

Friday 24th March 2023

CIRCULAR 047/2023

PARANA RIVER LOW WATERS (UPDATE)

Dear All,

In previous Circulars we have informed about the critical situation observed on the Parana River due to historically low water (see Circulars 23, 26, 28, 32, 42 and 43 enclosed for further information).

According to the last monthly report issued by our National Institute of the Water, in March 20203 the effect of La Niña phenomenon weakened and a transition to a neutral effect is expected in the southern autumn. The rain forecast for the current trimester (March to May 2023) is normal to deficient.

Overall, for the Parana River, it is expected that the flow would fluctuate in the range of average/average low, with a slight descendent tendency but still above the values recorded in the same period during the preceding years influenced by the increase observed in the Paraguay River and the Alto Parana and the regulation of the dams in the latter area.

For example, in Rosario port the heigh of the river recorded (22 March) was +3.18m compared to the historical average of +3.50M.

The chart below illustrates the level of water registered in the port of Rosario, indicating that one year ago the level of the water was +0.57m (above local zero) whereas today is +3.25m. The lowest levels were seen this year in January reaching +0.04m on 16 January 2023. As mentioned in the Institute of Water reports, between February and March the water recovered due to the condition of the Paraguay River and Alto Parana, including the dams, and the forecast is tending to deficient rains and water remaining between average to low with a decreasing tendency for the second trimester of the year.



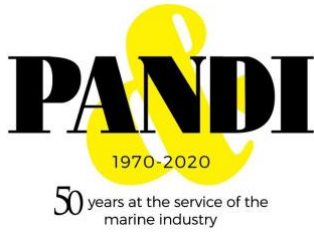
As a further illustration of the situation, today's minimum effective depth to reach/depart Rosario port is 11.62m (ie. 11.02m max. sailing draft) compared to the 11.29m (ie. 10.69m max sailing draft) recorded on the same date in 2019 prior to the extraordinary low water situation. This will tend to decrease, overall, in the following three months according to the forecasts.

We furthermore recommend to the Master to enquire the Pilots as to the relevant regulation within the area to be transited, including specific speed limits and to bear in mind, at all times, ship's squat effect, to minimise risks of groundings, wash damages and fines.

In respect of the speed, we would suggest to watch the applicable limitations closely as this must be complied with to avoid Administrative Enquiries and sanctions by the Coast Guards who are monitoring the speed actively through VTS (Please refer to our Circular 36/2020 as updated).

We shall continue monitoring the situation, keeping you posted. In the meantime, we remain at your disposal if clarification and/or additional information is needed.

Yours Faithfully,



Sebastián Trigub

PANDI LIQUIDORES SRL

BUENOS AIRES, ARGENTINA

This Circular updates Circulars 23, 26, 28, 32, 42 and 43 (enclosed)

For further information visit www.pandi.com.ar

Notice: the content of this circular is for information only. Even though it has been issued carefully, and to the best of our knowledge, it has a general purpose and we can accept no liability whatsoever for any particular action taken upon it. © Pandi Liquidadores SRL. All rights reserved.

Monday 7th June 2021

CIRCULAR 043/2021

PARANA RIVER LOW WATERS (UPDATE)

Dear All,

In previous Circulars we have informed about the critical situation observed on the Parana River due to historically low water (see Circulars 23, 26, 28, 32 and 42 enclosed for further information).

By way of update, please note, that in general terms, the season of critical low waters in the Parana River and River Plate basin continues: the lowest levels observed over the last 50 years.

The National Water Institute (INA for its initial in Spanish) has advised that the recent rain registered was very limited and with very short effect on the rise of the levels of the water in the Parana River. The flow of water of about 7,900 m³/s is well below the historical average recorded for June in the last 25 years. Considering today's information and the most probable tendency, **the INA forecasted that the level of the water in the following months will be very similar to those observed in most of 2020, or even lower.**

Just as an example, below chart illustrates the level of water registered in the port of Rosario, indicating that one year ago (already in the critically low water season) the level of the water was +1.28m (above local zero) whereas today is +1.1m. The lowest levels were seen between August/September 2020 (+0.3m), November/December 2020 (+0.13m) and January/February 2021 (+0.33m). This is well below to the +4.29m observed in June 2019 as illustrated in our Circular 26/20.

Registros del puerto ROSARIO

haga click y arrastre para hacer zoom en un area determinada



As a further illustration of the situation, today's maximum sailing draft from Rosario is 9.9m compared to the 11.53m on 7th June 2019 (prior to the period of extraordinary low waters).

According to some estimations received, the critical low waters in the Parana River represented a loss of US\$ 244M in exports in 2020, and a similar tendency continues in 2021.

The Coast Guards have issued periodical warnings stressing the utmost importance of complying with the daily maximum permissible sailing draft and with the mandatory UKC of 0.6 meters that should be always kept. The Coast Guards also recommends to the Masters to discuss the navigational plan with the Pilots before proceeding, as well as providing all necessary information related to ship's manoeuvrability.

We furthermore recommend to the Master to enquire the Pilots as to the relevant regulation within the area to be transited, including specific speed limits and to bear in mind, at all times, ship's squat effect, to minimise risks of groundings, wash damages and fines.

In respect of the speed, we would suggest to watch the applicable limitations closely as this must be complied with to avoid Administrative Enquiries and sanctions by the Coast Guards who are monitoring the speed actively through VTS (Please refer to our Circular 36/2020).

We shall continue monitoring the situation, keeping you posted. In the meantime, we remain at your disposal if clarification and/or additional information is needed.

Yours Faithfully,

Sebastián Trigub

PANDI LIQUIDORES SRL

BUENOS AIRES, ARGENTINA

This Circular updates Circulars 23/2020, 26/2020, 28 32 and 42 (enclosed).

For further information visit www.pandi.com.ar

Notice: the content of this circular is for information only. Even though it has been issued carefully, and to the best of our knowledge, it has a general purpose and we can accept no liability whatsoever for any particular action taken upon it. © Pandi Liquidadores SRL. All rights reserved.

Monday 3rd May 2021

CIRCULAR 042/2021

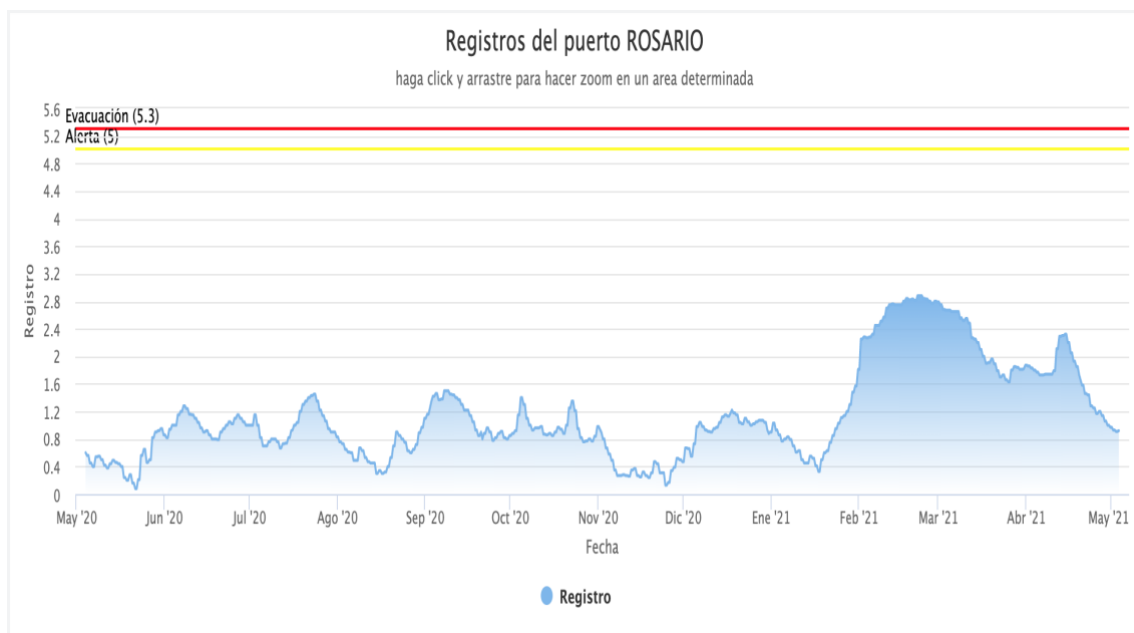
PARANA RIVER LOW WATERS (UPDATE)

Dear All,

In previous Circulars we have informed about the critical situation observed on the Parana River due to historically low water (see Circulars 23, 26, 28 and 32 2020 enclosed for further information).

By way of update please note whilst there was an improvement in March/April 2021, the level of the water commenced dropping towards the end of April and the situation remains critical.

See as an example below graph the level of the water on a period of 1 year at Rosario port (May 2020 – May 2021)



Due to the above, the Coast Guards have issued a new warning stressing the utmost importance of complying with the daily maximum permissible sailing draft and with the mandatory UKC of 0.6 meters that should be kept at all times.

The Coast Guards also recommends to the Masters to discuss the navigational plan with the Pilots before proceeding, as well as providing all necessary information related to ship's manoeuvrability.

We furthermore recommend to the Master to enquire the Pilots as to the relevant regulation within the area to be transited, including specific speed limits and to bear in mind, at all time, ship's squat effect in restricted waters.

Please also note that the forecast issued by the National Institute for the Water (INA) anticipates that the tendency will continue in the following weeks. By mid-May they forecasted a medium of +0.85m in the port of Rosario (compared to the historical average for the period of +3.58m).

We shall continue monitoring the situation, keeping you posted. In the meantime, we remain at your disposal if clarification and/or additional information is needed.

Yours Faithfully,

Sebastián Trigub

PANDI LIQUIDORES SRL

BUENOS AIRES, ARGENTINA

This Circular updates Circulars 23/2020, 26/2020, 28 and 32 2020 (enclosed).

For further information visit www.pandi.com.ar

Notice: the content of this circular is for information only. Even though it has been issued carefully, and to the best of our knowledge, it has a general purpose and we can accept no liability whatsoever for any particular action taken upon it. © Pandi Liquidadores SRL. All rights reserved.

Friday 11th September 2020

CIRCULAR 032/2020

PARANA RIVER LOW WATERS (UPDATE)

Dear All,

In previous Circulars we have informed about the critical situation observed on the Parana River due to historically low water (see Circulars 23, 26 and 28/2020 enclosed for further information).

By way of update please note whilst there was small improvement since June 2020, the situation remains critical and the forecasts do not anticipate for any relevant improvements soon.

See as an example below graph the level of the water on a period of 1 year at Rosario port (Sept 2019 – Sept 2020):



The rainfalls relevant to the Parana River basin are still expected to be ‘deficient’ during the last quarter of the year. The rainfalls are one of the main factors affecting the height of the water in the Parana River. Therefore, neither of the forecasts issued by the National Weather Service (SMN) nor the National Institute of Water (INA) foresee any relevant improvement soon.

As the condition of the Parana River continues to be critically low, the significant reduction on groundings seen the last 60 days compared to previous months would be explained by the effect of alert and awareness raised to all relevant parties. However, we would suggest reminding to those shipowners trading to Argentina of the current situation on the Parana River and to continue maximising all precautions and taking all measures as previously recommended:

- it is very important for the passage plan to be discussed with the pilot with all the crew that will be on the bridge during navigation even in ballast condition and to keep a good record in writing of the discussed navigational plan.
- When loading, the Master should be alert of the condition of the river bearing in mind the maximum permissible draft - which are based on the critical points that the vessel has to sail through depending the port/terminal she is in. This information is provided by the Undersecretary of Ports and Waterways every morning around 9 or 10 am so a vessel which is going to complete overnight could be sailing with the information provided during the morning and must be checked with agents daily.
- Be reminded that the vessels should keep a 2” (0.60m) UKC at all times and it is of utmost importance to consider the ship’s squat especially when crossing critical passages bearing in mind this time of low water levels.
- In case of any doubt the Master should always get in touch with the designated port agents before entering the River Plate basin and before departing from the

designated terminal as to obtain accurate/updated information to be confirmed then with the pilot on duty.

We shall continue monitoring the situation, keeping you posted. In the meantime, we remain at your disposal if clarification and/or additional information is needed.

Yours Faithfully,

Sebastián Trigub

PANDI LIQUIDORES SRL

BUENOS AIRES, ARGENTINA

This Circular updates Circulars 23/2020, 26/2020 and 28/2020)

For further information visit www.pandi.com.ar

Notice: the content of this circular is for information only. Even though it has been issued carefully, and to the best of our knowledge, it has a general purpose and we can accept no liability whatsoever for any particular action taken upon it. © Pandi Liquidadores SRL. All rights reserved.

Wednesday, August 5, 2020

CIRCULAR 028/2020

PARANA RIVER LOW WATERS - UKC

Dear All,

Further to our Circulars 23/2020 and 26/2020 (attached for your easy reference), a new warning has been issued today by the Argentine Coast Guard in relation to the UKC, especially bearing in mind that due to the COVID-19 scenario the clearance of vessels is mainly performed remotely. Although there have not been recent groundings in the past couple of weeks - especially after the peak last May- the levels of water in the river would not improve significantly in the near future in accordance with the information forecasted by INA (National Water Institute). Therefore, we recommend Masters to be alert in relation to the compulsory UKC, also bearing in mind the squat effect of the vessels when transiting restricted waters as our channels in the Parana River/River Plate are.

Yours Faithfully,

PANDI LIQUIDORES SRL
BUENOS AIRES, ARGENTINA

This circular update Circulars 023/2020 and 026/2020.

For updated information visit www.pandi.com.ar

Notice: the content of this circular is for information only. Even though it has been issued carefully, and to the best of our knowledge, it has a general purpose and we can accept no liability whatsoever for any particular action taken upon it. © Pandi Liquidadores SRL 2020. All rights reserved.



Recomendaciones para los capitanes de buques de porte que transitan la Vía Navegable Troncal Santa Fe – Océano

Publicado el martes 04 de agosto de 2020

Como consecuencia de la bajante extraordinaria que continúa afectando a toda la Cuenca del Plata y en particular a la navegación de los ríos Paraná Medio, Paraná Inferior, Paraná de las Palmas y el Río de la Plata, la Prefectura Naval Argentina alerta a los capitanes de buques y prácticos sobre los potenciales riesgos que constituyen para la seguridad de la navegación, la protección ambiental, la eficacia del tráfico de buques y la integridad operativa de la vía de navegación troncal, la inobservancia de los parámetros de seguridad establecidos en la Ordenanza N° 04/18 (DPSN) “Normas Particulares de Seguridad de la Navegación para las Áreas Fluviales y Marítimas de Jurisdicción Nacional”.

En este sentido y para poder cumplir con las previsiones de cargas y su transporte en forma segura y eficaz a través del sistema de navegación troncal, resulta esencial respetar el margen de seguridad mínimo bajo la quilla (MSBQ) establecido de 0,60 metros durante toda la travesía, para lo cual debe tomarse en consideración para el cálculo de los calados máximos los distintos factores y efectos evolutivos que incidan para su determinación, particularmente la velocidad del buque durante la navegación en canales y áreas de aguas restringidas.

Asimismo, esta Autoridad Marítima recomienda a los capitanes de buques notificar al personal de prácticos respecto de los detalles de la información relativa a la maniobra del buque y la planificación de viaje, incluyendo las medidas de vigilancia de la progresión y la situación del buque durante la ejecución de dicho plan, a fin de poder recibir el correcto asesoramiento y los prácticos dar cumplimiento a las leyes y normas que regulan su ejercicio profesional.

Fuente: <https://www.argentina.gov.ar/noticias/recomendaciones-para-los-capitanes-de-buques-de-porte-que-transitan-la-navegable-troncal>

Tuesday 7th April 2020

CIRCULAR 023/2020

PARANA RIVER: DRAFT RESTRICTIONS

Dear All,

Please be informed that the height of the water in the Plata Basin (Parana River / River Plate system) has been dropping below average and the forecast indicates that this tendency will continue during the following days. For this reason, the relevant Institute issued an Hydrological Alert and the Coast Guard circulated a note to all the parties concerned requesting to maximize caution with ship's drafts when loading to avoid incidents.

We are enclosing Coast Guards' Circular (free translation), last minimum drafts published (6 April) and the depth records of the last 7 days at Rosario as an example.

Due to the above we suggest to remind to the Masters to follow up with their agents the maximum sailing drafts taking into account the decreasing tendency and, as we always due, to suggest them to discuss with the Pilots every aspect of the navigational plan to minimize risks of grounding.

We also remain you that due to COVID-19 mandatory isolation our staff is working remotely, and can be contacted:

- **Remote office te.: +54 11 7078 0186 (Monday to Friday, 08:00 to 17:00)**
- **On duty 24/7: +54 911 4446 0662 (as usual, emergencies and A.O.H.)**
- **Mobiles phones and other contact details as published in the Clubs'books**

We shall keep monitoring the situation and we remain at your disposal if clarification or additional information is needed.

Yours Faithfully,

Sebastian Trigub

PANDI LIQUIADORES SRL | BUENOS AIRES | ARGENTINA

COAST GUARDS NOTE

No. 2020-24345065-APN-PZBP#PNA

(free translation)

Rosario, Santa Fe

Monday 6th April 2020

Reference: Safety measures due to the depth decreasing at Parana River

Dear All,

I am pleased to address you, in order to inform that, according to the forecast of the hydrometric heights issued by the Hydrological Information and Alert System for the Del Plata Basin corresponding to the National Institute of Water (INA), for the next few days the hydrometric heights will continue to drop below the average, event that triggered the "HYDROLOGICAL ALERT in the Plata Basin" by said entity, a situation that undoubtedly directly impacts the safety of navigation and the ship and convoy traffic management.

In order to prevent the occurrence of major events and environmental implications, among others, the Coast Guards through its VTS Centers, part of the communication service for the security of the navigation (SECOSENA), is issuing various recommendations to the Captains of ships and convoys that transit the trunk route of Santa Fe - Ocean.

In view of the foregoing, we request you to take the necessary security measures (in relation to the cargo and drafts) in order to avoid the occurrence of events that endanger waterways, crews, vessels and / or cargo, safeguarding the safety of navigation and protection of the environment", taking into account the current hydrological condition.

Yours Faithfully

Segio Oscar Jesus Claro




Prefecto de Zona





Prefectura de Zona bajo Parana


Prefectura Naval Argentina


SUBSECRETARÍA DE PUERTOS, VÍAS NAVEGABLES Y MARINA MERCANTE
DIRECCIÓN NACIONAL DE CONTROL DE PUERTOS Y VÍAS NAVEGABLES
RÍO DE LA PLATA - RÍO PARANÁ
RUTA DE ULTRAMAR


PROFUNDIDADES MÍNIMAS DÍA: 06 de abril de 2020

KM DESDE	KM HASTA	DENOMINACIÓN (Afectado a Régimen de Mareas)	KM CRÍTICO O APROX	ANCHO CANAL (m)	PROF. AL CERO (m)	OBSERVACIONES	FECHA ÚLTIMO RELEVAMIENTO
239,1	121,0	RÍO DE LA PLATA					
121,0	81,0	CANAL PUNTA INDIO	155,0	100	-10,50		28y29/11/2019
81,0	57,0	CANAL INTERMEDIO	82,9	100	-10,50		19/02/2020
57,0	37,0	PASO BANCO CHICO	58,4	100	-10,80		31/01/2020
37,0	12,0	RADA EXTERIOR	50,3	100	-11,40		28y29/01/2020
12,0	42,0	C. ACC. PTO. BUENOS AIRES	13,5	100	-10,70		27y28/01/2020
42,0	46,3	CANAL ING. EMILIO MITRE	12,1	100	-10,60	 (D)	20-21y23/01/2020
46,3	49,8	CANAL ING. EMILIO MITRE	44,8	100	-12,50		20-21y23/01/2020
		CANAL ING. EMILIO MITRE	47,4	100	-10,80		20-21y23/01/2020
		RÍO PARANÁ DE LAS PALMAS					
49,8	58,4	ISLA LUCHA	56,2	140	-11,40		26y27/02/2020
58,4	84,8	EV. ISLA LUCHA / TORDILLO	61,2	124	-12,00		14/02/2020
84,8	86,9	VUELTA DEL TORDILLO	86,1	166	-11,90		13/02/2020
86,9	88,6	EV. TORDILLO / HINOJO	88,0	190	-11,70		13/02/2020
88,6	90,4	VUELTA DEL HINOJO	88,7	222	-12,20		13/02/2020
90,4	92,2	EV. HINOJO / CAMPANA	91,6	183	-13,40		13/02/2020
92,2	99,0	VUELTA CAMPANA	94,3	165	-11,40		12y13/02/2020
99,0	99,7	EV. CAMPANA / VUELTA DEL ESTE	99,0	166	-12,18		12/02/2020
99,7	103,5	VUELTA DEL ESTE	100,5	259	-11,70		12/02/2020
103,5	112,4	EV. DEL ESTE / LOS BARBONES	107,4	122	-12,00		12/02/2020
112,4	121,3	VUELTA DE LOS BARBONES	120,0	205	-12,00		11/02/2020
121,3	125,0	EV. BARBONES / SAN ANTONIO	121,4	181	-12,60		11/02/2020
125,0	128,0	VUELTA SAN ANTONIO	126,4	237	-12,00		10y11/02/2020
128,0	128,9	EV. SAN ANTONIO / AB.LAS LIMAS	128,9	166	-14,10		10/02/2020
128,9	132,0	VUELTA ABAJO LAS LIMAS	131,7	189	-12,10	 (E)	10/02/2020
132,0	133,7	VUELTA LAS LIMAS	132,8	214	-12,10	 (E)	10/02/2020
133,7	134,5	EV. LAS LIMAS / DEL PELADO	134,4	206	-14,70		10/02/2020
134,5	137,1	VUELTA DEL PELADO	136,1	228	-12,00		10/02/2020
137,1	139,3	EV. DEL PELADO / LOS PATOS	139,4	147	-12,50		07/02/2020
139,3	146,4	VUELTA LOS PATOS	141,8	186	-11,80		06y07/02/2020
146,4	157,0	CANCHA LARGA	155,6	174	-11,70		05y06/02/2020
157,0	159,3	ZANJA MERCADAL	157,4	189	-11,90		05/02/2020
159,3	173,7	ANGOSTURA DE LA ISLETA	171,6	140	-11,90		04/02/2020
173,7	175,3	ANGOSTURA DE LA BASE	174,2	172	-11,60		03/02/2020
175,3	180,4	BIFURCACION	179,2	155	-11,70		03y04/02/2020
		RÍO PARANÁ					
234,1	276,0	EP. BIFURCACION/AB.LOS RATONES	258,9	116	-11,60		19-21-22-23y25/03/2020

KM DESDE	KM HASTA	DENOMINACIÓN	KM CRÍTICO O APROX	ANCHO CANAL (m)	PROF. AL CERO (m)	ALT. HIDROM. (m)	PROF. EFECTIVA (m)	OBSERVACIONES	FECHA ÚLTIMO RELEVAMIENTO
276,0	286,6	EP. BIFURCACION / AB.LOS RATONES	276,0	116	-11,40	0,62	12,02		19/03/2020
286,6	290,3	ABAJA LOS RATONES	288,9	116	-9,90	0,63	10,53		18/03/2020
290,3	292,5	EP. AB.LOS RATONES / LOS RATONES	292,6	116	-10,70	0,63	11,33		18/03/2020
292,5	296,4	LOS RATONES	295,2	116	-10,10	0,63	10,73		16/03/2019
296,4	308,5	EP. LOS RATONES / ARRIBA OBLIGADO	308,3	116	-10,30	0,64	10,94		13y16/03/2020
308,5	313,0	ARRIBA OBLIGADO	309,6	116	-9,80	0,64	10,44		12y13/03/2020
313,0	315,0	EP. ARRIBA OBLIGADO/AB.LAS HERMANAS	314,9	116	-10,80	0,64	11,44		12/03/2020
315,0	317,0	ABAJA LAS HERMANAS B.I.	316,6	116	-9,90	0,64	10,54		25/03/2020
317,0	319,9	EP. AB.LAS HERMANAS / LAS HERMANAS	318,6	116	-9,80	0,65	10,45		11/03/2020
319,9	325,3	LAS HERMANAS B.I.	321,6	116	-9,70	0,65	10,35		31/03/2020
325,3	330,2	EP. LAS HERMANAS B.I / CORT. ISLA NUEVA	325,4	116	-12,20	0,65	12,85		09/03/2020
330,2	344,0	CORTADA ISLA NUEVA	339,7	116	-10,10	0,82	10,92	 (C)	5y6/03/2020
344,0	351,3	EP.CORTADA ISLA NUEVA / YAGUARON	349,2	116	-10,40	0,94	11,34		04/03/2020
351,3	358,8	YAGUARON	354,5	116	-9,20	0,97	10,17	 (C)	02y03/03/2020
358,8	380,9	EP. YAGUARON / PARAGUAYO	374,6	116	-10,90	0,87	11,77		28-02y02/03/2020
380,9	392,2	PARAGUAYO	388,6	116	-9,30	0,93	10,23		26y27/02/2020
392,2	398,4	EP. PARAGUAYO / AB. ALVEAR	397,5	116	-9,40	0,97	10,37		26y27/02/2020
398,4	400,4	ABAJA ALVEAR	399,8	116	-9,20	0,98	10,18		28/03/2020
400,4	403,4	EP. AB. ALVEAR/ALVEAR	402,5	116	-9,10	0,99	10,09		02/04/2020
403,4	408,7	ALVEAR	408,4	116	-9,20	1,02	10,22	 (B)	19y20/02/2020
408,7	412,7	EP. ALVEAR/C. MUELLES PTO. ROSARIO	409,6	116	-9,90	1,02	10,92		14/02/2020
412,7	418,5	C.MUELLES PUERTO ROSARIO	414,9	200	-9,30	1,05	10,35		03/04/2020
418,5	429,3	EP. C.DE LOS MUELLES / BORGHI	418,6	200	-9,70	1,05	10,75		17/02/2020
429,3	438,9	BORGHI	438,0	116	-9,20	1,08	10,28		12y13/02/2020
438,9	449,8	EP. BORGHI/BELLA VISTA	449,7	116	-9,70	1,10	10,80		11y12/02/2020
449,8	452,1	BELLA VISTA	451,6	116	-9,20	1,11	10,31	 (A)	10/02/2020
452,1	460,0	EP. BELLA VISTA / AB. CORRENTOSO	452,2	100	-9,00	1,11	10,11		13/01/2020
460,0	472,3	EP. BELLA VISTA / AB. CORRENTOSO	470,4	116	-7,50	1,15	8,65		13/01/2020
472,3	475,3	ABAJA CORRENTOSO	474,0	116	-6,30	1,16	7,46		13/01/2020
475,3	490,5	EP. AB. CORRENTOSO / PARANACITO	480,4	116	-6,80	1,18	7,98		06/01/2020
490,5	494,5	PARANACITO	493,5	116	-6,40	1,21	7,61		12/01/2020
494,5	503,0	EP. PARANACITO / TACUANI	494,5	116	-6,50	1,21	7,71		06/01/2020
503,0	521,6	TACUANI	508,3	116	-5,60	1,24	6,84		29/02/2020
521,6	531,6	ABAJA DIAMANTE	526,3	116	-6,20	1,28	7,48		04/01/2020
531,6	542,2	LOS CHIVOS	537,3	116	-7,00	1,27	8,27		27/11/2019
542,2	553,2	RAIGONES	552,9	116	-6,10	1,17	7,27		27/11/2019
553,2	564,4	EP. RAIGONES/PARACAO	561,4	116	-6,90	1,12	8,02		02/01/2020
564,4	568,8	PARACAO	567,8	116	-7,40	1,08	8,48		02/01/2020
568,8	571,8	EP. PARACAO / ANIMAS	571,5	116	-9,10	1,06	10,16		02/01/2020
571,8	574,5	ANIMAS	573,6	116	-6,30	1,04	7,34		02/01/2020
574,5	578,9	EP. ANIMAS / TRAGADERO	578,6	116	-6,40	1,01	7,41		02/01/2020
578,9	584,0	TRAGADERO	582,6	116	-5,90	0,99	6,89		31/12/2019

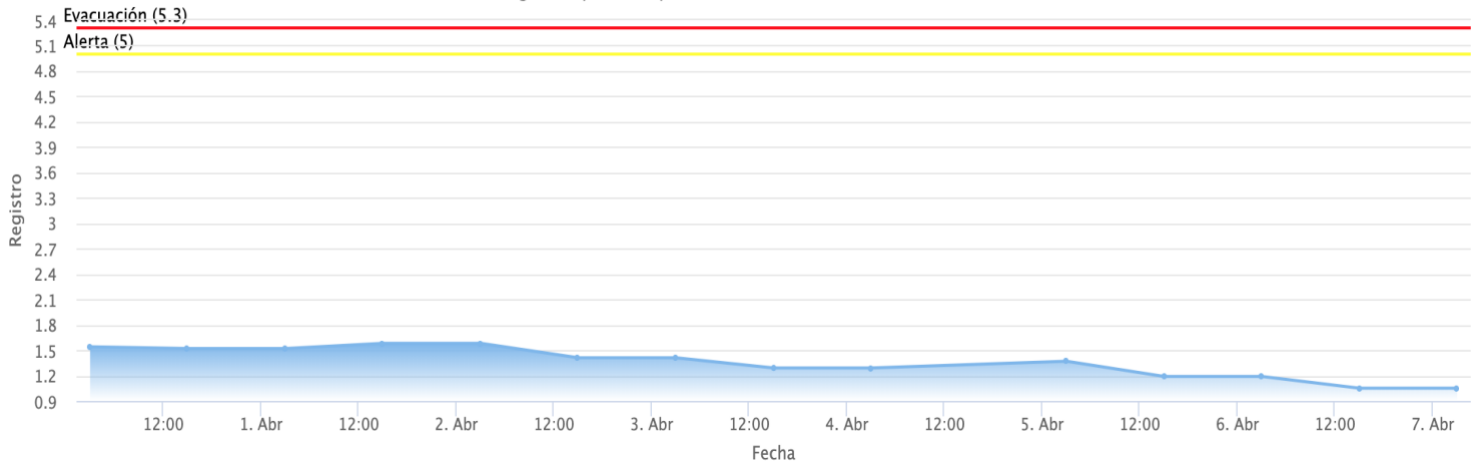
 (A) DRAGA A. NUÑEZ CABEÇA DE VACA OPERANDO

 (B) DRAGA MANZANILLO II OPERANDO

 (C) DRAGA CAP. NUÑEZ OPERANDO

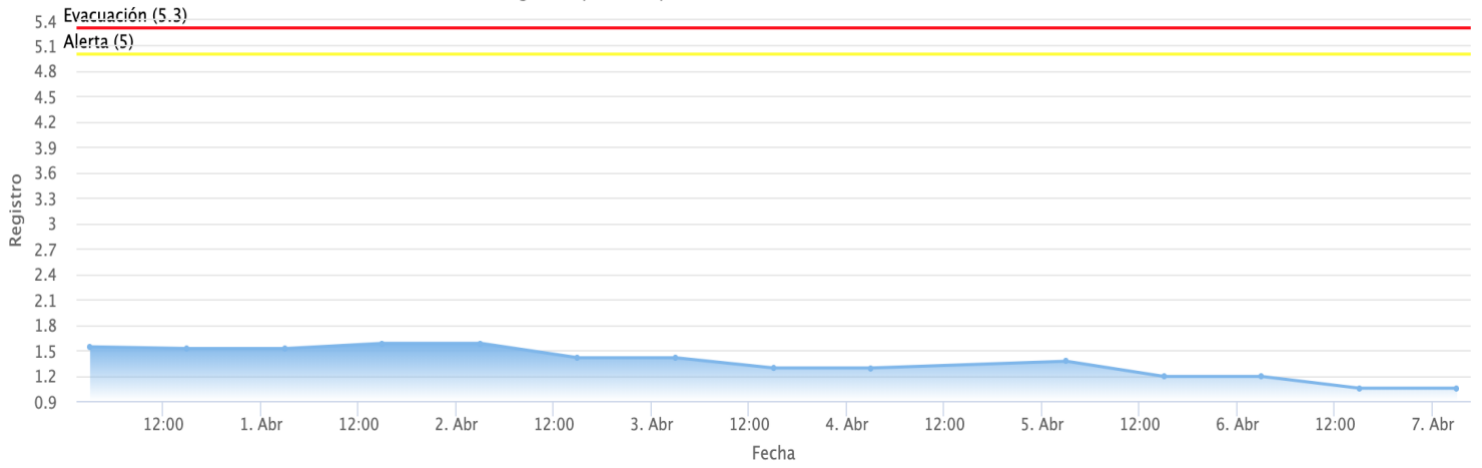
Registros del puerto ROSARIO

haga click y arrastre para hacer zoom en un area determinada



Registros del puerto ROSARIO

haga click y arrastre para hacer zoom en un area determinada



Monday, 3rd June 2020

CIRCULAR 026/2020

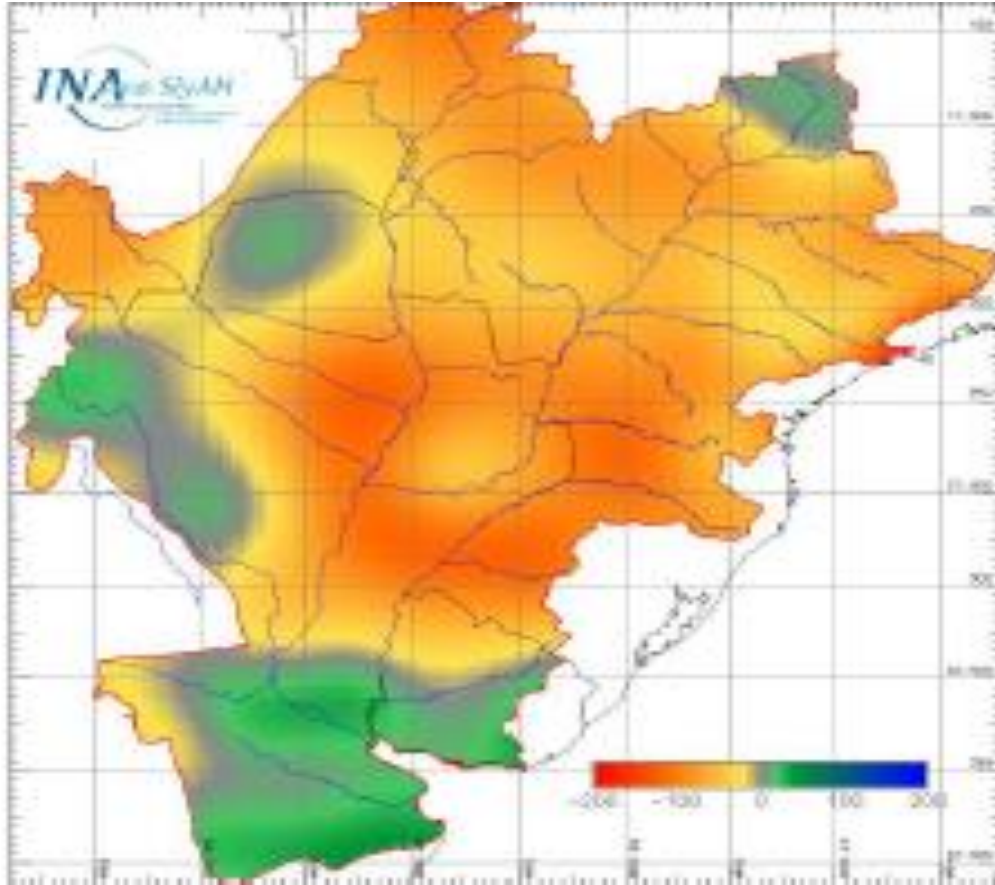
PARANA RIVER EXCEPTIONAL LOW WATER LEVEL

UPDATE - IMPORTANT

Further to our circular 023/2020 the Parana River is going through the worst low water levels in the last 50 years. For you to have a quick reference please see below a graph showing the level of the water on a period of 1 year (June 2019 – June 2020):



In accordance with the information provided by the National Water Institute (INA) the rains in the high basin of the Parana River were below the normal average and similar dry conditions were recorded in the Iguazu River as well as in the Paraguay basin which is due to a combination of weather and soil changes in a vast region as you will note in the below map were the yellow color show the dry areas in April 2020



Usually those tributaries deliver around 19/17,000 m³/s of water to the waterway of the Parana River and nowadays those levels are around 9,000 m³/s.

According to the forecasts, the lack of rain will continue. In general no improvement is expected during the next month although the ITAIPU dam (a binational dam between Paraguay and Brazil) has released some water to assist with the navigation of the Parana River, especially in the area known as High Parana.

Over the last weeks there has been an unusual number of groundings not only in the Parana River main navigation channel but also in some of the terminals along the River specially in the Rosario / San Nicolas area.

The current situation is also having the effect that the vessels are loading less cargo due

to draft restrictions and it is estimated that a bulk carrier like a panamax is short loading around 2,000 mt per feet of draft and a tanker (vegoils) are loading 6,000 mt less in total.

In view of the above it is very important for the passage plan to be discussed with the pilot with all the crew that will be on the bridge during navigation even in ballast condition and to keep a good record in writing of the discussed navigational plan.

On the other hand, when loading, the Master should be alert of the condition of the river bearing in mind the maximum permissible draft - which are based on the critical points that the vessel has to sail through depending the port/terminal she is in. This information is provided by the Undersecretary of Ports and Waterways every morning around 9 or 10 am so a vessel which is going to complete overnight could be sailing with the information provided during the morning.

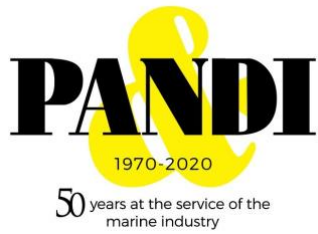
The aforementioned information could be obtained (in Spanish language) from the following website:

<https://www.argentina.gob.ar/puertos-vias-navegables-y-marina-mercante/planilla-de-determinantes>

Please be reminded that the vessels should keep a 2" UKC at all times and it is of utmost importance to consider the ship's squat especially when crossing critical passages bearing in mind this time of low water levels.

In case of any doubt the Master should always get in touch with the designated port agents before entering the River Plate basin and before departing from the designated terminal as to obtain accurate information to be confirmed then with the pilot on duty.

We shall keep you closely updated on developments and remain at your and/or your member's disposal for any clarification and/or additional information that might be required.



Yours Faithfully,
Sebastian Trigub

PANDI LIQUIDORES SRL
BUENOS AIRES, ARGENTINA

This circular update Circular 023/2020

Monday, 3rd June 2020

CIRCULAR 026/2020

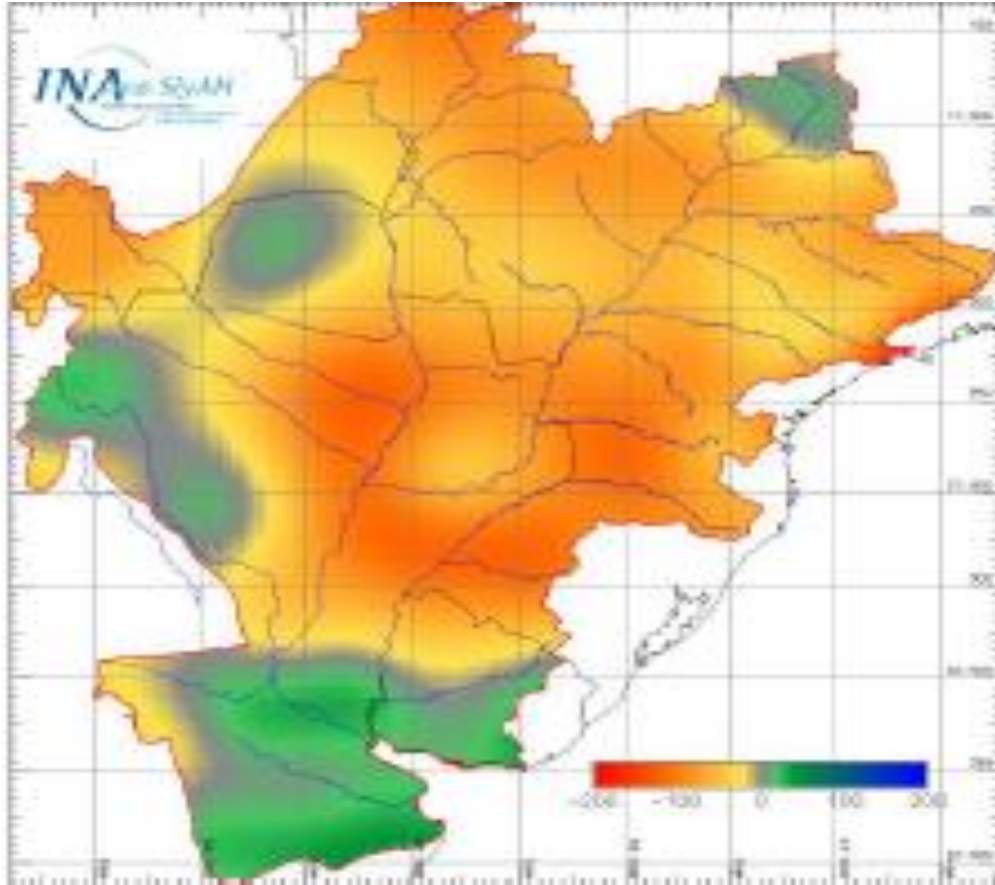
PARANA RIVER EXCEPTIONAL LOW WATER LEVEL

UPDATE - IMPORTANT

Further to our circular 023/2020 the Parana River is going through the worst low water levels in the last 50 years. For you to have a quick reference please see below a graph showing the level of the water on a period of 1 year (June 2019 – June 2020):



In accordance with the information provided by the National Water Institute (INA) the rains in the high basin of the Parana River were below the normal average and similar dry conditions were recorded in the Iguazu River as well as in the Paraguay basin which is due to a combination of weather and soil changes in a vast region as you will note in the below map were the yellow color show the dry areas in April 2020



Usually those tributaries deliver around 19/17,000 m³/s of water to the waterway of the Parana River and nowadays those levels are around 9,000 m³/s.

According to the forecasts, the lack of rain will continue. In general no improvement is expected during the next month although the ITAIPU dam (a binational dam between Paraguay and Brazil) has released some water to assist with the navigation of the Parana River, especially in the area known as High Parana.

Over the last weeks there has been an unusual number of groundings not only in the Parana River main navigation channel but also in some of the terminals along the River specially in the Rosario / San Nicolas area.

The current situation is also having the effect that the vessels are loading less cargo due

to draft restrictions and it is estimated that a bulk carrier like a panamax is short loading around 2,000 mt per feet of draft and a tanker (vegoils) are loading 6,000 mt less in total.

In view of the above it is very important for the passage plan to be discussed with the pilot with all the crew that will be on the bridge during navigation even in ballast condition and to keep a good record in writing of the discussed navigational plan.

On the other hand, when loading, the Master should be alert of the condition of the river bearing in mind the maximum permissible draft - which are based on the critical points that the vessel has to sail through depending the port/terminal she is in. This information is provided by the Undersecretary of Ports and Waterways every morning around 9 or 10 am so a vessel which is going to complete overnight could be sailing with the information provided during the morning.

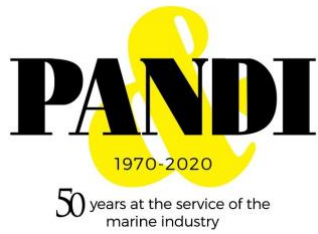
The aforementioned information could be obtained (in Spanish language) from the following website:

<https://www.argentina.gob.ar/puertos-vias-navegables-y-marina-mercante/planilla-de-determinantes>

Please be reminded that the vessels should keep a 2" UKC at all times and it is of utmost importance to consider the ship's squat especially when crossing critical passages bearing in mind this time of low water levels.

In case of any doubt the Master should always get in touch with the designated port agents before entering the River Plate basin and before departing from the designated terminal as to obtain accurate information to be confirmed then with the pilot on duty.

We shall keep you closely updated on developments and remain at your and/or your member's disposal for any clarification and/or additional information that might be required.



Yours Faithfully,
Sebastian Trigub

PANDI LIQUIDORES SRL
BUENOS AIRES, ARGENTINA

This circular update Circular 023/2020

Tuesday 7th April 2020

CIRCULAR 023/2020

PARANA RIVER: DRAFT RESTRICTIONS

Dear All,

Please be informed that the height of the water in the Plata Basin (Parana River / River Plate system) has been dropping below average and the forecast indicates that this tendency will continue during the following days. For this reason, the relevant Institute issued an Hydrological Alert and the Coast Guard circulated a note to all the parties concerned requesting to maximize caution with ship's drafts when loading to avoid incidents.

We are enclosing Coast Guards' Circular (free translation), last minimum drafts published (6 April) and the depth records of the last 7 days at Rosario as an example.

Due to the above we suggest to remind to the Masters to follow up with their agents the maximum sailing drafts taking into account the decreasing tendency and, as we always due, to suggest them to discuss with the Pilots every aspect of the navigational plan to minimize risks of grounding.

We also remain you that due to COVID-19 mandatory isolation our staff is working remotely, and can be contacted:

- **Remote office te.: +54 11 7078 0186 (Monday to Friday, 08:00 to 17:00)**
- **On duty 24/7: +54 911 4446 0662 (as usual, emergencies and A.O.H.)**
- **Mobiles phones and other contact details as published in the Clubs'books**

We shall keep monitoring the situation and we remain at your disposal if clarification or additional information is needed.

Yours Faithfully,

Sebastian Trigub

PANDI LIQUIADORES SRL | BUENOS AIRES | ARGENTINA

COAST GUARDS NOTE

No. 2020-24345065-APN-PZBP#PNA

(free translation)

Rosario, Santa Fe

Monday 6th April 2020

Reference: Safety measures due to the depth decreasing at Parana River

Dear All,

I am pleased to address you, in order to inform that, according to the forecast of the hydrometric heights issued by the Hydrological Information and Alert System for the Del Plata Basin corresponding to the National Institute of Water (INA), for the next few days the hydrometric heights will continue to drop below the average, event that triggered the "HYDROLOGICAL ALERT in the Plata Basin" by said entity, a situation that undoubtedly directly impacts the safety of navigation and the ship and convoy traffic management.

In order to prevent the occurrence of major events and environmental implications, among others, the Coast Guards through its VTS Centers, part of the communication service for the security of the navigation (SECOSENA), is issuing various recommendations to the Captains of ships and convoys that transit the trunk route of Santa Fe - Ocean.

In view of the foregoing, we request you to take the necessary security measures (in relation to the cargo and drafts) in order to avoid the occurrence of events that endanger waterways, crews, vessels and / or cargo, safeguarding the safety of navigation and protection of the environment", taking into account the current hydrological condition.

Yours Faithfully

Segio Oscar Jesus Claro




Prefecto de Zona





Prefectura de Zona bajo Parana

Prefectura Naval Argentina

SUBSECRETARÍA DE PUERTOS, VÍAS NAVEGABLES Y MARINA MERCANTE
DIRECCIÓN NACIONAL DE CONTROL DE PUERTOS Y VÍAS NAVEGABLES
RÍO DE LA PLATA - RÍO PARANÁ
RUTA DE ULTRAMAR

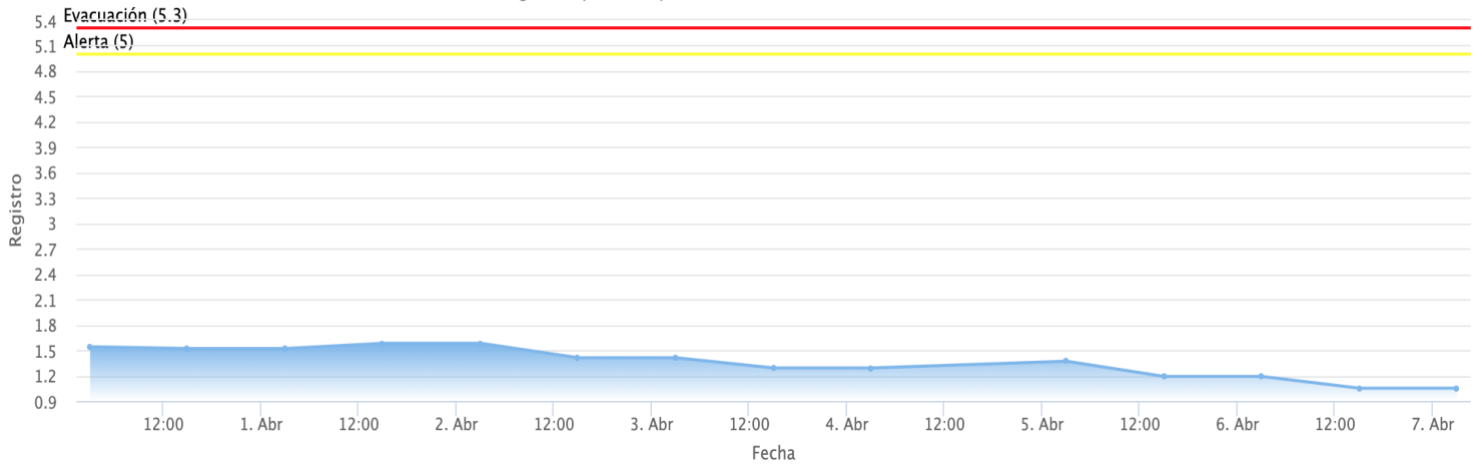
PROFUNDIDADES MÍNIMAS DÍA: 06 de abril de 2020

KM DESDE	KM HASTA	DENOMINACIÓN (Afectado a Régimen de Mareas)	KM CRÍTICO O APROX	ANCHO CANAL (m)	PROF. AL CERO (m)	OBSERVACIONES	FECHA ÚLTIMO RELEVAMIENTO
239,1	121,0	RÍO DE LA PLATA	155,0	100	-10,50		28y29/11/2019
121,0	81,0	CANAL PUNTA INDIO	82,9	100	-10,50		19/02/2020
81,0	57,0	CANAL INTERMEDIO	58,4	100	-10,80		31/01/2020
57,0	37,0	PASO BANCO CHICO	50,3	100	-11,40		28y29/01/2020
37,0	12,0	RADA EXTERIOR	13,5	100	-10,70		27y28/01/2020
12,0	42,0	C. ACC. PTO. BUENOS AIRES	12,1	100	-10,60	 (D)	20-21y23/01/2020
42,0	46,3	CANAL ING. EMILIO MITRE	44,8	100	-12,50		20-21y23/01/2020
46,3	49,8	CANAL ING. EMILIO MITRE	47,4	100	-10,80		20-21y23/01/2020
		RÍO PARANÁ DE LAS PALMAS					
49,8	58,4	ISLA LUCHA	56,2	140	-11,40		26y27/02/2020
58,4	84,8	EV. ISLA LUCHA / TORDILLO	61,2	124	-12,00		14/02/2020
84,8	86,9	VUELTA DEL TORDILLO	86,1	166	-11,90		13/02/2020
86,9	88,6	EV. TORDILLO / HINOJO	88,0	190	-11,70		13/02/2020
88,6	90,4	VUELTA DEL HINOJO	88,7	222	-12,20		13/02/2020
90,4	92,2	EV. HINOJO / CAMPANA	91,6	183	-13,40		13/02/2020
92,2	99,0	VUELTA CAMPANA	94,3	165	-11,40		12y13/02/2020
99,0	99,7	EV. CAMPANA / VUELTA DEL ESTE	99,0	166	-12,18		12/02/2020
99,7	103,5	VUELTA DEL ESTE	100,5	259	-11,70		12/02/2020
103,5	112,4	EV. DEL ESTE / LOS BARBONES	107,4	122	-12,00		12/02/2020
112,4	121,3	VUELTA DE LOS BARBONES	120,0	205	-12,00		11/02/2020
121,3	125,0	EV. BARBONES / SAN ANTONIO	121,4	181	-12,60		11/02/2020
125,0	128,0	VUELTA SAN ANTONIO	126,4	237	-12,00		10y11/02/2020
128,0	128,9	EV. SAN ANTONIO / AB. LAS LIMAS	128,9	166	-14,10		10/02/2020
128,9	132,0	VUELTA ABAJO LAS LIMAS	131,7	189	-12,10	 (E)	10/02/2020
132,0	133,7	VUELTA LAS LIMAS	132,8	214	-12,10	 (E)	10/02/2020
133,7	134,5	EV. LAS LIMAS / DEL PELADO	134,4	206	-14,70		10/02/2020
134,5	137,1	VUELTA DEL PELADO	136,1	228	-12,00		10/02/2020
137,1	139,3	EV. DEL PELADO / LOS PATOS	139,4	147	-12,50		07/02/2020
139,3	146,4	VUELTA LOS PATOS	141,8	186	-11,80		06y07/02/2020
146,4	157,0	CANCHA LARGA	155,6	174	-11,70		05y06/02/2020
157,0	159,3	ZANJA MERCADAL	157,4	189	-11,90		05/02/2020
159,3	173,7	ANGOSTURA DE LA ISLETA	171,6	140	-11,90		04/02/2020
173,7	175,3	ANGOSTURA DE LA BASE	174,2	172	-11,60		03/02/2020
175,3	180,4	BIFURCACION	179,2	155	-11,70		03y04/02/2020
		RÍO PARANÁ					
234,1	276,0	EP. BIFURCACION/AB. LOS RATONES	258,9	116	-11,60		19-21-22-23y25/03/2020

KM DESDE	KM HASTA	DENOMINACIÓN	KM CRÍTICO O APROX	ANCHO CANAL (m)	PROF. AL CERO (m)	ALT. HIDROM. (m)	PROF. EFECTIVA (m)	OBSERVACIONES	FECHA ÚLTIMO RELEVAMIENTO
276,0	286,6	EP. BIFURCACION / AB. LOS RATONES	276,0	116	-11,40	0,62	12,02		19/03/2020
286,6	290,3	ABAJOS RATONES	288,9	116	-9,90	0,63	10,53		18/03/2020
290,3	292,5	EP. AB. LOS RATONES / LOS RATONES	292,6	116	-10,70	0,63	11,33		18/03/2020
292,5	296,4	LOS RATONES	295,2	116	-10,10	0,63	10,73		16/03/2019
296,4	308,5	EP. LOS RATONES / ARRIBA OBLIGADO	308,3	116	-10,30	0,64	10,94		13y16/03/2020
308,5	313,0	ARRIBA OBLIGADO	309,6	116	-9,80	0,64	10,44		12y13/03/2020
313,0	315,0	EP. ARRIBA OBLIGADO/AB. LAS HERMANAS	314,9	116	-10,80	0,64	11,44		12/03/2020
315,0	317,0	ABAJOS HERMANAS B.I.	316,6	116	-9,90	0,64	10,54		25/03/2020
317,0	319,9	EP. AB. LAS HERMANAS / LAS HERMANAS	318,6	116	-9,80	0,65	10,45		11/03/2020
319,9	325,3	LAS HERMANAS B.I.	321,6	116	-9,70	0,65	10,35		31/03/2020
325,3	330,2	EP. LAS HERMANAS B.I. / CORT. ISLA NUEVA	325,4	116	-12,20	0,65	12,85		09/03/2020
330,2	344,0	CORTADA ISLA NUEVA	339,7	116	-10,10	0,82	10,92	 (C)	5y6/03/2020
344,0	351,3	EP. CORTADA ISLA NUEVA / YAGUARON	349,2	116	-10,40	0,94	11,34		04/03/2020
351,3	358,8	YAGUARON	354,5	116	-9,20	0,97	10,17	 (C)	02y03/03/2020
358,8	380,9	EP. YAGUARON / PARAGUAYO	374,6	116	-10,90	0,87	11,77		28-02y02/03/2020
380,9	392,2	PARAGUAYO	388,6	116	-9,30	0,93	10,23		26y27/02/2020
392,2	398,4	EP. PARAGUAYO / AB. ALVEAR	397,5	116	-9,40	0,97	10,37		26y27/02/2020
398,4	400,4	ABAJOS ALVEAR	399,8	116	-9,20	0,98	10,18		28/03/2020
400,4	403,4	EP. AB. ALVEAR/ALVEAR	402,5	116	-9,10	0,99	10,09		02/04/2020
403,4	408,7	ALVEAR	408,4	116	-9,20	1,02	10,22	 (B)	19y20/02/2020
408,7	412,7	EP. ALVEAR/C. MUELLES PTO. ROSARIO	409,6	116	-9,90	1,02	10,92		14/02/2020
412,7	418,5	C. MUELLES PUERTO ROSARIO	414,9	200	-9,30	1,05	10,35		03/04/2020
418,5	429,3	EP. C. DE LOS MUELLES / BORGHI	418,6	200	-9,70	1,05	10,75		17/02/2020
429,3	438,9	BORGHI	438,0	116	-9,20	1,08	10,28		12y13/02/2020
438,9	449,8	EP. BORGHI/BELLA VISTA	449,7	116	-9,70	1,10	10,80		11y12/02/2020
449,8	452,1	BELLA VISTA	451,6	116	-9,20	1,11	10,31	 (A)	10/02/2020
452,1	460,0	EP. BELLA VISTA / AB. CORRENTOSO	452,2	100	-9,00	1,11	10,11		13/01/2020
460,0	472,3	EP. BELLA VISTA / AB. CORRENTOSO	470,4	116	-7,50	1,15	8,65		13/01/2020
472,3	475,3	ABAJOS CORRENTOSO	474,0	116	-6,30	1,16	7,46		13/01/2020
475,3	490,5	EP. AB. CORRENTOSO / PARANACITO	480,4	116	-6,80	1,18	7,98		06/01/2020
490,5	494,5	PARANACITO	493,5	116	-6,40	1,21	7,61		12/01/2020
494,5	503,0	EP. PARANACITO / TACUANI	494,5	116	-6,50	1,21	7,71		06/01/2020
503,0	521,6	TACUANI	508,3	116	-5,60	1,24	6,84		29/02/2020
521,6	531,6	ABAJOS DIAMANTE	526,3	116	-6,20	1,28	7,48		04/01/2020
531,6	542,2	LOS CHIVOS	537,3	116	-7,00	1,27	8,27		27/11/2019
542,2	553,2	RAIGONES	552,9	116	-6,10	1,17	7,27		27/11/2019
553,2	564,4	EP. RAIGONES/PARACAO	561,4	116	-6,90	1,12	8,02		02/01/2020
564,4	568,8	PARACAO	567,8	116	-7,40	1,08	8,48		02/01/2020
568,8	571,8	EP. PARACAO / ANIMAS	571,5	116	-9,10	1,06	10,16		02/01/2020
571,8	574,5	ANIMAS	573,6	116	-6,30	1,04	7,34		02/01/2020
574,5	578,9	EP. ANIMAS / TRAGADERO	578,6	116	-6,40	1,01	7,41		02/01/2020
578,9	584,0	TRAGADERO	582,6	116	-5,90	0,99	6,89		31/12/2019




Registros del puerto ROSARIO





haga click y arrastre para hacer zoom en un area determinada





SUBSECRETARÍA DE PUERTOS, VÍAS NAVEGABLES Y MARINA MERCANTE
DIRECCIÓN NACIONAL DE CONTROL DE PUERTOS Y VÍAS NAVEGABLES
RÍO DE LA PLATA - RÍO PARANÁ
RUTA DE ULTRAMAR


PROFUNDIDADES MÍNIMAS DÍA: 06 de abril de 2020

KM DESDE	KM HASTA	DENOMINACIÓN (Afectado a Régimen de Mareas)	KM CRÍTICO O APROX	ANCHO CANAL (m)	PROF. AL CERO (m)	OBSERVACIONES	FECHA ÚLTIMO RELEVAMIENTO
239,1	121,0	RÍO DE LA PLATA	155,0	100	-10,50		28y29/11/2019
121,0	81,0	CANAL PUNTA INDIO	82,9	100	-10,50		19/02/2020
81,0	57,0	CANAL INTERMEDIO	58,4	100	-10,80		31/01/2020
57,0	37,0	PASO BANCO CHICO	50,3	100	-11,40		28y29/01/2020
37,0	12,0	RADA EXTERIOR	13,5	100	-10,70		27y28/01/2020
12,0	42,0	C. ACC. PTO.BUENOS AIRES	12,1	100	-10,60	 (D)	20-21y23/01/2020
42,0	46,3	CANAL ING. EMILIO MITRE	44,8	100	-12,50		20-21y23/01/2020
46,3	49,8	CANAL ING. EMILIO MITRE	47,4	100	-10,80		20-21y23/01/2020
		RÍO PARANÁ DE LAS PALMAS					
49,8	58,4	ISLA LUCHA	56,2	140	-11,40		26y27/02/2020
58,4	84,8	EV. ISLA LUCHA / TORDILLO	61,2	124	-12,00		14/02/2020
84,8	86,9	VUELTA DEL TORDILLO	86,1	166	-11,90		13/02/2020
86,9	88,6	EV. TORDILLO / HINOJO	88,0	190	-11,70		13/02/2020
88,6	90,4	VUELTA DEL HINOJO	88,7	222	-12,20		13/02/2020
90,4	92,2	EV. HINOJO / CAMPANA	91,6	183	-13,40		13/02/2020
92,2	99,0	VUELTA CAMPANA	94,3	165	-11,40		12y13/02/2020
99,0	99,7	EV. CAMPANA / VUELTA DEL ESTE	99,0	166	-12,18		12/02/2020
99,7	103,5	VUELTA DEL ESTE	100,5	259	-11,70		12/02/2020
103,5	112,4	EV. DEL ESTE / LOS BARBONES	107,4	122	-12,00		12/02/2020
112,4	121,3	VUELTA DE LOS BARBONES	120,0	205	-12,00		11/02/2020
121,3	125,0	EV. BARBONES / SAN ANTONIO	121,4	181	-12,60		11/02/2020
125,0	128,0	VUELTA SAN ANTONIO	126,4	237	-12,00		10y11/02/2020
128,0	128,9	EV. SAN ANTONIO / AB.LAS LIMAS	128,9	166	-14,10		10/02/2020
128,9	132,0	VUELTA ABAJO LAS LIMAS	131,7	189	-12,10	 (E)	10/02/2020
132,0	133,7	VUELTA LAS LIMAS	132,8	214	-12,10	 (E)	10/02/2020
133,7	134,5	EV. LAS LIMAS / DEL PELADO	134,4	206	-14,70		10/02/2020
134,5	137,1	VUELTA DEL PELADO	136,1	228	-12,00		10/02/2020
137,1	139,3	EV. DEL PELADO / LOS PATOS	139,4	147	-12,50		07/02/2020
139,3	146,4	VUELTA LOS PATOS	141,8	186	-11,80		06y07/02/2020
146,4	157,0	CANCHA LARGA	155,6	174	-11,70		05y06/02/2020
157,0	159,3	ZANJA MERCADAL	157,4	189	-11,90		05/02/2020
159,3	173,7	ANGOSTURA DE LA ISLETA	171,6	140	-11,90		04/02/2020
173,7	175,3	ANGOSTURA DE LA BASE	174,2	172	-11,60		03/02/2020
175,3	180,4	BIFURCACION	179,2	155	-11,70		03y04/02/2020
		RÍO PARANÁ					
234,1	276,0	EP. BIFURCACION/AB.LOS RATONES	258,9	116	-11,60		19-21-22-23y25/03/2020

KM DESDE	KM HASTA	DENOMINACIÓN	KM CRÍTICO O APROX	ANCHO CANAL (m)	PROF. AL CERO (m)	ALT. HIDROM. (m)	PROF. EFECTIVA (m)	OBSERVACIONES	FECHA ÚLTIMO RELEVAMIENTO
276,0	286,6	EP. BIFURCACION / AB.LOS RATONES	276,0	116	-11,40	0,62	12,02		19/03/2020
286,6	290,3	ABAJA LOS RATONES	288,9	116	-9,90	0,63	10,53		18/03/2020
290,3	292,5	EP. AB.LOS RATONES / LOS RATONES	292,6	116	-10,70	0,63	11,33		18/03/2020
292,5	296,4	LOS RATONES	295,2	116	-10,10	0,63	10,73		16/03/2019
296,4	308,5	EP. LOS RATONES / ARRIBA OBLIGADO	308,3	116	-10,30	0,64	10,94		13y16/03/2020
308,5	313,0	ARRIBA OBLIGADO	309,6	116	-9,80	0,64	10,44		12y13/03/2020
313,0	315,0	EP. ARRIBA OBLIGADO/AB.LAS HERMANAS	314,9	116	-10,80	0,64	11,44		12/03/2020
315,0	317,0	ABAJA LAS HERMANAS B.I.	316,6	116	-9,90	0,64	10,54		25/03/2020
317,0	319,9	EP. AB.LAS HERMANAS / LAS HERMANAS	318,6	116	-9,80	0,65	10,45		11/03/2020
319,9	325,3	LAS HERMANAS B.I.	321,6	116	-9,70	0,65	10,35		31/03/2020
325,3	330,2	EP. LAS HERMANAS B.I / CORT. ISLA NUEVA	325,4	116	-12,20	0,65	12,85		09/03/2020
330,2	344,0	CORTADA ISLA NUEVA	339,7	116	-10,10	0,82	10,92	 (C)	5y6/03/2020
344,0	351,3	EP.CORTADA ISLA NUEVA / YAGUARON	349,2	116	-10,40	0,94	11,34		04/03/2020
351,3	358,8	YAGUARON	354,5	116	-9,20	0,97	10,17	 (C)	02y03/03/2020
358,8	380,9	EP. YAGUARON / PARAGUAYO	374,6	116	-10,90	0,87	11,77		28-02y02/03/2020
380,9	392,2	PARAGUAYO	388,6	116	-9,30	0,93	10,23		26y27/02/2020
392,2	398,4	EP. PARAGUAYO / AB. ALVEAR	397,5	116	-9,40	0,97	10,37		26y27/02/2020
398,4	400,4	ABAJA ALVEAR	399,8	116	-9,20	0,98	10,18		28/03/2020
400,4	403,4	EP. AB. ALVEAR/ALVEAR	402,5	116	-9,10	0,99	10,09		02/04/2020
403,4	408,7	ALVEAR	408,4	116	-9,20	1,02	10,22	 (B)	19y20/02/2020
408,7	412,7	EP. ALVEAR/C. MUELLES PTO. ROSARIO	409,6	116	-9,90	1,02	10,92		14/02/2020
412,7	418,5	C.MUELLES PUERTO ROSARIO	414,9	200	-9,30	1,05	10,35		03/04/2020
418,5	429,3	EP. C.DE LOS MUELLES / BORGHI	418,6	200	-9,70	1,05	10,75		17/02/2020
429,3	438,9	BORGHI	438,0	116	-9,20	1,08	10,28		12y13/02/2020
438,9	449,8	EP. BORGHI/BELLA VISTA	449,7	116	-9,70	1,10	10,80		11y12/02/2020
449,8	452,1	BELLA VISTA	451,6	116	-9,20	1,11	10,31	 (A)	10/02/2020
452,1	460,0	EP. BELLA VISTA / AB. CORRENTOSO	452,2	100	-9,00	1,11	10,11		13/01/2020
460,0	472,3	EP. BELLA VISTA / AB. CORRENTOSO	470,4	116	-7,50	1,15	8,65		13/01/2020
472,3	475,3	ABAJA CORRENTOSO	474,0	116	-6,30	1,16	7,46		13/01/2020
475,3	490,5	EP. AB. CORRENTOSO / PARANACITO	480,4	116	-6,80	1,18	7,98		06/01/2020
490,5	494,5	PARANACITO	493,5	116	-6,40	1,21	7,61		12/01/2020
494,5	503,0	EP. PARANACITO / TACUANI	494,5	116	-6,50	1,21	7,71		06/01/2020
503,0	521,6	TACUANI	508,3	116	-5,60	1,24	6,84		29/02/2020
521,6	531,6	ABAJA DIAMANTE	526,3	116	-6,20	1,28	7,48		04/01/2020
531,6	542,2	LOS CHIVOS	537,3	116	-7,00	1,27	8,27		27/11/2019
542,2	553,2	RAIGONES	552,9	116	-6,10	1,17	7,27		27/11/2019
553,2	564,4	EP. RAIGONES/PARACAO	561,4	116	-6,90	1,12	8,02		02/01/2020
564,4	568,8	PARACAO	567,8	116	-7,40	1,08	8,48		02/01/2020
568,8	571,8	EP. PARACAO / ANIMAS	571,5	116	-9,10	1,06	10,16		02/01/2020
571,8	574,5	ANIMAS	573,6	116	-6,30	1,04	7,34		02/01/2020
574,5	578,9	EP. ANIMAS / TRAGADERO	578,6	116	-6,40	1,01	7,41		02/01/2020
578,9	584,0	TRAGADERO	582,6	116	-5,90	0,99	6,89		31/12/2019

 (A) DRAGA A. NUÑEZ CABEÇA DE VACA OPERANDO

 (B) DRAGA MANZANILLO II OPERANDO

 (C) DRAGA CAP. NUÑEZ OPERANDO

Registros del puerto ROSARIO

haga click y arrastre para hacer zoom en un area determinada

