

**Tribal Proposal to California Department of Fish and Wildlife (CDFW) for
Amending Commercial Harvest Rules for Kelp and Seaweed**

This paper outlines proposed changes to the state's current commercial harvest rules for kelp and seaweed. The changes are proposed by the following federally recognized Tribes: Cahto Tribe of Laytonville Rancheria; Coyote Valley Band of Pomo Indians; Hopland Band of Pomo Indians; Potter Valley Tribe; Redwood Valley Little River Band of Pomo Indians; Robinson Rancheria of Pomo Indians; Round Valley Indian Tribes; Scotts Valley Band of Pomo Indians; and Sherwood Valley Rancheria of Pomo Indians. The InterTribal Sinkyone Wilderness Council, a Tribal organization whose member Tribes include those listed above, fully supports the changes detailed in this Tribal proposal.

This proposal discusses the Tribes' rationale for amending applicable Fish and Game regulations, in Title 14, at Section 6653 and Section 6653.5. State authority for making these proposed changes is vested within the California Code of Regulations, in Title 14, at Section 165; and within the California Fish and Game Code, at Section 399.

The Tribes, the Sinkyone Council, biologists, and many others have serious concerns about the growing environmental threats contributing to alarming declines in kelp and seaweed species. Widespread die-offs of kelp and reductions of seaweed are increasing problems in the north coast region and elsewhere along the state's coastline.

Kelp and seaweed species continue to be severely impacted from increasing pressures of commercial and recreational harvesting, climate change, warming ocean waters, acidification, pollution, coastal development, purple urchins, and other factors. Many studies have documented widespread and significant declines in these species, as well as a number of potential causes. We include citations of several key studies at the end of this paper.

Since 2015, the Tribes and the Sinkyone Council have been meeting with California Department of Fish and Wildlife (CDFW) about Tribal issues of concern relating to kelp and seaweed. Since 2018, the Tribes have been engaged in an ongoing process of formal, collective Government-to-Government Consultation with representatives of CDFW with regard to amending the state's existing commercial kelp and seaweed harvest regulations. Representatives of the Fish and Game Commission are Observers in this Tribal Consultation process. Tribal engagement on these issues is based upon our cultural responsibility to tend these marine species for the sake of all life on this planet. Tribal traditional care and utilization of kelp and seaweed is vital to the protection and continuation of our peoples' cultural ways of life and wellbeing, and for maintaining and restoring health, balance and abundance to the marine ecosystem for the benefit of all.

For countless generations, Indigenous Peoples along the entire West Coast have cared for and intensively interacted with the marine environment, including a wide range of kelp and seaweed species that are of immense importance to our ways of life. We wish to point out here—and in stark contrast to our deep respect for and diligent care of kelp and seaweed—that these species continue to sharply decline as a consequence of non-Indigenous society's greed and disrespect for nature. That greed and disrespect has all but eliminated many once-abundant populations of marine finfish, invertebrate, mammal, kelp, seaweed, and other

species, and continues to threaten the wellbeing and biological diversity of marine life along the state's entire coastline. An early consequence of this greed and disrespect was the removal of Tribes from their traditional role as guardians of coastal and marine environments, and disruption of the Tribes' intergenerational care of and relationship with these and countless other species. Fundamentally, the greed and disrespect results from a blatant dismissal of the Natural Law and Indigenous Law adhered to by the Tribes for millennia, which exist to ensure the abundance and balance of ecosystems.

Only in very recent years has the state established Marine Protected Areas (MPAs) in an effort to conserve and revitalize imperiled marine species and habitats. While this is a necessary and good step, the state has yet to meaningfully make room for the Tribes' traditional roles in the care, management and use of both marine and terrestrial environments.

Certain environmental factors contributing to kelp and seaweed declines cannot be immediately remedied. These require multi-year efforts in areas of activism, policy, law, and management to enact and implement stronger environmental regulations and more effective measures for mitigating climate change. ***However, there are two important processes the state can and should engage in now to address the kelp and seaweed crises.***

The first process: This involves effectively confronting impacts of commercial kelp and seaweed harvesting by evaluating its impacts, and then developing and adopting an informed set of robust restrictions designed to address those impacts. For far too long, the state has allowed commercial harvesters to take vast quantities of kelp and seaweed, with very few rules, and harvest limits applicable to only a few circumstances. Current regulations include take limits only for bull kelp used for human consumption. All mechanical kelp harvest plans are required to define the amount of take allowed for each leased administrative kelp bed. Commercial harvesters pay only \$161.45 for an annual permit fee, and are allowed to "self-report" the amounts they have harvested. Many harvesters realize substantial incomes as a result of that absurdly small permit fee. They treat kelp and seaweed as economic commodities. That view, coupled with an almost complete lack of limits for the quantity of take, has caused significant harm to these species and their ecosystems. Yet, despite these decades-long activities, crucial environmental, social and other impacts of commercial harvesting have never been sufficiently investigated or quantified.

For many years, the Tribes have witnessed significant over-harvesting of seaweed beds situated along the Mendocino and Humboldt coastlines. We are not saying that commercial harvesting is the only source of impact to kelp and seaweed. But we are saying this is a source of significant impact, which can and should be evaluated by impartial entities outside of (and in no way connected to) the industry, so that the impact can be more fully understood and then responsibly regulated. Similar research on impacts caused by non-Tribal recreational harvesters of kelp and seaweed is needed so that new restrictions can be developed and imposed for non-Tribal recreational harvesting. That is not the subject of this paper, but it is a closely related topic, which needs to be referenced here.

From discussions with CDFW representatives and others, it has become abundantly clear that any data the Department possesses regarding commercial harvest of kelp and seaweed is limited to the information commercial harvesters have provided to CDFW. This so-called data does not provide a sufficiently reliable basis for ascertaining actual current or recent harvest

amounts, or the cumulative impacts of past, present, or projected future commercial kelp and seaweed harvesting activities. The only available “data” are the “self-reporting” harvest logs commercial harvesters are supposed to submit to CDFW. The accuracy of the industry’s self-reporting cannot be corroborated due to CDFW’s inability to monitor commercial harvesting activities.

CDFW has proposed various amendments to the existing commercial kelp and seaweed regulations. But without sufficient data to inform a thorough understanding of the levels of harvest and impacts of commercial activities, the development of amendments is a difficult and frustrating process. CDFW’s initial approach to amending the regulations was to utilize the precautionary principle as a basis for informing development of new harvest restrictions for certain species.

Commercial harvesters have reacted to the potential new restrictions with a wide range of accusations and anecdotal “evidence” in an effort to contradict scientific studies and data cited and CDFW’s precautionary approach. The Tribes are very displeased that the Department has not upheld its originally proposed set of restrictions, which were based on sound science and were actually quite lenient toward the industry. Instead, the Department appears to have been swayed by the commercial harvesters’ complaints. It is clear to us that a number of substantive alterations made to the originally proposed amendments have resulted in a proposal that is significantly more amenable to the industry. Recently, some harvesters have insisted that they should be granted leases for “administrative” seaweed beds so they can have sole harvesting privileges in those areas. Most denounce any amendments that will result in new restrictions, claim that their practices produce absolutely no negative impacts, and assert that such restrictions would be an invasion of their “rights.” California State and federal laws do not recognize a public “right” to harvest anything on state administered lands or waters. There are regulatory codes that conditionally **allow** for certain kinds of regulated harvest, but those allowed/regulated harvest activities do not create or grant any legal or other **rights** to harvest. Most harvesters have indicated they are adamantly opposed to the imposition of any harvest limits, to any monitoring of their activities, and to the enforcement of any pertinent rules. Some have expressed that they are vehemently against CDFW’s Government-to-Government Consultation process with the Tribes, and have demanded that the state halt the process. The Tribes believe that due to these and other factors, CDFW has significantly modified a number of the originally proposed amendments. In our view, this has resulted in compromising the original intent of the CDFW’s earlier proposals, which was to protect these species and the ecosystem.

Commercial harvesters feel threatened by the idea of new restrictions. They think their livelihoods may be on the way out, and that they might have to find other occupations. But unless significant restrictions are enacted, they ultimately will find that there is no kelp or seaweed left to harvest. Tribal people and environmentalists long decried the overharvesting of many marine species, but to no avail. The Tribes knew that those largely unregulated levels and methods of commercial harvest could never be sustainable, and so traditional leaders expressed first dismay and then outrage that state laws allowed for unrestrained take of numerous marine species, all for economic profit. Our concerns fell on deaf ears. And ultimately, hundreds of those species experienced dramatic population crashes. We are at a similar crossroads with regard to kelp and seaweed. The Tribes are the original marine

guardians who recognize these warning signs. Things are not right. The ecosystem is out of balance. And unless significant measures are taken, the worse is yet to come.

We realize that the state will not enact a complete closure for the commercial harvest of all kelp and seaweed species. So, we ask that the state support the closure of two keystone species, and engage in a further process in which the precautionary principle is applied for enacting additional restrictions on other kelp and seaweed species. These restrictions, in whatever form they take, will invariably be viewed as unfair by the commercial industry. During the MLPA Initiative process, many commercial harvesters took a similarly dim view of the new and necessary restrictions being proposed. In retrospect, many are now thankful those restrictions were enacted, as they have resulted in the rebounding of many marine species across state administered waters.

If the commercial kelp and seaweed industry expects to have any future at all, CDFW will need to enact much more stringent rules. Additionally, CDFW ultimately will need to develop a robust stewardship, monitoring and enforcement program to effectively oversee commercial harvest activities. Comprehensive plans are also needed for addressing best practices and longterm management of kelp and seaweed species. Establishment of Tribal management and co-management of marine ecosystems in customary gathering areas can further help to ensure the protection and revitalization of these species and places, and our cultural ways of life.

The second process: This involves the state pursuing a meaningful process that will lead to formal recognition of Tribes' inherent rights and responsibilities for carrying out their traditional kelp and seaweed gathering and stewardship practices. Those traditional Tribal rights and responsibilities pre-exist and will always exist; therefore, their validity does not depend upon anyone's recognition except that of the Creator and Nature. The practice of these inherent rights and responsibilities is necessary for the longterm protection and sustainability of marine and coastal ecosystems, and the Tribes' cultural lifeways. The Tribes need their traditional gathering of kelp and seaweed to be recognized as a distinctly separate category of "Tribal Cultural Tending & Gathering."

Tribal traditional practices are neither commercial nor recreational in nature. But, in order for the Tribes to fully exercise cultural practices without the interference of irrelevant laws, it is necessary that the state formally and fully recognize, respect, and support Tribes' rights and responsibilities with regard to their cultural relationships and interactions with the natural ecosystems and native species situated within lands and waters administered under state authority. First and foremost, these places, plants and animals are situated within Tribal traditional territories, to which the Tribes have never relinquished their cultural connections or inherent rights. In understanding that, it then becomes clear why it is insulting to Tribes that the state continues to categorize the Tribal gathering of kelp and seaweed under "recreational" harvest codes.

Those regulations are not designed for addressing the needs of Indigenous communities who have depended upon marine life since the beginning of time. Recreational regulations allow for a miniscule limit of 10 pounds of **wet** seaweed per day per Tribal member. Due to colonial-settler caused displacement, most Tribal members do not now reside at the coast. They are required to travel from time to time to the ocean to gather enough to sustain multiple family members for many months. The unfair dynamic that allows commercial harvesters to take

unlimited quantities of seaweed with no real restrictions or oversight is in stark contrast to the unreasonable limits that have been placed upon Tribal traditional gatherers who require seaweed and kelp for cultural and health purposes. Most Tribal members cannot afford the annual commercial harvest permit fee. And, importantly, their gathering of seaweed and kelp is not for commercial purposes. Gathering seaweed and kelp is for the continuation of our cultural ways of life that—despite past genocidal practices, denial of rights and continued obstacles—are still practiced and taught. Tribal access to, tending of, and the gathering and preparation of kelp and seaweed are deeply crucial for the continued survival of our cultural ways of life. For us, these are both customary and human rights.

CDFW and the Fish and Game Commission should welcome and be supportive of a process that fully and meaningfully engages with Tribes in collaboratively crafting a regulatory solution to satisfactorily address Tribal needs as regards their traditional gathering of seaweed and kelp, and ultimately also establishes formal roles for the Tribes in the management and co-management of kelp, seaweed and other marine species in state administered marine waters.

Our Tribal proposal to CDFW for amending the commercial harvest regulations includes the following components:

- 1) Continue the process of Government-to-Government Consultation with the Tribes regarding kelp and seaweed, understanding that this process is a learning experience for all involved and that it allows for and necessitates innovative approaches that should produce positive and long-lasting benefits for the environment and Indigenous Peoples.
- 2) Immediately pursue an emergency moratorium on the commercial harvest of all bull kelp within state waters, as this is a keystone species that continues to suffer massive die-offs. The state should utilize the precautionary principle and not wait to implement this crucially important step. The Tribes and many others support such a moratorium.
- 3) Develop an amendment to halt the commercial harvest of all sea palm within state waters for at least 10 years. Like bull kelp, sea palm is a sensitive keystone species. Establish monitoring locations at the start of the 10-year closure. At the end of the 10-year closure, evaluate population levels and other indicators to determine whether and to what degree limited harvesting may recommence.
- 4) Go back to the originally proposed amendments, and utilize them as a de minimis baseline for crafting a new set of more robust amendments that prioritize greater protection for the remaining kelp and seaweed species and their habitats. Do not compromise on the duty to protect the environment. All other considerations should be secondary to that.
- 5) Increase the cost of the annual commercial harvest permit. The current fee is extremely low considering the abundance of evidence pointing to a significant number of harvesters that make many thousands of dollars annually as a result of this miniscule fee. The annual fee should not be less than \$1000, although a fairer amount might be closer to \$2500 per year. Increasing the annual fee can help build a fund to help cover the costs of evaluating, monitoring and enforcing commercial harvest regulations.
- 6) Develop a standard for rotational harvesting of seaweed beds that commercial harvesters are required to adhere to. This will help ensure seaweed harvest areas have a chance to rest, recover and regenerate. Do not leave the decision of whether and how to do this up to the commercial harvesters. Seaweed and kelp are like any other species in that they

are not endlessly productive if they are subjected constant harvest. Every species has a tipping point of being over-harvested, beyond which it may not be able to recover. Do not wait until this happens before implementing these kinds of reasonable protection measures.

- 7) Genuinely reach out to all Tribes with ancestral connections to coastal and marine environments, and ask them if there are specific areas of the coastline where they would like commercial harvest activities to be prohibited, due to cultural and ecological concerns. Tribal requests for certain segments of the coastline to be excluded from commercial harvest should then be incorporated into the amendments.
- 8) Based on CDFW's primary mission to protect and steward marine ecosystems, as well as the precautionary principle, develop and advance a set of amendments that are centered in scientifically sound data and information—including Tribal traditional knowledge, which the state has formally recognized as a "legitimate" type of knowledge system. Therefore, Tribal traditional knowledge must be treated with the same deference and respect as the non-Indigenous scientific methods and epistemologies. Allow both Tribal input and scientific information to significantly and meaningfully inform a new set of proposed amendments.
- 9) Seek partners who will help the state to invest in a multi-year process of observing and quantifying the impacts of commercial harvesting. Use that data to inform subsequent phases for any additional amendments that are needed.
- 10) Continue to listen to and document complaints and oppositional arguments expressed by commercial harvesters, but do not allow those things to unduly influence this process.

The above list, and the other recommendations and concerns outlined in this proposal, are by no means exhaustive. In the upcoming weeks and months of the amendment process, the Sinkyone Council and its member Tribes will submit additional recommendations, ideas and issues of concern to CDFW.

The Tribes are not going to disappear, either from these lands and waters or from this discussion. In the long run, the ocean and the commercial harvesters will thank the state for defending the environment, so that there are still places that actually can be harvested in the future. An improved and more balanced approach to commercial harvesting is inevitable. The longer meaningful and positive change is delayed, the harder it will be to fix the environmental, social and cultural damage that results from not taking bold action when it still can be taken.

Published studies and reports: A variety of data, studies, reports, and other documents support this Tribal proposal. While it is by no means exhaustive, the following list includes key recent papers about impacts to kelp and seaweed along the West Coast.

- a) Van Pelt, M.; Steinruck, J.; Laucci, R.; Rosales, H.; Rohde, J.; Sinkyone Council Member Tribes; Sundberg, R.; Ben, J.; Comet, S.; Torma, T.; Hernandez, T.; Chen, C.; and Seminara, D. **Informing the North Coast MPA Baseline: Traditional Ecological Knowledge of Keystone Marine Species and Ecosystems, A Collaborative Project Among: Tolowa Dee-ni' Nation, InterTribal Sinkyone Wilderness Council, Cher-Ae Heights Indian Community of the Trinidad Rancheria, and Wiyot Tribe**, May 2017. *California Sea Grant, U.C. San Diego*.
<https://caseagrant.ucsd.edu/sites/default/files/39-Rocha-Final.pdf>

- b) McPherson, Meredith L.; Finger, Dennis J. I.; Houskeeper, Henry F.; et al. **Large-scale shift in the structure of a kelp forest ecosystem co-occurs with an epizootic and marine heatwave**, March 2021. *Communications Biology*.
<https://www.nature.com/articles/s42003-021-01827-6>
- c) Rogers-Bennett, L. & Catton, C.A. **Marine heat wave and multiple stressors tip bull kelp forest to sea urchin barrens**, September 2019. *Nature Research*.
<https://www.nature.com/articles/s41598-019-51114-y>
- d) Straub, Sandra C.; Wernberg, Thomas; Thomsen, Mads S.; Moore, Pippa J.; Burrows, Michael T.; Harvey, Ben P.; and Smale, Dan A. **Resistance, Extinction, and Everything in Between—The Diverse Responses of Seaweeds to Marine Heatwaves**, December 2019. *Frontiers in Marine Science*.
<https://www.frontiersin.org/articles/10.3389/fmars.2019.00763/full>
- e) Beas, R.; Micheli, F.; Woodson, C. **Geographic variation in responses of kelp forest communities of the California Current to recent climatic changes**, September 2020. *Research Gate*.
https://www.researchgate.net/publication/344214367_Geographic_variation_in_responses_of_kelp_forest_communities_of_the_California_Current_to_recent_climatic_changes
- f) Frölicher, T. & Laufkötter, C. **Emerging risks from marine heat waves**, July 2020. *Nature Research*.
<https://www.nature.com/search?q=Emerging+risks+from+marine+heat+waves>
- g) Arafeh-Dalmau, N.; Shoeman, D.; Montaña-Moctezuma, G.; Micheli, F.; Rogers-Bennett, L.; Olguin-Jacobson, C.; and Possingham, H. **Marine heat waves threaten kelp forests**, February 2020. *Science*.
<https://science.sciencemag.org/content/367/6478/635.1#:~:text=Between%202014%20and%202016%2C%20extreme,kelp%20forests%20have%20not%20recovered>