STATE OF CALIFORNIA  
FISH AND GAME COMMISSION  
INITIAL STATEMENT OF REASONS FOR REGULATORY ACTION  
(Pre-publication of Notice Statement)

Amend Sections 120.7 and 705  
Title 14, California Code of Regulations  
Re: Taking of Sea Urchin for Commercial Purposes, and  
Commercial Fishing Applications, Permits, Tags and Fees

I. Date of Initial Statement of Reasons (ISOR): July 11, 2017

II. Dates and Locations of Scheduled Hearings:

(a) Notice Hearing: Date: August 16, 2017  
Location: Sacramento

(b) Discussion Hearing: Date: October 12, 2017  
Location: Atascadero

(c) Adoption Hearing: Date: December 7, 2017  
Location: San Diego

III. Description of Regulatory Action:

(a) Statement of Specific Purpose of Regulation Change and Factual Basis for Determining that Regulation Change is Reasonably Necessary:

Section 9054 of the Fish and Game Code authorizes the Fish and Game Commission (Commission) to set the conditions for issuing commercial sea urchin diving permits to prevent overutilization of the sea urchin resource and to ensure that the fishery is efficient and economic on both a state-wide basis and in specific geographic areas. Data collected by the Department of Fish and Wildlife (Department) from fishing reports submitted by sea urchin divers indicates that the potential for overharvesting is a major issue in the fishery. It is necessary that the Commission consider a reduction in the number of divers permitted to take sea urchin in order to ensure a stable population and harvest in future years.

(1) Delete the Submission Requirement for 2008 in subsection (c)(2)

The provision in subsection (c)(2) specifies that for 2008 (only) applications for renewal of sea urchin diving permits shall be received by the Department or, if mailed, postmarked no later than June 30. After 2009, this was no longer in effect and is therefore deleted.
Diver Capacity Reduction, Amend subsection (d)

Present Regulations

The Commission regulation in subsection (d) currently limits the number of annual sea urchin diving permits to 300. All qualified prior sea urchin diving permittees shall be eligible to receive diving permits regardless of the number issued. Any permit that is not renewed is retired. If the total number of renewed permits is less than 300, new permits will be issued to applicants up until the 300-permit cap is filled. Individuals can apply for a sea urchin diving permit only if they have held a valid sea urchin crewmember permit in the two preceding years.

Proposed Regulations

The proposed change to subsection (d) would reduce the capacity level of sea urchin diving permits from the current level of 300 to 150 gradually over a period of several years. The proposed change in subsection (d)(3) specifies that while the number of diving permits issued to prior permittees is greater than 150, only one new sea urchin diving permit shall be available for every 11 permits that are retired pursuant to Fish and Game Code subsection 7852.2(c). Thereafter, the permits will be replaced 1:1 but never over 150 total.

Rationale

Both the sea urchin industry and the Department have been considering revisiting the current capacity goal of the fishery for many years. The fishery has high latent harvest potential from non-active sea urchin permit holders, which has been more evident during recent decades. In addition, the resource has been subject to an increasing effort compression because harvest areas are more limited due to marine protected areas (MPA) and environmental conditions have been persistently poor in recent years. Recent landings in both the northern and southern regions of the fishery are dramatically lower from yearly averages. Commercial divers have been expressing to the Department for many years that quality sea urchin are increasingly more difficult to find, which is further supported by a lower catch per unit effort in the landings data.

The potential for overharvesting due to latent effort is a major issue in the sea urchin fishery. During the years of 2007-2016, when the number of sea urchin permits was near 300 permits, 97-100 percent of the landings were made by 150 divers (Figure 1). During that same period, 92-98 percent of the landings were made by 125 divers and 84-93 percent of the landings were made by only 100 divers. A significant portion of the fishery has not been contributing to the total landings, and this latent capacity should be reduced to protect the industry and resource in the event of sudden shocks, such as a spike in market demand and an associated increase in fishing effort.
The percent of total landings taken by three levels of sea urchin divers (100, 125, and 150) from 2007-2016, a period when the number of permits was near or at 300 sea urchin permits.

The impact of divers is also concerning to the fishery. Divers are finding it more difficult to sustainably harvest sea urchins due to increased concentration of divers in smaller harvest zones. This in part can be attributed to the establishment of statewide MPAs, most of which were created after 1994 when the sea urchin industry instituted the 300-permit capacity goal. The MPAs have excluded divers from historically prime sea urchin grounds in terms of poundage and quality. Three reports written for the California Marine Life Protection Act Initiative (Ecotrust 2008, 2010, and 2011) estimates that MPA reduction of total commercial sea urchin fishing grounds by percent of area, by port, to be the following: South Coast, 2.0-19.3 percent for six ports; North Central Coast, 8.4-29.9 percent for four ports; and North Coast 8.2 percent for two ports. Recent military closures at San Clemente and San Nicolas islands further compressed the fishing ground by acting as reserves much of the year. As a result, the production and roe quality from many reefs have dropped substantially from the excessive harvest pressure.

Changing environmental conditions have significantly reduced the statewide abundance of bull kelp (*Nereocystis luetkeana*) and giant kelp (*Macrocystis pyrifera*), the main food sources for red sea urchin. The sea urchin fishery is based on quality of the product where only animals with gonads, known as “uni”, of specific size and taste are marketable, and this quality is directly correlated to food availability. Increased water temperature caused by the 2016 El Niño and
warm water ‘blob’ has reduced the bull kelp beds in northern California by 93 percent from previous years and greatly reduced the giant kelp beds in southern California. Without enough food and desirable habitat, many red sea urchins have become unmarketable.

The purple sea urchin explosion in northern California has further stressed the red sea urchin fishery. This event, in conjunction with the other factors mentioned has been described by the Department as the “Perfect Storm” in the March 2016 issue of CDFW Marine Management News. The explosion of purple sea urchin, a smaller and much less desirable sea urchin, is out-competing red sea urchin for food and suitable habitat typically used for red sea urchin larval settlement. As a consequence, the number of red sea urchin with quality roe in traditionally fished depths has greatly decreased, forcing divers to harvest in deeper waters to find harvestable red sea urchin, further stressing the resource, diminishing productivity, and creating more diver related safety concerns.

Another concern that has yet to manifest itself is the potential range expansion of the sea otter south of Point Conception and north of Monterey Bay. Divers are concerned that a range expansion to the north or south would have a high impact on the fishery, which has been observed at San Nicolas Island where divers believe the densities of commercially valuable invertebrate species has already seen a decline.

The statewide red sea urchin landings in 2016 dropped to a new low of 5.3 million pounds, something not seen since the 1970s when the fishery was in its beginnings. Northern California only accounted for 548,000 pounds in 2016, which is only 20 percent of the ten-year average of 2.7 million pounds. Southern California landings were only 56 percent of the ten-year average of about 8.4 million pounds. At the same time, the weight in pounds of sea urchin landed per fish receipt, used as a proxy of catch per unit effort (CPUE) also appears to be declining (Figure 2). While the proxy may not be a perfect representation due to potentially confounding factors (e.g. divers picking for quantity vs. quality, and efficiency of individual divers), the downward trend arguably warrants further attention.

Reducing the number of sea urchin diving permits by 50 percent should improve the chances of maintaining a sustainable fishery in the event of an unforeseen increase in market demand or other economic shocks that would cause the latent divers to re-enter the fishery. However, permit reduction to 150 does not guarantee the resource will not be overfished. A 2015 Department examination of the total revenue in relation to the number of permittees from a period of stability (2009-2013) shows that the per-diver marginal revenue is at its highest when only the 99 most productive fishermen are accounted for (Figure 3). This conclusion is based on various assumptions that may require further refinement, but it does suggest potential economic benefit for a lower capacity goal. The industry presently believes that a capacity goal of 150 permits is a reasonable compromise between the optimal theoretical goal of 99 permits and
the current capacity goal of 300 permits. Over time, a responsible capacity
should align the number of divers with the size of the harvesting grounds and
ensure a sustainable fishery in the years ahead.

Figure 2. Catch per unit effort (pounds landed per landing receipt) for
northern and southern areas of the California sea urchin fishery since
1998.

Figure 3. Optimal number of sea urchin divers based on ex-vessel revenues
(paid to the diver) from 2009-2013 landings, a period of stability in the fishery.
This approach selects the number of divers at peak economic efficiency, 99
permits, representing the optimal point. After that, there is a less than 1
percent increase for each added permit. The law of diminishing returns, after
the 99 point, while holding all others constant, will yield diminishing returns.

The California Sea Urchin Commission (CSUC) has taken the initiative to
conduct self-funded and fisherman-based studies of the sea urchin resource.
The CSUC has been collecting data by underwriting an independent study by the University of California Santa Barbara to analyze recruitment of red and purple urchins since 1991, which has been an effective and useful method for monitoring sea urchin recruitment. Some divers on their own initiative collect abundance data prior to harvest so they can measure resource trends. The 150 permit capacity goal is arguably the most cost-effective and feasible alternative to maintain a sustainable fishery. This option would ultimately better align with the available management funding than other alternatives (e.g. Total Allowable Catch, additional seasonal closures), which require more funding to implement.

At the October 8, 2014, Commission meeting in Mt. Shasta, testimony was given by a processor representing six other processors opposing the need to reduce capacity. In support of their position, the processors relied on a 2010 Maximum Sustainable Yield (MSY) study conducted by the Department, which indicated that the harvest level in southern California was lower than the MSY at that time. The processors argued that a capacity reduction was unwarranted since the fishery was not able to meet the stock’s MSY even with 300 active permittees.

However, it is important to note that the 2010 Department study was made before additional MPAs were established in 2012. In addition, the model used for the analysis (McCall 2009) may not be suitable to inform current management needs in that it does not consider the impact of environmental conditions on gonad quality and the divers’ decisions to harvest urchins. Given the declining status of the fishery at its current state, this MSY analysis is most likely not appropriate for the current status of the fishery.

The Department subsequently requested that the CSUC invite the processors to a special meeting to discuss their differences and seek a compromise. On November 21, 2014 the CSUC Board of Directors and seven of the largest sea urchin processors representing 95 percent of the urchins marketed in California met to discuss their differences. At that meeting, a capacity goal of 225 sea urchin divers was offered as a compromise to the processors; however, no follow-through materialized. Since then, a few processors have expressed support for the currently proposed 150 permit capacity goal. On July 13, 2015, the CSUC sent a letter to the Commission requesting to re-initiate a regulatory change despite not having the full support of the processing sector for the proposed revised capacity level.

Most sea urchin divers support achieving capacity reduction in the fishery. In 2012, the CSUC conducted a referendum of all current sea urchin diving permit holders. In total, 142 sea urchin divers representing a wide range of experience, age, and geographic areas participated in the survey. These divers overwhelmingly supported the proposed capacity reduction (81 percent in favor) and reducing capacity by a 10:1 drawing system (79 percent in favor). Ultimately, the industry wishes to continue to be proactive, as it has for the past
decade and a half, by contending that a capacity reduction is the most cost-effective way to ensure sustainability and viability.

(3) Modified-Preference Point Drawing System, subsections (d) – (f)

Present Regulations.

As currently set forth in subsections (d) and (e), the drawing system is based on opportunity with a baseline of 300 permits. The current drawing system gives minimal preference to applicants that have been attempting to obtain a sea urchin permit for many years. Although repeat applicants have more drawing chances, they still have to compete with many more applicants with fewer drawing chances. The CSUC desires a system in which applicants with multiple attempts in the drawing have a higher chance of entering the fishery as a sea urchin diver.

Proposed Regulations

The proposed change in subsection (d) would reduce the permit capacity from 300 to 150 over a period of years. In order to assure some opportunity for new divers to obtain permits, the Department proposes to amend the present drawing application in subsection (e) and add new drawing procedures in (f).

The proposed changes under subsection (e) would specify the application process for participating in the annual drawing. The process is fully automated and fairly distributes available permits to successful applicants. Although the application is limited to one application per qualified individual, the automated process adds in the preference points that have accumulated for each applicant based on their years of participation in the drawing.

The proposed addition of a new subsection (f) specifies the drawing process, assigns the proper number of chances, and randomly selects the successful applicant(s). The new system replaces the current drawing system for retired permits with a new Modified-Preference Point drawing system where the number of available permits would be offered on a 4 to 1 basis. The first four permits would be offered to a Preference Group and the next one permit would be offered to the Random Group. This method would carry over to subsequent years and would continue even when the capacity goal is met. Only one new permit will be made available for every eleven permits that are retired. This will continue until the lower capacity goal of 150 is reached. This method is further demonstrated in Table 1 and shows the milestones in which new permits would be issued based on the permit count after the March 31 renewal deadline.

The distribution of permits to both groups is further described in Table 1.
Table 1. This table explains in simple terms when a new sea urchin permit would be issued and to which group (Preference or Random).

<table>
<thead>
<tr>
<th>Permit Count</th>
<th>289</th>
<th>279</th>
<th>269</th>
<th>259</th>
<th>249</th>
<th>239</th>
<th>229</th>
<th>219</th>
<th>209</th>
<th>199</th>
<th>189</th>
<th>179</th>
<th>169</th>
<th>159</th>
<th>149 or less</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preference Group</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>One new permit issued when one retired</td>
</tr>
<tr>
<td>Random Group</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

New permits issued to Preference or Random groups when the permit count at March 31 renewal deadline is at or below the listed permit count. This group ratio of four Preference Group to one Random Group continues even when the permit count is 149 or less.

Each applicant would first be assigned a computer-generated random number then sorted from highest to lowest by the total preference points. One preference point would be awarded for each year they have applied for an urchin diving permit since 2006. The first four available permits, regardless of which year they become available, would be offered to the applicants with the highest number of preference points. The assigned random number would break any tie in preference points if there are fewer permits available than applicants. Any rewarded permit not purchased by the successful applicant would be offered to the next highest applicant in the preference point list. After the first four permits are awarded, the next available permit would be offered to the applicant with the lowest random number. Random numbers would be re-assigned for each year there is a drawing to adjust for added and removed applicants.

Rationale

As of 2016, there are eight applicants that fall under the group with the highest preference points. These eight applicants would be awarded 8 of the 10 first available permits, or earlier if they are chosen within the random draw. Since all applicants are pooled into the Random Group, there would be two independent opportunities for an applicant with a high preference point to obtain a permit. This system still gives applicants with fewer preference points a chance to obtain a sea urchin permit. Only 14 new sea urchin permits will be issued until the new capacity goal of 150 permits is reached. Of these, only two permits will be awarded to the Random Group and 12 would be awarded to the Preference Group. 2006 was chosen as the beginning of the reference period because it accounts for the more recent pool of applicants and the period encompasses a timeframe in which capacity was near 300 sea urchin divers.

The 11:1 ratio for capacity reduction allows a chance of entry for new divers into the fishery while meaningfully decreasing the permit count. This ratio of 11:1 was chosen instead of 10:1 to compensate for the one new permit that is added to the fishery during the reduction process. The newly issued permit would still be used in the total permit count calculation to determine when to give out a new permit, thus simplifying the process.
Amend Subsection 120.7(l), Fishing Season, Add Fishing Days in Southern California

Present Regulations.

Current regulations in subsection (l) allow sea urchins to be harvested seven days a week from November through May and Monday through Thursday from June through October.

Proposed Regulation

The proposed amendment to subsection (l), renumbered to (n), would allow the harvest of sea urchin on any weekday (Monday-Friday) from June-October in southern California south of the Monterey-San Luis Obispo county line. This will add 21 additional days of fishing during the summer season. The CSUC is not proposing to add fishing days north of the Monterey-San Luis Obispo county line because it is not supported by the CSUC and the north coast divers.

Rationale

The current closures for the sea urchin fishery were instituted in 1993 to curb resource depletion and did not account for evolving market dynamics. Long-term market trend of sea urchin roe has since evolved from large-scale international exports to one encompassing significant domestic consumption. A reliable supply of a quality product at a fair price is now essential to maintaining and expanding the market share of California’s urchin gonads. The current June-October harvest schedule of Monday through Thursday is resulting in delayed market replenishment at the beginning of each week. Sea urchins held over for shipments from the previous Thursday also lose some of their freshness and thus quality.

In addition, an increasing number of fishermen are selling sea urchins directly to the end users at local ports. These markets tend to be open during weekends, and are more amenable to products obtained the day before as opposed to ones that have sat in storage for over a day.

The extended weeks are not expected to increase fishing pressure on the red sea urchin resource in total. Most urchin divers do not currently dive for more than 75 percent of his/her available dive days during the restricted season. Making Fridays available to commercial divers would allow them to further exploit the high-end niche market catered to specific restaurants and end consumers. Divers are expected to divert more time and effort into marketing their catch, preserving the products, and interacting with end users. The extended fishing week is also expected to benefit fishermen by giving them more flexibility in selecting dive days with safer water conditions.
The changes in the market require a smaller but steadier supply of urchin roe. The domestic market for California red sea urchin has grown dramatically during the last decade and is continuing to expand, helping to offset the economic damage the fishery suffered with the loss of a substantial portion of its sales to the Japanese market. The U.S. market experiences its highest product demand during the summer months into early fall. By adding one day a week to the current harvesting schedule (June through October), the fishery will be on a more equal footing with the rest of the world. The additional day would also bring an added benefit of giving divers more flexibility to manage their dive schedules.

The reason for renumbering (l) to (n) is to maintain the logbook requirement as set forth in subsection 120.7(m). The Department is currently updating its regulation for the commercial sea cucumber dive fishery, and the pending regulation would cross-reference subsection 120.7(m) for the purpose of establishing its own logbook requirement. Renumbering subsection 120.7(l) would ensure that the logbook requirement remains as subsection 120.7(m) and minimize potential confusion and complication.

(5) **Amend Subsection (m), Sea Urchin Diving Logbook**

**Proposed Change**

The subsection phrase “before the sea urchins are landed” would be deleted.

**Rationale**

The current regulation requires dive logs to be completed and submitted before sea urchins are landed. Since urchins could be landed right as a fishing vessel docks, a fisherman may have to reach the nearest mail box to drop off a dive log before returning immediately back to his or her vessel to land the urchins while the buyer waiting idly at the dock. Furthermore, subsection 190(c) already prescribes a set of condition of when logs must be submitted to the Department. Removing the extra language in subsection 120.7(m), which is not found in the regulations for any other fishery, clarifies the required log requirements.

(6) **Remove Subsection (n)(2), Closed Areas**

**Proposed Change**

The proposed amendment would delete the current subsection (n)(2), which prohibits commercial sea urchin take inside Gerstle Cove, California. Subsection (n) is renumbered (o).

**Rationale**

The subsection restricting commercial sea urchin take is unnecessary, since subsection 632(b)(36) already prohibits all commercial take in Gerstle Cove.
(7) **Amend Subsections (o)(1)-(3); Size Limit**

Proposed Change

The proposed amendment to subsection (o), renumbered (p), and reword subsections (o)(1) & (2) to be more streamlined and compact. It would also remove subsection (o)(3).

Rationale

Subsection (o)(1) prescribes a slot size limit for red sea urchin in southern California and subsection (o)(2) prescribes a similar slot size limit in northern California. Red sea urchins within these respective size ranges cannot be taken. However, both subsections then proceed to provide a 30-urchin per-load allowance for all commercial urchin fishermen. The language can be streamlined by integrating the allowances directly into the prohibitions.

Delete subsection (o)(3) which specifically allows the take of red sea urchins below the slot size limits. This language is moot, since an inclusive slot size limit by definition means that fishermen may take individuals smaller than the limit.

(8) **Amend Subsection (p), Authorization of an Assistant for a Sea Urchin Diver Permittee.**

Proposed Change

The proposed changes would rephrase subsection (p), renumbered (q). The proposed changes would make several minor edits throughout subsection (p), and delete (p)(5), to help improve the clarity of the regulation.

Rationale

The current phrasing of subsection (p)(1) needs clarification. Separating the current requirements into subparagraphs will improve the overall flow of the language.

The current provision in (p)(5) was adopted more than 18 months ago and therefore the term of this provision has lapsed and is deleted for clarity.

(9) **Amend Subsection 705(c)(4), Commercial Fishing Applications, Permits, Tags and Fees: Sea Urchin Diving Permit Drawing Application and Fee.**

Present Regulations.

Current applicants for the sea urchin diving permit drawings are required to fill out a paper application form (FG 1440 (Rev. 1/13)) in order to enter the drawing for a sea urchin diving permit. The application does not incur any cost on the part of the applicant.
Proposed Regulations

The proposed regulation would remove reference to the current drawing application form from the regulations and add a minor administrative fee of $4.38 for future applications for entering the drawing.

Rationale

The new drawing system would be migrated to an online system, making the paper application form obsolete. Any reference to the old application form would be removed. A new application fee is imposed because the Department must expend resources every year in order to track the qualified pool of diving permit applicants. The Department must also review the eligibility of successful applicants when new permits are issued. Under Fish and Game Code Section 710.5(b), it is the legislature’s intent for the Department’s operation to be funded by the fees collected from the users of wildlife resources. The calculation of the proposed fee is provided for in Attachment 1 of this ISOR.

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

Authority: Sections 713, 1050, 9054 and 9055, Fish and Game Code.
Reference: Sections 713, 1050, 7850, 7852.2, 7857, 9054 and 9055, Fish and Game Code.

(c) Specific Technology or Equipment Required by Regulatory Change: None

(d) Identification of Reports or Documents Supporting Regulation Change:

1. Ecotrust, Report to the Marine Life Protection Act Initiative: Commercial and recreational fishing grounds and their relative importance off the North Central Coast of California, 2008; South Coast of California, 2010 and North Coast of California, 2011.
2. 2010 CDFW Urchin MSY Power Point Presentation
3. Attachment 1: Item Fee Calculation & Cost Recovery Sheet for Sea Urchin Diving Permit Drawing

(e) Public Discussions of Proposed Regulations Prior to Notice Publication:

1. October 8, 2014 Commission Meeting
2. November 21, 2014 California Sea Urchin Commission Meeting
3. October 7, 2015 Commission Meeting
4. April 28, 2017 Oxnard Port Meeting

IV. Description of Reasonable Alternatives to Regulatory Action:

(a) Alternatives to Regulation Change:
Total Allowable Catch in place of a Capacity Reduction

A Total Allowable Catch (TAC) could be used to limit the amount of sea urchin harvested per year by quota in lieu of reducing the number of sea urchin divers. The TAC allotment could be based on historical catch, maximum sustainable yield, stock assessments, and/or model simulations. It would take in account the potential latent effort from inactive sea urchin divers, which is currently about 50 percent of the permits. Given the fact that 150 divers could still potentially overharvest the resource of sea urchin, a TAC would limit the amount of poundage harvested based a sustainable estimation of take and could be adjusted based on the status of the fishery each year or as needed.

Harvest restrictions such as a TAC would prove to be very expensive and cumbersome for the Department to carry out and operate because it depends on staff to track the fishery in real time in order to shut down the fishery when the quota is filled. Similarly, an Individual Fishery Quota, which limits harvest per fisherman, would be just as expensive and cumbersome to enforce and track.

TAC fisheries invariably lead to a rush for the fish, resulting in an increase in competition in a shorter amount of time. Divers would inevitably be taking more chances to get their share of the catch by diving longer and deeper, or going out in inclement weather. This type of fishery could also be very impactful to the economic viability of the active sea urchin divers, limiting them on when they can make their landings thus making it more difficult to compete with worldwide markets.

For the reasons stated above, a TAC is rejected as an alternative to capacity reduction for this fishery.

(b) No Change Alternative:

The no change alternative would keep the existing regulations in place. Currently, the number of annual renewed permits cannot exceed 300, if less than 300, replacement permits would be issued on a one-for-one basis. With the high average age and high latency of the current permit holders, the fishery contains significant latent effort. As older, less active fishermen retire, they will gradually be replaced by younger, more active ones. Such increase in fishing effort can potentially create shocks to both the red sea urchin population and the sea urchin fishery.

Under a no change alternative, the open season June - October would remain at four days per week. Urchin fishermen in California will continue to face a market handicap against other urchin fisheries, which can provide the market with fresh urchin every day of the week. In addition, consumers in California who buy urchins from local fish markets, which tend to occur on Saturdays, would not be able to access the freshest possible urchin.
(c) Consideration of Alternatives:

In view of information currently possessed, no reasonable alternative considered would be more effective in carrying out the purpose for which the regulation is proposed, would be as effective and less burdensome to affected private persons than the proposed regulation, or would be more cost effective to affected private persons and equally effective in implementing the statutory policy or other provision of law.

V. Mitigation Measures Required by Regulatory Action:

The proposed regulatory action will have no negative impact on the environment; therefore, no mitigation measures are needed.

VI. Impact of Regulatory Action:

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action have 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 because the proposed action will not increase costs or reduce harvest quotas. The gradual reduction in the number of permits issued to 150 will accommodate the 125 average number of active urchin divers. Over time, a reduction in permits issued should align the number of divers with the size of the harvesting grounds, increase the average catch per unit of effort and ensure the long-run sustainability of the fishery.

The addition of one more day per week of fishing during the months of June through October is anticipated to enable sea urchin divers more flexibility to harvest and bring fresh product to market at peak demand. This change should assist California sea urchin businesses in remaining competitive.

(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:
No impacts on the creation or elimination of jobs within the state, the creation of new businesses or the elimination of existing businesses are anticipated because the proposed action will not increase costs or reduce harvest quotas.

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

The agency 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:

The Department may experience a reduction in permit sales revenue with the gradual decline in the number of permits issued from the current 300 to 150 over time. Permits are $461 per diver annually. If some of the sea urchin diving permittees choose not to renew at a rate of five percent each year, and an estimated 80 applicants enter the annual draw for a new permit, the Department could have revenue losses of about $6,575 in the current year and an estimated $6,229 - $5,901 in the next two fiscal years.

Table 2. Estimated Revenue Impact to the State

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Inactive Permits Retained</th>
<th>10% Permits Retired</th>
<th>Department Fee Revenue Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018/19</td>
<td>150</td>
<td>15</td>
<td>$ 6,915</td>
</tr>
<tr>
<td>2019/20</td>
<td>135</td>
<td>14</td>
<td>$ 6,224</td>
</tr>
<tr>
<td>2020/21</td>
<td>122</td>
<td>12</td>
<td>$ 5,601</td>
</tr>
</tbody>
</table>

No change to federal funding to the State is anticipated.

(e) Nondiscretionary Costs/Savings to Local Agencies: None.

(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:

The sea urchin industry has expressed concern about possible excess capacity in the fishery that may result in overutilization or interfere with efficient and economic operation of the fishery. The proposed regulatory action is intended to reduce the number of permits sold to prevent overutilization and to ensure the
efficient and economic operation of the fishery. A 2015 Department study found that the per-diver marginal revenue is the highest when only 99 of the most active fishermen are counted suggesting the potential economic benefit of fewer fishery participants. The industry has agreed with the capacity goal of 150 permits from the current 300 permits.

The addition of one more day per week of fishing during the months of June through October is anticipated to enable sea urchin divers more flexibility to harvest and bring fresh product to market at peak demand. This change should assist California sea urchin businesses in remaining competitive.

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

No impacts on the creation or elimination of jobs within the state are anticipated because the proposed action will not increase costs or reduce harvest quotas. These actions are intended to align the number of permits issued, which should increase the average catch per unit of effort and ensure the long-run sustainability of the fishery.

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

No impacts on the creation of new businesses or the elimination of existing businesses are anticipated because the proposed action will not increase costs or reduce harvest quotas. These actions are intended to align the number of permits issued, which should increase the average catch per unit of effort and ensure the long-run sustainability of the fishery.

(c) Effects of the Regulation on the Expansion of Businesses Currently Doing Business Within the State: None.

(d) Benefits of the Regulation to the Health and Welfare of California Residents: None.

(e) Benefits of the Regulation to Worker Safety:

The addition of another weekday during June through October will give sea urchin divers greater flexibility in working around dangerous ocean conditions, and military training activities, thus providing greater safety to the divers.

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

The proposed capacity reduction actions are anticipated to be the most cost-effective way to ensure sustainability and viability of the red sea
urchin fishery.

(g) Other Benefits of the Regulation: None.
Currently, subsection 120.7(d), Title 14 of the California Code of Regulations (CCR) sets the total number of sea urchin diving permits at 300. Subsection 120.7(e) further prescribes a random drawing system for distributing new permits as they become available. Under the current system, applicants who have held a sea urchin crewmember permit for more than two years would have his/her name entered into the draw one additional time for each additional year he/she has held such permit. However, this advantage is very small in practice due to a maximum cap of five times that a name may be entered into a draw.

Currently Section 750(c)(4) requires no fee for the random drawing application.

SUMMARY OF THE PROPOSED AMENDMENTS

The proposed amendments to subsection (d) would decrease the sea urchin fishery’s capacity goal to 150 permittees. This capacity goal will be achieved by issuing one new permit only once 11 permits have been retired. This ratio was chosen to simplify the calculation in which new permits would be issued, taking in account the new permit that is added to the fishery.

The lottery system proposed in subsection (e) and (f) will ensure that the most qualified applicants would enjoy a realistic advantage over less-qualified applicants. Under the new system, most of the new permits would be given to applicants with the most experience in the fishery as crewmembers. The remaining percentage of the new permits would be distributed under a drawing system where every remaining applicant stands the same chance.

The proposed amendment to Section 750(c)(4) would remove reference to the current drawing application form and add a minor administrative fee of $4.38 for future applications to enter the drawing.

Other amendments to Section 120.7 include:

- Add one extra fishing day per week in the months of June to October in Southern California.
- Clarify the requirements for authorization of an assistant for a sea urchin diver permittee.
- Remove language that no longer has any effect and clarify other regulatory text.

BENEFITS OF THE PROPOSED REGULATIONS

The proposed amendments would significantly decrease the latent fishing capacity within the current sea urchin fishery due to a large number of unused permits. The
changes would also strike a better balance for the future succession of the fishery by ensuring that the most qualified candidates would receive sea urchin diving permits in due course. At the same time, those who may not be as qualified but nonetheless are still willing and able would still have a chance of receiving one of these permits.

The additional dive days during the summer and fall months would allow divers to dive on days with the safest weather condition. The additional days would also help the industry meet the demand of Saturday dock markets and weekend demand. The added harvesting pressure is anticipated to be minimal, but the quality will be greatly enhanced to the consuming public.

CONSISTENCY WITH STATE REGULATIONS

The proposed regulations are neither inconsistent nor incompatible with existing State regulations. Commission staff has searched the California Code of Regulations and statutes and has found no other State regulations related to take of sea urchin for commercial purposes and no other State agency with authority to promulgate regulations concerning take of sea urchin for commercial purposes.