# Carbon Disclosure Project

## CDP 2013 CDP Water Disclosure 2013 Information Request Nestlé

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## **Module: Introduction**

#### Introduction

Please give a general description and introduction to your organization.

• Nestlé is the world's leading Nutrition, Health and Wellness company. Nestlé is committed to increasing the nutritional value of its products while improving the taste. Nestlé achieves this through its brands and with initiatives like the Nutritional Compass and 60/40+.

Creating Shared Value is the basic way we do business, which states that in order to create long term value for shareholders, we have to create value for society.
But we cannot be either environmentally sustainable or create shared value for shareholders and society if we fail to comply with our Business Principles. Nestlé is committed to the following 10 Business Principles in all countries, taking into account local legislation, cultural and religious practices:

1. Nutrition, Health & Wellness: Our core aim is to enhance the quality of consumers' lives every day, everywhere by offering tastier and healthier food and beverage choices and encouraging a healthy lifestyle. We express this via our corporate proposition Good Food, Good Life.

2. Quality assurance and product safety: Everywhere in the world, the Nestlé name represents a promise to the consumer that the product is safe and of high standard.

3. **Consumer communication**: We are committed to responsible, reliable consumer communication that empowers consumers to exercise their right to informed choice and promotes healthier diets. We respect consumer privacy.

4. Human rights in our business activities: We fully support the United Nations Global Compact's (UNGC) guiding principles on human rights and labour and aim to provide an example of good human rights and labour practices throughout our business activities.

5. Leadership and personal responsibility: Our success is based on our people. We treat each other with respect and dignity and expect everyone to promote a sense of personal responsibility. We recruit competent and motivated people who respect our values, provide equal opportunities for their development and advancement, protect their privacy and do not tolerate any form of harassment or discrimination.

6. Safety and health at work: We are committed to preventing accidents, injuries and illness related to work, and to protect employees, contractors and others involved along the value chain.

7. **Supplier and customer relations**: We require our suppliers, agents, subcontractors and their employees to demonstrate honesty, integrity and fairness, and to adhere to our non-negotiable standards. In the same way, we are committed to our own customers.

8. Agriculture and rural development: We contribute to improvements in agricultural production, the social and economic status of farmers, rural communities and in production systems to make them more environmentally sustainable.

9. Environmental sustainability: We commit ourselves to environmentally sustainable business practices. At all stages of the product life cycle we strive to use natural resources efficiently, favour the use of sustainably managed renewable resources, and target zero waste.

10. Water: We are committed to the sustainable use of water and continuous improvement in water management. We recognise that the world faces a growing water

## 0.2

### Reporting Year

Please state the start and end date of the year for which you are reporting data.

### Enter the period that will be disclosed.

Sun 01 Jan 2012 - Mon 31 Dec 2012

## 0.3

### **Reporting Boundary**

Please indicate the category that describes the reporting boundary for companies, entities, or groups for which water-related impacts are reported.

Companies, entities or groups over which financial control is exercised

## 0.4

## Exclusions

Are there any geographies, facilities or types of water inputs/outputs within this boundary which are not included in your disclosure?

Yes

## 0.4a

### List of Exclusions

Please describe any exclusion(s) in the following table.

Exclusion	Please explain why you have made the exclusion
Head Offices	Nestlé doesn't consolidate yet at global level the water consumption in its Head Offices. We have already started the process of implementation of a new consolidation system that will include Head Offices.

Exclusion	Please explain why you have made the exclusion
R&D	Nestlé doesn't consolidate yet at global level the water consumption in its R&D centres. We have already started the process of implementation of a new system that will include R&D centres.
Distribution Centres	Nestlé doesn't consolidate yet at global level the water consumption in its Distribution Centres. We have already started the process of implementation of a new system that will include Distribution Centres.
Acquisitions	Some recent acquisitions that have not yet implemented the new reporting system to track the water consumption at corporate level. For new acquisitions, the Nestlé Environmental Requirements sets a time frame for compliance with the implementation of tracking system at corporate level.

#### **Further Information**

Please see attach:

- The Nestlé Corporate Business Principles

- The Nestlé Policy on Environmental Sustainability

- 2012 Nestlé Integrated Annual Report Pack outlining the company's performance last year and its future ambitions. The integrated full Annual Report pack contains the company's 2012 Financial Statements, 2012 Corporate Governance report and the 2012 Nestlé in society: Creating Shared Value and meeting our commitments report.

#### Attachments

https://www.cdproject.net/sites/2013/42/12942/CDP Water Disclosure 2013/Shared Documents/Attachments/CDPWaterDisclosure2013/Introduction/Nestle Corporate Business Principles - English.pdf

https://www.cdproject.net/sites/2013/42/12942/CDP Water Disclosure 2013/Shared Documents/Attachments/CDPWaterDisclosure2013/Introduction/Nestlé 2012 Integrated Annual Report Pack.pdf

https://www.cdproject.net/sites/2013/42/12942/CDP Water Disclosure 2013/Shared Documents/Attachments/CDPWaterDisclosure2013/Introduction/The Nestlé Policy on Environmental Sustainability.pdf

## Module: Water-Governance

#### 1-ManagementGovernance

Does your company have a water policy, strategy or management plan?

## Yes

## 1.1a

## Please describe your policy, strategy or plan, including the highest level of responsibility for it within your company and its geographical reach.

Country or region	Description of policy, strategy or plan	Position of responsible person
Company- wide	Water is one of our Corporate Business Principles that form the foundation of all we do. The Principle state: "We are committed to the sustainable use of water and continuous improvement in water management. We recognise that the world faces a growing water challenge and that responsible management of the world's resources by all water users is an absolute necessity". The water resources that supply our business operations, and support the livelihoods of suppliers and consumers, are integral to our long-term business success. The Nestlé Commitment on Water, part of the Nestlé Policy on Environmental Sustainability states that Nestlé commits to: 1. Work to achieve water efficiency across our operations. Leading in water resource management and excelling in the reduction of the direct water use in all our facilities. 2. Advocate for effective water policies and stewardship. Promoting public policies that place value on water at every level. 3. Treat effectively the water we discharge. Setting strict targets for returning clean water to the environment. 4. Engage with suppliers, especially those in agriculture. Helping to improve their water management with focus on impacts at watershed level. 5. Raise awareness of water access and conservation. Engaging employees, communities and consumers in the water imperative. 6. Report publicly on a regular basis on the progress of meeting this Commitment	Board/executive board
Company- wide	The Nestlé Water Policy includes the following: 1. Water is essential for nutrition. Nestlé Waters, the water business of Nestlé, provides a wide range of safe, wholesome and convenient bottled waters of high quality to meet the increasing and varied needs of consumers throughout the world. Preservation and the responsible management of water resources are of primary importance in this endeavour. 2. Nestlé directs its worldwide research and development network towards: • the innovation and renovation of its products and processes, including manufacturing methods that minimise water consumption and waste water generation; • scientific research that is centred on the physiological and quality aspects of water. 3. Agricultural raw materials are dependent on water. Although, in general, Nestlé is not involved in the production of raw materials, it supports and encourages sustainable, environmentally-sound farming methods, including best possible practices for water use and conservation, and gene technology. As a raw material for food processing, water must satisfy both local legal requirements and internal quality criteria. 4. Nestlé strives to achieve optimal performance in its manufacturing activities, including water management: • without compromise to the safety and quality of its products, freshwater use is reduced as much as possible and, wherever feasible, water is re-used and recycled; and • used water is treated and returned to the environment according to local legislation; where none exist, internal Nestlé standards are applied. 5. The Nestlé Environmental Management System (NEMS) ensures the continuous improvement of Nestlé's environmental performance,	Board/executive board

Country or region	Description of policy, strategy or plan		
	including management of water resources: objectives are established, progress is monitored, results are checked and corrective and preventive actions are implemented. 6. As part of its broader commitment towards the good of the community, Nestlé: • in co-operation with health authorities, promotes to consumers the importance of using safe water for food and drink preparation; and • provides education, supports initiatives and fosters awareness of the importance of water resource conservation among employees, governments, local communities, schools, industry, consumers and other stakeholders.		
Other: Nestlé Waters	Nestlé Waters' overall efforts are guided by the global Nestlé Water Policy. Nestlé Waters' aim is to be the recognised healthy hydration company; the company works towards this by striving to maximise value for both shareholders and society by: • Providing healthy and safe products to cover consumers' daily hydration needs • Managing water resources in a responsible manner • Continuously optimising our environmental performances with a focus on packaging optimisation and recycling • Promoting hydration science and awareness from medical communities to the general public • Developing water care behaviours, with a focus on child education • Contributing to the environmental, social and economic development of the communities where we operate.	Board/executive board	

## 1.1b

Does the water policy, strategy or plan specify water-related targets or goals?

Yes

## 1.1c

Please describe these water-related targets or goals and the progress your company has made against them.

Country or region	Category of target or goal type	Description of target or goal	Progress against target or goal
Company- wide	Direct operations	*Be the most efficient water user among food manufacturers and lead in water resource management. *Continuously improve water efficiency across our operations, further reduce water withdrawals and discharges, and return clean water to the	*489 water-saving projects run in our factories, Water Resources Review programmes conducted at 116 Nestlé sites and CHF 28 million invested in water-saving and cleaning programmes during the year. *Water withdrawals down 29%

Country or region	Category of target or goal type	Description of target or goal	Progress against target or goal
		environment. *By 2015, reduce water withdrawal per tonne of product by 40% vs. 2005	2002 to 2012 *Water discharges down by 45% 2002 to 2012
Company- wide	Supply chain	*Help ensure that water is managed effectively throughout the agricultural value chain. *Protect the livelihoods of 25 million people involved in Nestlé's entire value chain.	*Engaging in water preservation activities with local stakeholders. *Sharing sustainable water use best practice and guidelines with other food companies. *Promoting sustainable development in 46 countries through the Nestlé Sustainable Agriculture Initiative (SAIN). *Ongoing implementation of Responsible Sourcing Guidelines for 12 of our key commodities. We've also incorporated guidelines on water into our Responsible Sourcing Guidelines.*
Company- wide	Public policy	*Demonstrate leadership in voluntary multi-stakeholder initiatives, which recognise water issues as shared risks and responsibilities and promote water stewardship. *Pursue collective action in watersheds relevant to our operations to balance water use. *Participate in the public policy debate on balancing water withdrawals with natural renewals. *Contribute to action-oriented dialogue that will increase the efficiency of water use at a watershed level, to deliver a balanced regulatory framework.	*Acting in all workstreams of the CEO Water Mandate and one of the first companies to contribute to the Water Carbon Disclosure Project (CDP). *Advocating for common standards through ISO 14046, the Alliance for Water Stewardship (AWS) and the Water Footprint Network. *Engaging in local water preservation and stewardship initiatives in countries including Colombia, India and France. *Appointment to AWS International Standard Development Committee: first draft standard by Q1 2012. *Harmonisation of CEO Water Mandate and Water CDP reporting requirements. *"Ecological corridors" in the Nestlé Waters Switzerland ECO-Broye project. *Water cost curves tested in India, Pakistan, South Africa, Jordan, Mexico and Mongolia, with the Water Resources Group. Preparatory analysis has been undertaken in Peru and Tanzania with the idea to continue with more in- depth work. *Participation at high level in public-private sector dialogue in several fora including World Economic Forum, World Water Week and Chatham House. *Since 2008, we have played a leading role in the 2030 Water Resources Group (WEF-WRG). * Last year we decided to take part again in the World Business Council for Sustainability governance as an active member, thus demonstrating our leadership in sustainable development.
Company- wide	Community engagement	*Contribute to the universal goal of translating the human right to water and sanitation into reality. *Support this worldwide, in areas close to our operations, by fostering access to clean drinking water and sanitary installations, as well as water, health and	*Access to water and sanitation for over 100 000 people in Ivory Coast, through our work with the International Federation of Red Cross and Red Crescent Societies since 2007. By 2014, the programme will cover 55 schools, 66 water

Country or region	Category of target or goal type	Description of target or goal	Progress against target or goal
		hygiene education.	points and sanitation facilities and at least 75,000 beneficiaries in the cocoa-growing areas. *In 2011, we launched 184 clean drinking water projects in the South Asian region, benefiting more than 100,000 pupils in village schools. *Water Education for Teachers programmes established in a dozen countries. *In 2012, Nestlé Waters North America donated 750,000 bottles of water to communities whose public supplies were been disrupted by Hurricane Sandy. *About 32% of our rural factories in developing countries provide clean drinking water to local communities. *In 2012, Nestlé Ecuador held a reforestation day in Cotopaxi National Park, one of the country's main water basins planting 5 000 native trees – the largest reforestation activity Nestlé Ecuador has ever undertaken. In 2013 they aim to plant 20 000 native trees.
Company- wide	Transparency	*We include a description of actions and investments undertaken, making reference to relevant performance indicators including water indicators found in the Global Reporting Initiative Guidelines.	* Our on-line Nestlé in Society report was granted a GRI A+.
Company- wide	Watershed management	*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. *We work to achieve water efficiency across our operations by concentrating interventions in priority watersheds and by engaging in collaborative policy and water conservation activities at a national/sub-national/watershed levels *We engage with suppliers by prioritising interventions per commodities, especially in water scarce locations and important water areas.	*Agrivair instituted innovative land management to protect the VITTEL natural mineral water spring from all forms of pollution, whether agricultural, industrial or urban. *Fully conscious of global climate issues, the VITTEL brand engaged with Pur Projet from 2010 to 2012 in a programme for the preservation of the primary forest and reafforestation with one million trees in Amazonia, the world's largest expanse of fresh water. *This consulting body provides technical support for local players by ensuring that concrete and concerted actions are implemented in order to preserve the quality of the water resources in the Vosges hydromineral basin.

You may explain here why your company does not have a water policy, strategy or plan and if you intend to put one in place.

## 1.2

Do you wish to report any actions outside your water policy, strategy or management plan that your company has taken to manage water resources or engage stakeholders in water-related issues?

Country or region	Category of action	Description of action and outcome
Vietnam	Direct operations	Most coffee factories treat the coffee process effluents before discharging them to a municipal plant or to the environment. The new initiative of Tri An is to treat the coffee effluents in the Nestlé treatment plant to an even higher standard and recycle this to users such as the cooling towers or social block toilet flushing. Our investment of CHF 1.8 million in a new water treatment plant, about 20% more than in a typical plant, is expected to generate savings of around CHF 120,000 per year. The initiative will reuse water, reducing daily water consumption by more than 30%. (annual water savings of 36,000 m3)
Philippines	Direct operations	The initiative in Nestlé Philippines, Tanauan factory is to collect all clean water possible to be able to use for secondary applications such as Industrial Services cooling tower make-up and factory garden irrigation and therefore reduce on water draw out from the factory owned deepwell. (annual water savings of 26,000 m3)
Mexico	Direct operations	Responding to the water scarcity in México and the need for enhanced water conservation, we accelerated water use reduction projects and initiatives at our Lagos de Moreno factory. The latest initiative, called Zer'Eau (zero water) is implemented as follows: Phase I (2011–2013): recovery and use of condensate from the milk evaporation process. This recovered water can be used for the boiler, and other utilities and process applications. This phase, along with various saving initiatives to be implemented in the factory during 2012 and 2013, will give an expected annual water savings of 546,000m <sup>3</sup> . Phase II (2013–2014): plans for recycling water by filtration of wastewater saving an estimated 140,000 m <sup>3</sup> of water year. The water-saving project at this factory will help improve water availability in the community in water-scarce areas. (estimated annual water savings of 546,000 m <sup>3</sup> )
Pakistan	Direct operations	Sheikhupura Factory is one of the biggest factories in the Nestlé World which comprises of various different Plants producing products of various different categories. One of the main Plants is for Milk Powder (Infant Formula milks), with one Evaporator, where the water is removed from the Liquid milk in several stages. We have invested in the latest membrane technology to recover water removed from the fresh milk evaporation process. The new technology will help us conserve water and save energy. (annual water savings of 40,000 m3 by 2013)
United States of America	Direct operations	In Ontario, by optimising reverse osmosis recovery, our Ontario factory in California provides recovered water for reuse by other members of the community, such as landscape irrigation and industrial manufacturing. (annual water savings of 136,000 m3)

Country or region	Category of action	Description of action and outcome
Uzbekistan	Direct operations	Water withdrawal has been significantly reduced through a range of measures including mapping water use to identify losses throughout the bottling process and implementing programmable logic control (PLC) to automatically balance withdrawal with production needs. (annual water savings of 147,000 m3)
Company-wide	Direct operations	Water Resource Reviews (WRR) are field assessments that evaluate not only our potential impact on a community's right to water of communities, but also the long-term availability of water resources around our factories at a watershed level, especially in water stressed/water scarce regions. The reviews consider five pillars related to the impact of our direct operations on local water resources: Quantity: aligning the long-term water needs of our factories with water availability Quality: ensuring local water quality is not detrimentally affected Regulatory compliance: ensuring appropriate extraction licenses are attained and that local and national water policies are adhered to Site protection: ensuring measures to protect water supply are understood and implemented, and Stakeholder relations: mapping key stakeholders and trying to engage with them so that their and our water concerns are addressed jointly. Stakeholder engagement is an important part of the review, ensuring that our operations consider collective, long-term local water needs. We're aware that more needs to be done to involve stakeholders in these reviews and we plan to introduce more systematic stakeholder engagement in the future.
India	Supply chain	Partnerships and awareness-raising in India: A 2010 joint study by Nestlé and the International Water Management Institute into the water intensity of milk, wheat and rice production in the Punjab determined that groundwater levels are falling rapidly due to agricultural over-use. Nestlé India therefore designed a programme to raise awareness among Punjab dairy farmers, and another for school students, to highlight the effects of over-exploitation of groundwater and the remedial action possible. In 2011, we joined the Department of Agriculture of Gurdaspur and our rice flour supplier evaluated the advantages of Systems of Rice Intensification (SRI) techniques: innovative paddy cultivation techniques promoted by NGOs in southern India that increase yields using fewer seeds, pesticides and fertilizers, and less water. The study compared SRI and non-SRI yields for the summer harvest and results so far show that SRI techniques have reduced irrigation water usage by 20%, as compared to non-SRI methods.
Nicaragua	Supply chain	Nestlé Nicaragua has been working with farmers to protect local water resources. 128 milk producers have received training on the importance of protecting water springs. Every year 10 additional farms will be integrated in the application of silvopastoral systems as well as receive training on management and protection of water sources
India	Supply chain	Nestlé India's chicory supplier, Vimsons Chicory Corporation, has installed a rainwater collection tank. The water collected is used for irrigation and has improved water availability.
Vietnam	Supply chain	Growing coffee, a major ingredient in many Nestlé products, uses a significant amount of water, and sometimes takes place in countries where water is already scarce. To better understand and quantify potential risks to key production inputs – such as water – and to coffee itself, we launched a study in 2011 in partnership with the International Water Management Institute, the Swiss Agency for Development and Cooperation and EDE Consulting. The initiative includes: a global assessment of the "consumptive water use" (water consumed in the production process without being returned) of coffee production at farm level; and a two-year, site-specific study at Dak Lak in Vietnam. In response to the rapid growth of Robusta coffee production in Vietnam, which has led to deforestation and land degradation, the study will promote the value of water among smallholders and recommend practical ways to optimise water use. The project aims to reach 300 farmers' families organized in 6 groups of 50 members. A network of on-site extension trainers will be established and trained on

Country or region	Category of action	Description of action and outcome
		Good Agricultural Practices during the project. This trainer team will be commissioned to disseminate knowledge to the farmers.
Venezuela	Supply chain	Nestlé Venezuela has launched an agro-forestry initiative within farms providing fresh milk for the El Piñal factory, which has positive impact on water, soil and ecosystem conservation. At farm level, initiatives are also deployed to minimise pollutant load from wastewater and valorise organic waste into a valuable resource (e.g. vermi-composting, biogas production). Indeed, waste water effluents from cleaning dairy farms have a direct impact on the risk of downstream pollution. To remediate this, integrated systems of productive decontamination of organic waste in dairy farming have been developed. Three farms in El Piñal, Venezuela, have planted trees to control soil erosion, provide shade for livestock and reduce water loss to evaporation and run-off. Some activities of the project include the development of pilots farms of dairy production, silvopastoral systems and implementation of conservations techniques such as buffer strips, hedges, erosion control and conservations areas. For 2012-2013, 30 such systems will be installed in different farms across the region.
China	Supply chain	So far Milk Collection Centers discharge waste water that is to date only treated by a fat separating trap. Nestlé Qingdao developed a model to treat waste water; this simple, but innovative system avoids discarding contaminated water into the environment in the country side. This extended model allows reducing COD (Chemical Oxygen Demand: an indicator of organic pollutant in water) values in line with legal regulations. Every day about 700lt of water are treated through this model. The Waste water treatment model will be implemented gradually to all collection centres in the region year by year.
Ecuador	Community engagement	In 2012, Nestlé Ecuador held a reforestation day in Cotopaxi National Park, one of the country's main water basins (Let's Plant Water programme). Recognising that trees support the water cycle, 250 Nestlé volunteers planted 5,000 native trees – the largest reforestation activity Nestlé Ecuador has ever undertaken. In 2012, they aim to plant 20,000 native trees.
Company-wide	Community engagement	Project WET and World Water Day: Project WET (Water Education for Teachers) is an international NGO that uses educational tools to raise awareness of water issues among school children around the world. Nestlé Waters has been its main sponsor since 1992, helping Project WET to establish programmes in a dozen countries including Vietnam, China, the United Arab Emirates, Lebanon and, most recently, Egypt. Every March, Nestlé Waters marks World Water Day in partnership with Project WET. Children and teachers participate in Together for Water festivals, to increase awareness of the importance of freshwater for nature, healthy hydration, good hygiene and disease prevention. In 2012, more than 15 000 children and 500 Nestlé Waters employees participated in events across 29 countries.
Cote d Ivoire	Community engagement	Since 2007, we have worked with the International Federation of Red Cross and Red Crescent Societies (IFRC) and the Red Cross Society of Côte d'Ivoire to provide water and sanitation facilities and hygiene training in Côte d'Ivoire. More than 60 000 adults and children are starting to feel the benefit, and by 2014, the programme will cover 55 schools, 66 water points and sanitation facilities and at least 75,000 beneficiaries in the cocoa-growing areas of Côte d'Ivoire.
Company-wide	Public policy	We are a founding signatory of the UN Global Compact CEO Water Mandate, a unique private-public initiative in which approximately 87 companies are working with environmental organisations and other stakeholders to support water disclosure, public policy engagement and the human right to water. We participate in the Mandate's working groups on these areas of engagement, and publish a public Communication on Progress every year; this report forms our 2012 Communication on Progress. In 2012, we participated in and presented at CEO Water Mandate events held at World Water Forum in Marseille (11-13 March), the Corporate Sustainability Forum in Rio de Janeiro (16-18 June) and at Stockholm

Country or region	Category of action	Description of action and outcome
		World Water Week (27-28 August). The Mandate launched a Collective Action Hub and published several documents related to its different work streams. We also contributed to the Water Disclosure Guidelines, whose public exposure draft was published in August.
France	Watershed management	In France, Nestlé received a special commendation for the best site management initiative in biodiversity, for a scheme to protect water reserves and restore biodiversity around the Vittel water source, awarded by the French Ministry for Sustainable Development and the French Environment and Energy National Agency (ADEME). Nestlé helped to launch the "Agrivair" project back in 1992, to preserve the quality of the Vittel, Contrex and Hépar springs in the Vosges water basin. Across 10 000 hectares of protected land, farmers have stopped using all artificial fertilisation and pesticides, abandoned crops that create nitrogen pollution and introduced crop rotation systems to improve soil conditions. With plans for future action to support biodiversity, including systematic tree planting and the reshaping of a river, Agrivair has provided Nestlé and others with a valuable model for watershed conservation. We received an award from the ESSEC business school in France recognising our initiative.
Thailand	Supply chain	Nestlé (Malaysia) Berhad launched the Nestlé Paddy Club, which aims to provide additional income to the paddy farmers in Kedah while bringing about environmental benefits through more efficient water usage and reduction of greenhouse gas emission, by the commercialisation of the Semi Aerobic Rice Intensification (SARI) method. An innovative farming collaboration with biotech company Organica Biotech Sdn Bhd, the Nestlé Paddy Club's core objectives are to provide significant benefits to three main areas –People, Planet and Profit – by using environment-friendly supplements that effectively deliver incremental yields. One of the notable findings made last year was the use of Clearfield Technology to eradicate weedy rice – a major yield-reducing malady in rice farming in Malaysia – and this technology has helped them improve the growth of rice. By September/October 2012, the Nestlé Paddy Club has targeted 500-600 members and 800ha have been cultivated.
Brazil	Community engagement	Saber is a 32 hours training that includes nutrition, sustainability, care for the children, agriculture, local culture, and project development contents. After the training sessions, teacher from the public schools are invited to submit their projects to the Saber Prize. Schools can then show the initiatives generated in the school with the children. In 2012, Saber was brought to 15 cities of predominant rural production of cocoa, coffee and milk In total, 1,137 educators of 582 schools were trained, reaching more than 63.4 thousand school age children. In several cities, Saber promoted the integration of public schools and local producers. Based on the local culture subject, farmers connected with school population, which were often their wives as teachers, or their children as students. Saber enabled a more comprehensive understanding of the importance of agriculture to local history and development.
Brazil	Community engagement	Pintadas city is located in a semiarid region in the state of Bahia. The region embraces milk producers and a population who faces yearly challenges of access to water. The project included an infrastructure investment to enable water supply during the drought season (cisterns), technical workshops on milk production (cattle nutrition alternatives, hygiene of equipments, transportation of milk, enhancements on milk quality), and educational activities on water preservation to 2,000 school age children. In total, 136 families of local producers benefited by the project support on the construction of 41 cisterns in small farms and the recovery of 68 water tanks. In 2012, a new project was deployed in the Montes Claros city, in the Minas Gerais state.
United States	Watershed	Nestlé Waters North America has committed USD 250,000 to fund the development of a floodplain meadow in Connecticut

Country or region	Category of action	Description of action and outcome
of America	management	(United States), which has been constructed to filter surface water, cleansing it before it enters the river. This project is part of an ambitious plan developed by the Mill River Collaborative to create a natural park environment in the middle of the urban landscape for public enjoyment but also to demonstrate the use of native plants to improve water quality, support local ecology and minimize damage from floods. It is hoped this project will help local homeowners and other businesses in the watershed understand the connection between natural areas and water quality and join the effort to restore the Mill River.
United Kingdom	Direct operations	Nestlé Waters UK opened its state-of-the-art production facility at Waterswallows in Buxton in 2012. The £35 million water bottling plant has been designed with cutting-edge features to help reduce water use. The plant's drainage system uses sophisticated technology to mimic nature, echoing as closely as possible the natural drainage of the site to minimise the impact of urban development. It promotes natural recharging of groundwater, in addition to enabling the wastewater from production and cleaning processes to be recovered and recycled.
Company-wide	Direct operations	We are committed to return clean water to the environment from our factories. We use municipal wastewater treatment facilities wherever possible, but where these are not efficient enough, we invest in our own facilities and return treated water to the environment according to local legislation and internal standards, whichever is more stringent. In 2012, we approved CHF 9 million for investment in new and improved facilities.
South Africa	Public policy	Nestlé ZAR is chairing the working group on Water Efficiency and Leakage Reduction, and this workgroup is finalising the 'No Drop' programme to address municipal water leakage and controls.
Switzerland	Watershed management	Organic farming practices initiated within the Henniez estate in Switzerland have helped to maintain quality habitat, both on natural areas and agricultural land. Taking advantage of the protected and clean environment, a local beekeeper has set up several successful hives, and honey is now being produced at Henniez.
United States of America	Watershed management	Nestlé Waters North America spend about \$8 million annually to maintain and protect the quality of our spring sources and their immediate watershed areas. Approximately 14,000 acres of land around our spring sources are managed as open space and are an environmental benefit to the local community.
United States of America	Direct operations	In 2012, Nestlé Waters conducted a pilot program to map our water use at our Dallas, Texas, facility to pinpoint where water may be lost during the manufacturing process. The preliminary findings revealed opportunities for further improvement. Since then, we have mapped the water use in all of our facilities to help us focus on potential areas of future water savings to further reduce our operational water footprint.
United States of America	Watershed management	In 2012, Nestlé Waters North America worked with local ecologists from Colorado Mountain College (CMC) to restore a fish hatchery at Ruby Mountain Springs to more natural conditions by enhancing the wetland and riparian habitat of the spring site. Wetlands protect water quality, regulate water quantity and provide an excellent wildlife habitat. By late summer, wildlife had begun returning to the area, including ducks, geese and muskrat, and numerous trout fingerlings had populated the pond. We continue to work with the students at CMC to monitor the success of the project.
Philippines	Watershed management	As part of Nestlé "Water for Emergency (WxE)" programme, we are testing in Philippines the "Aquasure" tablet solution designed to provide clean water to communities surrounding our manufacturing facilities in case of natural disasters, such as the frequently recurring floods in the country. With the Aquasure solution, clean water can be supplied even in case the only raw water available is turbid raw water from a surface water body (e.g.: river). The Aquasure solution is one of the integrated options in the "Water for Emergency programme, together with water supply taps at Nestlé sites, water tankering

Country or region	Category of action	Description of action and outcome
		and packed water trucking.
Company-wide	Community engagement	At Nestlé Waters, the local communities around our plants have always been important partners and our relationship with them is key. Based on previous experience in countries like France and the United States, Nestlé Waters launched a community Relations guidebook in 2012, for our water plants. Pilot projects have since been launched in Algeria, Argentina, Brazil, Egypt and Turkey, with plans for a global rollout in 2013-2014.

## Module: Water-RisksOpps

### 2-Indicators

## 2.1

Are any of your operations located in water-stressed regions?

Yes

## 2.1a

Please specify the method(s) you use to characterize water-stressed regions (you may choose more than one method).

Method used to define water stress	Please add any comments here:
Other: Nestlé Combined Water Stress Index	The Nestlé Combined Water-Stress Index takes an average of three leading water-stress indicators (estimated annual renewable water supply per person for 2025; water withdrawals to availability ratio; Water Risk Filter indicator). For each of our operations, the World Resources Institute (WRI) water scarcity definition is used to estimate a 'water stress factor'. It is based on the 2025 projection of the annual renewable water supply per person (Revenga et al. (2000) World Resources Institute, Washington D.C., USA: Pilot Analysis of Global Ecosystems: Freshwater Systems). A score from 1 to 5 is given to each factory depending on the water stress factor assigned. Water experts define areas where water supply per capita drops below 1,700 m3/year as experiencing "water stress". A factory located in

Method used to define water stress	Please add any comments here:
	areas where the projected water availability per capita is less that <500m3/year is given a score equals 5. Similarly, factories located in areas where the water availability per capita projected by 2025 is between 500-1000m3/year, 1000-1700 m3/year, 1700-4000m3/year, or greater than 4000m3/year are given an score of 4, 3, 2 and 1 respectively. In addition, we use the water withdrawals to water availability index developed by Pfister et al. (2009) (Institute of Environmental Engineering – ETH Zurich, Switzerland): Assessing the Environmental Impacts of Freshwater Consumption in LCA. Depending on the ratio between water withdrawals to water availability of each factory's location, a score is assigned for each factory. Locations with ratio less than 0.1, between 0.1-0.2, 0.2-0.4, 0.4-0.9 and greater than 0.9 are given a score of 1, 2, 3, 4 and 5 respectively. By using the Water Risk Filter tool prepared by WWF and the German Development Finance Institution (DEG) we screen our factories and assign them a water stress indicator from 1 to 5. The tool provides us with a score called 'physical risk', which takes competition from other local users into account where possible, to determine our risk of reduced water quantity or quality. Factories with Nestlé Combined Water-Stress Index equal or greater than 3 are consider in water stressed areas. For mapping our operations in water-stressed regions we use the WBCSD Global Water Tool and Google Earth (with Pfister et al. water stress maps).

## 2.1b

## Please list the water-stressed regions where you have operations and the proportion of your total operations in that area.

Country or region	River basin	Proportion of operations located in this region (%)	Further comments
Australia	Other: Shangai, Beijing	1 – 10	The proportion of operations located in water-stressed areas in this country out of the total number of Nestlé factories worldwide equals 1.0%.
China	Other: Shangai, Beijing	1 – 10	The proportion of operations located in water-stressed areas in this country out of the total number of Nestlé factories worldwide equals 3.0%.
France	Other: Scattered locations across the country	1 – 10	The proportion of operations located in water-stressed areas in this country out of the total number of Nestlé factories worldwide equals 2.0%.
Israel	Other: Scattered locations across the country	1 – 10	The proportion of operations located in water-stressed areas in this country out of the total number of Nestlé factories worldwide equals 1.8%.
Mexico	Other: Jalisco, Querétaro, Puebla, México	1 – 10	The proportion of operations located in water-stressed areas in this

Country or region	River basin	Proportion of operations located in this region (%)	Further comments
			country out of the total number of Nestlé factories worldwide equals 2.2%.
South Africa	Other: Gauteng, Free State, Western Cape	1 – 10	The proportion of operations located in water-stressed areas in this country out of the total number of Nestlé factories worldwide equals 1.6%.
Chile	Other: Central region	1 – 10	The proportion of operations located in water-stressed areas in this country out of the total number of Nestlé factories worldwide equals 0.8%.
United States of America	Other: South East, Mid West and West Coast, New York and Washington DC Area	1 – 10	The proportion of operations located in water-stressed areas in this country out of the total number of Nestlé factories worldwide equals 4.02%.
India	Other: Karnataka, Kerala, Punjab, Haryana	1 – 10	The proportion of operations located in water-stressed areas in this country out of the total number of Nestlé factories worldwide equals 1.0%.
Saudi Arabia	Other: Jeddah, Riyadh, Dammam	1 – 10	The proportion of operations located in water-stressed areas in this country out of the total number of Nestlé factories worldwide equals 1.4%.
Spain	Other: Extremadura, Cataluña	1 – 10	The proportion of operations located in water-stressed areas in this country out of the total number of Nestlé factories worldwide equals 1.2%.
Thailand	Other: Bangkok	1 – 10	The proportion of operations located in water-stressed areas in this country out of the total number of Nestlé factories worldwide equals 1.4%.

## 2.1a

Please specify the method(s) you use to characterize water-stressed regions.

ed to define water stress Please add any comments here:
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You may explain here why you are not able to identify which of your operations are located in regions subject to water stress and whether you have plans to investigate this in the future.

#### 2.2

Are there other indicators (besides water stress) which you wish to report that help you to identify which of your operations are located in regions subject to water-related risk?

Yes

#### 2.2

Are there other indicators (besides water stress) which you wish to report that help you to identify which of your operations are located in regions subject to water-related risk?

#### 2.2

Are there other indicators (besides water stress) which you wish to report which help you to identify which of your operations are located in regions subject to water-related risk?

#### 2.2a

Please list the regions at risk where you have operations, the relevant risk indicator and proportion of your total operations in that area.

Country or region	River basin	Risk Indicator	Proportion of operations located in this region (%)	Further comments
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Country or region	River basin	Risk Indicator	Proportion of operations located in this region (%)	Further comments
China	Other: Scattered locations across the country	Other: Water Poverty Index	1-10	The Water Poverty Index is also used as a country scale indicator providing information related to physical water stress, water quality, access to water. The proportion of operation located in water-stressed areas in this country out of the total number of Nestlé factories worldwide equals of 3.0%. The Water Poverty Index of South Africa is greater than 3.
India	Other: Scattered locations across the country	Other: Water Poverty Index	1-10	The Water Poverty Index is also used as a country scale indicator providing information related to physical water stress, water quality, access to water. The proportion of operation located in water-stressed areas in this country out of the total number of Nestlé factories worldwide equals of 1.0%. The Water Poverty Index of South Africa is greater than 3.
Israel	Other: Scattered locations across the country	Other: Water Poverty Index	1-10	The Water Poverty Index is also used as a country scale indicator providing information related to physical water stress, water quality, access to water. The proportion of operation located in water-stressed areas in this country out of the total number of Nestlé factories worldwide equals of 1.8%. The Water Poverty Index of South Africa is greater than 3.
South Africa	Other: Scattered locations across the country	Other: Water Poverty Index	1-10	The Water Poverty Index is also used as a country scale indicator providing information related to physical water stress, water quality, access to water. The proportion of operation located in water-stressed areas in this country out of the total number of Nestlé factories worldwide equals of 1.6%. The Water Poverty Index of South Africa is greater than 3.

### 2.2a

Please list the regions at risk where you have operations, the relevant risk indicator and proportion of your total operations in that area.

Country or region	River basin	Risk Indicator	Proportion of operations located in this region (%)	Further comments
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## 2.2a

Please list the regions at risk where you have operations, the relevant risk indicator and proportion of your total operations in that area.

Country or region	River basin	Risk Indicator	Proportion of operations located in this region (%)	Further comments
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2.2b

You may explain here why you do not wish to report or why you do not use other indicators to identify which of your operations are located in regions subject to water-related risk.

2.2b

You may explain here why you do not use or wish to report other indicators to identify which of your operations are located in regions subject to waterrelated risk.

#### 2.2b

You may explain here why you do not use or wish to report other indicators to identify which of your operations are located in regions subject to waterrelated risk.

## 2.3

Please specify the total proportion of your operations that are located in the regions at risk which you identified in questions 2.1 and/or 2.2.

40%

Please specify the total proportion of your operations that are located in the regions at risk which you identified in questions 2.1 and/or 2.2.

## 2.3

Please specify the total proportion of your operations that are located in the regions at risk which you identified in questions 2.1 and /or 2.2.

## 2.4

Please specify the basis you use to calculate the proportions used for questions 2.1 and/or 2.2.

Basis used to determine proportions	Please add any comments here
Number of facilities	We have calculated the proportion of factories located in the regions at risk out of the total number of factories we have worldwide (468).

## 2.4

Please specify the basis you use to calculate the proportions used for questions 2.1 and/or 2.2.

Basis used to determine proportions	Please add any comments here
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## 2.4

Please specify the basis you use to calculate the proportions used for questions 2.1 and/or 2.2

Basis u	sed to	determine	proportions
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Please add any comments here

### 2.5

Do any of your key inputs or raw materials (excluding water) come from regions subject to water-related risk?

### Yes

## 2.5a

Please state or estimate the proportion of your key inputs or raw materials that come from regions subject to water-related risk.

Country or region	River basin	Input or material	Proportion of key input or raw material that comes from region at risk (%)	Unit used for calculating percentage	Further comments
Company- wide	Other: Different river basins in sourcing regions	coffee	1 – 10	Volume or weight of material purchased	The coffee supply chain is extremely complex, with 80% of all farmers being smallholders. Around 25 million smallholders depend directly on coffee farming for their livelihoods, and a further 100 million people are involved in the industry as a whole. Nestlé is the world's largest purchaser of coffee. In 2011, we purchased 89 392 tonnes of green coffee through our Farmer Connect programmes in Vietnam, Thailand, China, Indonesia, the Philippines, Côte d'Ivoire and Mexico, maintaining our industry-leading position in terms of direct purchases of green coffee. The production of coffee is predominantly rainfed and its green and blue consumptive water use of coffee is 15'365 m3/ton (mainly from rain). We do not manage the GPS location of all our suppliers. So we have estimated the proportion of coffee coming from regions at risk by selected a list of countries that we considered at risk due to water scarcity (Mexico, China and India). We have calculated the volume of coffee procured from these countries out of the total coffee bought. Please note that this is a conservative approximation as we know all regions from we source soy within those countries are not subject to water-related risk.
Company-	Other: Different	milk	41 – 50	Volume or	In terms of value of products sold, Nestlé is the world's largest milk company. In

Country or region	River basin	Input or material	Proportion of key input or raw material that comes from region at risk (%)	Unit used for calculating percentage	Further comments
wide	river basins in sourcing regions			weight of material purchased	2011, we sourced more than 14.4 million tonnes of fresh milk equivalent with 50% of the volume coming from our milk districts we set up in more than 30 countries. Our approach involves the widespread use of our milk district model, which dates back to the 1870s. We procure milk from countries such as Mexico, China, India and Pakistan which we considered as water risk. The global average consumptive water use of milk production is estimated on 979 m3/ton, which 91% are obtained from rain water. Please note that this is a conservative approximation as we know all regions from we source soy within those countries are not subject to water-related risk.
Company- wide	Other: Different river basins in sourcing regions	sugar	11 – 20	Volume or weight of material purchased	We use sugar cane and sugar beet in our products. We source sugar from different countries including Brazil, USA, France, UK, Argentina and Germany. We estimated that about 18% of sugar (beet and beet) comes from countries considered at risk. In 2011, Nestlé started working with Proforest, an independent, not-for-profit organisation specialising in natural resources sustainability to help develop and implement Nestlé Responsible Sourcing Guidelines (RSGs) for sugar. In 2012, we began to map our global sugar supply chains and start assessing priority suppliers against the RSGs. Nestlé supports suppliers who are not yet able to meet the RSGs, but have committed to become compliant. We are gaining a better understanding of which of our supply chain partners are in water-stressed areas. Initially, we have focused on sugar suppliers in Brazil, India and Mexico. Implementation plans for the period 2012–2015 are being rolled out with the support of Proforest, our partner for the overall delivery of the plans. In 2013, we plan to roll out the guidelines to Australia, China, Thailand, and the UK. Through our Responsible Sourcing Guidelines for Sugar, and 'Specific Requirements for Water Use in Agriculture', mills and growers in water-stressed areas are expected to implement water management plans covering cultivation and processing that take into account the human right to water as well as environmental flows and water quality. Sugar has a very low consumptive water use compared with meat, nuts and chicken. Sugar represents important blue water consumption (irrigation) when compared to our key agricultural raw materials. Please note that this is a conservative approximation as we know all regions from we source soy within those countries are not subject to water-related risk.
Company-	Other: Different	cocoa	1 – 10	Volume or	Cocoa is grown in rainfed areas and the average consumptive water use is

Country or region	River basin	Input or material	Proportion of key input or raw material that comes from region at risk (%)	Unit used for calculating percentage	Further comments
wide	river basins in sourcing regions			weight of material purchased	according to WFN on average 19'749 m3/ton which are mainly coming from rain. Out of the list of countries that we considered at risk due to water scarcity (Mexico, Pakistan, USA, China, India, Spain, and South Africa), we procured less than 1% of cocoa from Mexico. The rest of the cocoa is bought from other countries. Please note that this is a conservative approximation as we know all regions from we source soy within those countries are not subject to water-related risk.
Company- wide	Other: Different river basins in sourcing regions	soy	61 – 70	Volume or weight of material purchased	We procure soybean, soybean meal and soybean oil. The main country were soy is produced from is USA. In 2011, we partnered with Conservation International, a global environmental non-profit organisation, to develop and implement RSGs for soya. These will implement Nestlé's commitment on no-deforestation and forest stewardship in the field of soya sourcing. Please note that this is a conservative approximation as we know all regions from we source soy within those countries are not subject to water-related risk.

#### 2.5b

You may explain here why you are not able to identify if any of your key inputs or raw materials come from regions subject to water-related risk and whether you have plans to explore this issue in the future.

#### **Further Information**

We source our agricultural raw materials through traditional trade and direct procurement operations (which we term "Farmers Connect"). Nestlé is not directly involved in the production of raw materials; therefore we do not manage the specific GPS locations of all farmers who supply us. However, we have broadly estimated the proportions of raw material volume coming from water stressed areas. To do so, we have identified different countries affected to some extent by water stress such as China, India, United States of America, Pakistan, Mexico and South Africa – which represent 47% of the world's population. To estimate the proportion of agricultural raw materials sourced from that region we have assumed that all agricultural raw materials sourced from those countries (Mexico, Pakistan, USA, China, India, and South Africa) are under risk. Nevertheless, we recognised the limitations of this methodology and we are working with our suppliers to estimate risks more accurately.

The criteria of selection of those countries was based on literature review, water stressed Maps and 2010 Environmental Performance Index conducted by the University of Yale and Columbia.

The inputs selected (Coffee, Cocoa, Milk, Sugar and Soy) are some of our key agricultural raw materials.

For many of our commodities we source via conventional trade and we do not currently have access to country/region of origin, thus we work on average global consumptive water use and impacts. The consumptive water use related to the production at farm level of agricultural products purchased by Nestlé on an annual basis can be roughly estimated at 45 billion m3 including 42 billion m3 rainwater and 3 billion m3 irrigation water. We continue to deploy a set of actions and initiatives to contribute towards improving water management within our supply chain and the "farmer connect" network.

Please note that most of the river basins disclosed through the text have been obtained in Water Risk Filter tool prepared by WWF and the German Development Finance Institution (DEG). Some river basins are not officially reported in publically available tools.

Please visit http://www.nestle.com/csv/rural-development to read more about Nestlé and Rural Development.

Please visit http://www.nestle.com/csv/responsible-sourcing to read more about Nestlé and Responsible Sourcing.

Please visit http://www.nestle.com/csv/water to read more about Nestlé and Water.

#### 3-Risk assessment

#### 3.1

Is your company exposed to water-related risks (current or future) that have the potential to generate a substantive change in your business operation, revenue or expenditure?

#### Yes

#### 3.1a

Please describe (i) the current and/or future risks to your operations, (ii) the ways in which these risks affect or could affect your operations before taking action, (iii) the estimated timescale of these risks, and (iv) your current or proposed strategies for managing them.

Country or region	River basin	Risk type	Potential business impact	Estimated timescale (years)	Risk management strategies
South Africa	Other: Country	16. Other: Inadequate	Municipal water treatment facilities not operated adequately; and failing	Current	Install additional water treatment (e.g. reverse osmosis).

Country or region	River basin	Risk type	Potential business impact	Estimated timescale (years)	Risk management strategies
	wide	infrastructure	infrastructure in some regions. This lead to declining water quality and increased costs for additional treatment of water.		
South Africa	Other: Mossel bay region	03. Physical: Increased water stress or scarcity	Climatic variation leading to reduced rain; and increasing demand for water by other users (e.g. human consumption). This can potentially lead to restrictions on water use; however industries have been exempted for now. During a drought period in 2009, one of our factories (Mossel Bay) was obliged to drastically reduce its water consumption. Luckily production was not affected but this pushed the factory to optimise their water usage. A similar drought period could occur in the future.	Current	Improved water efficiency at factories. Engagement with suppliers (e.g. milk farmers) to optimise water use. Engagement with local authorities. In addition, the factory located in Mossel Bay had decided to become a 'best in class' factory in terms of water usage by implementing several innovative Water 'Reduce, Reuse and Recycle' projects so that it is protected from future incidents of drought.
Spain	Other: Country wide	03. Physical: Increased water stress or scarcity	Declining groundwater levels and lower quality of superficial water. The potential business impact include a possible disruption of operations or potential need of investment for a new equipment in order to guarantee the quantity and the quality of water.	Current	We continue to monitor the risk in the sensible areas; improve the water efficiency and implement the necessary resources for the new equipments. The projects implemented in 2012 in our Girona, Miajadas and Reus factories have resulted in water reductions (9%, 13% and 11% respectively. In Valladolid, we have installation RO plant which has resulted in a reduction of water consumption and an improvement of water quality used in the process. We will continue to implement in Environmental Setting Programmes starting in one of our factories to continue identifying opportunities of water saving and applying efficient technologies, and best practices to optimise energy and water consumption.
China	Other: Country- wide	09. Regulatory: Regulation of discharge quality/volumes leading to higher compliance costs	Regulatory changes can result in increase of the operational costs Investment in water technologies have been implemented to reduce water use and recycle water. On-line monitoring devices have been installed at the effluent discharge point.	Current	Recycle cow water using RO. Different investment projects to storage the high quality discharge water for the lower requirement's usage. Reduce water usage by adjustment and close monitoring.
China	Other:	06. Regulatory:	Water price increases every year. Potential	Current	We are implementing new technologies to further

Country or region	River basin	Risk type	Potential business impact	Estimated timescale (years)	Risk management strategies
	Country- wide	Higher water prices	business impact is related to operating cost increase. Water prices increase varies from different region and source of supply. It increases from 0%-20%.		recycle. Recycle and reduce the water usage
China	Other: Country- wide	08. Regulatory: Mandatory water efficiency, conservation, recycling or process standards	Potential business impact includes operating cost increase.	1 – 5	We are implementing new technologies to further recycle water in our operations. In 2012, Nestlé recycled 6.9 million m3 of water as we seek to reduce water use and discharge.
China	Other: Country- wide	11. Regulatory: Statutory water withdrawal limits/changes to water allocation	Potential business impact includes operating cost increase.	1 – 5	Enhance water efficiency. As part of our Nestlé Environmental Management System we continue to implement projects to reduce our use of water, non-renewable energy and other natural resources, to reduce our greenhouse gas emissions, to eliminate waste and to improve the environmental performance of our products, including their packaging.
Pakistan	Other: Country- wide	03. Physical: Increased water stress or scarcity	Weak governmental plans to build Dams for water reserves causing excessive Water withdrawal for irrigation purposes by Agricultural sector through tubewells and pumps around area of Factory Operations. This may affect water level leading to an increase in business operational costs. Drop of water level and natural recharge could impact commodity prices.	6 – 10	Reduction in water wastage, Improve awareness on water usage in factories, Reusing of clean water, Maximizing reuse of water in utilities services. We work to raise awareness to farmer to adopt latest technique of irrigation and minimize use of irrigation from ground water.
Mexico	Other: Country- wide	13. Other: Litigation	Changes in regulation can result in litigation in some factories. Extra fees will need to be paid to get water allowances that will allow increasing the production volume in the factories. This represents a risk as this could limit possible expansion of production. The potential business impact is an increase in operational cost estimated in MXP 4million representing the value of Guarentee quotas.	Current	We have already bought Guarantee Quotas authorized to keep higher volumes than currently used in Gerber, Queretaro, Ocotlan and Coatepec factories.
Mexico	Santiago	01. Physical:	México has a growing overexploitation of	Current	In Chiapas and Tlaxcala, we are assessing

Country or region	River basin	Risk type	Potential business impact	Estimated timescale (years)	Risk management strategies
		Declining water quality	aquifers, pollution of surface waters and groundwater, poor quality of drinking water and high flood vulnerability of different populations the country. (Source: Agenda del Agua 2030_CONAGUA, 2011) In Chiapas and Tlaxcala, quality of surface water is declining. This results in higher production cost as there is a need to buy clean water to avoid any disruption in the production processes. This cost can be up to three times the normal cost of water. In Lagos de Moreno, the water of the aquifer has high concentration of fluoride. The quality of water does not comply with drinking water regulations and therefore we need to invest in cleaning water treatments to treat the water we use in our processes.		options to source water from a well to avoid the use of surface water. In2011, in Lagos de Moreno, we installed a reverse Osmosis treatment plan for our Ice-Cream Factory. Another RO to Lagos Milk factory will be installed in 2012.
Mexico	Santiago	07. Regulatory: Increased difficulty in obtaining operations permit	The amount of water available in the zone does not allow additional volumes in the water concession (Toluca). Do not have the possibility of growing or problems to maintain the production rate.	Current	We are implementing project to save water. Specifically a project with10% reduction in consumption of water is being implemented.
Mexico	Santiago	09. Regulatory: Regulation of discharge quality/volumes leading to higher compliance costs	High waste water treatment costs and future stronger regulations can lead into higher compliance cost. In Ocotlán, the capacity of the WWTP is exceeded and we have plans to increase the capacity of the WWTP.	1 – 5	We are upgrading the WWTP in order to increase production during 2012.
Congo, Republic of the	Congo	12. Regulatory: Other	Legislation in the Democratic Republic of Congo requires nothing more than a septic tank, which does not meet Nestlé Environmental Requirements. An investment at our factory provided a new wastewater treatment plant to improve on the local municipal facilities.	Current	We use municipal wastewater treatment facilities wherever possible, but where these are not efficient enough, we invest in our own facilities, returning treated water to the environment according to local legislation and internal standards, whichever is more stringent. We built a new water treatment plant – at the Maggi factory in Kinshasa – which became operational in October 2011.

Country or region	River basin	Risk type	Potential business impact	Estimated timescale (years)	Risk management strategies
Ghana	Other: Tema	16. Other: Inadequate infrastructure	Due to inadequate infrastructure of the municipal water supply network, one of our factories (Tema) is affected by frequent cuts in water supply. This has affected production on a number of occasions causing the factory to shutdown partially or fully production. The lack of water is due to inadequate infrastructure and not a physical lack of water in the region.	Current	A USD 2.2 million investment at our factory in Tema, Ghana, provided a new wastewater treatment plant to improve on the local municipal facilities. The factory with the assistance of the corporate Engineering of Nestlé put in place an ambitious action plan to reduce water usage and also recycle water to certain non food contact processes (e.g. cooling, floor washing etc)
India	Indus	03. Physical: Increased water stress or scarcity	A case study in the Moga District of Punjab (India) between Nestlé and the International Water Management Institute (IWMI) is raising strong concern about the sustainability of the region's fresh milk supply due to water stress. Water scarcity could affect the milk production in Moga.	1 – 5	An energy and water target setting is planned for 2012 and the factory is already in the process of implementing ambitious water recycling projects in order to reduce the factory dependence on groundwater.
Spain	Other: Pisueña River / Pas Basin	12. Regulatory: Other	Due to low flow of surface water in certain period of the year, the government put some restrictions to withdraw water below certain water flows. This can have can affect the production in our factory in La Penilla.	1 – 5	In La Penilla factory we have created a work team which aims at reducing the water used in refrigeration, which have resulted in absolute reductions of 2.2 million m3 in 2012 and reducing 45% water withdrawals per tonne of product. We have invested EUR 11 000 in water saving projects which have also resulted in energy and GHG emissions reductions.
Australia	Murray- Darling	03. Physical: Increased water stress or scarcity	Potential future risks to water supply; Potential future risks to sourcing raw agricultural ingredients. Increased water stress or scarce has resulted in increases up to 45% of water prices.	Current	Focus on water reduction/conservation actions for manufacturing facilities, participation in Aust SAI Platform which has a Water & Climate Change Working Group Some site specific actions for water reduction include: 1) Wahgunyah – capture rainwater from warehouse roof (saves 250kL/year) 2) Mulgrave – reduction in sanitise flushes in Cleaning circuit (saves 1,000kL/yr) 3) Campbelfield – Reduce blowdown rate on cooling tower (approx 1,875kl/yr) 4) Campbelfield – Change from batch to inline processing of products (1,000kl/yr) 5) Wahgunyah – Install auto on/off valve on

Country or region	River basin	Risk type	Potential business impact	Estimated timescale (years)	Risk management strategies
					pumpseal water supply (1,750kl/yr) 6) Tongala – Removal of redundant cleaning pipework (2,000kL/yr)
Australia	Murray- Darling	06. Regulatory: Higher water prices	Increased water supply costs to factories Our top 6 water using sites have shown an average increase of approximately 25% (range from 15-45%) in water supply costs from 2009-2010. This was at end of a long drought. The price increases from 2010-2011 have been far less (ie 0-20%).	Current	Some site specific actions for water reduction include: 1)capture rainwater from warehouse roof (saves 250kL/year) 2)reduction in sanitise flushes in Cleaning circuit (saves 1,000kL/yr) 3)Reduce blowdown rate on cooling tower (approx 1,875kl/yr) 4)Change from batch to inline processing of products (1,000kl/yr) 5) Install auto on/off valve on pumpseal water supply (1,750kl/yr) 6) Removal of redundant cleaning pipework (2,000kL/yr)
Australia	Murray- Darling	10. Regulatory: Regulatory uncertainty	Uncertainty regarding government water policy - influences production of food & feed crops, water availability & pricing affects food industry economic, environment & social sustainability. A key water policy document which is currently under development is the Murray-Darling Basin Plan. This has the potential to significantly impact agriculture due to the allocations of water entitlements. A second draft was recently released & sent to state ministers for consideration.	1 – 5	Monitoring government policy development.
Company- wide	Other: Country wide	04. Physical: Other	Our long-term success depends on the water resources that supply our business operations and support the livelihoods of suppliers and consumers. Melting ice, rising sea levels, more frequent and severe droughts and floods are part of the environmental changes that face the food industry and make it more exposed to climate change than others,. Indeed its key raw materials are sourced from nature and closely linked with the environment: a lack of water, combined with changing climate patterns, will impact vegetation distribution,	11 – 20	At Nestlé we take a comprehensive approach to assess and mitigate risk related to changes in physical climate parameters that will result in water scarcity in different areas. These include: – We have action-oriented dialogue with different stakeholders, from farmers to policymakers, to help formulate strategies aimed at addressing the water 'overdraft' e.g. we have played a leading role such as in the 2030 Water Resource Group In 2012, 489 water-saving projects were run in our factories saving 6.5 million m3 and 16 Water Resources Review programme were conducted at Nestlé sites. – In 2012, we continued to

Country or region	River basin	Risk type	Potential business impact	Estimated timescale (years)	Risk management strategies
			abundance and yields. Changing and unstable weather patterns such as temperature increases and limited rainfall could generate more drought incidences and pose some challenges to existing agricultural production systems. We have estimated that the potential financial implication include the loss of investment of factory ranging between CHF 50 to 150 million negatively impacting our revenue due to potential disruptions.		implement the Responsible Sourcing Guidelines for 12 of our key commodities and extension of our Water Guidelines for Suppliers of Agricultural Raw Materials. We implemented a further 10 projects associated with water in 2012 in our supply chain.
Company- wide	Other: Country wide	02. Physical: Flooding	Climate change may induce changes in natural resources and increase the occurrence and frequency of floods which can then affect our direct operations. We have identified 124 Nestlé factories located in areas of potential flood hazard. Flood exposures can be present almost anywhere. This can lead to property damage and/or business interruption increasing the operational cost. The financial implications due floods affecting our operations have been estimated in CHF 2.4 billion which assumes that the 124 properties identified under flood hazards are completely damaged and business is disrupted.	1 – 5	At Nestlé we take a comprehensive approach to assess and mitigate risk related to changes in physical climate parameters that could result in our operations disruptions. The Nestlé Global Property Loss Prevention Programme provides a consistent view of our exposure to property risks around the world to floods, enabling us to make informed decisions about the future standards of prevention and protection throughout Nestlé sites. Risk engineers experts inspect on a regular basis Nestlé sites and provide recommendations to improving standards of prevention to flooding. Flood emergency plans are in place in Nestlé sites exposed to flooding from any source These actions will reduce the magnitude of impact of the risk by reducing the financial implication by 25%.
India	Other: Kabini	03. Physical: Increased water stress or scarcity	Water availability in this region is strongly affected by monsoon patterns but also by misuse and lack of governance at catchment level. This poses risk of lack of water for production.	1 – 5	We are working to assess the availability state of local water resources and possibly identify a set of recommended solutions to allow improvement of water governance and engagement with local stakeholders for more sustainable water use.

Please explain why you do not consider your company to be exposed to any water-related risks that have the potential to generate a substantive change in your business operation, revenue or expenditure.

#### 3.1c

Please explain why you do not know if your company is exposed to any water-related risks that have the potential to generate a substantive change in your business operation, revenue or expenditure, and if you have plans to assess this risk in the future.

### 3.2

What methodology and what geographical scale (e.g. country, region, watershed, business unit, facility) do you use to analyze water-related risk across your operations?

Risk methodology	Country or geographical scale
To analyse water-related risk across our operations we use different methodologies at different geographical scales. (1) At a country and region level we analyse water-related risk across our operations by screening the operations that are in risk areas taking into account metrics such as water withdrawals to availability and the renewable water supply per person in that specific area. In addition, Nestlé has in place an Enterprise Risk Management process, which is applied across the enterprise, designed to identify potential events that may affect the company, to manage risk and opportunities, and to provide reasonable assurance regarding the achievement of objectives. Water related issues are an integrated part of the risk and opportunity assessment for business. (2) At a watershed level we have in place the Water Resources Review which is undertaken at operations considered under risk (at Nestlé Waters, this is undertaken at all sites). The programme looks into details in specific locations. The programme focuses on five areas: water quantity; water quality; regulatory compliance; site protection; and relationships with other stakeholders. Hydrogeological monitoring and possibly aquifer modelling are also used to assess the availability of surface and underground water. The impact of our operations linked to water transportation (pipelines and storage tanks), water treatment and wastewater processes are also analysed. Sites can also be prioritised by their position in our Water Stress Analysis, which in turn is based on external indicators of water poverty, watershed stress and internal local indicators. (3) At a facility level: Since 1996 we have in place the Nestlé Environmental Management System (NEMS) which help us to achieve continuous performance improvement and contribute towards sustainable development at factory level. NEMS also provides information regarding the environmental performance of our operations, including management of water resources. This system allows us to monitor progress, check and	Other: From country to facility

#### 3.3

Do you require your key suppliers to report on their water use, risks and management?

#### Yes

### 3.4

Is your supply chain exposed to water-related risks (current or future) that have the potential to generate a substantive change in your business operation, revenue or expenditure?

#### Yes

### 3.4a

Please describe (i) the current and/or future risks to your supply chain, (ii) the ways in which these risks affect or could affect your operations before taking action, (iii) the estimated timescale of these risks and, (iv) your current or proposed strategies for managing them.

Country or region	River basin	Risk type (to supplier)	Potential business impact (to responding company)	Estimate timescale (years)	Risk management strategies (by responding company)
India	Other: Western Cape	03. Physical: Increased water stress or scarcity	Disruption of supply of raw agricultural materials (e.g. rice). In parts of India (for example Gujarat), the water table is dropping up to 6 meters per year. This is partly due to the existence of over 20 million motorised water pumps in operation in India today, compared with 100,000 in 1955. Local water resources are overexploited and the water table is falling by at least one metre a year, which could affect raw agricultural materials	1 – 5	A 2010 joint study by Nestlé and the International Water Management Institute into the water intensity of milk, wheat and rice production in the Punjab determined that groundwater levels are falling rapidly due to agricultural over-use. Nestlé India therefore designed a programme to raise awareness among Punjab dairy farmers, and another for school students, to highlight the effects of over-exploitation of groundwater and the

Country or region	River basin	Risk type (to supplier)	Potential business impact (to responding company)	Estimate timescale (years)	Risk management strategies (by responding company)
			supply in the long term.		remedial action possible. In 2011, we joined the Department of Agriculture of Gurdaspur and our rice flour supplier evaluated the advantages of Systems of Rice Intensification (SRI) techniques: innovative paddy cultivation techniques promoted by NGOs in southern India that increase yields using fewer seeds, pesticides and fertilizers, and less water. The study compared SRI and non-SRI yields for the summer harvest and results so far show that SRI techniques have reduced irrigation water usage by 20%, as compared to non-SRI methods. Other actions have been taken : Nestlé India's chicory supplier, Vimsons Chicory Corporation, has installed a rainwater collection tank. The water collected is used for irrigation and has improved water availability.
China	Other: Western Cape	01. Physical: Declining water quality	There is a lack of wastewater treatment capacity in rural locations and pollution prevention regulations for manure and silage storage and disposal is poorly enforced; in part due to poor practices in watershed management such as these, 21% of available surface water resource nationally is now unfit for use even in agriculture according to McKinsey "Charting our Future". Because most manure storage systems require sizable investments with no immediate financial returns, local farmers have little incentive to improve their management of manure. Results from RISE (Response-Inducing Sustainability Evaluation) conducted in China suggest that the risk of water pollution is particularly caused by inappropriate manure storage, free access of cattle to water bodies and the absence of an appropriate waste water treatment. The waste water is	1 – 5	Nestlé has responded by financing the distribution of a low-cost solution: biogas digesters that help farmers store their manure in secure, covered containers and collect the manure's methane gas as energy for home cooking, lighting, and heating. Biogas production provides farmers with an economic incentive to manage their manure supplies more effectively, reducing water contamination in the process. So far Milk Collection Centers discharge waste water that is to date only treated by a fat separating trap. Nestlé Qingdao developed a model to treat waste water; this simple, but innovative system avoids discarding contaminated water into the environment in the country side. This extended model allows reducing COD (Chemical Oxygen Demand: an indicator of organic pollutant in water) values in line with legal regulations.Every day about 700lt of water are

Country or region	River basin	Risk type (to supplier)	Potential business impact (to responding company)	Estimate timescale (years)	Risk management strategies (by responding company)
			predominantly discharged directly on the ground and even though there are legislations that prohibit cattle to enter water bodies, they are not enforced. The lack of wastewater treatment available in some villages and an increased risk for water pollution through manure and silage leachate can negatively impact agricultural materials supply.		treated through this model. The Waste water treatment model will be implemented gradually to all collection centres in the region year by year.
South Africa	Other: Western Cape	03. Physical: Increased water stress or scarcity	Disruption of supply of raw agricultural materials i.e. milk.	Current	In 2010 the Western Cape region experienced its worst drought in 132 years, and in response Nestlé introduced a multi-pronged approach which included engineering interventions and awareness campaigns. The programme, which will run until 2015, is part of our work with organisations including the South African Government, the Water Resources Group (WRG) and several multi-national companies to help close the water gap by 2030, ensuring the availability of water in the future. In 2011, we launched phase two of the programme, a SAIN project to optimise water use further up the value chain engaging with 17 dairy farmers, five of whom work within the dam's catchment area, to increase milk production. Local experts, including Nestlé Agricultural Services, are providing training and financial assistance to help with soil moisture monitoring, soil fertility management, irrigation scheduling and the use of drought-resistant crops. Phase three, which will run from 2012 to 2015, will involve engineering work to convert the factory into a zero water intake facility.
Pakistan	Other: Country- wide	11. Regulatory: Statutory water withdrawal limits/changes to water allocation	Lowering of Water level may give rise to regulator changes to limit water withdrawal from ground resources. This may affect the volumes of production and may lead to newer water technologies to be implemented with	6 – 10	Water conservation technologies to be used, reuse and recycle methodologies to be used. Exploring best available techniques for recycle and reuse.

Country or region	River basin	Risk type (to supplier)	Potential business impact (to responding company)	Estimate timescale (years)	Risk management strategies (by responding company)
			potential increasing operational costs.		
Mexico	Other: Country- wide	03. Physical: Increased water stress or scarcity	During the past several decades, the demands placed on Mexico's water resources increased dramatically largely due to rapid population growth. In addition, the excess of allocations contributed to the overexploitation of water resources. Water withdrawal by agriculture is estimated at 60.6km3, or 78% of the total water withdrawal.	1 – 5	Working with farmers who supply coffee to the Company, Nestlé provides training and support for new technology to decrease water use in the coffee production process. As a result, water usage in coffee production was reduced from 40 litres to 3-5 litres of water per kilogram of coffee produced. Today, this technology is used by Nestlé Coffee suppliers across Mexico, achieving annual savings of about 296 000 m3 of water a year. The initiative is being promoted by the Mexican government, reaching many partners in the Mexican coffee milling industry, who have also adopted this technology. *We are working with the Swiss College of Agriculture in Mexico to improve the water sustainability of dairy production.
Other: In several water- stressed countries or regions (Cocoa production countries)	Other: Region- wide	03. Physical: Increased water stress or scarcity	Cocoa is highly susceptible to drought and the pattern of cropping cocoa is related to rainfall distribution. Cocoa seedling mortality is encouraged by prolonged dry season (drought), short dry season affects pod filling which will affect the bean size.	6 – 10	Cocoa Propagation Project: Nestlé develops new technology to mitigate water stress problems in many countries or regions. Nestlé has developed a competency in somatic embryogenesis, a relatively new technique that does not change the plant material but enables deep soil penetrating roots with greater drought tolerance. Currently, Nestlé's technology is applied, or in the process of being established, in several water-stressed countries or regions in Latin America and SE Asia.
Colombia	Other: Jardín Antioquia	01. Physical: Declining water quality	As the vast majority of Nespresso AAA farmers are smallholders, especially in Colombia, they often lack the resources to invest in appropriate water treatment facilities. The outcome of our Tool for the Assessment of Sustainable Quality (TASQ <sup>™</sup> ) indicates that many of these smallholder farms do not	Current	The installation of the micro-central mill in Jardín Antioquia is one such solution. Inaugurated in December 2010 as a joint undertaking between Nespresso, USAID, ACDI/VOCA, Cafexport and the local cooperatives, this new mill will provide coffee- milling services initially for 110 coffee farmer

Country or region	River basin	Risk type (to supplier)	Potential business impact (to responding company)	Estimate timescale (years)	Risk management strategies (by responding company)
			have the appropriate equipment for either domestic wastewater treatment or coffee- processing water treatment. The cost of providing such facilities on a farm-by-farm basis for the tens of thousands of farms we buy from is prohibitive, so we have been working with local partners to find more efficient and creative solutions that can protect water, improve crop quality and drive profitability for coffee farmers.		families in the region, avoiding the need to replicate equipment in each farm and improving coffee quality. The mill will save an average of 27 000 litres of water per farm and increase farmer profitability by 30%.
Ethiopia	Other: Country- wide	03. Physical: Increased water stress or scarcity	Improved water efficiency and reduced drought sensitivity could be achieved by an optimised combination of plant material, propagation and farming techniques.	Current	Screening for plant characteristics related to water-efficiency has only recently started in a few organizations, in particular in Brazil and Ethiopia. Coffee plant collections of different characteristics are fragmented throughout many organisations and it is unclear, which organisation has the most promising varieties. Nestlé has one of the largest collections of coffee varieties in the world and is thus considered an important piece of the global coffee plant puzzle. Although Nestlé has not previously screened for water-related characteristics, the following main activities are planned: Reinforce and build relationships with major coffee R&D organisations in Brazil and Ethiopia Start Nestlé's own screening program for the following water-related characteristics (in addition to quality and yield) in coffee plants:- lower overall water demand - fewer and shorter irrigation cycles - less drought sensitivity and fast recovery after droughts
Nicaragua	Other: Country- wide	01. Physical: Declining water quality	Nicaragua's surface water is highly contaminated by industrial and domestic waste water directly released into the rivers and coastal areas without any treatment. The lack of regulation concerning water aggravate the situation.	Current	Nestlé Nicaragua has been working with farmers to protect local water resources. 128 milk producers have received training on the importance of protecting water springs. 2'000 Mahogany and 500 Pochote plantlets have been distributed to 10 milk producers □ 10

Country or region	River basin	Risk type (to supplier)	Potential business impact (to responding company)	Estimate timescale (years)	Risk management strategies (by responding company)
					pilot farms have been supported to implement silvopastoral systems Every year 10 additional farms will be integrated in the application of silvopastoral systems as well as receive training on management and protection of water sources.
Venezuela	Other: El Pinal	01. Physical: Declining water quality	Studies have shown that in the metropolitan area, over 80 percent of sewage—mainly domestic but also industrial—is discharged into streams in the Guaire River's 32 subbasins.	Current	Nestlé Venezuela has launched an agro- forestry initiative within farms providing fresh milk for the El Piñal factory, which has positive impact on water, soil and ecosystem conservation. Most dairy farms have implemented hygiene measures within the milk parlor but lack the appropriate system to treat organic waste. Developing integral systems of productive decontamination of organic and water waste in dairy farms is a win-win solution. At farm level, initiatives are deployed to minimise pollutant load from wastewater and valorise organic waste into a valuable resource (e.g. vermi-composting, biogas production). For 2012-2013, 30 such systems will be installed in different farms across the region.
Ecuador	Other: Country- wide	04. Physical: Other	Day after day, Ecuadorian highlands and forests face a myriad of threats that hinder their natural functions and threaten their survival. Large tracts of forest are cleared for agricultural purposes, as well as for the purpose of growing pastures so that livestock can graze and for the purpose of producing wood. A majority of these felled trees are not replaced; or worse yet, trees are replanted, but the species of tree planted is invasive and/or harmful to the local ecosystem, causing even further harm. Many local populations, lacking alternatives, are pushing agriculture into the highlands (areas that were	Current	Let's Plant Water works to restore and protect areas near waterways. The program also includes reforestation projects, using native tree species, in collaboration with neighbouring community members to help promote a more sustainable and collaborative initiative. The importance of planting trees lies in the fact that these attract rain which invigorates the earth, prevent erosion, fix carbon dioxide, one of the main greenhouse gases, reduce global warming and are home to numerous species of flora and fauna embellishing them. Forests also modulate the water cycle by absorbing intense rains, improving water filtration

Country or region	River basin	Risk type (to supplier)	Potential business impact (to responding company)	Estimate timescale (years)	Risk management strategies (by responding company)
			once unthinkable for agricultural purposes). Once the highland areas are farmed, the topsoil is removed, and the earth becomes dry and compact. This past summer, the wildfires devastated 3,500 hectares of forest in Ecuador. Water availability and ecosystem diversity are endangered by this extensive deforestation.		underground and balancing out the availability of water throughout the year, similar to the way that ice and snow from the mountains do. 25'500 native plants have been plant in 2012 and we plan to plant 40,000 native trees next year. In addition, we will implement other strategies to ensure the availability of water; as water harvesting systems, drip irrigation systems and eco-efficient technologies for water use.
Company-wide	Other: Country- wide	03. Physical: Increased water stress or scarcity	Changing temperatures and precipitations patterns may lead to decreased availability of critical raw materials in the supply chain, especially agricultural commodities. As Nestlé business relies on raw material (coffee, sugar, cocoa, cereals etc.), this change will lead to the increased operational cost or even disrupt the business operations along the entire value chain of Nestlé.	6 – 10	- We established business continuity plans for the areas that could be potentially affected. We also tested management capabilities Launching a Nespresso AAA Sustainable Quality database to gather, analyse and share information about sustainability with coffee farmers, to help them plan for the future. It allows us to tailor support in environmental management to farmers' individual needs, as well as providing a global overview of our program implementation and the adoption of sustainability best practiceIn order to ensure long term supply, Nestlé helps farmers adapt to future environmental challenges in the frame of the NESCAFÉ Plan. Nestlé R&D Tours took this issue as a priority to initiate research programs focusing on improving the drought tolerance or "water use efficiency" of coffee. Drought tolerance has different physiological and genetic components. Their combination into new selected plants could lead to increased drought tolerance. Thus understanding the potential relations between physiological parameters and drought tolerance in coffee will help in identifying drought tolerant coffee plants for Arabica and Robusta coffeesThese actions are expected

Country or region	River basin	Risk type (to supplier)	Potential business impact (to responding company)	Estimate timescale (years)	Risk management strategies (by responding company)
					to ensure the long term availability of raw materials and therefore reduce the magnitude of impact of the risk to low over the 6-10 years timeframe.
Company-wide	Other: Country- wide	02. Physical: Flooding	Floods in Philippines can impact sales volume, time spent, labour cost, waste disposal cost, during the flooding and also in recovery cost.	1 – 5	Flood emergency plans are in place to reduce the potential impact of flooding.

#### 3.4b

Please explain why you do not consider your supply chain to be exposed to any water-related risks that have the potential to generate a substantive change in your business operation, revenue or expenditure.

### 3.4c

Please explain why you do not know if your supply chain is exposed to any water-related risks that have the potential to generate a substantive change in your business operation, revenue or expenditure, and if you have plans to assess this risk in the future.

#### 4-Impacts

## 4.1

Has your business experienced any detrimental impacts related to water in the past five years?

Country	Impact indicator	Description of impact	Response strategy
Ghana	Inadequate water infrastructure	Due to inadequate infrastructure of the municipal water supply network, our Tema factory is affected by frequent cuts in water supply. This has affected production on a number of occasions causing the factory to shutdown partially or fully production. The lack of water is due to inadequate infrastructure which has resulted in acute water shortage in the industrial hub of Ghana, Tema, has compelled industries within the harbour city and its environs to temporarily shut down their various plants for productions. The business impact of this water shortages resulted in production volume loss estimated on GHC 6 mio in 2011.	This has resulted in changes in water practices. The factory with the assistance of the corporate Engineering of Nestlé put in place an ambitious action plan to reduce water usage and also recycle water to certain non food contact processes (e.g. cooling, floor washing etc)
Thailand	Flooding	The flooding in Thailand in 2011 cause detrimental impact to the business. Our two of six factories in Thailand were affected to shut down and infrastructure damages. There was insufficient supply of Nestlé products to our customer during October 2011 to early of 2012. During this situation, many employees could not come to workplace and some had to move to safer area. The detrimental impacts included sales volume, time spent, labour cost, waste disposal cost, during the flooding and also in recovery period. After the water level was declined, we learnt from experiences and good practices, which will minimise an impact if it would happen again.	Protective actions are in place for example, water protection system such as Aqua fence. AquaFence is an effective transportable flood protection barrier that can be rapidly deployed, prior to or even during heavy rain and severe weather when there is a recognised danger of flooding. After the rain, sea or river water has receded the flood barrier can be easily dismantled and stored ready for the next flood event. The government has put protective plans in place around industrial estates.
Pakistan	Flooding	A detrimental impact that Nestlé faced was the massive floods in Pakistan where devastating floods washed away 4'500 villages, 1'600 human causalities, 20 million people displaced, 300'000 cattle dead, 20% agricultural land with crops flooded and major transportation issues during 4 weeks Among the longer term impacts we indentified high food inflation, GDP dropped from expected 4.5% to 2.8% in 2010 and people below the poverty line increased from 33% to almost 40% of the population. Beyond the usual business procedures we set	Nestlé Pakistan undertook a series of initiatives during 8 months, to make up for lack of external governance mechanisms such as distributing food to more than 80'000 people (first 2 weeks) and 240'000 litres of drinking water were transported in our milk tankers to flood relief camps. In addition, Nestlé contributed to free vaccinations to over 300,000 animals, repairs of damaged CSV projects, i.e. schools and water filtration plants and Joint Nestlé / SDC project in 17 villages of 10'000 people: food, seed and

Please describe these detrimental impacts including (i) their financial impacts and (ii) whether they have resulted in any changes to company practices.

Country	Impact indicator	Description of impact	Response strategy
		up a Crises Committee and Help desk set-up, Vigilance committee in the Milk collection operation.	fertilizers, 370 water pumps and wells rebuild actions. The negative impact on Nestlé was limited, with a 7% reduction of fresh milk sourcing for four weeks. Nevertheless, Nestlé Pakistan achieved all business targets thanks to the outstanding attitude and work ethic of the staff. We have enhanced our contingency plans.
Other: North America and Western Europe	Other: Criticism	In recent years, the bottled water industry has received some criticism, often based on biased, one-sided information, from certain actors – particularly activist organisations. This criticism has been most visible in North America and Western Europe and has often taken the form of anti-bottled water campaigns, traditional and online media articles, and documentary films.	The bottled water industry has actively mobilised to balance the criticisms with factual information on natural mineral, spring and treated waters, the health benefits of plain water, the industry's commitment to good water management, and its efforts to improve the environmental performance of its products (e.g. packaging and transport optimisation).
United Kingdom	Flooding	Floods in the UK in 2012 caused some damages as torrential rainfall filled rainwater drainage systems to capacity causing them to overflow. All operations were affected to some extent in the initial hours after the event but, however the other parts of the factory were able to resume operations relatively quickly. The main concern was related to the 45 ovens which were in process at the time and which had to be closed down due to inundation of the below ground air flow voids underneath each oven. The five day cooking cycle for the sweets in process at the time was thus interrupted.	The cost were estimated on CHF 610000 which includes repairs to buildings and fixtures and fittings, stock loss, additional labour costs, additional power, laboratory testing costs.

## 4.1b

Please explain why you do not know whether your business has experienced any detrimental impacts related to water in the past five years and if you have any plans to explore this in the future?

# **5-Opportunities**

# 5.1

Do water-related issues present opportunities (current or future) that have the potential to generate a substantive change in your business operation, revenue or expenditure?

Yes

5.1a

Please describe (i) the current and/or future opportunities, (ii) the ways in which these opportunities affect or could affect your operations (iii) the estimated timescale and (iv) your current or proposed strategies for exploiting them.

Country or region	Opportunity type	Potential business impact	Estimated timescale	Strategy to exploit opportunity
Other: Global	Other: Improve water management	Improve competitive position though operational performance, efficiency and by innovating new solutions.	1 – 5	Our Water Resources Review programme is in place, focusing on five areas: water quantity, water quality; regulatory compliance; site protection; and relationships with other stakeholders. Specific to regulatory compliance, the WRR programme it against the water-related responsibilities of our local operations (i.e. water rights, abstraction licences, water effluents discharges) and estimates potential evolution of water regulatory framework impacting the sites. The Nestlé Environmental Performance tracking tool continuously monitor the cost of all purchased water and off-site treated water for all plants. We give a value to water when assessing investments in water-saving industrial equipment. We assess projects based on a theoretical price ranging from CHF 1-5 per m3 depending on the water stress index of the factory's location. This informs our investment decisions on water saving technologies, especially in water-stressed areas. Regarding investments in water-saving projects and technologies, we have extended the acceptable return on investment periods beyond our normal criteria.

Country or region	Opportunity type	Potential business impact	Estimated timescale	Strategy to exploit opportunity
Other: Global	Other: Reduce waste	Saving in environmental and financial terms. By saving waste we save water.	1-5	Nestlé has been helping to avoid food waste ever since its foundation more than 140 years ago by transforming perishable raw materials such as milk, coffee beans and cocoa into safe, value-added food products for consumers. Over the last ten years we have almost halved the quantity of waste generated per kilo of product manufactured in our factories. We are committed to further reducing food waste along the entire production chain from farm to consumers and beyond, as well as to raising awareness of the fact that the true value of food is often not reflected in its price. We provide cooling facilities to help farmers in developing countries reduce milk losses. By providing these facilities we've managed to reduce losses between farm and retail by up to 1.4 million tonnes annually. In 2012, 39 of our factories achieved zero waste for disposal. We've committed that at least every tenth Nestlé factory should achieve this target by 2015. In 20 of our Nescafé factories, we use coffee grounds from the manufacturing process as a source of renewable energy. Product packaging is essential to preventing food waste along the value chain, from preventing breakages to avoiding spoilage and contamination. We optimise the weight and volume of our packaging, lead the development and use of material from sustainably-managed renewable resources, support initiatives to recycle or recover energy from used packaging, and use recycled materials wherever there is an environmental benefit and it is appropriate. By improving our capacity and demand planning, we are reducing the likelihood of product returns and spoiled goods. We help consumers manage their food shopping by offering them the right portion sizes for their needs. We provide preparation instructions on our packaging, which is crucial to prevent food wastage, and via websites such as 'Maggi Kochstudio' in Germany.

Country or region	Opportunity type	Potential business impact	Estimated timescale	Strategy to exploit opportunity
Other: Global	Other: Improve the environmental performance of our products.	Delight our consumers while at the same time improve the impact on the environment including their water consumption.	1 – 5	Nestlé actively participates in different multi- stakeholder LCA-related initiatives. *In Nestlé, we have in place different tools that allows us to conduct screening environmental life cycle assessment of products including water use: • PIQET (Packaging Impact Quick Evaluation Tool) is a packaging eco- design tool that evaluates the main environmental impact categories of an existing or under development packaging within Nestlé. • GEF (Global Environmental Footprint) evaluates the main environmental impact categories of a factory, a specific department, or an existing or under development product within Nestlé Waters Globally, in 2012 we completed more than 2300 eco- design analyses. Nestlé co-chairs, together with the European Commission, the steering committee of the European Round Table on Food Sustainable Consumption and Production, which have released for testing purposed the ENVIFOOD protocol, the first harmonised methodology for the assessment of environmental performance of food and drinks products. *Nestlé is a member of the Water Footprint Network and supports and actively participates in the development of the new ISO 14046 Standard on Water Footprinting Requirements and guidelines.
Other: Global	Other: Driving resource conservation and saving precious water	Operation of zero-intake milk factories in water stressed regions.	1 – 5	We are applying best technologies to make milk factories a zero-intake factories. We are making engineering interventions in our factories e.g. South Africa, Mexico, Pakistan.
Other: Global	Other: Enhancing consumer understanding of their water consumption by using our products	Consumers need water to prepare and use our products. By providing consumer with tips on how to reduce water use and scientific based and externally reviewed environmental data, they are able to improve their environmental performance and continue enjoying Nestlé products.	1 – 5	We continuously enhance the environmental information we provide to consumers about our products, based on scientific evidence. This increased transparency not only helps consumers decide what to purchase, but also enables them to improve their environmental impact when preparing and using our products, including minimising energy and water use. In 2012, in France, we updated an

Country or region	Opportunity type	Potential business impact	Estimated timescale	Strategy to exploit opportunity
				online NESCAFÉ LCA Communication tool to increase consumer awareness and help them improve their environmental performance when using our products. The interactive Nescafé Life Cycle Assessment communication tool in France invites consumers to click on the different stages of the Nescafé life cycle to learn about the level and nature of impacts at each product phase. Users can also look at GHG emissions, water use or biodiversity impacts across the full product life cycle. Nestlé Professional LCA communication tool was launched to help customers choose the best coffee machines in terms of GHG emissions and energy and water consumption.
Other: Global	Cost savings	Through continuous driving water saving, we gain competitive advantage in terms of lower manufacturing cost.	1 – 5	Different investment projects to storage the high quality discharge water for the lower requirement's usage. Reduce water usage by adjustment and close monitoring.
Other: Global	Other: Reuse Water	he implementation of a very sophisticated treatment process using UltraFiltration, Reverse Osmosis and advanced oxidation to comply with Nestlé Environmental Requirements have allow us to reuse water in the process.	1 – 5	Although the wastewater from our soluble coffee factory (under construction) would be discharged to the local municipal sewage, the discharge limit for colour (Pt Co 20 @pH7) and the high amount of colour in coffee effluents has forced us to implement a very sophisticated treatment process using UltraFiltration, Reverse Osmosis and advanced oxidation. The water is in fact so good after this treatment that it will be reused again within the factory utilities.
Mexico	Other: Reputation	In many countries, Nestlé was the first company to set up a wastewater treatment facility and while these investments have added to production costs in the short term, they have led to stricter regulations for all companies over time, thus giving Nestlé the prime-mover advantage.	1 – 5	Ocotlan is one of 2 Nestlé factories which demineralise Whey. The WW from this process is highly loaded in salts and in particular phosphates (<300ppm). The treatment process is being upgraded to meet stringent discharge limits for phosphates (<5ppm). The factory engineers are also studying a new process to recover the phosphates at source which can be recovered and used as fertilizer.
Other:	Cost savings	In water stressed areas, the application of best	1 – 5	By implementing engineering interventions to make

Country or region	Opportunity type	Potential business impact	Estimated timescale	Strategy to exploit opportunity
Water stressed areas		technologies for milk processing allows us to continue delighting consumers with our products with no intake of water.		the factory a zero-water intake factory we reducing water withdrawals. We can recover the condensate from the milk evaporation process. This recovered water is used in other uses such as the make-up water for the boiler, refrigeration plant and cooling tower.
Other: Global	Other: Reduction of water use in use phase of our products	Providing consumers with products that reduce their water use, allow them to continue enjoying Nestlé products while at the same time reduce their direct water footprint.	1 – 5	By choosing the ideal temperature for consumer baby's bottle, the BabyNes system does not need to overheat the water as a kettle or stove. This means energy savings are maximised through the preparation of each bottle and no water is needed to cool down the bottle which also saves water.
Other: Global	Other: Healthy hydration	Recently obesity and the measures that can be taken to address them have been in the spotlight, often accompanied by reports and guidance by health authorities encouraging populations to drink more water (USDA, WHO). In such a context, consumers are increasingly looking for good quality products that support their efforts towards a balanced, healthy diet and lifestyle. The overwhelming majority of the products produced by Nestlé Waters are plain water (which does not add calories to the diet). This makes them the reference healthy hydration option on the packaged beverage market, supported by the Nestlé quality guarantee.	1 – 5	-The company works on leveraging hydration and exploring its contribution to human health by participating in and funding clinical research, and contributing to the release of scientific evidence within the medical community. Our experts also participate in congresses and conferences around the worldWe promote healthy hydration through both our brand and corporate communication.
Mexico	Other: Ability to operate	In water stressed areas, the application of best technologies allows us to continue delighting consumers with our products with no intake of water.	Current	Responding to the water scarcity in México and the need for enhanced water conservation, we accelerated water use reduction projects and initiatives at our Lagos de Moreno factory. The latest initiative, called Zer'Eau (zero water) is implemented as follows: Phase I (2011–2013): recovery and use of condensate from the milk evaporation process. This recovered water can be used for the boiler, and other utilities and process applications. This phase, along with various saving initiatives to be implemented in the factory during 2012 and 2013, will give an expected annual water savings of 546,000m <sup>3</sup> .

Country or region	Opportunity type	Potential business impact	Estimated timescale	Strategy to exploit opportunity
				Phase II (2013–2014): plans for recycling water by filtration of wastewater saving an estimated 140,000 m <sup>3</sup> of water year. The water-saving project at this factory will help improve water availability in the community in water-scarce areas.
South Africa	Other: Reputation	Reputational opportunities. Nestlé South Africa is playing a leading role in industrial water efficiency and supply chain water savings through its work with local farmers in the Mossel Bay region. As a result, Nestlé is a founding member of the Strategic Water Partners Network (SWPN) which is a collection of industrial water users and national government. As part of its commitment to water stewardship, Nestlé has been working in partnership with South Africa Strategic Water Partners Network (SWPN-SA) to help South African municipalities to half water leaks by 2014.	1 – 5	Reducing leakage in municipal water distribution has turned out to be particularly relevant especially in this water scarce country: Municipal Water Services represent an overall demand of more than 25% of the total water use in South Africa. The Water Research Commission estimates that close to a quarter of the total water in municipal systems in South Africa is lost through physical leakage. Reducing water leaks in municipal supply systems is therefore a strategic priority for South Africa's water sector. It is a vital intervention to maintain a balance between water supply and growing demands. The main initiative led by Nestlé within SWPN-SA is a water use efficiency rating system – the No drop, to encourage performance excellence through rewards and penalties. The No drop is a simple-to-fill score card that assesses and ranks municipalities on water losses, revenue collection and water use efficiency (amount of water used per person per day). Municipalities can be compared to each other and their performance evaluated against the requirements of the law and best management practice. Coupled with support in the areas requiring improvement, the scorecard has been shown to work well for improving drinking water quality. The No drop system is expected to help municipalities to reduce water losses and save expenditure that would have been used to expand water services.
Company- wide	Other: Water Stewardship	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	1 – 5	The Nestlé Commitment on Water Stewardship sets the strategy to exploit the opportunity. In particular, it has been prepared to guide and align Nestlé's efforts to complement Nestlé's Corporate Business

Country or region	Opportunity type	Potential business impact	Estimated timescale	Strategy to exploit opportunity
		suppliers and consumers live. It believes that effective water stewardship will require that provisions are made firstly for water to meet the human right to water, then to ensure that ecosystems are able to function, and finally to ensure that water is used efficiently for agricultural and industrial use.		Principles, the Nestlé Policy on Environmental Sustainability, the Nestlé Supplier Code, Responsible Sourcing Guidelines, and Water Guidelines for Suppliers of Agricultural Raw Materials. N

### 5.1b

Please explain why you do not consider water-related issues to present opportunities to your company that have the potential to generate a substantive change in your business operation, revenue or expenditure or supply chain.

## 5.1c

Please explain why you do not know whether water-related issues present opportunities to your company that have the potential to generate a substantive change in your business operation, revenue or expenditure.

#### 6-tradeoffs

### 6.1

Has your company identified any linkages or trade-offs between water and carbon emissions in its operations or supply chain?

Please describe the linkages or trade-offs and the related management policy or action.

Linkage or trade- off	Policy or action
Linkage	Food production requires water and energy; water extraction and distribution requires energy; and energy production requires water. We use water to cool power equipment, and water supply and treatment, pumping water requires energy. On the other hand, risk to electricity from diminishing water is a global problem. The use of fossil energy has an impact on climate change—which disrupts the water cycle and threatens both water and energy resources. In 2009, Nestlé launched the Energy Target Setting (ETS). Teams of internal and external experts are sent to factories to identified energy and water and greenhouse gas emissions reduction opportunities. As part of our Energy Target Setting Initiative, we completed 36 energy-saving projects in 2012. These projects have resulted in annual energy savings of about 2 million GJ and a reduction of approximately 173,000 tonnes of CO2 equivalent. *We strive to improve the environmental performance of our factories. *We are working within the Water Resources Group on an innovative initiative under the guidance of the Global Agenda Council on Water Security. This initiative engage governments who wish to work progressively on a water sector reform strategy; and then provide a supporting public-private approach.
Linkage	By recovering heat at the end of manufacturing processes, we reduce water used in our factories for cooling purposes. The heat is not used to evaporate water in the cooling tower but to replace fuel to heat other processes. In our factories most of the heat is evacuated trough cooling tower systems by evaporating water in the ambient air. Anytime we are recovering the heat of a process to heat another one it saves the primary energy previously used to run the second process and the water consumed in the cooling tower to cool the 1st process. Applying this principle in the scope of our Energy Target Setting initiative we have identified more than 90 heat recovery or water/energy beneficial projects resulting in more than 6 mio. GJ saving, 1.4 mio. m3 of water and 110'000 tons of CO2 per year.
Trade- off	Cooling systems that use a water's cooling capacity a single time are called once-through cooling systems. These systems use large volumes of water. Close-loop cooling systems use less water but require more energy. In general, we replace once-through cooling systems with close-loop cooling systems to save water. In 2012, we use 9.8 million m3 in once through cooling, 35% down from 2011.
Trade- off	Biofuels vs. water availability. Increased use of biofuels puts increasing pressure on water resources in at least two ways: water use for the irrigation of crops used as feedstocks for biodiesel production; and water use in the production of biofuels in refineries, mostly for boiling and cooling. Nestlé is a strong supporter of sustainable and efficient water and energy use. Nestlé believes that any decision on the use of water and energy sources must be based on a systematic cost benefit and life cycle analysis, taking into consideration the social and environmental impact, including the effects on food prices. The current production of biofuel relies on the extensive use of food and feed crops such as maize and wheat. The large scale expansion of these agricultural raw materials for biofuel production will aggravate the problem of water scarcity, as every litre of biofuel made from irrigated maize or soybeans requires between 500 and 5,000 litres of water. This causes an unsustainable boost in the use of freshwater by agriculture, which already uses 70% of available sources. Furthermore, depending on crop type and geography, greenhouse gas savings compared to fossil fuel can be very small. Therefore Nestlé is opposed to the introduction of widespread production incentives and subsidies for current forms of biofuel(no food for fuel). Biofuels targets require a certain proportion of national energy needs to be met from renewable fuels, most of them biofuels (ie, ethyl alcohol made from crops, usually maize or sugar). It is our belief that biofuels should only be accepted when they: do not threaten food security; are able to demonstrably reduce greenhouse gas emissions; do not pose significant land use issues, or significant water allocation and stewardship issues; and when they do not risk conservation conflicts. Therefore, Nestlé continues to advocate against the use of crops for fuel rather

6.1a

Linkage or trade- off	Policy or action
	than food, as the growing use of biofuels is a significant factor in the destruction of rainforests. Therefore our strong policy claim: no food for fuel.
Trade- off	A site level, Nestlé has identified linkages and trade-offs between usage of water and energy. These are taken into account through its Change Management process, which includes investments projects and innovation/renovation of products and processes. For each new product or process developed, R&D teams have to assess related environmental impacts, which include water withdrawal and energy consumption and these are part of an internal process. Nestlé also strives to improve factory(ies) environmental performance through internal tools and procedures and in some situations with the support from external consultants and suppliers. Linkages between water and energy are taken into consideration. For instance, in many Nestlé factories the reduction of steam consumption allows to minimise water withdrawal as well as energy consumption. Trade-offs between water, energy and carbon are also taken into consideration, such as treating waste water which will allow the recycling of water but at the cost of additional energy usage. The impact of these factors on the environment may vary depending on local conditions (such as water scarcity in a region) and need to be evaluated based on all of the inputs, not just the impact a project or initiative has on one of the factors.
Trade- off	Nestlé has been conducting Life Cycle Assessments to assess the environmental impacts of its major product categories, from farm to consumer in order to increase the environmental performance of its products throughout their life cycle. Nestlé aims to use natural resources efficiently at all stages of the life cycle is, to favour the use of sustainably-managed renewable resources and to target zero waste. To optimise the environmental performance of its products the environmental impacts of its manufacturing operations but also those associated with the other steps in the value chain. Nestlé therefore applies a life cycle approach, systematically assessing its product categories from farm to fork and beyond. We advocate a multi-disciplinary approach not just looking at GHG emissions but also at water and natural resources, human health, and ecosystem quality.

## **Further Information**

For more information on Nestlé and Environmental Sustainability, please see http://www.nestle.com/csv/environmental-sustainability

# Module: Water-Accounting

## 7-Withdrawals

# 7.1

Are you able to provide data, whether measured or estimated, on water withdrawals within your operations?

# 7.1a

Please report the water withdrawals within your operations for the reporting year.

Country or region	River basin	Withdrawal type	Quantity (megaliters/year)	Proportion of data that has been verified (%)	Comments
United States of America	Other: Country- wide	Surface	0	76-100	Tracking and reporting system by factory is in place through SHE-PM (Safety, Health and Environmental Sustainability - Performance Management). 100% of water withdrawals have been verified by Bureau Veritas. The assurance statement is available at http://www.nestle.com/csv/performance/assurance
United States of America	Other: Country- wide	Groundwater	13892	76-100	Tracking and reporting system by factory is in place through SHE-PM (Safety, Health and Environmental Sustainability - Performance Management). 100% of water withdrawals have been verified by Bureau Veritas. The assurance statement is available at http://www.nestle.com/csv/performance/assurance
United States of America	Other: Country- wide	Rainwater	0	76-100	Tracking and reporting system by factory is in place through SHE-PM (Safety, Health and Environmental Sustainability - Performance Management). 100% of water withdrawals have been verified by Bureau Veritas. The assurance statement is available at http://www.nestle.com/csv/performance/assurance
United States of America	Other: Country- wide	Municipal water	22560	76-100	Tracking and reporting system by factory is in place through SHE-PM (Safety, Health and Environmental Sustainability - Performance Management). 100% of water withdrawals have been verified by Bureau Veritas. The assurance statement is available at http://www.nestle.com/csv/performance/assurance
China	Other: Country- wide	Surface	0	76-100	Tracking and reporting system by factory is in place through SHE-PM (Safety, Health and Environmental Sustainability - Performance Management). 100% of water withdrawals have been verified by Bureau Veritas. The assurance statement is available at http://www.nestle.com/csv/performance/assurance
China	Other: Country- wide	Groundwater	2801	76-100	Tracking and reporting system by factory is in place through SHE-PM (Safety, Health and Environmental Sustainability - Performance Management). 100% of water withdrawals have been verified by Bureau

Country or region	River basin	Withdrawal type	Quantity (megaliters/year)	Proportion of data that has been verified (%)	Comments
					Veritas. The assurance statement is available at http://www.nestle.com/csv/performance/assurance
China	Other: Country- wide	Rainwater	0	76-100	Tracking and reporting system by factory is in place through SHE-PM (Safety, Health and Environmental Sustainability - Performance Management). 100% of water withdrawals have been verified by Bureau Veritas. The assurance statement is available at http://www.nestle.com/csv/performance/assurance
China	Other: Country- wide	Municipal water	2153	76-100	Tracking and reporting system by factory is in place through SHE-PM (Safety, Health and Environmental Sustainability - Performance Management). 100% of water withdrawals have been verified by Bureau Veritas. The assurance statement is available at http://www.nestle.com/csv/performance/assurance
Mexico	Other: Country- wide	Surface	54	76-100	Tracking and reporting system by factory is in place through SHE-PM (Safety, Health and Environmental Sustainability - Performance Management). 100% of water withdrawals have been verified by Bureau Veritas. The assurance statement is available at http://www.nestle.com/csv/performance/assurance
Mexico	Other: Country- wide	Groundwater	4189	76-100	Tracking and reporting system by factory is in place through SHE-PM (Safety, Health and Environmental Sustainability - Performance Management). 100% of water withdrawals have been verified by Bureau Veritas. The assurance statement is available at http://www.nestle.com/csv/performance/assurance
Mexico	Other: Country- wide	Rainwater	0	76-100	Tracking and reporting system by factory is in place through SHE-PM (Safety, Health and Environmental Sustainability - Performance Management). 100% of water withdrawals have been verified by Bureau Veritas. The assurance statement is available at http://www.nestle.com/csv/performance/assurance
Mexico	Other: Country- wide	Municipal water	116	76-100	Tracking and reporting system by factory is in place through SHE-PM (Safety, Health and Environmental Sustainability - Performance Management). 100% of water withdrawals have been verified by Bureau Veritas. The assurance statement is available at http://www.nestle.com/csv/performance/assurance
Rest of world	Other: Country- wide	Surface	14737	76-100	Tracking and reporting system by factory is in place through SHE-PM (Safety, Health and Environmental Sustainability - Performance Management). 100% of water withdrawals have been verified by Bureau

Country or region	River basin	Withdrawal type	Quantity (megaliters/year)	Proportion of data that has been verified (%)	Comments
					Veritas. The assurance statement is available at http://www.nestle.com/csv/performance/assurance
Rest of world	Other: Country- wide	Groundwater	55495	76-100	Tracking and reporting system by factory is in place through SHE-PM (Safety, Health and Environmental Sustainability - Performance Management). 100% of water withdrawals have been verified by Bureau Veritas. The assurance statement is available at http://www.nestle.com/csv/performance/assurance
Rest of world	Other: Country- wide	Rainwater	55	76-100	Tracking and reporting system by factory is in place through SHE-PM (Safety, Health and Environmental Sustainability - Performance Management). 100% of water withdrawals have been verified by Bureau Veritas. The assurance statement is available at http://www.nestle.com/csv/performance/assurance
Rest of world	Other: Country- wide	Municipal water	21754	76-100	Tracking and reporting system by factory is in place through SHE-PM (Safety, Health and Environmental Sustainability - Performance Management). 100% of water withdrawals have been verified by Bureau Veritas. The assurance statement is available at http://www.nestle.com/csv/performance/assurance
Company- wide	Other: Country- wide	Surface	14791	76-100	Tracking and reporting system by factory is in place through SHE-PM (Safety, Health and Environmental Sustainability - Performance Management). 100% of water withdrawals have been verified by Bureau Veritas. The assurance statement is available at http://www.nestle.com/csv/performance/assurance
Company- wide	Other: Country- wide	Groundwater	76377	76-100	Tracking and reporting system by factory is in place through SHE-PM (Safety, Health and Environmental Sustainability - Performance Management). 100% of water withdrawals have been verified by Bureau Veritas. The assurance statement is available at http://www.nestle.com/csv/performance/assurance
Company- wide	Other: Country- wide	Rainwater	55	76-100	Tracking and reporting system by factory is in place through SHE-PM (Safety, Health and Environmental Sustainability - Performance Management). 100% of water withdrawals have been verified by Bureau Veritas. The assurance statement is available at http://www.nestle.com/csv/performance/assurance
Company- wide	Other: Country- wide	Municipal water	46583	76-100	Tracking and reporting system by factory is in place through SHE-PM (Safety, Health and Environmental Sustainability - Performance Management). 100% of water withdrawals have been verified by Bureau

Country or region	River basin	Withdrawal type	Quantity (megaliters/year)	Proportion of data that has been verified (%)	Comments
					Veritas. The assurance statement is available at http://www.nestle.com/csv/performance/assurance

## 7.1b

Please explain why you are not able to provide data for water withdrawals.

# 7.2

Are you able to provide data, whether measured or estimated, on water recycling/reuse within your operations?

Yes

## 7.2

Are you able to provide data, whether measured or estimated, on water recycling/reuse within your operations?

# 7.2a

Please report the water recycling/reuse within your operations for the reporting year.

Country or region	River basin	Quantity (megaliters/year)	Proportion of data that has been verified (%)	Comments
United States of America	Other: Country- wide	1919	76-100	This quantity corresponds to the total water flow that is captured for further use such as irrigation on-site and off-site. It does not include water volumes which are reused or recycled within the operations.
China	Other: Country- wide	62	76-100	This quantity corresponds to the total water flow that is captured for further use such as irrigation on-site and off-site. It does not include water volumes which are reused or recycled within the operations.
Mexico	Other: Country- wide	135	76-100	This quantity corresponds to the total water flow that is captured for further use such as irrigation on-site and off-site. It does not include water volumes which are reused or recycled within the operations.
Rest of world	Other: Regions- wide	4805	76-100	This quantity corresponds to the total water flow that is captured for further use such as irrigation on-site and off-site. It does not include water volumes which are reused or recycled within the operations.
Company- wide	Other: Regions- wide	6921	76-100	This quantity corresponds to the total water flow that is captured for further use such as irrigation on-site and off-site. It does not include water volumes which are reused or recycled within the operations. This represents 5% of the total water withdrawal of the company.

## 7.2a

Please report the water recycling/reuse within your operations for the reporting year.

River basin River basin River basin	Country or region	River basin	Quantity (megaliters/year)	Proportion of data that has been verified (%)	Comments
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## 7.2b

Please explain why you are not able to provide data for water recycling/reuse within your operations.

#### 7.2b

Please explain why you are not able to provide data for water recycling/reuse within your operations.

### 7.3

Please use this space to describe the methodologies used for questions 7.1 and 7.2 or to report withdrawals or recycling/reuse in a different format to that set out above.

Water withdrawal is the sum of water used by the plant from all sources, including purchases from suppliers as well as surface, ground or rain water sources. This includes water that may be treated through industrial services (such as softening and demineralising), non-contact cooling water, water used for cleaning and water used as a raw material (e.g. for bottled waters) but does not include water contained in raw materials (e.g. from milk).

## 7.3

Please use this space to describe the methodologies used for questions 7.1 and 7.2 or to report withdrawals or recycling/reuse in a different format to that set out above.

#### 7.4

Are any water sources significantly affected by your company's withdrawal of water?

No

### 7.4a

Please list any water sources significantly affected by your company's withdrawal of water.

Country or geographical reach	River basin	Water source	Impact	Company action and outcomes
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#### 7.4b

#### You may explain here why your company's withrawal of water does not significantly affect any water sources.

As part of The Nestlé Policy on Environmental Sustainability, water preservation is one of the key focus area. We work to reduce the amount of water withdrawn per kilo of product; assure that our activities respect local water resources and we take care that water we discharge into the environment is clean.

When we withdraw water from small watershed, we constantly and carefully monitor water resources ensuring that our withdrawals do not affect water sources. In most of the cases we abstract water from big watersheds where there is no significant impact.

Nestlé Waters has developed a monitoring system of physical parameters (for example: withdrawals, level, flow, conductivity, temperature, and rainfall) for all catchments. Frequent interpretation of data is critical in order to immediately detect any abnormality and anticipate long-term trends. It allows us to implement immediate action including temporarily reducing or stopping bottled water production. The ability to react quickly is essential if we are to avoid deviations that may lead to a major intervention on the catchment, a temporary decrease of water supply or even the permanent loss of a resource for our bottling activities. Although our sources of water for bottling are typically separate from those drawn on by local communities or municipalities, we support community-wide water resource management initiatives wherever possible. Environmental monitoring extends beyond the immediate locality of our water sources to include the whole water recharge area. In partnership with local communities, we work to ensure that only as much water is taken from an aquifer as its replenishment capacity allows.

The Water Resource Review is an internal audit process to evaluate the long term sustainability of each of our sources. The review includes an internal risk assessment tool that anticipates as soon as possible corrective actions that may be needed to avoid any potential water supply issues. The Water Resource Review allows us to rank our different sites in order to identify our most sensitive sites and adjust our local protection policy, or initiate new prevention plans in collaboration with the local community. These measures may include land acquisitions, extension of protection perimeters or transformation of farming practices.

Maintaining the highest standards means implementing protection measures against accidental or voluntary actions. At Nestlé Waters we have a complete set of technical specifications covering how drillings, pumping or storage operations shall be manoeuvred to comply with strict hygiene conditions. The technical specifications include disinfection processes for all the equipment that are directly in contact with water to avoid any contamination. Technical requirements also set standards for materials, such as the mandatory use of stainless steel or high density polyethylene for pipes, and 304L or 316L stainless steel for wellheads or equipment within the well. Technical protection also deals with the overall design of the catchment system to minimise impacts to retention zones and identify the time needed during maintenance in order to lower risk of microbiological contamination.

Our stringent specifications have been recognised by French standardisation authorities (Afnor) who asked Nestlé Waters to review technical guidelines for mineral water operational systems, which have since been published.

We adhere to measures that are adapted to the specific hydrogeological context of each source. These measures aim to prevent external disturbance within the immediate area surrounding the catchment, and to ensure that no contamination occurs during transport to the bottling plant. This includes locks and motion sensors covering all potential access points. Motion sensor activity is directly connected to our security guards and production offices. If there is a security breach, we are able to initiate measures to stop pumps or divert flows as necessary. At some of our sources, the bottling production area is very near to the source, whereas in others a greater distance from source to the bottling area allows more reaction time and different security measures.

7.4c

Please explain why you do not know if any water sources are significantly affected by your company's withdrawal of water.

### **Further Information**

Please find attached: Nestlé Policy on Environmental Sustainability Nestlé in Society - Summary Report 2012 Nestlé Waters CSV Report 2011

#### Attachments

https://www.cdproject.net/sites/2013/42/12942/CDP Water Disclosure 2013/Shared Documents/Attachments/CDPWaterDisclosure2013/7.WithdrawalsandRecycling/2012 - Summary - CSV and meeting our commitments report.pdf https://www.cdproject.net/sites/2013/42/12942/CDP Water Disclosure 2013/Shared Documents/Attachments/CDPWaterDisclosure2013/7.WithdrawalsandRecycling/The Nestlé Policy on Environmental Sustainability.pdf https://www.cdproject.net/sites/2013/42/12942/CDP Water Disclosure 2013/Shared Documents/Attachments/CDPWaterDisclosure2013/7.WithdrawalsandRecycling/Nestlé\_Waters\_CSV\_report\_2011.pdf

## 8-Discharges

### 8.1

Are you able to identify discharges of water from your operations by destination, by treatment method and by quantity and quality using standard effluent parameters?

### 8.1a

Please explain why you are not able to identify discharges from your operations by destination, treatment method, quantity and quality, and whether you have any plans to put in place systems that would enable you to do so.

## 8.2

Did your company pay any penalties or fines for significant breaches of discharge agreements or regulations in the reporting period?

### No

#### 8.2a

Please describe the location and impact of the discharge that was the subject of the significant breach(es), the associated fines and any actions taken to minimise the risk of future non-compliance.

Country or region	River basin	Impact	Fines and penalties	Company action and outcomes
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## 8.3

### Are any water bodies and related habitats significantly affected by discharges of water or runoff from your operations?

### No

Please list any water bodies and associated habitats which are significantly affected by discharge of water or runoff from your operations.

Country or region Rive	r basin Water body	Impact	Company action and outcomes
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8.3b

### You may explain here why your company's discharge of water does not significantly affect any water bodies or associated habitats.

The Nestlé Corporate Business Principles and The Nestlé Policy on Environmental Sustainability commit the Company to respect and comply with existing laws and regulations concerning the environment in local markets, and to apply Nestlé internal standards suitable to local conditions in those regions where specific environmental legislation is non-existent or insufficient.

The Nestlé Environmental Requirements define mandatory requirements across all Nestlé operations. Whilst their primary application is in those jurisdictions where environmental legislation is non-existent or under-developed, they must be met where applicable by all such Nestlé operations regardless of location.

New sites are intensively investigated and monitored for both quality and quantity, including potential pollution sources and hydrogeology.

Guidelines for Sustainable Water Resources Management are distributed to all technical directors, factory heads and Water Resources Community in Nestlé Waters factories. This document is supported by the Water Resources Review program, an internal audit system that is conducted on a regular basis.

The long-term supply of water with high quality and sufficient quantity is essential for our factories. To raise awareness at a local operational level, identify key issues and risks, and devise action plans for more sustainable water use, especially in water-stressed or water-scarce areas, our Water Resources Review programme focuses on five areas: water quantity; water quality; regulatory compliance; site protection; and relationships with other stakeholders. Hydrogeological monitoring and possibly aquifer modelling are also used to assess the availability of surface and underground water. The impact of our operations linked to water transportation (pipelines and storage tanks), water treatment and wastewater processes are also analysed.

On the local level, a continuous water resource managing system is in place with daily monitoring (quantity and quality) done by Water Resources Champions or Factory Environmental Officers at each Nestlé factory.

We monitor and improve water efficiency through our water resources management specialists and in our factories with our environmental specialists in line with the Nestlé Environmental Management System.

We use municipal wastewater treatment facilities wherever possible, but where these are not efficient enough, we invest in our own facilities, returning treated water to the environment according to local legislation and internal standards, whichever is more stringent. We have 301 on-site treatment plants, and in 2012 invested CHF 9 million in new and improved facilities.

We discharged 84.3 million m3 of water in 2012, with an average of 93.7 mg Chemical Oxygen Demand per litre. Compared to the previous period, the quality of water discharged declined by 37%. This drop is due to an issue which is being resolved in one of our factories, as well as maintenance activities on another factory.

Please explain why you do not know if any water bodies and associated habitats are significantly affected by discharge of water or runoff from your operations.

#### **Further Information**

For more information, please see: http://www.nestle.com/csv/water http://www.nestle-waters.com/environment

#### Attachments

https://www.cdproject.net/sites/2013/42/12942/CDP Water Disclosure 2013/Shared Documents/Attachments/CDPWaterDisclosure2013/8.Discharges/Nestle Corporate Business Principles - English.pdf https://www.cdproject.net/sites/2013/42/12942/CDP Water Disclosure 2013/Shared Documents/Attachments/CDPWaterDisclosure2013/8.Discharges/The Nestlé Policy on Environmental Sustainability.pdf

### 9-Intensity

### 9.1

Please provide any available financial intensity values for your company's water use across its operations.

Country or region	River basin	Financial metric	Water use type (megaliters)	Currency	Financial intensity (Currency/mega- liter)	Please provide any contextual details that you consider relevant to understand the units or figures you have provided.
Company- wide	Other: Country- wide	Profit	Withdrawals	CHF	101678	In 2012, trading operating profit amounted to 14012 million CHF and we withdrew 137807 megalitre of water. Water withdrawal is the sum of water used by the plant from all sources, including purchases from suppliers as well as surface, ground or rain water sources. This includes water that may be treated through industrial. services (such as softening

Country or region	River basin	Financial metric	Water use type (megaliters)	Currency	Financial intensity (Currency/mega- liter)	Please provide any contextual details that you consider relevant to understand the units or figures you have provided.
						and demineralising), non-contact cooling water, water used for cleaning and water used as a raw material (e.g. for bottled waters) but does not include water contained in raw materials (e.g. from milk).

9.2

Please provide any available water intensity values for your company's products or services across its operations.

Country or region	River basin	Product	Product unit	Water unit	Water intensity (Water unit/product unit)	Water use type	Please provide any contextual details that you consider relevant to understand the units or figures you have provided.
Company- wide	Other: Country- wide	all	tonne	Other: m3	2.89	Withdrawals	We aim to be the most efficient water user among food manufacturers. We withdrew 2.89 m3 per tonne of product; this is a 9% reduction in withdrawal per tonne of product from 2011. Water withdrawal is the sum of water used by the plant from all sources, including purchases from suppliers as well as surface, ground or rain water sources. This includes water that may be treated through industrial services (such as softening and demineralising), non-contact cooling water, water used for cleaning and water used as a raw material (e.g. for bottled waters) but does not include water contained in raw materials (e.g. from milk). The total production volume is defined as the total of all products produced at a factory, based on net weight.

Module: Sign Off

Please enter the name of the individual that has signed off (approved) the response and their job title

Pascal Gréverath, Nestlé AVP, Head of Environmental Sustainability

CDP 2013 CDP Water Disclosure 2013 Information Request