- RCW 79.135.440 Native kelp forest and eelgrass meadow health and conservation plan—Reports. (1) The department shall, consistent with this section, and subject to available funding, work with partners to establish a native kelp forest and eelgrass meadow health and conservation plan that endeavors to, by the year 2040, conserve and restore at least 10,000 acres of native kelp forests and eelgrass meadows. The plan should proactively and systematically address:
- (a) The potential loss of native kelp forest and eelgrass meadow habitat throughout Puget Sound and along the Washington state coastline;
- (b) Potential current and future stressors related to the decline of native kelp forests and eelgrass meadows; and
- (c) Awareness, action, and engagement tools being used by public and private entities in the Puget Sound region to raise awareness of the importance of conserving and restoring native kelp forests and eelgrass meadows and reducing stressors related to their decline.
- (2) The department shall develop the plan to assess and prioritize areas for coordinated conservation and restoration actions. The plan must consist of the following elements: Assessment and prioritization; identifying coordinated actions and success measures; monitoring; and reporting.
- (a) The department shall, together with partners, develop a framework to identify and prioritize native kelp forest and eelgrass meadow areas in greatest need of conservation or restoration. The framework must:
- (i) Incorporate conservation of native kelp forests and eelgrass meadows. Utilize and build on existing research to map and prioritize areas of native kelp forests and eelgrass meadows throughout Puget Sound and along the coast that are at highest risk of permanent loss, or contribute significant environmental, economic, and cultural benefits to tribal nations and local communities, including salmon recovery and water quality, and where opportunities for partnership and collaboration can accelerate progress towards the goal, and develop criteria by which an acre of kelp forests and eelgrass meadows can be considered to be conserved or restored;
- (ii) Identify research necessary to analyze and assess potential ecological, environmental, and community benefits of aquaculture of native seaweed species;
- (iii) Map and prioritize native kelp forest and eelgrass meadow areas throughout Puget Sound and along the coast where they were historically present, identifying priority locations for restoration, and where opportunities for partnership and collaboration exist that will accelerate progress towards the goal. This should include identification of sites where restoration may be possible and would most benefit nearshore ecosystem function, including where restoration could also support healthy kelp forests and eelgrass meadows, salmon recovery, water quality, and other ecosystem benefits, such as mitigating the negative effects of ocean acidification;
- (iv) Identify potential stressors impacting the health and vitality of native kelp forests and eelgrass meadows in prioritized areas in order to specifically address them in conservation and restoration efforts.
- (b) In developing coordinated actions and success measures, the department shall:

- (i) Conduct an assessment and inventory of existing tools relevant to conserving and restoring native kelp forests and eelgrass meadows and reducing stressors related to their decline;
- (ii) Identify new or amended tools that would support the goals of the plan created under this section; and
- (iii) Identify success measures to track progress toward the conservation and restoration goal.
 - (3) In developing the plan, the department shall:
- (a) Involve impacted communities using the community engagement plan developed under RCW 70A.02.050;
- (b) Consult with federally recognized tribal nations, including consultation on the cultural and ecological importance of native kelp forests and eelgrass meadows now threatened by urbanization or other disturbances;
- (c) Engage and collaborate with state and federal agencies, such as the national oceanic and atmospheric administration, the Northwest straits commission, the department of ecology, the department of fish and wildlife, the Puget Sound partnership, the recreation and conservation office, and the marine resources advisory council;
- (d) Engage with representatives from other stakeholder groups that may have vested and direct interest in the outcomes of the plan including, but not limited to, shellfish growers, the boating industry, and recreational user communities.
- (4)(a) By December 1, 2022, the department must submit a report in compliance with RCW 43.01.036 to the office of financial management and the appropriate committees of the legislature, to include community engagement plans and schedule for plan development. The native kelp forest and eelgrass meadow health and conservation plan must be finalized and submitted to the office of financial management and the appropriate committees of the legislature by December 1, 2023, including a map and justification of identified priority areas based on collaboratively developed criteria, and a list of potential tools and actions for conservation or restoration of these priority areas. A monitoring plan based on the identified success measures will also be submitted.
- (b) Subsequently, each biennium, the department shall continue to monitor the distributions and trends of native kelp forests and eelgrass meadows to inform adaptive management of the plan and coordinated partner actions. The department shall submit a report to the legislature that describes the native kelp forest and eelgrass meadow conservation priority areas, and monitoring approaches and findings, including success measures established in the plan. Beginning December 1, 2024, and by December 1st of each even-numbered year thereafter, the department shall provide the appropriate committees of the legislature and the office of financial management with:
- (i) An updated map of distributions and trends, and summary of success measures and findings, including relevant information from the prioritization process;
- (ii) An updated list summarizing potential stressors, prioritized areas, and corresponding coordinated actions and success measures. The summary must include any barriers to plan implementation and legislative or administrative recommendations to address those barriers;
- (iii) An update on the number of acres of native kelp forests and eelgrass meadows conserved by region, including restoration or loss in priority areas;

- (iv) An update on consultation with federally recognized tribal nations; and
- (v) An update on the department's community engagement plan or plans developed under RCW 70A.02.050. [2022 c 230 s 2.]
- Findings—Intent—2022 c 230: "(1) The legislature finds that coastal ecosystems and marine vegetation provide an array of valuable ecosystem goods and services to deep water and nearshore environments in Puget Sound and along the coastline. In particular, kelp forests and eelgrass meadows act as three-dimensional foundations for diverse and productive nearshore ecosystems, supporting food webs and providing important habitat for a wide array of marine life, including orcas and threatened and endangered salmon and salmonid species. These marine forests and meadows play an important role in climate mitigation and adaptation by sequestering carbon and relieving impacts from ocean acidification. Marine vegetation can sequester up to 20 times more carbon than terrestrial forests, and therefore represent a critical tool in the fight against climate change.
- (2) Washington state is home to 22 species of kelp and is a global hotspot for kelp diversity. However, these kelp forests are under threat and have declined in recent decades. A 2018 study conducted by the Samish Indian Nation on the bull kelp beds in the San Juan Islands found a 305-acre loss of kelp beds from 2006 to 2016, a 36 percent decline in one decade. A statewide study published in 2021 by the department of natural resources found that compared to the earliest baseline in 1878, the amount of bull kelp in 2017 had decreased by 63 percent in south Puget Sound, with individual areas showing up to 96 percent loss.
- (3) The legislature also finds that kelp and eelgrass have important cultural value to northwest tribal nations and have provided diverse marine resources that have sustained and inspired indigenous traditions over generations. In particular, bull kelp has played a prominent role in traditional knowledge and technology and is used in fishing, hunting, and food preparation and storage. Decline in kelp forests threatens these uses, and the cultural livelihoods of Northwest tribal nations.
- (4) Washington state's native eelgrass meadows (Zostera marina) also provide vital habitat for many organisms, including nursery habitat for juvenile salmon and feeder fish. Native eelgrass can provide a refuge for shellfish from the effects of ocean acidification. Native eelgrass also helps prevent erosion and maintain shoreline stability by anchoring seafloor sediment with its spreading roots and rhizomes. Native eelgrass is used as an indicator of estuary health, because of its fast response to changes in water quality. Examples of rapid native eelgrass loss include Westcott Bay in San Juan county, where in 2000 there were 37 acres of eelgrass meadows and 20 years later less than one acre remains. Changes in the abundance or distribution of this resource are likely to reflect changes in environmental conditions and therefore are key species to monitor and protect to ensure marine ecosystem health.
- (5) Kelp forests and eelgrass meadows also provide and enhance diverse recreational opportunities, including productive fishing and picturesque kayaking and diving. These activities are important for local economies and for promoting strong senses of place and overall human well-being in communities.

- (6) There is a need for greater education and outreach to communities to promote sustainable recreation practices in and near native kelp forests and eelgrass meadows, such as those called for in the Puget Sound kelp conservation and recovery plan.
- (7) Existing regional plans for conservation of kelp forests and eelgrass meadows, including the Puget Sound kelp conservation and recovery plan (2020) and the Puget Sound eelgrass recovery strategy (2015), identify the need to prioritize areas for conservation and restoration based on historical and current distributions.
- (8) Existing state plans for combatting ocean acidification in Washington, adopted in 2013 and 2017, identify actions to advance research and explore conservation and restoration of kelp and eelgrass, along with other aquatic vegetation, to help mitigate impacts of ocean acidification locally.
- (9) The legislature further finds that our terrestrial and marine ecosystems are interlinked and the state must be proactive in conserving our resources from trees to seas by protecting and restoring our marine forests and meadows in concert with conservation and reforestation of terrestrial forests. Therefore, it is the intent of the legislature to conserve and restore 10,000 acres of native kelp forests and eelgrass meadows by 2040." [2022 c 230 s 1.]