Panama Canal Authority Vice Presidency for Operations



Advisory To Shipping No. A-04-2024

February 9, 2024

TO : All Shipping Agents, Owners, and Operators

SUBJECT: Monthly Canal Operations Summary – January 2024

 Panama Canal Statistical Sumn

a. Transit Pilot Force	282	2
	6	
c. Tugs	46	5
d. Locomotives	100)

2. Traffic Statistics:	<u>Daily</u>	Lliah	<u>Low</u>	
	<u>Average</u>	<u>High</u>		
Arrivals	22.2	31	11	
Oceangoing Transits	22.6	26	19	
Canal Waters Time (hours)	32.1	84.9	15.8	
In-Transit Time (hours)	9.4	11.4	8.3	

Oceangoing Transits:	<u>Total</u>	Daily Average	<u>Percentage</u>
Vessels of less than 91' beam	141	4.55	20.09
Vessels 91' beam to under 107' beam	372	12.00	52.99
Neopanamax Vessels (107' beam and over)	189	6.10	26.92
Total:	702	22.65	100.00

Booking Slots:	<u>Available</u>	<u>Used</u>	<u>Percentage</u>
Neopanamax Vessels (107' beam and over)	170*	153* ¹	90.00
Large Vessels (91' beam to under 107' beam)	326*	247* ¹	75.77
Regular Vessels (less than 91' beam)	109*	102*1	93.58
Auctioned booking slots	180	162	90.0

 $[\]ensuremath{^{*}}$ Does not include additional auctioned booking slots

- 3. The following page provides the scheduled locks maintenance work and other information of interest to the shipping community.
- 4. This advisory will be canceled for record purposes on February 29, 2024.

ORIGINAL SIGNED

Boris Moreno Vásquez Vice President for Operations

¹ Includes booked transits only

Subject: Monthly Canal Operations Summary – January 2024

SCHEDULE OF PANAMAX LOCKS MAINTENANCE OUTAGES							
Dates	Duration	Miraflores	Pedro Miguel	Gatun	Estimated Capacity [^]	Expected Booking Condition	Status
January 25, 2024	7 hours	East*			17	N/A	Completed
February 13, 2024	6 hours	West*			17	N/A	Tentative
February 14, 2024	6 hours	East*			17	N/A	Tentative
February 28 and 29, 2024	7 hours/day	East*			17	N/A	Tentative
March 4 to 8, 2024	5 days	East*			17	N/A	Tentative
March 13, 2024	5 hours			East*	17	N/A	Tentative
March 14, 2024	4 hours		West*		17	N/A	Tentative
March 15, 2024	8 hours			West*	17	N/A	Tentative
March 21 and 22, 2024	7 hours/day	East*			17	N/A	Tentative
April 16 to 18, 2024	2 days-8 hrs			West**	17	N/A	Tentative
April 18 and 19, 2024	7 hours/day	East*			17	N/A	Tentative
April 22, 2024	4 hours		West*		17	N/A	Tentative
April 23, 2024	4 hours	East*			17	N/A	Tentative
April 24, 2024	6 hours			West*	17	N/A	Tentative
April 25 and 26, 2024	10 hrs/day			West*	17	N/A	Tentative
May 7 to 14, 2024	8 days			West**	17	N/A	Tentative

SCHEDULE OF NEOPANAMAX LOCKS MAINTENANCE OUTAGES							
Dates	Duration	Agua Clara	Cocolí	Estimated Capacity	Expected Booking Condition	Status	
January 29, 2024	4 hours		*	7	N/A	Completed	
January 30, 2024	6 hours		*	7	N/A	Completed	
February 5, 2024	4 hours	*		7	N/A	Tentative	
February 6, 2024	6 hours	*		7	N/A	Tentative	
March 25, 2024	4 hours		*	7	N/A	Tentative	
March 26, 2024	6 hours		*	7	N/A	Tentative	

^The normal transit capacity of the Panamax locks is 34-36 vessels per day, and in the Neopanamax locks 9-11 vessels per day, depending on vessel mix, transit restrictions, and other factors. The maximum sustainable capacity of the Panama Canal (Panamax and Neopanamax locks) is approximately 36-38 vessels per day. This capacity is reduced during locks maintenance work, as indicated in the above tables. The capacity may also be adjusted depending on the level of Gatun Lake. Consequently, vessels may experience delays in transiting. When the Panama Canal's capacity is expected to be reduced, a corresponding adjustment to the number of available reserved transit slots may be ordered by the Canal Authority. Whenever a set of locks requires a major outage of one of its two lanes for dry chamber inspection, miter gate repairs, tow track work or other major maintenance/improvement projects, advantage may be taken to perform simultaneous single lane outages at other locks.

^{*} In order to perform scheduled maintenance works

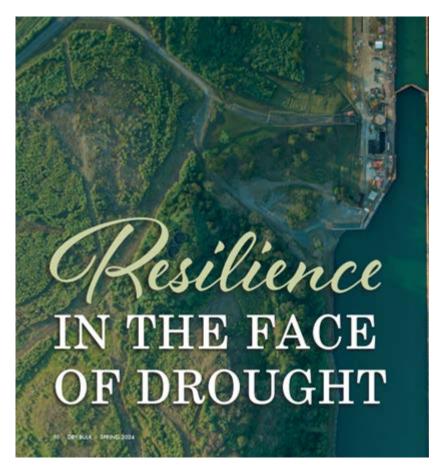
^{**} In order to perform scheduled dry chamber works

^{***} Culvert outage

The estimated capacity in the Panamax locks is currently reduced to approximately 17 lockages per day due to the low level of Gatun Lake

Subject: Monthly Canal Operations Summary – January 2024

Resilience in the face of drought Dry Bulk Magazine



Panama Canal Authority highlights the strategies it has implemented to maintain maritime trade in a time of drought.

As climate variability intensifies, the maritime sector faces growing challenges that highlight the susceptibility of crucial maritime infrastructure to worsening climate conditions.

Droughts have recently hampered trade across waterways from the Amazon to the Yangtze. In 2022, some vessels were forced to carry just 25% of their capacity along the Rhine as Europe suffered its worst drought in 500 years.

Later that year, experts estimated that the total damage and economic loss caused by historically low water levels in the Mississippi and related supply chain issues cost roughly US\$20 billion.

The impact of climate change extends to the Panama Canal, which finds itself on the front lines of an unprecedented drought affecting every sector of the market, particularly dry bulk. In 2023, the convergence of heightened temperatures in the Atlantic Ocean and the El Niño weather phenomenon, which delayed the

Subject: Monthly Canal Operations Summary – January 2024

onset of the rainy season, posed significant challenges for this crucial waterway, responsible for managing an estimated US\$444 billion worth of cargo from global trade annually.

In October 2023, the Panama Canal Watershed encountered its driest October on record, with precipitation levels hitting the lowest point since 1950.

This represented a significant 41% shortfall from the expected values. As the Canal transitions into the dry season, it faces the reality of water scarcity in the lakes crucial for its seamless operation, namely Gatun Lake and Alajuela Lake. These lakes play an indispensable role in feeding the freshwater maritime passage, emphasizing the critical need to address the challenges posed by their low water levels.

Known for its operational resilience, the Panama Canal has not stood idle. Instead, its team has responded with strategic measures and inventive maneuvers intended to ensure that operations remain safe, efficient, and competitive for the benefit of Panama and world maritime commerce. Adjustments have included modifying the maximum draft and adopting a proactive approach to planning and communication with customers.

In a historic move in October 2023, the Panama Canal Authority (ACP) restricted vessel transits through the Canal for the first time from the typical average of 36 per day, under normal conditions, to 22 for the entire month of December, in anticipation of the worst-case scenario for the following months. As November rains were below average, but not as critically low as in October, and progress had been made by water-saving measures, starting on 16 January this year, the Canal was able to increase daily transits to 24 and maintain this figure.

As is customary in every dry season, draft restrictions have been put in place. Vessels transiting the Neopanamax locks are allowed drafts of up to 44 ft, while vessels transiting the Panamax locks have had no draft restrictions. Furthermore, to give vessels a better, more equitable chance of obtaining a reservation, ACP also adjusted booking periods and limited the number of slots each shipper can obtain per day, with some exceptions for quotas offered to vessels competing through the reservation system.

The Canal's special auctions were also modified to make them more equitable and reflective of the market composition.

Resilience of the dry bulk segment amidst transit challenges

While transit and draft restrictions have impacted all vessel types, dry bulk trades carrying a variety of raw materials – such as minerals, metals and ores, grain, coal, and fertilizers – are some of the most affected.

Unlike cruise and container ships that typically secure transit slots months in advance, dry bulk carriers often secure slots only shortly before arrival because the nature of their business is different to liners. This practice, combined with the Canal's transit restrictions coinciding with the US grain harvest and increased transportation demand in the autumn, has prompted the dry bulk segment to seek alternative routes through the Suez Canal and the Cape of Good Hope.

Subject: Monthly Canal Operations Summary – January 2024

As a result, transits for dry bulk carriers have dipped by 9.85% between October 2022 and September 2023, compared to the same period the year prior. Nevertheless, the dry bulk segment remains integral to the Canal's operation, and the ACP continues to facilitate minor bulk trade (i.e., salt, phosphate, coal, etc.) throughout the drought period.

Although dry bulk vessels face increased voyage distances and transportation costs from alternative routes, the ACP remains confident that the situation is temporary. Its outlook is based on expectations of Panama's rainy season — which typically begins in May — easing the Canal's drought conditions, as well as dry bulk's demonstrated resilience in the face of global shocks in recent years. Dry bulk shipping has consistently shown adaptability, successfully navigating through crises such as the COVID-19 pandemic, rapidly evolving trade sanctions related to the war in Ukraine, and previous droughts in the Panama Canal Watershed.

Throughout 2020 and 2021, amidst the global upheaval caused by COVID-19, dry bulk shipping swiftly met the increased demand for raw materials worldwide, contributing to an overall increase in cargo volume of 2% and 16% through the Canal. The Russia-Ukraine war has also impacted dry bulk, reshuffling supply chains.

Russian coal, previously destined for the EU, found new routes to India and China, and the EU replaced Russian coal with supplies from Colombia, South Africa, the US, and Australia.

Despite these disruptions, dry bulk trade has always adapted to ensure markets remained adequately supplied.

These examples not only highlight the sector's ability to weather uncertainty and sustain essential operations but also offer a reassuring perspective on how the industry can adeptly navigate the present circumstances and ready itself for potentially similar challenges such as the Red Sea shipping crisis in early 2024.

Innovative water management solutions for the Canal's future

While there is no simple answer or project that can immediately solve the challenge of water scarcity at the Panama Canal, the ACP is rising to the occasion and advancing various short and long-term solutions that will strengthen the route permanently. It has placed a significant focus on climate-related risk management, as Panama has experienced an increasing number of extreme weather-related events over the past decade, undergoing a notable period of climatic stress with its three driest consecutive years occurring from 2013 – 2015.

In addition to conservation measures, the Panama Canal is exploring shorter-term solutions to help optimize the use and storage of water at the Canal.

One ongoing project, currently in the tender process, aims to improve the management of water stored at Gatun Lake.

Meanwhile, it is also pursuing a set of long-term solutions, some of which fall outside of the Canal watershed.

Subject: Monthly Canal Operations Summary – January 2024

The Canal's commitment to safeguarding global maritime trade.

The Panama Canal's legacy is rooted in confronting challenges. The ACP's hopes to show commitment to ensuring this critical artery of global trade remains steadfast. Through collaborative efforts with customers and a proactive approach to addressing the broader ramifications of climate-related disruptions, the ACP aims to develop and implement innovative solutions for sustainable and resilient operations for years to come.

Despite the current challenges, the Panama Canal's advantages – including significant time and cost savings, as well as seamless logistical connectivity – reaffirm its position as the preferred route for the maritime industry. At present, the Canal still serves over 180 maritime routes, connecting 170 countries and reaching approximately 1,920 ports worldwide. As it navigates the impacts of climate change, its determination to adapt and remain competitive underscores its commitment to continue facilitating global maritime trade efficiently, safely, and reliably.