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Operations and Services Marine and Coastal Weather Services, NWSPD 10-3 Coastal Marine Forecast Services, NWSI 10-310

ALASKA COASTAL MARINE FORECAST SERVICES

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SUMMARY OF PEVISIONS. This supplement

SUMMARY OF REVISIONS: This supplement supersedes Alaska Region Supplement 04-2002, Alaska Coastal Marine Forecast Services, dated November 26, 2009, and filed with NWSI 10-310.

The following changes were made in this issuance:

- 1. Product text examples in Sections 2.3.1, 2.3.2, 2.3.3, and Table 1 updated to reflect mixed case text.
- 2. Sections 2.2 and 2.3.3 updated to reflect current WSO office responsibilities.
- 3. Section 2.3.1 wording updated to reflect the discontinuation of VHF and HF radio dissemination in 2017.
- 4. Section 3 on the Surf Zone Forecast removed to reflect current WSO office responsibilities.
- 5. Appendix Sections 1.4 and 2 removed to reflect current WSO office responsibilities
- 6. Appendix Section 1 updated to include current mixed case CWF product examples

//Signed//	
Carven Scott	
Regional Director	

March 13, 2019

Date

Alaska Coastal Marine Forecast Services

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1. <u>Purpose</u>. The coastal marine forecast service procedures contained within this supplement augment the procedures in NWSI 10-310, Coastal Marine Forecast Services.

2. <u>Coastal Waters Forecasts (CWF)</u>.

2.2 <u>Issuance Guidelines</u>. Weather Forecast Offices (WFOs) issue CWFs out to five days for expected weather conditions within their marine forecast areas of responsibility.

2.3 <u>Technical Description</u>.

2.3.1 <u>Content</u>. Refer to NWSI 10-310 as well as examples shown in the Appendix for basic guidance on CWF content. The content should include wind, sea state, significant weather (when necessary) including visibility, precipitation and/or freezing spray. In addition, the following guidelines should be observed:

- a. Ranges for wind speed and wave height are not permitted. Single values representing predominant conditions are used. Forecasters should round speeds to the nearest 5 kt.
- b. If wind gusts are forecast, only one gust value may be included in each period.
- c. Visibility is only included for forecast conditions of 1 nautical mile (nm) or less.
- d. Forecasts should highlight meaningful trends and significant changes following guidelines provided below in Table 1.

Marine Weather Parameter	Expression in Forecast
WIND < 24 kt	No deterministic changes mentioned, unless increasing to gale. If increasing to gale, only include trend to highest value (e.g., increasing to 40 kt). Note: For all wind speeds, if change is less than threshold specified above, use a trend to or from the highest value (e.g., south wind 15 kt diminishing to 10 kt).
WIND 24-49 kt	Include speed changes of 10 kt or more, unless increasing to gale or storm category. In that case, only include trend to highest value (e.g., increasing to 40 kt).
WIND \geq 50 kt	Include wind speed changes of 20 kt or more (e.g., east wind 50 kt increasing to 70 kt).
Wind direction	Include changes of 90 degrees or more.
Waves ≥ 6 ft	Include changes of 25% or greater.
Waves < 6 ft	Include trend from highest value (subsiding or building).
Weather	If probability is 65% or greater, a categorical forecast of precipitation is mentioned (e.g., rain, snow). No expressions of probability are included (e.g., likely, chance of). Only one change or trend allowed per period (e.g., rain ending).
Visibility	Only one trend allowed per period (improving from or deteriorating to lowest condition).

 $\label{eq:table_to_constant} Table \ 1-Guidelines \ for \ Composition \ of \ the \ Coastal \ Waters \ Forecast$

Exception: For waters with a large recreational marine community, such as the Inside Passage or Prince William Sound, or near large subsistence marine communities, like much of Northern Alaska, changes more minor than those outlined in Table 1 may be included based upon expressed customer needs and in accordance with all relevant dissemination restrictions.

2.3.2 <u>CWF – Forecast Parameters</u>.

a. <u>Seas</u>. NWSI 10-310 allows for the use of descriptive words such as choppy or rough to characterize the sea state in regionally specified bays, inlets, harbors, estuaries, etc. In the Alaska Region (AR), these descriptive words may be used in marine forecasts for waters with a large number of recreational users, such as the Prince William Sound area. These areas are to be specified by WFOs in coordination with local customers and partners.

2.3.3 <u>Format</u>. The CWF product issued by WFOs will follow the format prescribed in NWSI 10-310. WFOs should use standard abbreviations in the text of the CWF i.e., NW instead of northwest to aid in dissemination.

APPENDIX A Examples of Coastal NWS Alaska Forecasts

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1.	Coastal Waters Forecast.				
1.1	Example of WFO Juneau Coastal Waters Forecast.				
FZAK52	PAJK 281138				
CWFAEG					
COASTAL	WATERS FORECAST FOR SOUTHEAST ALASKA				
	l Weather Service Juneau AK				
	AKST Thu Feb 28 2019				
Southea	st Alaska Coastal Waters from Dixon Entrance to				
Cape Su	ckling out 100 NM				
Utrad Co	accepte and the analysis of and direction				
Wind forecasts reflect the predominant speed and direction					
	expected. Seas forecasts represent the average of the highest one-third of the combined windwave and swell height.				
PKZ099-	010545-				
238 AM	AKST Thu Feb 28 2019				
.SYNOPS	IS FOR OUTSIDE WATERS				
Moderate strength high pressure will persist over the western					
Gulf of Alaska and the Yukon Territory through Fri. A weak					
trough	trough of low pressure will persist along the eastern Gulf				
coast. On Sat very strong arctic high pressure will build well					
east of the Panhandle for continued offshore flow.					
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PKZ041-010545-Dixon Entrance to Cape Decision-238 AM AKST Thu Feb 28 2019 ...SMALL CRAFT ADVISORY DUE TO SEAS THROUGH THIS MORNING... .TODAY...E wind 10 kt early in the morning becoming light. Seas 9 ft. .TONIGHT...Light winds becoming W 10 kt late. Seas 6 ft. W swell. .FRI...Light winds. Seas 5 ft. W swell. .FRI NIGHT...SE wind 15 kt. Seas 7 ft. W swell. .SAT...SE wind 10 kt. Seas 8 ft. .SUN...E wind 10 kt. Seas 7 ft. .MON...NE wind 10 kt. Seas 5 ft.

PKZ042-010545-Cape Decision to Cape Edgecumbe-238 AM AKST Thu Feb 28 2019

... SMALL CRAFT ADVISORY DUE TO SEAS THROUGH THIS MORNING...

.TODAY...N wind 10 kt becoming E in the morning, then becoming S in the afternoon. Seas 8 ft. .TONIGHT...Light winds. Seas 6 ft. W swell. .FRI...Light winds. Seas 5 ft. W swell in the afternoon. .FRI NIGHT...SE wind 15 kt. Seas 7 ft. W swell. .SAT...SE wind 10 kt. Seas 8 ft. .SUN...E wind 10 kt. Seas 7 ft. .MON...NE wind 10 kt. Seas 5 ft.

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PKZ043-010545-Cape Edgecumbe to Cape Fairweather-238 AM AKST Thu Feb 28 2019

.TODAY...N wind 10 kt becoming SE. Seas 7 ft. W swell early in the morning. .TONIGHT...W wind 10 kt. Seas 5 ft. W swell in the evening. .FRI...W wind 15 kt becoming SE in the afternoon. Seas 6 ft. W swell in the afternoon. .FRI NIGHT...SE wind 20 kt. Seas 7 ft. W swell. .SAT...SE wind 15 kt. Seas 7 ft. .SUN...E wind 15 kt. Seas 7 ft. .MON...E wind 10 kt. Seas 5 ft. \$\$ PKZ051-010545-Cape Fairweather to Icy Cape-238 AM AKST Thu Feb 28 2019 .TODAY...NW wind 10 kt becoming E. Seas 6 ft. W swell early in the morning. .TONIGHT...W wind 10 kt becoming E late. Seas 5 ft. .FRI...E wind 15 kt. Seas 5 ft. .FRI NIGHT...E wind 20 kt. Seas 7 ft. W swell. .SAT...SE wind 10 kt. Seas 7 ft. .SUN...SE wind 10 kt. Seas 6 ft. .MON...E wind 10 kt. Seas 4 ft.

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PKZ052-010545-Icy Cape to Cape Suckling-238 AM AKST Thu Feb 28 2019 .TODAY...W wind 10 kt. Seas 5 ft. .TONIGHT...E wind 10 kt. Seas 4 ft. .FRI...E wind 10 kt. Seas 5 ft. .FRI NIGHT...E wind 20 kt. Seas 6 ft. SW swell. .SAT...SE wind 10 kt. Seas 6 ft.

.SUN...E wind 10 kt. Seas 6 ft. .MON...E wind 10 kt becoming light. Seas 4 ft.

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1.2 Example of WFO Fairbanks Coastal Waters Forecast.

FZAK51 PAFG 281254

CWFNSB

Coastal Waters Forecast for Arctic Alaska National Weather Service Fairbanks AK 354 AM AKST Thu Feb 28 2019

Arctic Alaska Coastal Waters out 100 NM

Wind forecasts reflect the predominant speed and direction expected. Sea forecasts represent the average of the highest onethird of the combined wind-wave and swell height.

PKZ298-010315-

354 AM AKST Thu Feb 28 2019

.SYNOPSIS FOR ARCTIC COAST... A 1042 mb high east of Banks Island will continue to slide to the east today. A trough of low pressure develops along the eastern North Slope Coast on Friday as a strong ridge persists over the Eastern Interior of Alaska and the Yukon.

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PKZ225-010315-Cape Thompson to Cape Beaufort-354 AM AKST Thu Feb 28 2019

...GALE WARNING IN EFFECT THROUGH EARLY FRIDAY MORNING...

.TODAY...S winds 45 kt. Blowing snow. Rain. VSBY 1 NM or less. .TONIGHT...SE winds 35 kt. Blowing snow. VSBY 1 NM or less. .FRI...S winds 25 kt. Blowing snow. VSBY 1 NM or less. .FRI NIGHT...S winds 20 kt. .SAT...S winds 15 kt. .SAT NIGHT...S winds 15 kt. .SUN...SE winds 25 kt.

.MON...S winds 25 kt.

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PKZ230-010315-Cape Beaufort to Point Franklin-354 AM AKST Thu Feb 28 2019

...GALE WARNING IN EFFECT THROUGH LATE THIS AFTERNOON...

.TODAY...S winds 40 kt decreasing to 30 kt. Blowing snow. VSBY

1 NM or less.

.TONIGHT...SE winds 20 kt.

.FRI...SE winds 15 kt.

.FRI NIGHT...S winds 15 kt.

.SAT...SW winds 10 kt.

.SAT NIGHT...SW winds 15 kt.

.SUN...S winds 15 kt.

.MON...S winds 20 kt.

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PKZ235-010315-Point Franklin to Cape Halkett-354 AM AKST Thu Feb 28 2019

... BRISK WIND ADVISORY IN EFFECT THROUGH LATE THIS AFTERNOON...

.TODAY...S winds 25 kt. Blowing snow. VSBY 1 NM or less. .TONIGHT...SE winds 15 kt.

.FRI...SE winds 15 kt.

.FRI NIGHT...S winds 10 kt.

.SAT...W winds 5 kt.

.SAT NIGHT...W winds 10 kt.

.SUN...SW winds 15 kt.

.MON...S winds 15 kt.

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PKZ240-010315-Cape Halkett to Flaxman Island-354 AM AKST Thu Feb 28 2019

.TODAY...SE winds 20 kt.

.TONIGHT...E winds 15 kt. .FRI...E winds 15 kt. .FRI NIGHT...SE winds 15 kt. .SAT...SW winds 10 kt. .SAT NIGHT...W winds 15 kt. .SUN...W winds 10 kt. .MON...SE winds 15 kt.

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PKZ245-010315-Flaxman Island to Demarcation Point-354 AM AKST Thu Feb 28 2019

.TODAY...E winds 15 kt. .TONIGHT...E winds 20 kt. .FRI...E winds 25 kt. Blowing snow. VSBY 1 NM or less. .FRI NIGHT...SE winds 25 kt. Blowing snow. VSBY 1 NM or less. .SAT...SE winds 25 kt. .SAT NIGHT...W winds 20 kt. .SUN...W winds 20 kt. .MON...SE winds 15 kt.

1.3 Example of WFO Anchorage Coastal Waters Forecast.

FZAK51 PAFC 280024 CWFAER Coastal Waters Forecast National Weather Service Anchorage Alaska 324 PM AKST Wed Feb 27 2019 Coastal Waters Forecast for the Northern Gulf of Alaska Coast up to 100 nm out including Kodiak Island and Cook Inlet. Wind forecasts reflect the predominant speed and direction expected. Sea forecasts represent an average of the highest one-third of the combined wind wave and swell height. PKZ197-281300-324 PM AKST Wed Feb 27 2019 .SYNOPSIS FOR THE NORTH GULF COAST+KODIAK ISLAND WATERS+ COOK INLET... High pressure remains over the central Gulf through Fri. A trough of low pressure persists along the northern Gulf coast through Fri afternoon. \$\$ PKZ119-281300-Cape Suckling to Cape Cleare-324 PM AKST Wed Feb 27 2019 .TONIGHT...W wind 20 kt. Gusts to 30 kt out of the Copper River Delta. Seas 6 ft. .THU....NW wind 15 kt. Seas 5 ft. .THU NIGHT...Variable wind 10 kt. Seas 4 ft. .FRI...Variable wind 10 kt. Seas 3 ft.

.FRI NIGHT...Variable wind 10 kt. Seas 4 ft. .SAT...Variable wind 10 kt. Seas 5 ft. .SUN THROUGH MON...Variable wind 10 kt. Seas 3 ft.

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PKZ120-281300-Cape Cleare to Gore Point-324 PM AKST Wed Feb 27 2019

.TONIGHT...W wind 20 kt. Seas 6 ft. .THU...W wind 15 kt. Seas 5 ft. .THU NIGHT...W wind 15 kt. Seas 4 ft. .FRI...W wind 15 kt. Seas 4 ft. .FRI NIGHT...Variable wind 10 kt. Seas 3 ft. .SAT THROUGH SUN...Variable wind 10 kt. Seas 4 ft. .MON...Variable wind 10 kt. Seas 3 ft.

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PKZ121-281300-Resurrection Bay-324 PM AKST Wed Feb 27 2019

.TONIGHT...N wind 20 kt. Seas 4 ft. Freezing spray after midnight. .THU...N wind 15 kt diminishing to 10 kt in the afternoon. Seas 3 ft. .THU NIGHT...N wind 10 kt. Seas 2 ft. .FRI AND FRI NIGHT...N wind 10 kt. Seas 2 ft. .SAT THROUGH SUN...N wind 10 kt. Seas 2 ft. .MON...S wind 10 kt. Seas 2 ft.

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PKZ125-281300-Prince William Sound-324 PM AKST Wed Feb 27 2019

.TONIGHT...NW wind 15 kt becoming N 10 kt after midnight. Seas 2 ft. .THU...Variable wind less than 10 kt. Seas 2 ft. .THU NIGHT...Variable wind less than 10 kt. Seas 2 ft. .FRI AND FRI NIGHT...Variable wind less than 10 kt. Seas 2 ft. .SAT THROUGH SUN...N wind 10 kt. Seas 2 ft. .MON...Variable wind less than 10 kt. Seas 2 ft.

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PKZ126-281300-Port Valdez-324 PM AKST Wed Feb 27 2019

.TONIGHT...NE wind 10 kt. Seas 2 ft. .THU...Variable wind less than 10 kt. Seas 2 ft. .THU NIGHT...Variable wind less than 10 kt. Seas 2 ft. .FRI AND FRI NIGHT...Variable wind less than 10 kt. Seas 2 ft. .SAT...Variable wind less than 10 kt. Seas 2 ft. .SUN THROUGH MON...NE wind 10 kt. Seas 2 ft.

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PKZ127-281300-Valdez Narrows-324 PM AKST Wed Feb 27 2019

.TONIGHT...NE wind 20 kt. Seas 3 ft. .THU...NE wind 20 kt. Seas 3 ft. .THU NIGHT...NE wind 20 kt. Seas 3 ft. .FRI...NE wind 20 kt. Seas 3 ft. .FRI NIGHT...NE wind 15 kt. Seas 3 ft. .SAT THROUGH MON...NE wind 15 kt. Seas 3 ft.

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PKZ128-281300-
Valdez Arm-
324 PM AKST Wed Feb 27 2019
.TONIGHT...NE wind 15 kt. Seas 3 ft.
.THU...NE wind 15 kt diminishing to 10 kt in the afternoon. Seas
3 ft.
.THU NIGHT...NE wind 10 kt. Seas 2 ft.
.FRI AND FRI NIGHT...NE wind 10 kt. Seas 2 ft.
.SAT THROUGH MON...NE wind 10 kt. Seas 2 ft.
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PKZ129-281300-
Passage Canal-
324 PM AKST Wed Feb 27 2019
.TONIGHT...W wind 20 kt. Gusts to 45 kt in the evening near Wittier.
Seas 3 ft.
.THU...W wind 10 kt. Seas 2 ft.
.THU NIGHT...W wind 10 kt. Seas 2 ft.
.FRI...Variable wind less than 10 kt. Seas 2 ft.
.FRI NIGHT...Variable wind less than 10 kt. Seas 2 ft.
.SAT...Variable wind less than 10 kt. Seas 2 ft.
.SUN...Variable wind less than 10 kt. Seas 2 ft.
.MON...E wind 10 kt. Seas 2 ft.
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PKZ130-281300-
West of Barren Islands including Kamishak Bay-
324 PM AKST Wed Feb 27 2019
.TONIGHT...NE wind 15 kt. Seas 4 ft.
.THU...N wind 15 kt. Seas 4 ft.
.THU NIGHT...Variable wind 10 kt. Seas 2 ft.
.FRI AND FRI NIGHT...Variable wind 10 kt. Seas 2 ft.
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.SAT THROUGH SUN...Variable wind 10 kt. Seas 3 ft. .MON...E wind 15 kt. Seas 3 ft. \$\$ PKZ131-281300-Barren Islands East-324 PM AKST Wed Feb 27 2019 ...SMALL CRAFT ADVISORY TONIGHT... .TONIGHT...W wind 25 kt. Seas 7 ft. .THU...W wind 20 kt. Seas 6 ft. .THU NIGHT...W wind 15 kt. Seas 4 ft. .FRI...W wind 15 kt. Seas 4 ft. .FRI NIGHT...Variable wind 10 kt. Seas 3 ft. .SAT THROUGH SUN...Variable wind 10 kt. Seas 4 ft. .MON...SW wind 15 kt. Seas 3 ft.

PKZ132-281300-Marmot Island to Sitkinak-324 PM AKST Wed Feb 27 2019

.TONIGHT...SW wind 15 kt. Seas 5 ft. .THU...SW wind 15 kt. Seas 5 ft. .THU NIGHT...SW wind 15 kt. Seas 7 ft. .FRI...SW wind 15 kt. Seas 8 ft. .FRI NIGHT...Variable wind 10 kt. Seas 8 ft. .SAT...Variable wind 10 kt. Seas 8 ft. .SUN...Variable wind 10 kt. Seas 5 ft. .MON...S wind 15 kt. Seas 6 ft.

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PKZ136-281300-

Chiniak Bay-324 PM AKST Wed Feb 27 2019 .TONIGHT...Variable wind less than 10 kt. Seas 1 ft. .THU....SW wind 10 kt. Seas 1 ft. .THU NIGHT...SW wind 10 kt. Seas 1 ft. .FRI AND FRI NIGHT...Variable wind less than 10 kt. Seas 1 ft. .SAT...Variable wind less than 10 kt. Seas 2 ft. .SUN...Variable wind less than 10 kt. Seas 2 ft. .MON...S wind 10 kt. Seas 1 ft. \$\$

PKZ137-281300-Marmot Bay-324 PM AKST Wed Feb 27 2019

.TONIGHT...Variable wind less than 10 kt. Seas 2 ft. .THU....Variable wind less than 10 kt. Seas 2 ft. .THU NIGHT...Variable wind less than 10 kt. Seas 2 ft. .FRI AND FRI NIGHT...Variable wind less than 10 kt. Seas 2 ft. .SAT...Variable wind less than 10 kt. Seas 3 ft. .SUN...Variable wind less than 10 kt. Seas 2 ft. .MON...S wind 10 kt. Seas 3 ft.

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PKZ138-281300-Shelikof Strait-324 PM AKST Wed Feb 27 2019

.TONIGHT...SE wind 15 kt. Seas 3 ft. .THU...S wind 15 kt. Seas 3 ft. .THU NIGHT...S wind 15 kt. Seas 4 ft. .FRI AND FRI NIGHT...Variable wind 10 kt. Seas 3 ft. .SAT...Variable wind 10 kt. Seas 2 ft. .SUN...Variable wind 10 kt. Seas 2 ft.

.MON...SE wind 20 kt. Seas 4 ft.

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PKZ139-281300-

Cook Inlet Kalgin Island to Point Bede-324 PM AKST Wed Feb 27 2019

.TONIGHT...N wind 15 kt. Seas 3 ft. Freezing spray. .THU...N wind 15 kt. Seas 3 ft. Freezing spray in the morning. .THU NIGHT...N wind 10 kt in the evening becoming variable less than 10 kt. Seas 2 ft. .FRI AND FRI NIGHT...Variable wind less than 10 kt. Seas 2 ft. .SAT THROUGH MON...NE wind 10 kt. Seas 3 ft.

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PKZ140-281300-Cook Inlet North of Kalgin Island-324 PM AKST Wed Feb 27 2019

.TONIGHT...Variable wind less than 10 kt. Areas of freezing fog. .THU...NE wind 10 kt in the morning becoming variable less than 10 kt. Areas of freezing fog. .THU NIGHT...Variable wind less than 10 kt. Patchy freezing fog. .FRI AND FRI NIGHT...Variable wind less than 10 kt. .SAT THROUGH MON...NE wind 10 kt.

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PKZ141-281300-Kachemak Bay-324 PM AKST Wed Feb 27 2019

.TONIGHT...NE wind 10 kt. Seas 2 ft.

.THU...Variable wind less than 10 kt. Seas 2 ft. .THU NIGHT...Variable wind less than 10 kt. .FRI...Variable wind less than 10 kt. Seas 2 ft. .FRI NIGHT...Variable wind less than 10 kt. .SAT THROUGH SUN...Variable wind less than 10 kt. Seas 2 ft. .MON...Variable wind less than 10 kt. Seas 2 ft.