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

Amend Section 29.15
Title 14, California Code of Regulations
Re: Abalone

I. Date of Revised Initial Statement of Reasons: August 5, 2011

II. Dates and Locations of Scheduled Hearings:

(a) Notice Hearing: Date: August 3, 2011
    Location: Sacramento, California

(b) Discussion Hearing: Date: September 15, 2011
    Location: Redding, California

(c) Adoption Hearing: Date: October 19-20, 2011
    Location: Monterey, California

III. Description of Regulatory Action:

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

Present Regulations
Under existing law, red abalone (abalone) may be taken for recreational purposes
with a sport fishing license and an abalone report card subject to regulations
prescribed by the Fish and Game Commission (Commission). Current regulations
specify season, size limit, bag and possession limit, annual limit, closed fishing
areas, and hours and methods of take for abalone. The proposed regulation
change would amend Title 14, California Code of Regulations (CCR),
Section 29.15 beginning with the 2012 fishing season, which opens April 1.

Proposed Regulations
The regulation change is being proposed in response to the guidelines in the
Abalone Recovery and Management Plan (ARMP), adopted by the Commission in
2005, with regard to average abalone density at eight index sites (surveyed on a
three year cycle) within Mendocino and Sonoma counties. In addition, one
regulatory option addresses an enforcement issue arising when more than one
person places untagged abalone in the same container. Observations by
Department of Fish and Game (Department) wardens and data analyses by
biologists were considered in proposing the regulation changes. Recent scuba
surveys indicate that the average density of emergent abalone (sublegal and legal sized) has trended downward over the past six years (Figure 1). Average density is now at 0.54 abalone/m² for the index sites which is substantially below the 0.68/m² average from the previous three years (Figure 1). Abalone creel surveys based on interviews with fishermen have recently shown indications of declining abalone populations. Wardens have also observed fishermen experiencing increased difficulty in catching limits of abalone. Low average densities and declining trends indicate a risk that leaving regulations unchanged could result in further reductions in average density, to values below the ARMP trigger level of 0.50 abalone/m², a density level that requires a 25 percent reduction in the total allowable catch (TAC) for the fishery. Department biologists have just completed the second three year survey cycle and reducing the catch now would be prudent since there is evidence more abalone are being taken than are being replaced through reproduction. Abalone densities could be substantially reduced before the next survey cycle is completed if no regulations are changed. Considering survey uncertainty, there is a 36 percent statistical probability that the true density is already below the trigger level. Abalone fishing effort, as well as catch, in the Fort Ross area is much higher than other sites and abalone densities there are approaching levels which would trigger closure for the site. Consequently, the Department is proposing regulations which will reduce the catch in the hopes that further reductions in average density and the closure of Fort Ross can be prevented.

For public notice purposes and to facilitate Commission discussion, the Department is proposing four regulatory options. The first three options are distinguished by the degree to which the catch could be reduced under each approach. Two of the three catch reduction options could achieve between a three percent and a 28 percent reduction in catch. The third option is estimated to reduce the catch by less than 10 percent and is designed to work with one of the other two options to provide additional protection for abalone populations in the Fort Ross area. The fourth option simplifies enforcement of daily bag limits by requiring each person storing untagged abalone in a container to possess his own container and to retain abalone only in that container. Only after all abalone are properly tagged, may they be commingled with other abalone taken by another person.

Option 1: Early Morning Closure (up to 28 percent catch reduction)
Current regulations allow for fishing to start one-half hour before sunrise. The proposed regulation would shorten the fishing day by prohibiting the take of abalone prior to 8:00 AM local time during the entire season. It is estimated that this regulation could reduce the catch by up to 28 percent based on examining time of catch data from the 2009 abalone report cards. However, this estimated catch reduction is contingent on variables like time of low tide and abalone shorepicker (defined as fishermen who do not use fins while taking abalone) behavior. While most minus tides occur in the early morning hours in the spring and a high percentage of abalone are taken in the spring, shorepickers may adjust their
behavior to take abalone later in the day when tides are still low but occur after 8:00 AM. Because it is not possible to precisely forecast this potential change in behavior, the estimate of 28 percent is an upper bound, and the actual effect could be somewhat less.

Pros:
- Is risk adverse, because it explicitly addresses the 36 percent probability that the actual density for the eight index sites may be below the 0.50 abalone/m² threshold for management action that is set forth in the ARMP.
- Reduces take by the segment of the abalone fishing public showing rapid growth in recent years and impacts intertidal abalone populations especially sub-legal abalone.
- Provides a uniform start time throughout the season which would eliminate the confusion caused by the current start time (one half hour before sunrise) which changes continuously during the season.
- May reduce the incidental mortality of sub-legal abalone in intertidal areas due to less fishing effort by shorepickers.
- Divers may not be impacted as greatly because they do not require minus tides (common during early morning hours) to access abalone.

Cons:
- There is a 64 percent probability that the actual density for the eight index sites is above the 0.50 abalone/m² threshold for management action in the ARMP.
- Will impact shorepickers to a greater degree than divers since shorepickers fish during low tides which occur frequently in the early morning hours during the first part of the season.
- Effectiveness of regulation will be less than projected if substantial fishing effort is shifted to later hours or if shorepickers behave more like divers and take abalone from deeper water.
- Since divers and shorepickers can legally enter the water or be in the intertidal zone before 8:00 AM it may be difficult for wardens to determine whether abalone take has actually occurred prior to 8:00 AM.

Option 2: Reduce annual limit (up to 25 percent catch reduction)
Based on report card purchases, an annual average of 37,000 fishermen participated in the northern California abalone fishery between 2002 and 2009. Fishermen took an estimated annual average of 268,000 abalone during the same period with take ranging from a low of 235,000 in 2005 to a high of 309,000 in 2007. The fishery-wide daily average take per person is 2.4 abalone, and the average annual take per fisherman is 8.3 abalone, based on 2002-2009 abalone report card data. While the average is less than 12 abalone per person on an annual basis, there are a number of individuals that achieve a much higher annual take and tend to be the more avid fishermen. Reducing the annual limit closer to the
per-person average is expected to lower fishing impacts, and thus improve the reproductive potential of the population. For public notice and discussion purposes, the Department proposes that the Commission select an annual limit within the range of 12-24 abalone.

Pros:
- Is risk adverse, because it explicitly addresses the 36 percent probability that the actual density for the eight index sites may be below the 0.50 abalone/m² threshold for management action that is set forth in the ARMP.
- Reduction in catch is more certain than Option 1 (early morning closure) because an annual limit is a maximum regardless of tides, times, areas, days or weeks.

Cons:
- There is a 64 percent probability that the actual density for the eight index sites is above the 0.50 abalone/m² threshold for management action in the ARMP
- Would affect avid and local fishermen who take more than 12 abalone per year.
- May negatively impact local businesses and the local economy by reducing the overall number of potential abalone fishing trips.

**Option 3: Fort Ross Early Season Area Closure (estimated seven percent catch reduction)**
The ARMP establishes a framework and timeline for long-term management of the northern California abalone resource to begin sometime after 2011. One of the elements of long-term management is the use of management zones to target specific regulations for discrete areas. This option (delay season opening of Fort Ross) is in essence a step towards management by zones or discrete areas. The Fort Ross area has produced by far the highest catches in recent years (Table 1) and has the lowest abalone densities of the eight index survey sites (Figure 2). This is likely an unsustainable combination and catch rates (take per day and take per hour) have consequently been in decline. Shorepickers make up an increasing proportion of abalone pickers and their catch rates have declined more sharply than diver rates between the last two creel surveys, conducted in 2007 and 2009. Shorepickers are most active during minus tides in the spring season. Currently, about 45 percent of the Fort Ross catch occurs during April and May when minus tides are low. This proposed regulation would reduce the season by two months at Fort Ross by closing April and May, with a season opener on June 1. The impact of this regulation on the total northern California abalone catch is estimated at about seven percent.

Pros:
- May not have much net effect on overall fishery-wide revenues because fishermen could go to alternative sites during the closure.
Introduces area management, a tool described in the ARMP, designed to target a specific site for catch reduction while minimizing regulatory impact to other areas.

Reduces chance that abalone density at Fort Ross (currently 0.33/m²) will fall below the ARMP density level of 0.25/m² which would trigger closure of the site.

Reduces the catch at Fort Ross which greatly exceeds other sites and has probably caused this site to have the lowest abalone density of all index sites.

Cons:

- Will likely increase effort at other north coast sites in the early spring
- Creates more complicated regulations and may cause confusion (additive effect with the new MPAs etc.) especially with establishing boundaries for the closure area
- Closes a fishing site that is accessible during rough ocean conditions common in the spring and popular with shorepickers during good early season low tides

**Option 4:** Persons taking and storing abalone in any container prior to tagging them, must possess and use their own separate container.

Wardens experience a difficult task in keeping track of the number of abalone being taken by each person in a group. The task is further complicated when more than one person puts abalone into the same container. The purpose of the regulation is to clearly define each person’s possession of caught abalone prior to tagging them. When using a container or receptacle to store harvested abalone, the person shall place only his own abalone into the container and the abalone shall not be commingled with those taken by someone else. Only after all abalone are properly tagged, may they be commingled with abalone taken by other people.

**Pros:**
- Assists wardens in verifying individual compliance of the abalone daily limit.
- Allows those who want to use a container for their abalone to continue to do so.

**Cons:**
- Individuals will now have to use their own container prior to tagging each abalone.

**Rationale**

Department biologists are concerned that the northern California recreational red abalone fishery may not be sustainable at current levels of take. Major findings for the northern California recreational red abalone fishery are:

(1) *Average density for index sites approaching trigger to reduce catch.*

Surveys at fishery index sites have shown a decline in overall average abalone
densities since 2005 (Figure 1). The average density observed in the most recent dive surveys at the eight ARMP index sites was 0.54 abalone/m² which is close to the ARMP trigger of 0.50 abalone/m² for lowering the TAC (Figure 2) and is substantially below the 0.68/m² average for the previous survey period.

(2) Evidence of Poor Recruitment. Low recruitment rates (below 0.45 abalone/m²) indicated by dive surveys might not be sufficient to sustain abalone populations with current levels of take (Table 2).

(3) Very High Catch at Fort Ross Sites. High catch rates in the Fort Ross area may not be sustainable. Abalone density at Fort Ross (0.33 abalone/m²) is near the ARMP site closure level (0.25 abalone/m²). Recent annual catches have greatly increased in this area and represented 17 to 21 percent of the overall estimated abalone catch in recent years.

During the past six years (two complete surveying cycles) the density declined from being above the sustainable fishery density level (0.66/m²) in the first cycle to being close to the trigger level to reduce the TAC (0.50/m²) in this cycle. This rapid decline in density is alarming and was not foreseen when the ARMP was developed. Thus even though ARMP management is based on the precautionary management principle, due to recent events, building in additional precaution to proactively reduce catch before the trigger is reached may be prudent.

The decline in density is evidence that abalone are being taken faster than they are being replaced by reproduction. The catch rate should be reduced to avoid the likelihood of abalone density falling further. Because there is a three year lag between complete survey cycles, abalone density may be reduced considerably before the next survey cycle is complete at the end of 2013. Proactively reducing the catch will conserve more of the spawning population and the rate of reproduction could be kept at a higher level.

Law enforcement personnel occasionally encounter groups of divers or pickers with their catch mixed together in one bag or container while actively fishing. This situation makes it difficult to determine each individual’s catch and thus who is responsible for a size limit or over limit violation when it occurs. Adding a provision to the regulations that individuals retaining untagged abalone in a container must possess and use only his own container will help alleviate this difficulty in enforcing abalone regulations. People will not be allowed to commingle their abalone with those taken by other people until after all abalone are properly tagged.

Additional Information
Abalone are long lived, slow growing animals that have sporadic successful recruitment. These biological characteristics along with other factors (i.e. disease and predation), make them generally vulnerable to over fishing as has been demonstrated in the collapse of abalone fisheries in southern California and many other parts of the world. Abalone populations are most susceptible at low population densities since they are broadcast spawners and require high densities for successful fertilization. Fertilization success drops off rapidly when males and
females are more than one meter apart. Red abalone reproduction has been shown to be sporadic in northern California as measured using abalone recruitment surveys over the past decade.

Red abalone punctured with an abalone iron during fishing may not survive because abalone have no blood clotting mechanisms; sublegal-sized abalone taken and then put back suffer high incidental mortality rates. The above characteristics coupled with slow growth suggest a precautionary approach to management is warranted for maintaining healthy stocks. Any of the proposed regulation changes is expected to reduce the number of red abalone taken in the recreational fishery and help maintain a sustainable fishery (see report entitled “Abalone Recovery and Management Plan Status Report – Northern California Red abalone Fishery” available on the Department of Fish and Game website at http://www.dfg.ca.gov/marine/armp/index.asp).

Based on report card purchases, an annual average of 37,000 fishermen participated in the northern California abalone fishery between 2002 and 2009. Fishermen took an estimated annual average of 268,000 abalone during the same period with take ranging from a low of 235,000 in 2005 to a high of 309,000 in 2007. The fishery-wide daily average take per person is 2.4 abalone, and the average annual take per fisherman is 8.3 abalone, based on 2002-2009 abalone report card data.

Estimated average annual catch at Fort Ross increased by 51 percent between the periods 2002 - 2006 and 2007 - 2009, from 37,000 to 56,000 abalone per year. In recent years, an estimated 17 to 21 percent of the total abalone catch came from the Fort Ross area. As mentioned earlier, Fort Ross has the lowest abalone density of the eight index sites (0.33 abalone/m²) and is the closest to the site closure trigger of 0.25 abalone/m². While average abalone densities at several of the other index sites have declined (i.e. Salt Point, Caspar, Timber Cove), these sites have not shown the dramatic increase in catch and effort that occurred at Fort Ross. More restrictive regulations may be needed at the Fort Ross site to insure sustainability as abalone are vulnerable to local depletion. Even with the early morning closure or the reduction in the annual limit, the catch at Fort Ross might not be reduced sufficiently to prevent the eventual closure of the site. An estimated 51,000 abalone were taken in the Fort Ross area in 2009. The 25 percent catch reduction likely from proposed regulation change would lower the catch to 38,000 which is still double the catch at Van Damme, the site with the next highest catch in 2009. The catch in the Fort Ross area is so much higher than anywhere else; a 25 percent reduction doesn’t bring the catch down to levels similar to other sites. This high catch rate is probably the cause of the low densities found at Fort Ross in the most recent site dive surveys. Fort Ross needs to be managed cautiously because there is no longer much room for error and further drops in density could put it below the level for site closure.
Figure 1. Average red abalone densities by square meter by index site from 2005 to 2010. Densities have declined at five of eight index sites since 2005.
Figure 2. Recent abalone densities per square meter at the eight index sites and overall mean density. Criteria for 25 percent TAC reduction is indicated by bold line at 0.5 abalone per square meter and the criteria for site closure is indicated by dotted line at 0.25 abalone per square meter.

Table 1. Top Five Abalone Catch Sites (2009 data are preliminary)

<table>
<thead>
<tr>
<th>Site</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fort Ross</td>
<td>62,000</td>
<td>56,000</td>
<td>51,000</td>
</tr>
<tr>
<td>Van Damme</td>
<td>16,000</td>
<td>16,000</td>
<td>19,000</td>
</tr>
<tr>
<td>Moat Creek</td>
<td>12,000</td>
<td>14,000</td>
<td>19,000</td>
</tr>
<tr>
<td>Salt Point</td>
<td>13,000</td>
<td>11,000</td>
<td>12,000</td>
</tr>
<tr>
<td>Sea Ranch</td>
<td>13,000</td>
<td>10,000</td>
<td>12,000</td>
</tr>
<tr>
<td><strong>Total Catch</strong></td>
<td><strong>309,000</strong></td>
<td><strong>265,000</strong></td>
<td><strong>295,000</strong></td>
</tr>
</tbody>
</table>
Table 2. Recruitment Densities 2008-2010 (ab/m²)

<table>
<thead>
<tr>
<th>Site</th>
<th>Total Abalone Density (all depths and sizes)</th>
<th>Recruitment Density (abalone 4 in. to 7 in. length)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Todds Point 2009/10</td>
<td>0.51</td>
<td>0.10</td>
</tr>
<tr>
<td>Caspar Cove 2008</td>
<td>0.43</td>
<td>0.11</td>
</tr>
<tr>
<td>Van Damme 2010</td>
<td>0.80</td>
<td>0.30</td>
</tr>
<tr>
<td>Point Arena 2010</td>
<td>0.81</td>
<td>0.22</td>
</tr>
<tr>
<td>Salt Point 2008</td>
<td>0.39</td>
<td>0.15</td>
</tr>
<tr>
<td>Ocean Cove 2010</td>
<td>0.62</td>
<td>0.23</td>
</tr>
<tr>
<td>Timber Cove 2009</td>
<td>0.43</td>
<td>0.09</td>
</tr>
<tr>
<td>Fort Ross 2009</td>
<td>0.33</td>
<td>0.10</td>
</tr>
<tr>
<td>Overall Average</td>
<td>0.54</td>
<td>0.16</td>
</tr>
</tbody>
</table>

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

Authority: Sections 200, 202, 205, 210, 220, 240, 5521, and 7149.8, Fish and Game Code

Reference: Sections 200, 202, 205, 220, 5521, 7145, and 7149.8, Fish and Game Code

(c) Specific Technology or Equipment Required by Regulatory Change:

None

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


Public Discussions of Proposed Regulations Prior to Notice publication:

June 23, 2010, Folsom, California. Potential abalone sport regulation changes and research results supporting changes were presented and discussed at a scheduled Fish and Game Commission meeting open to the public.

June 28, 2010, Los Alamitos, California. Potential abalone sport regulation changes and research results supporting changes were presented and discussed at a scheduled teleconference call of the Recreational Abalone Advisory Committee meeting open to the public.

October 12, 2010, Santa Barbara, California. Potential abalone sport regulation changes and research results supporting changes were presented and discussed at the California Fish and Game Commission’s Marine Resources Committee meeting.

December 4, 2010, Santa Ana, California. Potential abalone sport regulation changes and research results supporting changes were presented and discussed at a scheduled Recreational Abalone Advisory Committee meeting open to the public.

June 30, 2011, Stockton, California. Potential abalone sport regulation changes and research results supporting changes were presented and discussed at a scheduled Fish and Game Commission meeting open to the public.

August 3, 2011, Sacramento, California. Potential abalone sport regulation changes were discussed at a scheduled Fish and Game Commission meeting open to the public.

IV. Description of Reasonable Alternatives to Regulatory Action:

(a) Alternatives to Regulation Change:

The Department has presented four options for Commission consideration: reduce the fishing hours, reduce the annual limit, reduce the season at a specific site and/or prohibit commingling of untagged abalone.

Alternative regulations were presented by Mendocino Abalone Watch (MAW). The Department’s evaluations of and recommendations regarding MAW’s proposal are included in ISOR Attachment A.
(b) No Change Alternative:

Evidence exists that current levels of take may be unsustainable. If current declining trends in density continue for both the fishery overall and the Fort Ross area, more restrictive regulations, as prescribed in the ARMP, may be necessary.

(c) Consideration of Alternatives:

In view of information currently possessed, no reasonable alternative considered would be more effective in carrying out the purposes for which the regulation is proposed or would be as effective and less burdensome to the affected private persons than the proposed regulation.

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 is difficult to assess because available socio-economic and fishing effort data were not designed to address this question, and therefore assumptions must be made in the analyses that are not amenable to quantitative estimation of statistical uncertainty. In particular, changes in expenditures and fishing effort by abalone fishermen in response to new regulations could be expected to differ depending upon several factors such as distance traveled to fishing grounds and the avidity of the individual fishermen, but these kinds of variables can not be stratified from the available data sets. Consequently, estimates of economic impacts are unavoidably imprecise and possibly biased, and alternative conclusions could be reached under a different set of underlying assumptions. Notwithstanding these limitations, the potential for significant statewide adverse economic impacts that might result from the proposed regulatory actions 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(s) 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, since these activities focus on resources and features unique to the North Coast.

Option 1: Early morning closure
Economic impact: The estimated economic impact for the early morning closure is predicted to fall below the Option 2 economic impact estimate because the economic analysis was based on a predicted reduction in the number of abalone trips. The early morning closure is not expected to reduce the number of trips to the same extent that an annual limit reduction would, because a significant number of shorepickers will be able to adapt to the closure by concentrating effort in the open low tide periods or behaving more like divers, who are not as dependent on early morning low tides to take their abalone.

Option 2: Reduce the annual limit.

Economic impacts: If the Commission elects to reduce the annual limit of abalone from 24 to 12 per year, annual trips and trip expenditures by abalone sport fishermen could decrease, perhaps by as much as 37 percent. This scenario assumes a shortened season for the individual abalone fishermen since their reduced annual limits would be filled sooner. This assumption is based on historic monthly harvest rates and trip activities, which under a reduced annual limit could cause the seven months abalone season to effectively shrink to two-and-a-half months for many fishermen. A 37 percent reduction in activities and trip expenditures could translate into $4.8 million (2009$) in potential direct revenue losses to businesses. In the area affected by these potential direct revenue losses, the economic impact could be about $8.5 million (2009$) in total economic output losses (due to the ripple effect). Since expenditures per trip tend to be higher for people making fewer trips and those people are less affected by a reduced annual limit, these impacts should be considered worst case scenarios.

Option 3: Fort Ross Early Season Closure

Economic impacts: A minor adverse economic impact far below the range of the overall economic impact analysis is anticipated for the regulation change altering the season opening at Fort Ross to June 1. Most abalone fishermen may shift to other areas to the north in response to this option.

Option 4: Individual Container Possession Requirement

Economic impacts: No adverse economic impact is anticipated based on this proposed option.

(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:
If the Commission elects to enact an early morning closure job loss projections are likely to be minimal. Alternatively, if the Commission elects to reduce the annual limit from 24 to 12 abalone, the equivalent of up to 82 jobs may be lost. These job loss projections are all relative to employment levels associated with recreational abalone harvest and business activities calculated from annual averages using data from 2005 through 2009. Trips to Fort Ross are largely day trips and a reduction in such trips is not likely to generate significant economic losses under the Fort Ross early season closure.

(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.

There are no increased costs or new fees, nor new reporting requirements for private persons or businesses in the proposed regulations.

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

Unknown, though some potential loss in recreational abalone report card sales revenue could likely occur.

(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.
Informative Digest/Policy Statement Overview

Under existing regulations (Section 29.15, Title 14, CCR), red abalone may only be taken for recreational purposes north of a line drawn due west magnetic from the center of the mouth of San Francisco Bay. Current regulations also specify: season, hours, daily limits, special gear provisions, measuring devices, abalone report card requirements, and sizes.

The regulation change is being proposed in response to the guidelines in the Abalone Recovery and Management Plan (ARMP), adopted by the Commission in 2005, with regard to average abalone density at eight index sites (surveyed on a three year cycle) within Mendocino and Sonoma counties. Recent scuba surveys indicate that the average density of emergent abalone (sublegal and legal sized) has trended downward over the past six years. Average density is now at 0.54 abalone/m² for the index sites which is substantially below the 0.68/m² average from the previous three years. Abalone creel surveys based on interviews with fishermen have recently shown indications of declining abalone populations. Wardens have also observed fishermen experiencing increased difficulty in catching limits of abalone. Low average densities and declining trends indicate a risk that leaving regulations unchanged could result in further reductions in average density, to values below the ARMP trigger level of 0.50 abalone/m², a density level that requires a 25 percent reduction in the total allowable catch (TAC) for the fishery. Abalone fishing effort, as well as catch, in the Fort Ross area is much higher than other sites and abalone densities there are approaching levels which would trigger closure for the site. Consequently, the Department is proposing regulations which will reduce the catch in the hopes that further reductions in average density and the closure of Fort Ross can be prevented.

The regulatory change will amend the existing regulations by either reducing fishing hours, reducing the annual limit, and/or reducing the season in the Fort Ross area, depending on which option(s) is chosen. The proposed regulation would also require every person using a container to store abalone prior to tagging to possess his own container and to retain abalone only in his own container. The following summarizes the options for regulatory change in Title 14, Section 29.15.

Option 1:
- Change the legal fishing hours to begin at 8:00 AM instead of one-half hour before sunrise

Option 2:
- Reduce the annual limit from 24 abalone per year to no less than 12 abalone per year.

Option 3:
- Reduce the season at Fort Ross area by closing the months of April and May

Option 4:
- Require every person who uses a container to store abalone, prior to tagging, to possess his own container and to retain abalone only in his own container.
PROPOSED REGULATORY CHANGES – TITLE 14, § 29.15

Submitted by Mendocino Abalone Watch, June 2011

Proposal 1:
Current Version:

(a) Geographic Area: Abalone may only be taken north of a line drawn due west magnetic from the center of the mouth of San Francisco Bay. No abalone may be taken, landed, or possessed if landed south of this line.

Proposed change:

(a) Only Red abalone (Haliotis rufescens) may be taken north of a line drawn due west magnetic from the center of the mouth of San Francisco Bay. No abalone of any kind may be taken south of this line.

Response 1: 29.15 (c) addresses the type of abalone that can be taken. Red abalone, (Haliotis rufescens) is already listed. There does not appear to be a need for clarification.

Proposal 2:
Current Version:

(b) Open Season and Hours: Abalone may be taken only during the months of April, May, June, August, September, October and November from one-half hour before sunrise to one-half hour after sunset.

Proposed Change:

(b) Open Season and Hours: Abalone may be taken only during the months of April, May, June, September, October and November from 8 a.m. to 6 p.m.

Response 2: During the later months of the season the time changes. This 6 p.m. closure may allow the take of abalone during darkness which the current regulations prohibit. Department currently has a proposed regulation to allow take of abalone starting at 8 AM in all open areas and/or to delay opening the season until June 1 in an area where the abalone population is at low population density.

Proposal 3:
Current Version:

(c) Bag Limit and Yearly Trip Limit: Three red abalone, Haliotis rufescens, may be taken per day. No more than three abalone may be possessed at any time. No other species of abalone may be taken or possessed. Each person taking abalone shall stop detaching abalone when the limit of three is reached. No person shall take more than 24 abalone during a calendar year.
Proposed Change:

No. 1 Alternative: (c) Two red abalone may be detached per day and no more than four may be possessed at any one time. No person may take more than 12 abalone per year unless they have reached that limit and obtained a second abalone card entitling the taking of 12 additional abalone, to a maximum of 24 abalone during the open season of a calendar year. Lost or mutilated cards or tags are void and cannot be replaced.

No. 2 Alternative: (c) Three red abalone may be detached per day and no more than three may be possessed at any one time. In no event, may a person take more than 24 abalone during the open season of a calendar year. All legal-size abalone that are detached must be retained and each person must stop detaching when that person has detached three legal-size abalone.

Response 3: The Department does not believe that these more restrictive measures are necessary at this time.

Proposal 4:

Current Version:

(d) Minimum Abalone Size: All red abalone must be seven inches or greater measured along the longest shell diameter. All legal size abalone detached must be retained. No undersized abalone may be brought ashore or aboard any boat, placed in any type of receiver, kept on the person, or retained in any person's possession or under his control. Undersize abalone must be replaced immediately to the same surface of the rock from which detached. Abalone brought ashore shall be in such a condition that the size can be determined.

Proposed Change:

(d) Minimum Abalone Size: Seven inches or greater measured along the longest shell diameter. All legal size abalone detached must be retained. No undersized abalone may be brought ashore or aboard any boat, placed in any type of receiver, kept on the person, or retained in any person's possession or under his control except to be replaced immediately to the same surface of the rock from which detached. Abalone brought ashore shall be in such a condition that the size can be determined. High-grading consists of replacement of a legal size abalone in order to find and detach a larger abalone and is prohibited.

Response 4: The existing law is clear and there does not appear to be confusion about the need to clarify the requirement to keep legal sized abalone. Possession in separate container is addressed in a proposed regulation change.

Proposal 5:

Current Version:

(e) Special Gear Provisions: The use of SCUBA gear or surface supplied air to take abalone is prohibited. Abalone may not be taken or possessed aboard any boat, vessel, or floating device in the water containing SCUBA or surface supplied air. Abalone may be taken only by hand or by devices commonly known as abalone irons. Abalone irons must be less than 36 inches long, straight or with a curve having a radius of not less than 18 inches, and must not be less than 3/4 inch wide nor less than 1/16 inch thick. All edges must be rounded and free of sharp edges. Knives, screwdrivers and sharp instruments are prohibited.
(f) Measuring Device. Every person while taking abalone shall carry a fixed caliper measuring gauge capable of accurately measuring seven inches. The measuring device shall have fixed opposing arms of sufficient length to measure the abalone by placing the gauge over the shell.

(g) Abalone Possession and Transportation: Abalones shall not be removed from their shell, except when being prepared for immediate consumption.

Proposed Change:

These three subparts above are reworked and consolidated into a broader, single subpart (e) as follows –

(e) Proper Gear, Removal and Possession:

(1) Use of any artificial breathing device other than a snorkel is prohibited.

Response 5: The Department does not feel there is a need for word change at this time.

Proposal 6:
(2) No attempt to remove an abalone may be made unless the abalone is visible or the legal size can be reasonably estimated beforehand. [NEW]

Response 6: The proposed change would not be enforceable.

Proposal 7
(3) Each person must carry their own separately identifiable dive tube, game bag, or similar container. [NEW]

Response 7: A modified version of this proposal was added to the proposed regulations.

Proposal 8:
(4) Persons taking abalone must have in their immediate possession an acceptable measuring device consisting of a fixed caliper measuring gauge capable of accurately measuring seven inches. The measuring device shall have fixed opposing arms of sufficient length to measure the abalone by placing the gauge over the shell.

Response 8: The current wording for a measuring device is sufficient.

Proposal 9
(5) Removal is allowed only by hand or by devices commonly known as abalone irons. Abalone irons must be less than 36 inches long, straight or with a curve having a radius of not less than 18 inches, and must not be less than 3/4 inch wide nor less than 1/16 inch thick. All edges must be rounded and free of sharp edges.

Response 9: Current wording is sufficient at this time.

Proposal 10:
(6) Abalone irons must be employed in such a manner as not to fatally injure the abalone during removal, by using the rock surface as a fulcrum. [NEW]

Response 10: The proposed change would not be enforceable.
Proposal 11:
Current Version
(h) Report Card Required: Any person fishing for or taking abalone shall have in their possession a nontransferable Abalone Report Card issued by the department and shall adhere to all reporting and tagging requirements for abalone defined in Sections 1.74 and 29.16, Title 14, CCR.

Proposed Change: Eliminates separate (f) and (g), instead incorporating these under (e). Subpart (h) now becomes (e) and reads as follows –

(e) All persons taking abalone must have in their immediate possession a nontransferable Abalone Report Card and adhere to section 29.16.

Response 11: The current wording is both enforceable and understandable by the public.