

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

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**W0.1****Introduction****Please give a general description and introduction to your organization**

Enerplus Corporation (Enerplus) has a diversified portfolio of oil and gas properties throughout Western Canada and the United States and produced an average of approximately 93,125 BOE/day, with 54% of the total production originating from natural gas, and 46% from crude oil and natural gas liquids throughout 2016.

The head office is located in Calgary, Alberta, and the United States office is located in Denver, Colorado. Enerplus has twelve field offices located throughout British Columbia, Alberta, Saskatchewan, Montana and North Dakota. As of December 31, 2016, Enerplus employed a total of 472 people, including full-time benefit and payroll consultants, 340 of whom were in Canada and 132 of whom were in the United States.

Enerplus strives to continuously improve the efficiency of its energy consumption, reduce our greenhouse gas emissions intensity and provide resources, training and technology to meet our environmental objectives. We have several ongoing environmental initiatives in this regard, including:

- greenhouse gas (GHG) emissions and small pneumatic venting equipment inventory
- site environmental inspection and audit program;
- water management planning;
- waste management and waste reduction programs;
- fugitive emissions management program; and
- reclamation of disturbed landscapes to equivalent land capability.

In 2016, for the second year Enerplus reported its key environmental and safety metrics in its Sustainability Report. Enerplus' efforts in key performance indicator disclosure, stakeholder engagement, activity and culture demonstrate its commitment to responsible resource development and to continuous improvement in environment, health and safety and social performance.

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**W0.2**

**Reporting year**

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

| <b>Period for which data is reported</b> |
|------------------------------------------|
| Fri 01 Jan 2016 - Sat 31 Dec 2016        |

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**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

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**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

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**W0.4a**

**Exclusions**

**Please report the exclusions in the following table**

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

**Further Information**

**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                                                       | Direct use importance rating | Indirect use importance rating | Please explain                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------------------------------------------|------------------------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sufficient amounts of good quality freshwater available for use                  | Vital for operations         | Important                      | Fresh water is vital for drilling, completions, operations and maintenance. Often non-fresh water can be used in place of fresh water, however non-fresh water must be chemically compatible with the formation and economically viable. Early in development stages, the primary use of fresh water is for drilling and completions (i.e., hydraulic fracturing), because recycled/brackish/produced water is usually not economically readily available. Importance rating of vital was chosen because without sufficient fresh water development would no longer be possible due to economics (i.e. increased costs would lead to capital spent elsewhere for greater potential returns on investment). Indirectly, freshwater is important to Enerplus' supply chain. For example steel is used in oil/gas well construction, pipelines and facilities; steel manufacturing requires fresh water. Sufficient amounts of economically viable, good quality freshwater are important for the production of steel. |
| Sufficient amounts of recycled, brackish and/or produced water available for use | Vital for operations         | Important                      | Sufficient volumes of recycled/brackish/produced water are vital for operations. Primary use of recycled/brackish/produced water is for Enhanced Oil Recovery (EOR) water floods. Water is vital to maintain voidage replacement ratio (VRR) in reservoir. For every barrel of oil removed from the reservoir, a barrel of water must be added to the reservoir to maintain VRR. If water was not available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

| Water quality and quantity | Direct use importance rating | Indirect use importance rating | Please explain                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------|------------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                            |                              |                                | to maintain VRR, water flood operations would no longer be possible. From an indirect use perspective, sufficient amounts of recycled, brackish and/or produced water available for use are important to Enerplus' supply chain as well. For example, steel manufacturing uses large amounts of recycled/brackish/produced water for once through cooling. Sufficient amounts of economically viable, recycled/brackish/produced water are important for the production of steel. |

**W1.2**

**For your total operations, please detail which of the following water aspects are regularly measured and monitored and provide an explanation as to why or why not**

| Water aspect                            | % of sites/facilities/operations | Please explain                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Water withdrawals- total volumes        | 76-100                           | In most operational jurisdictions, water use reporting is a regulatory requirement. As a standard practice, 100% of water volumes withdrawn, purchased and re-ceived from third parties are measured, monitored and recorded internally. Water metrics are used internally to evaluate performance and are reported externally to various audiences (regulators, sustain-ability reporting, Annual Information Form, etc.). |
| Water withdrawals- volume by sources    | 76-100                           | As a standard practice, 100% of water withdrawal sources are measured, monitored and classified as fresh water, non-fresh water (i.e. saline groundwater), produced water, third party water from another organization or municipal water.                                                                                                                                                                                  |
| Water discharges- total volumes         | 76-100                           | Discharge of industrial use water to surface environment or receiving water body is not permitted. All water is discharged deep underground (greater than 600 meters depth) to maintain reservoir pressure in water flood operations or disposed via deep well injection. As a standard practice, 100% of water discharge volumes are measured and monitored.                                                               |
| Water discharges- volume by destination | 76-100                           | All withdrawn water is discharged to deep groundwater, either through use in water flood operations or disposed via deep well injection. As a standard practice, 100% of water discharge destinations are                                                                                                                                                                                                                   |

| Water aspect                                                          | % of sites/facilities/operations | Please explain                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                       |                                  | measured and monitored.                                                                                                                                                                                                                                                                                                                                                           |
| Water discharges- volume by treatment method                          | 76-100                           | All withdrawn water is released to deep groundwater, either through use in water flood operations or a deep disposal well. Treatment may be required prior to discharge. All treatment methods and volumes of water treated are documented. As a standard practice, 100% of water volumes and treatment methods are measured and monitored to track treatment efficacy and costs. |
| Water discharge quality data- quality by standard effluent parameters | 76-100                           | All water discharge quality is analyzed to ensure chemical compatibility between discharged water and receiving reservoir. As a standard practice, 100% of water volumes discharged are measured and monitored to ensure quality is within acceptable parameters to avoid adverse effects within injection systems.                                                               |
| Water consumption- total volume                                       | 76-100                           | Detailed water volumetric accounting is a regulatory requirement and this data is crucial for reservoir engineers to understand the fluid dynamics and VRR implications to production. As a standard practice, 100% of water volumes consumed are measured and monitored.                                                                                                         |
| Facilities providing fully-functioning WASH services for all workers  | 76-100                           | All Enerplus facilities supply appropriate WASH services. As a standard practice 100% of facilities supplying WASH services are measured and monitored.                                                                                                                                                                                                                           |

#### W1.2a

**Water withdrawals: for the reporting year, please provide total water withdrawal data by source, across your operations**

| Source                          | Quantity (megaliters/year) | How does total water withdrawals for this source compare to the last reporting year? | Comment                                                                                                                                         |
|---------------------------------|----------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Fresh surface water             | 973                        | Lower                                                                                | Withdrawals of this water type decreased by 9% compared to 2015, mostly due to divesting water flood assets and ending a water flood operation. |
| Brackish surface water/seawater | 0                          | Not applicable                                                                       | This type of water not used in our operations.                                                                                                  |

| Source                               | Quantity (megaliters/year) | How does total water withdrawals for this source compare to the last reporting year? | Comment                                                                                                                                                 |
|--------------------------------------|----------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rainwater                            | 0                          | Not applicable                                                                       | This type of water not used in our operations.                                                                                                          |
| Groundwater - renewable              | 0                          | Not applicable                                                                       | This type of water not used in our operations.                                                                                                          |
| Groundwater - non-renewable          | 605                        | Much higher                                                                          | Withdrawals of this water type in-creased by 19% compared to 2015, mostly due to increased saline source water being used to displace municipal supply. |
| Produced/process water               | 19456                      | About the same                                                                       | Withdrawals of this water type are unchanged compared to 2015.                                                                                          |
| Municipal supply                     | 165                        | Much lower                                                                           | Withdrawals of this water type decreased by 51% compared to 2015, mostly due to increased saline source water being used to displace municipal supply.  |
| Wastewater from another organization | 29                         | Much lower                                                                           | Withdrawals of this water type decreased by 20% compared to 2015, mostly due to decreased demand to dispose of other operator's waste water.            |
| Total                                | 21228                      | About the same                                                                       | Total water withdrawals decreased by 1% compared to 2015.                                                                                               |

## W1.2b

**Water discharges: for the reporting year, please provide total water discharge data by destination, across your operations**

| Destination                     | Quantity (megaliters/year) | How does total water discharged to this destination compare to the last reporting year? | Comment                                                                                                                                                                                                          |
|---------------------------------|----------------------------|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fresh surface water             | 0                          | About the same                                                                          | No fresh surface water discharge of industrial use water is permitted by regulations. All withdrawn water is released to deep groundwater, either through use in water flood operations or a deep disposal well. |
| Brackish surface water/seawater | 0                          | Not applicable                                                                          | No brackish surface water/seawater is withdrawn, used or a discharge destination within operations.                                                                                                              |
| Groundwater                     | 21228                      | About the same                                                                          | All withdrawn water is released to deep groundwater, either through use in                                                                                                                                       |

| Destination                                     | Quantity (megaliters/year) | How does total water discharged to this destination compare to the last reporting year? | Comment                                                                                                  |
|-------------------------------------------------|----------------------------|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
|                                                 |                            |                                                                                         | water flood operations or a deep disposal well. Total water discharges decreased by 1% compared to 2015. |
| Municipal/industrial wastewater treatment plant | 0                          | About the same                                                                          | No water is discharged to municipal/industrial wastewater treatment plants.                              |
| Wastewater for another organization             | 0                          | About the same                                                                          | No water is discharged to another organization                                                           |
| Total                                           | 21228                      | About the same                                                                          | Total water discharges decreased by 1% in 2016 compared to 2015.                                         |

#### W1.2c

**Water consumption: for the reporting year, please provide total water consumption data, across your operations**

| Consumption (megaliters/year) | How does this consumption figure compare to the last reporting year? | Comment                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1138                          | Much lower                                                           | Surface water withdrawn is ultimately injected into deeper formations as primary or secondary function of oil and gas extraction. The process of transferring water from surface water to deep groundwater is considered consumptive. Water considered consumed is sum of fresh surface water and municipal water. Total water consumed decreased by 19% in 2016 compared to 2015. |

#### W1.3

**Do you request your suppliers to report on their water use, risks and/or management?**

No

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**W1.3a**

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

| Proportion of suppliers % | Total procurement spend % | Rationale for this coverage |
|---------------------------|---------------------------|-----------------------------|
|                           |                           |                             |

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**W1.3b**

Please choose the option that best explains why you do not request your suppliers to report on their water use, risks and/or management

| Primary reason                  | Please explain                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Assessed risk but no risk found | Supplier water risk was assessed but no substantive risk identified. Individual areas of increased water risk were identified; however these areas were limited in geographic scale to specific river basins and only for specific times of the year. Adequate project planning could mitigate these risks to acceptable levels. Geographically diversified operation reduces the water related risk to acceptable levels that are not likely to cause significant business impacts. Our supply chain is geographically and temporally diversified, any potential water impacts would have limited effect. In event supply chain disruption occurs, alternative supply would be secured, minimizing business impacts. For these reasons the water risk was not considered to be substantive This risk will be assessed again in 2017. |

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**W1.4**

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

No

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W1.4a

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

| Country | River basin | Impact driver | Impact | Description of impact | Length of impact | Overall financial impact | Response strategy | Description of response strategy |
|---------|-------------|---------------|--------|-----------------------|------------------|--------------------------|-------------------|----------------------------------|
|---------|-------------|---------------|--------|-----------------------|------------------|--------------------------|-------------------|----------------------------------|

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W1.4b

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 year and any plans you have to investigate this in the future

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

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**Further Information**

**Module: Risk Assessment**

**Page: W2. Procedures and Requirements**

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**W2.1**

**Does your organization undertake a water-related risk assessment?**

Water risks are assessed

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**W2.2**

**Please select the options that best describe your procedures with regard to assessing water risks**

| <b>Risk assessment procedure</b>           | <b>Coverage</b>                    | <b>Scale</b>                 | <b>Please explain</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------|------------------------------------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Comprehensive company-wide risk assessment | Direct operations and supply chain | All facilities and suppliers | A comprehensive risk assessment is completed for all operational areas within the company. This approach has been taken because an in-depth understanding of all potential risks is necessary to quantify the likelihood and severity of the risk, and to develop mitigation strategies to bring the risks within acceptable levels. The risk assessment includes risks to direct operations and potential risk of interruption to supply chain. These risk assessments include water related risk, as access to economically viable water is vital. |

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**W2.3**

**Please state how frequently you undertake water risk assessments, at what geographical scale and how far into the future you consider risks for each assessment**

| Frequency | Geographic scale | How far into the future are risks considered? | Comment                                                                                                                                                                                                                                                                                                                                                      |
|-----------|------------------|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Annually  | Facility         | 3 to 6 years                                  | Enerplus' Asset teams review project specifics annually to determine ongoing economic viability. The scale of project review ranges from a single well to larger area water flood projects, within the context of river basin specific concerns. Larger water demand projects have correspondingly larger geographic and temporal scales of risk assessment. |

#### W2.4

**Have you evaluated how water risks could affect the success (viability, constraints) of your organization's growth strategy?**

Yes, evaluated over the next 10 years

#### W2.4a

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

Access to adequate water supply is important to all Enerplus' operational stages including exploration, development and operations. At the initial planning stages of new projects, Enerplus evaluates potential water sources to ensure sufficient, economically viable water supply is available for the planned duration of the project.

Each year short and long range reviews of all operations are conducted.

For US operations, regulatorily required Water Management Plans are completed prior to all developments.

These water-related risk assessments include Asset Team forecasts for the short, medium and long terms. The projected water requirements are compared with water availability forecasts to identify areas of risk.

The assessments include available water quantity/quality, other water user's cumulative effects, local stakeholders' interests, pending and potential regulations and regional climatic trends.

A recent assessment identified water risk within a water short river basin in southern Alberta. The current practice of using mostly fresh surface water for water flood

operations may not be feasible if surface water availability were to decrease in the future. As a proactive mitigation against potential future water shortage, a deep saline groundwater well was brought into operation, decreasing the dependence on surface water.

**W2.4b**

What is the main reason for not having evaluated how water risks 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 |
|-------------|---------------|----------------------------|---------|
|             |               |                            |         |

**W2.5**

Please state the methods used to assess water risks

| Method                                                                                                                                                                       | Please explain how these methods are used in your risk assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GEMI Local Water Tool<br>Internal company knowledge<br>IPIECA Global Water Tool for Oil & Gas<br>Regional government databases<br>Other: Enerplus Water Source Decision Tool | Internal company knowledge is leveraged with professional water resources consultants input to arrive at risk assessment findings. Regional government databases are accessed to gather water approvals and water use data for other water users in operational areas. Regional water use approvals can be an indicator of overall pressures to water supply sources. The increased pressure on water resource poses a water procurement availability risk. To mitigate this risk, water approvals need to be acquired early in the development process. The operational scope of the risk assessments include 100% of the company as divided into individual operational areas. All facilities are grouped geographically and combined into asset areas based on production type (i.e., water flood, deep gas, shale oil, etc.). Our asset areas are managed by Asset teams of professionals that have long-term organizational knowledge of each facility, including their current and forecast water demand, supply, stress, regulations, stakeholders, etc. Enerplus internally developed a water source decision tool to assess risks when comparing source options prior to sourcing water during the project planning process. Net environmental and social effects of each option are compared before final source decisions are made. This decision tool is based on GEMI and IPIECA water tools. |

| Method | Please explain how these methods are used in your risk assessment |
|--------|-------------------------------------------------------------------|
|        |                                                                   |

**W2.6**

**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 | Water availability and quality is assessed for each project to ensure that adequate water supply of chemically compatible water is available. Internal company knowledge of our asset areas is combined with third-party resource consultant information to determine if water demand will be met by local supply. Adequate water supply is fundamental to project feasibility; Asset teams are required to have this knowledge to determine if a project can succeed economically. |
| Current water regulatory frameworks and tariffs at a local level          | Relevant, included | All regulations and tariffs must be known to ensure compliance. Internal company knowledge includes awareness of all relevant regulations that must be complied with in all of our operating areas.                                                                                                                                                                                                                                                                                 |
| Current stakeholder conflicts concerning water resources at a local level | Relevant, included | Stakeholder concerns regarding water are addressed through the regulatory approval process.                                                                                                                                                                                                                                                                                                                                                                                         |
| Current implications of water on your key commodities/raw materials       | Relevant, included | An adequate supply of economically viable water supply is required for our operations. Internal company knowledge includes detailed forecast of water quality required for each operational stage: exploration, development and production.                                                                                                                                                                                                                                         |
| Current status of ecosystems and habitats at a local level                | Relevant, included | In all of the jurisdictions where we operate, regulatory agencies ensure that ecosystems and habitats are not adversely impacted by our operations. This is done through strict legislation and regulations for the oil and gas industry. Enerplus complies with all regulations, acquires all relevant approvals required and follows industry best practices for all developments and operations.                                                                                 |
| Current river basin management plans                                      | Relevant, included | Internal company knowledge includes review of all relevant management plans to ensure compliance with regulations and our operating approval conditions.                                                                                                                                                                                                                                                                                                                            |
| Current access to fully-functioning WASH services for all employees       | Relevant, included | Access to sufficient potable water and sanitation services are not a concern within the jurisdictions Enerplus operates. All facilities have WASH services in place.                                                                                                                                                                                                                                                                                                                |
| Estimates of future changes in water                                      | Relevant,          | Long-term internal company knowledge of asset areas allows trends in water supply to be                                                                                                                                                                                                                                                                                                                                                                                             |

| Issues                                                                                                                      | Choose option                      | Please explain                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| availability at a local level                                                                                               | included                           | incorporated into project planning. If water source risk is expected, alternative water supply types are secured prior to the supply risk causing business impacts.                                                                                                                                                                                                                                                                                                                                                                      |
| Estimates of future potential regulatory changes at a local level                                                           | Relevant, included                 | All pending and published regulatory changes are reviewed to determine potential business impacts on operations. Enerplus sits on several industrial associations (e. g. Canadian Association of Petroleum Producers (CAPP), North Dakota Petroleum Council (NDPC), Western Energy Alliance (WEA), Etc.) that routinely provide feedback on pending legislation. Potential regulatory changes are summarized and disseminated internally to heighten internal company knowledge and to aid in providing informed feedback to regulators. |
| Estimates of future potential stakeholder conflicts at a local level                                                        | Relevant, included                 | Long-term internal company knowledge of asset areas aids in a high level of understanding regarding stakeholder sentiment and potential conflicts. Enerplus proactively builds strong relationships with stakeholders in local communities. In addition, operations employees are active members of the communities in which they live and work.                                                                                                                                                                                         |
| Estimates of future implications of water on your key commodities/raw materials                                             | Relevant, included                 | Future implications on water are expected to be similar to current. Alternatives to water such as oil for completions or CO2 for enhanced oil recovery are compared during project planning and review. Currently, use of water is more economically viable than alternatives. Long-term internal company knowledge allows ongoing comparison of water versus non-water alternatives and economic viability determination.                                                                                                               |
| Estimates of future potential changes in the status of ecosystems and habitats at a local level                             | Not relevant, explanation provided | Regulators are responsible for monitoring current state and modelling future potential changes. Through compliance with all regulations, and supporting industry funded government monitoring initiatives, the requirement to maintain internal company knowledge of ecosystems and habitats is unnecessary.                                                                                                                                                                                                                             |
| Scenario analysis of availability of sufficient quantity and quality of water relevant for your operations at a local level | Relevant, included                 | Scenario analysis includes estimating the potential business impact of a short-term or long-term disruption to water supply or requirement to implement water treatment due to decrease in water quality. Contingency water supplies and treatment options are analyzed for economic viability. Long-term internal company knowledge includes information regarding how much additional cost-related to water quantity and quality can be incurred while maintaining economic viability of projects.                                     |
| Scenario analysis of regulatory and/or tariff changes at a local level                                                      | Relevant, included                 | Annual project reviews include analysis of potential changes to regulations and tariffs. Significant changes to these may necessitate the switching to alternative water supply (e.g., using deep saline water instead of fresh surface water). Our project economics include a detailed analysis of alternative water source options.                                                                                                                                                                                                   |
| Scenario analysis of stakeholder conflicts concerning water resources at a local level                                      | Relevant, included                 | Stakeholder conflicts or concerns with accompanying regulatory interventions could necessitate the switching to alternative water supply (e.g.. using deep saline water instead of fresh surface water). Project economics of implementing alternative water source options is part of our project planning process.                                                                                                                                                                                                                     |
| Scenario analysis of implications of water on your key commodities/raw materials                                            | Relevant, included                 | The economics of using alternatives to water are compared during our project planning process and review. Long-term internal company knowledge allows ongoing comparison of water versus non-water alternatives and economic viability determination.                                                                                                                                                                                                                                                                                    |

| Issues                                                                                           | Choose option                      | Please explain                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Scenario analysis of potential changes in the status of ecosystems and habitats at a local level | Not relevant, explanation provided | In all operational jurisdictions, applicable regulatory agencies (provincial, state and/or federal) are responsible for protection of ecosystems and habitats and mitigating impacts causing potential changes in the status of ecosystems and habitats at a local level. Enerplus complies with all regulations, acquires all relevant approvals required and follows industry best practices for all developments and operations. |
| Other                                                                                            |                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## W2.7

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

| Stakeholder                        | Choose option                      | Please explain                                                                                                                                                                                                                                                                                                            |
|------------------------------------|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Customers                          | Not relevant, explanation provided | The customers of Enerplus' produced oil and gas are midstream and/or refining companies. Long-term sales contracts are agreed upon early in project development. In the case of oil and gas production, customers are not relevant to water risk assessment.                                                              |
| Employees                          | Relevant, included                 | Environmental stewardship is a company value for which all Enerplus employees are responsible. Relevant employees are interviewed as part of the water risk assessment process. In addition, employees are engaged through our sustainability materiality survey, risk registry analysis and employee engagement surveys. |
| Investors                          | Relevant, included                 | Financial impacts related to water risks are relevant and included. Economic performance can be affected by water risks and reflected in stock prices. Investors are engaged through our corporate website, sustainability materiality survey and Enerplus' published sustainability report.                              |
| Local communities                  | Relevant, included                 | Local communities are included within water risk assessments. Potential impacts to local communities are identified and mitigated. Enerplus proactively builds strong relationships with stakeholders in local communities.                                                                                               |
| NGOs                               | Relevant, included                 | NGOs active in the operational area are included in the water risk assessment. Reputational risk related to NGOs is assessed. Engagement method includes corporate website, sustainability materiality survey and Enerplus' published sustainability report.                                                              |
| Other water users at a local level | Relevant, included                 | Other water users are included in the water risk assessment. Potential collaboration opportunities are identified and pursued where feasible. Engagement methods include direct dialogue, business agreements, and sustainability materiality surveys.                                                                    |
| Regulators                         | Relevant,                          | Regulators are included in water risk assessments. Regulatory compliance and awareness of new/developing                                                                                                                                                                                                                  |

| Stakeholder                                        | Choose option      | Please explain                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                    | included           | regulations are critical factors related to water risk. Engagement methods include conversations, official correspondence, applications/receipt of approvals, and , sustainability materiality surveys.                                                                                                                                            |
| River basin management authorities                 | Relevant, included | River basin management authorities are included for water risk assessments if present. Understanding of and compliance with management goals is relevant to water risk. Engagement methods include attending meetings, sustainability materiality surveys, reading relevant published documents.                                                   |
| Statutory special interest groups at a local level | Relevant, included | Statutory special interest groups are included for water risk assessments if present. Potential impacts to these groups are identified and mitigation strategies developed. Engagement methods include discussion with regulators, attending meetings, sustainability materiality surveys and reading relevant published documents.                |
| Suppliers                                          | Relevant, included | Suppliers are included for water risk assessments. Supply of key goods and services is crucial for development and operations. Potential risks of supply disruptions are identified and contingency plans developed. Engagement methods include discussion, service agreements, proposal requests/receipts and sustainability materiality surveys. |
| Water utilities at a local level                   | Relevant, included | Water utilities/suppliers are included for water risk assessments. Water supply is crucial for development and operations. Potential risks of supply disruptions are identified and contingency plans developed. Engagement methods include discussion, service agreements and proposal requests/receipts.                                         |
| Other                                              | Relevant, included |                                                                                                                                                                                                                                                                                                                                                    |

## W2.8

Please choose the option that best explains why your organisation does not undertake a water-related risk assessment

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

## Further Information

**Module: Implications**

**Page: W3. Water Risks**

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**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?**

No

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**W3.2**

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

Substantive change is defined as impacting the economic viability of an operational area or facility, triggering a new evaluation of whether the facility is a net asset or liability. For instance, if the cash flows no longer exceed the anticipated abandonment or the cumulative positives are less than the book value (up front capital), there may be net loss.

Metrics used to determine substantive change include: proved reserves, annual production, net income, cashflow, fixed and variable operational costs, finding and development costs and capital efficiencies. These metrics are reviewed annually. Due to variable economic parameters, specific thresholds used to determine substantiveness vary by operational area.

Enerplus defines substantive applicable to direct operation only.

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**W3.2a**

**Please provide the number of facilities\* per river basin exposed to water risks that could generate a substantive change in your business, operations, revenue or expenditure; and the proportion of company-wide facilities this represents**

| Country | River basin | Number of facilities exposed to water risk | Proportion of company-wide facilities that this represents (%) | Comment |
|---------|-------------|--------------------------------------------|----------------------------------------------------------------|---------|
|---------|-------------|--------------------------------------------|----------------------------------------------------------------|---------|

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**W3.2b**

For each river basin mentioned in W3.2a, please provide the proportion of the company's total financial value that could be affected by water risks

| Country | River basin | Financial reporting metric | Proportion of chosen metric that could be affected | Comment |
|---------|-------------|----------------------------|----------------------------------------------------|---------|
|---------|-------------|----------------------------|----------------------------------------------------|---------|

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**W3.2c**

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 potential impact | Timeframe | Likelihood | Magnitude of potential financial impact | Response strategy | Costs of response strategy | Details of strategy and costs |
|---------|-------------|-------------|------------------|---------------------------------|-----------|------------|-----------------------------------------|-------------------|----------------------------|-------------------------------|
|---------|-------------|-------------|------------------|---------------------------------|-----------|------------|-----------------------------------------|-------------------|----------------------------|-------------------------------|

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**W3.2d**

Please list the inherent water 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 potential impact | Timeframe | Likelihood | Magnitude of potential financial impact | Response strategy | Costs of response strategy | Details of strategy and costs |
|---------|-------------|-------------|------------------|---------------------------------|-----------|------------|-----------------------------------------|-------------------|----------------------------|-------------------------------|
|---------|-------------|-------------|------------------|---------------------------------|-----------|------------|-----------------------------------------|-------------------|----------------------------|-------------------------------|

**W3.2e**

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Risks exist, but no substantive impact anticipated | During annual asset area reviews, water risks (likelihood and potential severity) are assessed using internal company knowledge, conversations with vendors and regulators. Risk of water supply disruption exists; in all cases the water risks were deemed to be temporary in nature and limited in geographic scale. During a disruption to water supply, a contingency water source would be used. For example, fresh surface water from a river is used for one of our EOR water floods; drought conditions forced the curtailment of water withdrawals from the river, but alternative groundwater withdrawals were used to make up the water shortfall. The additional costs incurred due to temporarily switching withdrawal sources were not substantive. During the annual reviews, no risks with potential business impacts greater than the assigned thresholds were identified. Risk assessments are completed annually. |

**W3.2f**

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Risks exist, but no substantive impact anticipated | By using available databases and conversations with vendors, Enerplus conducted a risk assessment of supply chain water risk, and concluded these risks are not substantive, no potential business impact greater than \$10M likely. Supplier water risk was assessed but no substantive risk was identified. Individual areas of increased water risk were identified; however these areas were limited in geographic scale to specific river basins and only for specific times of the year. Adequate project planning could mitigate these risks to acceptable levels. Geographically diversified operation reduces the water related risk to acceptable levels that are not likely to cause significant business impacts. In the event that a supply disruption occurs, alternative supply would be secured, minimizing business impacts. Risk assessments are completed annually. |

W3.2g

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

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**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  | Comment                                                                              |
|--------------------------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------------------------------------------------------------------------------------|
| United States of America | Cost savings | In North Dakota, we conducted a pilot project in 2016 to evaluate the use of temporary above ground pipelines to move water from the water source to the wellsite for our hydraulic fracturing operations. Typically, water is hauled to the site by water tankers. We saw many positive results from the pilot project including: a significant reduction in the number of trucks using local roads; decreased road noise and dust; reduction in vehicle emissions; less impacts to wildlife. | Current-up to 1 year | This strategy will be reviewed to assess feasibility for all completions operations. |

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**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 |
|----------------|----------------|

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**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 |
|----------------|----------------|

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**Further Information**

**Module: Accounting**

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

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W5.1

Water withdrawals: for the reporting year, 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 year? | Please explain |
|---------------------------|---------|-------------|---------------|------------------------------------------------------------|-------------------------------------------------------------------------------------------|----------------|
|---------------------------|---------|-------------|---------------|------------------------------------------------------------|-------------------------------------------------------------------------------------------|----------------|

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**Further Information**

**Page: W5. Facility Level Water Accounting (II)**

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W5.1a

Water withdrawals: for the reporting year, please provide withdrawal data, in megaliters per year, for the water sources used for all facilities reported in W5.1

| Facility reference number | Fresh surface water | Brackish surface water/seawater | Rainwater | Groundwater (renewable) | Groundwater (non-renewable) | Produced/process water | Municipal water | Wastewater from another organization | Comment |
|---------------------------|---------------------|---------------------------------|-----------|-------------------------|-----------------------------|------------------------|-----------------|--------------------------------------|---------|
|---------------------------|---------------------|---------------------------------|-----------|-------------------------|-----------------------------|------------------------|-----------------|--------------------------------------|---------|

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**W5.2**

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

| 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 year? | Please explain |
|---------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------|----------------|
|---------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------|----------------|

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**W5.2a**

Water discharge: for the reporting year, please provide water discharge data, in megaliters per year, by destination for all facilities reported in W5.2

| Facility reference number | Fresh surface water | Municipal/industrial wastewater treatment plant | Seawater | Groundwater | Wastewater for another organization | Comment |
|---------------------------|---------------------|-------------------------------------------------|----------|-------------|-------------------------------------|---------|
|---------------------------|---------------------|-------------------------------------------------|----------|-------------|-------------------------------------|---------|

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**W5.3**

Water consumption: for the reporting year, please provide water consumption data for all facilities reported in W3.2a

| Facility reference number | Consumption (megaliters/year) | How does this compare to the last reporting year? | Please explain |
|---------------------------|-------------------------------|---------------------------------------------------|----------------|
|---------------------------|-------------------------------|---------------------------------------------------|----------------|

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W5.4

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

| Water aspect | % verification | What standard and methodology was used? |
|--------------|----------------|-----------------------------------------|
|--------------|----------------|-----------------------------------------|

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**Further Information**

**Module: Response**

**Page: W6. Governance and Strategy**

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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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------------------------------------------------|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Board of individuals/Sub-set of the Board or other committee appointed by the Board |                                        | The Enerplus Board of Directors Safety and Social Responsibility (S&SR) Committee is established by the Board for development and implementation of an effective S&SR management system, to ensure activities are planned and executed safely and responsibly, and to ensure regulatory compliance, emergency response plans, and stakeholder engagement activities. The S&SR Committee reviews the Corporation's performance related to S&SR quarterly to ensure that long-range preventative programs are in place to limit or mitigate future liability. The S&SR Committee is comprised of at a minimum of three independent Board of Director members which are appointed annually following the annual general meeting of the Corporation. The Enerplus Chief Executive Officer is responsible for Board Liaison. The S&SR Board Committee Chairman presents verbal and/or written reports regarding the Corporation's S&SR performance, Committee meetings and discussions at scheduled meetings of the Board of Directors. |

**W6.2**

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

Yes

**W6.2a**

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

| Influence of water on business strategy | Please explain |
|-----------------------------------------|----------------|
|-----------------------------------------|----------------|

| Influence of water on business strategy                                              | Please explain                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Water resource considerations are factored into site expansions                      | Access to adequate water supply is important to all Enerplus' operational stages including exploration, development and operations. At the initial planning stages of new projects and site expansions Enerplus evaluates potential water sources to ensure that sufficient, economically feasible water supply is available for both immediate development and the overall development areas life cycle. Only areas with economically viable water supply will be developed. |
| Water resource considerations are factored into location planning for new operations | Access to adequate water supply is important to all Enerplus' operational stages including exploration, development and operations. At the initial planning stages of new projects and site expansions Enerplus evaluates potential water sources to ensure that sufficient, economically feasible water supply is available for both immediate development and the overall development areas life cycle. Only areas with economically viable water supply will be developed. |

**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                                                                                                                                                                                                                                                                                                                   |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Divestment from regions exposed to water risks | Although not the sole deciding factor, the cost of water procurement is one of the criteria used to evaluate potential divestments. Areas with greater water risks translate into higher costs for water procurement. Due to these higher costs, facilities may be divested preferentially compared to areas with no water risk. |

**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

**W6.3a**

**Please select the content that best describes your water policy (tick all that apply)**

| Content                                                                                                                                                                                                                                                                                                                                                                           | Please explain why this content is included                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Publicly available<br>Company-wide<br>Select facilities only<br>Performance standards for direct operations<br>Commitment to customer education<br>Incorporated within group environmental, sustainability or EHS policy<br>Acknowledges the human right to water, sanitation and hygiene<br>Other: water will be re-used or recycled whenever its economically feasible to do so | A companywide water policy has a dedicated page on our company website. The performance standard of using non-potable water and re-using/recycling water whenever economically viable is stated. Inclusion of the water policy page on the website is intended to educate customers and investors. Water is also included within the Safety and Social Responsibility Policy that is publicly available on the company website. |

| Content | Please explain why this content is included |
|---------|---------------------------------------------|
|         |                                             |

**W6.4**

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

| Water CAPEX (+/- % change) | Water OPEX (+/- % change) | Motivation for these changes                                                                                                                                                               |
|----------------------------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -1                         | -1                        | Overall water withdrawals decreased by 1% from 2015 to 2016. Assuming that all input costs remained relatively unchanged, the averaged decrease in water CAPEX/OPEX is estimated to be 1%. |

**Further Information**

**Page: W7. Compliance**

**W7.1**

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

No

**W7.1a**

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

| Facility name | Incident | Incident description | Frequency of occurrence in reporting year | Financial impact | Currency | Incident resolution |
|---------------|----------|----------------------|-------------------------------------------|------------------|----------|---------------------|
|---------------|----------|----------------------|-------------------------------------------|------------------|----------|---------------------|

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W7.1b

What proportion of your total facilities/operations are associated with the incidents listed in W7.1a?

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W7.1c

Please indicate the total financial impacts of all incidents reported in W7.1a as a proportion of total operating expenditure (OPEX) for the reporting year. Please also provide a comparison of this proportion compared to the previous reporting year

| Impact as % of OPEX | Comparison to last year |
|---------------------|-------------------------|
|---------------------|-------------------------|

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**Further Information**

**Page: W8. Targets and Initiatives**

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**W8.1**

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

Yes, goals only

**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 |
|--------------------|------------|-----------------------|----------------------------------|----------------|-------------|----------------------------------------|
|                    |            |                       |                                  |                |             |                                        |

**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                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Other: use alternatives to fresh surface water whenever economically viable and technically feasible | Recommended sector best practice | For all water required, alternatives to fresh surface water are sourced provided the alternative sources are economically viable and technically feasible. | For all projects, the economic viability and technical feasibility assessments comparing alternatives to fresh surface water have been completed. In cases where economics allow, fresh water alternatives are used. |

**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

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**Further Information**

**Module: Linkages/Tradeoff**

**Page: W9. Managing trade-offs between water and other environmental issues**

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**W9.1**

**Has your organization identified any linkages or trade-offs between water and other environmental issues in its value chain?**

Yes

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**W9.1a**

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

| Environmental issues                                                                                                                                                                                                                                                                                                                                            | Linkage or trade-off | Policy or action                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Consumptive use of fresh water is avoided when economically viable to do so. The net environmental effects of using alternatives to fresh water may cause more impact to the environment than using fresh water would, due to consideration for full lifecycle impacts such as fuel use for sourcing water (trucking), possible land disturbance and health and | Trade-off            | Avoiding the use of fresh water at all costs does not always benefit the environment. Assessment of all possible water sources, fresh, produced, saline groundwater, recycled, third party, etc., is completed prior to making water source decisions. Enerplus utilizes a water source decision tool to compare source options prior to sourcing water during the project planning |

| Environmental issues        | Linkage or trade-off | Policy or action                                                                                                  |
|-----------------------------|----------------------|-------------------------------------------------------------------------------------------------------------------|
| safety risks, among others. |                      | process. Net environmental and social effects of each option are compared before final source decisions are made. |

**Further Information**

**Module: Sign Off**

**Page: Sign Off**

**W10.1**

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

| Name        | Job title                                 | Corresponding job category         |
|-------------|-------------------------------------------|------------------------------------|
| Kym Fawcett | Manager, Safety and Social Responsibility | Environment/Sustainability manager |

**W10.2**

Please indicate that your organization agrees for CDP to transfer your publicly disclosed data regarding your response strategies to the CEO Water Mandate Water Action Hub.

**Note:** Only your responses to W1.4a (response to impacts) and W3.2c&d (response to risks) will be shared and then reviewed as a potential collective action project for inclusion on the WAH website.

By selecting Yes, you agree that CDP may also share the email address of your registered CDP user with the CEO Water Mandate. This will allow the Hub

administrator to alert your company if its response data includes a project of potential interest to other parties using water resources in the geographies in which you operate. The Hub will publish the project with the associated contact details. Your company will be provided with a secure log-in allowing it to amend the project profile and contact details.

No

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#### Further Information

[CDP 2017 Water 2017 Information Request](#)