

Project Summary Report

Bull Kelp Monitoring



Project Reporting Period (October 2025 – September 2026)

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Jefferson County
**Marine
Resources
Committee**



PUGET SOUND
PARTNERSHIP



**Northwest
Straits**
INITIATIVE

1. Abstract

Bull kelp (*Nereocystis luetkeana*) is a large brown algae that is native to Washington's Outer Coast, Straits of Juan de Fuca, and Puget Sound. It often grows in dense "forests" in the rocky intertidal and subtidal zones and provides vital habitat and food to a variety of species, including forage fish, salmon, and rockfish. Concerns of decline in parts of southern and central Puget Sound have compelled efforts to assess kelp abundance and distribution statewide to better inform protection, stewardship and restoration plans. The Jefferson MRC continues to collect data for the Northwest Straits Commission's (NWSC) regional bull kelp monitoring project, with 2026 marking its eleventh year of monitoring (since July 2016). Looking ahead, the Jefferson MRC will continue its long term monitoring efforts while exploring how to increase community engagement on and off the water around bull kelp forests.

2. Project Goals

The goal of this project is to continue the long-term monitoring efforts the MRC has been involved in, alongside other MRCs and the Northwest Straits Commission, to track kelp bed health and foster awareness of the importance of kelp. This project helps fill data gaps in regional bull kelp population monitoring efforts in support of the Department of Natural Resources (DNR) kelp database. The Jefferson MRC is interested in understanding the extent of the county's kelp resources and how they may be changing, paying particular attention to the North Beach area, where an update to the sewer outflow infrastructure is being proposed by the city.

3. Project Engagement

3.1. Partners/Organizations

This project partnered with the Northwest Straits Commission, who provided project guidance, kayak safety training and data collection training, and managed data analysis. In the 2026 season we also worked with 2 volunteers from the local community.

3.2. Participants

Name of Event	Date of Event	MRC members attended	Participants attended
NWSC Kayak Training	May 8	Neil Harrington, Jon Waggoner	~18
June Survey	June 20	Jon Waggoner, Brenda Johnson	4
July Survey	July 19	Jon Waggoner, Emily Buckner, Brenda Johnson	3
August Survey	August 15	Jon Waggoner, Brenda Johnson	2
September Survey	September 25 (scheduled)	TBD	TBD

4. Project Methods/Actions

Project Activity Summary	Date or Period	Location(s)
JCMRC Kayaking dates scheduled and volunteer availability confirmed	May-June	NA
NWSC protocol walk through	May	Blyn
NWSC Kayak Safety Training	June	Port Townsend
Kayak survey using NWSC protocol, compiled data sheets, uploaded data to Kobo Toolbox (note that September's monitoring event is only scheduled at the time of this report)	June-September	North Beach
Wrote final project summary report	September	NA

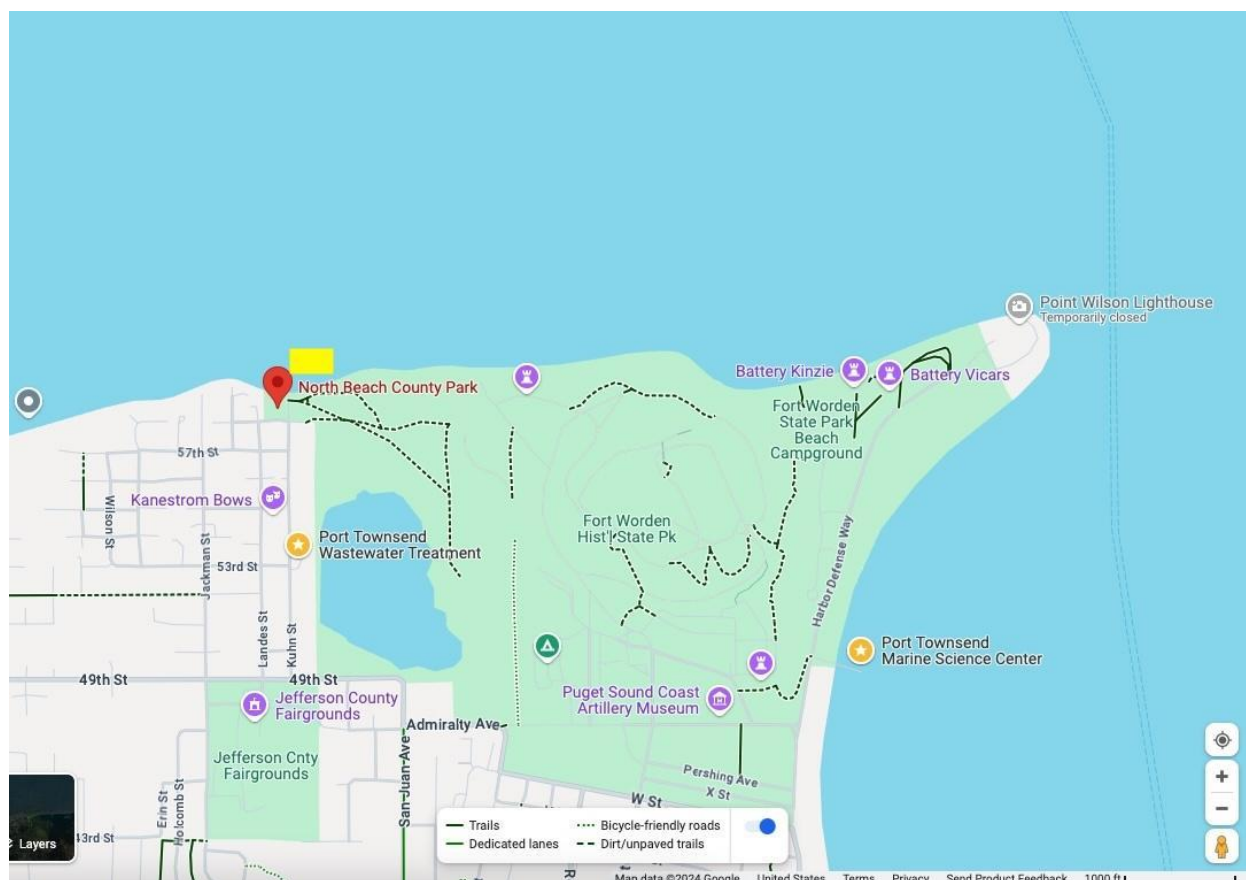


Figure 1. JCMRC Kelp monitoring site (yellow box) at North Beach, Port Townsend, WA.

The North Beach County Park east bull kelp bed (Figure 1) was paddle-based surveyed four times this year (June through September). Note that the September survey has not occurred at the time of this report, and could potentially be cancelled due to adverse weather conditions.

Paddle-based surveyors followed the NWSC protocol (Appendix A), and used a Garmin gpx64 and Garmin Striker Cast to collect data. Data was then uploaded to Kobo Toolbox.

Training and recruitment – To recruit volunteers, an email was sent to previous years participants and volunteers who had expressed past interest in participating. On site training was provided for volunteers at the North Beach site.

5. Results

Field data sheets are submitted electronically to NWSC via Kobo Toolbox, copies of which are included at the end of this report in Appendix B. Data review and analysis for 2026 is still in process at NWSC.

5.1. Data Summary

Data is still being analyzed by NWSC and will be available in early 2027.

Overall impressions of the kelp bed at North Beach is that it remains in a healthy and stable condition. The “donut” shape observed in previous years continued to be present in 2026. The June survey, first of the year, included a “C” shape where the bed was growing but had not completely enclosed the hole in the middle.

5.2. Outcomes

We successfully achieved our goal of continuing to add to our long-term observations of the North Beach kelp bed using the programs kayak-based protocol. We also significantly increased the number of people who we engaged with on this topic.

5.3. Outputs

- # of Volunteers/Participants (in survey) – 5
- # of Survey events – 3 (4th still in planning)
- Volunteer hours – 26
- # of sites surveyed – 1

5.4. Results in context

We will review our kayak survey results in the context of previous year later this fall when we have our annual meeting with staff at the NWSC.

6. Project Highlights, Innovations & Stories

This year included an opportunity to provide a tour of the kelp bed to local representatives. Not all were able to attend, but those that did expressed wonder at the beauty of the North Beach kelp bed and appreciation for the work the MRC does to monitor it.

7. Lessons Learned

Our box of kelp monitoring tools thankfully include several rather low-tech items like a lead line and floating thermometer. These came in handy during the August survey when it was discovered that the Striker Cast unit refused to connect to a phone. Thankfully we discovered this before heading out and were able to collect data the old fashioned way.

8. Next Steps

We have found that the survey only really requires 2-3 dedicated people for data collection but we hope to continue having members of the community ‘kayak with kelp’ with us and have one MRC member be designated as a ‘tour guide/educator’ as a part of these survey and outreach experiences.

Images

Photos below taken by Jon Waggoner during the 2026 North Beach surveys. MRC member Brenda Johnson and PSRF’s monitoring buoy are depicted at top in August. Below shows Emily Buckner dropping the lead line for depth while Brenda Johnson takes notes in June.



Jefferson County, WA
Marine Resources Committee



Appendix A – Kayaking Survey Protocol



A kayak-based survey protocol for Bull Kelp in Puget Sound

Prepared for the Northwest
Straits Commission

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