

# WAGGONER

## Weather Worksheet, Checklists, and Maps

These checklists, maps, and worksheet are designed to help collect weather, sea, and tidal current information to aid in making a GO or NoGO evaluation of conditions for a day's planned passage.



**Passage Planning**

- ☐ Enter the day's passage information on the Worksheet page.
- ☐ Enter the day's starting, ending, and intermediate locations along with planned times, and direction of travel (Heading).
- ☐ Determine Distance, Speed, and Time and a rough course for each leg of the trip passage.
- ☐ Enter the times for sunrise and sunset.

**Weather Planning**

- ☐ Determine the weather reporting stations and forecast areas relevant to the passage (see the map) and enter on the Worksheet.
- ☐ Gather forecast weather and enter on Worksheet, see the Weather Planning pages.
- ☐ Check the weather depiction charts for "Current; 24; 48; 72; and 96 hour" forecasts
- ☐ Gather Buoy and Lighthouse weather and sea conditions observations for stations and enter on Worksheet.
- ☐ Consult supplemental weather information sources.

**Tides and Current Flow**

- ☐ Enter Name & Location for any time-dependent "Gates" such as tidal current rapids.
- ☐ Enter predicted tidal current direction and speed for each location.
- ☐ What is the maximum current for the day?
- ☐ What is the best timing for Gates or the general currents?
- ☐ Enter the Lunar Cycle Stage (NEW | FULL | WAXING | WANING) on the Worksheet.
- ☐ See Ports & Passes, or Canadian Tides & Currents, or NOAA Tide Predictions

**GO NoGO Evaluation and Decision**

- ☐ Are forecast weather and sea conditions within your crew and your vessel's limits?
- ☐ Will conditions improve or deteriorate?
- ☐ Check wind direction in relation to direction of travel. Straight line route isn't always the best option. Are longer, but more protected routes a better option?
- ☐ Are you prepared to clear U.S. or Canada Customs?
- ☐ Is there a wind against wave or current situation? Will it change with the tide?
- ☐ What is the status of restricted areas? (WG or other controlled waters)
- ☐ What is the optimal time for departure and arrival?
- ☐ Vessel Traffic System frequencies to monitor \_\_\_\_\_.

**Fail-Safe Contingency Plans**

- ☐ Alternate plan or destination in case of unforeseen situations?

## Worksheet

## Day's Passage:

Date: \_\_\_\_\_ From: \_\_\_\_\_ To: \_\_\_\_\_

Sunrise: \_\_\_\_\_ Sunset: \_\_\_\_\_ Lunar Cycle Stage \_\_\_\_\_

Location	Time	Heading	Tidal Current Flood/Ebb
From			
To			

## Weather Forecast Synopsis Notes:

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## Forecast by Reporting Station in Direction of Day's Passage:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

## Lightstation and Buoy Reports:

1. \_\_\_\_\_ Wind Dir & Speed \_\_\_\_\_ Sea Condition \_\_\_\_\_
2. \_\_\_\_\_ Wind Dir & Speed \_\_\_\_\_ Sea Condition \_\_\_\_\_
3. \_\_\_\_\_ Wind Dir & Speed \_\_\_\_\_ Sea Condition \_\_\_\_\_
4. \_\_\_\_\_ Wind Dir & Speed \_\_\_\_\_ Sea Condition \_\_\_\_\_

## Weather Planning

### Weather Planning

- ☐ Determine the weather reporting stations and forecast areas relevant to the passage (see the map) and enter on the Weather Worksheet.
- ☐ Gather forecast weather and enter on Worksheet
- ☐ Check the weather depiction charts for “Current; 24; 48; 72; and 96 hour” forecasts
- ☐ Gather Buoy and Lighthouse weather and sea conditions observations for stations and enter on Worksheet

### Collecting Weather Forecasts and Observed Weather Information

- ☐ Via Internet
  - Environment Canada [weather.gc.ca/marine/](http://weather.gc.ca/marine/)
  - U.S. NOAA National Weather Svc. [www.weather.gov/sew](http://www.weather.gov/sew)
  - National Data Buoy Center [www.ndbc.noaa.gov](http://www.ndbc.noaa.gov)
  - Ocean Prediction Center [www.opc.ncep.noaa.gov](http://www.opc.ncep.noaa.gov) or [ocean.weather.gov](http://ocean.weather.gov)
- ☐ Via Telephone
  - Seattle 206-526-6087
  - Vancouver 604-666-3655
  - Victoria 250-363-6880 or 250-363-6492
  - Comox 250-339-0748
  - Alert Bay 250-974-5305
  - Prince Rupert 250-624-9009
  - Tofino 250-726-3415
- ☐ Via VHF Radio Continuous Broadcasts – see following page for Format & Order
  - WX1 Seattle, Neah Bay, Cape Lazo, Alert Bay, Eliza Dome, Klemtu
  - WX2 Saltspring Island, Nootka, Calvert Island, Mt. Gil, Dundas Island
  - WX3 Olympia, Mt. Helmcken, Bowen Island
  - WX4 Puget Sound, San Juan Islands
  - WX8/21B Mt. Park, Discover Mtn., Holberg, Mt. Ozzard, Mt. Hays, Kitimat
- ☐ Supplemental Information Sources
  - Apps – Windy, Predictwind, Sailflow
  - Satellite Service – SiriusXM, Garmin InReach

### Collecting Weather Buoy Information

- ☐ Via Internet
  - U.S. NOAA National Weather Svc. [www.weather.gov/sew](http://www.weather.gov/sew)
  - National Data Buoy Center [www.ndbc.noaa.gov](http://www.ndbc.noaa.gov)
- ☐ Via Telephone (Have Buoy numbers from maps on pages 5&6 ready for entry)
  - Dial-A-Buoy 888-701-8992

## Weather Planning

### Collecting Lightstation Reports

Hourly reports originate from observations provided by Canadian Coast Guard staffed lightstations. Reports are normally taken during daylight hours. Reports generally conform to the format and coding below. The “Issued at” field at the top of the report indicates the Universal Time Coordinated (UTC) and date of the observation. (subtract 8 hours, or 7 hours during daylight savings, for local time)

- ☐ Via Internet - Environment Canada [weather.gc.ca/marine/](http://weather.gc.ca/marine/)

On the area forecast page, click on “**Weather Conditions**” tab, then click on “**Lightstations Reports**” in the **Legend** box near the bottom of the page.

### Format and Order of Report:

Name	Sky	Visibility	Weather	Wind Direction	Wind Speed	Sea State	Swell	Remarks
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**Sample Reports:** CARMANAH      OVC 15 RW E 22G30 2FT CHP  
 MCINNES                      CLDY 15 CLM 1FT CHP LO SW  
 BOAT BLUFF    PC 15 NW04 RPLD

**Name:** Station Identification Name

**Sky:** Sky Conditions – CLR (clear); CLDY (cloudy); PT CLDY (party cloudy); X (obscured);  
 -X (partially obscured)

**Visibility:** Visibility measured in miles

**Weather:** Weather Elements – R (rain); RW (rain showers); S (snow); SW (snow showers);  
 -L (drizzle); F (fog); T (thunder); A (hail);

**Wind Direction:** Eight points of the compass – N, S, E, W, NE, NW, SE, SW

**Wind Speed:** wind speed and sometimes gusts in knots; or CLM for calm.

**Sea State:** Wave height reported in feet; and sea state - SMTH (smooth); RPLD (ripped);  
 CHP (chop); MOD (moderate); RUF (rough)

**Swell:** Direction and state of swell – LO (0 to 2 meters); MOD (2 to 4 meters); and  
 HVY (greater than 4 meters)

**Remarks:** Various comments that are usually abbreviated such as (OCNL RW- for  
 occasional light rain shower)

**VHF Weather Broadcasts Report Format and Order of Presentation****U.S. NOAA National Weather Service****1. Introduction**

- Name of forecast area
  - Puget Sound and Hood Canal
  - Admiralty Inlet
  - Northern Inland Waters (including San Juan Islands)
  - East Entrance Strait of Juan de Fuca
  - Strait of Juan de Fuca
  - Pacific Waters from Environment Canada for West Coast Vancouver Island
- Date and time the forecast was prepared

**2. Marine Synopsis**

- An overview for an area, delivered by day

**3. Hourly Observations Roundup**

- Weather conditions including wind speed (in knots), wind direction and barometric pressure (in millibars)

**4. Marine Observations and Buoy Reports**

- Wind and sea conditions

**5. Marine Forecast by area of Washington**

- Forecast winds, seas, and sky conditions for current and next three days
- Special advisories such as Small Craft and Gale Warnings

**Environment Canada****1. Introduction**

- Name of forecast area
  - Juan de Fuca Strait – East Entrance
  - Juan de Fuca Strait - Central
  - Haro Strait
  - Strait of Georgia – South of Nanaimo
  - Strait of Georgia – North of Nanaimo
  - Howe Sound
  - Johnstone Strait
- Date and time the forecast was prepared
- Warnings

**2. Weather Summary**

- Summary by area

**3. Marine Weather Forecast Statement**

- Forecast winds, seas, and sky conditions for Today, Tonight, and Tomorrow
- Special advisories such as Small Craft and Gale Warnings

**4. Technical Marine Synopsis**

- Weather systems summary and position
- Forecast weather systems 24 hour movement

**5. Extended Marine Forecast for Pacific Water**

- Delivered by area (see list above)
- Forecast conditions for 2 – 5 days

**6. Automated Reports**

- Weather conditions from automatic reporting stations.

**7. Ocean Buoy Reports**

- Wind direction, speed, combined seas, and barometric pressure from buoys.

**8. Lighthouse Weather Reports**

- Wind and sea conditions reported and updated hourly by lighthouse operators.

**9. Local Marine Weather Reports****10. Special Reports**

- Special notices, such as status of Military Exercise Areas – Like Whisky Golf (WG)



## Southern BC &amp; Washington Weather Stations, Areas, and Buoys



## SE Alaska &amp; Northern BC Coast Weather Stations, Areas, and Buoys

