

Custom Weather Forecast

Bell's Beer Bayview Mackinac Race

For The Exclusive Use of

Sample Forecast

Disclaimer: The user assumes all risk related to the use of this Custom Weather Forecast. The crew of the participating yacht must determine their ability and willingness to manage all weather-related challenges. Please consult the current official National Weather Service forecast, watches, and warnings before and during the race.

Thunderstorms

Special Note: The forecast may include the potential for severe thunderstorms. The National Weather Service thresholds for a severe thunderstorm are winds exceeding 50 knots, hail greater than 1" in diameter, or the formation of a tornado. Both severe and non-severe thunderstorms can have a significant and unpredictable effect on wind speed, wind direction, and wave heights. Race participants should continuously monitor the latest National Weather Service forecasts, watches, and warnings.

Large-Scale Weather Pattern

Figure 1: Surface Forecast Valid 8:00 am Saturday

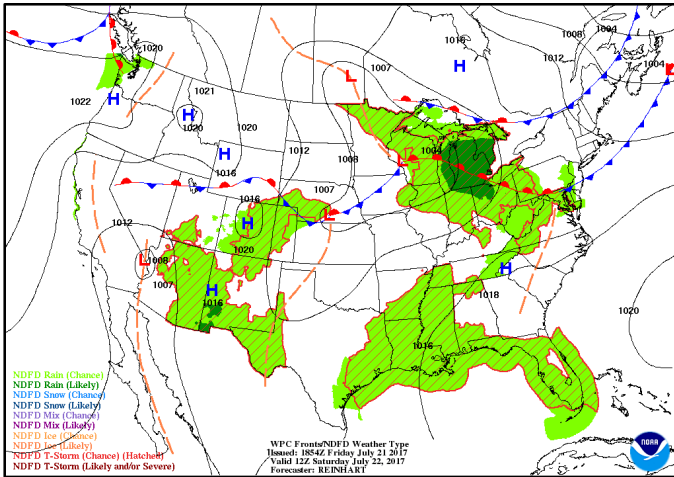


Figure 2: Surface Forecast Valid 8:00 am Sunday

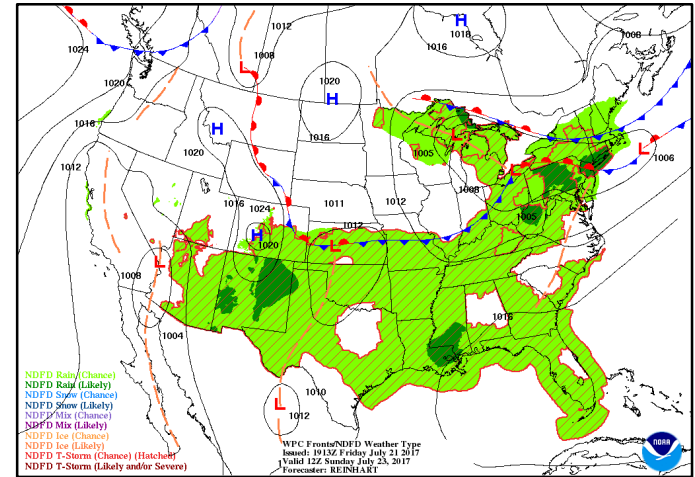


Figure 3: Surface Forecast Valid 8:00 am Monday

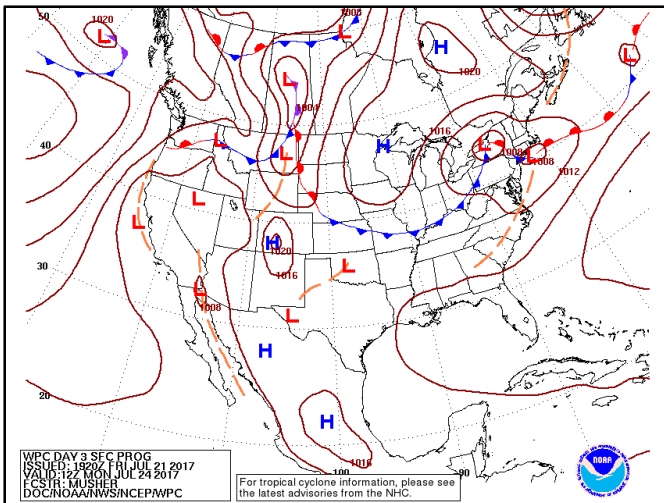
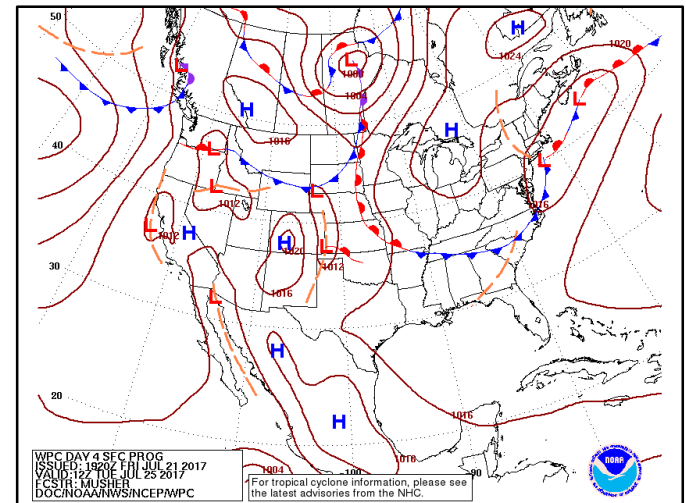


Figure 4: Surface Forecast Valid 8:00 am Tuesday



Saturday's Forecast

Saturday's Forecast Discussion

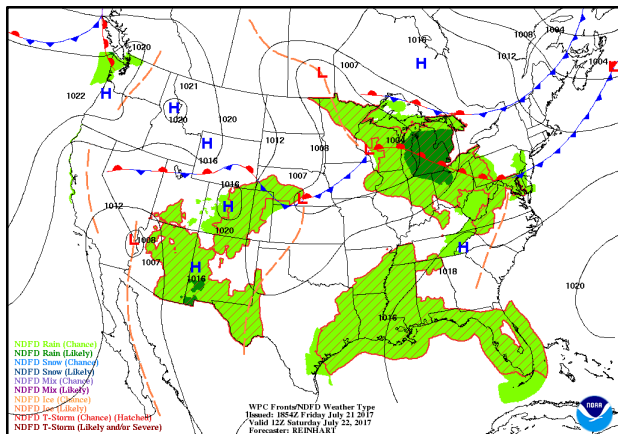
On Saturday morning, Lake Huron will be sandwiched between two features that will influence the weather pattern during this year's Race. By 8:00 am on Saturday morning, a stationary front/surface trough associated with a low pressure system over the Canadian Maritimes will lie just north of Lake Huron. The current forecast suggests this trough will remain north of the Lake for the next couple of days before dissipating early next week. Previous forecasts indicated this trough would stall near the rhumbline between Cove Island and Mackinac Island resulting in a variable wind pattern through mid-day on Monday. The trough remaining north of Lake Huron is good news for the fleet, particularly those sailing the Cove Island course.

Also on Saturday morning, a low pressure system centered over western Minnesota will move east toward southern Lake Huron. At 8:00 am on Saturday, the warm front extending from this low will lie southwest of Lake Huron across southern Michigan. As the low moves east on Saturday, the warm front will lift northeast toward southern Lake Huron resulting in cloudy skies, rain, and the potential for thunderstorms. The low is forecast to reach southern Lake Huron on Saturday evening and then drift south toward Lake Erie by Sunday morning. A weak surface trough extending from the low's northwest quadrant will linger to the west of Lake Huron.

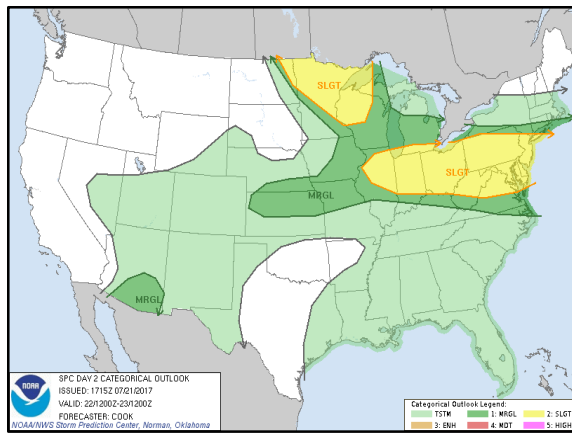
Precipitation/Thunderstorms

Rain should be underway before 8:00 am on Saturday and should persist for most of the day. A range of .10" to .25" of rain is expected from 8:00 am on to 8:00 am on Sunday. The potential for thunderstorms will exist all day on Saturday. The Storm Prediction Center currently has a Marginal risk of severe thunderstorms across Lake Huron on Saturday. The high temperature in Port Huron will reach the low 80s.

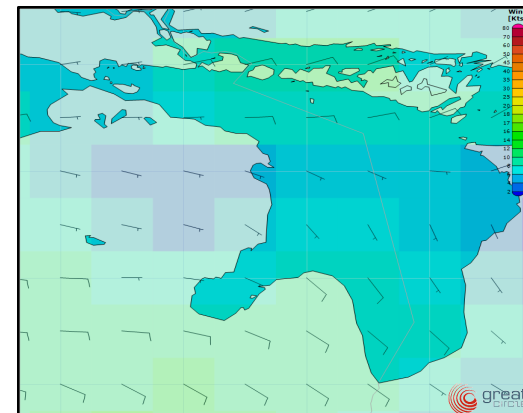
Surface Forecast Valid 8:00 am Saturday



SPC Convective Outlook For Saturday



Wind Forecast Valid 8:00 am Saturday



Saturday's Wind & Wave Forecast-Summary

Saturday Wind & Wave Forecast	
Upper Lake	East 7 to 12 knots. Waves 1 to 3 feet. Models hint a slight backing to the NE for a few hours late Saturday evening. Veering back to east by midnight. Waves 1 to 3 feet.
Lower Lake	Southeast at 7 to 12 knots early. Backing to east at 7 to 12 knots on Saturday evening. Waves 1 to 3 feet.

Important Note – Thunderstorms usually produce much higher wind speeds and wave heights. These localized effects on wind speed and wave heights are not included in the forecast.

Saturday's Forecast Wind & Wave Forecast-Detail

Forecast Time		Southern Lake Huron		
		Wind Direction	Wind Speed (kts)	Wave Heights (feet)
Local	UTC			
8:00 AM	12Z	SE	7 to 12	1 to 3
11:00 AM	15Z	SE	7 to 12	1 to 3
2:00 PM	18Z	SE	7 to 12	1 to 3
5:00 PM	21Z	E	7 to 12	1 to 3
8:00 PM	0Z	E	7 to 12	1 to 3
11:00 PM	3Z	E	7 to 12	1 to 3

Northern Lake Huron		
Wind Direction	Wind Speed (kts)	Wave Heights (feet)
E	7 to 12	1 to 3
E	7 to 12	1 to 3
E	7 to 12	1 to 3
E	7 to 12	1 to 3
NE	7 to 12	1 to 3
E	7 to 12	1 to 3

Forecast Notes

- The wind speed forecast is at the standard meteorological height of 10 meters / 32.8 feet.
- Thunderstorms usually produce much higher wind speeds and wave heights. These localized effects on wind speed and wave heights are not included in the forecast.
- Waves are the significant wave height - the average of the highest 1/3 of the total wave spectrum. Individual waves may be significantly higher than the forecast range.

Sunday's Forecast

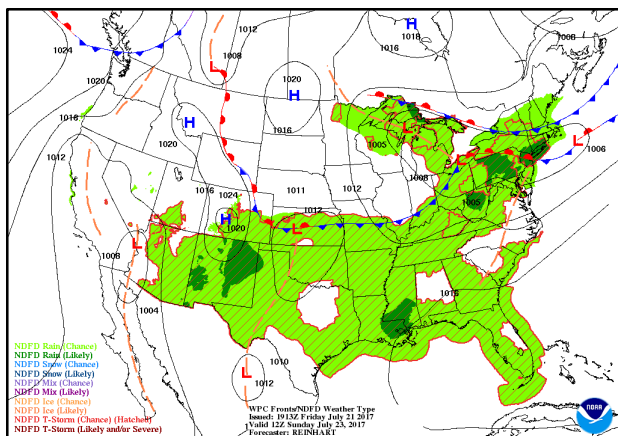
Sunday's Forecast Discussion

By early Sunday morning, a low pressure system will be centered over Lake Erie's western basin. A surface trough extending from this low will be located just west of Lake Huron and is forecast to drift east across Lake Huron on Sunday afternoon/evening. Further north, a stationary front/surface trough from a low over eastern Canada will linger just north of Lake Huron. Surface troughs are often associated with noticeable wind shifts and areas of light winds. Minor shifts in the location of these troughs, particularly if the northern trough drifts south, will result in noticeable changes in the wind field. This may be particularly true for those on the Cove Island course.

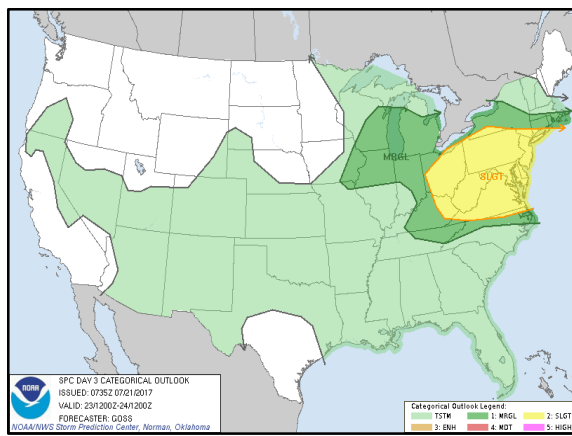
Precipitation/Thunderstorm

Although the low will be southeast of Lake Huron, it is expected to bring showers and thunderstorms to Lake Huron. Cloudy skies are expected all day on Sunday, although some clearing may occur from mid-morning to mid-afternoon. Rain should end early on Sunday morning (2 to 5 am) and then redevelop by mid-afternoon. A total of .25" to .50" of rain is expected across northern Lake Huron on Sunday. Thunderstorms are also in the forecast for Sunday. The Storm Prediction Center has placed Lake Huron at a Marginal risk of severe thunderstorms on Sunday.

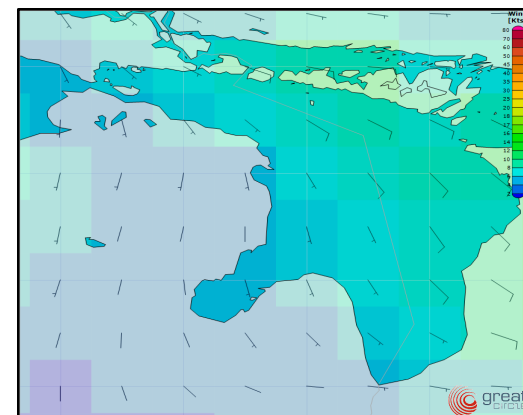
Surface Forecast Valid 8:00 am Sunday



SPC Convective Outlook For Sunday



Wind Forecast Valid 8:00 am Sunday



Sunday's Wind & Wave Forecast-Summary

Sunday Wind & Wave Forecast	
Upper Lake	East at 7 to 12 knots early. Increasing to 11 to 16 knots by mid-morning. Backing to the northeast at 11 to 16 knots during the evening. Waves 1 to 3 feet.
Lower Lake	East at 7 to 12 knots early. Veering toward the southeast during the morning. Backing to east at 7 to 12 knots early afternoon. Backing to northeast at 7 to 12 knots late afternoon. Waves 1 to 3 feet.

Important Note – Thunderstorms usually produce much higher wind speeds and wave heights. These localized effects on wind speed and wave heights are not included in the forecast.

Sunday's Wind & Wave Forecast-Detail

Forecast Time		Southern Lake Huron			Northern Lake Huron		
		Wind Direction	Wind Speed (kts)	Wave Heights (feet)	Wind Direction	Wind Speed (kts)	Wave Heights (feet)
Local	UTC						
2:00 AM	6Z	E	7 to 12	1 to 3	E	7 to 12	1 to 3
5:00 AM	9Z	E	7 to 12	1 to 3	E	7 to 12	1 to 3
8:00 AM	12Z	SE	7 to 12	1 to 3	E	7 to 12	1 to 3
11:00 AM	15Z	SE	7 to 12	1 to 3	E	11 to 16	1 to 3
2:00 PM	18Z	E	7 to 12	1 to 3	E	11 to 16	1 to 3
5:00 PM	21Z	NE	7 to 12	1 to 3	E	11 to 16	1 to 3
8:00 PM	0Z	NE	7 to 12	1 to 3	NE	11 to 16	1 to 3
11:00 PM	3Z	NE	7 to 12	1 to 3	NE	11 to 16	1 to 3

Forecast Notes

- The wind speed forecast is at the standard meteorological height of 10 meters / 32.8 feet.
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- Waves are the significant wave height - the average of the highest 1/3 of the total wave spectrum. Individual waves may be significantly higher than the forecast range.

Monday's Forecast

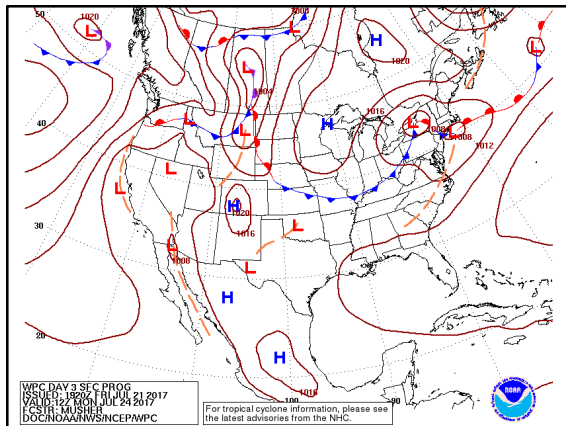
Monday's Forecast Discussion

By 8:00 am on Monday morning, the slow-moving low pressure will exit to the east. As it departs, high pressure from the upper Midwest will fill in over Lake Huron.

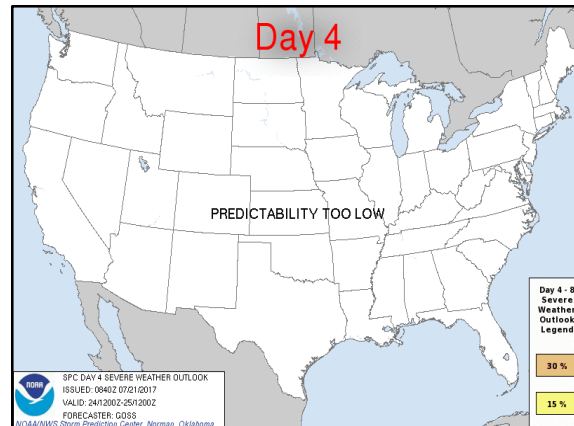
Precipitation/Thunderstorms

Rain should end during the early morning hours of Monday. Clear skies are expected by mid morning. Thunderstorms are not currently expected.

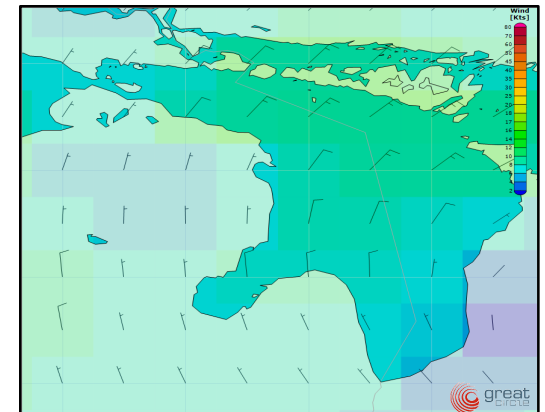
Surface Forecast Valid 8:00 am Monday



SPC Convective Outlook For Monday



Wind Forecast Valid 8:00 am Monday



Monday's Wind & Wave Forecast-Summary

Monday Wind & Wave Forecast	
Upper Lake	Northeast 7 to 12 knots early. Slight backing toward the north and diminishing to 3 to 8 knots by late morning. Light and variable east of Mackinac Island. Waves 1 to 3 feet.
Lower Lake	Northeast at 7 to 12 knots early. Increasing to 11 to 16 knots and backing toward the north by mid-morning. Waves 1 to 3 feet.

Important Note – Thunderstorms usually produce much higher wind speeds and wave heights. These localized effects on wind speed and wave heights are not included in the forecast.

Monday's Wind & Wave Forecast-Detailed

Forecast Time		Southern Lake Huron			Northern Lake Huron		
		Wind Direction	Wind Speed (kts)	Wave Heights (feet)	Wind Direction	Wind Speed (kts)	Wave Heights (feet)
Local	UTC						
2:00 AM	6Z	NE	7 to 12	1 to 3	NE	7 to 12	1 to 3
5:00 AM	9Z	NE	7 to 12	1 to 3	NE	7 to 12	1 to 3
8:00 AM	12Z	NE	7 to 12	1 to 3	NE	7 to 12	1 to 3
11:00 AM	15Z	NNE	11 to 16	1 to 3	NNE	3 to 8	1 to 3
2:00 PM	18Z	NNE	11 to 16	2 to 4	NNE	3 to 8	1 to 3
5:00 PM	21Z	NNE	11 to 16	2 to 4	NNE	3 to 8	1 to 3
8:00 PM	0Z	NNE	11 to 16	2 to 4	NNE	3 to 8	1 to 3
11:00 PM	3Z						

Forecast Notes

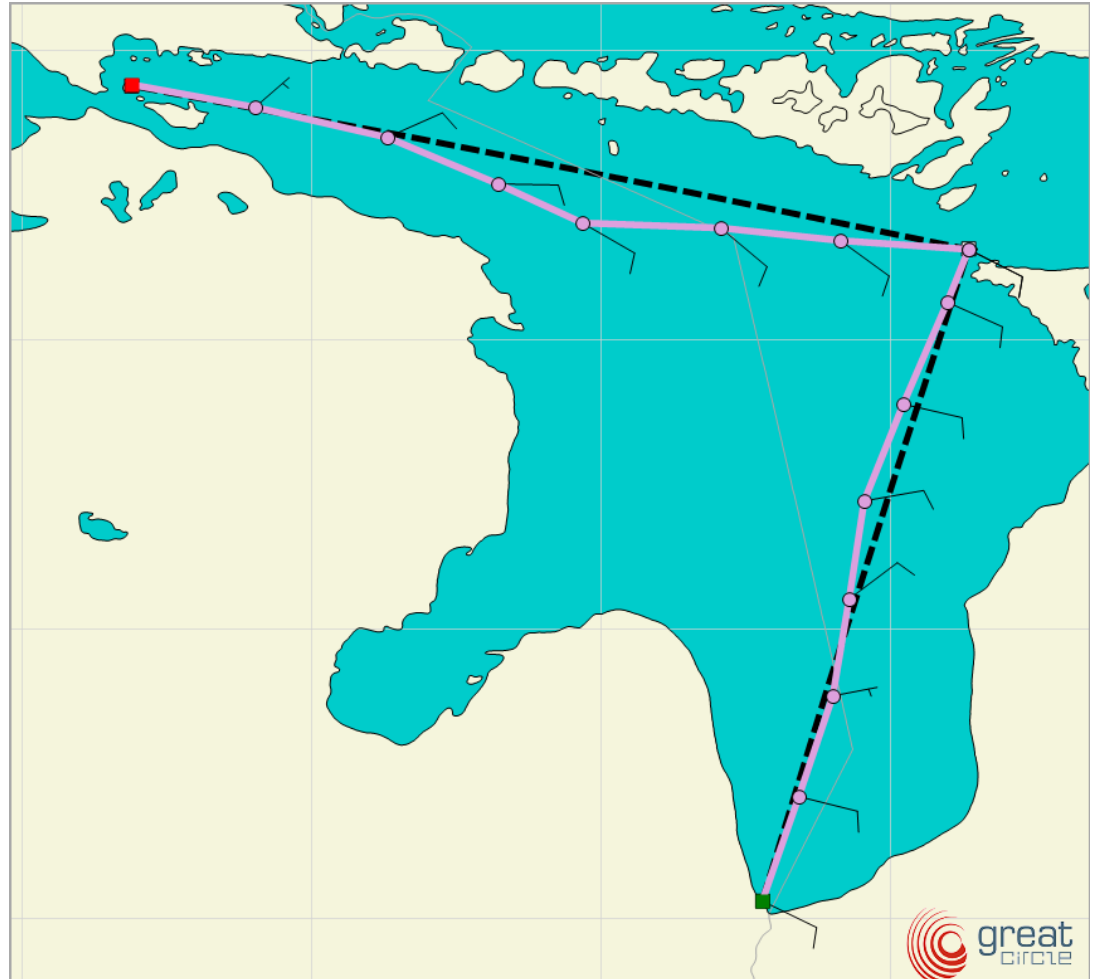
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Forecast Model Routing

Forecast Model Routing Overview

Routing Comments

GEFS Forecast Model – Arrival 3:22 am on Monday morning.



Please Note: Waypoints on weather forecast maps and other imagery provided by LakeErieWX are not to be used for navigational purposes. Client and crew are responsible for avoiding all navigational hazards and operating the yacht in a safe and seamanlike manner.

Marine Weather Education and Forecasting Resources

Forecast Model Routing Table

Time	Name	Latitude	Longitude	DistToEnd	TimeToGo	Speed Over Ground	True Wind Angle	True Wind True Wind	True Wind Speed	True Wind Direction
22 Jul 15:00	WP 0	43.06	-82.44	267.99	1d 16h 22m		102° S	9 kts at 116°	9.30	116
22 Jul 18:00	WP 1	43.42	-82.32	245.57	1d 13h 22m	7.47	90° S	10 kts at 104°	9.75	104
22 Jul 21:00	WP 2	43.77	-82.20	224.05	1d 10h 22m	7.17	72° S	8 kts at 079°	7.63	79
23 Jul 00:00	WP 3	44.10	-82.14	203.92	1d 07h 22m	6.71	47° S	9 kts at 053°	8.97	53
23 Jul 03:00	WP 4	44.44	-82.09	183.51	1d 04h 22m	6.80	64° S	8 kts at 080°	8.22	80
23 Jul 06:00	WP 5	44.78	-81.96	162.44	1d 01h 22m	7.02	86° S	10 kts at 103°	9.78	103
23 Jul 09:00	WP 6	45.13	-81.81	140.46	0d 22h 22m	7.33	97° S	10 kts at 114°	9.91	114
23 Jul 10:32	WP 7	45.31	-81.73	128.93	0d 20h 49m	7.47	117° S	10 kts at 117°	10.02	117
23 Jul 10:32	WP 8	45.31	-81.73	128.93	0d 20h 49m	6.30	158° P	10 kts at 117°	10.02	117
23 Jul 13:32	WP 9	45.34	-82.17	110.03	0d 17h 49m	6.30	153° P	10 kts at 126°	9.60	126
23 Jul 16:32	WP 10	45.39	-82.59	92.44	0d 14h 49m	5.86	143° P	10 kts at 130°	10.00	130
23 Jul 19:32	WP 11	45.40	-83.06	72.18	0d 11h 49m	6.75	177° S	9 kts at 120°	8.84	120
23 Jul 22:32	WP 12	45.54	-83.36	57.47	0d 08h 49m	4.90	150° S	9 kts at 091°	8.62	91
24 Jul 01:32	WP 13	45.70	-83.74	38.63	0d 05h 49m	6.28	138° S	8 kts at 066°	8.39	66
24 Jul 04:32	WP 14	45.80	-84.19	18.56	0d 02h 49m	6.69		7 kts at 049°	7.25	49
24 Jul 07:22	WP 15	45.88	-84.62	0.00	0d 00h 00m	6.57				

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Thank you for choosing LakeErieWX for your marine forecasting needs.

Have a safe and speed trip to the Island!