

**AGUA CLARA LOCKS** 

The Panama Canal remains aligned with the natural environment.

The waterway is nestled in a watershed of abundant biodiversity where humankind and nature coexist and work together.

Over 160 different types of mammals native to the region rely on the Panama Canal Watershed as their source of drinking water and survival. As a complement to that coexistence, we are continuously focused on managing a clean and healthy watershed.





Our partnership with nature has resulted in new knowledge and pioneering programs for environmental protection, reforestation and a better quality of life for all.

The Expanded Canal is Panama's largest infrastructure undertaking since the original construction of the waterway. The Expanded Canal adds a third lane for the transit of longer, wider and deeper-draft vessels, which doubles the waterway's capacity by promoting economies of scale and contributing to the

Furthermore, the Expanded Canal helps mitigate climate change, since bigger ships will transit through this route, reducing the global emissions of CO<sub>2</sub> that result when using alternate longer routes.

# A LITTLE HISTORY

The Panama Canal is the result of a saga of human ingenuity and courage that goes back to the early 16th century when the Spaniards arrived on the Isthmus. Since then, the idea of building a route that would join the Atlantic and Pacific Oceans was conceived.

The first firm effort to build an all-water route through Panama began with the French in 1880, but financial troubles and diseases made the initiative fail, After its independence in 1903, Panama negotiated an agreement with the United States for the construction of the Canal which the U.S. would finish on August 15, 1914 and then managed the waterway until 1999.

At noon on December 31, 1999, Panama took over full operation, administration and maintenance of the Canal, in compliance with the Torrijos-Carter Treaties negotiated with the United States in 1977. Since then, the Panama Canal Authority (ACP) manages the waterway as an autonomous government agency.

## **HOW DOES IT WORKS?**

The Panama Canal serves as a maritime shortcut that saves time and costs in transporting all kinds of goods. The 80-kilometer waterway communicates the Atlantic and Pacific Oceans in one of the narrowest points of the Isthmus of Panama and of the American Continent.

Since its opening in 1914, more than one million ships from all over the world have transited the Canal. The historic millionth mark was reached on September 4. 2010 with the transit of the bulk carrier Fortune Plum.

The waterway uses a system of locks that operates as water elevators and raises the ships from sea level to the level of Gatun Lake, 27 meters above sea level, to allow the crossing through the Continental Divide, and then lowers the ships to sea level on the other side of the Isthmus.

narrowest part and its 12.7 kilometers represent almost a fifth part of the total extension of the waterway. This segment was excavated through rock and limestone of the Continental Divide of Panama. With the material excavated during its construction, up to 63 pyramids same as in Egypt could be erected.



**COCOLI LOCKS** 

development of new markets.

The water used to raise and lower the vessels in each set of locks is obtained from Gatun Lake by gravity and poured into the locks through a main culvert system that extends under the locks chambers from the sidewalls and the center wall.

### **EXPANDED** PANAMA CANAL

Construction for the Expanded Panama Canal began in September 2007. It was inaugurated on June 26, 2016. Its objective is to double the waterway's capacity to satisfy the increasing demand of world maritime trade.

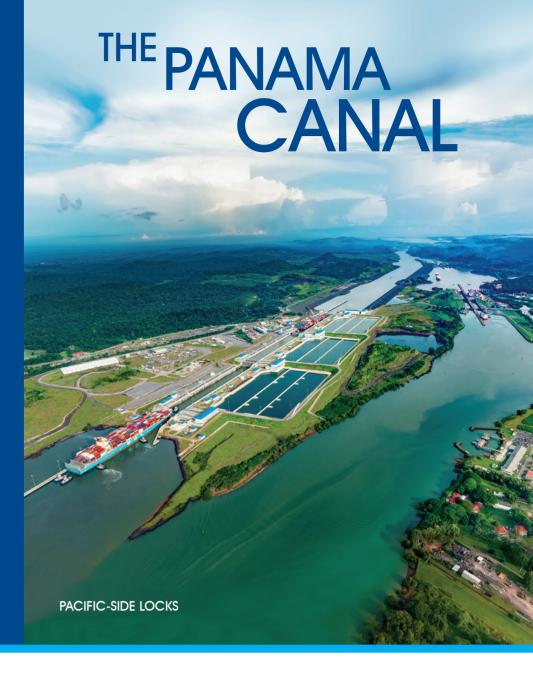
The Expansion entailed the construction of two new lock complexes on the Pacific and Atlantic sides. Each complex features three chambers, nine water-saving basins, and rolling gates. The project also included the construction of a Pacific Access Channel, improving the navigational channels and increasing water supply.

To ensure the social and environmental feasibility of the project, the expansion complied with the environmental impact studies that include mitigation measures such as reforestation, wildlife rescue and archaeological and paleontological

Culebra Cut is the Canal's

## 10 MILESTONES IN PANAMA CANAL HISTORY

- August 15, 1914 The Panama Canal was opened with the passage of the SS Ancon, in a full transit from the Atlantic to the Pacific Ocean.
- October 12, 1962 Inauguration of the Bridge of the Americas, the first bridge opened to the public over the Panama Canal.
- May 12, 1963 The Panama Canal begins operating 24/7.
- February 29, 1968 Most transits on a single day at the Panama Canal with an amount of 65 ships crossing the isthmus.
- **September 7, 1977** United States and Panama sign the Torrijos-Carter Treaties, which ultimately transferred the Canal to Panama by December 31, 1999.
- June 22, 1979 The U.S. Navy hydrofoil Pegasus made the fastest transit through the Panama Canal in two hours and 41 minutes.
- February 16, 1994 The Panama Canal is chosen as one of the Seven Wonders of the Modern World by the American Society of Civil Engineers (ASCE)
- **December 31, 1999** Panama takes over the administration and operation of the
- September 3, 2007 Panama Canal Expansion construction begins.
- September 4, 2010 The bulk carrier Fortune Plum carries out the one-millionth transit through the waterway.
- August 26, 2012 The Panama Canal implements more sound "Green Building" practices with regards to future constructions in order to improve compatibility with
- August 15, 2014 The Panama Canal celebrates 100 years of connecting the world.
- July 1, 2015 Beginning of tests of the rolling gates of the Expanded Canal.
- June 26, 2016 The Expanded Panama Canal is inaugurated.





#### ADDITIONAL INFORMATION

Additional information on the Panama Canal may be requested by writing to the Panama Canal Authority, Corporate Communications Vice President Balboa-Ancon, Republic of Panama (local), or P.O. Box 526725, Miami, FL 33152-6725, U.S.A. (internationa

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# IT IS POSSIBLE TO HAVE THE WORLD AT YOUR REACH



Panama's connectivity is strengthened by the services offered by the waterway together with the advantages resulting from boasting ports at both oceans, an air transportation hub, a coast-to-coast railroad system, highways, and a renowned commercial distribution center at the Colon Free Zone.

> Undeniable evidence confirms the permanent value and worldwide importance of the Panama route. The Expanded Panama Canal further enhances the route's vital role as a link for global

# THE PANAMA CANAL IS CONNECTIVITY



For more than 100 years, the Panama Canal has been improving global commerce, transportation and connectivity. Since its opening, the Panama Canal has transformed world trade by reducing time, distance and cost between producers and consumers.

The Panama Canal connects 144 routes from every corner of the globe, reaching 1,700 ports in 160 countries, providing safe, reliable and efficient service to the maritime industry.

To maintain competitiveness and enhance reliability for the next 100 years, the Canal continues to invest in its existing infrastructure, maintenance and modernization programs, and its dedicated workforce.

