



Welcome to your CDP Water Security Questionnaire 2022

W0. Introduction

W0.1

(W0.1) Give a general description of and introduction to your organization.

Graphic Packaging Holding Company (together with its subsidiaries, “Graphic Packaging” or the “Company”) is committed to providing consumer packaging that makes a world of difference. The Company is a leading provider of fiber-based packaging solutions for a wide variety of products to food, beverage, foodservice, and other consumer products companies. The Company operates on a global basis, is one of the largest producers of folding cartons and fiber-based foodservice products in the United States (“U.S.”) and Europe and holds leading market positions in coated unbleached kraft paperboard (“CUK”), coated-recycled paperboard (“CRB”) and solid bleached sulfate paperboard (“SBS”).

The Company’s customers include many of the world’s most widely recognized companies and brands with prominent market positions in beverage, food, food service, and other consumer products. The Company strives to provide its customers with packaging solutions designed to deliver marketing and performance benefits at a competitive cost by capitalizing on its low-cost paperboard mills and carton manufacturing plants, its proprietary carton, container and packaging designs, and its commitment to quality and service.

We have a long history of environmental and social responsibility practices at the Company and we continue to improve our manufacturing processes. At Graphic Packaging, many of our packaging solutions are made primarily from tree-based renewable materials, and most of our paperboard packaging and food service products can be recycled today. We intend to leverage our industry-leading sustainability profile and continue to reduce our impact on the environment through our own operations and through innovative paperboard solutions. As part of our Vision 2025, we challenged our team to achieve significant improvements. In the next few years, we desire to reduce greenhouse gas emissions intensity, non-



renewable energy usage intensity, and mill water effluents intensity by 15%, and reduce the use of low-density polyethylene (LDPE) by 40%. In addition, we have established a goal for 100% of Graphic Packaging revenues to come from Graphic Packaging products that are recyclable. We are committed to continuous improvement to benefit the communities in which we live and work, and we will provide updates on milestones achieved in our annual sustainability reports.

Certain statements regarding the expectations of Graphic Packaging, including, but not limited to, the Company’s plans or estimates with respect to energy use and intensity reductions, water use and intensity reductions and climate related events in this report constitute “forward-looking statements” as defined in the Private Securities Litigation Reform Act of 1995. Such statements are based on currently available operating, financial and competitive information and are subject to various risks and uncertainties that could cause actual results to differ materially from the Company’s historical experience and its present expectations. These risks and uncertainties include, but are not limited to, the Company’s ability to obtain permits and other administrative approvals, changes in revenue due to climate related concerns, and supply chain disruptions. Undue reliance should not be placed on such forward-looking statements, as such statements speak only as of the date on which they are made, and the Company undertakes no obligation to update such statements, except as may be required by law. Additional information regarding these and other risks is contained in Part I, “Item 1A., Risk Factors” of the Company’s 2021 Annual Report on Form 10-K, and in other filings with the Securities and Exchange Commission.

W0.2

(W0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date
Reporting year	January 1, 2021	December 31, 2021

W0.3

(W0.3) Select the countries/areas in which you operate.

- Australia
- Austria
- Brazil
- Canada
- Croatia



- Estonia
- Finland
- France
- Germany
- Indonesia
- Ireland
- Mexico
- Netherlands
- New Zealand
- Nigeria
- Poland
- Russian Federation
- Spain
- Sweden
- Switzerland
- United Kingdom of Great Britain and Northern Ireland
- United States of America

W0.4

(W0.4) Select the currency used for all financial information disclosed throughout your response.

USD

W0.5

(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.

Companies, entities or groups over which operational control is exercised



W0.6

(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?

Yes

W0.6a

(W0.6a) Please report the exclusions.

Exclusion	Please explain
Graphic Packaging is excluding its former facility in Norwalk from its disclosure.	Graphic Packaging is excluding its former facility in Norwalk from this disclosure because it was only recently acquired as of July 2021, then closed mid-2022, and represented an immaterial percentage of Graphic Packaging’s water consumption in 2021. The Norwalk site represented less than 0.1% of Graphic Packaging’s total water consumption.

W0.7

(W0.7) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization.	Provide your unique identifier
Yes, an ISIN code	US3886891015
Yes, a CUSIP number	388689101
Yes, a Ticker symbol	GPK

W1. Current state

W1.1

(W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.



	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital	Important	<p>Direct Use: Good quality freshwater is vital for our direct operations because high-quality water is a required component in the processing of fiber into paperboard to produce high quality paperboard. Water supply is vital because future paperboard production and the related profitability of the organization could be affected if the water supply was insufficient. Further, good quality water is essential for employee use.</p> <p>Indirect Use: Good quality freshwater is important for our supply chains, such as our wood baskets and other upstream paperboard raw materials. This is important because water is a key component of quality upstream materials; rainwater and groundwater are necessary inputs to tree growth which Graphic Packaging relies upon to produce fiber, a critical raw material for our production.</p> <p>Future water dependency is not expected to change (vitally important for direct and important for indirect use) given Graphic Packaging’s focus on paperboard production for the food, foodservice, and beverage industry and the pivotal role water plays in these production processes.</p>
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Neutral	<p>Direct Use: Recycled water is important for our direct operations because high-quality water is a required component in the processing of fiber and cooling to produce high-quality paperboard. Water supply is vital because future paperboard production and the related profitability of the organization could be affected if the water supply was insufficient and our future dependency on recycled, brackish or produced water for our manufacturing processes could increase if there isn’t enough freshwater supply or there are stricter regulations that would require the use of recycled water.</p> <p>Indirect Use: Produced water is of neutral importance for our supply chain. Produced water is used in our supply chain to manufacture paperboard; however, Graphic Packaging does not</p>



		<p>have direct control over the water our suppliers are using. We expect our suppliers to be in compliance our Supplier Code of Conduct, which states that all suppliers should demonstrate a commitment to preserving the environment and complying with all applicable environmental laws and regulations. Therefore, this is not of significant importance to us.</p> <p>Future water dependency is not expected to change (vitaly important for direct and neutral for indirect use) given Graphic Packaging’s focus on paperboard production for the food, foodservice, and beverage industry in which water plays a pivotal role as a coolant and agent for breaking down fiber.</p>
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W1.2

(W1.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

	% of sites/facilities/operations	Please explain
Water withdrawals – total volumes	76-99	Graphic Packaging monitors our water withdrawals and discharges through the use of water meters and utility invoices. The paperboard mills represent the largest component of our water discharges. The quantitative analysis has been generated from our monitoring activities. Water withdrawal is monitored for virtually all facilities and is conducted on a monthly and annual basis.
Water withdrawals – volumes by source	76-99	Graphic Packaging monitors our water withdrawals and discharges through the use of water meters and utility invoices. The paperboard mills represent the largest component of our water discharges. The quantitative analysis has been generated from our monitoring activities. Water withdrawal is monitored for virtually all facilities and is conducted on a monthly and annual basis.
Water withdrawals quality	76-99	Graphic Packaging monitors water quality at our paperboard mills. As an example, the Macon mill tests the pH conductivity and temperature from 1 of the 2 active wells. This groundwater source is monitored on a monthly and annual basis to comply with permit requirements. In



		<p>addition, there is daily monitoring of the intake flow and turbidity, which is monitored for the boiler feed. Water quality at our converting plants is monitored via municipal water supply water quality reports.</p>
Water discharges – total volumes	76-99	<p>Graphic Packaging monitors our water withdrawals and discharges at our paperboard mill operations using water meters and utility invoices and at our converting plants using invoices. The paperboard mills represent the largest component of our water discharges. The quantitative analysis has been generated from our monitoring activities. Graphic Packaging has established KPIs and monitors our water discharge at all paperboard mills on a monthly basis. Key measures include discharge per saleable ton of paperboard YTD, against the plan and against the prior year. Monitoring discharge is a key metric to inform on our water performance. Water monitoring for our converting plants is in the assessment and development stages.</p>
Water discharges – volumes by destination	76-99	<p>Graphic Packaging monitors our water withdrawals and discharges at our paperboard mill operations and converting plants using water meters and utility invoices. The paperboard mills represent the largest component of our water discharges. The quantitative analysis has been generated from our monitoring activities. Graphic Packaging has established KPIs and monitors our water discharge at all paperboard mills on a monthly basis. Key measures include discharge per saleable ton of paperboard YTD, against the plan and against the prior year. Monitoring discharge is a key metric to inform on our water performance. Water monitoring for our converting plants is in the assessment and development stages.</p>
Water discharges – volumes by treatment method	76-99	<p>Graphic Packaging monitors our water withdrawals and discharge at our paperboard mill and converting plant operations. Volumes of water discharge by treatment method is monitored and measured in accordance with permit requirements (typically at the mills); Graphic Packaging reports the results as part of our permit reports. Graphic Packaging has established KPIs and monitors our water discharge at all paperboard mills on a monthly basis. The paperboard mills represent the largest component of our water discharges. The quantitative analysis has been generated from our monitoring activities. Graphic Packaging treats water</p>



		before discharge to the local water treatment facility and/or directly to the river. Water monitoring for the converting plants is in the assessment and development stages.
Water discharge quality – by standard effluent parameters	76-99	Graphic Packaging monitors our water withdrawals and discharge at our paperboard mill and converting plant operations. Water discharge quality by standard effluent parameters is monitored and measured in accordance with permit requirements; Graphic Packaging reports the results as part of our permit reports. Graphic Packaging has established KPIs and monitors our water discharge at all paperboard mills on a monthly basis. The paperboard mills represent the largest component of our water discharges. The quantitative analysis has been generated from our monitoring activities. Graphic Packaging treats water before discharge to the local water treatment facility and/or directly to the river. Water monitoring for the converting plants is in the assessment and development stages.
Water discharge quality – temperature	1-25	Graphic Packaging monitors discharge quality at our paperboard mills. For example, at our Kalamazoo mill, we also monitor the temperature of the non-contact cooling water on a weekly basis. Water discharge temperature is monitored and measured in accordance with permit requirements; Graphic Packaging reports the results as part of our permit reports. Temperature monitoring is not typically required at our converting plant operations as most of this water is discharged back to third-party sources.
Water consumption – total volume	76-99	Graphic Packaging monitors our water withdrawals and discharge at our paperboard mill and converting plant operations. For the purposes of CDP reporting, we measure net volume by subtracting water discharges from water withdrawals on an annual basis. The paperboard mills represent the largest component of our water discharges. The quantitative analysis has been generated from our monitoring activities. Water monitoring for the converting plants is in the assessment and development stages.
Water recycled/reused	Not monitored	Graphic Packaging recycles a significant portion of mill process water through recirculation in short loops. Graphic Packaging is working to calculate its recycled water metrics but significant obstacles remain; namely, we have several different types of facilities, in some cases water is recycled multiple times, and many of our facilities are not equipped to adequately measure



		these inputs. Graphic Packaging has identified this as a key improvement area and is endeavoring to enhance tracking of recycled water in the future.
The provision of fully-functioning, safely managed WASH services to all workers	76-99	WASH services are provided in compliance with all local laws and regulations. Furthermore, all Graphic Packaging-owned facilities undergo SMETA audits every three years. Recently acquired sites will be incorporated into this audit cadence in the near future.

W1.2b

(W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, and how do these volumes compare to the previous reporting year?

	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Total withdrawals	151,575	Lower	The 1,445 megaliters (-0.9%) decrease year over year is driven primarily by the decrease in surface water withdrawals. Of the sites within Graphic Packaging’s portfolio, the 8 mills represent the highest water flow. We anticipate total water withdrawal to remain relatively the same in the future. Much lower / much higher is defined as a % change of 10% or more.
Total discharges	125,104	Lower	The 12,607 megaliters (-9.3%) decrease year over year is primarily driven by a decrease in discharge at our Augusta mill. This was the most significant contributor to the decrease in wastewater discharge compared to 2020. We anticipate total water discharge to remain relatively the same in the future. Much lower / much higher is defined as a % change of 10% or more.
Total consumption	26,472	Much higher	Total consumption is calculated on a company-wide basis taking the difference between the available data representing total withdrawals and discharge from Graphic Packaging’s mill facilities. As such, the larger year-over-year reduction in discharges widened the difference between withdrawals and discharges in 2021 compared to previous years. Overall consumption increased year over year by approximately 11,161 megaliters or +63%, primarily driven by an increase in consumption by our Augusta mill. We anticipate total water consumption to remain

			relatively the same in the future. Much lower / much higher is defined as a % change of 10% or more.
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W1.2d

(W1.2d) Indicate whether water is withdrawn from areas with water stress and provide the proportion.

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Identification tool	Please explain
Row 1	Yes	Less than 1%	About the same	WRI Aqueduct	The WRI Aqueduct tool was used to assess the proportion of withdrawal associated with all sites, and particularly our mills, that are located in river basins that are considered as having high or extremely high baseline water stress. Graphic Packaging site addresses are input into the tool, and the tool models the level of baseline water stress and baseline water depletion for each site, assigning each site a score. WRI uses the general circulation models from the CMIP Phase 5 project and socioeconomic variables based on the SSP database from the International Institute for Applied Systems Analysis. In the reporting year, 20 converting plants (and 0 mills), which represent approximately <1% of our water withdrawal, met this threshold. Similarly, no mills were located in stressed areas in 2019-2021. Therefore, since the number of mills that are characterized as being in locations with high baseline water stress remains 0, the % of withdrawal that represents these sites is the same compared to 2021.

W1.2h

(W1.2h) Provide total water withdrawal data by source.



	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water from wetlands, rivers, and lakes	Relevant	119,751	Lower	Fresh surface water (river water) is monitored and tracked for use as process water and cooling water. Compared to 2020, there was a decrease of approximately 5,047 ML or 4.04%. This was driven in part by the closure of the Prosperity mill, as well as an overall decrease in withdrawal at most of Graphic Packaging's other mills. Water is critical to paper making and is an essential input to our processes. Of the water that is used for our non-contact cooling and process water, river water represents the most significant percent of Graphic Packaging's withdrawal source. Overall, there is little to no expected change in withdrawal within the next year. Graphic Packaging defines "Much higher/much lower" as a change in excess of +/- 10%.
Brackish surface water/Seawater	Not relevant			Brackish surface water/seawater is not used as a water source for Graphic Packaging.
Groundwater – renewable	Relevant	2,330	Much lower	Graphic Packaging tracks groundwater - renewable withdrawal from 4 mills, for which all renewable groundwater is sourced and directly measured from wells. Year over year withdrawal has decreased by approximately 1,147 ML due a decrease in water consumption at those locations. Groundwater – renewable is withdrawn for the use as both process and non-contact cooling water in our mill operations. The Company anticipates that future changes will support our 2025 Sustainability Vision. Graphic Packaging defines "Much higher/much lower" as a change in excess of +/- 10%.
Groundwater – non-renewable	Relevant	15,055	Much higher	In 2021, 5 sites reported groundwater - non-renewable, per direct measurements. The year over year withdrawal has increased by approximately 3,411 ML or 29.30%. Groundwater – nonrenewable is



				withdrawn for use as both process and non-contact cooling water in our operations. The Company anticipates that future changes will support our 2025 Sustainability Vision. Graphic Packaging defines "Much higher/much lower" as a change in excess of +/- 10%.
Produced/Entrained water	Relevant	4,612	Much higher	Graphic Packaging estimates produced water through a calculation of estimated moisture content of wood chips as a percentage of estimated wood chips brought into the virgin mills. The year over year produced water usage increased by approximately 818.45 ML or 21.58%, primarily due to increased production (a greater volume of wood chips were being brought into the mills, thereby producing more produced water). The Company anticipates that future changes will support our 2025 Sustainability Vision. Graphic Packaging defines "Much higher/much lower" as a change in excess of +/- 10%.
Third party sources	Relevant	9,827	Higher	Graphic Packaging withdraws and directly measures the volume of municipal grey water and municipal potable water used for operational processes in our mills to process fiber from wood chips to create paperboard. An increase of approximately 519 ML or 5.58% year over year was observed, primarily due to increased consumption at the Augusta and Kalamazoo mills. The Company anticipates that future changes will support our 2025 Sustainability Vision. GPI defines "Much higher/much lower" as a change in excess of +/- 10%.

W1.2i

(W1.2i) Provide total water discharge data by destination.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Please explain
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Fresh surface water	Relevant	2,330	Much lower	Compared to the prior year, this discharge is much lower by approximately 4,554 ML or 80%. We continue to improve GPI's data collection processes and continue collecting information from our newly acquired facilities. The Company anticipates that current and future changes will support our 2025 Sustainability Vision. Graphic Packaging defines "Much higher/much lower" as a change in excess of +/- 10%.
Brackish surface water/seawater	Not relevant			All water from Graphic Packaging's Paperboard mill operations is discharged through fresh surface water (i.e. rivers) or to municipal waste water treatment facilities. We do not anticipate discharge to brackish surface water destinations.
Groundwater	Not relevant			All water from Graphic Packaging's operations is discharged through fresh surface water (i.e. rivers) or to municipal waste water treatment facilities. No discharge to groundwater is observed. There has been no change in practice compared to the prior year. No change in anticipated discharge is expected.
Third-party destinations	Relevant	122,773	Lower	All remaining process water is discharged through third parties (municipal waste water treatment facilities). This discharge volume decreased by 6,916 ML or 5.33%, due to decreased consumption at our Augusta mill. The Company anticipates that future changes will support our 2025 Sustainability Vision. Graphic Packaging defines "Much higher/much lower" as a change in excess of +/- 10%.

W1.2j

(W1.2j) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain
Tertiary treatment	Not relevant				No water is discharged from Graphic Packaging after tertiary treatment.



Secondary treatment	Relevant	117,104	Lower	1-10	Graphic Packaging discharges water used at the Augusta, Macon, Texarkana, and West Monroe mills after secondary treatment. The City of Macon provides tertiary treatment for the Macon mill's discharge. At Augusta, Texarkana, and West Monroe, on-site waste water treatment systems are used, and the treated water is discharged to the river. Graphic Packaging abides by all local laws and regulations, including permit requirements.
Primary treatment only	Relevant	1,370	Much higher	1-10	Graphic Packaging discharges water used at the Kalamazoo plant after primary treatment. Graphic Packaging abides by all local laws and regulations, including permit requirements.
Discharge to the natural environment without treatment	Relevant	2,330	Much lower	1-10	Graphic Packaging utilizes non-contact cooling water at the Battle Creek and Macon mills. This type of fresh surface water discharge represents all non-contact river water used for cooling that is returned to rivers. Graphic Packaging abides by all local laws and regulations, including permit requirements.
Discharge to a third party without treatment	Relevant	4,300	Much higher	91-99	All other water discharges are sent to third-party treatment facilities. Graphic Packaging abides by all local laws and regulations, including permit requirements.
Other	Not relevant				No water discharges from Graphic Packaging are treated through other means.



W1.3

(W1.3) Provide a figure for your organization’s total water withdrawal efficiency.

	Revenue	Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend
Row 1	7,156,000,000	151,575	47,210.9516740887	As part of its Vision 2025 Goals, Graphic Packaging has set a goal to reduce mill water effluent intensity by 15% (1,000 gal/saleable ton) from a 2016 base year. Given Graphic Packaging’s focus on reducing water discharges from our mills, and the fact that most of our water footprint is within our mills, we anticipate that our water withdrawals will decrease, thereby improving our water efficiency.

W1.4

(W1.4) Do you engage with your value chain on water-related issues?

Yes, our customers or other value chain partners

W1.4c

(W1.4c) What is your organization’s rationale and strategy for prioritizing engagements with customers or other partners in its value chain?

Graphic Packaging engages with value chain partners on water issues. These partners include the local communities in which we operate, as well as our customers. For example, the community of the West Monroe mill raised a concern to Graphic Packaging regarding withdrawal of 10M gallons daily from the local aquifer. They approached Graphic Packaging with a project to replace water from the aquifer with treated water from the water treatment facility, ensuring that the water met FDA drinking water quality standards.

Rationale for engagement: Graphic Packaging engaged with its local community and its customers on this issue because a solution that met the needs of Graphic Packaging, its customers, and its communities was attainable and mutually beneficial.

Method of engagement: By working with its customers to obtain their approval to use treated water from the water treatment facility as process water, Graphic Packaging addressed concerns regarding the water quality expectations for input as a raw material for the paper making process. Graphic Packaging engaged the local community by working with it to implement its proposal of replacing water from the aquifer with treated water from the water treatment facility in Graphic Packaging's operations. In so doing, Graphic Packaging was able to successfully manage customer expectations and local stakeholder concerns, and reduce its withdrawal from the aquifer.

How engagement success is measured: Water withdrawn from the aquifer was successfully reduced by 50%. Graphic Packaging continues to explore strategies to reduce our draw on the local aquifer.

W2. Business impacts

W2.1

(W2.1) Has your organization experienced any detrimental water-related impacts?

No

W2.2

(W2.2) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

No

W3. Procedures

W3.3

(W3.3) Does your organization undertake a water-related risk assessment?

Yes, water-related risks are assessed

W3.3a

(W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.

Value chain stage

Direct operations

Coverage

Full

Risk assessment procedure

Water risks are assessed as part of other company-wide risk assessment system

Frequency of assessment

More than once a year

How far into the future are risks considered?

More than 6 years

Type of tools and methods used

Tools on the market

Enterprise risk management

Tools and methods used

WRI Aqueduct

Contextual issues considered

Water availability at a basin/catchment level

Water quality at a basin/catchment level

Stakeholder conflicts concerning water resources at a basin/catchment level



Implications of water on your key commodities/raw materials
Water regulatory frameworks
Status of ecosystems and habitats
Access to fully-functioning, safely managed WASH services for all employees

Stakeholders considered

Customers
Employees
Investors
Local communities
NGOs
Regulators
Suppliers
Water utilities at a local level
Other water users at the basin/catchment level

Comment

Value chain stage

Supply chain

Coverage

Full

Risk assessment procedure

Water risks are assessed as part of other company-wide risk assessment system

Frequency of assessment

Annually

How far into the future are risks considered?

More than 6 years

Type of tools and methods used

Other

Tools and methods used

Internal company methods

Contextual issues considered

Water availability at a basin/catchment level

Water quality at a basin/catchment level

Stakeholder conflicts concerning water resources at a basin/catchment level

Implications of water on your key commodities/raw materials

Water regulatory frameworks

Status of ecosystems and habitats

Access to fully-functioning, safely managed WASH services for all employees

Stakeholders considered

Customers

Employees

Investors

Local communities

NGOs

Regulators

Suppliers

Water utilities at a local level

Other water users at the basin/catchment level

Comment

Supply Chain: Water-related supply chain risks are included in Graphic Packaging's climate change risk assessment. Supply chain risks have not yet presented a risk. Graphic Packaging undertook a materiality assessment in 2021 that identified the environmental impact of our supply chain as a material item. We will periodically refresh the materiality assessment.

W3.3b

(W3.3b) Describe your organization's process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.

Graphic Packaging uses a comprehensive, integrated Enterprise Risk Management (ERM) system that includes a formal governance process that defines and communicates our policy and expectations regarding risk management and oversight. It assures effective, systematic identification, analysis, prioritization, and management of risks that have the potential to affect our company on a short-, medium-, and long-term basis and provides necessary input to inform our strategic planning and business improvement goals.

Graphic Packaging defines major risks and opportunities (R/Os) as those that could have a substantive financial or reputational impact on the company. The corporate risk management team conducts an annual risk analysis process to validate existing, known risks and identify new and emerging R/Os facing the Company – including considerations for physical and transition R/Os related to climate change.

Each risk is reviewed, evaluated, and prioritized using a scaled, weighted approach that considers the potential likelihood the risk will occur, speed of risk impact, and the degree of impact a given risk could have on the Company. Potential impacts evaluated include those related to our direct operations (e.g., financial impacts, threats to our right to operate, Company reputational damage, environment or community impact, etc.) as well as possible impacts to our supply chain continuity, ability to meet customer commitments, or impacts to our customers' operations. Any significant new or emerging risks that arise throughout the year are analyzed, prioritized, and added to the risk management process.

The Board is responsible for overseeing the overall ERM process, and its leadership structure supports its effective oversight. In fulfilling its oversight responsibility, the Board receives various management and board committee reports and engages in periodic discussions with the company's officers, as it may deem appropriate. Specifically, the Board Audit Committee oversees the policies and practices that govern the processes by which major risk exposures are identified, assessed, managed and controlled on an enterprise-wide basis. Responsibility for managing risk rests with the president/CEO and the ELT. The appropriate Company function or business leaders are appointed as risk owners and sponsors for each major risk. Risk mitigation plans are developed and implemented by the risk owner with support from their respective team and risk sponsor. The risk owner develops and monitors key risk indicators to track progress managing the risk and determine if intervention or corrective action is needed.

Annually, the Company uses the WRI Aqueduct Water Risk Atlas to assess water-related risks such as water quality, quantity, and regulation, etc. in its direct operations. Facility locations are input into the tool, which then models current baseline water stress and depletion, and future water stress into 2030 and 2040. These resulting risks are assessed and prioritized, and the outcomes are reported to the VP, Chief Sustainability Officer (CSO). Future

scenario results are shared with operations leadership to evaluate water stewardship strategies, engagement plans with local water stakeholders and water management needs. These tools are also useful when screening locations for new facility investments to ensure adequate water supply will be available during the operating life of the facility.

Water-related supply chain risks are included in Graphic Packaging's annual climate change risk assessment. The outcome of this assessment informs Graphic Packaging if supply chain risks exist. Supply chain risks have not yet presented a risk. If they did, Graphic Packaging would engage suppliers as appropriate.

Graphic Packaging considers many contextual issues and stakeholders when assessing water risk. Water availability and water quality at the basin level, and by extension the implications of water on our key raw materials, are considered because GPI relies on tree growth to produce fiber, which is a critical component of our production. If we cannot produce as expected, this would impact profits and in turn our investors. We also consider our suppliers, because water risk could impact their ability to supply raw materials. We attend to stakeholder conflicts to maintain positive relations with our stakeholders, including customers, local communities, local water utilities, and other local water users – all stakeholders are relevant to water issues and we have engaged all of these groups in the past. We also consider water regulatory frameworks and the status of ecosystems and habitats as required by the permitting processes to which we adhere. By extension, we also consider regulators and NGOs as key stakeholders related to water risk management. Access to WASH services is critical to the health and safety of our employees, and GPI ensures that this is maintained through annual audits and adherence to regulation.

W4. Risks and opportunities

W4.1

(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?

No

W4.1a

(W4.1a) How does your organization define substantive financial or strategic impact on your business?

Substantive financial or strategic impacts are events that could impact our business or operations and require management attention to either mitigate risk or capitalize on new opportunities. To identify and rank substantive financial and strategic impacts we consider both qualitative and quantitative



measures. The quantitative measures evaluated include potential impacts to revenue, earnings and assets. Qualitative measures include but are not limited to consideration of impacts to employee/community safety, regulatory requirements, our reputation, business continuity, trends in the underlying business, suppliers and customers. Substantive impacts would include those that would have a high likelihood to result in a loss of key suppliers or customers, sustained serious loss in market share or Company value, death, serious breaches of legal and regulatory compliance, customer market disintegration, significant impact on shareholders, catastrophic business continuity exposure and financial losses/opportunities. The impacts considered include those related to our direct operations as well as possible impacts to the continuity of our supply chain and our ability to meet customer commitments. These factors are weighed against: (a) The proportion of business units affected; (b) The size of the impact on those business units, and (c) The potential for shareholder or customer concern. A potential substantive financial impact could occur because of a large change in one of these aspects, or small changes in multiple aspects combining to create a larger impact. A specific climate or water-related risk or opportunity may be considered as having a potential substantive financial impact if it would reasonably be expected to affect the company’s expected revenues, earnings or assets positively or negatively by a certain quantitative amount that varies as the company grows. However, magnitude of the issue, by itself, without regard to the nature of the specific risk or opportunity and the circumstances in which the judgment has to be made, will not generally be a sufficient basis for the judgment. Graphic Packaging considers both qualitative and quantitative factors together when evaluating whether a specific climate or water-related risk or opportunity would have a substantive financial or strategic impact on the Company.

Through our risk management process, Graphic Packaging assigns a quantitative score to define a potential substantive financial or strategic impact for each risk/opportunity as follows: a risk magnitude impact factor of 1-5, (with the number corresponding to a range of financial impacts with 1 being low impact and 5 being high impact) and a risk probability impact factor of 1-5 (with risk level 1 corresponding to a risk that rarely occurs within a two-year time period and risk level 5 corresponding to a risk that is almost certain to occur within a two-year time period). When risk magnitude (financial impact) is multiplied by risk probability (likelihood of the event) and this results in a figure equal to or higher than 10, a risk/opportunity is considered to have a substantive financial or strategic impact.

W4.2b

(W4.2b) Why does your organization not consider itself exposed to water risks in its direct operations with the potential to have a substantive financial or strategic impact?

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	Through our risk management process, Graphic Packaging assigns a quantitative score to define a potential substantive financial or strategic impact for each risk/opportunity as follows: a risk magnitude impact factor of 1-5 (with the number corresponding to a range of financial impacts with 1 being low impact and 5 being high impact), and a risk probability impact



	<p>factor of 1-5 (with risk level 1 corresponding to a risk that rarely occurs within a two-year time period and level 5 corresponding to a risk that is almost certain to occur within a two-year time period). When risk magnitude (financial impact) is multiplied by risk probability (likelihood of the event) and this results in a figure equal to or higher than 10, a risk/opportunity is considered to have a substantive financial or strategic impact. Based on Graphic Packaging's methodology for assessing substantive financial or strategic impact, the individual sites identified by the WRI Aqueduct tool as located in basins with high/extremely high risk do not currently meet the Company's threshold for substantive impact.</p>
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W4.2c

(W4.2c) Why does your organization not consider itself exposed to water risks in its value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact?

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	At this time potential risks have been assessed and the company anticipates that there are no material financial impacts. Regarding our upstream value chain, the Company relies on private landowners and the open market for all of its pine and hardwood pulp and recycled fiber requirements, supplemented by clippings that are obtained from its converting operations. The Company believes that adequate supplies from both private landowners and open market fiber sellers currently are available in close proximity to meet its fiber needs at these mills. Regarding our downstream value chain, water is not an input into the downstream production process of our products; therefore, we do not anticipate any substantive water-related impacts.

W4.3

(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes, we have identified opportunities, and some/all are being realized

W4.3a

(W4.3a) Provide details of opportunities currently being realized that could have a substantive financial or strategic impact on your business.

Type of opportunity

Efficiency

Primary water-related opportunity

Improved water efficiency in operations

Company-specific description & strategy to realize opportunity

The Graphic Packaging mill system represents nearly 85% of our greenhouse gas generation and 99% of our water withdrawals. Paperboard mills are energy and water-intensive, and we continually assess our mill footprint to test cost and environmental impacts. Through this assessment process, we concluded that a rebalancing of our recycled paperboard mill manufacturing was appropriate. In 2019, we began our investment in a transformational \$600 million CRB platform optimization project which has included the purchase of a new recycled paperboard machine in Kalamazoo, Michigan. In addition to producing the highest quality CRB at an unmatched cost, this new CRB paperboard machine is a strategic investment in sustainable packaging. We estimate that the new paperboard machine and platform optimization will allow us to reduce our global greenhouse gases and purchased electricity. We also expect an annual decrease in water use. Graphic Packaging began the installation of the CRB machine in 2020 and mechanically completed construction in late 2021.

Estimated timeframe for realization

1 to 3 years

Magnitude of potential financial impact

Low-medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate



Potential financial impact figure (currency)

130,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact

The Company expects the investment will enable it to eliminate higher cost production at other facilities and will deliver an incremental \$130 million in annualized EBITDA over an anticipated three-year period following the commercialization in 2022. The increase in EBITDA will be driven by cost savings from significantly increased scale production, reduced raw material consumption, and lower fixed costs. \$130 million * 1 year (annual) = \$130 million annual impact.

W6. Governance

W6.1

(W6.1) Does your organization have a water policy?

No, but we plan to develop one within the next 2 years

W6.2

(W6.2) Is there board level oversight of water-related issues within your organization?

Yes



W6.2a

(W6.2a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for water-related issues.

Position of individual	Please explain
Board-level committee	Our Board of Directors, which includes our President and CEO is responsible for the oversight of our sustainability and water strategy, governance standards, goals and performance and has assigned principal oversight of our sustainability policy and practices to the Nominating and Corporate Governance Committee. The Nominating and Corporate Governance Committee (NCGC) of the Board reviews the Company's policy and practices for consistency with its ESG and water commitments, including goals, performance metrics, mitigation plans, and public reporting and makes recommendations to the Board and management. Oversight of water risk is assigned to the Audit Committee. A water-related decision made by the Committee: In 2021, the NCGC endorsed hiring a Chief Sustainability Officer to provide more focus for managing and addressing water-related matters.

W6.2b

(W6.2b) Provide further details on the board's oversight of water-related issues.

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring implementation and performance Overseeing acquisitions and divestiture Overseeing major capital expenditures	Our Board of Directors, which includes our President and CEO, guides our purpose, values, and sustainability strategy, including water-related matters. In recognition of the importance of sustainability matters to the Company, we believe that a two-tiered level of oversight provides the best structure to integrate consideration of ESG and water risks/opportunities into our overall business strategy and help us meet the changing demands of all our stakeholders. As set forth in our Corporate Governance Guidelines, our Board is responsible for reviewing, approving, and monitoring business strategies and financial performance and ensuring



		<p>Reviewing and guiding annual budgets</p> <p>Reviewing and guiding business plans</p> <p>Reviewing and guiding strategy</p> <p>Reviewing and guiding corporate responsibility strategy</p>	<p>appropriate oversight is in place. The Board fulfills these responsibilities through a number of practices, including: approval of the annual operating and strategic long-range plans, review of results against such plans and review and approval of significant corporate actions. In addition, the Board is responsible for the oversight of our sustainability and water strategy, governance standards, goals and performance and has assigned principal oversight of our sustainability policy and practices to the Nominating and Corporate Governance Committee.</p> <p>The Nominating and Corporate Governance Committee (NCGC) of the Board considers current and emerging social and environmental trends, as well as major legislative and regulatory developments and other public policy issues that may impact our business operations or stakeholders. The Committee also reviews the Company’s policy and practices for consistency with its ESG and water commitments, including goals, performance metrics, mitigation plans, and public reporting and makes recommendations to the Board and management. The Audit Committee of the Company’s Board of Directors oversees our integrated risk management framework that is designed to identify, prioritize, address, manage, monitor and communicate our top strategic, financial, operating, business, compliance, safety, reputational and other risks, including water-related risks across the organization.</p> <p>The NCGC makes recommendations to the Board and management as it deems advisable and has sustainability and ESG as standard agenda items at certain of its meetings. In 2021, Management updated the Board and the NCGC as part of routine sustainability updates and reviewed and approved the Company’s sustainability report in July 2021. The Board also oversees major capital expenditures, like the installation of a new coated recycled board (CRB) machine at our Kalamazoo, Michigan site as part of our transformational CRB platform optimization project. The optimization of our platform is expected to reduce greenhouse gas intensity, purchased fossil fuel energy intensity, and water effluent intensity in our CRB platform. The Board reviews the company-wide long-range plan and budget each September.</p>
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W6.2d

(W6.2d) Does your organization have at least one board member with competence on water-related issues?

	Board member(s) have competence on water-related issues	Criteria used to assess competence of board member(s) on water-related issues
Row 1	Yes	<p>The Nominating and Corporate Governance Committee is responsible for identifying and recommending to the Board individuals for nomination as members of the Board and its committees and, in this regard, reviewing with the Board on an annual basis the current skills, background and expertise of the members of the Board, as well as the Company’s future and ongoing needs. This assessment is used to establish criteria for identifying and evaluating potential candidates for the Board. However, as a general matter, the Nominating and Corporate Governance Committee seeks individuals with significant and relevant business experience who demonstrate:</p> <ul style="list-style-type: none"> • The highest personal and professional integrity; • Commitment to driving the Company’s success; • An ability to provide informed and thoughtful counsel on a range of issues; and • Exceptional ability and judgment. <p>The Nominating and Corporate Governance Committee regularly assesses the skills, background and expertise of the members of the Board and identifies the Company’s needs, including skills and experience related to environmental matters important to the company like climate and water-related matters. As part of this process, the Nominating and Corporate Governance Committee strives to select nominees with relevant business experience, the personal characteristics described above, and a wide variety of skills and viewpoints, informed by diversity of race, ethnicity and gender.</p>

W6.3

(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).



Name of the position(s) and/or committee(s)

Chief Sustainability Officer (CSO)

Responsibility

- Assessing future trends in water demand
- Assessing water-related risks and opportunities
- Managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

More frequently than quarterly

Please explain

Responsibilities: The CSO is responsible for managing Graphic Packaging’s progress towards its water-related goals, as well as overseeing water risk. The CSO works with the mills and operations teams to track, report, develop and implement strategies to achieve the company’s water goals. The CSO also evaluates current and future water-related risks at different sites.

Topics reported to the Board: The Board receives updates on the company’s progress towards achieving its Vision 2025 goals, which include reducing mill water effluent intensity by 15% by 2025. The Board also receives updates on sites that are water stressed, and reports on general water usage metrics.

W6.4

(W6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?

	Provide incentives for management of water-related issues	Comment
Row 1	Yes	

W6.4a

(W6.4a) What incentives are provided to C-suite employees or board members for the management of water-related issues (do not include the names of individuals)?



	Role(s) entitled to incentive	Performance indicator	Please explain
Monetary reward	Corporate executive team	Reduction of water withdrawals Improvements in efficiency - direct operations	<p>Targets are established for key environmental metrics. These environmental metrics are monitored and support financial and productivity metrics, which have individual performance goals for the senior leadership team and others associated with them. The assessment of these individual performance goals is factored into determining merit increases annually. The environmental metrics are monitored monthly in our Mill division as that business unit represents a significant percentage of the Graphic Packaging environmental profile.</p> <p>Environmental metrics include advancing progress towards achieving our Vision 2025 water intensity (consumption of water per unit production) reduction goal. This metric was established due to the water intensive nature of our paper mill operations to incent developing new opportunities to recycle water within our operations.</p>
Non-monetary reward	Corporate executive team	Implementation of employee awareness campaign or training program	<p>There is a plan to reduce water across all our mills, and a report is prepared on monthly basis, which measures water consumption against the prior period and against targets. The Mill leadership team meets on a regular basis and discusses KPIs and best practices in operations, including water-related performance. The Center for Excellence has a water expert who works with the Mills to improve their water management and works with the facilities to improve water-related KPIs and share best practices, encouraging innovation across all facilities and exchange of successful examples.</p>

W6.5

(W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?

Yes, direct engagement with policy makers

W6.5a

(W6.5a) What processes do you have in place to ensure that all of your direct and indirect activities seeking to influence policy are consistent with your water policy/water commitments?

Along with communicating our sustainability and responsibility programs, we share the impacts of legislation and regulation on operations and our ability to execute these programs. Engagements with these groups include one-on-one meetings, facility tours, and town hall meetings. When there is legislation that Graphic Packaging considers significant to our operations or community, we meet with legislators and review concerns surrounding the bill or proposed regulation and highlight alternatives. Additionally, we participate in public comment periods representing Graphic Packaging or as a member of an industry association in order to provide relevant feedback.

Graphic Packaging's VP of Government Affairs with the Chief Sustainability Officer provide strategic direction and ensure that the direct and indirect activities regarding water related policies are consistent with the strategy. The strategy is reviewed formally each year on an ad-hoc basis. Graphic Packaging's President and CEO and other members of the Executive Team participate in policy discussions at the Federal and State levels.

If inconsistency is discovered, for example in the case of an emerging regulation that will impact our strategy, the company business team along with the VP of Government affairs reviews the impact, identifies adequate measures to address it, assesses investment required, and proposes measures accordingly.

W6.6

(W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?

Yes (you may attach the report - this is optional)

W7. Business strategy

W7.1

(W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?



	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	Yes, water-related issues are integrated	5-10	The stewardship of our water resources along with our operational water efficiency are integrated into our long-term business objectives. Customers of food and beverage products have expressed concerns with plastic packaging due to pollution concerns and, as such, are expressing a greater interest in paperboard packaging. We communicate to our customers and communities how our operational processes are making a positive impact on the environment. Graphic Packaging is continually monitoring technologies associated with reducing water use and will implement those that have relevance to mills and are economically justifiable in the context of meeting our water use and monitoring commitments that make up our Sustainability Vision 2025 goals. The time horizon is targeted for 2025 and targets are reviewed against a 2016 baseline. For example, as part of our business objectives, we engage with regulators. In 2015 the EPA initiated risk policies to be imposed in the calculation of certain water quality standards which were, in many cases, unattainable. The impacts of the risk policies if put into law were assessed by Graphic Packaging and used to determine priorities for our Governmental Affairs advocacy and in our long-range planning. In 2019, the EPA began reconsidering those policies and Graphic Packaging advocated to the agency to expeditiously complete that reconsideration. We continue to advocate and continue our dialogue with EPA around future drinking water standards.
Strategy for achieving long-term objectives	Yes, water-related issues are integrated	5-10	Water use practices are embedded into Graphic Packaging’s strategy for achieving long-term objectives, both in terms of the water-specific effluent and monitoring goals set as well as energy and GHG reduction targets. By incorporating improved water reuse, recovery and recycling efforts into our operations, our water withdrawals, discharges, energy use, emissions and energy costs all decline as we are able to maintain water at a higher temperature for optimal fiber processing. Over the course of the next few years, we plan to implement various CAPEX investments to keep working on reduction of water consumption and increase water recycling to align with our 2025 target. Doing so is key to Graphic Packaging’s strategy to maintain a low-cost operating structure. The time horizon selected aligns with the period for which each goal noted above is targeted for 2025 and are



			<p>reviewed against a 2016 baseline. As an example, in 2020, we began to realize our investment of a new world-class Coated Recycled Board (CRB) machine in our Kalamazoo, MI site, and in 2021 we mechanically completed the project. The new machine is part of our transformational, \$600 million CRB platform optimization investment and will have a positive environmental impact by reducing water usage, as well as reducing greenhouse gas emissions, purchased energy, and associated transitional risks.</p>
Financial planning	Yes, water-related issues are integrated	5-10	<p>Water related concerns are indirectly integrated into Graphic Packaging’s financial planning process in which Graphic Packaging anticipates positive revenue growth associated with a shift in customer preferences for paperboard-based packaging. This is tied to the shift observed in customer concerns attributed to plastic packaging and industry trends switching to paperboard alternatives. This market shift, along with Graphic Packaging’s low cost structure that is supported by water and energy efficient practices, will have direct financial impacts on both revenue and expenses. The operational efficiency goals are tied to a 5-10 year horizon and it is expected that financial effects will positively impact revenue and expenses. Therefore, in 2020, we began to realize our investment in a new world-class Coated Recycled Board (CRB) machine in our Kalamazoo, MI site, and in 2021 we mechanically completed the project. The new machine is part of our transformational, \$600 million CRB platform optimization investment and will have a positive environmental impact by reducing water usage, as well as reducing greenhouse gas emissions, purchased energy, and associated transitional risks. The Company expects the investment will enable it to eliminate higher cost production at other facilities and will deliver an incremental \$130 million in annualized EBITDA over an anticipated three-year period following the commercialization in 2022.</p>

W7.2

(W7.2) What is the trend in your organization’s water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?

Row 1

Water-related CAPEX (+/- % change)



0

Anticipated forward trend for CAPEX (+/- % change)

0

Water-related OPEX (+/- % change)

0

Anticipated forward trend for OPEX (+/- % change)

0

Please explain

Graphic Packaging’s CAPEX remained the same in the reporting year (2021) compared to the previous reporting year (2020). This is because major water-related investments did not change in the reporting year versus the previous year. Our water-related CAPEX expenditures are for the installation of the new paperboard machine at the Kalamazoo mill. It is projected that water-related CAPEX will not change from the reporting year (2021) to the next year (2022). However, once the project is complete in 2022 the company’s CAPEX is expected to return to typical levels.

W7.3

(W7.3) Does your organization use scenario analysis to inform its business strategy?

	Use of scenario analysis	Comment
Row 1	Yes	

W7.3a

(W7.3a) Provide details of the scenario analysis, what water-related outcomes were identified, and how they have influenced your organization’s business strategy.

	Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
Row 1	Water-related	<p>Graphic Packaging uses the WRI Aqueduct Water Risk Atlas 3.0 for modeling water availability scenarios for all our operating sites. The model evaluates potential water risk in 2030 and 2040 under different climate and development scenarios – optimistic, business as usual (BAU), and pessimistic. We evaluate future water risk using the water stress indicator, and current water risk using baseline water stress and baseline water depletion indicators.</p> <p>Parameters: WRI uses the general circulation models from the CMIP Phase 5 project and socioeconomic variables based on the SSP database from the International Institute for Applied Systems Analysis. SSPs consider population, GDP, and urbanization. The models also consider changing climate phenomena, economic development, and policy.</p> <p>Assumptions: The optimistic scenario uses SSP2 and RCP4.5 to model future water stress. RCP4.5 assumes emissions will</p>	<p>Water is vital for our operations because high-quality water is a required component in the processing of fiber into paperboard and cooling to produce high quality paperboard. Future paperboard production and the related profitability of the organization could be affected if the water supply is insufficient. Stress on water resources could limit or disrupt operational and production capacity especially at the mills, decreasing potential profitability of our papermaking processes.</p>	<p>Though Graphic Packaging does not currently consider itself to be exposed to water risk, the company would take steps if it was exposed to risk and has taken steps in the past to address water risk. These steps include minimizing the company’s water withdrawals.</p> <p>For example, the Sparta aquifer is a primary source of ground water for industrial, municipal, and agricultural uses in southern Arkansas and northern Louisiana. In the 1990s it was discovered that the aquifer was severely overdrawn, and stakeholders – including the affected communities, companies, and governmental and non-governmental organizations – have been working to decrease draw. Graphic Packaging uses water from the aquifer as process water for making paperboard at our West Monroe, Louisiana plant. Though Graphic Packaging was not required to decrease our water draw from the aquifer, the Company has invested capital and staff time to decrease the amount of water withdrawn from the aquifer. Because of the</p>



		<p>stabilize at ~650 ppm CO2 and temperatures to will rise to 1.1–2.6°C by 2100. SS2 assumes higher GDP growth, lower population growth, and a higher rate of urbanization than the SS3 scenario. The BAU scenario uses SSP2 and RCP8.5 to model future water risk. RCP8.5 assumes emissions will reach ~1370 ppm by 2100 and global mean temperatures will increase 2.6–4.8°C relative to 1986–2005. The pessimistic scenario uses SSP3 and RCP8.5 to model future water risk. SS3 assumes lower GDP growth, higher population growth, and a lower rate of urbanization than SS2.</p> <p>Analytical Choices: All scenarios are applied at the company level and do not account for Graphic Packaging's value chain. The time horizons covered include 2030 and 2040.</p>		<p>measures Graphic Packaging is taking to address the water concerns, we do not consider the scale of this impact to be substantive.</p> <p>Timescale: Graphic Packaging considers water risk and mitigation efforts as far out a 2040; 2030 and 2040 analysis time periods are consistent with expected operating timelines for our facilities and long-term capital planning for future investments.</p>
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W7.4

(W7.4) Does your company use an internal price on water?

Row 1

Does your company use an internal price on water?

No, and we do not anticipate doing so within the next two years



Please explain

Graphic Packaging does not anticipate integrating water valuation practices into our operations within the next two years. New water brought in and energy costs are part of the calculations for water efficiency and re-use projects; therefore, we have heat exchangers and water circulation systems in place to reduce energy costs. Mill managers take into account water re-use as an important factor to reduce costs.

W7.5

(W7.5) Do you classify any of your current products and/or services as low water impact?

	Products and/or services classified as low water impact	Primary reason for not classifying any of your current products and/or services as low water impact	Please explain
Row 1	No, and we do not plan to address this within the next two years	Other, please specify Lack of standardization and rigor in defining "low water impact"	Graphic Packaging believes that there currently exists a lack of standardization and rigor in defining products and services that are "low water impact." Therefore, we do not currently plan to address this issue.

W8. Targets

W8.1

(W8.1) Describe your approach to setting and monitoring water-related targets and/or goals.

	Levels for targets and/or goals	Monitoring at corporate level	Approach to setting and monitoring targets and/or goals
Row 1	Company-wide targets and goals Business level specific targets and/or goals	Targets are monitored at the corporate level	Water is critical to papermaking. Because of this, we are committed to reducing our water usage and ensuring we responsibly return the water we borrow from the environment. We continue to invest in technologies, like water tanks, advanced strainers for water treatment, and clarifying units to allow us to reuse more of our process water and reduce our draw on water resources. In addition, we have implemented a structured water monitoring system to help us isolate and find additional water conservation opportunities. When setting targets and goals, Graphic Packaging considers our water-related risks and



	Site/facility specific targets and/or goals	Goals are monitored at the corporate level	opportunities as well as operational constraints, and then assesses the appropriate level of and strategy to meet targets and goals. Graphic Packaging monitors our effluent on a monthly basis consistent with prior reporting periods. Additionally, the Mill division establishes goals each year and monitors the progress of activity toward achieving those goals against the baseline period. Formally Graphic Packaging has set company-wide targets and goals in support of our organization’s overall commitment to preserving the environment, which drives strategic development within our organization and traction toward our goals.
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W8.1a

(W8.1a) Provide details of your water targets that are monitored at the corporate level, and the progress made.

Target reference number

Target 1

Category of target

Water discharge

Level

Company-wide

Primary motivation

Water stewardship

Description of target

Graphic Packaging has a target to reduce company-wide water discharge intensity by 15% by 2025 (1,000 gal/saleable ton of paperboard), from a base year of 2016 for its mills, which represent 99% of the company’s water discharges. Therefore, we consider this to be a company-wide goal in this context. Rationale: This target was determined by evaluating historical trends of water usage and targets and assessing what the company had been able to achieve in the past, evaluating how the capital investment program could impact water usage, and then setting a



stretch target based on this data. This process was managed by the sustainability team and the EVP of the Mills Division, and presented to the CEO for approval.

Quantitative metric

% reduction per unit of production

Baseline year

2016

Start year

2016

Target year

2025

% of target achieved

82

Please explain

Graphic Packaging notes that water discharge decreased approximately 13.85% since 2016 on an absolute basis and by 14% since 2016 per ton of paperboard produced on an intensity basis. Since absolute discharge decreased compared to 2016 while saleable tons also increased, we have observed a decrease in the overall metric. The decrease in water discharge per unit of production is currently aligned with the Company's water intensity effluent reduction goal.

W8.1b

(W8.1b) Provide details of your water goal(s) that are monitored at the corporate level and the progress made.

Goal

Engagement with public policy makers to advance sustainable water management and policies



Level

Company-wide

Motivation

Shared value

Description of goal

Graphic Packaging's goal is to ensure that the Waters of the US legislation is achievable in its intent to improve water quality. This goal is important because the proposed legislation sets standards for water effluent, an issue of relevance and importance to the Company. Graphic Packaging is currently educating legislators, the EPA and the Administration on our commitment to water quality and potential impacts.

Baseline year

2016

Start year

2016

End year

2025

Progress

In 2015 the U.S. Environmental Protection Agency (EPA) initiated risk policies to be imposed in the calculation of certain water quality standards which were, in many cases, unattainable and could cost municipal and industrial dischargers billions of dollars. In 2019, the EPA began reconsidering those policies and Graphic Packaging advocated that the agency expeditiously complete that reconsideration. The EPA ultimately repealed the 2015 ruling (Step One rule) and recodified the regulatory text that existed prior to the 2015 Rule. The Step One rule was replaced by the Navigable Waters Protection Rule (NWPR) on June 22, 2020. In December 2021, EPA and the U.S. Army Corps of Engineers issued a proposal to interpret WOTUS under the Clean Water Act and repeal the Trump Administration's NWPR. In February 2022, the company participated with the AF&PA to submit comments recommending that the agencies clarify and improve upon the waste treatment exclusion and narrow the proposal's overly broad inclusion of ephemeral streams and drainages important for productive forest management. Progress is indicated by the likelihood that more effective regulation will be enacted. Threshold of success: The Company will consider our efforts a success



if our comments lead to adjustments to the regulation draft that will make the regulations both relevant and achievable in their intent. Through the efforts of GPI and the forest products industry, more effective regulation is anticipated.

W9. Verification

W9.1

(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?

In progress

W10. Sign off

W-FI

(W-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

W10.1

(W10.1) Provide details for the person that has signed off (approved) your CDP water response.

	Job title	Corresponding job category
Row 1	President and CEO	Chief Executive Officer (CEO)



W10.2

(W10.2) Please indicate whether your organization agrees for CDP to transfer your publicly disclosed data on your impact and risk response strategies to the CEO Water Mandate’s Water Action Hub [applies only to W2.1a (response to impacts), W4.2 and W4.2a (response to risks)].

No

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms