
SUBSTITUTE SENATE BILL 5619

State of Washington

67th Legislature

2022 Regular Session

By Senate Agriculture, Water, Natural Resources & Parks (originally sponsored by Senators Lovelett, Conway, Das, Hasegawa, Nobles, Pedersen, Randall, Rolfes, Saldaña, Stanford, Van De Wege, and C. Wilson; by request of Department of Natural Resources)

READ FIRST TIME 01/28/22.

1 AN ACT Relating to conserving and restoring kelp forests and
2 eelgrass meadows in Washington state; adding a new section to chapter
3 79.135 RCW; and creating a new section.

4 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

5 NEW SECTION. **Sec. 1.** (1) The legislature finds that coastal
6 ecosystems and marine vegetation provide an array of valuable
7 ecosystem goods and services to deep water and nearshore environments
8 in Puget Sound and along the coastline. In particular, kelp forests
9 and eelgrass meadows act as three dimensional foundations for diverse
10 and productive nearshore ecosystems, supporting food webs and
11 providing important habitat for a wide array of marine life,
12 including orcas and threatened and endangered salmon and salmonid
13 species. These marine forests and meadows play an important role in
14 climate mitigation and adaptation by sequestering carbon and
15 relieving impacts from ocean acidification. Marine vegetation can
16 sequester up to 20 times more carbon than terrestrial forests, and
17 therefore represent a critical tool in the fight against climate
18 change.

19 (2) Washington state is home to 22 species of kelp and is a
20 global hotspot for kelp diversity. However, these kelp forests are
21 under threat and have declined in recent decades. A 2018 study

1 conducted by the Samish Indian Nation on the bull kelp beds in the
2 San Juan Islands found a 305-acre loss of kelp beds from 2006 to
3 2016, a 36 percent decline in one decade. A statewide study published
4 in 2021 by the department of natural resources found that compared to
5 the earliest baseline in 1878, the amount of bull kelp in 2017 had
6 decreased by 63 percent in south Puget Sound, with individual areas
7 showing up to 96 percent loss.

8 (3) The legislature also finds that kelp and eelgrass have
9 important cultural value to northwest tribal nations and have
10 provided diverse marine resources that have sustained and inspired
11 indigenous traditions over generations. In particular, bull kelp has
12 played a prominent role in traditional knowledge and technology and
13 is used in fishing, hunting, and food preparation and storage.
14 Decline in kelp forests threatens these uses, and the cultural
15 livelihoods of Northwest tribal nations.

16 (4) Washington state's native eelgrass meadows (*Zostera marina*)
17 also provide vital habitat for many organisms, including nursery
18 habitat for juvenile salmon and feeder fish. Native eelgrass can
19 provide a refuge for shellfish from the effects of ocean
20 acidification. Native eelgrass also helps prevent erosion and
21 maintain shoreline stability by anchoring seafloor sediment with its
22 spreading roots and rhizomes. Native eelgrass is used as an indicator
23 of estuary health, because of its fast response to changes in water
24 quality. Examples of rapid native eelgrass loss include Westcott Bay
25 in San Juan county, where in 2000 there were 37 acres of eelgrass
26 meadows and 20 years later less than one acre remains. Changes in the
27 abundance or distribution of this resource are likely to reflect
28 changes in environmental conditions and therefore are key species to
29 monitor and protect to ensure marine ecosystem health.

30 (5) Kelp forests and eelgrass meadows also provide and enhance
31 diverse recreational opportunities, including productive fishing and
32 picturesque kayaking and diving. These activities are important for
33 local economies and for promoting strong senses of place and overall
34 human well-being in communities.

35 (6) There is a need for greater education and outreach to
36 communities to promote sustainable recreation practices in and near
37 native kelp forests and eelgrass meadows, such as those called for in
38 the Puget Sound kelp conservation and recovery plan.

39 (7) Existing regional plans for conservation of kelp forests and
40 eelgrass meadows, including the Puget Sound kelp conservation and

1 recovery plan (2020) and the Puget Sound eelgrass recovery strategy
2 (2015), identify the need to prioritize areas for conservation and
3 restoration based on historical and current distributions.

4 (8) Existing state plans for combatting ocean acidification in
5 Washington, adopted in 2013 and 2017, identify actions to advance
6 research and explore conservation and restoration of kelp and
7 eelgrass, along with other aquatic vegetation, to help mitigate
8 impacts of ocean acidification locally.

9 (9) The legislature further finds that our terrestrial and marine
10 ecosystems are interlinked and the state must be proactive in
11 conserving our resources from trees to seas by protecting and
12 restoring our marine forests and meadows in concert with conservation
13 and reforestation of terrestrial forests. Therefore, it is the intent
14 of the legislature to conserve and restore 10,000 acres of native
15 kelp forests and eelgrass meadows by 2040.

16 NEW SECTION. **Sec. 2.** A new section is added to chapter 79.135
17 RCW to read as follows:

18 (1) The department shall, consistent with this section, and
19 subject to available funding, work with partners to establish a
20 native kelp forest and eelgrass meadow health and conservation plan
21 that endeavors to, by the year 2040, conserve and restore at least
22 10,000 acres of native kelp forests and eelgrass meadows. The plan
23 should proactively and systematically address:

24 (a) The potential loss of native kelp forest and eelgrass meadow
25 habitat throughout Puget Sound and along the Washington state
26 coastline;

27 (b) Potential current and future stressors related to the decline
28 of native kelp forests and eelgrass meadows; and

29 (c) Awareness, action, and engagement tools being used by public
30 and private entities in the Puget Sound region to raise awareness of
31 the importance of conserving and restoring native kelp forests and
32 eelgrass meadows and reducing stressors related to their decline.

33 (2) The department shall develop the plan to assess and
34 prioritize areas for coordinated conservation and restoration
35 actions. The plan must consist of the following elements: Assessment
36 and prioritization; identifying coordinated actions and success
37 measures; monitoring; and reporting.

38 (a) The department shall, together with partners, develop a
39 framework to identify and prioritize native kelp forest and eelgrass

1 meadow areas in greatest need of conservation or restoration. The
2 framework must:

3 (i) Incorporate conservation of native kelp forests and eelgrass
4 meadows. Utilize and build on existing research to map and prioritize
5 areas of native kelp forests and eelgrass meadows throughout Puget
6 Sound and along the coast that are at highest risk of permanent loss,
7 or contribute significant environmental, economic, and cultural
8 benefits to tribal nations and local communities, including salmon
9 recovery and water quality, and where opportunities for partnership
10 and collaboration can accelerate progress towards the goal, and
11 develop criteria by which an acre of kelp forests and eelgrass
12 meadows can be considered to be conserved or restored;

13 (ii) Identify research necessary to analyze and assess potential
14 ecological, environmental, and community benefits of aquaculture of
15 native seaweed species;

16 (iii) Map and prioritize native kelp forest and eelgrass meadow
17 areas throughout Puget Sound and along the coast where they were
18 historically present, identifying priority locations for restoration,
19 and where opportunities for partnership and collaboration exist that
20 will accelerate progress towards the goal. This should include
21 identification of sites where restoration may be possible and would
22 most benefit nearshore ecosystem function, including where
23 restoration could also support healthy kelp forests and eelgrass
24 meadows, salmon recovery, water quality, and other ecosystem
25 benefits, such as mitigating the negative effects of ocean
26 acidification;

27 (iv) Identify potential stressors impacting the health and
28 vitality of native kelp forests and eelgrass meadows in prioritized
29 areas in order to specifically address them in conservation and
30 restoration efforts.

31 (b) In developing coordinated actions and success measures, the
32 department shall:

33 (i) Conduct an assessment and inventory of existing tools
34 relevant to conserving and restoring native kelp forests and eelgrass
35 meadows and reducing stressors related to their decline;

36 (ii) Identify new or amended tools that would support the goals
37 of the plan created under this section; and

38 (iii) Identify success measures to track progress toward the
39 conservation and restoration goal.

40 (3) In developing the plan, the department shall:

1 (a) Involve impacted communities using the community engagement
2 plan developed under RCW 70A.02.050;

3 (b) Consult with federally recognized tribal nations, including
4 consultation on the cultural and ecological importance of native kelp
5 forests and eelgrass meadows now threatened by urbanization or other
6 disturbances;

7 (c) Engage and collaborate with state and federal agencies, such
8 as the national oceanic and atmospheric administration, the Northwest
9 straits commission, the department of ecology, the department of fish
10 and wildlife, the Puget Sound partnership, the recreation and
11 conservation office, and the marine resources advisory council;

12 (d) Engage with representatives from other stakeholder groups
13 that may have vested and direct interest in the outcomes of the plan
14 including, but not limited to, shellfish growers, the boating
15 industry, and recreational user communities.

16 (4) (a) By December 1, 2022, the department must submit a report
17 in compliance with RCW 43.01.036 to the office of financial
18 management and the appropriate committees of the legislature, to
19 include community engagement plans and schedule for plan development.
20 The native kelp forest and eelgrass meadow health and conservation
21 plan must be finalized and submitted to the office of financial
22 management and the appropriate committees of the legislature by
23 December 1, 2023, including a map and justification of identified
24 priority areas based on collaboratively developed criteria, and a
25 list of potential tools and actions for conservation or restoration
26 of these priority areas. A monitoring plan based on the identified
27 success measures will also be submitted.

28 (b) Subsequently, each biennium, the department shall continue to
29 monitor the distributions and trends of native kelp forests and
30 eelgrass meadows to inform adaptive management of the plan and
31 coordinated partner actions. The department shall submit a report to
32 the legislature that describes the native kelp forest and eelgrass
33 meadow conservation priority areas, and monitoring approaches and
34 findings, including success measures established in the plan.
35 Beginning December 1, 2024, and by December 1st of each even-numbered
36 year thereafter, the department shall provide the appropriate
37 committees of the legislature and the office of financial management
38 with:

1 (i) An updated map of distributions and trends, and summary of
2 success measures and findings, including relevant information from
3 the prioritization process;

4 (ii) An updated list summarizing potential stressors, prioritized
5 areas, and corresponding coordinated actions and success measures.
6 The summary must include any barriers to plan implementation and
7 legislative or administrative recommendations to address those
8 barriers;

9 (iii) An update on the number of acres of native kelp forests and
10 eelgrass meadows conserved by region, including restoration or loss
11 in priority areas;

12 (iv) An update on consultation with federally recognized tribal
13 nations; and

14 (v) An update on the department's community engagement plan or
15 plans developed under RCW 70A.02.050.

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