

## STAFF SUMMARY FOR FEBRUARY 21, 2020

**17. RECREATIONAL TAKE OF PURPLE SEA URCHIN EMERGENCY****Today's Item**Information Action 

Discuss and consider adopting emergency regulations concerning recreational take of purple sea urchin at Caspar Cove, Mendocino County.

**Summary of Previous/Future Actions**

- |                                   |                                 |
|-----------------------------------|---------------------------------|
| • Adopted emergency regulations   | Apr 18-19, 2018; Ventura        |
| • Adopted regular rulemaking      | Feb 6, 2019; Sacramento         |
| • MRC vetting                     | Nov 5, 2019; MRC, Sacramento    |
| • <b>Today's adoption hearing</b> | <b>Feb 21, 2020; Sacramento</b> |

**Background**

Since 2014, FGC and DFW have been tracking a combination of environmental and biological stressors in the nearshore waters across northern California. The nearshore conditions have led to the near collapse of the bull kelp forest ecosystem and significant declines in the corresponding species that the kelp ecosystem supports, including red sea urchin and red abalone. Already weakened by environmental stressors and a severely limited kelp food source, an exploding purple sea urchin population has outcompeted red sea urchin and red abalone for the remaining kelp, ultimately leading to the widespread starvation and death of abalone and the collapse of both fisheries; recovery of these fisheries will not be possible without the eventual recovery of bull kelp forests and the return of sufficient food to support survival and reproduction.

In 2018, based on a DFW findings that volatile and adverse conditions on the north coast posed an emergency situation for resident abalone populations and the kelp forest ecosystem upon which they rely, FGC adopted emergency regulations to raise the daily bag limit for purple sea urchin from 35 individual urchin to 20 gallons per person, per day, taken only while skin-diving or SCUBA diving in state waters off Sonoma and Mendocino counties. Seen as part of a broader collaborative process, the regulation helped to facilitate citizen science efforts and initiate a coordinated approach to kelp ecosystem recovery on the north coast (Exhibit 1).

In Feb 2019, FGC adopted a regular rulemaking that further increased the daily recreational take limit of purple sea urchin to 40 gallons in the waters off Sonoma, Mendocino, and Humboldt counties (Exhibit 2). The intent of the higher 40 gallons limit was to promote the continued involvement of recreational divers in efforts to restore the severely-impacted kelp forest ecosystems in northern California, and contribute more greatly to reduction efforts without adversely affecting the long-term health of the purple sea urchin population.

DFW coordinated with divers to monitor recreational harvest events in 2018 and 2019. While some events were successful at moving large volumes of purple sea urchin, DFW has reported that recreational divers often found removing and transporting 40 gallons of urchin to shore to be unattainable, and that removing that volume put diver safety at risk due to regional ocean conditions. Environmental conditions have continued to deteriorate in northern California, and divers remain committed to testing alternative methods that might increase the expected

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benefits to the kelp ecosystem and the species that rely upon it from removing larger amounts of purple urchin.

DFW is requesting that FGC take emergency action to amend Section 29.06 of Title 14 to temporarily remove the daily bag limit and expand authorized recreational take methods for purple sea urchin in a discrete geographic area in Mendocino County, specifically an area offshore of Caspar Headlands State Beach known as Caspar Cove (exhibits 3 and 4). The proposed regulations are intended to explore and evaluate whether intensified removals may promote the recovery of kelp and the associated species that it supports (Exhibit 3). Recreational take of purple sea urchin in Caspar Cove would be allowed only by hand or with manually operated handheld tools.

If adopted today, the new regulations are expected to take effect on or around Mar 2 and continue for 180 days, during which time DFW and partners intend to monitor and evaluate effectiveness by comparing ecosystem recovery in the recreational removal area to similar nearby areas with commercial take and/or no purple urchin removal efforts.

### ***California Environmental Quality Act (CEQA)***

DFW has determined that the proposed action falls within the statutory exemption under Public Resources Code Section 21080(b)(4) (Exhibit 5). The statutory exemption, which is repeated in Section 15359 of the CEQA guidelines, applies to actions necessary to prevent or mitigate an emergency. DFW has also determined that, under CEQA guidelines in Section 15061, the proposed action falls within categorical exemptions class 7 and 8 as related to agency actions to protect natural resources and the environment (exhibits 6 and 7); FGC staff agrees these exemptions are applicable.

As to the exceptions to categorical exemptions set forth in CEQA guidelines in Section 15300.2, including the prospect of unusual circumstances and related effects, FGC staff's review was guided by the Supreme Court of California's recent decision in *Berkeley Hillside Preservation v. City of Berkeley*. FGC staff has reviewed all of the available information possessed by FGC relevant to the issue and does not believe adopting the regulations poses any unusual circumstances that would constitute an exception to the categorical exemptions set forth above. Compared to the activities that fall within Class 7 and Class 8 generally, which include the given example of wildlife preservation activities such as the effort here, there is nothing unusual about the proposed regulations. In addition, even if there were unusual circumstances, no potentially significant effects on either project-specific or cumulative bases are expected.

In considering emergency action, FGC must determine the magnitude of potential harm, the existence of a crisis situation, the immediacy of the need, and whether the anticipation of harm has a basis firmer than simple speculation. All available information indicates that conditions in the kelp ecosystem have continued to decline and extraordinary measures must be taken immediately to help restore the important habitat for the benefit of a myriad species that rely upon it. DFW will provide an overview at the meeting (Exhibit 11).

### **Significant Public Comments**

Ten commenters submitted emails to express support for the emergency action. Representative

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emails are included as exhibits 8-10. In addition to supporting the emergency action, one commenter advocates for other measures to address the problem, including using drones, site selection by volunteers, and hiring unemployed commercial urchin divers for removal efforts.

### Recommendation

**FGC staff:** Adopt the proposed emergency action as recommended by DFW, recognizing the essential nature of DFW and partner monitoring of outcomes to help determine effectiveness of the strategy.

**DFW:** Temporarily remove the daily bag limit for recreational take of purple sea urchin in Caspar Cove, Mendocino County.

### Exhibits

1. [Staff summary from Apr 18-19, 2018 FGC meeting](#) (for background only)
2. [Staff summary from Feb 6, 2019 FGC meeting](#) (for background only)
3. [DFW memo transmitting proposed emergency statement](#), received Feb 10, 2020
4. [Draft emergency statement](#)
5. [DFW memo transmitting notice of exemption under CEQA](#), received Feb 10, 2020
6. [Draft CEQA notice of exemption](#)
7. [CEQA notice of exemption attachment](#)
8. [Email from Madeleine Russo](#), received Jan 31, 2020
9. [Email from Captain Dan Walsh](#), received Feb 5, 2020
10. [Email from Doug Jung](#), received Feb 9, 2020
11. [DFW presentation](#) (*added Feb 18, 2020*)

### Motion/Direction

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission determines, pursuant to Section 11346.1 of the Government Code, that an emergency situation exists and finds the proposed regulation is necessary to address the emergency.

The Commission further determines, based on the record, pursuant to sections 15061(a), 15307, and 15308 of Title 14, that the proposed action is exempt from the California Environmental Quality Act as an action necessary to prevent or mitigate an emergency and as an action to protect natural resources and the environment.

The Commission further determines, pursuant to Section 399 of the Fish and Game Code, that adopting this regulation is necessary for the immediate conservation, preservation, or protection of birds, mammals, fish, amphibians, or reptiles, including but not limited to their nests or eggs.

Therefore, the Commission adopts the emergency regulation to amend Section 29.06.

## STAFF SUMMARY FOR APRIL 18-19, 2018

For background only

**12. RECREATIONAL PURPLE SEA URCHIN****Today's Item**Information Action 

Adopt emergency regulations concerning recreational take of purple sea urchin to support kelp recovery.

**Summary of Previous/Future Actions**

- MRC vetting Mar 6, 2018; MRC, Santa Rosa
- **Adoption hearing Apr 18-19, 2018; Ventura**

**Background**

Since 2014, FGC and DFW have been tracking a combination of environmental and biological stressors in nearshore waters across northern California, including extreme warm water, catastrophic algae blooms, an unprecedented increase in herbivorous purple sea urchin populations, and significant loss of bull kelp forests and other marine algae. DFW has identified that the large number of purple urchins is contributing to overgrazing of kelp, preventing kelp recovery and leading to red abalone starvation (Exhibit 1).

In Dec 2017, FGC received a petition for regulation change (Petition #2017-014) to remove the take restrictions on recreational purple urchin harvest, with a goal of supporting possible restoration of naturally occurring kelp along the environmentally impacted areas. At its Feb 2018 commission meeting, FGC granted the petition *in part* for consideration, and approved DFW's request to bring an emergency rulemaking proposal to the Apr 2018 meeting. Subsequently, at the Mar MRC meeting, DFW staff presented its proposal for an emergency regulation to temporarily increase the recreational harvest allowance for purple sea urchin, as part of broader collaborative efforts to support kelp bed restoration. A temporary increase in recreational harvest of purple sea urchin may facilitate and mobilize citizen science through recreational harvest as part of the multi-pronged and coordinated approach toward kelp recovery on the north coast.

For today's action, DFW has provided a refined proposal to raise the daily limit for purple sea urchin from the current 35 individuals to 20 gallons per day, taken only while skin-diving or SCUBA diving and in state waters off Mendocino and Sonoma counties (exhibits 1 and 2).

FGC must consider the following factors in determining whether an emergency exists: The magnitude of potential harm, the existence of a crisis situation, the immediacy of the need, and whether the anticipation of harm has a basis firmer than simple speculation. All available information points to a highly volatile and adverse condition for northern California kelp forests and the resident abalone populations, and extraordinary measures must be taken immediately to help restore these important but vulnerable habitats.

**Significant Public Comments**

1. Representatives from Norcal Underwater Hunters and Waterman's Alliance support the proposal and invite FGC and DFW staff to an organized sea urchin removal event on the Sonoma coast over Memorial Day weekend (exhibits 4 and 5).

## STAFF SUMMARY FOR APRIL 18-19, 2018

2. An abalone diver recommends allowing more than 20 gallons per person per day, supports composting of urchins as a way to avoid “wanton waste,” and urges DFW to authorize restoration within marine protected areas soon (Exhibit 6).
3. An abalone diver encourages “heroic measures” be taken to save abalone and to enlist the commercial sea urchin fishing fleet to efficiently remove urchin and to compost the take (Exhibit 7).

**Recommendation**

**FGC staff:** Adopt the proposed emergency action as recommended by DFW.

**MRC:** Adopt proposed emergency action as recommended by DFW.

**DFW:** Raise the daily bag limit for purple sea urchin, taken while skin-diving or SCUBA diving in state waters off Mendocino and Sonoma Counties, to 20 gallons, with no possession limit.

**Exhibits**

1. DFW memo, received Apr 5, 2018
2. Emergency statement to add Section 29.11
3. Economic and fiscal impact statement (Std. 399)
4. Email from Matt Mattison, received Mar 20, 2018
5. Email from Josh Russo, received Mar 20, 2018
6. Email from Bruce Watkins, received Mar 30, 2018
7. Email from Eric Wunsch, received Mar 07, 2018
8. DFW presentation

**Motion/Direction**

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission determines, pursuant to Section 11346.1 of the Government Code, that an emergency situation exists and finds the proposed regulation is necessary to address the emergency.

The Commission further determines, based on the record, pursuant to Section 15061(a) of Title 14, that the proposed action is exempt from the California Environmental Quality Act as an action necessary to prevent or mitigate an emergency as specified in Public Resources Code Section 21080(b)(4).

The Commission further determines, pursuant to Section 399 of the Fish and Game Code, that adopting this regulation is necessary for the immediate conservation, preservation, or protection of birds, mammals, fish, amphibians or reptiles.

Therefore, the Commission adopts the emergency regulation to add Section 29.11.

## STAFF SUMMARY FOR FEBRUARY 6, 2019

For background only

**25. RECREATIONAL TAKE OF PURPLE SEA URCHIN (REGULAR RULEMAKING)****Today's Item**Information Action 

Consider adopting proposed regulations to add Section 29.06 for the recreational take of purple sea urchin.

**Summary of Previous/Future Actions**

- |                                   |                                |
|-----------------------------------|--------------------------------|
| • MRC vetting                     | Mar 6, 2018; MRC, Santa Rosa   |
| • Adopted emergency regulations   | Apr 18-19, 2018; Ventura       |
| • Emergency regulations extended  | Oct 17, 2018; Fresno           |
| • Notice hearing                  | Oct 17, 2018; Fresno           |
| • Discussion hearing              | Dec 12-13, 2018; Oceanside     |
| • <b>Today's adoption hearing</b> | <b>Feb 6, 2019; Sacramento</b> |

**Background**

For additional background information, please see the staff summary from the Dec 2018 discussion hearing (Exhibit 1).

The proposed regulation would add a new section (29.06), and modify provisions of the emergency regulation governing the recreational take of purple sea urchin in the following ways:

1. Increase the daily recreational take limit to 40 gallons while skin or SCUBA diving;
2. Apply the take allowance to waters off Humboldt County in addition to Sonoma and Mendocino counties;
3. Exempt the take from a daily possession limit; and
4. Includes an option which, if selected, would add Del Norte County to the list of counties for which the take allowance applies.

See Exhibit 3 for more details.

At this time, FGC staff does not believe that the inclusion of Del Norte County is warranted; the ecosystem imbalance that precipitated the rulemaking in Sonoma, Mendocino and Humboldt counties is not documented in this area.

**California Environmental Quality Act (CEQA)**

A notice of exemption (Exhibit 4) has been drafted consistent with FGC staff's recommendation to rely on CEQA categorical exemptions (Class 7 and 8) for these regulation changes. Staff has reviewed all of the available information possessed by FGC relevant to the issue and does not believe adopting the regulation changes pose any unusual circumstances that would constitute an exception to the categorical exemptions set forth above. Compared to the activities that fall within Class 7 and Class 8 generally, which include the example of wildlife preservation activities, such as the effort here, there is nothing unusual about the

## STAFF SUMMARY FOR FEBRUARY 6, 2019

proposed regulation changes. In addition, even if there were unusual circumstances, no potentially significant effects on either a project-specific or cumulative basis are expected.

### Significant Public Comments

1. A commenter requests FGC assistance in promoting additional urchin eradication efforts and events. He also suggests to open commercial urchin permit sales to sport divers (Exhibit 7).
2. A commenter from the Humboldt area writes to support the proposed regulation and does not see the need to include Del Norte county (Exhibit 8).

### Recommendation

**FGC staff:** Determine that adopting the regulation is exempt consistent with the draft notice of exemption and adopt the regulation changes as proposed, excluding Del Norte County.

**DFW:** Select whether to include Del Norte County, and adopt the regulation changes as proposed.

### Exhibits

1. Staff summary from the Dec 12-13, 2018 discussion hearing, Agenda Item 9 (for background only)
2. DFW memo, received Nov 14, 2018
3. Initial statement of reasons
4. Draft notice of exemption and attachment
5. Email in lieu of pre-adoption statement of reasons, received Jan 25, 2019
6. Economic and fiscal impact statement (Std. 399)
7. Email from Robert Soroka, received Dec 22, 2018
8. Email from Brandi Easter, received Jan 11, 2019

### Motion/Direction

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission determines the project is exempt from the California Environmental Quality Act as being categorically exempt and adopts proposed changes to add Section 29.06 related to the recreational take of purple sea urchin as proposed, excluding Del Norte County.

**OR**

Moved by \_\_\_\_\_ and seconded by \_\_\_\_\_ that the Commission determines the project is exempt from the California Environmental Quality Act as being categorically exempt and adopts proposed changes to add Section 29.06 related to the recreational take of purple sea urchin as proposed, including Del Norte County.

Received February 10, 2020.  
Original signed copy on file.

## Memorandum

**Date:** February 10, 2020

**To:** Melissa Miller-Henson  
Executive Director  
Fish and Game Commission

**From:** Charlton H. Bonham  
Director

**Subject:** **Agenda Item for the February 2020 Fish and Game Commission Meeting. Re: Emergency Regulation Action to Amend Section 29.06, Title 14, Recreational take of Purple Sea Urchin**

The Department of Fish and Wildlife (Department) proposes to temporarily remove the daily bag limit for purple sea urchin in Caspar Cove, Mendocino County, provided that such removal is done using hands or manual handheld tools. The proposal would amend Section 29.06, Title 14, of the California Code of Regulations (CCR) as an emergency to facilitate underwater culling of purple sea urchins by recreational divers in Caspar Cove. The proposal is necessary to determine if this activity can help promote the recovery of kelp and the numerous species and ecosystem services that kelp supports, including red urchin and red abalone.

Transmittal of the attached Findings of Emergency and Statement of Proposed Emergency Regulatory Action to the Fish and Game Commission (Commission) will allow the Commission to consider adopting the emergency rulemaking at its February meeting. The emergency regulation, if adopted, will take effect on March 2, 2020, and continue for a period of six months with a possibility of extensions. Results of the harvest, recreational efforts, and possible negative impacts will be analyzed to determine next steps.

If you have any questions or need additional information, please contact Dr. Craig Shuman, Marine Regional Manager at (916) 373-5491. The Department point of contact for this emergency rulemaking should identify Environmental Scientist, Anthony Shiao. His contact information is (805) 560-6056 or [Anthony.Shiao@Wildlife.ca.gov](mailto:Anthony.Shiao@Wildlife.ca.gov).

Attachment

ec: Stafford Lehr, Deputy Director  
Wildlife and Fisheries Division  
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Melissa Miller-Henson, Executive Director  
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February 10, 2020  
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# DRAFT

## CALIFORNIA FISH AND GAME COMMISSION FINDING OF EMERGENCY AND STATEMENT OF PROPOSED EMERGENCY REGULATORY ACTION

Emergency Action to  
Amend Section 29.06,  
Title 14, California Code of Regulations  
Re: 2020 Recreational Purple Sea Urchin Emergency Rule

Date of Statement: January 30, 2020

### **I. Statement of Facts Constituting the Need for Emergency Regulatory Action**

Since 2014, bull kelp (*Nereocystis luetkeana*) in northern California has declined by more than 90%. This decline has been linked to a combination of severe warm water events and multiple ecological stressors, particularly an explosive increase in purple sea urchin (PSU) populations exacerbated by the loss of predatory sea stars due to sea star wasting disease. PSU are a native species in California; however, the species' abundance is now at a 60-fold increase compared to historic levels, which has led to the suppression of bull kelp forests on the north coast, and a regime shift from bull kelp forests to urchin barrens across most of the region. The collapse of bull kelp has had cascading effects resulting in significant losses of kelp forest ecosystem services, contributing to the collapse of the north coast commercial red urchin fishery in 2015 and closure of the recreational red abalone fishery in 2018.

The environmental conditions in northern California have continued to deteriorate. By 2019, divers from the California Department of Fish and Wildlife (Department) observed very few remaining patches of bull kelp in northern California as well as a sustained decline in species diversity that would otherwise inhabit a healthy bull kelp ecosystem; this condition has been corroborated by local divers and research entities such as Reef Check California. The remaining stands of kelp tend to occupy the top of isolated, frequently disturbed boulders and rock formations that are more difficult for PSU to reach. However, Department staff is extremely concerned that the expanding PSU population may soon reach the remaining stands. As annual plants, bull kelp require a large standing spore stock to persist successfully. Preserving the remaining stands is critically important in the effort to rebuild this biogenic habitat upon which a myriad of native species including red abalone rely.

Because of the critical environmental situation on the north coast, the Department is working with multiple partners to develop and assess potential management tools to arrest kelp decline and promote broader ecosystem recovery for species that rely upon the kelp ecosystem. One of the primary tools is creating a network of kelp spore "refuges" in localized areas throughout the north coast by locally controlling PSU presence.

One mechanism to locally control PSU that is being explored is to allow removal by recreational divers. After a series of rulemaking actions starting in 2018, the California Fish and Game Commission (Commission) and the Department expanded recreational divers' take limit for PSU by raising the daily bag limit to 40 gallons of PSU per person per day in the most severely-impacted counties of Sonoma, Mendocino, and Humboldt.

However, the expanded bag limit was not as broadly successful as originally anticipated due to the logistical constraints and physical difficulties of bringing such large and unwieldy quantities of PSU safely back to shore.

Without successful local control of PSU, the north coast is at risk of exhausting its kelp spore banks and with them the capacity for broader recovery of the bull kelp ecosystem and the diverse species it supports. Because of the dire circumstances, the Department and its partners have determined it is necessary to explore the role of in-situ culling of PSU by the recreational diver community. The purpose of this rulemaking is to help restore kelp in the north coast through PSU culling and to evaluate the efficacy of this management tool under highly monitored conditions in a localized area. Research suggests that localized culling of PSU in urchin barrens may be effective only if extensive and concentrated effort is focused on an area. This project is expected to generate valuable data for Department staff, which could be used to evaluate its prospects of helping restore kelp forests elsewhere and ultimately recover impacted fisheries.

### **Prior Commission Action**

In April 2018, the Commission adopted an emergency regulation that temporarily increased the recreational take limit of PSU to 20 gallons per-diver per-day in Mendocino and Sonoma counties. The emergency rulemaking was initiated with strong public interest in controlling PSU populations by taking PSUs out of the water.

In February 2019, the Commission raised the recreation limit to 40 gallons through regular rulemaking and extended the higher limit to Humboldt County as well.

### **Proposed Action by the Commission**

The proposed rule would authorize recreational divers to cull PSU underwater within the area commonly referred to as Caspar Cove, Mendocino County (located seaward of Caspar Headlands State Beach, along Point Cabrillo Drive). Specifically, the rule would temporarily remove the recreational take limit for PSU within Caspar Cove. The rule would also specify that PSUs can only be taken by hand or with manually-operated, handheld tools.

The initial assessment of PSU culling will be limited to Caspar Cove in Mendocino County, which was chosen for a combination of reasons. It is in the epicenter of the PSU overpopulation. Existing infrastructure (e.g., access roads, parking lot, campground) at Caspar Headlands State Beach gives recreational divers easy access to the cove. The area has historically been the site of a large kelp forest, and many pinnacles and rock formations just outside of the cove still contains remnant stands of bull kelp that could help repopulate the cove.

It allows for extensive and concentrated effort to be focused on an area. The Department and its partners will also be able to concentrate their resources on the site to assess the effectiveness of culling and any potential negative impacts. For reasons stated here, Caspar Cove makes a very good candidate site for urchin culling, and concentrated effort in this single location has a higher chance of creating lasting impact.

## **Existence of an Emergency and Need for Immediate Action**

The Commission considered the following factors in determining whether an emergency exists: The magnitude of potential harm; the existence of a crisis situation; the immediacy of the need; and whether the anticipation of harm has a basis firmer than simple speculation. The current severely-degraded state of northern California's bull kelp ecosystem is well documented (e.g., Rogers-Bennett and Catton 2019) and has resulted in the closure or collapse of valuable commercial and recreational fisheries in the region, with cascading negative effects to other fisheries and ecosystem services anticipated over time.

Department staff originally had two environmental concerns with *in-situ* culling of PSU. First, it was unclear whether culling urchins underwater could accidentally trigger spawning events, thereby exacerbating the problem or negating any positive impacts. Second, underwater culling activities beyond simple removal carry some risk of impact to non-target components of the ecosystem (e.g., biogenic habitat or other invertebrate species).

Under the current environmental conditions in Caspar Cove and the north coast generally, neither of these concerns is currently considered high risk. Most available food sources for urchin in the north coast have been consumed, and Caspar Cove itself is devoid of kelp. While it is difficult for PSU to starve completely, most PSU are currently not sufficiently nourished to reproduce; this greatly reduce the risks associated with accidentally triggering spawning events. By the same token, community complexity within the urchin barrens has been critically reduced, with most locations now characterized by bare rock reefs dominated by PSU. Therefore, it is unlikely that underwater activities associated with culling PSU will negatively impact non-target species or habitat.

A reduction in PSU populations, even in just one selected location to prevent loss of the remaining bull kelp spore refuges, is critical to the restoration and recovery of the ecosystem, including red urchin and red abalone populations. Controlling urchins through culling with recreational divers may be an important tool in preventing the loss of the remaining stands of bull kelp. However, the effort must begin as soon as conditions allow in spring of 2020 due to the short diving season in northern California. PSU may soon migrate to or settle on the isolated areas where a few kelp stands still persist; once these stands are lost, restoration within the area will become significantly more difficult.

## **II. Impact of Regulatory Action**

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following determinations relative to the required statutory categories have been made:

- (a) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State: None.
- (b) Nondiscretionary Costs/Savings to Local Agencies: None.
- (c) Programs Mandated on Local Agencies or School Districts: None.

(d) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4, Government Code: None.

(e) Effect on Housing Costs: None.

### **III. Technical, Theoretical, and/or Empirical Studies, Reports, or Documents Relied Upon**

Bernard, F. R. (1977). Fishery and reproductive cycle of the red sea urchin, *Strongylocentrotus franciscanus*, in British Columbia. *Journal of the Fisheries Board of Canada*, 34(5), 604-610.

Ling, S. D., Kriegisch, N., Woolley, B., & Reeves, S. E. (2019). Density-dependent feedbacks, hysteresis, and demography of overgrazing sea urchins. *Ecology*, 100(2), e02577.

Rogers-Bennett, L., & Catton, C. A. (2019). Marine heat wave and multiple stressors tip bull kelp forest to sea urchin barrens. *Scientific reports*, 9(1), 1-9.

### **IV. Authority and Reference**

Authority cited: Sections 200, 205 and 399, Fish and Game Code.

Reference: Sections 200, 205 and 399, Fish and Game Code.

### **IV. Section 399 Finding**

Pursuant to Section 399 of the Fish and Game Code, the Commission finds that adopting this regulation is necessary for the immediate conservation, preservation, or protection of the species that rely upon kelp forest ecosystem in northern California.

## **Informative Digest (Policy Statement Overview)**

### **Existence of an Emergency and Need for Immediate Action**

The California Department of Fish and Wildlife (Department) proposes to temporarily remove the daily bag limit for purple sea urchins (PSU) in the area commonly referred to as Caspar Cove, Mendocino County (located seaward of Caspar Headlands State Beach), for the purpose of bull kelp restoration, provided that such removal is done using hands or manual handheld tools. The proposal would amend Section 29.06, Title 14, CCR through emergency action. The proposal is necessary to facilitate underwater culling activities by recreational divers in Caspar Cove.

Since 2014, extreme oceanographic conditions and ecological stressors have caused a greater than 90 percent decline in bull kelp coverage in northern California and critically degraded the kelp ecosystem in the region. Productive kelp forest habitats have been replaced with monotonic PSU barrens. The grazing pressure from PSU needs to be severely curtailed before the kelp can recover and support the species that depend on kelp to survive. The Department is pursuing multiple approaches to achieve this, including assistance in facilitating control of PSU by recreational divers. Past efforts of raising the bag limit and encouraging recreational divers to bring more PSU out of the water has been limited by logistical challenges.

The proposed emergency regulation will stimulate the recovery of bull kelp in Caspar Cove. The Department and its partners will also be able to evaluate the effectiveness and feasibility of using this activity as a tool to address the environmental crisis on the north coast generally. The limited scope of this regulation allows the Department to concentrate its resources on the site while assessing the feasibility of expanding the project as well as evaluate any potential negative consequences. Time is of the essence for this project. The state is at risk of losing its few remaining kelp stands in northern California. Such a loss would significantly limit the capacity for the future recovery of this resource and all marine life dependent upon it, including red abalone.

To determine whether an emergency exists, the California Fish and Game Commission (Commission) considered the following factors: The magnitude of potential harm; the existence of a crisis situation; the immediacy of the need; and whether the anticipation of harm has a basis firmer than simple speculation. Environmental data since 2014 demonstrate that all these factors have been met.

### **Benefits of the Regulation to the State's Environment:**

The Commission anticipates benefits to the State's environment by sustainably managing California's ocean resources. The environmental risk arising from the proposed activities are not regarded as significant, particularly in light of the advanced state of PSU encroachment and the resulting loss of bull kelp habitat upon which a myriad of native species, including red abalone, rely.

The Department conducted an evaluation of existing regulations and this regulation is neither inconsistent nor incompatible with existing state regulations.

## Emergency Regulatory Language

Section 29.06, Title 14, CCR, is amended as follows:

### § 29.06. Purple Sea Urchin

- (a) Except as provided in this section, the daily bag limit for purple sea urchin is 35 individuals.
- (b) The daily bag limit for purple sea urchin is forty (40) gallons when taken while skin or SCUBA diving in ocean waters of the following counties: Humboldt, Mendocino, and Sonoma.
- (c) There is no possession limit for purple sea urchin.

(d) Notwithstanding subsection (b) of this Section, in ocean waters seaward of Caspar Headlands State Beach commonly referred to as Caspar Cove, in Mendocino County, in the area eastward of a straight line connecting points between 39° 22.045 ' N. lat. 123° 49.462 ' W. long. and 39° 21.695 ' N. lat. 123° 49.423 ' W. long., purple sea urchins may be taken in any number for the purpose of restoring the kelp ecosystem. Purple sea urchins may only be taken by hand or with manually operated hand-held tools.

Authority cited: Sections 200, ~~and~~ 205, and 399, Fish and Game Code.

Reference: Sections 200, ~~and~~ 205, and 399, Fish and Game Code.

## Memorandum

**Date:** January 22, 2020

**To:** Melissa Miller-Henson  
Executive Director  
Fish and Game Commission

**From:** Charlton H. Bonham  
Director

**Subject:** **Notice of Exemption for Proposed Amendment of Section 29.06, Title 14, California Code of Regulations; 2020 Recreational Purple Sea Urchin Emergency Rule**

Attached please find the Draft Notice of Exemption (NOE) for the proposed amendment to Sections 29.06, Title 14, California Code of Regulations (CCR). The attached draft notice has been prepared pursuant to Section 15062 of the California Environmental Quality Act (CEQA) Guidelines. Since the NOE is not anticipated to change, this early submission gives the Commission notice of the Department's recommendation to rely on statutory exemption for the proposed action. Staff's analysis of the use of exemption under CEQA is described below.

### **CEQA Exemption**

#### *Statutory Exemption to Specific Actions Necessary to Prevent or Mitigate an Emergency*

Statutorily exempt projects are classes of projects that the Legislature has determined as exempt from the requirements of the California Environmental Quality Act (CEQA; Public Resources Code Section 21000 et seq.).

The review effort by Department staff pursuant to Public Resources Code has led the Department to conclude that the proposed amendment to section 29.06 in Title 14 of the CCR falls within the statutory exemption under Public Resources Code Section 21080. This exemption applies to actions necessary to prevent or mitigate an emergency.

The environmental condition for kelp forests in northern California has continued to deteriorate at a rapid pace, and the loss of the last remaining kelp stands may be imminent, despite prior effort to arrest the trend. This crisis is in large part due to the overgrazing of kelp by purple sea urchins (*Strongylocentrotus purpuratus*). The proposed regulation would temporarily allow recreational divers to take any number of purple sea urchin within Caspar Cove, Mendocino County, to control the purple sea urchin population. The take is expected to help restore bull kelp in Caspar Cove, and provide Department Staff with valuable data to consider the viability of expanding the activity to other areas in Northern California.



Melissa Miller-Henson, Executive Director  
Fish and Game Commission  
January 22, 2020  
Page 2

*Categorical Exemptions to Protect Natural Resources and the Environment*

Categorically exempt projects are classes of projects that the State Resources Agency has determined not to have a significant effect on the environment; therefore, these projects are exempt from the requirement for the preparation of environmental documents (CEQA Guidelines Section 15300, et seq.).

The review effort by Department staff pursuant to CEQA Guidelines Section 15061 has also led staff to conclude that the proposed amendment to section 29.06 in Title 14 of the CCR falls within the Class 7 and 8 categorical exemptions (CEQA Guidelines sections 15307 and 15308). These two exemptions are related to agency actions to protect natural resources and the environment. The proposed project would benefit the fragile kelp forest ecosystem in Northern California, including the valuable abalone populations.

If you have any questions regarding this item, please contact Dr. Craig Shuman, Marine Regional Manager, at (916) 373-5491.

Attachments

cc: Craig Shuman, D. Env., Regional Manager  
Marine Region  
[Craig.Shuman@wildlife.ca.gov](mailto:Craig.Shuman@wildlife.ca.gov)

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Fish and Game Commission  
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DRAFT

**Notice of Exemption****Appendix E**

**To:** Office of Planning and Research  
P.O. Box 3044, Room 113  
Sacramento, CA 95812-3044

County Clerk

County of: N/A

**From:** (Public Agency): CA Fish and Game Commission  
1416 Ninth Street, Suite 1320  
Sacramento, CA 95814

(Address)

Project Title: 2020 Recreational Purple Sea Urchin Emergency Rule

Project Applicant: N/A

Project Location - Specific:  
State ocean water insider Caspar Cove, Mendocino County

Project Location - City: N/A Project Location - County: Mendocino

Description of Nature, Purpose and Beneficiaries of Project:

The proposed project would amend section 29.06 to Title 14, CCR to temporarily allow unlimited recreational take of Purple Sea Urchin inside Caspar Cove, Mendocino County. The project is designed to test the public's ability to help control urchin population in degraded Northern California kelp forests.

Name of Public Agency Approving Project: California Fish and Game Commission

Name of Person or Agency Carrying Out Project: CA Department of Fish and Wildlife

Exempt Status: **(check one):**

- Ministerial (Sec. 21080(b)(1); 15268);
- Declared Emergency (Sec. 21080(b)(3); 15269(a));
- Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- Categorical Exemption. State type and section number: Class 7 & 8; 14 CCR 15307 & 15308
- Statutory Exemptions. State code number: \_\_\_\_\_

Reasons why project is exempt:

Statutory exemption for emergency action applies to actions taken in response to emergencies. Class 7 and 8 categorical exemptions exempt actions for the protection of natural resources and the environment, respectively. The proposed project qualifies because it is designed to help save the last remaining stands of kelp for the benefit of species dependent on kelp & whole ecosystem in Northern California (See Attachment).

Lead Agency  
Contact Person: David Thesell Area Code/Telephone/Extension: (916) 654-9903

**If filed by applicant:**

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project?  Yes  No

Signature: \_\_\_\_\_ Date: \_\_\_\_\_ Title: \_\_\_\_\_

Signed by Lead Agency  Signed by Applicant

Authority cited: Sections 21083 and 21110, Public Resources Code.  
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

Date Received for filing at OPR: \_\_\_\_\_



January 21, 2020

## **ATTACHMENT TO NOTICE OF EXEMPTION 2020 Recreational Purple Sea Urchin Emergency Rule**

The California Fish and Game Commission (Commission) has taken final action under the Fish and Game Code and the Administrative Procedure Act with respect to the proposed project on February 21, 2020. On February 21, 2020, the Commission noticed and adopted an emergency action to amend Section 29.06 to Title 14 of the California Code of Regulations (CCR).

### **Statutory Exemption for Specific Actions Necessary to Prevent or Mitigate an Emergency**

In compliance with the California Environmental Quality Act (CEQA; Public Resources Code Section 21000 et seq.), the Commission adopted the regulation relying on a statutory exemption contained in Public Resources Code Section 21080 (Actions Necessary to Prevent or Mitigate an Emergency). The exemption applies to agency actions to prevent or mitigate an emergency.

A combination of environmental factors has resulted in one of the worst kelp die-offs along northern California coast in recent history. This is accompanied by an explosive growth of purple sea urchins (*Strongylocentrotus purpuratus*) in the region, and the population remains largely unchecked due to decimation of predatory sea stars from disease epidemic occurring in 2013. The lack of kelp recovery is in turn leading to the continued and imminent devastation of northern California kelp forest ecosystem and all its component species, including valuable abalone species.

Previous attempts at controlling the population has not been successful, and the region is at risk of losing its remaining kelp stands. The proposed regulatory action would temporarily allow recreational divers to take any number of purple sea urchins underwater for the purpose of controlling the population within the area commonly known as Caspar Cove, Mendocino County (seaward of Caspar Headlands State Beach). Because the regulation is intended to prevent complete loss of kelp in an important but fragile ecosystem, Commission adoption of the regulation is an activity that is the proper subject of the statutory exemption.

### **Categorical Exemptions to Protect Natural Resources and the Environment**

In compliance with the California Environmental Quality Act (CEQA; Public Resources Code Section 21000 et seq.), the Commission adopted the regulation by also relying on the categorical exemptions contained in CEQA Guidelines Sections 15307 (Action by

Regulatory Agencies for Protection of Natural Resources) and 15308 (Action by Regulatory Agencies for Protection of the Environment). The exemptions apply to agency actions to protect natural resources and the environment, respectively.

The proposed regulation would help restore kelp in Caspar Cove and preserve crucial spore banks in the North Coast. Positioning the area to quickly recover its kelp patches would benefit and help restore the whole ecosystem including fragile and valuable abalone populations that rely upon it. As such, the proposal is an activity that is the proper subject of CEQA's Class 7 and 8 categorical exemptions.

**From:** MADELEINE RUSSO [REDACTED]  
**Sent:** Friday, January 31, 2020 9:44 AM  
**To:** FGC <FGC@fgc.ca.gov>  
**Subject:** FGC Meeting, 2/21/2020, Agenda Item #18

I am writing in full support of any efforts to reduce the purple urchin population on the North Coast, with the aim of helping the kelp to reforest and nourish the environment. As a resident of Mendocino County, I can see the devastating impact the loss of revenue from closing the fisheries, particularly abalone, is having... and it will only get worse if the current urchin population is not reduced.

Thank you for your efforts.

Madeleine Russo  
Willits, CA

[REDACTED]

From: Dan Walsh  
Sent: Wednesday, February 5, 2020 10:42 AM  
To: FGC  
Subject: FGC meeting 2/21/2020 Agenda item 18

I support the motion for an emergency regulation 18. I recall a program decades ago off the Palos Verdes Peninsula called "Project Purp", which was an urchin eradication program. Today, that area is lush with kelp and marine life, including a prolific White Sea Bass fishery.

I'm a NAUI Certified SCUBA Instructor since 1972, a US Coast Guard licensed Captain and have skippered dive boats in Southern California, Hawaii, the Caribbean, and Baja California. I'm also (or was until the closure) an active free diver visiting the Northern California area to legally collect abalone; hopefully someday that area will replenish both kelp and abalone successfully, as what Project Purp did for the PV area so long ago.

Thank you for your time and consideration of supporting emergency regulation 18.

Respectfully,  
Dan Walsh

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**Captain Dan Walsh**

[REDACTED]

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From: doug jung  
Sent: Sunday, February 9, 2020 4:53 PM  
To: FGC  
Subject: Agenda Item 18

[REDACTED]  
To: Fish and Game Commissioners

Fr: Doug Jung

Re: 2/21/2020 Agenda Item 18 - Emergency Regulations for Hammering Purple Urchins

We are pleased the Commission is considering the emergency regulations to allow the hammering of killer purple urchins off our coast to save what biodiversity we can for the future. Every sports diver and participant in the abalone culture I have spoken with are deeply frustrated and depressed over the pending death of the people's resource. Not only would we advocate for the opening of Casper Cove for remediation but much much more. We are in the 9th inning and much more must be done before what surviving abalone, kelp and biodiversity dies.

For years we advocated to allow the 40,000 abalone divers an opportunity to volunteer and self identify as purple urchin predators, go to our favorite dive sites and hammer urchins in the shallows surrounding surviving kelp and abalone to create safe spaces to buy time. We leave the calcium shells in place for ocean acidification titration while kelp growth absorbs vast amounts of CO2. But all we were allowed of late were bag and drag events, where we go into urchin barrens and slowly remove by hand urchins, bag them and drag them back to shore where they were smashed and disposed into a landfill. This futile method is labor intensive and dangerous dragging around bags in the surf. Fewer and fewer divers were willing to participate in this fiasco. They want to save abalone at their favorite dive site before they all died, not wanting to clear urchin barrens in the most difficult manor for CDFW. Divers spend their time and considerable resources at dive shops, travel, pay Park camping accommodations, buy fishing licenses for the privilege of removing urchins, hotels, food, restaurants, etc that support the coastal communities that are suffering because of the abalone closure. The last dive shop Sub Surface Progression at Fort Bragg closed after nearly 50 years serving the community. Now none exist on the Coast. With such personal sacrifice should volunteer divers not be able to select our sites while not endanger our lives unnecessarily?

We advocate hiring unemployed commercial urchin divers and recruit new ones to clear urchin barrens in midwater especially surround areas where kelp exist to foster kelp growth. These are our spore banks and the kelp are nursery for our fish and biodiversity. This past year I went free diving to spear a fish and bring home a treat. Four out of five dives I didn't even see a fish. Before urchin barrens I always brought home fish. Is this a harbinger of things to come?

Finally, we have been advocating for the development of drones and robotics to assist the divers. Every engineering student wants to develop killer robots, so let's notify our Universities and progress to SBIR to begin this challenge and let them be creative and we at the end will test and evaluate the many concepts and select winners. I have contacted Deans of Engineering but they want to hear from the State of California, not Award Winning Alumnis.

It should be clear, human divers are a stop gap. This massive endeavor requires a mechanical component. Think of this environmental technology exported to other nations. This urchin crisis is not just a California issue, it is a worldwide plague.

There is great urgency to save what seed stock we can after years of exponential death? We desire a plan that will address the crisis before everything dies while being studied to death. We need boots on the ground before it is too late.

Respectfully,

Doug Jung



# Purple Sea Urchin Emergency Regulation Proposal

California Fish and Game Commission Meeting  
February 21, 2020



# Background

- Perfect Storm of environmental factors triggered shift in north coast kelp forest ecosystem
- December 2017: Commission closed the 2018 recreational abalone fishery – closure extended to April 1, 2021 in December 2018.
- April 2018: Commission adopted emergency regulation raising recreational Purple Sea Urchin take to 20 gallons per day in Mendocino and Sonoma – Re-adopted, October 2018
- February 2019: Commission adopted recreational Purple Sea Urchin take of 40 gallons per day in Mendocino, Sonoma, and Humboldt counties
- In 2018 and 2019 commercial urchin divers conducted pilot removals of Purple Sea Urchin at four sites in Mendocino County with guidance from CDFW staff and supported by funding from the Noyo Center for Marine Science and the Watermen's Alliance.



# Purple Sea Urchin Emergency Regulation- Why?

- Kelp ecosystem and associated species still declining
- Efforts to date – challenged
- Evolving strategy – focused experimental design
- Ascertain if, how, when, where kelp recovery can be attained
- Pilot effort - scalable

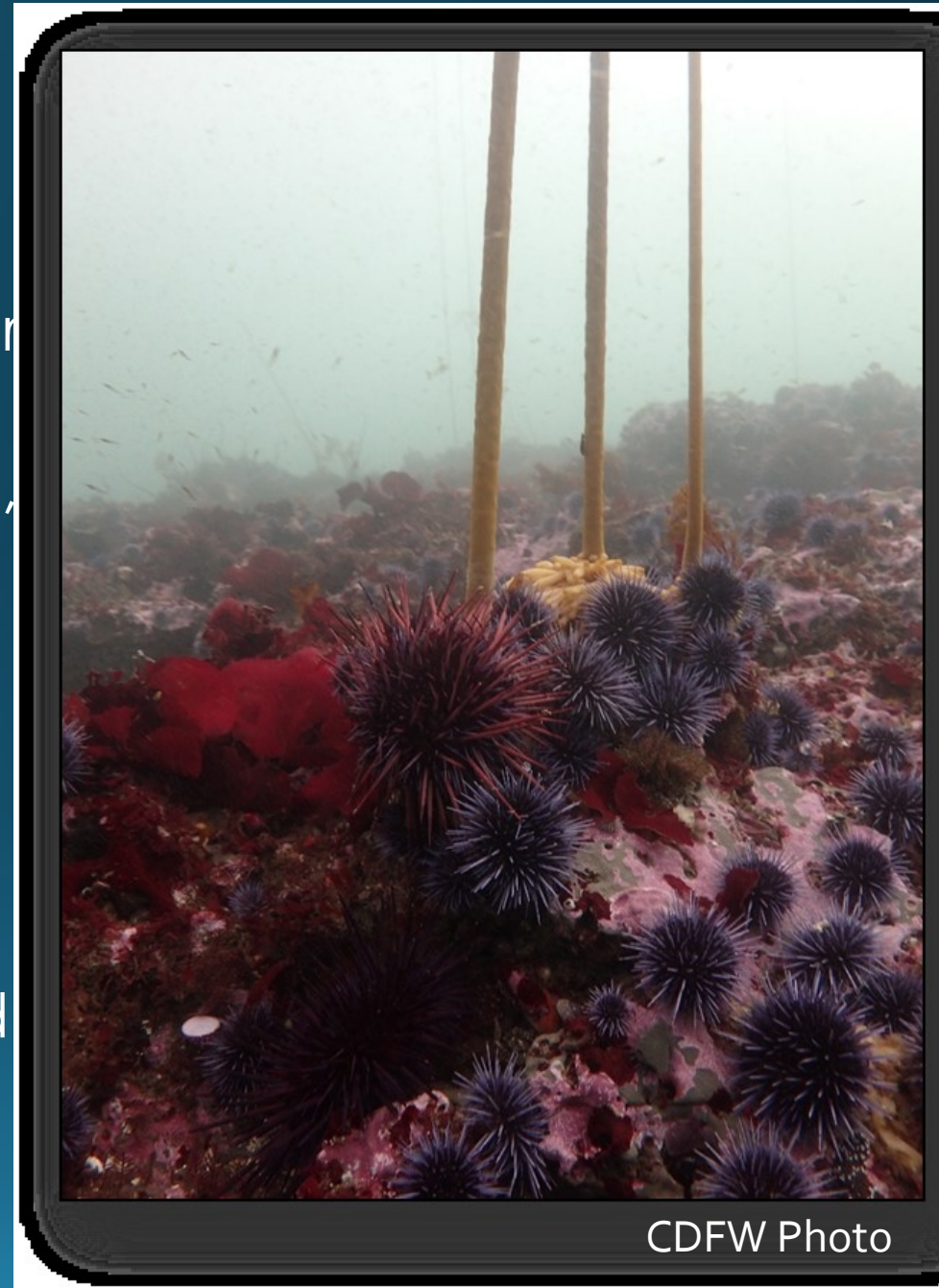


CDFW Photo



# Purple Sea Urchin Emergency Regulation- How?

- Developed collaborative effort to promote bull kelp ecosystem and associated species recovery
- Key partners: DFW, OPC, Commercial urchin divers, recreational divers, Waterman's Alliance, Reef Check California, Noyo Center for Marine Science, The Nature Conservancy, Greater Farallones Association
- Study Design:
  - Commercial diver urchin removal – 3 sites
  - Recreational diver urchin removal – 1 site
  - Monitoring of results at treatment sites and control sites



CDFW Photo



# Purple Sea Urchin Emergency Regulation- The Proposed Rule

- Location: Caspar Cove (Anchorage), Mendocino Co.
- No recreational bag limit for Purple urchins east of the designated line
- Take can only be done by hand or manual hand-held tools
- Temporary
  - Evaluate efficacy



CDFW Photo

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the Community

# Thank You

Questions?

James Ray, Environmental Scientist  
California Department of Fish and Wildlife

[James.Ray@Wildlife.ca.gov](mailto:James.Ray@Wildlife.ca.gov)