

Model Project to Support Nature-related Financial Disclosures Utilizing FY24 Climate-related Financial Information (setting targets)

Project Results Report

January 30, 2025 (Thursday)

Ecology Center
Manufacturing Management Division

TOPPAN Holdings Inc.

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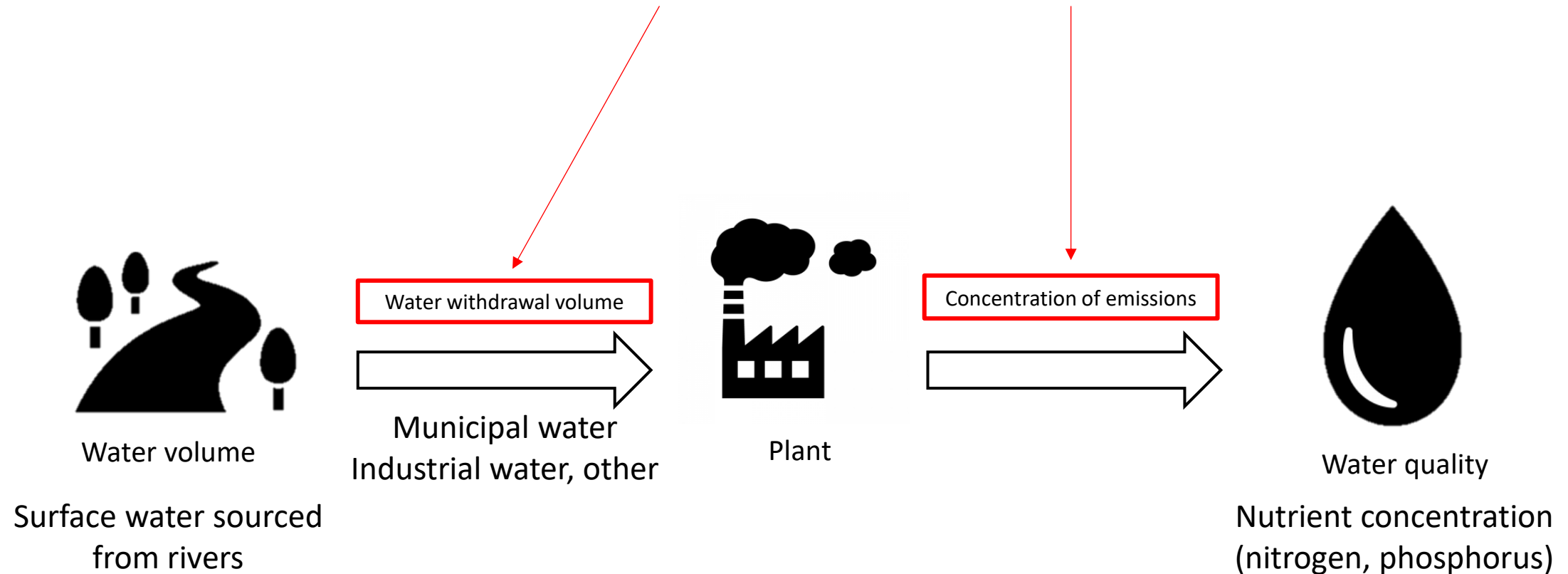
The information provided here is currently being verified and may not accurately reflect TOPPAN's future water conservation initiatives.

1. Process review
2. Implementation framework
3. Processes implemented and key considerations
4. Challenges in the process for setting targets and issues related to disclosure and deployment at other plants
5. Key takeaways from our analysis
6. Future action plan based on the project's results

0. Overview

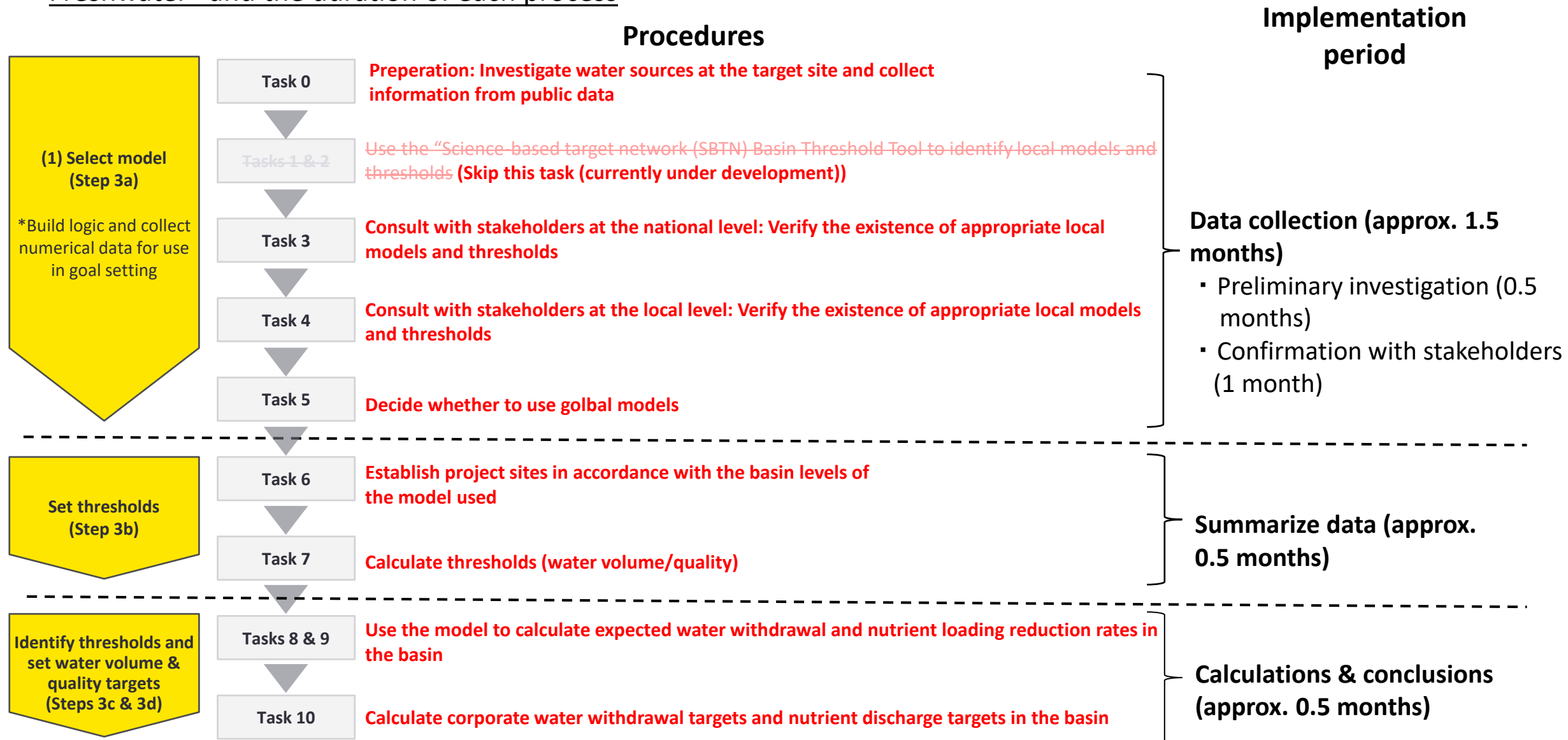
SBTs for Nature Step 3 Freshwater

To ensure the sustainable use of water resources, companies are setting science-based targets, aiming to reduce water consumption and improve quality.



1. Process review

Implementation procedures in accordance with "Science-based targets (SBTs) for Nature Step 3: Freshwater" and the duration of each process



2. Implementation framework

Water targets set by TOPPAN Group

- ✓ **Environmental Policy**

Optimal Water Use:

Working to optimize water consumption, recharge water by conserving forest resources, and prevent pollution

- ✓ **TOPPAN Group Environmental Vision 2050**

Contributing to achieving optimal water use and improving water quality by preventing pollution

- ✓ **TOPPAN Group Medium-and-Long-Term Targets for Fiscal 2030**

Achieve water withdrawal reduction targets for sites with high water risk (water stress exceeding 40%)

Ensure no cases of action taken by authorities due to exceeding regulatory threshold values



External recognition for water conservation activities



CDP Water Security



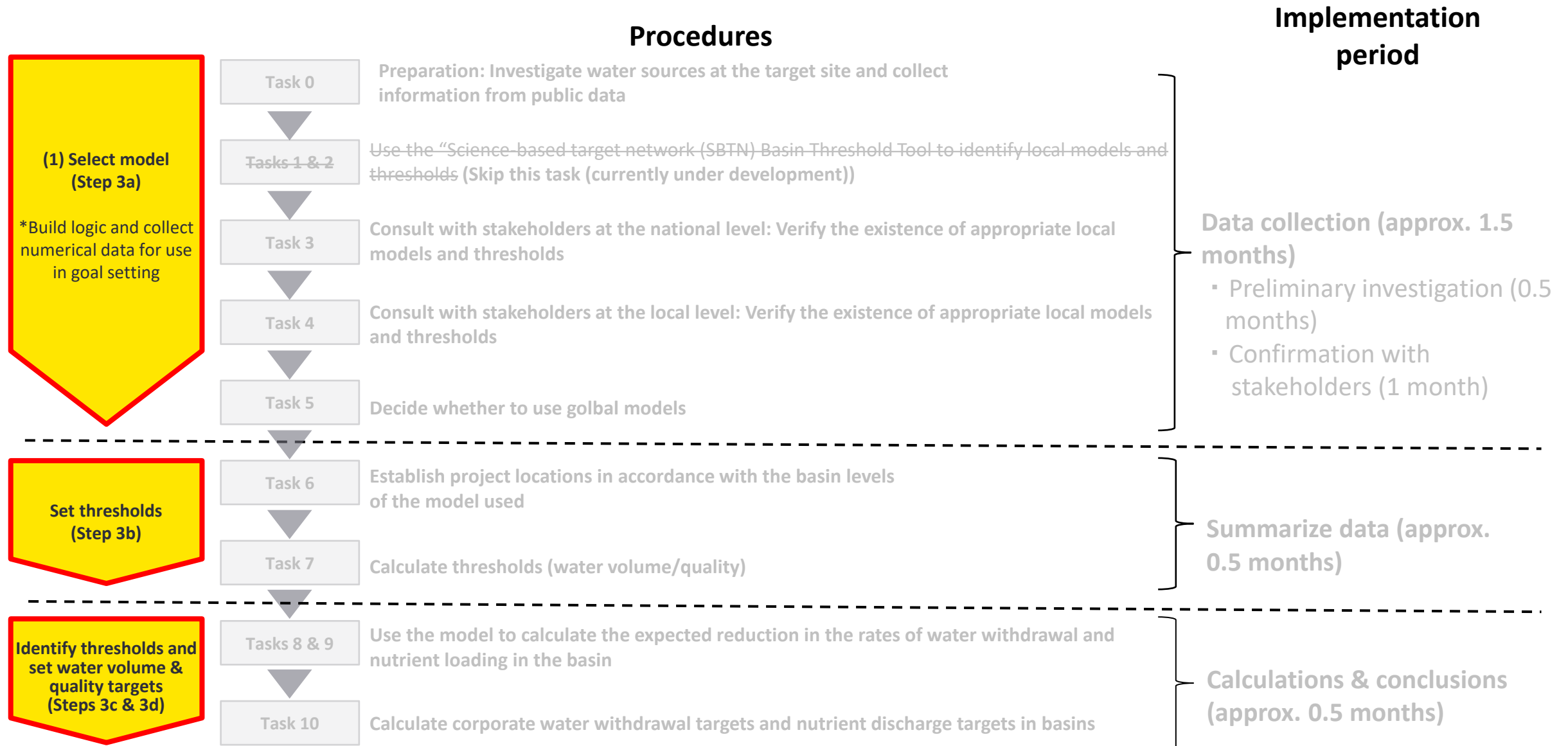
GRI Standards



Through this project, we aim to further enhance the TOPPAN Group's goals related to water conservation

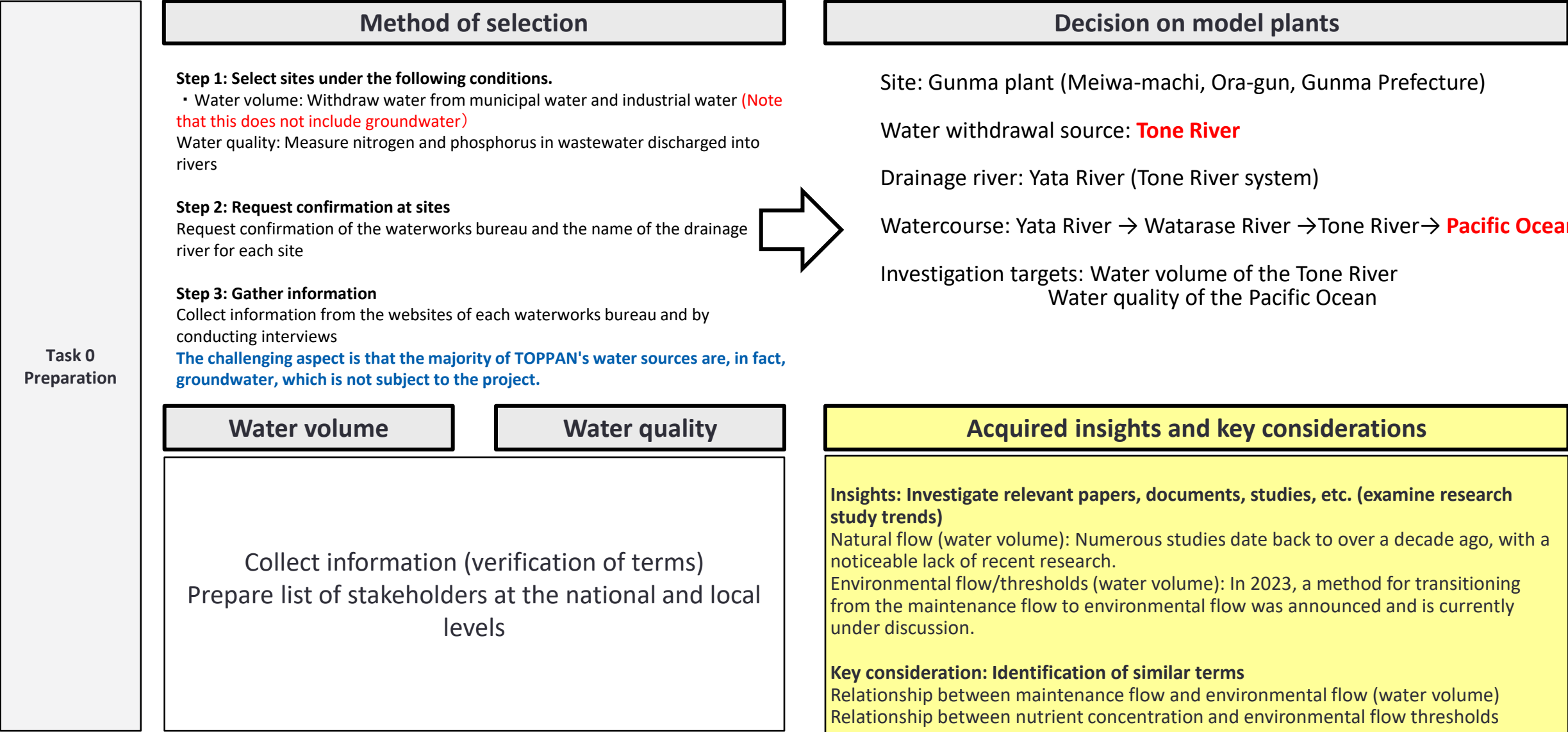
3. Processes implemented and key considerations

The processes and key considerations in the implementation of each step (3a to 3d) are described below.



3. Processes implemented and key considerations -Select model (Step 3a)-

Preparation for confirmation with stakeholders (0.5 months)



3. Processes implemented and key considerations -Select model (Step 3a)-

In the relevant waters, there was a scarcity of publicly available data related to SBTs for Nature.

▪ Water volume

(Data essential for setting minimum goals is in red)

Mandatory items	Overview	Publicly available data	Similar terms
(1) Natural flow	Flow of water basins when water is not withdrawn from basins	X	-
(2) Environmental flow/thresholds	Flows that should be supplied to waters, including rivers and wetlands, to maintain ecosystems	X	Maintenance flow
(3) Preferential flows	(1) Natural flow — (2) Environmental flow	-	-
(4) Present flow	Present basin flow	○	-
(5) Present overall basin water withdrawal	(1) Natural flow — (4) Present flow	-	-
(6) Excess water withdrawal	(2) Environmental flow — (4) Present flow	-	-

▪ Water quality

Mandatory items	Overview	Publicly available data	Similar terms
(1) Present basin nutrient concentration	Present nutrient concentration at basins	○	-
(2) Nutrient concentration thresholds	Science-based thresholds set in each basin to prevent eutrophication (Phosphorus/nitrogen concentrations)	X	Environmental standards

3. Processes implemented and key considerations -Select model (Step 3a)-

- Confirmation with stakeholders and aquired insights, key considerations (1 month)

(Direct discussions held are in red)

	Water volume	Water quality	Acquired insights and key considerations
Task 3 Consult with relevant parties at the national level	<ul style="list-style-type: none"> Ministry of Land, Infrastructure, Transport and Tourism (River Management Division) 	<ul style="list-style-type: none"> Ministry of Land, Infrastructure, Transport and Tourism (River Management Division) Minister of the Environment (Water Environment Department, Water Quality Conservation Bureau) Japan Water Agency (Incorporated Administrative Agency) 	<p>Insights: Availability of data Data related to SBTN at the national level is not available Some lakes or marshes have their own unique models</p> <p>Key consideration: Definition of terms Gather opinions from various ministries and agencies based on similar terms collected through information gathering and SBTN term definitions</p>
Task 4 Consult with relevant parties at the local level	<ul style="list-style-type: none"> Waterworks bureaus 	<ul style="list-style-type: none"> Waterworks bureaus Prefectural governments (Chiba Prefecture, Gunma Prefecture, Saitama Prefecture) 	<p>Insights: Availability of data Data related to SBTN at the local level is not available →Data at city, ward, town, and village levels need to be verified</p> <p>Key considerations: Stakeholder information Request introductions to other stakeholders</p>
Task 5 Use global data	<p>If local models cannot be verified →For Japan, consider the calculation methods using data available at the national level without using SBTN-provided tools</p>		

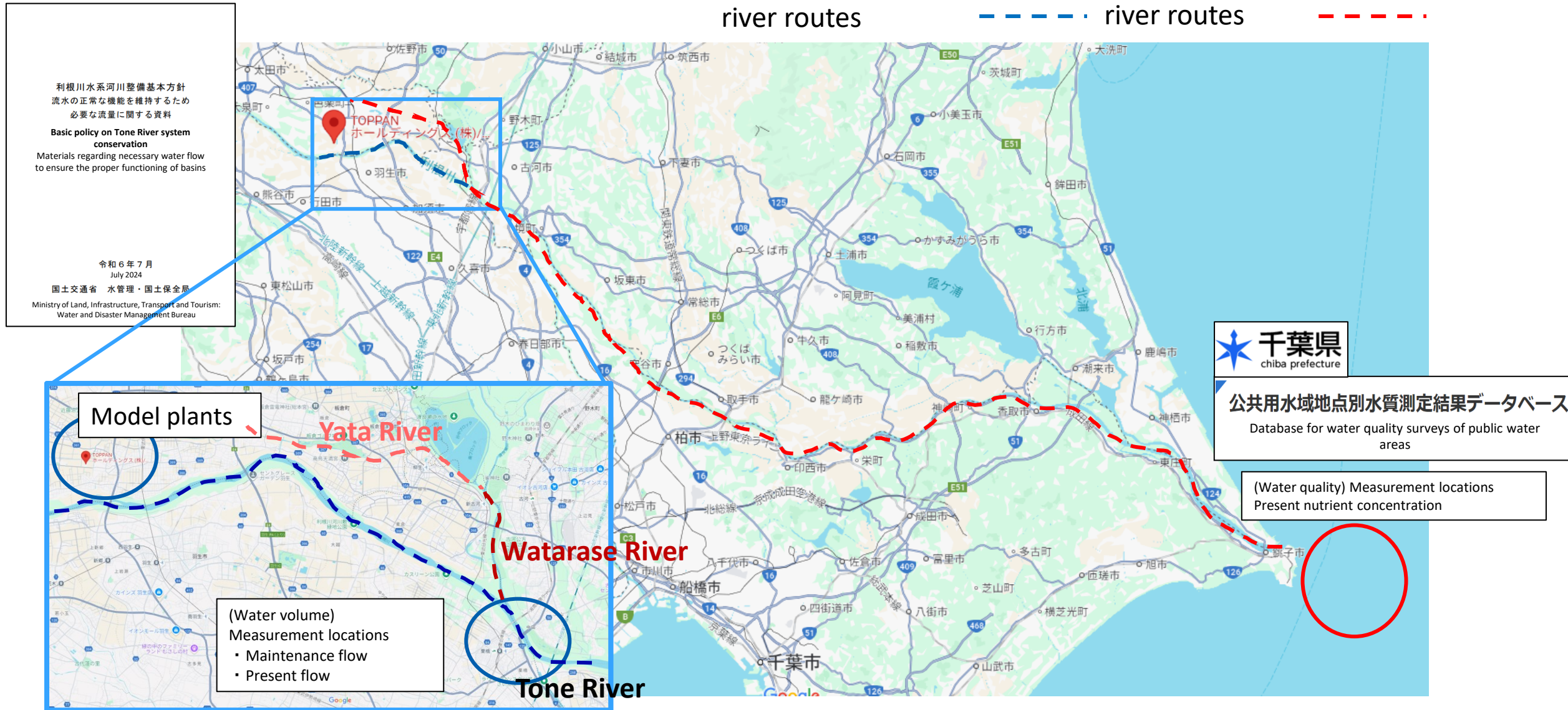
3. Processes implemented and key considerations -Set thresholds (Step 3b)-

Items for which data could not be obtained were replaced with the most conceptually similar published data or reference data (0.5 months)

Task 6
Organization of
models/data
used

Water volume			
Mandatory items	Data	Results of interviews	Adopted items (reference materials)
(1) Natural flow	X	Unknown	→ Natural flow (Data referencing SBTN global data)
(2) Environmental flow/thresholds	X	<ul style="list-style-type: none">• The Ministry of Land, Infrastructure, Transport and Tourism considers the minimum flow required for flora, fauna, and fisheries when examining the maintenance flow of rivers.→ Minimum flows during times of drought are set, which differ from preferred flows during normal conditions or environmental flows.	→ Maintenance flow (The Ministry of Land, Infrastructure, Transport and Tourism “R6. Tone River system conservation basic policy”)
(4) Present flow	○	It was confirmed with the Ministry of Land, Infrastructure, Transport and Tourism, that the river conditions described in the "Tone River system conservation basic policy" are applicable .	→ Drought flow (The Ministry of Land, Infrastructure, Transport and Tourism “R6. Tone River system conservation basic policy”)
Water quality			
Mandatory items	Data	Results of interviews	Adopted items (reference materials)
(1) Present basin nutrient concentration	○	Results of the water quality survey in the Pacific Ocean	→ Present nutrient concentration (Chiba Prefecture website water quality database “Pacific (1)”)
(2) Thresholds	X	<ul style="list-style-type: none">• The environmental standards established by the Ministry of the Environment are goals to aim for, rather than thresholds.• The Pacific Ocean is not a closed water body; therefore, nitrogen and phosphorus targets have not been established. Additionally, setting a threshold of Class I is not appropriate due to the lack of a basis. (Ministry of the Environment).	→ Global thresholds set by SBTN

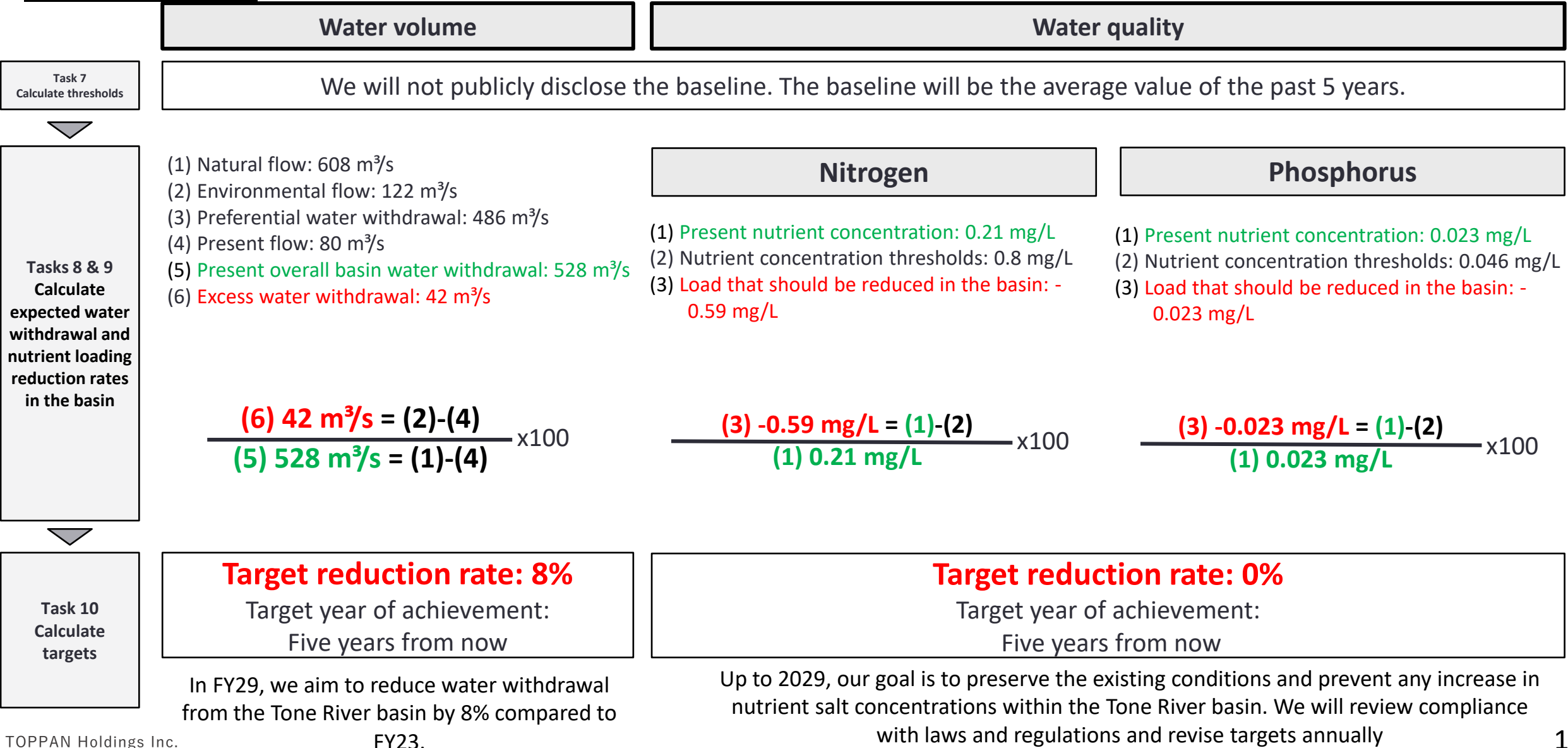
3. Processes implemented and key considerations -Set thresholds (Step 3b)-



3. Processes implemented and key considerations -Set water volume & quality targets

(Steps 3c & 3d)-

We calculated our water volume targets to be an 8% reduction in the basin's water withdrawal, and set water quality targets that would preserve existing conditions (0.5 months).



4. Challenges in the process for setting targets and issues related to disclosure and deployment at other plants

The following is a partial excerpt of the challenges experienced throughout the project, along with the proposed recommendations for deployment at other plants. The main challenge during the project was collecting publicly available data.

	Step	Challenges in the process for setting targets		Recommendations for deployment at other plants
	Overall	Situations where there is no academic data or legal thresholds		
Water volume/ water quality shared steps	Step 3a Set models	Understanding the key takeaways when verifying models with government agencies (Government agencies are not necessarily aware of SBT initiatives)	→	Create checklists that include key points and terms to ensure our company personnel can conduct inquiries with government agencies effectively
	Steps 3c & d Set targets	Level of acceptance of targets among business locations	→	Consider implementing a policy to collaborate with other companies operating in the same basin to take joint measures
Water volume	Step 3a Set models	Determining criteria for selecting flow data collection sites	→	Establish criteria for determining representative monitoring points, or points closest to sites within a basin, for effective data collection
		Setting ranges for the years of data	→	SBTN does not specify acceptable timeframes for flow data, requiring us to rely on the most recent data, even when it's over 10 years old.
Water quality	Step 3a Set models	Prioritizing tasks during the survey of reference points	→	Principally, water drains into lakes, marshes, or the ocean
		Determining the usage of lake and marsh data	→	Exclude lakes and marshes into which tributaries drain

5. Key takeaways from our analysis

Target setting and strategy enhancement:

- We obtained know-how in setting targets.
- We examined policies for setting targets related to water.
 - We will leverage these results to enhance our organization's strategic planning capabilities and establish environmental targets.

Streamlining information management and operations:

We identified the information that must be obtained for each site going forward.

- We will leverage these results to enhance operational efficiency at each site and streamline the identification and management of necessary information.

Optimization of resource management:

Surveys of water sources revealed that many TOPPAN Group locations utilize groundwater as their primary source of water.

- We will leverage these findings to enhance understanding of the sustainable use and management of groundwater resources.

Raising awareness and adapting towards achieving environmental targets:

- There is a **difference** between the requirements of “SBTs for Nature Step 3: Freshwater” and the actual environmental conditions in Japan.
 - These results provided us with an opportunity to raise awareness of the criteria for SBTN for Nature and recognize the need to adapt these criteria to actual business processes.

6. Future action plan based on the project's results

◆ Current actions

In manufacturing facilities, both domestic and overseas, take actions to verify water sources with waterworks bureaus and to assess the quality of river water into which wastewater is discharged.

◆ Future actions

(1) Provide procedure manuals to business locations

The procedure manuals prepared by EY serve as internal guidelines for business locations to follow when establishing water targets

(2) Set targets for groundwater

In the TOPPAN Group, many of our business locations in Japan primarily use groundwater as their water source.

Accordingly, when guidance materials are issued on groundwater, we will perform relevant calculations.

すべてを突破する。
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