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

Emergency Action to
Amend Sections 29.20 and 29.80,
Title 14, California Code of Regulations
Re: 2021 Recreational Clam, Sand Crab, and Shrimp Gear Emergency Rule

Date of Statement: January 11, 2021

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

Background

There is an active recreational fishery for gaper clams (also known as horseneck clams) that include the Pacific gaper (Tresus nuttalli) and the fat gaper (T. capax) in northern California. The recreational fishery for these clams takes place in intertidal areas of bays with sand and mud bottoms including Humboldt Bay, Bodega Bay, Tomales Bay, Drakes Estero, and Elkhorn Slough. Tomales and Humboldt Bays are the two most popular areas for clamming during low tides for these species. Daily clammer counts conducted by the Department of Fish and Wildlife (Department) during low tides in April, May, and July in 2017 ranged from 339-544 clammers in Tomales Bay.

There are no closed seasons or annual limits in the fishery. Fishing hours are limited from half hour before sunrise to half hour after sunset. Limits on gaper clams have historically been aggregated with those of Washington clams (Saxidomus nuttalli; Section 29.25, Title 14, California Code of Regulations (CCR)). The bag and possession limit is 10 of each species, except in Humboldt Bay where the limit is 50 in combination and no more than 25 gaper clams taken or possessed. In Elkhorn Slough, the limit is 12 in combination and take is also limited to a discrete area within the marine conservation area that is located there. All gaper clams and Washington clams dug, regardless of size or broken condition, must be retained until the bag limit is reached. Special gear provisions allow the use of spades, shovels, hoes, rakes, or other appliances operated by hand to take clams, with the exception of spears or gaff hooks. Clams cannot be taken using SCUBA north of Yankee Point, Monterey County, and this SCUBA gear restriction includes all the popular clamming areas of Humboldt Bay, Bodega Bay, Tomales Bay, Drakes Estero, and Elkhorn Slough.

Novel developments in the recreational clam fishery have raised concerns for the sustainability of the resource and sensitive eelgrass habitat near clamming grounds including:

- Use of hand-operated hydraulic pumps in clamming which:
  - speed extraction of clams;
  - provide access to previously inaccessible clam beds in deeper water; and
  - increases time before and after low tide clams are accessible.

- Disturbance of previously undisturbed eelgrass habitat during clamming.
• Increased fishing pressure since the closure of the recreational abalone fishery, and during the Covid-19 pandemic.
• Increased illegal commercialization of gaper clams facilitated by hydraulic pumps.
• Concern for the sustainability of the resource in state waters, particularly Humboldt Bay, Bodega Bay, Tomales Bay, Drakes Estero, and Elkhorn Slough.

Traditionally, clammers use shovels to dig for the clams at low tide, which may be buried as deep as four feet in sand or mud. In muddy areas, three-foot lengths of PVC pipes about 12 to 15 inches in diameter are often used to prevent the hole from caving in, enabling clammers to reach these deeply buried clams. Recently, some clammers in Tomales Bay and elsewhere began using a type of handheld PVC pump that hydraulically liquefies the sand around a submerged clam to make it easier to extract by hand (Figure 1). This device and technique allow clammers to access still-submerged clams surrounding the bars at low tide. These submerged clams are part of the population that has not typically been accessible to clammers in the past.

![Figure 1. Hand operated hydraulic pump used to extract clams.](image)

Clammer surveys conducted in 2017 and 2018 indicate catch per clammer is higher and bag limits are more commonly reached when using hydraulic pumps compared with other methods. In a spring 2019 survey of clams taken in Tomales Bay, 85% of clams (N=532) were taken using the new tool. With this device and technique, clammers do not need to wait for low tides to take gapers. This allows clammers to access clam populations submerged at the lowest tides, which were previously inaccessible and have acted as a de facto reserve for the population. The ability of clammers to take clams while the beds are submerged has also led to illegal high grading (Section 29.25, Title 14, CCR). High grading occurs when clammers operate in groups where one person operates the pump and frees a clam but leaves it submerged in the water, and other members collect the largest clams. As gaper clams are
unable to rebury themselves, it is presumed that abandoned clams succumb to predation or other causes of mortality.

Wildlife officers are increasingly issuing citations for over-limits of clams, particularly to groups operating the new hydraulic pumps (Figure 2). It is very likely that individuals cited for gross overlimit were trafficking these clams in the illegal market. The illegal commercialization of clams is a violation of both the Fish and Game Code (Sections 8340-8346) and the Health and Safety Code (Sections 112160-112230) which regulates shellfish sales for public consumption. Wildlife officers report wildlife traffickers are illegally marketing the gaper clams as geoduck clams, which is a species supplied and sold by commercial fisheries that operate in Washington State, or from highly regulated aquaculture facilities. Upon inspection by wildlife officers, clams have been found individually rubber-banded to keep the clam from losing water, thus maintaining higher weights, as is typical for clams that are being prepared for sale.

Figure 2. Over limit of gaper clams taken during the low tide on June 23, 2018. This catch represents two groups of clammers using hand pumps.

There is significant concern for the health of the clam resource and the sustainability of the fishery if this novel tool for easy extraction of clams continues unchecked. A gaper clam illegal commercialization case was successfully prosecuted in 2019. Law enforcement personnel are aware these clams are heavily trafficked and continue to conduct investigations to stop this illegal activity.

There is also concern that the changing fishing dynamics and new hydraulic tools are negatively impacting eel grass habitat in Tomales Bay and elsewhere. Eelgrass beds support soft sediment ecosystems including clams and can be disturbed by clammers. Eelgrass is prohibited from being cut or disturbed (Section 30.10, Title 14, CCR) and is less plentiful on the sand bars that are fully exposed during low tides. Clammers with hydraulic gear are more likely
to encounter and disturb eel grass at the margins of the clam bars that remain submerged during low tides where they operate, both overturning sediment and trampling eel grass beds.

Further, there is concern that the current practice of clammers commingling their clams in one container while digging and transporting to shore creates a significant enforcement challenge. Commingling makes it difficult for law enforcement to verify individual bag and possession limits, which is increasingly important given the increase in clamming as discussed below.

CDFW environmental scientists and law enforcement personnel have observed greater participation by the public in the harvest of intertidal species, including clams, since the beginning of the COVID-19 pandemic in early 2020. The increase in participation of harvest of intertidal species was so high that the Department rapidly organized outreach efforts in popular harvesting locations and marine protected areas to prevent damage to intertidal resources. Department staff participated in an outreach event at Pillar Point on November 14-15, 2020 estimated over 1,000 people accessed the tidepools and clamming grounds over the course of the weekend (Figure 3). Law enforcement personnel observed 180 clammers at Tomales Bay during low tide at 3:00 PM on January 9, 2021, many of whom were working in teams with hydraulic pumps (Figure 4). Department wardens contacted six of these groups, all of whom were cited for over-limits. The following day, 50 clammers were observed and all groups contacted were cited for high grading.

Figure 3. Intertidal harvesters at Pillar Point on November 15, 2020.
Figure 4. Clammers in Tomales Bay, January 9, 2021. At least 6, and potentially 9 hydraulic pumps are visible. Visible pumps are labeled with a number and potential pumps are labeled with a question mark.

**Prior Commission Action**

On August 8, 2019, the Commission referred petition 2019-012 requesting the amendment of Section 29.20 to ban the use of hydraulic pumps in clamming to the Department for review and recommendation.

**II. Proposed Emergency Regulations**

The proposed rule would amend subsections 29.20(c) and (d), Title 14, CCR to specify the gear permitted to be used to harvest clams as hand operated spades, shovels, hoes, forks, rakes, slurp guns, clam guns, and rigid clam tubes. It would specifically prohibit the use of hydraulic hand pumps. Subsection 29.20(c) is revised to include gear restriction language for the hydraulic pump, as well as language that states that it is unlawful to possess a hydraulic pump or use any method that can liquefy sand in any area where clams may be taken. This language is necessary to make it clear to recreational clammers that the subject device is a restricted type of gear, and to include language to make the prohibition enforceable.

Subsection 29.20(d) would require each person to keep clams they had harvested in a separate container from clams harvested by others while digging clams and returning them to shore. This language is necessary to prevent the commingling of clams in one container while digging and transporting to shore to reduce the existing enforcement challenge of verifying the lawfulness of individual bag and possession limits.

Proposed amendment to subsection 29.80(h), Title 14, CCR would specify the gear permitted to be used to harvest sand crabs and shrimp as hand operated spades, shovels, hoes, forks, rakes, and slurp guns, and specifically prohibit the use of hydraulic hand pumps. This is necessary to ensure clarity and consistency on this particular gear restriction in both sections of Title 14.

**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.

Clams are an important ecological, cultural, and recreational resource in the State of California. The use of hydraulic pumps to harvest clams has greatly increased the efficiency of clam harvesting and allow greater access to clam beds. These factors, combined with increasing participation in the fishery due to the COVID-19 pandemic, are likely causing a significant increase in take, and it is unknown whether the stock can support this increase. Further, illegal commercial sale of gaper clams facilitated by the use of hydraulic pumps poses a public health risk, as these catches are not subject to normal shellfish safety inspections. Consumers may believe they are purchasing geoduck clam from legitimate fisheries or be unaware of the risks posed by consuming wild-caught shellfish. Finally, the increased disturbance of sensitive and ecologically important eelgrass habitat is causing unknown disruption to estuarine environments in the state.

Emergency action is necessary now to protect the clam resource and estuarine environment in a timely manner.

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


Personal communications with CDFW law enforcement personnel

IV. Authority and Reference

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

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IV. Section 399 Finding

Delay in the prohibition of hydraulic pumps for recreational take of clams (i.e., six to nine months for a standard rulemaking) required to address this puts clam and marine resources at risk. Emergency action is necessary now to protect the resource and estuarine environment in a timely manner, as increased recreational take participation coincides with better weather conditions in the coming spring months.

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 gaper clam stocks, and eelgrass habitat adjoining clam beds.
Informative Digest (Policy Statement Overview)

Existence of an Emergency and Need for Immediate Action

The California Department of Fish and Wildlife (Department) proposes to prohibit the use of hydraulic pumps for the recreational harvest of clams. The proposal would amend Sections 29.20 and 29.80, Title 14, California Code of Regulations (CCR) through emergency action. The proposal is necessary to protect clam stocks from the unknown effects of this novel gear type, especially in the popular clamming areas of Humboldt Bay, Bodega Bay, Tomales Bay, Drakes Estero, and Elkhorn Slough.

The concerns addressed by this emergency action are:

- Use of hydraulic pumps in clamming which:
  - speed extraction of clams;
  - provide access to previously inaccessible clam beds in deeper water;
  - increases time before and after low tide clams are accessible.

- Disturbance of previously undisturbed eel grass habitat during clamming.

- Increased fishing pressure since the closure of the recreational abalone fishery, and during the Covid-19 pandemic.

- Increased illegal commercialization of gaper clams facilitated by hydraulic pumps.

- Concern for the sustainability of the resource in state waters, particularly Humboldt Bay, Bodega Bay, Tomales Bay, Drakes Estero, and Elkhorn Slough.

Clams are an important ecological, cultural, and recreational resource in the State of California. The use of hydraulic pumps to harvest clams has greatly increased the efficiency of clam harvesting and allows greater access to clam beds. These factors, combined with increasing participation in the fishery due to the COVID-19 pandemic, are likely causing a significant increase in take, and it is unknown whether the stock can support this increase. Further, the use of hydraulic pumps has corresponded with an observed increase in illegal commercial sales of gaper clams. Finally, the increased disturbance of sensitive and ecologically important eelgrass habitat is causing unknown disruption to estuarine environments in the state.

The proposed rule would amend Section 29.20, Title 14, CCR to specify the gear permitted to be used to harvest clams as hand operated spades, shovels, hoes, forks, and rakes, and specifically prohibit the use of hydraulic hand pumps. It would also require each person to keep clams they had harvested in a separate container from clams harvested by others while digging clams and returning them to shore. The proposed rule would amend Section 29.80, Title 14, CCR to specify the gear permitted to be used to harvest sand crabs and shrimp as hand operated spades, shovels, hoes, forks, rakes, and slurp guns and specifically prohibit the use of hydraulic hand pumps.

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. Observations by Department Wildlife Officers and
scientific staff have confirmed the increasing use of hydraulic pumps in clamming and the threat they pose to the state’s environment and public health.

**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 rule are not regarded as significant, as the rule manages the resource more conservatively than existing regulation.

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