State of California
Fish and Game Commission
Initial Statement of Reasons for Regulatory Action
(Certificate of Compliance)

Amend Sections 29.05, 29.20 & 29.80
Title 14, California Code of Regulations
Re: Recreational Clam, Sand Crab, and Shrimp Gear Specifications

I. Date of Initial Statement of Reasons: 8 October 2021

II. Dates and Locations of Scheduled Hearings
   (a) Notice Hearing
       Date: December 15-16, 2021 Location: Webinar/Teleconference
   (b) Discussion Hearing
       Date: February 16-17, 2022 Location: Sacramento
   (c) Adoption Hearing
       Date: April 20-21, 2022 Location: Monterey/Santa Cruz Area

III. Description of Regulatory Action
   (a) Statement of Specific Purpose of Regulatory Change and Factual Basis for Determining that Regulation Change is Reasonably Necessary

       Unless otherwise specified, all section references in this document are to Title 14 of the California Code of Regulations (CCR).

       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.

       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. Over the past several years, 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.

The use of this novel gear has led to substantial difficulties for wildlife officers enforcing existing rules, as well as raising concerns over the sustainability of the resource and sensitive eelgrass habitat near clamming grounds.

Over the past several seasons, wildlife officers have issued ever increasing numbers of 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 (FGC) 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. 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.
In addition to illegal commercialization, the ability of clammers to take clams while the beds are submerged has also greatly facilitated illegal high grading (Section 29.25). 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. Since hydraulic pumps were often used over submerged tideland, high grading would often occur underwater, making the prohibition against the practice extremely difficult to enforce.

In addition to the various enforcement challenges, there is also 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. 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.

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) 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

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.
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.

California Department of Fish and Wildlife (Department) environmental scientists and wildlife officers 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 substantial enough that Department staff began organizing 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 and estimated that over 1,000 people accessed the tidepools and clamming grounds over the course of the weekend (Figure 3). Wildlife officers 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 wildlife officers 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 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.

In response to these developments, the California Fish and Game Commission (Commission) took action to temporarily prohibit recreational use of hydraulic gear for take of clams and other invertebrates using its authority to adopt emergency rules (FGC section 219). The rule became effective on March 8, 2021.

Wildlife officers reported the emergency rule as effective at reducing the use of hydraulic pumps, and the requirement to keep individual bag limits separate has improved enforcement and discouraged illegal commercialization.

During creel surveys conducted by Department staff in June and July 2021, 121 groups representing approximately 825 fishery participants were surveyed for their opinion on the emergency regulation prohibiting hydraulic pumps. Forty-five percent of groups surveyed reported they went clamming for the first time in 2020 or 2021, or that they clammed more in 2020/21 than in previous years. The emergency regulation was supported by 55% of clammers surveyed, compared to 19% who supported allowing hydraulic pumps with the possibility of lower bag limits. The balance did not have an opinion on the issue. 75% of participants reported they were satisfied with current bag limits, and many commented that pumps were not necessary to harvest a limit of gaper clams. Surveys observed approximately 130-280 clammers per day on summer weekends with a tide of –0.5 feet or lower, at both Lawson’s Landing and Bodega Bay.

Despite the high participation in the fishery, preliminary analysis shows no significant change in the median length of gaper clams harvested at Lawson’s Landing compared to 2015, though this analysis is ongoing and a full comparison of the size structure of the population will provide greater insight into the sustainability of the fishery. Department staff are also continuing to investigate the habitat impact of hydraulic pumps compared to traditional digging tools. On the one hand, liquifying sand may incur less physical impact
than solid digging tools. On the other hand, many areas where hydraulic pumps are used, specifically fully submerged tidelands, would not have experienced any clamming activities at all if not for the hydraulic pumps.

Due to the persisting threat of illegal commercialization, potential conservation concerns for the stock in an increasingly popular fishery, and strong support shown by the public, the Commission has decided to pursue this Certificate of Compliance to make permanent the existing emergency rules

**Current Standard Regulations and Development of Emergency Regulations**

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 nutallii*; Section 29.25). 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.

On March 8, 2021, the Office of Administrative Law (OAL) approved an emergency rule amending Sections 29.20(c) and 29.20(d), as well as Section 29.80(h) (OAL File Number 2021-0226-02E). The rule prohibits the use of hydraulic devices while taking clam recreationally, as well as the possession of such devices while taking or possessing clams. The prohibition also extends to the take of sand crabs and shrimps for enforceability purposes. The rule also prohibits commingling of clams taken by multiple individuals. Through Executive Orders N040-20 and N66-20, this action is extended through January 7, 2022. The emergency rule has been subject to one readoption, which extends its expiration date to April 8, 2022. The rule may be readopted one additional time, in which case it will expire on July 7, 2022.

**Proposed Amendment**

This proposal would make permanent the emergency prohibition against the recreational use of hydraulic gear. Specifically, it will continue to prohibit the use of such gear for recreational take of clam, sand crab, and shrimp, as well as restrict the possession of such tools. It would also continue to prohibit the mixing of multiple people’s clam take. This proposal also contains several clarifications to the authority and reference portions of several sections, which do not carry any substantive regulatory effect.
Add Section 29.05(e) Prohibiting Use or Possession of Hydraulic Pump

This proposal would prohibit the possession of hydraulic pumps capable of liquifying sands within 100 yards of any area where marine invertebrates may be present, except for the place of a person’s primary residence. This wide-ranging prohibition is necessary because of the threat of illegal commercialization facing this fishery. Individuals who are intent on breaking existing rules would also be incentivized to seek out any loopholes within the regulations, such as claiming to be taking invertebrates other than clam while in possession of the pumps or claiming not to be using the pumps at all when approached by wildlife officers. As such, a blanket prohibition of possession is necessary.

Amend Section 29.05 Authority and Reference

The proposal would add FGC section 205 as a statutory authority for the section and remove FGC section 255 as authority. While FGC section 200 authorizes the Commission to regulate recreational take of fish, FGC section 205 explicitly authorizes the Commission to regulate the manner and the means of such take. FGC section 255, on the other hand, provides procedural requirements that the Commission must meet while adopting regulations that they are empowered to adopt, and does not provide additional authorities that the Commission does not otherwise have. As such, citing these sections as statutory authorities is not necessary.

Amend Section 29.20(c) Prohibiting Use of Hydraulic Pump While Taking Clam

The proposal would prohibit the use of hydraulic pumps while taking clam as well as referencing the Section 29.05(e) for the definition of hydraulic pumps. The prohibition against using such pumps to take clams is the heart of this proposal and is necessary to outlaw a practice that is creating both enforcement difficulties as well as conservation concerns.

Amend Section 29.20(d) Prohibiting Bag-Mixing for Clam

The proposal would prohibit multiple recreational clammers from mixing their catch. This is necessary to ensure the integrity of the bag limit. During the sudden proliferation of hydraulic gear, Department staff observed individuals who were not participating in clamming but obtained clams from individuals who operated the hydraulic pumps. This is against the rule on individual take limits (Section 1.59). By mixing take, wildlife officers cannot attribute a clam to a specific individual, and thus cannot hold a person responsible if they take more than the daily individual limit for clam (Sections 29.25-29.45).

Amend Section 29.20 Authority and Reference

The proposal would remove FGC sections 219 and 399 as statutory authorities. This is necessary to ensure that the correct authorities are cited. FGC section 219 provides the Commission with the authority to adoption emergency regulations. However, since this proposal would make the emergency regulations at issue permanent by initiating a Certificate of Compliance standard rulemaking, the authority for adopting emergency
regulations would no longer apply. FGC section 399 includes mention of findings that the Commission must make for an emergency action; this section was added as an authority through the initial emergency action. This certificate of compliance process aims to make the proposed changes permanent. As such, citing these sections as statutory authorities is not necessary.

**Amend Section 29.80(h) Prohibiting Hydraulic While Taking Shrimp and Sand Crab**

The proposal would also add a prohibition similar to that of the amendment to Section 29.20(c) by prohibiting the use of hydraulic pumps while taking crustaceans as well as referencing the new addition to Section 29.05 (e). This is necessary to ensure that individuals with malintent would not use crustacean fishing as pretense to take hydraulic pumps near the water.

**Amend Section 29.80 Authority and Reference**

The proposal would remove FGC sections 270 and 399 as statutory authorities. This is necessary to ensure that the correct authorities are cited. FGC section 270 prescribes the effective date and period of the recreational regulations that the Commission adopts but does not provide additional statutory authorities to the Commission. FGC section 399 includes mention of findings that the Commission must make for an emergency action; this section was added as an authority through the initial emergency action. As such, citing the sections as statutory authorities is not necessary.

(b) Goals and Benefits of the Regulation

The policy of this state is “to ensure the conservation, sustainable use, and, where feasible, restoration of California’s marine living resources for the benefit of all the citizens of the State” (Fish and Game Code section 7050(b)). The proposed regulation would make standard a prohibition against hydraulic gear for clamming, which is expected to help reduce pressure on clam stocks by overfishing, illegal commercialization, as well as potentially habitat degradation.

(c) Authority and Reference Sections from Fish and Game Code for Regulation

Section 29.05, title 14, CCR:

**Authority:** Sections 200, 205, and 265 Fish and Game Code.

**Reference:** Sections 200, 205, 255, and 265, Fish and Game Code.

Section 29.20, title 14, CCR:

**Authority cited:** Sections 200, 205, 265, and 275, Fish and Game Code.

**Reference:** Sections 200, 205, 255, 265, 270, and 275, Fish and Game Code.

Section 29.80, title 14, CCR:

**Authority cited:** Sections 200, 205, 265, 275, 7075, and 7078, Fish and Game Code.
Reference: Sections 200, 205, 265, 270, 275, 7050, 7055, and 7056, Fish and Game Code.

(d) Specific Technology or Equipment Required by Regulatory Change

None

(e) Identification of Reports or Documents Supporting Regulation Change


(f) Identification of Reports or Documents Providing Background Information


(g) Public Discussions of Proposed Regulations Prior to Notice Publication

The issue was raised and discussed at the February 2021 Commission meeting. Department staff has also conducted various surveys at Tomales Bay and Bodega Bay in June and July 2021, during which staff discussed the rationale behind the prohibition and solicited the public’s opinions. The plan was also presented to the Commission’s Marine Resources Committee on November 9, 2021.

IV. Description of Reasonable Alternatives to Regulatory Action

(a) Alternatives to Regulation Change

Allow hydraulic pumps, with the possibility of lower bag limits. This alternative would attempt to protect clam populations by reducing the number of clams each participant is permitted to harvest per day, to compensate for the increased ease and speed of harvest, and increased time available to harvest. This alternative would not address concerns that hydraulic pumps are facilitating the illegal commercialization of gaper clams but could include the requirement to keep separate bag limits, which could ease enforcement of take regulations for clams. Recreational clammers surveyed in summer 2021 preferred hydraulic pumps remained prohibited compared to this alternative.

(b) No Change Alternative

Without any change, the existing emergency rule will expire in 2022. Hydraulic pumps will be allowed again along with risk to the clam stock and illegal commercialization.

V. Mitigation Measures Required by Regulatory Action
The proposed regulatory action will have no negative impact on the environment; therefore, no mitigation measures needed.

VI. 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 initial determinations relative to the required statutory categories have been made:

(a) Significant Statewide Adverse Economic Impact Directly Affecting Businesses, Including the Ability of California Businesses to Compete with Businesses in Other States

The proposed action will not have a significant statewide adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states. The proposal includes relatively minor changes to the fishery: the prohibition of a new gear which has only come into popularity within the past five years, and a requirement to keep bag limits separated. There may be a slight negative impact on shops which sold or rented hydraulic pump gear for clamming.

(b) Impact on the Creation or Elimination of Jobs Within the State, the Creation of New Businesses or the Elimination of Existing Businesses, or the Expansion of Businesses in California; Benefits of the Regulation to the Health and Welfare of California Residents, Worker Safety, and the State’s Environment

The Commission anticipates no impacts on the creation or elimination of jobs within the state; no impact on the creation of new businesses or the elimination of existing businesses; generalized benefits to the health and welfare of California residents; no effects on worker safety; and benefits to the state’s environment. A sustainable clam fishery supports tackle shops, hotels, campgrounds, and other businesses that cater to fishery participants. This action protects clam stocks and the fishery which support those businesses.

(c) Cost Impacts on a Representative Private Person or Business

The Commission is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

(d) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State

No change in administration or enforcement costs are anticipated by the Department or other state agencies. Consideration was given to keep administrative and enforcement costs within existing budgets. No impact in federal funding to the State is anticipated.

(e) Nondiscretionary Costs/Savings to Local Agencies

None. The proposed action has been designed to ensure that there are no nondiscretionary cost impacts to local law enforcement or emergency response services.
(f) Programs Mandated on Local Agencies or School Districts

None.

(g) 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.

(h) Effect on Housing Costs

None.

VII. Economic Impact Assessment

(a) Effects of the Regulation on the Creation or Elimination of Jobs Within the State

The Commission anticipates no impacts on the creation or elimination of jobs within the state because any retail sales or rentals of the equipment proposed to be prohibited constituted a very small part of existing job-supporting business activity.

(b) Effects of the Regulation on the Creation of New Businesses or the Elimination of Existing Businesses Within the State

The Commission anticipates no impacts on the creation of new businesses or the elimination of existing businesses within the state because any retail sales or rentals of the equipment proposed to be prohibited constituted a very small part of existing business activity.

(c) Effects of the Regulation on the Expansion of Businesses Currently Doing Business Within the State

The Commission anticipates no impacts on the expansion of businesses currently doing business within the state because the proposed prohibition of the specified equipment would not stimulate the expansion of businesses.

(d) Benefits of the Regulation to the Health and Welfare of California Residents

The Commission anticipates no direct benefits to the health and welfare of California residents. Benefits of the Regulation to Worker Safety

(e) Benefits of the Regulation to Worker Safety

The Commission anticipates no impacts on the worker safety because the proposed action does not have any bearing on working conditions.

(f) Benefits of the Regulation to the State’s Environment

The Commission anticipates benefits to the State’s environment by contributing to the sustainability of clam populations and related ecosystems.
The Fish and Game Commission (Commission) and the Department of Fish and Wildlife (Department) are proposing to amend Sections 29.05, 29.20 & 29.80 of Title 14, California Code of Regulations (CCR). The proposal is necessary to protect clam stocks from the detrimental effects of hydraulic pumps, 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:

- Increased illegal commercialization of gaper clams facilitated by hydraulic pumps.
- Increased bag-limit overage and high grading of clams
- Use of hand-operated 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.
- 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 have likely caused 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 Sections 29.05 and 29.20 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 prohibit the possession of hydraulic pumps within 100 yards of where marine invertebrates could be harvested and prohibit the possession of hydraulic pumps concurrently with any crab, and require each person to keep clams they had harvested in a separate container from clams harvested by others. The proposed rule would amend Section 29.80 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. The proposal also clarifies the authority and reference portions of the three regulatory sections, which do not carry any substantive regulatory effect.
Benefits of the Regulations

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.

Consistency and Compatibility with Existing Regulations

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