Panama — How much water does a transit forecast assume?



Panama AI white paper • 27 November 2026 · Revision 2

In Panama, a canal forecast connects a vessel’s timetable with reservoirs that also supply households. This proposal follows that connection from the scheduling desk to the water office. It also asks who decides what a shared digital service may record in Indigenous territories.

The decision before local leaders

This paper proposes two starting points for Panama. Before either begins, the service owner should agree on an existing comparison service, a way to challenge an error and the conditions for ending the trial.

Compare forecasts with actual bookings before sending a sailing notice.

Proposed lead. Participating freight dispatcher

What to measure. Record commitments changed after a dispatcher spotted an unconfirmed slot.

Trace a water report from a community desk through repair and return notice.

Proposed lead. Participating community water committee and service operator

What to measure. Measure time to acknowledgement, completion and confirmation back to the person who reported it.

Local evidence in context

Indicator	Value	Observation	Source
Population	4,571,189	2025	World Bank WDI
GDP per person, current US dollars	19,790	2025	World Bank WDI
Residents aged 65 and over	9.7%	2025	World Bank WDI
People using the internet	72.8%	2024	ITU / World Bank

The year and geographic coverage belong to each observation. These figures describe the jurisdiction as a whole. Collect service-level figures before setting a cost target, staff requirement or digital access threshold.

Economic and social needs

Show the cost of a missed slot

The Panama Canal Authority describes using reservation arrangements and auctions when drought reduced the transit slots available. A freight forwarder could use AI to compare possible sailing dates. If the tool quietly treats an unconfirmed reservation as firm, the forwarder may commit a truck or warehouse crew too early. Have the dispatcher compare each proposed schedule with the current booking and record delay costs on small shipments as well as large ones.

Policy response. Display whether each slot is confirmed, assumed or unavailable and require the dispatcher to approve commitments.

Panama Canal Authority, 2025 Sustainability Report

Design the service with the people who run it

The World Bank’s project appraisal for Panama’s Indigenous Peoples Development Plan describes joint planning with Indigenous authorities and improvements to education, health, water and sanitation. For a digital water-repair desk, that matters before anyone buys software. A community may already know who can verify a broken pump and who has access to a phone. Use that route to accept reports and to return a repair decision in an agreed language.

Policy response. Co-design an offline report with the participating authority and let residents check that a repair ticket reached the right team.

World Bank, Support for the National Indigenous Peoples Development Plan, project appraisal

Public institutions and environmental needs

Name the office that can correct the record

Panama's Law 81 of 2019 sets out principles, rights and procedures for personal data. A municipal complaints assistant might record a household name and address, then send a summary to a contractor. Correcting the municipal screen alone would leave a contractor working from the wrong address. Before a pilot, the municipality should identify each recipient, who can amend their copy and how the resident will hear the result.

Policy response. Use a sample correction that reaches both the municipal desk and contractor before admitting live household records.

ANTAI, Law 81 of 2019 on personal data protection

Show drinking water beside shipping demand

The Canal Authority's 2024 annual report accounts for drinking water and lock operations separately within watershed water use. A model that forecasts successful transits could satisfy its shipping target while saying little about household supply. Each trial forecast should show reservoir assumptions, the date of its observations and the water demands included. Water operators and scheduling staff should review the same forecast before it is used for a public statement.

Policy response. Put drinking-water demand and lock demand on the same review sheet and require a fresh reading when the forecast exceeds its stated validity.

Panama Canal Authority, 2024 Annual Report, watershed water use

How the policy would change a decision

Enter two sample applications with the same earnings. In one, provide a payslip. In the other, leave the field blank for an applicant who can document income another way. Check where the second application goes and whether the officer can approve it.

- Trace each rejection path to its legal basis and any sector rules. Document the basis of any Article 19 exception.
- Record how customers can submit corrections and identify the complaints route under Article 18 for the institution involved.

The head of lending should retain both test outcomes and evidence that the officer’s decision reached the applicant. If a missing document generates an unreviewable denial, suspend that rule and offer affected applicants a fresh assessment.

Source: CAIA jurisdiction guide for Panama. The worked example illustrates the proposal.

Compare the trade-offs before a dry season

Show watershed residents, port users and water managers the same dry-season projection in plain Spanish, with other locally requested languages or formats. Ask each group which trade-off is missing and what evidence would change its view.

The local pilot connects to Energy, water and data centres · Agriculture and fisheries. Review R09 · R11 in the regional risk register.

Implementation and public review

Stage	Evidence or decision	Proposed responsibility
Before the trial	Define a completed case and sample the current process. Include people who use the phone, desk or an offline route.	Participating freight dispatcher
During shadow testing	Record commitments changed after a dispatcher spotted an unconfirmed slot. Compare the same cases through both routes and record every override.	Participating freight dispatcher
At the local decision	Measure time to acknowledgement, completion and confirmation back to the person who reported it. Record whether the result justifies a live trial and identify the person who can stop it.	Participating community water committee and service operator
After six months	Publish results by channel, the correction time, unresolved complaints and the decision to continue, revise or stop.	Local service owner

What partners can share

Caribbean ports could share disruption measures for planning freight. Panama’s responsible authorities keep operational decisions and sensitive infrastructure records; publish what water assumptions a partner actually needs.

Record the local approval, correction route and stop authority before exchanging results. Other jurisdictions can reuse the method and run their own tests. Regional recommendation 5.

Where to draw the boundary

An office adopting this proposal would still need to check its own powers, contracts and data permissions. Organisations named as possible reviewers or leads have not been appointed by this publication. Publish any accepted role and its date with the local trial record.

A 90-day plan for the first service

Compare forecasts with actual bookings before sending a sailing notice.

Proposed pilot lead. Participating freight dispatcher

A provisional booking becomes a confirmed sailing notice

Failure to test. A forecast treats a slot as secured and the dispatcher’s notice goes to a customer before confirmation.

Evidence to retain. Keep the confirmed booking record, forecast timestamps and dispatcher corrections.

Pause condition. An unconfirmed slot enters a binding customer instruction.

When	Proposed action and evidence
Days 1–30	Participating freight dispatcher agrees the eligible cases, existing service measures, staffed alternative and authorised decision owner. Record reviewers and a cost estimate in local currency for staff time, testing, access and recovery. Identify the funding source and who would approve it.

When	Proposed action and evidence
Days 31–60	Run the original and proposed routes on the same sample. Record commitments changed after a dispatcher spotted an unconfirmed slot. Report counted errors and eligible cases by channel and language where lawful, plus the time from error report to correction.
Days 61–90	Witness the fallback, correction and restart before asking the accountable officer for a decision. Pause on the condition above. Record affected cases, unresolved issues, costs and the date for the next check.
Six months after live launch	Publish a lawful comparison with the baseline, including corrections, open complaints and the decision to continue, change or end the use.

Sponsorship, funding and the proposed lead’s acceptance require a recorded local decision. Share test methods with Caribbean partners using the local data permissions.

Sector guide · Panama Canal Authority, 2025 Sustainability Report · Local evidence and sources · Regional high-impact use rules · Local risk scenario

Sources and method

The committee used published local evidence to select the four priorities and compared them with the Caribbean AI Framework's requirements for access, data, skills, oversight and adoption. Recommendations and stories are editorial proposals. This edition reports no results from a completed local pilot.

1. Panama Canal Authority, 2025 Sustainability Report
2. World Bank, Support for the National Indigenous Peoples Development Plan, project appraisal
3. ANTAI, Law 81 of 2019 on personal data protection
4. Panama Canal Authority, 2024 Annual Report, watershed water use
5. World Bank WDI — Population
6. World Bank WDI — GDP per person, current US dollars
7. World Bank WDI — Residents aged 65 and over
8. ITU / World Bank — People using the internet
9. Panama jurisdiction guide, Caribbean AI Association
10. Panama pilot note, Caribbean AI Association
11. Caribbean AI Framework, consultation edition, 27 November 2026

Suggested citation: Caribbean AI Association, AI Framework Committee (2026). Panama — How much water does a transit forecast assume?. Country white paper, consultation edition, 27 November 2026. Publication page.