AGENDA
Recreational Abalone Advisory Committee (RAAC)
Saturday, October 16, 2004
9:00 A.M. to 3:00 P.M.

Location: The Health Education Center of Samuel Merritt College
400 Hawthorne Ave.
Oakland, CA.

Contact Person: Konstantin Karpov, Senior Marine Biologist, 19160 S. Harbor Drive, Fort Bragg, CA 95437
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Committee Web Page: http://www.dfg.ca.gov/mrd/raac/

1. Introductions –Announcements and Review of minutes (Karpov)

2. WLP report 2001-2002 activities (Riske and Morse)

3. ARMP update (Taniguchi)

   Break [10:30-10:45]

4. Proposed Budget 2004-2005 (Karpov)

5. Abalone fishery assessments Updates
   - Pink and Green recovery surveys (Haaker)
   - Transect surveys (Kashiwada)
   - Punch card and Telephone Surveys (Kashiwada)
   - Stornetta ranch surveys
   - Abalone Recruitment Modules (Rogers-Bennett)

6. Lunch

7. 

8. 

   Public Expression (non-agenda items, please limit to 3 minutes per person)

   Adjournment
Minutes

RAAC Members Present: Konstantin Karpov, Steve Campi, John Colgate, Lt. Steve Riske, Rocky Daniels, Richard Pogre, Steve Benevides, Brooke Halsey (Member-Elect)

Absent: Dr. Paul Dayton (Member-Elect)

Others Present: DFG staff - Lt. Steve Morse, Ian Taniguchi, Pete Haaker, Jerry Kashiwada, Dr. Laura Rogers Bennett. Members of the public - Paul Weakland, Gene Kramer, Ed Schulze, Ed Flynn

1. Introduction and approval of last meeting minutes

Karpov opened the meeting and briefly went over the minutes of the last meeting. He also provided an update to the recommendations that the committee sent to the Director. Campi read the letter from then acting director, Sonke Mastrup that replied to the recommendations. After minor changes to the minutes regarding the meeting date for the RAAC each year, a motion to accept the minutes was made by Campi and seconded by Benevides. The minutes were approved by the committee.

2. Enforcement report 2003-2004 activities

Riske gave the enforcement report beginning with the reorganization of the enforcement branch within the Department. The Department enforcement branch went to a straight-line supervision structure where there is a straight chain of command from wardens to lieutenants to captains etc. all the way up to the Director. This was done due to the Department's budgets problems and reduction in numbers of enforcement personnel to try to get as many of the existing wardens out into the field for patrol. The way this was done was to cut back on the number of supervisors by going to a smaller number, but larger, districts than previously. Prior to the restructuring, enforcement was broken out by the seven regions and an OSPR unit. Now there are four major enforcement districts (northern, southern, northern coastal, and southern coastal) and OSPR. All marine region wardens were put into either the northern or southern coastal districts. These wardens will still have a marine emphasis to their patrol, but they will be doing other types of enforcement as well. Implementation of this structure plan will take three to five years.

Riske reported that there was no overtime due to the Department's budget problems. Thus RAAC's recommended increase in overtime was denied, as mentioned in the reply letter read by Campi at the beginning. Despite this setback, marine wardens were out working abalone almost 100 % of their time during the spring months. One of the trends in violations that was noticed this year was the increased number of people who are altering their report cards or are purchasing additional cards. The most common way of altering the cards is the changing of the dates on their report cards. Detecting report card violations is very time consuming.

Another trend seen this year is the increased number of abalone possessed in overlimit cases. Part of this is due to the big bust of a commercial urchin fisherman being caught with over 400 abalone. Despite this one case, the numbers of cases have increased where individuals are taking excessive amounts of abalone (10 - 30 abalone).

Several cases were made on poaching abalone south of San Francisco in San Mateo county.

The courts have been offering good support for abalone violations and punishments. High fines with probation and suspension of fishing licenses have been handed out in the most serious cases. Forfeiture of dive gear has also been part of the sentences.

Three abalone checkpoints were conducted this year, which is down in number from previous years due to lack of enforcement personnel to run the checkpoints. Some of the violations seen at these checkpoints include;
overlimits, abalone out of the shell, undersize abalone, no license or report card, altering of the report card, and fish violations. Most common violation is failure to appropriately fill out the report card.

SOU is down in staff this year but are now filling positions to re-staff the unit. Due to the reduced number of SOU personnel this year the unit had to reduce their time spent on abalone investigations to cover other cases. However abalone is still a top priority and they continue to crack down on the black marketing of sport caught abalone.

The Department is still in the process of developing the Records Management System. With this system wardens will have direct access to records on prior contacts and violations for an individual. The RMS is going to be tested with a small group first real soon.

Karpov had a question regarding Scott Melvin, who is an SOU member and his salary is paid through abalone stamp funds. He asked if he is still focused on abalone issues. Riske answered yes and that in general all of SOU is still focused on abalone with the exception of the big sturgeon case made at the beginning of the year. Morse also said that SOU has recently advertised for their vacancies so they should be up to full compliment real soon.

Karpov also asked if the violations of commercial sale of sport caught abalone is being captured on the punch card? Morse answered that most of the time these violators are not filling out the punch card.

Karpov also asked in regards to the recent case of urchin fishermen being caught with 468 abalone on board, if enforcement is going to have more of a concerted effort to focus on these types of violations maybe something similar to roadside checkpoints except done in the harbors? Morse answered that they only focus on certain boats if they get a tip of a violation. Riske also added that wardens also do random checks of urchin boats when the come to land their catch in the harbors. Morse also said that random searches would be too time consuming and that they really need some sort of tip before they will expend the time and resources to shadow a particular boat.

Karpov asked about the relationship with county D.A.s? Morse answered that their relationships have been good in Mendocino and Sonoma, where the majority of cases are filed. In Mendocino the D.A. will file every violation that comes in. The only problem has been with just a few judges. Riske also reiterated that their relationship has been real good in Sonoma. Halsey said that educating the courts is the key to the cooperation and good relationship that the Department enforcement has now.

Colgate asked if the wardens like the punch card system and if there has been any attempt to look at ways to improve it? It seems that there are a lot of problems with the current system. Morse stated that any reporting system has problems. There are always ways to get around the system. Riske also stated that the problems that we have are not that bad when compared to the total number of cards that are sold each year. The number of punch card violations that are made is really small compared to the total.

Pogre asked if the use of the term "commercial" could not be used. When it is used in terms of the commercialization of sport abalone take, there is no distinction between that and regular commercial fishing. Also there is no commercial abalone fishing at this time. In other words, a negative stigmatism is being applied to commercial fishing in general. Riske said that maybe the term could be changed to be more specific, such as the illegal commercial use of sport abalone etc.

3. ARMP update

Taniguchi gave an update on the process for adoption of the ARMP. He reiterated that at the last meeting over a year ago, he told the committee that the draft ARMP was entering into the formal public comment period. Since then four public comment meetings were held to receive comment on the draft document. The first meeting was
the second meeting was in February in Long Beach, the third meeting was in April in Santa Rosa, and the last one was held in June in Crescent City. Prior to the June meeting the ARMP was scheduled for consideration of adoption at the late August Commission meeting. However, due to the suggested changes to the document by the Commission and Department management staff, the adoption of the plan was postponed to the December Commission meeting. This will give the Department time to make the changes and finalize the document for adoption.

Most of the changes are minor editorial type changes to the document. One of the more significant changes that was suggested by the Commission was to add four additional index sites to the interim management plan for the north coast abalone fishery. The Commission was concerned that using the current four index sites of highly used fishing areas was not representative enough for the entire fishery. The concern is that the fishery could possibly be closed prematurely if only four heavily used fishing sites were relied upon. Therefore the Commission asked us to add four more index sites (of moderate fishing use), to try to assess the entire health of the fishery better. The Department has come up with a plan to implement the new index sites contingent on available resources to implement them.

The second suggested change to the plan was on how to address situations where once restricted access to the coast line now becomes open access to the public. This particular issue was in direct reference to the Stornetta Ranch sale of property to the Bureau of Land Management (BLM). The Stornetta family, which owns a large portion of the coastal land area south of Point Arena, wanted to deed over a portion of that land along the coast to BLM. Once this land is deeded over the land becomes public property and is open to public use. This would include a stretch of coast line that has easy access to the ocean and an area that would be available to abalone shorepickers and divers. This once restricted use area would become open and there is concern that abalone resources there could be fished down fairly rapidly. The way we dealt with this suggested change was to revise the section on uses of MPAs in chapter 7. In this section we added a list of criteria for areas or habitats that we consider to be important to conserving or understanding abalone population dynamics better. If similar situations such as the Stornetta case come up in the future, if the area exhibits at least four of the listed criteria we might suggest including this area in some type of MPA.

Taniguchi also related the present timeline for finalizing the document and sending it to the Commission in time for the December meeting.

Colgate asked if the final ARMP will have a chance to be peer reviewed again. Department staff answered that the document will not be peer reviewed again. The Commission felt that the changes were not substantial enough to warrant another peer review. Colgate asked if the final document could be distributed to the peer review panel as an information item, not asking for a review, but just to supply them with the finished product for their information. Karpov said that could possibly be done, but the Department would have to check with Sea Grant if that would be ok, since they were the contractor that put together the peer review panel etc.

Benevides said that he would like to see the previous RAAC recommendations for MPAs go forward to the MLPA group when ever they get around to looking at southern California (possibly in the next 3-5 years).

4. Abalone Budget

Karpov reported on last years budget (fiscal year 03/04) and went over the budget for the 04/05 fiscal year. Handouts for last year's budget and this year's budget were passed out. For the 03/04 year abalone activities spent close to its annual allotment. Although final spending figures are not finalized yet, we were under our allotment by approximately $5,000. Part the reason why we were under our allotment was that the Department did not allow any overtime as part of our cut backs on spending. Therefore the annual budgeted allotment for enforcement overtime was spent from the abalone account.
Our annual allotment is based on the sales of abalone punch cards averaged over the past three years. Once that figure is determined then the annual allotment is adjusted. Unfortunately we cannot estimate the sales of punch cards for this year due to a major sporting goods chain (Big 5) purchasing a large block of the cards up front at the beginning of the year. Because of this we will not have accurate sales figure until Big 5 returns the unsold portion and is reimbursed.

Karpov reported that in this year's abalone budget, we are expecting to overspend our allotment. Karpov went on to explain how we could increase our allotment. There are two possible scenarios. The first is a long term fix by putting in a Budget Change Proposal (BCP) to increase our allotment so that we do not over spend our allotment every year. This is a three year process so changes would not take place immediately. The second possibility is a short term fix which is to borrow spending authority (or allotment) from other projects that do not use all of their allotment. Fortunately we do have that ability in the meantime. Our current projection of over expenditure of the budget for this year is approximately $34,000.

Benevides asked what the status is of the actual abalone account. Kon reported that the fund is estimated to be at $624,000 as of July 1, 2004. The fund is expected to increase due to the increase in revenue when the price of the stamp was raised from $12.50 to $15.00 this year.

Daniels asked about the enforcement overtime allotment for last year and this year. Specifically he asked if the overtime allotment was not spent last year, then could it be added to this year's to boost overall spending for overtime? It was explained to him that there is no roll over of the allotment. Although the allotment for last year's overtime was not spent on overtime, it was used for other expenditures in the abalone account, thus there is no roll over. Also unused allotment for each year cannot be rolled over to the next year. Daniels then asked if the allotment for overtime can be increased this year or next year to compensate for not spending it last year. The answer given by Department staff is that the RAAC could suggest that, but the reality is that boosting the allotment for overtime will detract from other activities funded in this budget.

Colgate asked in regards to the budget, if more effort and or funding will be spent in southern California for recovery activities, especially now that the ARMP is close to adoption. Department staff answered that more funding from the budget will not necessarily be directed to recovery. However, Taniguchi's position, which is funded by the stamp, along with Haaker's position (funded from other sources) are directly dedicated to implementing recovery activities once the ARMP is adopted. In fact they have already started implementing these activities this year.

Campi asked a question about other funding sources outside of the abalone stamp that were mentioned in chapter nine of the draft ARMP. He asked if those numbers are correct and is that really being spent on abalone activities? Taniguchi and Karpov answered that they are not sure if that amount of funding is actually being spent at this moment. They explained that the numbers in that chapter were estimates of total expenditure with a projection and were developed several years ago prior to the budget cuts etc. Thus it is most likely that those numbers will go down and that the chapter will most likely be updated prior to adoption.

5. Fishery, Recovery Assessments, and Research

- Recovery Assessment for Pinks and Greens

Haaker presented a brief summary of recovery assessment activities for pink and green abalone in southern California. The Department's southern abalone team has begun implementing recovery assessment this year. Since there are only two biologists in Marine that work on abalone recovery in southern California, they have had to develop partnerships with other groups to help extend their ability to accomplish the daunting task of recovery assessment.
This year they have developed a partnership with the Long Beach Aquarium of the Pacific (AoP) to use their volunteer divers in abalone assessment surveys. Since April, Taniguchi and Haaker have been going out on one day trips to conduct abalone swim surveys at Catalina Island with the help of the AoP divers. The volunteer program at AoP is an AAUS certified program so diving reciprocity is not an issue. These once a month (at minimum) trips have accomplished an amazing amount of work. Most of Catalina Island has been covered for pink and green abalone survey of recovery key locations.

Colgate asked if these volunteer divers are research divers or do we train them? Haaker answered that we train them to do the swim surveys and to be able to identify abalone by species. Haaker and Taniguchi held a one evening training course for the group of AoP volunteer divers and have accompanied them on most of the trips.

Haaker also reported on another project that is helping a grad student do her thesis on pink abalone while helping to survey Point Loma kelp bed for recovery assessment. Ms. Cynthia Catton is a graduate student in Dr. Paul Dayton's lab down at Scripps.

Haaker also mentioned continued work on black abalone at a site near Point Arguello. The abalone team has been monitoring this site for many years and will be going back to do this year's sampling late this fall. The population there was hit by WS several years back but the remaining population continues to exist at a stable low level.

Haaker also reported on an upcoming white abalone cruise in December aboard the Channel Island National Sanctuary boat, R/V Shearwater. This cruise is funded through grants from NOAA and Sea Grant. The goal of the cruise is to record and identify white abalone habitat using an ROV, search for live white abalone to collect for broodstock, and to deploy Baby Abalone Recruitment Traps (BARTS). Haaker explained that BARTS are a similar concept as an ARM (Artificial Recruitment Module), which the National Park uses at their Kelp Forest Monitoring sites. The difference is that the BART uses cut cinder blocks that are haphazardly placed into a wire cage, as opposed to the ARM where the cinder blocks are stacked in a certain fashion in a wire cage.

- **Index abundance surveys**

Kashiwada gave a report on this year's surveys of two index sites done under contract by Humboldt State University divers. Kashiwada gave a powerpoint presentation summarizing the results of the surveys. The two index sites surveyed were Van Damme and Point Arena Cove. For Van Damme, this year's survey, when compared to the 1999 and 2000 survey, revealed a higher overall emergent density of abalone. Arena Cove had a lesser density than Van Damme but it's density is comparable to other index site densities (from 1999-2000). Kashiwada pointed out the overall density levels are well above the threshold levels for reducing the TAC (Table 7-2 in the ARMP), thus at the next sport fish triennial regulation cycle the TAC will most likely remain the same. One difference between the 1999-2000 sampling and this year is the placement of transects. This year more transects were done in areas of high abalone density as well as in other areas in the south portion of Van Damme, where the 1999-2000 survey did not cover.

A discussion about recruitment ensued after looking at the size distribution graphs for multiple years of survey. No indication of recruitment was seen in the more recent surveys. It appears that the last major recruitment that was picked up in the survey happened in 1989-92. Rogers-Bennett pointed out that the more recent surveys did not do invasive surveys where as the 1989-92 survey it was done. Possibly this is why no recruitment was seen in recent surveys. Kashiwada pointed out that even though no invasive surveys were done, if there was a major recruitment between 1992 and the present the emergent surveys should have picked up the cohort as they grew into emergent animals (around 100 mm length).
Colgate asked if the areas sampled in the survey are areas that are accessible to divers? Kashiwada said yes and that the majority of the divers are accessing these areas by kayaks or small inflatable boats that are launched from the beach.

Lunch

5. Fishery, Recovery Assessments, and Research (continued)

- Punch card and telephone survey

Kashiwada gave a report on last year's punch card and telephone survey databases. Kashiwada showed the percentages of card returns for each year. He explained that the 2002 year had a high return because reminder post cards were sent out at the end of the season to everyone that purchased a report card. It cost a lot to do this for a small increase in report card compliance, thus it was decided this year that it was not worth spending this amount to do the same.

The estimates of total take of abalone for the season, when just looking at the punch card data, the number for 2002 was 318,000 abalone and 385,000 abalone for 2003. These estimates were derived by taking the average number of abalone taken from all returned cards and then extrapolating over the number of cards sold that year. The problem with this estimate is that the average number of abalone per card is based on a low percentage of cards returned (compared to what was sold). Therefore the estimate may not accurately represent what was taken for the year because the majority of cards sold were not returned.

Kashiwada also explained that cards that are returned that are not filled out creates another problem. It is not known if a blank card signifies that that particular person did not go abalone fishing at all or that they did go out but did not catch any. If the latter is the case then that could be of concern to managers and may signify that resource is in worse shape than it appears. The use of a telephone survey from the list of punch card purchasers helps answer some of these questions.

Kashiwada explained the results for the telephone survey, which came up with different numbers for estimates. Part of the telephone survey asked if the person returned their card or not. Take estimates were shown broken down by these two categories. Those respondents that said they did return their cards, their average take for the season was 11 abalone per person. For those who didn't return their cards the average was around seven to eight abalone. So with the annual take estimate based on the telephone survey is lower than the one that is strictly based on returned cards.

A question was asked on how many people were sampled in the telephone survey. Kashiwada answered that approximately 550 people were contacted in 2002 and 650 were contacted in 2003. It was pointed out that the sampling was small compared to the total number of card purchasers. Kashiwada explained that even though it was a small sample, it is truly a random sample so the estimate has higher confidence level.

- Stornetta and Mote Creek surveys

Rogers-Bennett reported on the Stornetta Ranch and Mote Creek intertidal surveys that were conducted this last spring. She passed out copies of the report. The Stornetta Ranch property that was surveyed is located just south of the lighthouse. The property has been in private hands for many years but it recently became public property (as of August 1). There is easy access to a section of the coastline where there is a protected extensive intertidal and subtidal area. The goal of this survey was to examine the red abalone populations in subtidal and intertidal areas at this site. Transects were done in both subtidal and intertidal areas. The subtidal transects were done by a dive class from Humboldt State
University, and the intertidal transects were done at low tide by Department and Sea Grant personnel. Additionally this site was also selected to be one of the coastal biodiversity sites for monitoring by UC Santa Cruz and PISCO. The survey was done in the spring, prior to the property being opened to the public. Department abalone biologists conducted a creel survey at the site in early August when the site was open to the public.

Rogers-Bennett pointed out that the results of the intertidal surveys showed a broad size distribution of abalone with a mean size of 142 mm and 18% of the population sampled were of legal size. The density of abalone was about 0.6 abalone per square meter.

Results of the Stornetta Ranch intertidal survey was compared to the intertidal survey that was done at Mote Creek which is located several miles to the south of the Stornetta site. Mote Creek is a public coastal access area that is heavily utilized by recreational abalone shorepickers and is also another site where there is an extensive rocky intertidal area similar to Stornetta. So a comparison of a heavily fished intertidal site with a lightly fished intertidal site of similar habitat can be done. The mean size at Mote Creek was 135 mm, 8.7% of the abalone were above the legal size limit and densities were 0.09 abalone per square meter. The survey data for the intertidal area immediately in front of the access point was broken out to compare with Stornetta numbers. This area is called the high use area and the mean size is even lower at 120 mm, and there were no abalone larger than the seven inch size limit. The density was 0.05 abalone per square meter.

Rogers-Bennett next presented the subtidal survey data for Stornetta. The mean size is 172 mm, and almost half of the abalone measured were above the legal size limit. Density was higher at 1.1 abalone per square meter.

Karpov asked if the subtidal survey was done in close proximity to the intertidal survey area. Rogers-Bennett answered that the Stornetta site is a protected cove with an island in front and both surveys were done in the cove area. Most of the subtidal surveys were done right in front of the island and thus the subtidal is basically an extension of the intertidal.

Rogers-Bennett also reported on the results of the creel survey at Stornetta after it was opened to the public. On Sunday, August 1, there were 30 cars at the Stornetta site at low tide and 67 abalone fishers were counted (27 divers, 40 shorepickers). 190 abalone were taken on that Sunday. On the Monday low tide the effort dropped to 19 cars at the site, with 47 fishers (12 divers, 35 shorepickers), and a total of 125 abalone taken.

- Recruitment module surveys

Rogers-Bennett reported on this years work on the ARMs and other work on tracking population dynamics of red abalone. Some of the information we are gathering include reproduction, growth, mortality, and recruitment rates. The growth and mortality rates were gathered through a tag recapture study. The research has been written up and is now in review and will be published soon in the Journal of Marine Biology. A brief synopsis of the growth study is that it takes 12 years for red abalone on the north coast to reach legal size. The mortality estimates are around 0.3 for adults which is in line with other mortality estimates for abalone populations.

The reproduction rates are being determined by sampling the sport catch as well as collection of animals in the off season (sampling is done on a quarterly basis). This has been going on for the last four years. Sampling includes measuring and assessing the gonad index. This is done by measuring the size of the gonad and then indexing it relative to the animals total body weight. Looking at the index reveals that peak gonad maturity occurs usually at the end of the year (late fall early winter). The peaks are also associated with peaks in seasonal water temperature.
The recruitment rates are being measured through the use of ARMs which are set out at Van Damme. The reason for conducting this study is to learn the temporal patterns of recruitment in the northern California red abalone stock. For example, are there good years and bad years for recruitment and if so what are some of the potential causes for good or bad years. Another reason for doing this study is to quantify the number of juveniles that a healthy self-sustaining population that can support a fishery generally produce per year. The ARMs provide a known quantifiable surface area measurement and are easy to disassemble to look for small abalone. There are 12 of these ARM modules that were installed in Van Damme in 2000 and have been monitored every year since. This year, 17 small reds were found in the modules (2001 - 36 reds, 2002 - 25, 2003 - 17). Flat abalone are also found in the modules. For red abalone less than 50 mm the numbers in the modules are as follows; 2001 - 17, 2002 - 25, 2003 - 15, 2004 - 21. When this information is analyzed with the reproduction pattern of the adults then recruitment patterns should become clearer with a longer time series of information.

In comparison with red abalone in the south at San Miguel Island, where 3 ARMs were sampled in 2002, 6 ARMs in 2003, and 7 this year, the numbers of small abalone (< 50 mm) found are 3, 5, 15 respectively. For larger abalone the numbers found in the modules were 2002 - 3, 2003 - 5, 2004 - 8. For the NPS KFM ARM modules, which there are 82 distributed among three islands, in 2001 14 small abalone were found, and 11 small abalone were found in 2002 and 2003. Approximately 14 small abalone were found in the ARMs this year.

For other species, such as sea urchins, the south has more sea urchins found in the ARMs compared to the north.

Daniels asked how the ARMs are looking now, are there signs of wear etc? Rogers-Bennett answered that most are looking good and are holding up. One ARM was tampered with by someone, probably a scuba diver since the ARMs are located at 30 or 35 ft. Daniels suggested having some type of signage on the beach to inform divers of what is out there and to avoid tampering with the ARMs.

6. Other business

Rogers-Bennett announced that the red abalone reproduction study has been published in the Journal of Shellfish Research. She provided reprints of the paper for everyone.

Karpov asked if there were any other issues that the committee would like to raise at this time.

Benevides asked if there was any more information on abalone genetics work that is being done. Rogers-Bennett answered that Dr. Ron Burton has a grant from Sea Grant to do abalone genetics. He has one publication already comparing the uniqueness of northern California red abalone with southern California red abalone. Karpov asked if the citation could be sent to all of the committee members.

Benevides mentioned that a few years ago there was a presentation on survey data that showed that there was a large recruitment event in the early 1990's and there haven't been such a recruitment event since then. He wanted to know if there was any more work recently that shows any improvement on recruitment? Rogers-Bennett answered that more recent surveys (1999 to present) show that there still is a big gap in recruitment, thus we have not seen a big recruitment event since the early 90's. Hopefully the continued monitoring of the ARMs will eventually pick up such an event.

Karpov asked for dates for the next meeting. Everyone decided that the fourth weekend in September is good (which would be September 24). The meeting will be in Oakland at the same venue as long as it is available.

Karpov brought up another issue regarding the interim secretarial duties that Mr. Campi is doing. He suggested that naming an official secretary should be done as soon as all the new committee members are officially
appointed. This could take place via e-mail. Mr. Campi agreed to continue on as interim secretary until the next meeting.

Karpov also brought up the issue about updating the RAAC website. The website has not been kept up to date, mainly because of the current lack of a permanent secretary. The most current meeting agendas, minutes, and any letters of recommendation should be posted on the website. Taniguchi volunteered to work with the Department ITB staff to put the meeting minutes up on the website as long as approved completed minutes are supplied by RAAC.

7. Public Comment

Members of the public that attended the meeting were given five minutes each to provide comments to the committee.

Ed Schulze - Mr. Schulze had several comments and suggestions. The first one was to close the month of November. This would not only help conserve the abalone resource it would also reduce the work load of game wardens, especially now that current enforcement staffing is low. The month of November hosts a multiple number of hunting season openings (i.e. duck, turkey, quail, pheasant). Closing November to abalone would reduce the work load and enforcement resources could be better utilized to concentrate on hunting season. The second suggestion is to issue the abalone punch cards from DFG headquarters in a manor similar to the way deer tags are issued. People would have to send in an application and fee to Sacramento rather than just purchasing the card from a local sporting goods store. The advantage of this strategy is it would be easier to track sales and to reduce the number of duplicate cards sold. Also if you don't return the card at the end of the year, you will not be eligible to get one the following year. This could boost the compliance to turn in the card. The third recommendation is to use the 51 listed sites on the punch card as zones (similar to deer tags) and issue cards for each zone. Each zone would have a finite number of tags and would be specific to the zone.

Paul Weakland - Mr. Weakland notified the committee of an underground black market for poached abalone shells. There has been no commercial fishery for some time now thus the red abalone shells sold in these shops must be coming from sport caught abalone or are poached. The second comment Mr. Weakland made was that the abalone report cards are a failure. The lack of compliance should be a sign that this system is not working. Also there is no statistical information coming out of these cards. Only estimates of the take or mortality can be made. There is no accurate count of total mortality. The third comment related to an error on the annual limit. Mr. Weakland pointed out that besides the 24 abalone annual limit, the two free fishing days are not included into this limit. Thus there are six more abalone per diver that are not accounted for in the estimates. The fourth comment was about the discrepancy in changes to the ARMP. Mr. Weakland said that we were told at this meeting by Mr. Taniguchi that there were two minor changes to the ARMP, yet at the FGC Marine Subcommittee meeting a few weeks back, he was told that major changes were done to the ARMP. He asked what is the truth? The fifth comment was in regards to the budget. The Budget does not reflect the large amount of money coming from grants. Mr. Weakland's sixth comment was on the artificially spawned hybrids released to the wild. Mr. Weakland attributes the problems in reproduction in the south to the many years of outplanting of aquacultured spawned abalone. According to Mr. Weakland, nature has a mechanism for negating too much genetic diversity in the environment. When there is too much genetic diversity nature negates all spawning to cleanse itself from the genetically altered introduced hybrids. Thus fishing is not responsible for depletion, it is the outplanting of these hybrids. The seventh comment was about all of the measurements in the studies are in metric and not inches. This makes it difficult for the public to understand the information.

Gene Kramer - Mr. Kramer's first comment was in regards to not reducing the number of opportunities to get abalone. He is against any shortening of the season. The second comment was on access to abalone fishing, especially in regards to setting up MPAs. If MPAs are set up they should be placed in areas where there is very little public access to begin with. Mr. Kramer would like to see areas of public access to the coast for abalone fishing to remain open. The third comment was a question for Ms. Rogers-Bennett on the total cost of the
ARMs study. Ms. Rogers-Bennett answered that other than the initial cost of putting out the ARMs, the year to year cost of monitoring is real cheap. The monitoring is done be DFG divers each year at the northern California diver recertification. The last comment Mr. Kramer stated was that he would like to see San Mateo Co. opened up again for recreational abalone opportunities.

**Ed Flynn** - Mr. Flynn suggested that a volunteer abalone group for helping the wardens with enforcement would be very useful. If just a few of the 34,000 abalone card holders were to volunteer to be the eyes and ears of the wardens then this would definitely help them do their job more efficiently. The second comment Mr. Flynn made was to suggest if the current abalone stamp funds are not sufficient to get the job done then raising the cost of the punch card should be considered. The third comment was about sea otters and abalone. Mr. Flynn acknowledged that sea otters and abalone fisheries can not coexist as mentioned in the ARMP. If we cannot resolve the conflict between the two species then we need to ask for help from the Governor etc.

**Meeting Adjournment**