## PANAMA CANAL AUTHORITY

OFFICIAL TARIFF Item No. 1500.0000

Part I MARINE SERVICES				
ITEM	SYMBOL	EFFECTIVE	DESCRIPTION	TARIFF
1500.0000			Fresh Water Surcharge	
			Fixed portion of the fresh water surcharge	
1500.0001	AR	15-Feb-20	Vessels over 38.1 meters (125 feet) in LOA, up to 60.96 meters (200 feet)	\$ 2,500.00
1500.0002	AR	15-Feb-20	Vessels over 60.96 meters (200 feet ) in LOA, up to 91.44 meters (300 feet)	\$ 5,000.00
1500.0003	AR	15-Feb-20	Vessels over 91.44 meters (300 feet) in LOA	\$ 10,000.00
1500.0100	AR	15-Feb-20	Variable portion of the fresh water surcharge: applicable to vessels 38.1 meters (125 feet) LOA. The variable portion is derived from a sigmoidal function, as a percentage (%) and an independent variable (x) which pertains to the official depth level of Gatun Lake in the day of the transit, which is published in the Panama Canal website. The resulting percentage can vary between 1% and 10% and is applied to the total tolls of the vessel (including the fixed and variable tolls portions in those cases where the tolls structure includes those components). $f(x) = \begin{cases} \frac{0.10}{1+e^{0.6(x-82)}}, & x \leq 85.5 \\ 0.01, & x > 85.5 \end{cases}$	The variable amount to be charged is the percentage obtained in the function times the total tolls of the vessel (including the fixed and variable components of such tolls when applicable)