

Work Horses and the Secret Sources!

One of the best sources of marine weather forecasts for a one to a few day's sail on inland waters is likely to be a surprise to you. It is new, or relatively new—I am not sure when it became available. No announcements that I recall. It is hidden right under our noses (I mean mouse cursors) in the same place we check every day to see what clothes to wear to work. But let's come back to this jewel in a moment.

Once underway on inland and near coastal waters, the NOAA marine weather radio on VHF is likely to be the main source for inland waters. It gives observations every 3 hours and forecasts every 6 hours. The local Marine Weather Services Chart (MSC-10) tells all about this fundamental service (www.starpath.com/navpubs). But that is not the best place to start a study of what might take place.

All inland and coastal marine weather planning starts best at NOAA's National Data Buoy Center website (www.ndbc.noaa.gov). They provide a comprehensive compilation of recent observations at several places along the inland and coastal waters. Google "WPOW1" to go direct to the data from the West Point lighthouse.

This site shows you present conditions updated hourly, along with historical records for the past day, or even longer.

One of the best pictures of what has been taking place there is given in their "Combined plot of Wind Speed, Gust, and Air Pressure." Unfortunately, we do not have a choice of "mariner's units." We get pressure in inches of mercury and wind speed in kts if we choose "English" units or we get meters per second and millibars if we choose "Metric" units. What we want as mariners (as opposed to pilots) is mb and kts, but we don't get it.

The sample here at the time of writing is not particularly interesting, though it normally is. We see that the past high pressure is now back to normal (1017 mb is normal for the Pacific Northwest in both summer and winter) and the wind has died down. This plot

does not tell us the future, but it definitely looks like not much wind for the moment.

You will also find a link to the latest marine weather forecasts on the NDBC page for any of its stations. This will give you a 5-day snapshot of the wind and seas for rather broad regions, of which the first 3 days are likely to be fairly good. But these are broad regions. Check MSC-10 to see where the regions are defined using the labels "PZZ133," "PZZ135," etc.

Remember weather can change quickly in our region, so do not rely on a Saturday forecast that you got on Thursday. Check it again Saturday morning.

You can also get these reports by any standard cell phone. Call 888-701-8992 and follow instructions. They can also be requested by email. The NDBC site explains both services, though they do not tell you about the value of the MSC charts.

Once you have the overview of present conditions, and the longer term outlook in the general region you plan to sail, you can then be much more specific with your forecasts. The trick play mentioned earlier is found right on the standard National Weather Service (NWS) forecast page. Start with this link:

<http://forecast.weather.gov/zipcity.php>

Sample Marine Weather Forecasts

PZZ133-112215- NORTHERN INLAND WATERS INCLUDING THE SAN JUAN ISLANDS-

833 AM PDT SUN OCT 11 2009 ...SMALL CRAFT ADVISORY IN EFFECT UNTIL 3 PM PDT THIS AFTERNOON...

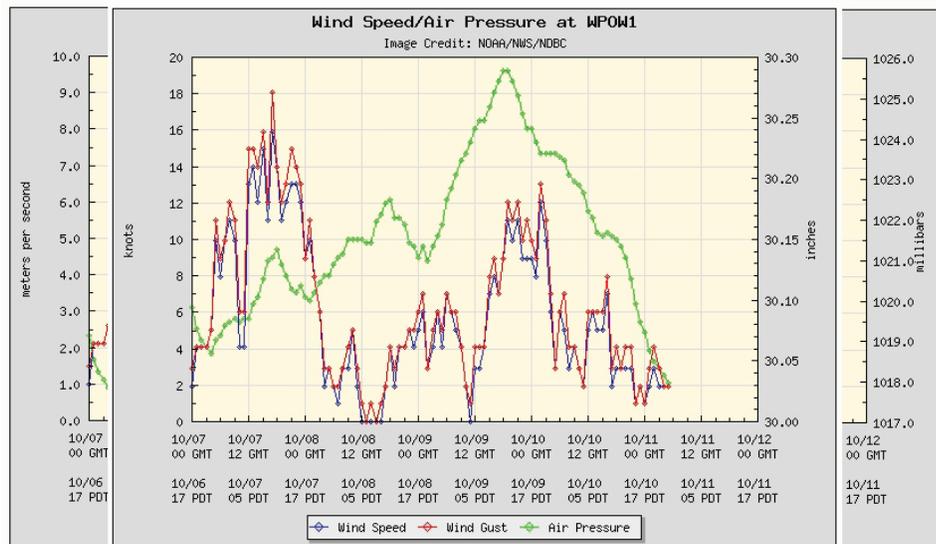
TODAY NE WIND 5 TO 15 KT RISING TO 15 TO 25 KT IN THE MORNING... THEN BECOMING 10 TO 20 KT LATE. WIND WAVES 1 TO 4 FT. **TONIGHT** NE WIND 10 TO 15 KT. WIND WAVES 1 OR 2 FT. **MON** NE WIND 10 TO 15 KT. WIND WAVES 1 OR 2 FT. **MON NIGHT** NE WIND 10 TO 15 KT...BECOMING SE 10 TO 20 KT AFTER MIDNIGHT. WIND WAVES 1 TO 3 FT. **TUE** SE WIND 15 TO 25 KT. WIND WAVES 2 TO 4 FT. **WED** SE WIND 15 TO 25 KT. WIND WAVES 2 TO 4 FT. **THU** SE WIND 20 TO 30 KT. WIND WAVES 3 TO 5 FT.

PZZ135-112215- PUGET SOUND AND HOOD CANAL-

833 AM PDT SUN OCT 11 2009

TODAY NE WIND TO 10 KT. WIND WAVES 1 FT OR LESS. **TONIGHT** NE WIND 10 TO 15 KT. WIND WAVES 1 OR 2 FT. **MON** NE WIND 10 TO 15 KT. WIND WAVES 1 OR 2 FT. **MON NIGHT** NE WIND 10 KT. WIND WAVES 1 FT. **TUE** SE WIND 10 TO 15 KT... BECOMING 10 TO 20 KT IN THE AFTERNOON. WIND WAVES 1 TO 3 FT. **WED** SE WIND 10 TO 15 KT...RISING TO 15 TO 25 KT. WIND WAVES 1 OR 2 FT BUILDING TO 2 TO 4 FT. **THU** S WIND 15 TO 25 KT. WIND WAVES 2 TO 4 FT.

Once you enter your zip code, you can bookmark the page. You should see a page titled "Your National Weather Service Forecast / your town" followed by 9 icons of daily weather and a window showing a section of Google Maps with the region around Seattle



highlighted in red. This is the main page you can work from. There are two crucial parts of the page. This Google map window, and one totally inconspicuous link at the bottom right of the page called “Hourly Weather Graph.”

The first step to getting marine weather data is to go to the Google map window, where you can zoom the picture (PC mouse roller works) and also click and drag to a region you want. Then left click the map at your location of choice. Be sure you are clicking in the water and not on land. Click on land and you will learn what coat to wear, but you get no marine info. When you click the place you want, it will become highlighted in red. Then go back to the Hourly Weather Graph and click that link.

There you will find wind and sea state—even with waves separated from swells—along with other weather info. It gives the data hourly, so now you can attempt to be even more specific about the forecast. From the Graph page you can click any point on the Graph page and get a digital table of values.

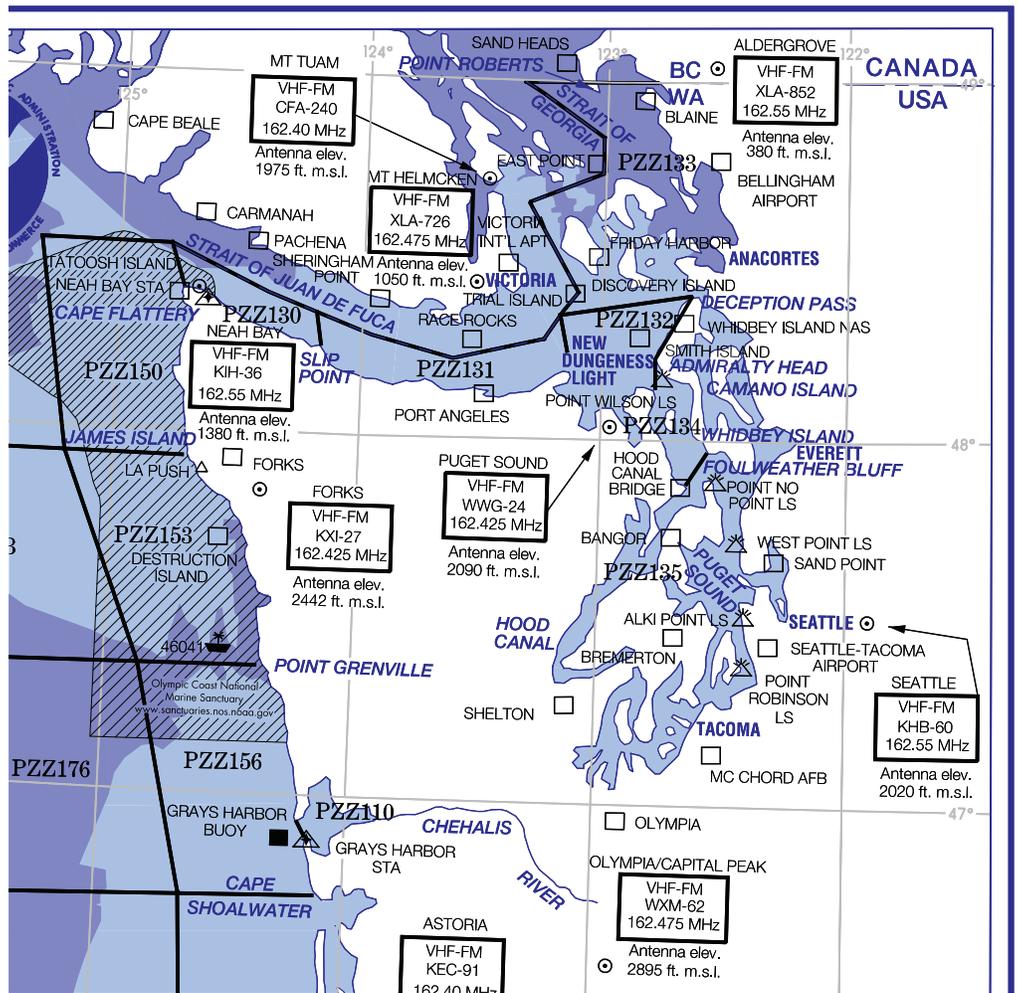
You will find it interesting to compare the results you get this way with the broader brush descriptions given in the text reports.

These sources tell you what is there and what to expect. They do not tell you what to do about it. For that I recommend our new book *Modern Marine Weather*, which covers tactical use of marine weather data and also how to evaluate the forecasts.

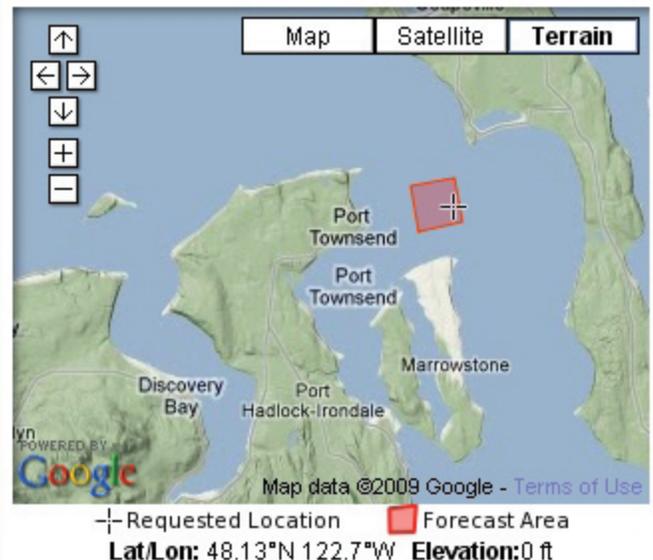
For a broader look at weather in the Pacific Northwest on land and on the water, there is no better book than Cliff Mass’s beautiful book *The Weather of the Pacific Northwest*. He also provides weekly weather descriptions on KUOW (94.9 FM) Weekday radio program on Fridays at about 9 am, which are also available as podcasts if you miss it. See

cliffmass.blogspot.com

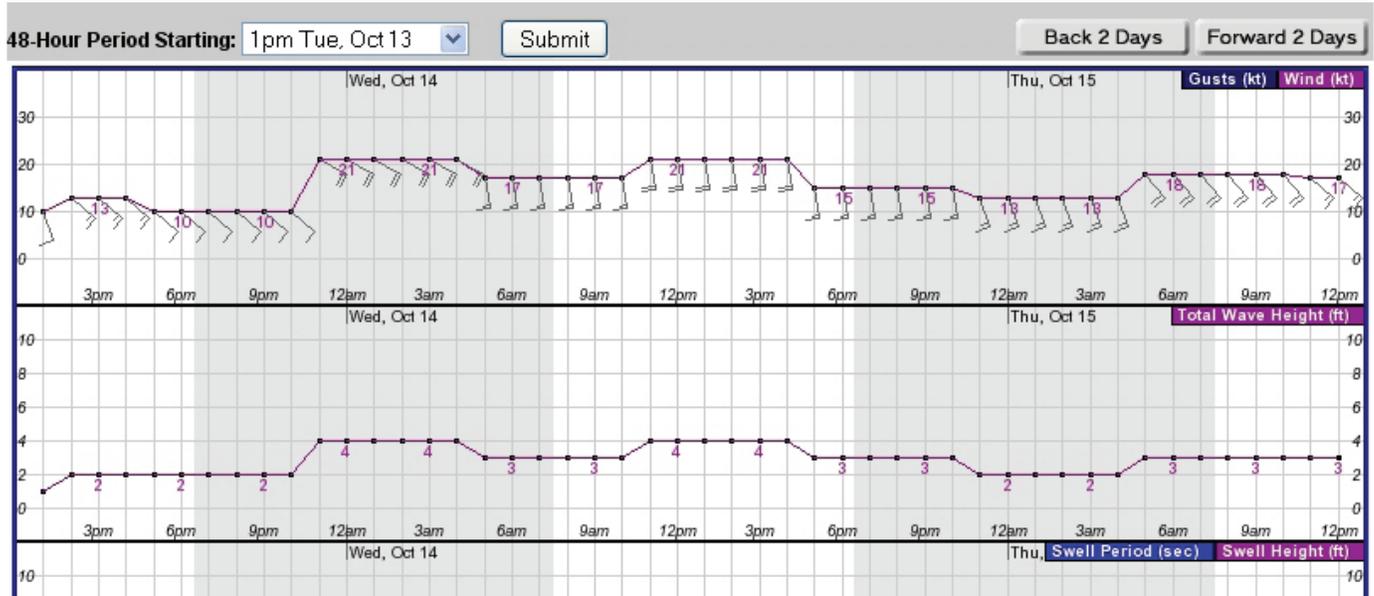
for Professor Mass’s extensive work on weather, including links to numerical weather predictions that account for local terrain, the wonderful Ferry Weather program that he set up, and also work on Probabilistic Forecasting, which is the future we are looking forward to.



Small section of Marine Weather Services Chart No. 10. These charts are available for all US waters as free download. See www.starpath.com/navpubs, which also offers printed versions.



The Google window on the NWS forecast page, showing a region selected for marine forecast data. Be sure to click on the water (elevation = 0 ft) to get marine weather, else you get land weather.



Hourly graphs of wind and waves off of Port Townsend obtained from the NWS standard forecast page. Find similar data for any place in the waters of Western WA. In coastal regions or the Str. of Juan de Fuca, you get separate reports for wind waves and swells. You can also get the standard data: temperature, rain probability, relative humidity, sky cover, etc.

—David Burch
www.starpath.com
 Seattle, WA, Nov 2009