

**Module: Introduction****Page: W0. Introduction**

---

**W0.1****Introduction**

Please give a general description and introduction to your organization.

Cummins Inc., a global power leader, is a corporation of complementary business units that design, manufacture, distribute and service engines and related technologies, including fuel systems, controls, air handling, filtration, emission solutions and electrical power generation systems. Headquartered in Columbus, Indiana, (USA) Cummins employs approximately 46,000 people worldwide and serves customers in approximately 190 countries and territories through a network of more than 600 company-owned and independent distributor locations and approximately 6,500 dealer locations. Cummins earned \$1.48 billion on sales of \$17.3 billion in 2013. Press releases can be found on the Web at [www.cummins.com](http://www.cummins.com).

Complementing our strong 2013 financial performance, a critical determinant of Cummins' success over the long term is our ability to create an organization that is focused on delivering on our commitments to the full range of stakeholders we serve. The values that define Cummins are designed to endure and have never been more important to us than in today's economic climate. Our 2013-2014 Sustainability Report this year celebrates our six core values: Integrity, Innovation, Delivering Superior Results, Corporate Responsibility, Diversity and Global Involvement. Our leaders have embraced these values to guide the Company in good times and bad. Just since their adoption in the year 2000, they have helped Cummins successfully navigate multiple recessions, tremendous technological changes in our industry and the advent of fierce global competition. Cummins' values provide us with a foundation that enables our Company to look at challenging times not as a moment to stand still, but rather as an opportunity to position ourselves for a bright future, relying on our values to guide us more than ever.

Our Company has long worked under the premise that our strength is dependent on the health of the communities in which we operate and where our products are sold. From that perspective, the notion of sustainability is not a luxury, but rather a critical component to our long-term success.

---

**W0.2****Reporting Year**

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

Period for which data is reported
Tue 01 Jan 2013 - Tue 31 Dec 2013

---

**W0.3****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 operational control is exercised

---

**W0.4****Exclusions**

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

No

---

**W0.4a****List of Exclusions**

Please report the exclusions in the following table

Exclusion	Please explain why you have made the exclusion
-----------	------------------------------------------------

---

### Further Information

1.1A Science and Technology Advisory Council Cummins seeks advice from its Science and Technology Advisory Council in developing products to meet various standards, to reduce the Company's environmental footprint and to meet customer demands. The Council, formed in 1993, has given the Company access to some of the country's leading scientific thinkers and policymakers from the worlds of academia, industry and government. The Council was restructured in 2010 to facilitate access to a broader group of international specialists and align their expertise with the specific topics being addressed by the Council at a particular time. The permanent members are: • Chairman Dr. Gerald Wilson, former Dean of Engineering at the Massachusetts Institute of Technology. • Dr. Harold Brown, former U.S. Secretary of Defense and former President of the California Institute of Technology. Other senior international scientists and engineers are invited to participate as advisors depending on the topic. 1.2A In addition to implementing energy efficiency capital projects, Cummins has trained a broad network of Energy Champions who coach and mentor site Energy Leaders to find and implement, through a process called an energy treasure hunt, low and no-cost energy projects that also save money for their sites. The Company now has about 115 trained Energy Champions and Energy Champion deputies at 38 sites and more than 270 Energy Leaders, who completed 10-week programs over the lunch hour in energy efficiency. These Champions and Leaders have been recognized in their plant communities by the executive who heads the climate change work and their efforts have been applauded. Many of our plants calculate, communicate and measure on a CO2 per engine metric. For three years, Cummins has held an event we call "the Unplugged Challenge" which challenges sites to reduce energy use during their "at rest" state during prolonged periods of shutdown, usually at holidays. Winners in several categories are chosen and communicated about throughout the Company. Banners were created to hang in the plants, and often were presented to them by their business unit executive to celebrate the accomplishment. The experience gleaned from these energy programs, will support our efforts in water conservation and water management as we strive to elevate our water management programs to the same level of maturity as our energy initiatives. However, water is more a more complex issue than energy and notwithstanding our opportunity to apply lessons learned from our energy management program, other factors are being considered in our water strategy. Furthermore, Cummins is tackling the broader issues of sustainability and sustainability integration through the formation of the Action Committee for Environmental Sustainability (ACES). Through this effort, Cummins will prioritize our efforts to ensure that our focus and resources are aligned to achieve the most significant environmental gains. Water is recognized as a critical challenge by the company and is a specific consideration being evaluated by ACES.

### Module: Current State

#### Page: W1. Context

---

#### W1.1

Please rate the importance (current and future) of water quality and water quantity to the success of your organization

Water quality and quantity	Importance rating	Please explain
Direct use: sufficient amounts of good quality freshwater available for use across your own operations	Vital for operations	At a minimum, good quality fresh water is required to support employee needs (i.e. drinking and sanitation). We also use commonly use fresh water in our processes, most notably cooling, machining, and washing processes. Opportunities may exist to use recycled or produced water to meet these needs. We also consider process choices to reduce or eliminate process water needs as dictated by our risk evaluation.
Direct use: sufficient amounts of recycled, brackish and/or produced water available for use across your own operations	Vital for operations	At a minimum, good quality fresh water is required to support employee needs (i.e. drinking and sanitation). We also use commonly use fresh water in our processes, most notably cooling, machining, and washing processes. Opportunities may exist to use recycled or produced water to meet these needs. We also consider process choices to reduce or eliminate process water needs as dictated by our risk evaluation.
Indirect use: sufficient amounts of good quality freshwater available for use across your value chain	Vital for operations	Our suppliers also require freshwater to support employee needs (i.e. drinking and sanitation). Suppliers providing machinery typically have similar needs for cooling, machining, and washing processes. The highest demand in our supply chain relates to processing metals, which has opportunities to substitute lower quality water sources.
Indirect use: sufficient amounts of recycled, brackish and/or produced water available for use across your value chain	Vital for operations	Our suppliers also require freshwater to support employee needs (i.e. drinking and sanitation). Suppliers providing machinery typically have similar needs for cooling, machining, and washing processes. The highest demand in our supply chain relates to processing metals, which has opportunities to substitute lower quality water sources.

**W1.2**

**Have you evaluated how water quality and water quantity affects /could affect the success (viability, constraints) of your organization's growth strategy?**

Yes, evaluated over the next 5 years

**W1.2a**

**Please explain how your organization evaluated the effects of water quality and water quantity on the success (viability, constraints) of your organization's growth strategy?**

Cummins uses a multi-pronged approach to evaluating risks and opportunities. As part of Cummins Business Continuity Planning function, sites prioritize and address key risks of which water related issues are one component.

Cummins augments this process with a variety of water specific processes and tools. Cummins recognizes that water is a local/regional issue with multiple dimensions (physical, regulatory, economic, and social) that requires site- specific management responses. To address this issue, Cummins developed a detailed cause and effect (C&E) matrix to prioritize our sites combining multiple factors including: 1) the site's self-assessment of water risk from a survey on source water sustainability, quality, discharge, regulatory, and cost considerations addressing both current and future (2017 and beyond) conditions, 2) the size and complexity of the site, 3) the presence or absence of water supply assessments, 4) and watershed-specific water stress indicators. For water stress indicators, Cummins worked with an external consultant to develop a composite picture of current and future water stress by combining data from WRI Aqueduct Tool, WBCSD Global Water Tool, and consultant expertise in the countries/regions where we operate. Portions of this data extend to a 2025 planning horizon. Based upon these results, Cummins prioritized and conducted site level audits at over 20 of our prioritized sites and watershed assessments at the 3 highest risk geographies during 2012 and 2013. These audits and assessments identified specific areas for water management improvements including conservation, risk management, and community/watershed engagement opportunities.

In 2013, Cummins also developed a tool that prompts evaluation of risk mitigation actions required as part of our management of change processes. This tool considers economic conditions, governance, accessibility of water for basic health and sanitation needs, and our own dependence on water as a more representative measure of water related risks. The tool automates evaluation of over 500 facilities throughout the world including reference locations for our facilities, joint ventures, and key suppliers. We are now working to deploy this tool throughout business processes.

---

**W1.2b**

**What is the main reason for not having evaluated how water quality and water quantity affects /could affect the success (viability, constraints) of your organization's growth strategy, and are there any plans in place to do so in the future?**

Main reason	Current plans	Timeframe until evaluation	Comment
-------------	---------------	----------------------------	---------

---

**W1.3**

**Has your organization experienced any detrimental impacts related to water in the reporting period?**

No

---

W1.3a

Please describe the detrimental impacts experienced by your organization related to water in the reporting period

Country	River basin	Impact indicator	Impact	Description of impact	Overall financial impact	Response strategy	Description of response strategy
---------	-------------	------------------	--------	-----------------------	--------------------------	-------------------	----------------------------------

---

W1.3b

Please choose the option below that best explains why you do not know if your organization experienced any detrimental impacts related to water in the reporting period and any plans you have to investigate this in the future

Primary reason	Future plans
----------------	--------------

---

**Further Information**

Cummins answered no to question 1.3. Facilities in two locations, later listed in this reporting as exposed to water risk, experienced water supply interruptions from the public utility during the reporting period. Water needs during this time were met using trucked water. The need to use trucked water did not materially affect the financial or production performance of these facilities. These situations, and similar situations at these and other facilities, will be closely monitored for changing conditions as further mitigation actions are being implemented and maintained. Our water management program and the actions described in latter sections of this document are specifically directed at managing current and future risk exposure associated with events of this nature.

## Module: Risk Assessment

### Page: W2. Procedures and Requirements

---

#### W2.1

**Please select the option that best describes your procedures with regard to assessing water risks and provide an explanation as to why this option is suitable for your organization**

Water is integrated into a comprehensive, company-wide risk assessment process incorporating both direct operations and supply chain

---

#### W2.1a

**You may provide additional information about your approach to assessing water risks here**

Our Cummins Business Continuity Planning function prioritizes key risks of which water related issues are one component. This is augmented by water specific processes and tools:

1. A cause and effect matrix to prioritize sites using: 1) site-level water risk self-assessment survey, 2) facility characteristics, 3) watershed knowledge, 4) and a composite picture of water stress using external datasets and consultant expertise (current and future conditions 2025).
  2. Site audit process of priority sites to define risks and opportunities.
  3. Detailed watershed assessments conducted at the top 3 prioritized sites.
  4. Water specific question sections included as part of the annual HSEMS internal audit process
  5. Water risk tool that automates evaluation of over 500 locations throughout the world, evaluates risk based upon operational details, water risk indicators and socioeconomic factors, and highlights associated risk-driven requirements as part of change management process.
- 

#### W2.2

Please state how frequently you undertake water risk assessments, what geographical scale and how far into the future you consider

Frequency	Geographic scale	Timeframe
Annual - Cummins launched its corporate wide water risk screen In 2012. Annually Cummins reviews this data and adds new sites to determine if they are water scarce. Sites prioritized through this process are engaged at least annually using audits, management review, and site specific objectives and targets. A specific time period to revisit the company wide assessment has not been established.	Facility	The screening process used to prioritize facilities used a five year horizon based upon local input and a 10+ year horizon for water stress projections.

**W2.3**

Please state the methods used to assess water risks

Method
FAO/AQUASTAT
Internal company knowledge
WBCSD Global Water Tool
Life Cycle Assessment
Other: Internally Developed Tool
WRI Aqueduct
Other: World Bank Governance Indicators

**W2.4**

Which of the following contextual issues are always factored into your organization's water risk assessments?

Issues	Choose option	Please explain
Current water availability and quality parameters at a local level	Relevant, included	Cummins recognizes that water supply availability and quality is critical for our operations. Based upon our risk screening activities, the company conducted water source assessments in our three most critical communities. Water availability is considered through our water audit process at prioritized facilities and our internal audit process as part of Cummins Enterprise HSEMS. Water must be ranked and assessed as part of our business continuity planning process.
Current water regulatory frameworks and tariffs at a local level	Relevant, included	Cummins recognizes that regulatory constraints can affect our operations related to both water supply availability and discharge requirements. The water assessments noted above addressed both current and future regulatory conditions. The water audit data collection process also drives assessment of regulatory conditions. Finally, as part of Cummins global enterprise HSEMS, all sites are required to conduct an annual compliance audit that includes water and wastewater requirements.
Current stakeholder conflicts concerning water resources at a local level	Relevant, included	In areas where access to adequate fresh water is inconsistent, the potential for stakeholder conflicts exists. The water source assessments referenced above address this topic. Additionally, recently set a goal to achieve "Water Neutrality" at 15 facilities in the key water stressed countries. This goal and the activities supporting its execution are coupled with our long standing Corporate Responsibility Program to promote active engagement with community partners.
Current implications of water on your key commodities/raw materials	Relevant, included for some facilities/suppliers	In preparing our 2020 sustainability plan, Cummins evaluated our footprint including a representative LCA for one engine product. This effort indicated that approximately 88% of our water footprint is associated with supply chain, predominantly metals extraction and processing. In our 2020 plan, Cummins identifies raw materials efficiency as a priority area. We are also launching a process that will assess the water risk exposure of our largest supplies.
Current status of ecosystems and habitats at a local level	Not evaluated	Cummins has implemented a process for assessing watershed conditions, but has not yet evaluated the inclusion of broader ecosystem and habitat considerations which may be considered in future enhancements.
Estimates of future changes in water availability at a local level	Relevant, included	Cummins water risk process incorporates this into the site-specific water risk self-assessment survey, inclusion of leading water stress indicators (current and future), watershed assessments, and consultant expertise.
Estimates of future potential regulatory changes at a local level	Relevant, included	Cummins water risk process incorporates this into the site-specific water risk self-assessment survey, watershed assessments, and consultant expertise.
Estimates of future potential stakeholder conflicts at a local level	Relevant, included	Source assessments cover both current and future conditions. Additionally, our "Water Neutrality" goal is specifically aimed to promote engagement and reduce the risk associated with future stakeholder conflicts, including a Stakeholder Mapping and Engagement step

Issues	Choose option	Please explain
Estimates of future implications of water on your key commodities/raw materials	Relevant, included for some facilities/suppliers	In preparing our 2020 sustainability plan, Cummins evaluated our footprint including a representative LCA for one engine product. This effort indicated that approximately 88% of our water footprint is associated with supply chain, predominantly metals extraction and processing. In our 2020 plan, Cummins identifies raw materials efficiency as a priority area. We are also launching a process that will assess the water risk exposure of our largest suppliers using our water risk tool.
Estimates of future potential changes in the status of ecosystems and habitats at a local level	Not evaluated	Cummins has implemented a process for assessing watershed conditions, but has not yet evaluated the inclusion of broader ecosystem and habitat considerations which may be considered in future enhancements.
Scenario analysis of availability of sufficient quantity and quality of water relevant for your operations at a local level	Relevant, included	Based upon our data analysis and risk evaluation, we estimate that water supply availability will continue to decline, particularly in existing water scarce areas within emerging markets. To manage these conditions, we have developed a tool defines requirements and considerations that reduce both water consumption and dependency on water in areas characterized as high risk. We are working to embed this tool throughout our processes that govern new facilities and management of change processes.
Scenario analysis of regulatory and/or tariff changes at a local level	Relevant, included	In response to decreasing water availability, we expect regulations governing water use and allocation to strengthen. Our risk process evaluates current conditions, 2017 conditions, and expected risk trends beyond 2017 including regulatory and water pricing risks.
Scenario analysis of stakeholder conflicts concerning water resources at a local level	Relevant, included	In response to decreasing water availability, we expect the potential for stakeholder conflict to rise. Our actions described above coupled with our "Water Neutrality" goal promote actions that work to address this issue.
Scenario analysis of implications of water on your key commodities/raw materials	Relevant, not yet included	We expect that suppliers will face similar constraints to those we project. However, at the current maturity level of our program, we have not yet evaluated the range of specific implications and actions associated with this facet.
Scenario analysis of potential changes in the status of ecosystems and habitats at a local level	Not evaluated	Cummins has implemented a process for assessing watershed conditions, but has not yet evaluated the inclusion of broader ecosystem and habitat considerations which may be considered in future enhancements.
Other	Not evaluated	We believe our water risk and management program is comprehensive based upon all topics previously covered within this section, but remain open to enhancements based upon the changing dynamics of water conditions and associated business risks and opportunities.

**W2.4a**

**Which of the following stakeholders are always factored into your organization's water risk assessments?**

Stakeholder	Choose option	Please explain
Customers	Relevant, included	Our life cycle and supply chain assessment conducted as part of the 2020 sustainability plan development concluded that use of our products had minimal water footprint. However, customers would be adversely impacted by interruptions that could occur. Therefore, this stakeholder group is considered by virtue of the focus on business continuity planning.
Employees	Relevant, included	Employee needs (drinking water and sanitation) represent a base load use that will always exist. Ensuring availability of water for these purposes is critical. Employees are also members of the community where we operate and have also identified responsible environmental performance as key priorities. These factors have been considered in development of our water strategy and program actions.
Investors	Relevant, included	Cummins Mission includes "creating wealth for all stakeholders". This concept drives us to implement actions that are consistent with long term wealth creation for the company and its shareholders. All risks are evaluated in this context.
Local communities	Relevant, included	A stated value of Cummins is to "Serve and improve the communities in which we live". This value coupled with the business risk exposure considerations discussed above prompt our actions and goals that are specifically focused on community.
NGOs	Relevant, included for some facilities/suppliers	We do not specifically consider NGOs in our assessment separately from a holistic view of the community. However as part of our Corporate Responsibility approach that is core to the Neutrality objective, we encourage sites to partner with NGOs and create coalitions within the community to execute projects.
Other water users at a local level	Relevant, included for some facilities/suppliers	As a result of our community engagement, other water users may be considered (i.e. agricultural uses near our Phaltan site). However, other users are not specifically evaluated, particularly in larger metropolitan areas.
Regulators at a local level	Relevant, included for some facilities/suppliers	Regulatory agencies are considered through the compliance assessment process. Additionally, Cummins government affairs office engages local governments on topics that are of significant importance to the region.
Statutory special interest groups at a local level	Not evaluated	Special interest groups are not specifically focused upon within our risk assessment process and are handled proactively at the corporate, regional, and site-levels as needed and relevant to our business. Our Government and Public Affairs function tracks, monitors, and actively engages on business relevant special interest issues.
Suppliers	Relevant, not yet included	As part of the water risk tool that we have developed, Cummins is beginning to beginning to address the issue of supplier water risk. Cummins expects to begin assessing the risk exposure and mitigation actions related to its largest suppliers in 2014 and 2015.
Water utilities/suppliers at a local level	Relevant, included for some facilities/suppliers	Our water audit process encourages sites to routinely interact with their utility suppliers. Actual engagement is variable and conducted at the facility level.

Stakeholder	Choose option	Please explain
Other	Not evaluated	Our water risk and management program incorporates the stakeholders previously covered within this section, but we remain open to incorporate additional categories based upon the changing dynamics of water conditions and associated business risks and opportunities.

---

**W2.5**

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

No

---

**W2.5a**

Please provide the proportion of key suppliers you require to report on their water use, risks and management and the proportion of your procurement spend this represents

Proportion of key suppliers %	Total procurement spend %	Rationale for this coverage

---

**W2.5b**

**Please choose the option that best explains why you do not require your key suppliers to report on their water use, risks and management**

Primary reason	Please explain
Other: Program Maturity	In the 2020 Sustainability Plan, Cummins is beginning to address supplier water risk. Cummins conducted a representative LCA for one engine product and a Supply Chain Environmental Hotspots Assessment that evaluated and prioritized water-related impacts of raw materials. We expect to further assess risk exposure and mitigation actions related to its largest suppliers in 2014/2015 and will focus on those suppliers deemed to have risk exposure rather than requiring all suppliers to provide data.

---

#### Further Information

**Module: Implications**

**Page: W3. Water Risks**

---

#### W3.1

**Is your organization exposed to water risks, either current and/or future, that could generate a substantive change in your business, operations, revenue or expenditure?**

Yes, direct operations only

---

#### W3.2

**Please provide details as to how your organization defines substantive change in your business, operations, revenue or expenditure from water risk**

Cummins uses a multi-pronged approach to evaluating risks and opportunities and determining if they are substantive to our business:

Cummins Business Continuity Planning function prioritizes and addresses key risks of which water related issues are one component.

Cummins developed a detailed cause and effect (C&E) matrix to prioritize our sites combining multiple factors including: 1) the site's self-assessment of water risk from a survey on source water sustainability, quality, discharge, regulatory, and cost considerations addressing both current and future (2017 and beyond)

conditions, 2) the size and complexity of the site, 3) the presence or absence of water supply assessments, 4) and watershed-specific water stress indicators. For water stress indicators, Cummins worked with an external consultant to develop a composite picture of current and future water stress by combining data from WRI Aqueduct Tool, WBCSD Global Water Tool, and consultant expertise in the countries/regions where we operate. Portions of this data extend to a 2025 planning horizon. Scoring and weighting factors were applied to each of the 4 components of the C&E matrix and an 'at risk' threshold was defined as any sites scoring 150 or above in total composite score.

Based upon these results, Cummins conducted detailed watershed assessments at each of the 3 locations scoring above the 150 'at risk' threshold, plus over 20 site level audits to further validate conditions at prioritized sites. These audits and assessments identified specific areas for water management improvements including conservation, risk management, and community/watershed engagement opportunities.

### W3.2a

**Please complete the table below providing information as to the number of facilities in your direct operations exposed to water risks that could generate a substantive change in your business, operations, revenue or expenditure. Please also provide either the proportion of cost of goods sold, global revenue or global production capacity that could be affected across your entire organization at the river basin level**

Country	River basin	Number of facilities within the river basin exposed to water risk	Reporting metric	Proportion of chosen metric that could be affected within the river basin
India	Krishna	3	Other: % Global Labor Hours	6-10
Brazil	Parana	1	Other: % Global Labor Hours	1-5
Mexico	Panuco	1	Other: % Global Labor Hours	6-10
China	Hai Ho	1	Other: % Global Labor Hours	1-5

### W3.2b

**Please list the inherent water risks that could generate a substantive change in your business, operations, revenue or expenditure, the potential impact to your direct operations and the strategies to mitigate them**

Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
India	Krishna	Physical-Seasonal supply variability/Inter annual variability	Higher operating costs	Potential for inadequate or unreliable water supplies in the short- and long-term horizons, which could lead to operational disruptions, increased water pricing, investment in contingency plans, and increased capital expenditures to manage growth within water use allocation limits.	Current-up to 1 year	Highly probable	Low	Other: Blended strategy of performance standards, capital investment, and community engagement	Low	A watershed assessment was conducted to better understand water sourcing risks, alternatives, and overall watershed conditions. Responses include continued water conservation measures in existing operations, increase in water storage capacity, and deployment of low/no water use processes such as air cooled chiller systems where warranted based upon facility water dependency. These systems typically require increased capital expenditure and increased operating costs related to higher energy use, but off-set the potential risks associated with interruption of operations.

Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
										However, Cummins is also using technologies such as regenerative dynos to manage the costs associated with potential energy impacts. Also, developed specific goals that include both conservation and community alignment. Cummins will continue to monitor dynamic conditions and adjust strategies accordingly.
Brazil	Parana	Physical-Seasonal supply variability/Inter annual variability	Higher operating costs	Potential for inadequate or unreliable water supplies in the short- and long-term horizons, which could lead to operational disruptions, increased water pricing, investment in contingency plans, and	1-3 years	Probable	Low	Other: Blended strategy of performance standards, capital investment, and community engagement	Low	This site was recently elevated to high risk based upon facility expansion and recent drought conditions within Brazil. A watershed assessment is planned in order to better understand and evaluate water sourcing risks, alternatives, and

Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
				increased capital expenditures to manage growth within water use allocation limits.						overall watershed conditions. The company is also constructing additional facilities remote to this location as part of our growth plans that will diversify our footprint and reduce localized exposure. In addition to continued water conservation measures and technologies, additional response measures may include deployment of additional water storage and low/no water use processes such as air cooled chiller systems where warranted. Cummins will continue to monitor dynamic conditions and adjust strategies accordingly.

Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
Mexico	Panuco	Physical-Projected water scarcity	Higher operating costs	Potential for inadequate or unreliable water supplies in the short- and long-term horizons, which could lead to operational disruptions, increased water pricing, investment in contingency plans, and increased capital expenditures to manage growth within water use allocation limits.	4-6 years	Unlikely	Low	Other: Blended strategy of performance standards, capital investment, and community engagement	Low	A watershed assessment was conducted to better understand water sourcing risks, alternatives, and overall watershed conditions. A response plan was developed and is in the process of being implemented including further due diligence on mitigation measures, evaluating of water sourcing options, and continued water conservation measures. Also, developed specific goals that include both conservation and community alignment. . Cummins will continue to monitor dynamic conditions and adjust strategies accordingly.

Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
China	Hai Ho	Physical-Projected water scarcity	Higher operating costs	Potential for inadequate or unreliable water supplies in the long-term horizons, which could lead to operational disruptions, increased water pricing, investment in contingency plans, and increased capital expenditures to manage growth within water use allocation limits.	>6 years	Unlikely	Low	Other: Blended strategy of performance standards, capital investment, and community engagement	Low	This site was recently elevated to high risk based upon facility expansion coupled with future water scarcity conditions in the region. A watershed assessment is planned in order to better understand and evaluate water sourcing risks, alternatives, and overall watershed conditions. Also, developed specific goals that include both conservation and community alignment. Cummins will continue to monitor dynamic conditions and adjust strategies accordingly.

Please list the inherent risks that could generate a substantive change in your business operations, revenue or expenditure, the potential impact to your supply chain and the strategies to mitigate them

Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
---------	-------------	-------------	------------------	-----------------------	-----------	------------	-----------------------------------------	-------------------	----------------------------	-------------------------------

W3.2d

Please choose the option that best explains why you do not consider your organization to be exposed to water risks in your direct operations that could generate a substantive change in your business, operations, revenue or expenditure

Primary reason	Please explain
----------------	----------------

W3.2e

Please choose the option that best explains why you do not consider your organization to be exposed to water risks in your supply chain that could generate a substantive change in your business, operations, revenue or expenditure

Primary reason	Please explain
Other: Supplier risk not yet evaluated at this level	As part of our 2020 Sustainability Plan, Cummins is beginning to address the issue of supplier water risk. Cummins conducted a representative LCA for one engine product and a Hotspot Assessment that evaluated and prioritized water-related impacts of raw

Primary reason	Please explain
	materials. Cummins expects to further assess risk exposure and mitigation actions related to its largest suppliers in 2014/2015. However, we have not yet conducted this level of analysis to determine what risks do or do not exist.

W3.2f

Please choose the option that best explains why you do not know if your organization is exposed to water risks that could generate a substantive change in your business operations, revenue or expenditure and discuss any future plans you have to assess this

Primary reason	Future plans

**Further Information**

**Page: W4. Water Opportunities**

W4.1

**Does water present strategic, operational or market opportunities that substantively benefit/have the potential to benefit your organization?**

Yes

W4.1a

**Please describe the opportunities water presents to your organization and your strategies to realize them**

Country or region	Opportunity	Strategy to realize opportunity	Estimated timeframe	Please explain
Company-wide	Increased brand value	Continue to align CR efforts with water, particularly in water stressed regions. "Water Neutrality" goal establishes a metric that drives organizational behavior toward this objective.	>6 years	Opportunities to partner with communities exist today. We have examples of projects already completed including check dams, water treatment equipment for schools, education initiatives and more that are already underway. Continued efforts will strengthen brand value. This will be an ongoing program with current targets set for 2020.
Company-wide	Improved water efficiency	Establish water conservation goal of 33% labor normalized reduction to a 2010 baseline.	>6 years	Opportunities exist to continue to improve water use efficiency and reduce water dependence. This goal will promote specific action in this space. This will be an ongoing program with current targets set for 2020.
Company-wide	Cost savings	Establish water conservation goal of 33% labor normalized reduction to a 2010 baseline.	>6 years	We expect to realize cost savings associated with our water efficiency improvements. Note that cost savings include water, sewer, energy, chemical and other related costs.
Company-wide	Staff retention	Establish water conservation and water neutrality goals	>6 years	Our employees have consistently ranked the environment as one of their top priorities. These goals are part of a variety of activities that combine work in our operations and work in our communities to improve the environment.

W4.1b

Please choose the option that best explains why water does not present your organization with any opportunities that have the potential to provide substantive benefit

Primary reason	Please explain
----------------	----------------

W4.1c

Please choose the option that best explains why you do not know if water presents your organization with any opportunities that have the potential to provide substantive benefit

Primary reason	Please explain

---

**Further Information**

**Module: Accounting**

**Page: W5. Water Accounting (I)**

---

**W5.1**

Please report the total withdrawal, discharge, consumption and recycled water volumes across your operations for the reporting period

Water use	Quantity (megaliters)
Total volume of water withdrawn	3642.7
Total volume of water discharged	2553.4
Total volume of water consumed	728.5
Total volume of recycled water used	37.5

---

**W5.2**

**For those facilities exposed to water risks that could generate a substantive change in your business, operations, revenue or expenditure, the number of which was reported in W3.2a, please detail which of the following water aspects are regularly measured and monitored and an explanation as to why or why not**

Water aspect	% of facilities	Please explain
Water withdrawals- total volumes	76-100	Cummins tracks this aspect globally since 2008.
Water withdrawals- volume by sources	76-100	There are five water withdrawal by source indicators in our water tracking. 1) Water from Cummins Owned Well 2) Water supplied from other sources 3) Water Supplied from Public/Private Utility 4) Water trucked/hailed from offsite 5) Stormwater/Rainwater Harvesting for On-site Use
Water discharges- total volumes	76-100	We track this data in our central Enablon Database.
Water discharges- volume by destination	76-100	In addition to Industrial & Sanitary waste water discharged to public/private treatment works, Cummins tracks onsite treated water released to (a) Surface Waters/Streams, (b) underground (Eg: Septic Leach Field, Sub Surface Injection), (c) Irrigation, and untreated waste water trucked offsite. Cummins also tracks fire testing water discharged to environment and water used for landscape irrigation.
Water discharges- volume by treatment method	Less than 1%	We do not roll-up treatment process data at the corporate level.
Water discharge quality data- quality by standard effluent parameters	Less than 1%	We do not roll-up comprehensive data at the corporate level, however, we do track any exceedance of criteria.
Water consumption- total volume	76-100	Cummins tracks 1) Evaporative Losses (cooling towers, etc) 2) Water Used in Product for Sale
Water recycling/reuse-total volume	Less than 1%	Cummins tracks 1) Industrial and Sanitary Waste Water Treated On-site Reused in Process 2) Stormwater/Rainwater Harvesting 3) Industrial and Sanitary Waste Water Reused in Irrigation In addition to these, we reuse significant quantities of water throughout our plants. However we do not track reuse internal to plant operations. As such, we have listed less than 1% for the number of facilities since we believe reported quantities underestimate actual reuse throughout our operations.

**W5.3**

**Water withdrawals: for the reporting period, please complete the table below with water accounting data for all facilities included in your answer to W3.2a**

Facility reference number	Country	River basin	Facility name	Total water withdrawals (megaliters/year) at this facility	How does the total water withdrawals at this facility compare to the last reporting period?	Please explain the change if substantial
Facility 1	China	Hai Ho	Beijing Foton Cummins Engine Co.	78.06	Higher	8.9% increase in water usage due to change in output and construction of second facility doubling footprint.. (Note: employee hours increased by 40%)
Facility 2	India	Krishna	Phaltan Megasite - All facilities	125.66	Much higher	Data reported for all facilities on the campus (7 facilities). One facility listed in 3.2a due to scale and dependency of that operation. 55% increase as the facilities continue to expand. (Note: Employee hours increased by 32% and facility footprint by 72%)
Facility 3	India	Krishna	CIL + CTCL Kothrud Campus	163.75	Much lower	Two facilities listed in 3.2a due to scale. Combined due to shared campus. 45% decrease due to deep dive project on water use reduction, installing low flow faucets, leak detection and repair program,etc.
Facility 4	Mexico	Panuco	San Luis Potosi - All	121.71	About the same	2% increase
Facility 5	Brazil	Parana	Cummins Brazil Limited	47.14	Much lower	23% decrease due to conservation efforts and slowed production.

#### Further Information

#### Page: W5. Water Accounting (II)

#### W5.3a

**Water withdrawals: for the reporting period, please provide withdrawal data, in megaliters per year, for the water sources used for all facilities reported in W5.3**

Facility reference number	Surface water	Groundwater (renewable)	Groundwater (non-renewable)	Municipal water	Recycled water	Produced/process water	Wastewater	Brackish/salt water
Facility 1	0	0	0	76.65	1.41	0	0	0
Facility 2	0	0	0	125.66	0	0	0	0
Facility 3	0	119.62	0	44.12	0	0	0	0
Facility 4	0	86.25	0	31.45	4	0	0	0
Facility 5	0	24.42	0	20.45	2.27	0	0	0

#### W5.4

**Water discharge: for the reporting period, please provide the water accounting data for all facilities reported in W5.3**

Facility reference number	Total water discharged (megaliters/year) at this facility	How does the total water discharged at this facility compare to the last reporting period?	Please explain the change if substantive
Facility 1	49.17	About the same	0.03%. Higher Landscape Irrigation was offset by lower Industrial and Sanitary Waste Water Treated On-site Reused for Irrigation
Facility 2	64.25	Much higher	91% increase. Though Landscape irrigation decreased (32%) Industrial and Sanitary Waste Water Treated On-site Reused for Irrigation and WW to PTW increased due to addition of new facilities
Facility 3	73.98	Much lower	41% decrease. Lower water usage (-45%) leading to lower Industrial and Sanitary Waste Water Treated On-site Reused for Irrigation (-41%)
Facility 4	109.24	Lower	6% decrease. Landscape irrigation dropped by half or by about 4 million gallons
Facility 5	24.03	Much lower	40% decrease in waste water to PTW due to lower usage

**W5.4a**

**Water discharge: for the reporting period, please provide water discharge data, in megaliters per year, by destination for all facilities reported in W5.3**

Facility reference number	Surface water	Municipal Treatment Plant	Saltwater	Injection for production/disposal	Aquifer recharge	Storage/waste lagoon
Facility 1	0.16	0	0	0	49.02	0
Facility 2	0.01	36.23	0	0	28.02	0
Facility 3	0	1.28	0	0	72.70	0
Facility 4	0.02	24.62	0	0	84.60	0
Facility 5	0	24.03	0	0	0	0

**W5.5**

**Water consumption: for the reporting period, please provide water consumption data for all facilities reported in W5.3**

Facility reference number	Consumption (megaliters/year)	How does this compare to the last reporting period?	Please explain the change if substantive
Facility 1	28.88	Higher	58% increase due to higher growth related usage leading to higher evaporative losses
Facility 2	14.61	Lower	46% decrease. Started discharge to public/private water treatment works. Opportunity exists to complete water balance as new facilities are added and better estimates of evaporative losses.
Facility 3	76.5	Higher	46% increase due to higher evaporative loss

Facility reference number	Consumption (megaliters/year)	How does this compare to the last reporting period?	Please explain the change if substantive
Facility 4	9.34	Higher	57% increase. CMI started tracking Water Used in Product for Sale in 2013. Attributed to higher evaporative loss (21%) combined with water used in product for sale
Facility 5	4.55	Much lower	76% decrease due to decrease in usage and eventual decrease in evaporative losses

#### W5.6

For the reporting period, please provide any available water intensity values for your organization's products or services across its operation

Country	River basin	Product name	Product unit	Water unit	Water intensity (Water unit/Product unit)	Water use type	Comment
China	Hai Ho	Power Systems and Related Components	Other: Labor Hours	Liters	31.03	Withdrawals	These values represent the intensities for the facilities listed in section 5.3. These facilities tend to be Engine manufacturing plants and/or test facilities that have a higher dependency on water given the criteria for listing in Section 3.2.
India	Krishna	Power Systems and Related Components	Other: Labor Hours	Liters	27.13	Withdrawals	These values represent the intensities for the facilities listed in section 5.3. These facilities tend to be Engine manufacturing plants and/or test facilities that have a higher dependency on water given the criteria for listing in Section 3.2.
Mexico	Panuco	Power Systems and Related Components	Other: Labor Hours	Liters	14.09		These values represent the intensities for the facilities listed in section 5.3. These facilities tend to be Engine manufacturing plants and/or test facilities that have a higher dependency on water given the criteria for listing in Section 3.2.

Country	River basin	Product name	Product unit	Water unit	Water intensity (Water unit/Product unit)	Water use type	Comment
Brazil	Parnaíba	Power Systems and Related Components	Other: Labor Hours	Liters	10.92	Withdrawals	These values represent the intensities for the facilities listed in section 5.3. These facilities tend to be Engine manufacturing plants and/or test facilities that have a higher dependency on water given the criteria for listing in Section 3.2.

#### W5.7

For all facilities reported in W3.2a what proportion of their accounting data has been externally verified?

Water aspect	% verification	What standard was used?
Water withdrawals- total volumes	76-100	Limited Assurance from external certification agency (Bureau Veritas) Water Verification Methodology: - Interview relevant personnel from Cummins responsible for determination of Water, Waste and Recycling data; - Review of Cummins data, information systems and methodologies for collection, aggregation, analysis and review of information used to determine global Water, Waste and Recycling data; and - Visit to company headquarters facility where data is collected and processed.
Water withdrawals- volume by sources	76-100	Limited Assurance from external certification agency (Bureau Veritas) Water Verification Methodology: - Interview relevant personnel from Cummins responsible for determination of Water, Waste and Recycling data; - Review of Cummins data, information systems and methodologies for collection, aggregation, analysis and review of information used to determine global Water, Waste and Recycling data; and - Visit to company headquarters facility where data is collected and processed.
Water discharges- total volumes	Not verified	We have focused on withdrawals and not historically verified discharge data. We have now added an increased set of KPIs in our database including a water balance to drive improvement in discharge data. We will consider validating discharge data in the future.

Water aspect	% verification	What standard was used?
Water discharges- volume by destination	Not verified	We have focused on withdrawals and not historically verified discharge data. We have now added an increased set of KPIs in our database including a water balance to drive improvement in discharge data. We will consider validating discharge data in the future.
Water discharges- volume by treatment method	Not verified	Treatment methods are managed at a site level and not compiled at a corporate level.
Water discharge quality data-quality by standard effluent parameters	Not verified	Discharge quality data is managed at a site level and not compiled at a corporate level. We do compile any information on exceedances of discharge criteria.
Water consumption- total volume	Not verified	The majority of our water consumption is evaporation. We have many sources of evaporation across our facilities. We are continuing to add sub-metering on larger systems (i.e. cooling towers) that will support improvement of this data. We will consider validation of this data in the future,
Water recycling/reuse-total volume	Not verified	We track reuse/recycling data from our on-site wastewater treatment facilities. However, we often reuse/recycle water at many points within our facilities. We do not anticipate collecting corporate data at this level of detail as the net impact of increased recycling/reuse is reflected in our reduced withdrawal intensity.

---

#### Further Information

#### Attachments

[https://www.cdp.net/sites/2014/36/4136/Water 2014/Shared Documents/Attachments/Water2014/W5.WaterAccounting\(II\)/Cummins - Verification Statement CY2013 Water, Waste and Recycling.pdf](https://www.cdp.net/sites/2014/36/4136/Water%202014/Shared%20Documents/Attachments/Water2014/W5.WaterAccounting(II)/Cummins%20-%20Verification%20Statement%20CY2013%20Water,%20Waste%20and%20Recycling.pdf)

#### Module: Response

#### Page: W6. Governance and Strategy

---

#### W6.1

**Who has the highest level of direct responsibility for water within your organization and how frequently are they briefed?**

Highest level of direct responsibility for water issues	Frequency of briefings on water issues	Comment
Individual/Sub-set of the Board or other committee appointed by the Board	Scheduled-annual	The Safety, Environment and Technology Committee of Cummins Board of Directors has overall responsibility. The Committee advises senior leaders of Cummins on environmental and technological strategies, among other items. The Chairman of the Board/CEO and leadership team of the company have taken direct ownership of the 2020 Sustainability plan of which water conservation goals, water neutrality goals and supplier risk management are all included. A briefing is scheduled every 6 months.

**W6.2**

**Is water management integrated into your business strategy?**

Yes

**W6.2a**

**Please choose the option(s) below that best explain how water has positively influenced your business strategy**

Influence of water on business strategy	Please explain
Establishment of sustainability goals	The organization established a 2020 sustainability plan including water goals. While not the sole driver, importance of environmental priority topics including water was an influence.
Water resource considerations are factored into location planning for new operations	Risk dependent water considerations are being factored in new operations design processes. Cummins is working to further embed these factors in all business processes that affect new and changes operations.

Influence of water on business strategy	Please explain
Water resource considerations are factored into new product development	As part of the 2020 sustainability plan, Cummins established a design for environment function. This function is working to embed more comprehensive environmental considerations (including water) into design processes. Our advanced manufacturing group considering opportunities to reduce water use and dependency in manufacturing.
Publicly demonstrated our commitment to water	As part of the 2020 sustainability plan, Cummins released goals that demonstrate our public commitment to water.
Investment in staff/training	The water audit process deployed over the past two years has also served as a training opportunity. Significant investment has been made in deploying corporate water expertise to these sites as well as developing tool sets that further support development of water knowledge in the organization.
Introduction of water management KPIs	Water KPIs (both leading and lagging indicators) have been established and are an integral part of the Cummins enterprise HSEMS.
Water is factored into procurement directives	As part of the 2020 sustainability plan, Cummins is including additional environmental sustainability considerations in its supplier selection process. Additionally, Cummins is launching a program to assess the water risk exposure of its largest suppliers.

**W6.2b**

**Please choose the option(s) below that best explains how water has negatively influenced your business strategy**

Influence of water on business strategy	Please explain
Increased capital expenditure	Incremental investment in certain facilities components (i.e. air cooled chillers, wastewater recycling systems) has occurred in water stressed regions. While an increased cost, these have not significantly influenced the business strategy or success in an adverse manner as compared to the benefits the company realizes for operating in these regions.

**W6.2c**

Please choose the option that best explains why your organization does not integrate water management into its business strategy and discuss any future plans to do so

Primary reason	Please explain
----------------	----------------

**W6.3**

**Does your organization have a water policy that sets out clear goals and guidelines for action?**

Yes, a company-wide water policy

**W6.4**

**How does your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) during the most recent reporting period compare to the previous reporting period?**

Water-related spending: % of total CAPEX during this reporting period compared to last reporting period	Water-related spending: % of total OPEX during this reporting period compared to last reporting period	Motivation for these changes
		We do not track water specific expenditures at this level. We approach water as an integrated cost of our business. Additionally, a single water cost number is not necessarily representative of the true cost of water when considering

Water-related spending: % of total CAPEX during this reporting period compared to last reporting period	Water-related spending: % of total OPEX during this reporting period compared to last reporting period	Motivation for these changes
		implications on energy, chemicals and other cost factors. As such, we pursue an integrated decision making approach that factors in a variety of costs and non-cost considerations that is not conducive to tracking at this level.

### Further Information

Cummins does not have a policy specific only to water, although we have made a concerted effort to develop clear and comprehensive statements regarding our policies and positions on water issues. These are found in our annual Sustainability Report as well as public disclosure through Carbon Disclosure Project and other public forums and case studies in which we participate. Cummins created its comprehensive environmental policy in 2001, with an update in 2013, and purposely used broad and all-encompassing language so the policy did not need to be updated every year. There are more than 30 separately documented environmental procedures related to this environmental policy. Cummins Enterprise Environmental Management System (EMS) ensures a common approach to implementing the Company's environmental standards at its sites worldwide. Through the EMS, the Company sets and cascades key environmental improvement objectives, monitors environmental performance and provides a framework for continual environmental improvement. In 2014, Cummins released its comprehensive environmental sustainability plan. As part of this plan, Cummins announced formal water goals. To complement Cummins corporate policy, each year business units develop specific targets and objectives that reflect cascaded corporate priorities as well as the issues that are most relevant to their operations. Water is specifically included in these objectives and targets. These actions in total represent the elements that comprise a robust water policy and establish the basis for our answer to W6.3.

### Page: W7. Compliance

#### W7.1

**Was your organization subject to any penalties and/or fines for breaches of abstraction licenses, discharge consents or other water and wastewater related regulations in the reporting period?**

No

#### W7.1a

Please describe the penalties and/or fines for breaches of abstraction licenses, discharge consents or other water and wastewater related regulations and your plans for resolving them

Facility name	Incident description	Financial penalty or fine	Currency	Incident resolution
---------------	----------------------	---------------------------	----------	---------------------

---

W7.1b

Please indicate the total of all penalties and/or fines for breaches of abstraction licenses, discharge consents or other water and wastewater related regulations as a percentage of total operating expenditure (OPEX) compared to last year

---

**Further Information**

**Page: W8. Targets and Initiatives**

---

W8.1

**Do you have any company wide targets (quantitative) or goals (qualitative) related to water?**

Yes, targets and goals

---

W8.1a

**Please complete the following table with information on company wide quantitative targets (ongoing or reached completion during the reporting period) and an indication of progress made**

Category of target	Motivation	Description of target	Quantitative unit of measurement	Base-line year	Target year	Proportion of target achieved, % value
Reduction of water intensity	Water stewardship	Reduce water use in direct operations by 33% normalized to labor hours. Motivation listed as water stewardship although cost reduction and risk mitigation benefits also exist.	Other: % reduction per labor hour	2010	2020	90%

#### W8.1b

Please describe any company wide qualitative goals (ongoing or reached completion during the reporting period) and your progress in achieving these

Goal	Motivation	Description of goal	Progress
Strengthen links with local community	Water stewardship	Achieve water neutrality at 15 sites (manufacturing, test, high intensity) by 2020 in priority water stressed countries - India, China, Mexico, South Africa.. Drives work in the community to off-set our footprint and creates connectivity with our CR programs. Motivation listed as water stewardship although risk mitigation benefits also exist.	We launched this goal in 2014. We have multiple projects underway and completed that will contribute to this goal but have not yet assessed/validated progress.

#### W8.1c

Please explain why you do not have any water-related targets or goals and discuss any plans to develop these in the future

#### Further Information

**Module: Sign Off**

**Page: Sign Off**

---

**W9.1**

Please provide the following information for the person that has signed off (approved) your CDP water response

Name	Job title	Corresponding job category
Todd Swingle	Director of Environmental Strategy	Environment/Sustainability manager

---

**Further Information**

**CDP 2014 Water 2014 Information Request**