustainable future for business, society and the environment. Together with its members, the council applies thought leadership and effective advocacy to generate constructive solutions and take shared action.

1,3	Tool Source (e.g. weblink)	www.wbcsd.org/web/watertool.htm
1,4	Date of the Latest Version	2011
1,5	Availability of Tool	Public - Free of Charge
1,6	Key Contacts	Anne-Leonore Boffi e. info@wbcsd.org ph. +41 22 839 3100

2,0 Tool Purpose

2,1	General Description	The Global Water Tool maps a company's water use and characterises its exposure to water risks within its global operations and supply chains, using a range of water stress metrics. The tool aims to develop a company and geography-specific knowledge base for driving improved water consumption and efficiency, and enable effective communication with internal and external stakeholders. The tool is composed of: • An Excel workbook • An online mapping system plotting site locations with external water, sanitation, population and biodiversity datasets • Spatial viewing via Google Earth interface The tool generates automatic outputs including: • GRI, CDP Water, DJSI and Bloomberg water related indicators • Inventories, risk and performance metrics charts and maps combining company sites location with country and/or watershed data

GEMI's Local Water Tool has been designed to be used in conjunction with the WBCSD Global Water Tool

2,2	Tool Type	Water Stress/Risk Mapping Tool
2,3	Tool Software/Format	Microsoft Excel
2,4	Geographic Focus	Global
2,5	Sector Focus	No Specific Focus

Tools for the Oil and Gas and Power Utilities sectors have been developed by WBCSD. These tools seek to categorise different aspects of the oil and gas supply chain or different power forms and identify which parts of the supply are in water stressed areas.

2,6	Assessment Approach	Bottom Up Product/Process Level Assessment
2,7	End Purpose	Water Vulnerability/Scarcity Risk Assessment
2,8	Focal Stage of Water Management	

Y	Assessing the Local Situation	
N	Accounting for and Understanding Impacts	
Y	Identifying Water Risks and Opportunities	
N	Determining Action and Setting Targets	
N	Monitoring and Communicating Performance	
N	Other (please state under 'additional comments')	

3,0 Tool Functionality

3,1 Data Inputs

3.1.1	Data Types Used	Combination of User Inputted and Tool Embedded Data
3.1.2	User Inputted Data Detail: Water Use	

Y	Water Use Volumes	
Y	Water Use Types, e.g. municipal supply/site sourced/recycled	
Y	Water Source Location, e.g. local aquifer/nearby river/distant reservoir	
N	Other (please state under 'additional comments')	

3.1.3	Tool Embedded Data Detail: Geography	Specific Location, e.g. GIS Co-ordinates/Site Address
3.1.4	Tool Embedded Data Detail: Sector/ Process	None
3.1.5	Transparency of Embedded Data Set for Risk/Stress Assessments	High

3,2 Tool Output

3.2.1	Nature of Tool Output	Characterisation of actual water risks/impacts affecting the organisation
3.2.2	Key Water Risks/Impacts Considered	

Y	Environmental	
Y	Physical (e.g. flood risk/damage to infrastructure)	
Y	Social	
Y	Economic	
Y	Reputational	
Y	Temporal Aspects	
N	Other (please state under 'additional comments')	

3.2.3	Output Format	

Y	Maps	
Y	Graphs	
Y	Numbers	
N	Other (please state under 'additional comments')	

3.2.4	Nature of Risk/Impacts Output	Quantitative, e.g. Scale on Water Stress Index
3.2.5	Resolution of Risk/Impacts Output	Low (Water Basin/Region)
3.2.6	Temporal Context of Output	

Y	Current Situation	
Y	Predicted Future Scenario	
Y	Other (please state under 'additional comments')	

3,3 User Friendliness

3.3.1	Required Level of Training to Use	High
3.3.2	Ease of Use Once Fully Trained	Simple
3.3.3	Online/Offline Functionality?	Data can be input offline, but tool needs to be online to undertake assessment

			Additional Comments
1,0	**General Tool Information**		
1,1	Tool Name	International Water Stewardship Standard	Although the AWS Standard provides the focus for much of AWS's work, over time AWS aims to develop additional innovative tools to pursue its mission: to promote responsible use of freshwater that is socially and economically beneficial as well as environmentally sustainable.
1,2	Tool Developer	Alliance for Water Stewardship (AWS)	AWS is a registered not-for-profit organisation formed to provide a coherent international framework for responding to freshwater challenges. The AWS model is designed around capturing and enabling access to knowledge and expertise on best practice on water stewardship. The centrepiece of the AWS work is the AWS Standard. In 2008, three organizations (The Nature Conservancy, The Pacific Institute, and Water Stewardship Australia) came together to form the AWS. Over time, these three founding organizations were joined by seven other organizations (Carbon Disclosure Project, European Water Partnership, International Water Management Institute, United Nations Global Compact's CEO Water Mandate, Water Environment Federation, Water Witness International, and WWF) to form a Board of Directors.
1,3	Tool Source (e.g. weblink)	www.allianceforwaterstewardship.org	
1,4	Date of the Latest Version	2012	
1,5	Availability of Tool	Public - Free of Charge	
1,6	Key Contacts	Adrian Sym, Executive Director e. adrian@allianceforwaterstewardship.org ph.	An FAQ about the AWS is available at: http://allianceforwaterstewardship.org/about-aws.html#faq
2,0	**Tool Purpose**		
2,1	General Description	The AWS Standard is designed to be an international, ISEAL-compliant, standard that defines a set of water stewardship principles, criteria, and indicators for how water should be stewarded at a site and watershed level in a way that is environmentally, socially, and economically beneficial. The AWS Standard is intended to provide water stewards with an approach for evaluating the existing processes and performances within their sites and watersheds, and ensuring that responsible water stewardship actions are in place to minimize negative impacts and maximize positive impacts. The Standard's principles – water governance, water balance, water quality and important water areas – are expected to lead to positive outcomes in terms of a) more equitable governance, b) sustainable water flow regimes, c) good water quality, and, d) protected, managed and restored areas. Social (e.g. culture- or health-related), environmental (e.g. species- or habitat-related) and economic (e.g. financial- or livelihood-related) impacts relating to these outcomes will benefit stakeholders from different sectors. The AWS Standard is international in scope, however its application is based around successful local partnerships through which decision-making on watershed-level actions are developed by all those with a stake in water management. This combination of international and local partnerships aims to generate a positive cycle of learning and innovation through which lessons learned in one location or sector can be replicated, applied and further developed in other settings.	The AWS released the First Draft International Water Stewardship Standard for Public Consultation in March 2012. The first public consultation on the AWS Standard is open to stakeholders until **15 June 2012**. This is the first draft in an 18-month process that will include another public consultation period and lead to the first full version of the Standard (targeted for mid-2013). In addition to the public consultation period, two AWS groups are involved in the development of the Standard: a **Global Water Roundtable**, and an **International Standard Development Committee (ISDC)**. The focus of the Water Roundtable is to seek out multi-stakeholder consensus through meetings and pilots held throughout the world. Stakeholders will have the opportunity to provide input into how the Standard is shaped through online feedback, in-person meetings, and piloting efforts. The ISDC comprises fifteen cross-regional and cross-sectoral individuals and has been tasked with deciding what to ultimately include or omit from the Standard. All content in the draft is open for stakeholder input, however specific input has been requested in several challenging areas. Using the input provided by stakeholders, the ISDC will develop the content based upon feedback for the second draft Standard.
2,2	Tool Type	Formal Standard/Protocol	
2,3	Tool Software/Format	Not Applicable to Tool	
2,4	Geographic Focus	Global	Regional initiatives are operating in Africa, Europe, Latin America and the Caribbean and North America (see also Water Stewardship Australia)
2,5	Sector Focus	No specific focus	
2,6	Assessment Approach	Top Down Corporate Assessment	
2,7	End Purpose	Overarching Water Strategy Development Support	
2,8	Focal Stage of Water Management	N Assessing the Local Situation	
		Y Accounting for and Understanding Impacts	
		N Identifying Water Risks and Opportunities	
		N Determining Action and Setting Targets	
		Y Monitoring and Communicating Performance	
		N Other (please state under 'additional comments')	
3,0	**Tool Functionality**		
	3,1 Data Inputs		
3.1.1	Data Types Used	User Inputted Data, e.g. Water Use Volumes/Water Source Locations/Water Stress Index/Ecological Characteristics	
3.1.2	User Inputted Data Detail: Water Use	Y Water Use Volumes	
		Y Water Use Types, e.g. municipal supply/site sourced/recycled	
		Y Water Source Location, e.g. local aquifer/nearby river/distant reservoir	
		N Other (please state under 'additional comments')	
3.1.3	Tool Embedded Data Detail: Geography	Not Applicable to Tool	
3.1.4	Tool Embedded Data Detail: Sector/ Process	Not Applicable to Tool	
3.1.5	Transparency of Embedded Data Set for Risk/Stress Assessments	Not Applicable to Tool	
	3,2 Tool Output		
3.2.1	Nature of Tool Output	None/Not Applicable to Tool	
3.2.2	Key Water Risks/Impacts Considered	Y Environmental	
		Y Physical (e.g. flood risk/damage to infrastructure)	
		Y Social	
		Y Economic	
		Y Reputational	
		Y Temporal Aspects	
		N Other (please state under 'additional comments')	
3.2.3	Output Format	N Maps	
		N Graphs	
		N Numbers	
		N Other (please state under 'additional comments')	
3.2.4	Nature of Risk/Impacts Output	Not Applicable to Tool	
3.2.5	Resolution of Risk/Impacts Output	Not Applicable to Tool	
3.2.6	Temporal Context of Output	N Current Situation	
		N Predicted Future Scenario	
		N Other (please state under 'additional comments')	
	3,3 User Friendliness		
3.3.1	Required Level of Training to Use	Not Applicable to Tool	
3.3.2	Ease of Use Once Fully Trained	Not Applicable to Tool	
3.3.3	Online/Offline Functionality?	Not Applicable to Tool	

1,0	**General Tool Information**		*Additional Comments*
1,1	Tool Name	Federation House Commitment	
1,2	Tool Developer	UK Food and Drink Federation/WRAP	
1,3	Tool Source (e.g. weblink)	www.fhc2020.co.uk	
1,4	Date of the Latest Version	Not Applicable	
1,5	Availability of Tool	Membership Based Initiative	
1,6	Key Contacts	No specific contact identified e. fhc2020@wrap.org.uk ph. +44 121 345 9014	

2,0	**Tool Purpose**	
2,1	General Description	The Federation House Commitment (FHC) aims to help reduce overall water usage across the Food and Drink sector by 20% by the year 2020. Under the FHC, food and drink companies pledge to review their on-site water use and develop site specific action plans to significantly reduce water consumption and costs within six months of signing up to the Commitment. Members agree to provide data on water and cost savings made on-site on an annual basis. An independent administrator of the Commitment has been appointed that also provides expert advice on assessing water use and developing implementation plans to participants. FHC Members have access to a package of benefits to help them to review and reduce their water use including: • Up to three days free on-site technical implementation support; • Access to on-line water management tools; • Access to benchmarking information and Good Practice Guidance; • An opportunity to participate in a peer working group; • An opportunity to promote success to the rest of the industry; • Direct access to the FHC independent administrator team; and • Access to a dedicated member's area on the FHC website.
2,2	Tool Type	Participatory Initiative with Defined Commitments
2,3	Tool Software/Format	Format of on-line water management tools unknown
2,4	Geographic Focus	UK
2,5	Sector Focus	Food and Beverage
2,6	Assessment Approach	Bottom Up Product/Process Level Assessment
2,7	End Purpose	Internal Process Modification
2,8	Focal Stage of Water Management	Y — Assessing the Local Situation N — Accounting for and Understanding Impacts N — Identifying Water Risks and Opportunities Y — Determining Action and Setting Targets Y — Monitoring and Communicating Performance N — Other (please state under 'additional comments')

3,0	**Tool Functionality**		
3,1	**Data Inputs**		
3.1.1	Data Types Used	Unknown	Scope and structure of 'on-line water management tools' unknown
3.1.2	User Inputted Data Detail: Water Use	? — Water Use Volumes ? — Water Use Types, e.g. municipal supply/site sourced/recycled ? — Water Source Location, e.g. local aquifer/nearby river/distant reservoir N — Other (please state under 'additional comments')	
3.1.3	Tool Embedded Data Detail: Geography	Unknown	
3.1.4	Tool Embedded Data Detail: Sector/ Process	Unknown	
3.1.5	Transparency of Embedded Data Set for Risk/Stress Assessments	Unknown	
3,2	**Tool Output**		
3.2.1	Nature of Tool Output	Unknown	
3.2.2	Key Water Risks/Impacts Considered	Y — Environmental Y — Physical (e.g. flood risk/damage to infrastructure) Y — Social Y — Economic Y — Reputational Y — Temporal Aspects N — Other (please state under 'additional comments')	
3.2.3	Output Format	? — Maps ? — Graphs ? — Numbers N — Other (please state under 'additional comments')	
3.2.4	Nature of Risk/Impacts Output	Unknown	
3.2.5	Resolution of Risk/Impacts Output	Unknown	
3.2.6	Temporal Context of Output	? — Current Situation ? — Predicted Future Scenario N — Other (please state under 'additional comments')	
3,3	**User Friendliness**		
3.3.1	Required Level of Training to Use	Unknown	
3.3.2	Ease of Use Once Fully Trained	Unknown	
3.3.3	Online/Offline Functionality?	Unknown	

1,0 General Tool Information

1,1	Tool Name	Water Brief for Business
1,2	Tool Developer	Business Roundtable
1,3	Tool Source (e.g. weblink)	www.waterbrief.businessroundtable.org
1,4	Date of the Latest Version	Not Applicable
1,5	Availability of Tool	Membership Based Initiative
1,6	Key Contacts	No specific contact identified e. info@businessroundtable.org ph. +1 202 872 1260

Additional Comments

The Business Roundtable is an association of chief executive officers (CEOs) of leading US companies that innovate and advocates helping expand economic opportunity for Americans. Business Roundtable launched the S.E.E. Change (Society, Environment and the Economy) initiative in September 2005, with water elevated as a priority.

2,0 Tool Purpose

2,1	General Description	Business Roundtable launched the S.E.E. Change (Society, Environment and the Economy) initiative in September 2005. S.E.E. Change asks America's leading companies to set challenging goals that benefit society, the environment and the economy. Through the S.E.E. Change: Water Brief For Business, the Roundtable can perform a valuable educational function by raising the awareness of member CEOs and motivating them to look seriously at how their companies use and affect water resources and what role they can play in addressing the water challenge. Where companies determine that a strategic business case exists for investment in sustainable water use, S.E.E. Change can provide the tools and framework for designing and implementing a sustainable water initiative.
2,2	Tool Type	Participatory Initiative with Defined Commitments
2,3	Tool Software/Format	Not Applicable to Tool
2,4	Geographic Focus	USA
2,5	Sector Focus	No specific focus
2,6	Assessment Approach	Top Down Corporate Assessment
2,7	End Purpose	Overarching Water Strategy Development Support
2,8	Focal Stage of Water Management	N Assessing the Local Situation
		N Accounting for and Understanding Impacts
		Y Identifying Water Risks and Opportunities
		Y Determining Action and Setting Targets
		N Monitoring and Communicating Performance
		N Other (please state under 'additional comments')

Water Brief for Business builds the business case for water sustainability by asking strategic questions including:
• Actions companies are taking
• Water and its intensity in the business value chain
• Corporate risks of water scarcity and water quality
• Business strategies on water

The Water Brief also outlines key reasons to act, including:
• Water scarcity and supply interruptions
• Water-related risks
• Water as a business opportunity

3,0 Tool Functionality

3,1 Data Inputs

3.1.1	Data Types Used	User Inputted Data, e.g. Water Use Volumes/Water Source Locations/Water Stress Index/Ecological Characteristics
3.1.2	User Inputted Data Detail: Water Use	? Water Use Volumes
		? Water Use Types, e.g. municipal supply/site sourced/recycled
		? Water Source Location, e.g. local aquifer/nearby river/distant reservoir
		N Other (please state under 'additional comments')
3.1.3	Tool Embedded Data Detail: Geography	Not Applicable to Tool
3.1.4	Tool Embedded Data Detail: Sector/ Process	Not Applicable to Tool
3.1.5	Transparency of Embedded Data Set for Risk/Stress Assessments	Not Applicable to Tool

3,2 Tool Output

3.2.1	Nature of Tool Output	None/Not Applicable to Tool
3.2.2	Key Water Risks/Impacts Considered	Y Environmental
		Y Physical (e.g. flood risk/damage to infrastructure)
		Y Social
		Y Economic
		Y Reputational
		Y Temporal Aspects
		N Other (please state under 'additional comments')
3.2.3	Output Format	N Maps
		N Graphs
		N Numbers
		N Other (please state under 'additional comments')
3.2.4	Nature of Risk/Impacts Output	Not Applicable to Tool
3.2.5	Resolution of Risk/Impacts Output	Not Applicable to Tool
3.2.6	Temporal Context of Output	N Current Situation
		N Predicted Future Scenario
		N Other (please state under 'additional comments')

3,3 User Friendliness

3.3.1	Required Level of Training to Use	Not Applicable to Tool
3.3.2	Ease of Use Once Fully Trained	Not Applicable to Tool
3.3.3	Online/Offline Functionality?	Not Applicable to Tool

1,0	**General Tool Information**			Additional Comments
1,1	Tool Name	Water Footprint Network Assessment Manual and WaterStat Database		
1,2	Tool Developer	Water Footprint Network		The Water Footprint Network is a non-profit foundation, acting as an international network by and for its partners. Founding members include University of Twente, WWF, UNESCO, IHE Institute for Water Education, the Water Neutral Foundation, the WBCSD, the International Finance Corporation and the Netherlands Water Partnership.
				The Water Footprint Network has a Board consisting of two directors. A Supervisory Council is charged with supervision of the Board. An Advisory Council advises the Board on the strategies to be followed with regard to achieving the Network's objectives. The network is open to partners from various types of stakeholders in water resources management, including government agencies, non-governmental organizations, businesses, academia and international-organizations. The Water Footprint Peer Review Committee has been installed as a platform for the scientific review of global guidelines and tools for water footprint accounting. Its main task is to advise the Board on annual revisions of the Water Footprint Manual.
1,3	Tool Source (e.g. weblink)	www.waterfootprint.org		
1,4	Date of the Latest Version	2011		
1,5	Availability of Tool	Public - Free of Charge		
1,6	Key Contacts	Ruth Mathews, Executive Director e. ruth.mathews@waterfootprint.org ph. +31 53 489 4370		

2,0	**Tool Purpose**		
2,1	General Description	The Water Footprint Network Assessment Manual: • Provides a set of methods for water footprint assessment • Shows how water footprints can be calculated for individual processes and products, as well as for consumers, nations and businesses • Contains worked examples of how to calculate green, blue and grey water footprints • Describes how to assess the sustainability of the aggregated water footprint within a river basin or the water footprint of a specific product • Includes a library of possible measures that can contribute to water footprint reduction The WaterStat Database includes: • Product water footprint statistics • National water footprint statistics • International virtual water flows statistics • Water scarcity statistics	
2,2	Tool Type	Formal Standard/Protocol	
2,3	Tool Software/Format	Not Applicable to Tool	
2,4	Geographic Focus	Global	
2,5	Sector Focus	No specific focus	
2,6	Assessment Approach	Bottom Up Product/Process Level Assessment	
2,7	End Purpose	Water Vulnerability/Scarcity Risk Assessment	
2,8	Focal Stage of Water Management	N	Assessing the Local Situation
		Y	Accounting for and Understanding Impacts
		N	Identifying Water Risks and Opportunities
		N	Determining Action and Setting Targets
		N	Monitoring and Communicating Performance
		N	Other (please state under 'additional comments')

3,0	**Tool Functionality**		
3,1	**Data Inputs**		
3.1.1	Data Types Used	Combination of User Inputted and Tool Embedded Data	
3.1.2	User Inputted Data Detail: Water Use	Y	Water Use Volumes
		Y	Water Use Types, e.g. municipal supply/site sourced/recycled
		Y	Water Source Location, e.g. local aquifer/nearby river/distant reservoir
		N	Other (please state under 'additional comments')
3.1.3	Tool Embedded Data Detail: Geography	Specific Location, e.g. GIS Co-ordinates/Site Address	
3.1.4	Tool Embedded Data Detail: Sector/ Process	Specific Industry, e.g. Brewing	
3.1.5	Transparency of Embedded Data Set for Risk/Stress Assessments	High	
3,2	**Tool Output**		
3.2.1	Nature of Tool Output	Characterisation of actual water risks/impacts affecting the organisation	
3.2.2	Key Water Risks/Impacts Considered	Y	Environmental
		Y	Physical (e.g. flood risk/damage to infrastructure)
		Y	Social
		Y	Economic
		Y	Reputational
		Y	Temporal Aspects
		N	Other (please state under 'additional comments')
3.2.3	Output Format	Y	Maps
		Y	Graphs
		Y	Numbers
		N	Other (please state under 'additional comments')
3.2.4	Nature of Risk/Impacts Output	Quantitative, e.g. Scale on Water Stress Index	
3.2.5	Resolution of Risk/Impacts Output	High (Local Habitats)	
3.2.6	Temporal Context of Output	Y	Current Situation
		Y	Predicted Future Scenario
		Y	Other (please state under 'additional comments')
3,3	**User Friendliness**		
3.3.1	Required Level of Training to Use	High	
3.3.2	Ease of Use Once Fully Trained	Simple	
3.3.3	Online/Offline Functionality?	Data can be input offline, but tool needs to be online to undertake assessment	

1,0	**General Tool Information**		*Additional Comments*
1,1	Tool Name	Water Footprint, Neutrality and Efficiency Umbrella Project	
1,2	Tool Developer	United Nations Environment Programme, Division of Technology, Industry and Economics	UNEP DTIE has the mandate to work with business and industry in close collaboration with the Global Compact. It pursues new business models and corporate social and environmental responsibility via its SCP Branch. Focus is on cleaner and safer production, eco-design and life cycle management for more efficient resource use. The Water Footprint, Neutrality & Efficiency (WaFNE) Umbrella Project is an example of the outcome of this work. Building on interagency cooperation, the project will link with the related activities of the organizations under the CEO Water Mandate of the UN Global Compact, in which UNEP is a core partner.
1,3	Tool Source (e.g. weblink)	http://www.unep.fr/scp/water/WAFNE.htm	
1,4	Date of the Latest Version	Not Applicable	
1,5	Availability of Tool	Not Applicable	
1,6	Key Contacts	No specific contact identified e. unep.tie@unep.fr ph.	

2,0	**Tool Purpose**		
2,1	General Description	Since 2009, UNEP has been implementing a project to enhance water efficiency and water quality management through the refinement of water footprinting and water neutrality methodologies, their testing and applications in developing country industries and in water stressed areas. The specific objectives of the project include the following: • To refine methods and management tools for the water footprint and water neutrality concepts; • To build capacity and to raise awareness among the public and private sector in order to apply the water footprint and neutrality concepts on a larger scale and with greater consistency; • To demonstrate the applicability of harmonised concepts in enhancing water efficiency and improving water quality in high water impact and water dependent industries and in water stressed regions.	To engage the public and private (business and industry, including financial services) sectors in collaborative work with UNEP in the area of water use efficiency. • Map and refine methodologies and related management tools for the water footprint and neutrality concepts • Build capacity and raise awareness among the public and private sectors in order to apply water accounting and neutrality concepts on a greater scale and with greater consistency • Demonstrate the applicability of harmonized concepts in enhancing water efficiency and improving water quality
2,2	Tool Type	Other (please state under 'additional comments')	Research/Thought Leadership Programme
2,3	Tool Software/Format	Not Applicable to Tool	
2,4	Geographic Focus	Countries and geographic locations facing water scarcity due to rapidly growing water intensive industries	
2,5	Sector Focus	Water intensive industries, e.g. food and beverage, pulp and paper, apparel, chemicals, machinery and metals	
2,6	Assessment Approach	Bottom Up Product/Process Level Assessment	Focus of programme is in the area of water use efficiency
2,7	End Purpose	Internal Process Modification	
2,8	Focal Stage of Water Management	N Assessing the Local Situation	
		N Accounting for and Understanding Impacts	
		N Identifying Water Risks and Opportunities	
		Y Determining Action and Setting Targets	
		N Monitoring and Communicating Performance	
		N Other (please state under 'additional comments')	

3,0	**Tool Functionality**	
	3,1 Data Inputs	
3.1.1	Data Types Used	Not Applicable to Tool
3.1.2	User Inputted Data Detail: Water Use	N/A Water Use Volumes
		N/A Water Use Types, e.g. municipal supply/site sourced/recycled
		N/A Water Source Location, e.g. local aquifer/nearby river/distant reservoir
		N Other (please state under 'additional comments')
3.1.3	Tool Embedded Data Detail: Geography	Not Applicable to Tool
3.1.4	Tool Embedded Data Detail: Sector/ Process	Not Applicable to Tool
3.1.5	Transparency of Embedded Data Set for Risk/Stress Assessments	Not Applicable to Tool
	3,2 Tool Output	
3.2.1	Nature of Tool Output	None/Not Applicable to Tool
3.2.2	Key Water Risks/Impacts Considered	Y Environmental
		Y Physical (e.g. flood risk/damage to infrastructure)
		Y Social
		Y Economic
		Y Reputational
		Y Temporal Aspects
		N Other (please state under 'additional comments')
3.2.3	Output Format	N Maps
		N Graphs
		N Numbers
		N Other (please state under 'additional comments')
3.2.4	Nature of Risk/Impacts Output	Not Applicable to Tool
3.2.5	Resolution of Risk/Impacts Output	Not Applicable to Tool
3.2.6	Temporal Context of Output	N Current Situation
		N Predicted Future Scenario
		N Other (please state under 'additional comments')
	3,3 User Friendliness	
3.3.1	Required Level of Training to Use	Not Applicable to Tool
3.3.2	Ease of Use Once Fully Trained	Not Applicable to Tool
3.3.3	Online/Offline Functionality?	Not Applicable to Tool

1,0 General Tool Information

1,1	Tool Name	Australian Water Stewardship Standard
1,2	Tool Developer	Water Stewardship Australia (WSA, formerly Water Stewardship Initiative)
1,3	Tool Source (e.g. weblink)	www.waterstewardship.org.au
1,4	Date of the Latest Version	2012
1,5	Availability of Tool	Membership Based Initiative
1,6	Key Contacts	Michael Spencer, Secretary e. ph. +61 4 3938 1144

2,0 Tool Purpose

2,1	General Description	Water stewardship standards are defined at the site level with the aim of achieving sustainable water use at the catchment level. The draft Australian Water Stewardship standard focuses on four key elements to deliver catchment sustainability: • Water flow regime • Water quality • Water governance • Habitat
2,2	Tool Type	Formal Standard/Protocol
2,3	Tool Software/Format	Not Applicable to Tool
2,4	Geographic Focus	Australia and Asia Pacific
2,5	Sector Focus	No Specific Focus
2,6	Assessment Approach	Top Down Corporate Assessment
2,7	End Purpose	Overarching Water Strategy Development Support
2,8	Focal Stage of Water Management	N Assessing the Local Situation Y Accounting for and Understanding Impacts N Identifying Water Risks and Opportunities Y Determining Action and Setting Targets N Monitoring and Communicating Performance N Other (please state under 'additional comments')

WSA began drafting the world's first Water Stewardship Standards in 2007, working at both the national and international level. The structure of the draft standard is based on the well-established ISO 14001 format.

Initial concepts were drawn from a range of inputs:
• a series of stakeholder workshops
• other social and environmental standards
• Timbercorp water usage standards
• environmental expertise within the AWS

An initial set of principles were disseminated in 2008 and refined in light of feedback from a regional stakeholder forum.

Draft 01 Water Stewardship Standards were developed in 2009 and tested in irrigated horticulture and meat processing pilot studies.

Draft 01 was presented at the first Global Water Roundtable convened by AWS in June 2010.

Further refinement is now underway based on input from local stakeholder workshops and further pilot trials.

3,0 Tool Functionality

3,1 Data Inputs

3.1.1	Data Types Used	User Inputted Data, e.g. Water Use Volumes/Water Source Locations/Water Stress Index/Ecological Characteristics
3.1.2	User Inputted Data Detail: Water Use	Y Water Use Volumes Y Water Use Types, e.g. municipal supply/site sourced/recycled Y Water Source Location, e.g. local aquifer/nearby river/distant reservoir N Other (please state under 'additional comments')
3.1.3	Tool Embedded Data Detail: Geography	Not Applicable to Tool
3.1.4	Tool Embedded Data Detail: Sector/ Process	Not Applicable to Tool
3.1.5	Transparency of Embedded Data Set for Risk/Stress Assessments	Not Applicable to Tool

3,2 Tool Output

3.2.1	Nature of Tool Output	None/Not Applicable to Tool
3.2.2	Key Water Risks/Impacts Considered	Y Environmental Y Physical (e.g. flood risk/damage to infrastructure) Y Social Y Economic Y Reputational Y Temporal Aspects N Other (please state under 'additional comments')
3.2.3	Output Format	N Maps N Graphs N Numbers N Other (please state under 'additional comments')
3.2.4	Nature of Risk/Impacts Output	Not Applicable to Tool
3.2.5	Resolution of Risk/Impacts Output	Not Applicable to Tool
3.2.6	Temporal Context of Output	N Current Situation N Predicted Future Scenario N Other (please state under 'additional comments')

3,3 User Friendliness

3.3.1	Required Level of Training to Use	Not Applicable to Tool
3.3.2	Ease of Use Once Fully Trained	Not Applicable to Tool
3.3.3	Online/Offline Functionality?	Not Applicable to Tool

1,0 General Tool Information

			Additional Comments
1,1	Tool Name	Watershed Risk Assessment Tool	
1,2	Tool Developer	The Nature Conservancy and Pepsi-Co	The Nature Conservancy is a non-profit conservation organization that has dedicated itself since 1951 to the preservation of the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive.
1,3	Tool Source (e.g. weblink)	www.pepsico.com/Download/Positive_Water_Impact.pdf	Further information on the Nature Conservancy water initiatives is available at: www.conservationgateway.org/topic/corporate-water-use
1,4	Date of the Latest Version	2011	
1,5	Availability of Tool	Private Tool Under Development	
1,6	Key Contacts	Liese Dallbauman e. liese.dallbauman@pepsi.com ph.	

2,0 Tool Purpose

2,1	General Description	PepsiCo and The Nature Conservancy partnered to launch five Positive Water Impact pilot projects focused on understanding the watershed conditions and restoration opportunities for a group of diverse manufacturing plants in different parts of the world. The information and experience gained through these pilots is being used to provide a framework for developing a tool for identifying, designing and evaluating watershed remediation strategies that are relevant to the specific challenges that individual sites face. The first component of this method is a watershed "diagnostic" that relies on a number of focused questions to help a site determine whether it is at risk of water stress, evaluate the level of risk, and identify the need for watershed restoration actions. The next component allows sites to use their local situation as a guide to potential action. This typically takes the form of a decision tree that results in identification of potential actions for each situation. Whilst it was identified that the Positive Water Impact Process often progressed in a nonlinear manner, the following steps we covered for each location: • Select Pilot Sites • Identify "Area of Influence" • Understand Impacts and Risks • Identify Optimal Watersheds for Restoration • Identify Restoration Activities • Calculate Benefit Associated with Each Restoration Activity • Estimate Costs Associated with Each Restoration Activity	The Watershed Risk Assessment Tool offers large water users a consistent methodology to assess their water related impacts and risks within the watershed(s) in which they operate. The results of the assessment allow the user to subsequently develop response strategies, if needed, to ensure sustainable water use within the watershed. At the time of publication of the 'Striving for Positive Water Impact' report, specific initiatives and funding levels for Phase Two of Positive Water Impact were being explored and assessed.
2,2	Tool Type	Water Stress/Risk Mapping Tool	
2,3	Tool Software/Format	Format of on-line water management tools unknown	
2,4	Geographic Focus	Global	
2,5	Sector Focus	Beverage	Although the initial scope of the tool and pilot studies is the beverage sector, it is anticipated that the tool will have broader sector coverage
2,6	Assessment Approach	Bottom Up Product/Process Level Assessment	
2,7	End Purpose	Water Vulnerability/Scarcity Risk Assessment	
2,8	Focal Stage of Water Management	Y Assessing the Local Situation	
		Y Accounting for and Understanding Impacts	
		Y Identifying Water Risks and Opportunities	
		N Determining Action and Setting Targets	
		Y Monitoring and Communicating Performance	
		Y Other (please state under 'additional comments')	Identifying restoration activities

3,0 Tool Functionality

3,1 Data Inputs

3.1.1	Data Types Used	Unknown	Scope and structure of 'watershed risk assessment tool' unknown
3.1.2	User Inputted Data Detail: Water Use	? Water Use Volumes	
		? Water Use Types, e.g. municipal supply/site sourced/recycled	
		? Water Source Location, e.g. local aquifer/nearby river/distant reservoir	
		? Other (please state under 'additional comments')	
3.1.3	Tool Embedded Data Detail: Geography	Unknown	
3.1.4	Tool Embedded Data Detail: Sector/ Process	Unknown	
3.1.5	Transparency of Embedded Data Set for Risk/Stress Assessments	Unknown	

3,2 Tool Output

3.2.1	Nature of Tool Output	Unknown	
3.2.2	Key Water Risks/Impacts Considered	Y Environmental	
		Y Physical (e.g. flood risk/damage to infrastructure)	
		Y Social	
		Y Economic	
		Y Reputational	
		Y Temporal Aspects	
		N Other (please state under 'additional comments')	
3.2.3	Output Format	? Maps	
		? Graphs	
		? Numbers	
		? Other (please state under 'additional comments')	
3.2.4	Nature of Risk/Impacts Output	Unknown	
3.2.5	Resolution of Risk/Impacts Output	Unknown	
3.2.6	Temporal Context of Output	? Current Situation	
		? Predicted Future Scenario	
		? Other (please state under 'additional comments')	

3,3 User Friendliness

3.3.1	Required Level of Training to Use	Unknown	
3.3.2	Ease of Use Once Fully Trained	Unknown	
3.3.3	Online/Offline Functionality?	Unknown	

1,0	**General Tool Information**		*Additional Comments*
1,1	Tool Name	N/A	
1,2	Tool Developer	2030 Water Resources Group	
1,3	Tool Source (e.g. weblink)	www.2030waterresourcesgroup.com	
1,4	Date of the Latest Version	2009	
1,5	Availability of Tool	Membership Based Initiative	
1,6	Key Contacts	No specific contact identified e. 2030WaterResourcesGroup@mckinsey.com ph.	

2,0	**Tool Purpose**		
2,1	General Description	The 2030 Water Resources Group (WRG) was formed in 2008 to contribute new insights to the increasingly critical issue of water resource scarcity. Members include McKinsey & Company and the World Bank Group (led by the International Finance Corporation – IFC) with a consortium of business partners: The Barilla Group, The Coca-Cola Company, Nestlé, New Holland Agriculture, SABMiller, Standard Chartered and Syngenta International. Veolia Environnement joined the group for the second stage. In October 2009, WRG published a landmark report, Charting our Water Future, which analyses the global water supply-demand gap to 2030 and economic options to close the gap. Detailed case studies considered in the report include China, India, South Africa, Mexico and the state of São Paulo in Brazil.	
2,2	Tool Type	Other (please state under 'additional comments')	Research/Thought Leadership Programme
2,3	Tool Software/Format	Not Applicable to Tool	
2,4	Geographic Focus	Global	
2,5	Sector Focus	No Specific Focus	
2,6	Assessment Approach	Top Down Corporate Assessment	
2,7	End Purpose	Overarching Water Strategy Development Support	
2,8	Focal Stage of Water Management	N/A Assessing the Local Situation	
		N/A Accounting for and Understanding Impacts	
		N/A Identifying Water Risks and Opportunities	
		N/A Determining Action and Setting Targets	
		N/A Monitoring and Communicating Performance	
		N/A Other (please state under 'additional comments')	

3,0	**Tool Functionality**		
3,1	**Data Inputs**		
3.1.1	Data Types Used	Not Applicable to Tool	
3.1.2	User Inputted Data Detail: Water Use	N/A Water Use Volumes	
		N/A Water Use Types, e.g. municipal supply/site sourced/recycled	
		N/A Water Source Location, e.g. local aquifer/nearby river/distant reservoir	
		N Other (please state under 'additional comments')	
3.1.3	Tool Embedded Data Detail: Geography	Not Applicable to Tool	
3.1.4	Tool Embedded Data Detail: Sector/ Process	Not Applicable to Tool	
3.1.5	Transparency of Embedded Data Set for Risk/Stress Assessments	Not Applicable to Tool	
3,2	**Tool Output**		
3.2.1	Nature of Tool Output	None/Not Applicable to Tool	
3.2.2	Key Water Risks/Impacts Considered	Y Environmental	
		Y Physical (e.g. flood risk/damage to infrastructure)	
		Y Social	
		Y Economic	
		Y Reputational	
		Y Temporal Aspects	
		N Other (please state under 'additional comments')	
3.2.3	Output Format	N Maps	
		N Graphs	
		N Numbers	
		N Other (please state under 'additional comments')	
3.2.4	Nature of Risk/Impacts Output	Not Applicable to Tool	
3.2.5	Resolution of Risk/Impacts Output	Not Applicable to Tool	
3.2.6	Temporal Context of Output	N Current Situation	
		N Predicted Future Scenario	
		N Other (please state under 'additional comments')	
3,3	**User Friendliness**		
3.3.1	Required Level of Training to Use	Not Applicable to Tool	
3.3.2	Ease of Use Once Fully Trained	Not Applicable to Tool	
3.3.3	Online/Offline Functionality?	Not Applicable to Tool	

1,0 General Tool Information

1,1	Tool Name	BIER Water Stewardship Programme
1,2	Tool Developer	Beverage Industry Environmental Roundtable (BIER)
1,3	Tool Source (e.g. weblink)	www.bieroundtable.com
1,4	Date of the Latest Version	Not Applicable
1,5	Availability of Tool	Membership Based Initiative
1,6	Key Contacts	No specific contact identified e. info@bieroundtable.com ph. +1 612 850 8609

BIER is a partnership of leading global beverage companies working together to advance the standing of the beverage industry in the realm of environmental stewardship. The partnership was formed in 2006 and is facilitated through member-hosted Roundtable meetings and working groups on key issues. The pursuit of our shared mission is driven by the following focus areas:
• Water Stewardship
• Energy and Climate Change
• Stakeholder Engagement

BIER is facilitated by a Global Corporate Consultancy

2,0 Tool Purpose

2,1	General Description	Members work in collaboration to: • Produce a practical perspective on water footprinting in the beverage sector, guiding beverage companies in the application of existing and developing water footprinting documents • Share best practices in water management • Perform quantitative benchmarking study related to water use
2,2	Tool Type	Participatory Initiative with Defined Commitments
2,3	Tool Software/Format	Not Applicable to Tool
2,4	Geographic Focus	Global
2,5	Sector Focus	Beverages
2,6	Assessment Approach	Bottom Up Product/Process Level Assessment
2,7	End Purpose	Overarching Water Strategy Development Support
2,8	Focal Stage of Water Management	N Assessing the Local Situation
		N Accounting for and Understanding Impacts
		Y Identifying Water Risks and Opportunities
		N Determining Action and Setting Targets
		N Monitoring and Communicating Performance
		N Other (please state under 'additional comments')

In 2010, member enterprise were required to submit three years (2007, 2008, 2009) of facility-specific data including total water use, total beverage production, facility type and location to participate in the annual benchmark.

3,0 Tool Functionality

3,1 Data Inputs

3.1.1	Data Types Used	User Inputted Data, e.g. Water Use Volumes/Water Source Locations/Water Stress Index/Ecological Characteristics
3.1.2	User Inputted Data Detail: Water Use	N/A Water Use Volumes
		N/A Water Use Types, e.g. municipal supply/site sourced/recycled
		N/A Water Source Location, e.g. local aquifer/nearby river/distant reservoir
		N Other (please state under 'additional comments')
3.1.3	Tool Embedded Data Detail: Geography	Not Applicable to Tool
3.1.4	Tool Embedded Data Detail: Sector/ Process	Not Applicable to Tool
3.1.5	Transparency of Embedded Data Set for Risk/Stress Assessments	Not Applicable to Tool

3,2 Tool Output

3.2.1	Nature of Tool Output	None/Not Applicable to Tool
3.2.2	Key Water Risks/Impacts Considered	Y Environmental
		Y Physical (e.g. flood risk/damage to infrastructure)
		Y Social
		Y Economic
		Y Reputational
		Y Temporal Aspects
		N Other (please state under 'additional comments')
3.2.3	Output Format	N Maps
		N Graphs
		N Numbers
		Y Other (please state under 'additional comments')
3.2.4	Nature of Risk/Impacts Output	Not Applicable to Tool
3.2.5	Resolution of Risk/Impacts Output	Not Applicable to Tool
3.2.6	Temporal Context of Output	N Current Situation
		N Predicted Future Scenario
		N Other (please state under 'additional comments')

3,3 User Friendliness

3.3.1	Required Level of Training to Use	Not Applicable to Tool
3.3.2	Ease of Use Once Fully Trained	Not Applicable to Tool
3.3.3	Online/Offline Functionality?	Not Applicable to Tool

1,0 General Tool Information

			Additional Comments
1,1	Tool Name	GEMI Local Water Tool (GEMI LWT)	
1,2	Tool Developer	Global Environmental Management Initiative (GEMI)	GEMI's Local Water Tool was developed by CH2M Hill ; Project participants include 16 companies from diverse industry sectors (including beverage industry).
1,3	Tool Source (e.g. weblink)	http://www.gemi.org/localwatertool/	
1,4	Date of the Latest Version	March 2012	
1,5	Availability of Tool	Public - free of charge	
1,6	Key Contacts	No specific contact identified e. info@gemi.org ph. + 1 202 296 7449	

2,0 Tool Purpose

2,1	General Description	Tool for companies and organizations to evaluate the external impacts, business risks, opportunities and management plans related to water use and discharge at a specific site or operation. The information generated in the GEMI LWT™ may be used by companies for internal or external communication at their discretion.	A webinar is available at: http://www.2degreesnetwork.com/groups/water-risk-and-strategy/resources/worldwide-launch-new-gemi-local-water-tooltm-lwt-and-gemi-lwttm-oil-and-gas/
2,2	Tool Type	Water Stress/Risk Mapping Tool	
2,3	Tool Software/Format	Microsoft Excel	Designed to be used in conjunction with WBCSD Global Water Tool
2,4	Geographic Focus	Global	
2,5	Sector Focus	No Specific Focus	The GEMI Local Water Tool™(LWT) for Oil and Gas exists; tool customized for petroleum companies
2,6	Assessment Approach	Bottom Up Product/Process Level Assessment	
2,7	End Purpose	Water Vulnerability/Scarcity Risk Assessment	To help companies assess impacts, risks, opportunities and manage water-related issues at specific sites. Identify and rank specific impact/risks/opportunities at the site level; Create tactical management plans; Develop metrics and report (Bloomberg; CDP water; DJSI; GRI)
2,8	Focal Stage of Water Management	Y Assessing the Local Situation	
		N Accounting for and Understanding Impacts	
		Y Identifying Water Risks and Opportunities	
		N Determining Action and Setting Targets	
		N Monitoring and Communicating Performance	
		N Other (please state under 'additional comments')	

3,0 Tool Functionality

3,1 Data Inputs

3.1.1	Data Types Used	Combination of User Inputted and Tool Embedded Data
3.1.2	User Inputted Data Detail: Water Use	Y Water Use Volumes
		Y Water Use Types, e.g. municipal supply/site sourced/recycled
		Y Water Source Location, e.g. local aquifer/nearby river/distant reservoir
		N Other (please state under 'additional comments')
3.1.3	Tool Embedded Data Detail: Geography	Specific Location, e.g. GIS Co-ordinates/Site Address
3.1.4	Tool Embedded Data Detail: Sector/ Process	Not Applicable to Tool
3.1.5	Transparency of Embedded Data Set for Risk/Stress Assessments	High

3,2 Tool Output

3.2.1	Nature of Tool Output	Characterisation of actual water risks/impacts affecting the organisation and identification of strategies to manage identified water risks/impacts
3.2.2	Key Water Risks/Impacts Considered	Y Environmental
		Y Physical (e.g. flood risk/damage to infrastructure)
		Y Social
		Y Economic
		Y Reputational
		Y Temporal Aspects
		N Other (please state under 'additional comments')
3.2.3	Output Format	Y Maps
		Y Graphs
		Y Numbers
		N Other (please state under 'additional comments')
3.2.4	Nature of Risk/Impacts Output	Qualitative, e.g. High/Medium/Low
3.2.5	Resolution of Risk/Impacts Output	Medium (Local Catchment)
3.2.6	Temporal Context of Output	Y Current Situation
		Y Predicted Future Scenario
		Y Other (please state under 'additional comments')

3,3 User Friendliness

3.3.1	Required Level of Training to Use	Medium	How to use guide available on http://www.gemi.org/localwatertool/how-to-use.html
3.3.2	Ease of Use Once Fully Trained	Simple	
3.3.3	Online/Offline Functionality?	Tool can be used online and offline	

1,0 General Tool Information

			Additional Comments
1,1	Tool Name	GRI Water Performance Indicators	
1,2	Tool Developer	Global Reporting Initiative (GRI)	The Global Reporting Initiative (GRI) is a non-profit organization, established by CERES and UNEP. The GRI is a well established framework sets out the globally applicable principles and indicators that corporations and organizations can use to measure and report their economic, environmental, and social performance. In 2003 the GRI concluded an agreement with the United Nations Global Compact that encourages companies participating in the Compact to use the GRI Guidelines for producing their Communication on Progress reports. In 2009, a group of over 50 investor groups called upon the Securities and Exchange Commission (SEC) to begin requiring companies to report on their ESG (Environmental, Social and Governance) activities preferably in the form of a GRI report.
1,3	Tool Source (e.g. weblink)	https://www.globalreporting.org/reporting/guidelines-online/Pages/default.aspx	
1,4	Date of the Latest Version	G3 (2006)	New guidelines (G4) expected in 2013
1,5	Availability of Tool	Public - Free of Charge	
1,6	Key Contacts	No specific contact identified e. info@gri.org ph. +31 20 531 00 00	

2,0 Tool Purpose

2,1	General Description	The G3 consist of principles and disclosure items. The standardised reporting guidelines concerning the environment are contained within the GRI Indicator Protocol Set. The Performance Indicators include criteria on water EN8 Total water withdrawal by source; EN9: Water sources significantly affected by withdrawal of water; EN10: Percentage of total volume of water recycled and reused; EN21: Total water discharge by quality and destination; EN25: Identity, size, protected status and biodiversity value of water bodies and related habitats significantly affected by the reporting organisation's discharges of water and runoff.	
2,2	Tool Type	Formal Standard/Protocol	
2,3	Tool Software/Format	Not Applicable to Tool	Also online
2,4	Geographic Focus	Global	
2,5	Sector Focus	No Specific Focus	Sector supplements exists (not for beverage sector)
2,6	Assessment Approach	Top Down Corporate Assessment	
2,7	End Purpose	External Reporting	
2,8	Focal Stage of Water Management	N Assessing the Local Situation	
		N Accounting for and Understanding Impacts	
		N Identifying Water Risks and Opportunities	
		N Determining Action and Setting Targets	
		Y Monitoring and Communicating Performance	
		N Other (please state under 'additional comments')	

3,0 Tool Functionality

3,1 Data Inputs

3.1.1	Data Types Used	User Inputted Data, e.g. Water Use Volumes/Water Source Locations/Water Stress Index/Ecological Characteristics	
3.1.2	User Inputted Data Detail: Water Use	Y Water Use Volumes	
		Y Water Use Types, e.g. municipal supply/site sourced/recycled	
		N Water Source Location, e.g. local aquifer/nearby river/distant reservoir	
		N Other (please state under 'additional comments')	
3.1.3	Tool Embedded Data Detail: Geography	Not Applicable to Tool	
3.1.4	Tool Embedded Data Detail: Sector/ Process	Not Applicable to Tool	
3.1.5	Transparency of Embedded Data Set for Risk/Stress Assessments	Not Applicable to Tool	

3,2 Tool Output

3.2.1	Nature of Tool Output	Improved understanding of potential site water risks/impacts that may affect the organisation	
3.2.2	Key Water Risks/Impacts Considered	Y Environmental	
		N Physical (e.g. flood risk/damage to infrastructure)	
		N Social	
		N Economic	
		N Reputational	
		N Temporal Aspects	
		N Other (please state under 'additional comments')	
3.2.3	Output Format	N Maps	
		N Graphs	
		N Numbers	
		N Other (please state under 'additional comments')	
3.2.4	Nature of Risk/Impacts Output	Quantitative, e.g. Scale on Water Stress Index	Trends over time possible
3.2.5	Resolution of Risk/Impacts Output	Medium (Local Catchment)	
3.2.6	Temporal Context of Output	Y Current Situation	
		N Predicted Future Scenario	
		N Other (please state under 'additional comments')	

3,3 User Friendliness

3.3.1	Required Level of Training to Use	Low	
3.3.2	Ease of Use Once Fully Trained	Simple	
3.3.3	Online/Offline Functionality?	Not Applicable to Tool	

1,0	**General Tool Information**		*Additional Comments*
1,1	Tool Name	CEO Water Mandate	
1,2	Tool Developer	United Nations Global Compact (UNGC)	
1,3	Tool Source (e.g. weblink)	http://www.ceowatermandate.org	
1,4	Date of the Latest Version	2007	
1,5	Availability of Tool	Public - Free of Charge	
1,6	Key Contacts	No specific contact identified e. ceowatermandate@unglobalcompact.org ph. 19.173.679.112	

2,0	**Tool Purpose**		
2,1	General Description	The UN Global Compact's CEO Water Mandate is a public-private initiative designed to assist companies in the development, implementation and disclosure of water sustainability and policies. Companies pledge to disclose annually by means of a Communication on Progress – Water report that describes the ways in which they are implementing the Mandate elements. The six areas areas for action are Direct Operations; Supply Chain and Watershed Management; Collective Action; Public Policy; Community Engagement; and Transparency.	
2,2	Tool Type	Participatory Initiative with Defined Commitments	
2,3	Tool Software/Format	Not Applicable to Tool	
2,4	Geographic Focus	Global	
2,5	Sector Focus	No	
2,6	Assessment Approach	Top Down Corporate Assessment	
2,7	End Purpose	Overarching Water Strategy Development Support	
2,8	Focal Stage of Water Management	N	Assessing the Local Situation
		N	Accounting for and Understanding Impacts
		N	Identifying Water Risks and Opportunities
		Y	Determining Action and Setting Targets
		N	Monitoring and Communicating Performance
		N	Other (please state under 'additional comments')

3,0	**Tool Functionality**		
3,1	**Data Inputs**	Not Applicable to Tool	
3.1.1	Data Types Used	Not Applicable to Tool	CEO Water Mandate refers to GRI Water indicators.
3.1.2	User Inputted Data Detail: Water Use	N/A	Water Use Volumes
		N/A	Water Use Types, e.g. municipal supply/site sourced/recycled
		N/A	Water Source Location, e.g. local aquifer/nearby river/distant reservoir
		N	Other (please state under 'additional comments')
3.1.3	Tool Embedded Data Detail: Geography	Not Applicable to Tool	
3.1.4	Tool Embedded Data Detail: Sector/ Process	Not Applicable to Tool	
3.1.5	Transparency of Embedded Data Set for Risk/Stress Assessments	Not Applicable to Tool	
3,2	**Tool Output**		
3.2.1	Nature of Tool Output	Strategies to address potential site water risks	
3.2.2	Key Water Risks/Impacts Considered	Y	Environmental
		Y	Physical (e.g. flood risk/damage to infrastructure)
		Y	Social
		Y	Economic
		Y	Reputational
		N	Temporal Aspects
		N	Other (please state under 'additional comments')
3.2.3	Output Format	N	Maps
		N	Graphs
		N	Numbers
		Y	Other (please state under 'additional comments') — Communication on Progress – Water report
3.2.4	Nature of Risk/Impacts Output	Not Applicable to Tool	
3.2.5	Resolution of Risk/Impacts Output	Not Applicable to Tool	
3.2.6	Temporal Context of Output	N/A	Current Situation
		N/A	Predicted Future Scenario
		N/A	Other (please state under 'additional comments')
3,3	**User Friendliness**		
3.3.1	Required Level of Training to Use	Low	
3.3.2	Ease of Use Once Fully Trained	Simple	
3.3.3	Online/Offline Functionality?	Not Applicable to Tool	

1,0 General Tool Information		*Additional Comments*
1,1	Tool Name	Aqueduct
1,2	Tool Developer	World Resources Institute (WRI)
1,3	Tool Source (e.g. weblink)	http://insights.wri.org/aqueduct/atlas
1,4	Date of the Latest Version	2011
1,5	Availability of Tool	Public - Free of Charge
1,6	Key Contacts	Betsy Otto e. botto@wri.org ph. +1 202-729-7600

2,0 Tool Purpose

2,1	General Description	Aqueduct provides global maps including baseline water stress, water reuse, socio-economic drought, and projected change in water stress for the years 2025, 2050 and 2095 and for several IPCC climate change scenarios. Aqueduct also provides detailed water risk maps for specific basins, including the several River Basin, that combine advanced hydrological data with geographically-specific indicators linked to economic, governance and social factors. Companies can use the global maps to locate facilities and pinpoint locations threatened by current and projected water stress. All information is provided at sub-basin level and collected by WRI.
2,2	Tool Type	Water Stress/Risk Mapping Tool
2,3	Tool Software/Format	Online tool
2,4	Geographic Focus	Global - Asia
2,5	Sector Focus	No
2,6	Assessment Approach	Bottom Up Product/Process Level Assessment
2,7	End Purpose	Water Vulnerability/Scarcity Risk Assessment
2,8	Focal Stage of Water Management	Y Assessing the Local Situation
		N Accounting for and Understanding Impacts
		Y Identifying Water Risks and Opportunities
		N Determining Action and Setting Targets
		N Monitoring and Communicating Performance
		N Other (please state under 'additional comments')

3,0 Tool Functionality

3,1 Data Inputs

3.1.1	Data Types Used	Tool Embedded Data from which Water Stress is Derived, e.g. Geographic Location, Water Use Volumes and Types
3.1.2	User Inputted Data Detail: Water Use	N Water Use Volumes
		N Water Use Types, e.g. municipal supply/site sourced/recycled
		N Water Source Location, e.g. local aquifer/nearby river/distant reservoir
		N Other (please state under 'additional comments')
3.1.3	Tool Embedded Data Detail: Geography	Specific Location, e.g. GIS Co-ordinates/Site Address
3.1.4	Tool Embedded Data Detail: Sector/ Process	None
3.1.5	Transparency of Embedded Data Set for Risk/Stress Assessments	High

3,2 Tool Output

3.2.1	Nature of Tool Output	Characterisation of actual water risks/impacts affecting the organisation
3.2.2	Key Water Risks/Impacts Considered	Y Environmental
		Y Physical (e.g. flood risk/damage to infrastructure)
		Y Social
		Y Economic
		Y Reputational
		Y Temporal Aspects
		N Other (please state under 'additional comments')
3.2.3	Output Format	Y Maps
		N Graphs
		N Numbers
		N Other (please state under 'additional comments')
3.2.4	Nature of Risk/Impacts Output	Quantitative, e.g. Scale on Water Stress Index
3.2.5	Resolution of Risk/Impacts Output	High (Specific Habitats)
3.2.6	Temporal Context of Output	Y Current Situation
		Y Predicted Future Scenario
		N Other (please state under 'additional comments')

Additional Comments (3.2.5): Global maps, These basins include the Orange-Senqu River Basin in Southern Africa, the Murray-Darling River Basin in Australia, the Colorado River Basin in the western United States, and the Yellow River Basin in China.

Additional Comments (3.2.6): 1 year, 3 years, 2020, 2050, 2095 and various IPCC scenario's

3,3 User Friendliness

3.3.1	Required Level of Training to Use	Low
3.3.2	Ease of Use Once Fully Trained	Simple
3.3.3	Online/Offline Functionality?	Tool can only be used online

1,0 General Tool Information

			Additional Comments
1,1	Tool Name	CDP Water Disclosure	
1,2	Tool Developer	Carbon Disclosure Project (CDP)	A program of the Carbon Disclosure Project (CDP), an independent non-profit organization managing the largest database of corporate climate change information in the world. Norges Bank Investment Management, Molson Coors, and Deloitte provided initial funding for the development of the CDP Water Disclosure information request.
1,3	Tool Source (e.g. weblink)	https://www.cdproject.net/en-US/Programmes/Pages/water.aspx	
1,4	Date of the Latest Version	2012	Scoring of disclosure will be from 2013 onwards.
1,5	Availability of Tool	Public - Free of Charge	
1,6	Key Contacts	Chris Hedemann e. chris.hedemann@cdproject.net ph. +44 (0) 20 7415 7073	A webinar is available at: http://player.vimeo.com/video/36539940

2,0 Tool Purpose

2,1	General Description	The CDP Water Disclosure 2012 information request aims to collect and distribute high quality information in relation to three modules: companies' water management and governance; water-related risks and opportunities in their own operations and supply chains; and water accounting metrics including withdrawals, discharges and intensity of use.	At present, CDP relies on relevant reporting principles from the GHG Protocol, the GRI indicators for water, and additional existing water reporting guidance that is relevant to individual questions.
2,2	Tool Type	Participatory Initiative with Defined Commitments	
2,3	Tool Software/Format	Online questionnaire	
2,4	Geographic Focus	Global	
2,5	Sector Focus	No Specific Focus	
2,6	Assessment Approach	Top Down Corporate Assessment	
2,7	End Purpose	External Reporting	To provide critical water-related data from corporations to inform the global market place on investment risk and commercial opportunity.
2,8	Focal Stage of Water Management	N Assessing the Local Situation	
		N Accounting for and Understanding Impacts	
		N Identifying Water Risks and Opportunities	
		N Determining Action and Setting Targets	
		Y Monitoring and Communicating Performance	
		N Other (please state under 'additional comments')	

3,0 Tool Functionality

3,1 Data Inputs

3.1.1	Data Types Used	User Inputted Data, e.g. Water Use Volumes/Water Source Locations/Water Stress Index/Ecological Characteristics	
3.1.2	User Inputted Data Detail: Water Use	Y Water Use Volumes	
		Y Water Use Types, e.g. municipal supply/site sourced/recycled	
		Y Water Source Location, e.g. local aquifer/nearby river/distant reservoir	
		N Other (please state under 'additional comments')	
3.1.3	Tool Embedded Data Detail: Geography	Not Applicable to Tool	
3.1.4	Tool Embedded Data Detail: Sector/ Process	Not Applicable to Tool	
3.1.5	Transparency of Embedded Data Set for Risk/Stress Assessments	Not Applicable to Tool	

3,2 Tool Output

3.2.1	Nature of Tool Output	Characterisation of actual water risks/impacts affecting the organisation	
3.2.2	Key Water Risks/Impacts Considered	Y Environmental	
		Y Physical (e.g. flood risk/damage to infrastructure)	
		N Social	
		Y Economic	
		Y Reputational	
		N Temporal Aspects	
		N Other (please state under 'additional comments')	
3.2.3	Output Format	N Maps	
		Y Graphs	
		Y Numbers	
		Y Other (please state under 'additional comments')	Benchmarking
3.2.4	Nature of Risk/Impacts Output	Qualitative, e.g. High/Medium/Low	Disclosure scoring (from 2013 onward)
3.2.5	Resolution of Risk/Impacts Output	Very Low (Country)	
3.2.6	Temporal Context of Output	Y Current Situation	
		Y Predicted Future Scenario	
		N Other (please state under 'additional comments')	

3,3 User Friendliness

3.3.1	Required Level of Training to Use	High	
3.3.2	Ease of Use Once Fully Trained	Simple	
3.3.3	Online/Offline Functionality?	Data can be input offline, but tool needs to be online to undertake assessment	Questionnaire can be downloaded. To submit the response the tool needs to be online.

1,0	**General Tool Information**		*Additional Comments*
1,1	Tool Name	Water Risk Filter	
1,2	Tool Developer	World Wildlife Foundation and DEG	
1,3	Tool Source (e.g. weblink)	http://waterriskfilter.panda.org/	
1,4	Date of the Latest Version	2012	
1,5	Availability of Tool	Public - Free of Charge	
1,6	Key Contacts	Jochem Verberne e. waterriskfilter@wwfint.org ph.	

2,0	**Tool Purpose**		
2,1	General Description	The aim of the Water Risk Filter was to develop a methodology for financial institutions to assess and quantify clients' related water risk based on their geographic location (basin-related risks) and their own impact (company-specific risk). The filter translates the most up-to-date underlying data sets into risk metrics. Furthermore, the user is able to plot all assessed facilities on maps with different water relevant map overlays. The results can be displayed on portfolio as well as on facility level, and a specific report will provide the user with all information needed to fill in the Carbon Disclosure Project (CDP) questionnaire. The online tool is designed for the non-water expert user, and contains highly detailed data sets for 231 countries and territories. To bridge the gap between understanding risks and action on the ground, the Filter offers a "mitigation toolbox" that lists overview of >250 mitigation responses, accompanied by >80 up-to-date case studies.	The Water Risk Filter and the Alliance for Water Stewardship are complementary. The Water Risk Filter provides a company with awareness and an understanding of their water risks, as well as a collection of mitigation activities. Conversely, the Alliance for Water Stewardship Standard provides a company with a systematic approach to address the identified risks, and if desired, an auditing system that can verify risk reduction.
2,2	Tool Type	Water Stress/Risk Mapping Tool	
2,3	Tool Software/Format	Questionnaire	
2,4	Geographic Focus	Global	
2,5	Sector Focus	Yes	
2,6	Assessment Approach	Bottom Up Product/Process Level Assessment	
2,7	End Purpose	Water Vulnerability/Scarcity Risk Assessment	
2,8	Focal Stage of Water Management	N Assessing the Local Situation	
		N Accounting for and Understanding Impacts	
		Y Identifying Water Risks and Opportunities	
		N Determining Action and Setting Targets	
		N Monitoring and Communicating Performance	
		N Other (please state under 'additional comments')	

3,0	**Tool Functionality**		
3,1	**Data Inputs**	Combination of User Inputted and Tool Embedded Data	The Water Risk Filter combines the functionality of some of the existing tools into one tool, and provides input for other tools. For example, it uses the detailed river scarcity data from WFN, while providing answers to >80% of the questions of the CDP Water questionnaire.
3,1,1	Data Types Used	Specific Location, e.g. GIS Co-ordinates/Site Address	
3,1,2	User Inputted Data Detail: Water Use	Y Water Use Volumes	
		Y Water Use Types, e.g. municipal supply/site sourced/recycled	
		N Water Source Location, e.g. local aquifer/nearby river/distant reservoir	
		Y Other (please state under 'additional comments')	Pollution, water re-use, permits....
3,1,3	Tool Embedded Data Detail: Geography	Region of Operation, e.g. State/County	
3,1,4	Tool Embedded Data Detail: Sector/ Process	Broad Industry Sector, e.g. Food and Beverage	
3,1,5	Transparency of Embedded Data Set for Risk/Stress Assessments	High	
3,2	**Tool Output**		
3,2,1	Nature of Tool Output	Characterisation of actual water risks/impacts affecting the organisation including consideration of specific source water risks	The Filter risk levels are determined based on scores related to the answers on a set of questions/indicators multiplied by a corresponding weighting.
3,2,2	Key Water Risks/Impacts Considered	Y Environmental	
		Y Physical (e.g. flood risk/damage to infrastructure)	
		Y Social	
		Y Economic	
		Y Reputational	
		N Temporal Aspects	
		N Other (please state under 'additional comments')	
3,2,3	Output Format	Y Maps	
		N Graphs	
		Y Numbers	
		Y Other (please state under 'additional comments')	Indicator values
3,2,4	Nature of Risk/Impacts Output	Quantitative, e.g. Scale on Water Stress Index	
3,2,5	Resolution of Risk/Impacts Output	Low (Water Basin/Region)	
3,2,6	Temporal Context of Output	Y Current Situation	
		N Predicted Future Scenario	
		N Other (please state under 'additional comments')	
3,3	**User Friendliness**		
3,3,1	Required Level of Training to Use	Medium	
3,3,2	Ease of Use Once Fully Trained	Simple	
3,3,3	Online/Offline Functionality?	Tool can only be used online	

1,0 General Tool Information			*Additional Comments*
1,1	Tool Name	Aqua Gauge	
1,2	Tool Developer	Ceres	The tool was developed through a collaboration with the World Business Council for Sustainable Development, Irbaris, and IRRC Institute in consultation with representatives from over 50 financial institutions, companies, and NGOs.
1,3	Tool Source (e.g. weblink)	http://www.ceres.org/issues/water/aqua-gauge/aqua-gauge	
1,4	Date of the Latest Version	2012	
1,5	Availability of Tool	Public - Free of Charge	
1,6	Key Contacts	Brooke Barton e. barton@ceres.org ph.	

2,0 Tool Purpose			
2,1	General Description	The Aqua Gauge is a flexible Excel-based tool that allows investors to scorecard a company's water management activities against detailed definitions of leading practice. The tool also benefits companies by giving them a resource to inform and strengthen their own water management strategies.	Both rapid and more comprehensive analysis, or "Quick Gauge" – of core management practices appropriate to the company's risk profile as well as assessing a comprehensive set of corporate-level practices that provide a more detailed picture of the company's water management approach (full gauge). The Quick Gauge asks nine simple questions focusing on core management and value chain issues, whereas the detailed performance assessment asks 28 questions, focusing on measurement, management, engagement and disclosure.
2,2	Tool Type	Water Stress/Risk Mapping Tool	
2,3	Tool Software/Format	Excel 2007	
2,4	Geographic Focus	Global	
2,5	Sector Focus	No	
2,6	Assessment Approach	Top Down Corporate Assessment	
2,7	End Purpose	Water Vulnerability/Scarcity Risk Assessment	
2,8	Focal Stage of Water Management	N Assessing the Local Situation	
		N Accounting for and Understanding Impacts	
		N Identifying Water Risks and Opportunities	
		Y Determining Action and Setting Targets	
		Y Monitoring and Communicating Performance	
		N Other (please state under 'additional comments')	

3,0 Tool Functionality			
3,1 Data Inputs		Combination of User Inputted and Tool Embedded Data	
3.1.1	Data Types Used	Not Applicable to Tool	
3.1.2	User Inputted Data Detail: Water Use	N Water Use Volumes	
		N Water Use Types, e.g. municipal supply/site sourced/recycled	
		N Water Source Location, e.g. local aquifer/nearby river/distant reservoir	
		Y Other (please state under 'additional comments')	Measurement, Management, Stakeholder Engagement, Disclosure
3.1.3	Tool Embedded Data Detail: Geography	Not Applicable to Tool	
3.1.4	Tool Embedded Data Detail: Sector/ Process	Not Applicable to Tool	
3.1.5	Transparency of Embedded Data Set for Risk/Stress Assessments	Medium	
3,2 Tool Output			
3.2.1	Nature of Tool Output	Characterisation of actual water risks/impacts affecting the organisation	
3.2.2	Key Water Risks/Impacts Considered	Y Environmental	
		Y Physical (e.g. flood risk/damage to infrastructure)	
		Y Social	
		N Economic	
		Y Reputational	
		N Temporal Aspects	
		N Other (please state under 'additional comments')	
3.2.3	Output Format	N Maps	
		N Graphs	
		N Numbers	
		Y Other (please state under 'additional comments')	Scorecard
3.2.4	Nature of Risk/Impacts Output	Qualitative, e.g. High/Medium/Low	
3.2.5	Resolution of Risk/Impacts Output	Not Applicable to Tool	
3.2.6	Temporal Context of Output	Y Current Situation	
		N Predicted Future Scenario	
		N Other (please state under 'additional comments')	
3,3 User Friendliness			
3.3.1	Required Level of Training to Use	Low	
3.3.2	Ease of Use Once Fully Trained	Simple	
3.3.3	Online/Offline Functionality?	Tool can only be used offline	Tool can be downloaded

1,0 General Tool Information

			Additional Comments
1,1	Tool Name	European Water Stewardship Standard	
1,2	Tool Developer	European Water Partnership	The European Water partnership (EWP) is a non-profit member association comprising companies, governmental, NGOs and research institutions.
1,3	Tool Source (e.g. weblink)	http://www.ewp.eu/activities/water-stewardship/	
1,4	Date of the Latest Version	2011	
1,5	Availability of Tool	Public - Free of Charge	
1,6	Key Contacts	Sabine von Wirén-Lehr e. s.von-wiren-lehr@ewp.eu ph.	

2,0 Tool Purpose

2,1	General Description	The EWS standard has been shaped within the project "Communication of Sustainable Water Management" of the European Water Stewardship program in order to: • Define Sustainable Water Management principles and criteria in a comprehensive and concrete manner. • Provide guidance to European water users on how to become a good water steward. • Create the basis for an objective reporting, certification and communication scheme for water stewardship. • Initiate and support the discussion within Europe and within the global Water Stewardship movement.

Additional Comments:

The EWS standard includes:
• 4 principles, which outline the overarching aims of the EWS Standard, and associated criteria.• Principle 1: Achieve and maintain sustainable water abstraction in terms of water quantity: Environmental flow regime / Water abstraction. • Principle 2: Ensure the achievement and maintenance of good water status in terms of chemical quality and biological elements: Water quality. • Principle 3: Restore and preserve water-cycle related High Conservation Value Areas. Protection of high conservation value wetlands, lakes or riparian areas. • Principle 4: Achieve equitable and transparent water governance. Equitable governance.

• Criteria are further divided into indicators, which are used to evaluate compliance with the principles and criteria.
• Indicators are classified as major indicator, minor indicator or recommendation.
Participants can be certified Bronze, Silver or Gold

2,2	Tool Type	Formal Standard/Protocol
2,3	Tool Software/Format	NA
2,4	Geographic Focus	Focus on Europe.
2,5	Sector Focus	All sectors
2,6	Assessment Approach	Top Down Corporate Assessment
2,7	End Purpose	Overarching Water Strategy Development Support
2,8	Focal Stage of Water Management	N Assessing the Local Situation
		Y Accounting for and Understanding Impacts
		N Identifying Water Risks and Opportunities
		N Determining Action and Setting Targets
		Y Monitoring and Communicating Performance
		N Other (please state under 'additional comments')

3,0 Tool Functionality

3,1 Data Inputs

	Data Inputs	User Inputted Data, e.g. Water Use Volumes/Water Source Locations/Water Stress
3.1.1	Data Types Used	Not Applicable to Tool
3.1.2	User Inputted Data Detail: Water Use	Y Water Use Volumes
		Y Water Use Types, e.g. municipal supply/site sourced/recycled
		Y Water Source Location, e.g. local aquifer/nearby river/distant reservoir
		N Other (please state under 'additional comments')
3.1.3	Tool Embedded Data Detail: Geography	Not Applicable to Tool
3.1.4	Tool Embedded Data Detail: Sector/ Process	None
3.1.5	Transparency of Embedded Data Set for Risk/Stress Assessments	Not Applicable to Tool

3,2 Tool Output

3.2.1	Nature of Tool Output	Characterisation of actual water risks/impacts affecting the organisation and identification of
3.2.2	Key Water Risks/Impacts Considered	Y Environmental
		Y Physical (e.g. flood risk/damage to infrastructure)
		N Social
		Y Economic
		Y Reputational
		N Temporal Aspects
		N Other (please state under 'additional comments')
3.2.3	Output Format	N Maps
		N Graphs
		N Numbers
		Y Other (please state under 'additional comments')
3.2.4	Nature of Risk/Impacts Output	Other (please state under 'additional comments')
3.2.5	Resolution of Risk/Impacts Output	Not Applicable to Tool
3.2.6	Temporal Context of Output	Y Current Situation
		N Predicted Future Scenario
		N Other (please state under 'additional comments')

Additional comments:
Certification - label gold, silver, bronze
Audit

3,3 User Friendliness

3.3.1	Required Level of Training to Use	Medium
3.3.2	Ease of Use Once Fully Trained	Medium
3.3.3	Online/Offline Functionality?	Not Applicable to Tool

1,0 General Tool Information

1,1	Tool Name	ISO 14046 Water Footprint
1,2	Tool Developer	International Standard Organisation

1,3	Tool Source (e.g. weblink)	http://www.iso.org/iso/iso_catalogue/catalogue_ics/catalogue_detail_ics.htm?ics1=13&ics2=0
1,4	Date of the Latest Version	Under Development - final version expected after 2013
1,5	Availability of Tool	Fee - Draft is only free to members
1,6	Key Contacts	No specific contact identified e. uari@afnor.org ph. +33 1 41 62 80 00

2,0 Tool Purpose

2,1	General Description	The proposed International Standard will deliver principles, requirements and guidelines for a water footprint metric of products, processes and organisations. For products, it will be based on a life cycle assessment approach. For organisations, it will consider the guidance given under ISO14064 for greenhouse gases. It will define how the different types of water sources (for example ground, surface, lake etc.) should be considered, how the different types of water releases should be considered, and how the local environmental conditions (dry areas, wet areas) should be treated. The Standard will contain Terms and definitions, Water inventory calculation, Water impact assessment requirements, Rules for reporting. The standard aligns with other environmental reporting standards (e.g. ISO 14001).
2,2	Tool Type	Formal Standard/Protocol	
2,3	Tool Software/Format	Not Applicable	
2,4	Geographic Focus	Global	
2,5	Sector Focus	No	
2,6	Assessment Approach	Top Down Corporate Assessment	
2,7	End Purpose	Internal Process Modification	Depending on the scope
2,8	Focal Stage of Water Management	Y Assessing the Local Situation	
		Y Accounting for and Understanding Impacts	
		? Identifying Water Risks and Opportunities	Depending on the scope
		? Determining Action and Setting Targets	Depending on the scope
		? Monitoring and Communicating Performance	Not primary purpose of the tool
		N Other (please state under 'additional comments')	

3,0 Tool Functionality

3,1 Data Inputs

3.1.1	Data Types Used	User Inputted Data, e.g. Water Use Volumes/Water Source Locations/Water Stress Index/Ecological Characteristics	
3.1.2	User Inputted Data Detail: Water Use	Y Water Use Volumes	
		Y Water Use Types, e.g. municipal supply/site sourced/recycled	
		Y Water Source Location, e.g. local aquifer/nearby river/distant reservoir	
		N Other (please state under 'additional comments')	
3.1.3	Tool Embedded Data Detail: Geography	Not Applicable to Tool	Depending on the scope
3.1.4	Tool Embedded Data Detail: Sector/ Process	None	
3.1.5	Transparency of Embedded Data Set for	High	

3,2 Tool Output

3.2.1	Nature of Tool Output	Improved understanding of potential site water risks/impacts that may affect the organisation	
3.2.2	Key Water Risks/Impacts Considered	Y Environmental	Depending on the scope
		? Physical (e.g. flood risk/damage to infrastructure)	Depending on the scope
		? Social	Depending on the scope
		? Economic	Depending on the scope
		? Reputational	Depending on the scope
		? Temporal Aspects	Depending on the scope
		N Other (please state under 'additional comments')	
3.2.3	Output Format	N Maps	
		N Graphs	
		Y Numbers	
		N Other (please state under 'additional comments')	
3.2.4	Nature of Risk/Impacts Output	Not Applicable to Tool	
3.2.5	Resolution of Risk/Impacts Output	Not Applicable to Tool	
3.2.6	Temporal Context of Output	Y Current Situation	
		Y Predicted Future Scenario	
		? Other (please state under 'additional comments')	

3,3 User Friendliness

3.3.1	Required Level of Training to Use	High
3.3.2	Ease of Use Once Fully Trained	Medium
3.3.3	Online/Offline Functionality?	Not Applicable to Tool

Glossary

		Source
Water footprint	An indicator of water used that looks at both direct and indirect water use. The water footprint of a business is the volume of freshwater used to produce its goods and services. Water use is measured in terms of water volumes consumed (evaporated) an/or polluted per unit of time. The footprint includes green, blue and grey water components defined elsewhere in this glossary. It is a geographically explicit indicator, not only showing volumes of water use and pollution, but also the locations.	Gerbens-Leenes and Hoekstra, 2008.
Water Scarcity	**Physical water scarcity** occurs when the demand outstrips the lands ability to provide the needed water (implying that dry areas are not necessarily water scarce); **Economic water scarcity** results from insufficient human capacity or financial resources to provide water.	IWMI
Business Water Footprint	Business water footprint – The total volume of freshwater that is used directly and indirectly to run and support a business. The water footprint of a business consists of two components: the direct water use by the producer (for producing/manufacturing or for supporting activities) and the indirect water use (the water use in the producer's supply chain). The 'water footprint of a business' is the same as the total 'water footprint of the business output products'.	Gerbens-Leenes and Hoekstra, 2008.
Water Stress Index	Ranging form 0 to 1, indicates the proportion of consumptive water use that deprives other users of freshwater. Weighs the water abstraction as percentage of available water per source.	Pfister et al. 2009.
Water Stewardship	Water Stewardship is the use of freshwater that is socially and economically beneficial as well as environmentally sustainable. Environmentally sustainable water use maintains or improves biodiversity and ecological processes at the watershed level. Socially beneficial water use recognizes basic human needs and ensures long-term benefits (including economic benefits) for local people and society at large.	Alliance for water stewardship
Water Reporting	To provide and disclose information or an account on water (inputs, outputs quality...). Standards for water reporting are not as consistently established as those for carbon. However, several organisations such as GRI and CDP Water disclosure project are developing standards to account for water impacts.	
Water Stress	Symptomatic consequence of water scarcity.	
Local water situation	Local water situation is characterised by amongst others local demand for water, local water-stressed, regulatory framework, characteristics of ecosystem services which have an impact on water availability and quality degraded,	
Accounting for and understanding water impacts	Accounting and understanding how water supply, water consumption, the local water situation,... affects the business and the value chain.	
Water accounting	A system that provides quantitative information about direct and indirect water use of a company, a site or a product to understand the water impacts.	
Determining Action and Setting Targets	Identification and determination of (reasonable) targets to respond to water risks and opportunities and actions needed to achieve these.	
Monitoring and Communicating Performance	Identification, monitoring and communication of indicators to assess performance and monitor improvements.	
Indirect Water Use	The water used behind the products consumed by a consumer or used as inputs by a producer (i.e., water used in the production and supply chain of the goods and services consumed; water used in a business's supply chain).	
Water footprint	An indicator of water use that looks at both direct and indirect water use. The water footprint of a business is the volume of freshwater used to produce its goods and services.	