

Appendix 4

Public Responses to 2001 Kelp CEQA Document

Fred Wendell

From: Linda VanHook <abaloneint@earthlink.net>
To: Fred Wendell <fwendell@dfg2.ca.gov>
Sent: Friday, January 05, 2001 6:58 AM
Subject: Re: F&G Game kelp Regs. revisions

la { Thanks for sending along the info. I don't see anything right off the bat that would be offensive. Please keep me in the info loop as this progresses. Thanks again,
C.

01/23/2001

Fred Wendell

From: <Pacificalabalone@cs.com>
To: <racollin@dfg.ca.gov>
Sent: Wednesday, January 17, 2001 10:46 PM
Subject: Feedback on Kelp CEQA document

Dear Rob,
The following is my feedback on the CEQA listed by paragraph and sub-section.

2a { 165.b.1 - The harvester may determine weight..."that has been approved by the department". COMMENT: what is the criteria for approval, this needs to be clarified.

2b { 165.c.5.C - Prior commission approval of a kelp harvest plan...mechanical harvester...
COMMENT: what is the criteria for approval, as this stands it depends only on whoever is at the helm of the commission at the time.

2c { 165.c.5.E - The commission may designate...for a specified period of time.
COMMENT: what is the criteria for closure, this too is positioned to be a very subjective.

2d { Finally, although I object to the closure of the area between the breakwater and Drake for the purpose of throwing the environmentalists a bone, I understand it.

Thanks for allowing us a chance to give comment.
Gary Russell
Pacific Abalone Farms

01/18/2001

Jan. 14, 01

Dear Mr. Collins,

3a { I am writing to you to comment on what I think are some
 fundamental management strategies to use in managing our kelp beds. First
 of all kelp should be managed to maintain its health and viability for all of
 the natural ocean systems that depend upon it. Once that criteria is met, then
 we can manage it for harvesting. I believe that before we can manage it to be
 a healthy eco-system, we need to have the most current scientific knowledge
 and research to assess what comprises a viable ecosystem. Mr. North's study
 3b { which was comprised in 1968 is absolutely not adequate to use as an
 assessment for today.

3c { I believe that the kelp harvesters themselves should not be
 able to regulate themselves, the state Fish and Game should do this and if the
 state is unable to because of lack of funds then the federal government
 should be inlisted to protect and regulate the natural resources of the
 National Marine Sanctuary. I also believe that he entire coast of California
 3d { should be regulated not just our local area.

3e { As you can see I do not support a no action approach to
 manage this profoundly important resource. Please do keep me posted on
 this process. I thank you for your time and attention.

Sincerely,

Mike Tobin & Jenny Pursell
18 Paseo Cuarto
Salinas, CA 93908



THE ABALONE FARM, INC.

P.O. BOX 136 CAYUCOS, CA 93430 805/995-2495 FAX # 805/995-0236 LIC # 0014 DEALER # 6862

January 24, 2001

Robson Collins
Department of Fish and Game
20 Lower Ragsdale Dr.
Monterey, CA 93940

Dear Mr. Collins,

I would like to take this opportunity to comment on the Department's Draft Final Environmental Document Giant and Bull Kelp Commercial and Sport Fishing Regulations. I commend you and the other members of the Kelp Management Team for putting together a very thorough document.

4a { However, I do have a few concerns with the report. It appears to me that the proposed changes in the regulations are directed at the kelp harvesting activities of the abalone growers, who by the Department's numbers account for less than 1.7% (page 3-76) of the annual kelp harvest. The current regulations have served the state well for many years.

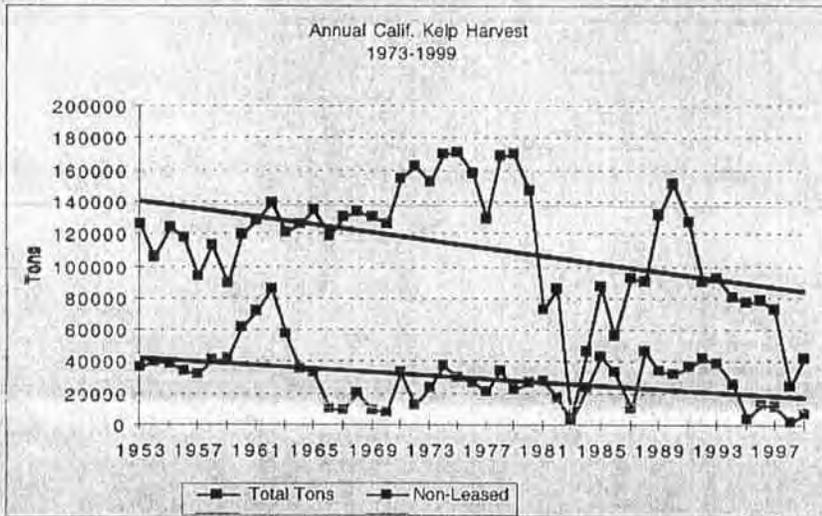
4b { In fact, I believe the Department could point to kelp harvesting as an example of one of their best managed fisheries, with sustained harvests for many, many years with no negative impacts on the resource.

4c { In the report itself the Departments states that maintaining the current regulations will have no negative impacts. You also state that adopting your proposed changes will have no impacts on the resource. However, these proposed changes could have noticeable negative impacts on the abalone aquaculturists who have built their business and invested tremendous amounts of money based on the current regulations and the assumption that kelp harvesting would remain a legal activity for many years to come. Please remember that one of the mandates of the Department is to promote aquaculture. While it is true that another mandate of the Department is to protect our natural resources, I don't believe the

4d { Department should be proposing actions detrimental to aquaculture when there is no danger to the natural resources.

4e { The Department's data show a definite downward trend in kelp harvesting (see chart). This is not a brief anomaly due to El Nino or other events.

4g



4f ISP Alginates (Kelco) has moved a lot of their production offshore, and there are fewer abalone farms than there were in the past. Given this downward trend in harvesting, I don't understand the need for more restrictive regulations.

4e Section (c)(4) states "The commission may limit or prohibit the harvest of kelp within a bed or portion of a bed for any length of time to insure that kelp is properly harvested". What does this mean (properly harvested), and what is the intended purpose? It seems to me that if you are harvesting kelp in compliance with the state's regulations, you are by definition 'properly harvesting'. If you are not in compliance, you are not 'properly harvesting'. What criteria would be evaluated in the decision to close a bed? Who is responsible for bringing this data to the commission? I am afraid that certain parties or individuals will use this regulation to petition the commission for closure of beds or areas of beds on a regular basis, thereby necessitating a response by the harvesters in order to allow harvest to continue. This type of activity can consume a tremendous amount of time and effort on our part. This section also appears to be redundant with Section (c)(4)(E).

4j Section (c)(4)(B) states that Nereocystis harvesting be closed from April 1-July 31 within the boundaries of the Monterey National Marine Sanctuary (MNMS). The text on page 2-3 of the report states the closure is from March 1-July 31. The dates need to be clarified, but either way this regulation is counter-productive, as it limits an abalone grower's ability to use drift bull kelp. I would think that the state and the MNMS would rather have the growers using drift kelp that is already technically dead as opposed to harvesting growing Macrocyctis. I would propose that at the least the wording be changed to "no harvesting of attached Nereocystis plants from the period...". However, I question the need for this regulation in the first place. How much attached Nereocystis is being harvest within the MNMS borders? Within the state waters? I would guess that it is very little. ISP Alginates (Kelco) doesn't harvest Nereocystis, we (AFI) don't harvest Nereocystis, and none of the growers in the Monterey/Santa Cruz area harvest any kelp more than a mile or two from the harbor. Is this level of harvesting having any affect on

4k { the Nereocystis beds within the Sanctuary? Throughout Section 4 of the report, the Department states that there is a '...lack of apparent impacts under the existing regulatory strategy...!', so what is being accomplished with this additional regulation?

4l { Section (c)(4)(c) states that "Prior commission approval of a kelp harvesting plan is necessary before a kelp harvester may use a mechanical harvester to harvest giant kelp in a non-leased kelp bed in the area north of Santa Rosa Creek". What is this regulation trying to accomplish? The report does not even address this regulation in its summary on pages 2-1 to 2-3, so it is impossible to determine your intent. The Department is potentially restricting mechanical harvesting of giant kelp from almost half of the California coastline. What constitutes a valid plan that would be approved by the commission? How long will it take to get approval? How long will commission approval remain in effect, as the commission only meets monthly? I can tell you our plan right now- Drive boat to kelp bed, harvest kelp, return to port. I think every kelp harvester has the exact same plan. Is this an approvable plan? The ambiguity of this regulation is frightening, as it puts the future needs of our business at the whims of some unknown person with an unknown process.

4m { Section (c)(4)(E) states "The commission may designate, through emergency regulation, a non-leased kelp bed or portion of a bed as a harvest control area for a specified period of time. The commission shall set a cumulative harvest tonnage limit that may not be exceeded by a kelp harvester while harvesting within the control area during any consecutive 7-day period. The department shall maintain a list of active control areas, their effective time period, and their cumulative harvest tonnage on its web page." While I appreciate the Department's stated goal of find an alternative to closing an entire bed to all harvesting if they feel it is warranted, I have serious concerns about how this regulation would be implemented. First of all, who presents the information to the commission that a harvest control area is warranted- the Department, concerned citizens, Friends of the Sea Otter, all of the above? How does the commission decide if a control area is needed? How do they set the weekly limits? Since the commission only meets monthly, at the most, will this then become a monthly issue, with the abalone growers having to traipse across the state each month to argue for increased limits if the kelp is outgrowing the current limits? We all know that the amount of kelp in a bed can change radically in a very short amount of time. Also, no offense intended, but the Department is not noted for keeping up to date information on their web page- in mid 1999 I was reading all about the S. California sport abalone regulations, despite the fact that all abalone harvest was curtailed in mid 1997. Now they are proposing to gather information from all kelp harvesters and post it on the web on a daily basis? I'm sorry, but I am skeptical. If the information on the web page is not current when a harvester leaves the dock at 5 am, and he is busted several hours later because the Department has finally calculated that the weekly limit has been achieved, will he still be cited? Will he be allowed to keep the kelp, as it is a violation to throw it back? If two or three harvesters are in a harvest control area on the same day, report their harvest, and their harvest pushes the cumulative total for the week over the allotment, who is in trouble? The last one to report, the last one to the dock, all three?

4o { There needs to be a lot more detail on how the Department plans to implement this regulation. If this is the Department's solution to the user conflicts occurring in Bed 220, then I believe it is not a solution at all, but will merely exacerbate the problem and

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4p

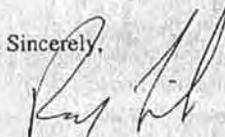
prolong the conflict. I can see the anti-harvesting groups, some of which have made it pointedly clear that they want to see all kelp harvesting stopped, arguing before the commission on a regular basis to establish a harvest control area in a particular area they are concerned with. I think that all of the abalone growers have begrudgingly accepted the reality of a large closed area in the Cannery Row area set aside for "non-consumptive users". However, I do not think that all of the "non-consumptive users" are going to view this as an adequate measure, and I can easily see them using this new regulation to attempt to limit or eliminate kelp harvesting in other portions of Bed 220 and beyond.

4q

Again, I feel these proposed changes to the regulations are strongly biased against the abalone growers, and could have potentially devastating impacts. The algin producers use large ships that are capable of reaching kelp beds anywhere in the state. If the Department were to make a bed they wanted to harvest off limits, they can easily move elsewhere. While they might suffer some financial loss, their business would survive. The abalone growers, on the other hand, are dependent upon a few kelp beds close to harbors. Some of them harvest kelp in boats as small as 12' -15'. If the commission were to use some of these ambiguous new regulations to suddenly close the only areas the abalone growers can access, their entire inventory could perish before the next scheduled commission meeting. While the current managers within the Department, such as yourself, have given verbal reassurance that they would not use these proposed regulations to arbitrarily close kelp harvesting, these reassurances are not adequate for the long term. The regulations, if adopted as written, could be around longer than the current management or commissioners. We must make sure that any proposed regulations actually accomplish the Department's goals (which are not very clearly stated) and protect the rights of the abalone growers to continue to harvest kelp in a legal and responsible manner.

Thank you for your consideration of these comments. I look forward to seeing you at the commission meeting in February to discuss these issues further.

Sincerely,



Ray Fields

CC: Justin Malan, California Aquaculture Assoc.
CA Dept. of Fish and Game Commissioners
Fred Wendell, CA Dept. of Fish and Game
Bob Hulbrock, CA Dept. of Fish and Game

US ABALONE

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Fish and Game Commission
1416 Ninth Street
Sacramento, CA 95814

2 February 2001

Dear Commissioners,

I have reviewed the Department's Draft Final Environmental Document for Giant and Bull Kelp Commercial and Sport Regulations. While the Report appears to be thorough and well thought out, there are several areas of concern that may negatively impact my business if the proposed project were to pass in its present form. Specifically, amendments 3 and 6 (P. 2.1), and Proposed Regulatory Changes (c) 4, (c) 4B, (c) 4C, and (c) 4E (P. Appendix 2-3). I have discussed in detail many of these concerns in written comments that I made regarding the Monterey Bay National Marine Sanctuary's (MBNMS) recommendations. Specially, in my letters dated 23 February 2000 and 7 August 2000 that were addressed to William Douros, Superintendent MBNMS, with copies sent to Mr. Robert Treanor, Executive Director, Fish and Game Commission, and Robert Hight, Director, Department of Fish and Game, and in a letter to Mr. Hight dated 16 October 2000. I would encourage the Commissioners to review these correspondence if you have not already done so.

US Abalone is a publically held Company having completed an Initial Public Offering in June 1997. The Company's shareholder base of over 500 households can be characterized as educated, middle to upper income, environmentally conscientious, and mostly residing in Monterey and Santa Cruz Counties. The business plan, capital outlay, and the future success of our Company was based in part on its ability to harvest kelp locally. Investment decisions by shareholders were based in part on a stable regulatory environment which included the ability to harvest kelp. In addition to the investment by local residents in US Abalone the local aquaculture industry annually contributes over \$1 million into the local economy by patronizing local vendors, marketing and sales to local customers, charitable events, and through payroll and property taxes. US Abalone has been in operation for over 11 years and primarily harvests in kelp Beds #220, #221, and #222.

Below I have provided an explanation for each proposed changes that I am concerned about:

Amendment 3 - "Regulations controlling the commercial harvest of bull kelp should be amended to restrict acceptable harvest methods and seasons to protect that species near the southern limits of its geographic distribution."

This amendment proposes to increase regulations on the take of bull kelp near the southern limits of its geographic range. This proposal was put forth by the Staff of the Monterey Bay National Marine Sanctuary (MBNMS). The MBNMS held numerous meetings on their proposed recommendations to the Department. These meetings were attended by 5 people at the Monterey meeting held on 24 July 2000, 3 people at its Santa Cruz hearings held on 19 July 2000, and 4 people at its 20 July 2000 meeting in Half Moon Bay. Furthermore, at the Sanctuary Advisory

5A

5A

Council meeting on 4 August of 2000 this recommendation was resoundingly rejected by a 10 to 2 vote of citizen's representing a cross-section of the community. This included representatives of the Agriculture, Business, Conservation, Education, Recreation, Research, and Tourism Industries to name but a few of the community interests that voted to reject this recommendation.

5B

As I stated in my letter to the Department's Director, Mr. Robert Hight, dated 16 October 2000, the bull kelp beds only start in Bed #224 which is approximately 15 miles north of Santa Cruz. There are no bull kelp beds in the areas where kelp is harvested. The bull kelp that is taken is either drift or beach wrack, neither of which is reproductively viable. This recommendation does not appear to have any resource or scientific basis, nor does it appear to have any bearing on the user conflict along Cannery Row.

5C

The importance of bull kelp to my operation is vital as during the fall through spring months, during periods of inclement weather we use the drift kelp to sustain our abalone. If we are unable to collect bull kelp as beach wrack or drift in the months of September through April it would mean that we would have to go to Monterey to collect kelp. The Sanctuary Advisory Council strongly urged the MBNMS Staff to reject this proposal. I would like to urge the Commission to strongly consider rejecting this proposed recommendation as well.

5D

In addition to my own needs, the Cities of Monterey and Santa Cruz annually bury thousands of tons of bull and giant kelp on their beaches. Some of this we collect off their beaches or as drift before it reaches the shore. If this recommendation were to pass as proposed, the burying of bull kelp by these Cities would in effect be a violation of the law during the closed months.

I strongly urge the Commission to consider rejecting this proposed amendment.

5E

Amendment 6 - "The regulations should also be amended to provide a method for placing temporary harvest controls in beds or portions of beds where necessary for resource protection."

This regulation is vague and does not indicate or specify how a closure would be determined. As kelp beds are highly variable, changing quite rapidly in a very short time frame, this proposed amendment as stated could severely impact businesses, such as abalone farmers, who depend on kelp for their survival.

I strongly urge the Commission to consider rejecting this proposed amendment.

5F

Proposed Regulatory Changes (P. Appendix 2-3)

(c) 4 - "The commission may limit or prohibit the harvest of kelp within a bed or portion of a bed for any length of time to insure that kelp is properly harvested."

5f

This proposed regulatory change is unclear as to why it was even proposed. It seems as though kelp harvesting as managed by the Department is being properly harvested, either by hand or by use of a mechanical harvester. I strongly urge the Commission to consider rejecting this proposed amendment.

5g

(c) 4B - "Between April 1 and July 31, a kelp harvester may not harvest bull kelp from a non-leased kelp bed that lies partially or totally within the boundary of the MBNMS extending from Santa Rosa Creek, San Luis Obispo County, northward to Rocky Point, Marin County."

See above comments under Amendment #3.

(c) 4C - "Prior commission approval of a kelp harvest plan is necessary before a kelp harvester may use a mechanical harvester to harvest giant kelp in a non-leased kelp bed in the area north of Santa Rosa Creek."

This proposed change stemmed from a recommendation put forth by the MBNMS. At its 4 August 2000 Sanctuary Advisory Council meeting, this recommendation was resoundingly rejected by an 11 to 3 margin. The Sanctuary Advisory Council members including representatives of the Agriculture, Business, Conservation, Education, Recreation, Research, and Tourism communities voted to reject this recommendation. Yet the MBNMS Superintendent ignored the Council's rejection of this recommendation. It seems that when members of the agriculture, business, conservation, education, research, recreation, and tourism industries come together to oppose such a recommendation that our public officials should take notice and not ignore their will as I believe was done in this instance.

The rationale for rejecting this proposed regulatory change is that it would in effect undermine the sustainable management of kelp within the MBNMS. As I have outlined in previous letters to the Staff of the MBNMS and to Director Hight, the same amount of kelp will be harvested whether it is by hand in a very narrow area or throughout a much broader area. Currently kelp is harvested within 1-2 miles of the Santa Cruz and Monterey Harbors. A mechanical harvester would allow for kelp to be harvested in a much larger area, thus reducing the impact in any one area. A mechanical harvester operated out of Santa Cruz for over 10 years with no public complaints or comments being made during the DFG Kelp Plan Review in 1995. Also, for a Company such as mine to consider such a large capital investment (\$100-150K) with no assurance that we would be able to operate our boat may preclude us from making such a capital outlay. Furthermore, the proposal to limit mechanical harvesting does not address the real issue at hand. The whole issue had always revolved around hand harvesting along Cannery Row.

I strongly urge the Commission to consider rejecting this proposed amendment.

5h

P. 4

(c) 4E - "The commission may designate, through emergency regulation, a non-leased kelp bed or portion of a bed as a harvest control area for a specified period of time. The commission shall set a cumulative harvest tonnage limit that may not be exceeded by a kelp harvester while harvesting within the control area during any consecutive 7-day period."

The language is vague and unclear as to what the Department is trying to achieve through this recommendation. Please see attachment regarding estimates of kelp biomass in Beds #220, #221, and #222.

5i

I strongly urge the Commission to consider rejecting this proposed amendment.

Finally, I have attached a table with figures and numbers that have been provided by the DFG and the MBNMS in its kelp reports. As you can see the amount of kelp currently being harvested in beds #220, #221, and #222 is insignificant relative to the amount of kelp habitat available within these beds. The amount of kelp harvested even if doubled in the next five years would still be far below 1% of the available kelp. In addition, our efforts to maintain a broad harvest area using a mechanical harvester will further minimize any perceived impact to the kelp beds.

5j

In summary, the main flaw in the Report is that it never clarifies why any regulatory changes are needed or what these changes will accomplish. To the contrary the Report states that the proposed changes will have no significant effect on the kelp resources, but will impact the abalone growers who account for 1.7% of the kelp harvested statewide.

In conclusion the DFG has always supported and promoted aquaculture, yet the main regulatory changes proposed will severely impact this industry. I sincerely hope that the Commissioners put into perspective the proposed changes and consider how they will effect small aquaculture businesses.

Thank you very much for your time and consideration.

Sincerely,



David A. Ebert, Ph.D.
Vice President

cc: Mr. Bruce McPherson, State Senator, 15th District
Mr. Fred Keeley, State Assemblyman, 27th District
Mr. Robert Hight, Director, Department Fish and Game
Mr. David Bunn, Legislative Director, Department Fish and Game
Mr. Dirk Brazil, Deputy Director, Department Fish and Game

KELP HARVESTED BETWEEN 1989-99 FROM KELP BEDS:

	TOTAL	AVG./YR. HARVESTED
#220	4,185 TONS	380 TONS
#221	3,496 TONS	318 TONS
#222	651 TONS	59 TONS

AVERAGE BIOMASS OF KELP PRODUCED ANNUALLY IN THE FOLLOWING BEDS:

#220	96.3 MILLION TONS
#221	46.1 MILLION TONS
#222	41.5 MILLION TONS

SANCTUARY AMOUNT OF KELP BIOMASS: 11.8 BILLION TONS

ANNUAL PERCENT BIOMASS OF KELP HARVESTED FROM BEDS:

#220	0.00039 %
#221	0.00068 %
#222	0.00016 %

DATA SOURCE: DEPARTMENT OF FISH AND GAME AND THE MONTEREY BAY NATIONAL MARINE SANCTUARY KELP REPORT



Figure 2-1b. Administrative Kelp Beds, Santa Barbara to Bodega Bay

US ABALONE

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Mr. Robert Hight, Director
California Department Fish and Game
1416 Ninth Street
Sacramento, CA 95814

16 October 2000

RE: Monterey Bay National Marine Sanctuary Final Kelp Management Report.

Dear Mr. Hight,

I am writing in regards to the Monterey Bay National Marine Sanctuary's (MBNMS) final kelp management report. While the Sanctuary's staff has spent considerable effort, time and resources to develop their report on this issue I have some concerns regarding the final report recommendations. Specifically three of the recommendations that were made to the Department by the MBNMS.

I would like to preface my comments with a bit of background information. The MBNMS held several public hearings regarding the kelp harvesting issue. The attendance at three of these widely publicized meetings was 5 at the Monterey meeting held on 24 July 2000, the Santa Cruz meeting held on 19 July 2000 was attended by 3 people, and the Half Moon Bay meeting held on 20 July 2000 was attended by 4 people. A total of 12 people attended these public hearings for this supposedly important issue. Monterey as you are aware has been the center of controversy on this issue yet only 5 people took time to attend the Sanctuary's public meeting.

At the Sanctuary Advisory Council (SAC) meeting, an open public meeting that was also widely publicized, on 4 August 2000 ALL of the abalone growers effected by this issue plus a representative from ISP Algimates (formerly Kelco) attended and gave public testimony. In addition, the Executive Director for a local conservation organization spoke positively about the benefits abalone farming and kelp harvesting have to the community. NO one from the public spoke in opposition to kelp harvesting at this very important public meeting regarding this activity within the MBNMS.

As you are aware, the SAC is a citizen's volunteer committee comprised of representatives from various interest groups within the local community. This includes representatives from the Agriculture, Business, Conservation, Education, Recreation, Research, and Tourism communities, in addition representatives from the Harbor Districts, Coastal Commission, State Resources Agency, State EPA, Coast Guard, and other governmental agencies sit on the SAC. The SAC is intended to give a broad representation of the various community interests within the area of the MBNMS.

P. 2

The MBNMS in their second draft report on kelp harvesting made 9 recommendations. These recommendations were discussed and voted on by the SAC at their 4 August 2000 meeting. Of the 9 recommendations 3 were overwhelmingly rejected by the SAC; these were recommendations #3, #5, and #9. I wish to address each of these recommendations as they may impact my business.

Recommendation #3 which is of considerable importance to my Company restricts our ability to harvest kelp using a mechanical cutter. This recommendation was rejected by the SAC by an 11 to 3 margin. Draft recommendation # 3 prohibits the use of mechanical harvesting in beds #220 and #221. The SAC in casting their votes I believe sent a strong message that there should be no limitations on the method by which abalone growers harvest kelp.

The SAC, I believe, realized that whether I harvest by hand or use a mechanical harvester it will not effect the amount of kelp I need to feed my abalone. The difference will be in the area I have available to harvest. For example, bed #221 stretches approximately 40 miles from the Monterey Breakwater to the Lighthouse in Santa Cruz. Currently in my small boat I can only range between 1-2 miles from the harbor. I eventually would like to step up to a larger boat so that I could range further within this bed. To step up to a larger boat would in all practicality involve getting a small mechanical harvester. I would then be able to harvest kelp from a much broader area within this kelp bed than I am currently able to at this time. I might add that a small mechanical harvester operated in bed #221 for over 10 years without any issues having been raised by the public. This same boat also operated in bed #220 between Point Pinos and Cypress Point, occasionally, during this same time period.

This entire issue has, as I have previously stated, always revolved around the Cannery Row area of bed #220. It involved one business using small boats to hand-harvest kelp along Cannery Row. This particular business (Pacific Mariculture) operated a mechanical harvester for 10 years on the Santa Cruz side of Monterey Bay (bed #221), between Point Pinos and Cypress Point (bed #220), and in Carmel Bay (bed #219) with very little notice. It was only when the independent owner of the mechanical harvester ceased operations that Pacific Mariculture was forced to hand-harvest on Cannery Row (combined with the proposed Ed Ricketts Underwater Park) that this became an issue. That's why this whole issue regarding mechanical harvesting seems so ludicrous! I might add that the former president of Pacific Mariculture is now the Chairman of the Board of Directors for a prominent local conservation organization based in Santa Cruz. Even within bed #220 which includes the Cannery Row area, that portion extending from Point Pinos to Cypress Point has never been an issue of controversy as it has been harvested for many years by ISP Alginates (Kelco) using mechanical harvesters much larger than I would envision for my Company.

While I applaud the MBNMS staff for leaving beds #219, #222, and #223 open to mechanical harvesting, these beds are located north of Santa Cruz along the open exposed coastline. At times of the year it is virtually impossible to operate in these areas, while the more protected waters of bed #221 may offer a safe haven in which to harvest kelp.

P.3

My main disagreement with the MBNMS over this recommendation is that they are attempting to restrict the area where kelp can be harvested, thus potentially creating a problem by concentrating all of the harvesting into small areas. I believe that is why the SAC overwhelmingly rejected this recommendation. The same amount of kelp will be harvested whether it comes from one small area or over the entire 40 mile stretch of bed #221. Everyone seems to agree, including MBNMS staff, that spreading out the harvest will lessen any perceived impact to an area. The ability of my Company to use a mechanical harvester in bed #221 may make the difference between staying on the Santa Cruz side of Monterey Bay or going to bed #220 on the Monterey side of the Bay to hand-harvest as we have done historically. I sincerely hope that the DFG, like the SAC, will reject this recommendation as being overbearing and unnecessary.

Recommendation #5 regarding the harvest of bull kelp was rejected by the SAC by a 10 to 2 vote. As I have stated in previous correspondence to the MBNMS and DFG, bull kelp beds only start north of Santa Cruz in bed #224 which the MBNMS has recommended to close to kelp harvesting. There are no bull kelp beds within the areas that are currently harvested. The bull kelp that is harvested is either drift kelp or beach wrack, neither of which is reproductively viable. This entire recommendation has no resource or scientific basis. I hope that the DFG considers rejecting this recommendation by the MBNMS.

Finally, recommendation #9 regarding the closure of beds #224 and north to kelp harvesting. The SAC rejected this recommendation by a 10-3 vote. At this time there is an insufficient amount of kelp in these beds to consider harvesting. However, with the return of sea otters to the Half Moon Bay area and points north, the possibility exists that giant kelp beds may return to this area. It would be short-sighted to close these beds in the event that giant kelp does re-establish itself in this area within the next couple of years. I hope that the DFG considers either rejecting this recommendation or adding a provision to open it if a sufficient kelp canopy were to re-establish itself in the future.

I appreciate your time and sincere consideration on this most important issue for my Company. Thank you very much.

Sincerely,


David A. Ebert
Vice President

cc: Robert Treanor, Executive Director, Fish and Game Commission
Dirk Brazil, Deputy Director, Department of Fish and Game
David Bunn, Legislative Director, Department of Fish and Game
Fred Wendell, Department of Fish and Game
Rob Collins, Department of Fish and Game
Aaron King, Monterey Bay National Marine Sanctuary
Justin Malan, Executive Director, California Aquaculture Association



6
UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE

Monterey Bay National Marine Sanctuary
299 Foam Street, Suite D
Monterey, California 93940

February 2, 2001

Mr. Mike Chrisman, President
California Fish and Game Commission
1416 9th Street, Room 1320
Sacramento, California 95814

RE: Draft Kelp CEQA document and proposed management regime for 2001-2005

Dear Mr. Chrisman:

The Monterey Bay National Marine Sanctuary (MBNMS) appreciates this opportunity to comment on the State of California's Draft Kelp CEQA document and proposed kelp management regime for the period of 2001 to 2005. The MBNMS is also appreciative that the Commission has scheduled its April 5-6 meeting in Monterey. This will allow residents that live along the Sanctuary's coast to have an opportunity to make verbal comments to your commission on this issue.

On October 3, 2000, the MBNMS sent the California Department of Fish and Game (DFG) and the California Fish and Game Commission (FGC) copies of our "Kelp Management Report: Background, Environmental Setting and Recommendations" (see attached summary of final recommendations). My office began drafting this document through an open, public process in the fall of 1999, well in advance of DFG's initiation of a review of California's kelp management regime. In crafting our recommendations, we relied heavily on input from our Sanctuary Advisory Council, a 24-member group representing stakeholders, agencies and the public, and input we received at eight public hearings in central California.

The Sanctuary's approach overall has been to not exercise our regulatory authority on kelp harvesting, and instead rely on the State's regulatory structure to address concerns we and the public believe exist in the current kelp harvesting program. As the Superintendent of a Federal agency that shares DFG's and FGC's resource management responsibility for kelp harvesting in central California, I am writing this letter to ensure that all of the concerns raised in our extensive public process and document are addressed in the State's new kelp management regime.

In general, the MBNMS believes the draft kelp CEQA document and proposed kelp management regime offer substantial improvements to existing regulations. After comparing the draft State CEQA document and proposed management strategy to the original set of MBNMS recommendations (attached), the MBNMS would like to make the following comments:



- 6A { 1. We could not find any analysis of revenues generated from kelp harvesting activities and the costs of kelp resource management in the State's draft document. The MBNMS continues to believe that such a discussion is important for the people of California to fully understand the pros and cons of the harvest of their kelp resource (see MBNMS Recommendation #1). Additionally, such an analysis is necessary for the State to properly establish fees for kelp harvesting. While the MBNMS does not believe the State needs to realize a surplus from such fees, it does believe that those fees should minimally cover the costs of the management regime established as being necessary and appropriate by the State. The MBNMS requests that the FGC direct the DFG to add this analysis to the final CEQA document.
- 6B { 2. The DFG is recommending a no-kelp harvest area similar, but smaller, to that recommended by the MBNMS for the area along Cannery Row in Monterey (see attached figure). The difference is that the State no-harvest area will only extend from the Coast Guard Wharf to Drake Street, instead of to the Charthouse restaurant. We believe the point of land on which the Charthouse restaurant sits is far more visible from offshore than Drake Street, especially in foggy conditions. Furthermore, the State's no harvest zone reduces protection along about 100 yards of coastline, an area hardly noticeable to kelp harvesters but important to local scuba diving interests. Our proposal reflected a compromise reached by our Advisory Council from competing alternatives. The MBNMS strongly urges the State to adopt the Charthouse restaurant as the northern end point to this no-harvest reserve.
- 6C { 3. The DFG draft regulations suggest that any mechanical harvesting within the MBNMS be required to obtain prior FGC approval. While we had sought a ban on mechanical harvest in DFG Beds #220 and #221 offshore of the Monterey peninsula and Santa Cruz (see MBNMS Recommendation #3), we believe that the less restrictive strategy proposed by DFG would be acceptable. This is also more consistent with the recommendation of our Advisory Council that there be no restriction on mechanical harvesting.
- 6D { 4. The MBNMS is pleased to see its recommendation for seasonal restrictions of *Nereocystis* harvesting included in the draft management regime, and endorses this concept.
- 6E { 5. While MBNMS recommendations #7, #9 and #10 did not call for regulatory changes, they did call for changes in the way DFG conducts monitoring, enforcement and educational activities surrounding kelp harvesting. DFG staff have informed the MBNMS that they generally agree with these recommendations, and will work to implement them through future administrative actions. The MBNMS would also like to see an endorsement of these concepts by the FGC, and have related wording incorporated into the CEQA document.
- 6F { 6. The MBNMS endorses the criteria method established by DFG in the draft regulations to define DFG Kelp Beds that contain too little kelp to sustain kelp harvesting activities, and, therefore, should be closed until those kelp beds may increase in size. This will, in effect, produce the result we had sought in our MBNMS Recommendation #8. The MBNMS is concerned however, that the proposed definition leaves open the possibility of a small kelp bed having just barely enough kelp to be open for harvesting. The MBNMS would, therefore, recommend that the regulations automatically define any DFG Kelp Bed as being a "harvest control area" if the size of the kelp bed is only between 1/2 and 1 square mile in size.

66

7. We understand that our recommendation #11, asking that the definition of take include plants, is beyond the scope of these kelp harvesting regulations, and could affect other aspects of State resource management. Therefore, DFG staff have informed the MBNMS that they have passed this recommendation over to their enforcement staff to determine if a need exists to alter the definition of "take" in the general Fish and Game Regulations. As this matter will affect how DFG may enforce its own regulations, the MBNMS asks that the FGC endorse the notion that "take" include plants such as kelp.

To reiterate, the MBNMS has received numerous comments and heard concerns from the public about kelp harvesting since the Sanctuary was designated in 1992, and we believe our recommendations in the MBNMS Kelp Report address those concerns in a fair and balanced manner. From January to August, 2000, the MBNMS held ten public meetings between Half Moon Bay and Cambria, including several with our Sanctuary Advisory Council, and we remain confident that on the balance our report has captured public input and has fully involved user groups. In addition, we continue to be focused on ensuring that kelp harvesting remain a viable and sustainable use of kelp within the MBNMS.

Over the course of the past year and a half, my staff worked closely with the DFG Marine Region staff to ensure that both agencies were aware of, and had an appreciation for, the other agency's work on kelp management. In particular, my staff has experienced an excellent working relationship with Mr. Robson Collins (Offshore Ecosystem Coordinator) and Mr. Fred Wendell (Chair, DFG Kelp Management Committee). All DFG staff we interacted with in this process deserve commendation for their professionalism and their expertise.

The issues we dealt with on this matter were difficult and contentious, yet we believe the educational value to the public of the MBNMS Kelp Report has been instrumental in creating a healthy dialogue on the best use of kelp.

Thank you for your attention to these matters.

Sincerely,



William J. Douros
Superintendent

Attachments

cc: MBNMS Advisory Council Members
Robert Hight, Director, DFG
Robson Collins, Offshore Ecosystem Coordinator
Fred Wendell, Chair, DFG Kelp Management Committee

Recommendations to the State of California
from the
MBNMS Kelp Management Report:
Background, Environmental Setting and Recommendations

Release Date: October 3, 2001

Recommendation #1: The MBNMS recommends that the State's kelp management process fully document and analyze the State's costs in managing kelp harvesting, including research, monitoring and enforcement, and evaluate the extent to which the revenues generated from various fees collected from the kelp harvesting industry (e.g., license fees, violation fines, business and personal taxes, tonnage fees) cover these costs.

Recommendation #2: The MBNMS recommends the designation of a single no-kelp-harvest area from the City of Monterey's Coast Guard Breakwater to the north wall at the current location of the Charthouse Restaurant extending from the mean high-tide mark to a depth of 100 feet. This no-harvest area must be monitored for its effectiveness in reducing multiple-use conflicts and increasing kelp canopy to allow for proper re-evaluation in five years.

Recommendation #3: The MBNMS recommends that there be no mechanical harvesting within DFG Kelp Beds #220 and #221.

Recommendation #4: The MBNMS recommends the implementation of a system of limited entry for kelp harvesting in DFG Kelp Bed #220.

Recommendation #5: The MBNMS recommends that no hand-harvesting (including possession) of *Nereocystis* be allowed in the MBNMS between April 1 and August 31 (inclusive) of each year.

Recommendation #6: The MBNMS recommends that the State restrict annual harvest of any kelp bed available for harvest in the MBNMS to 50% of that bed's total maximum canopy cover.

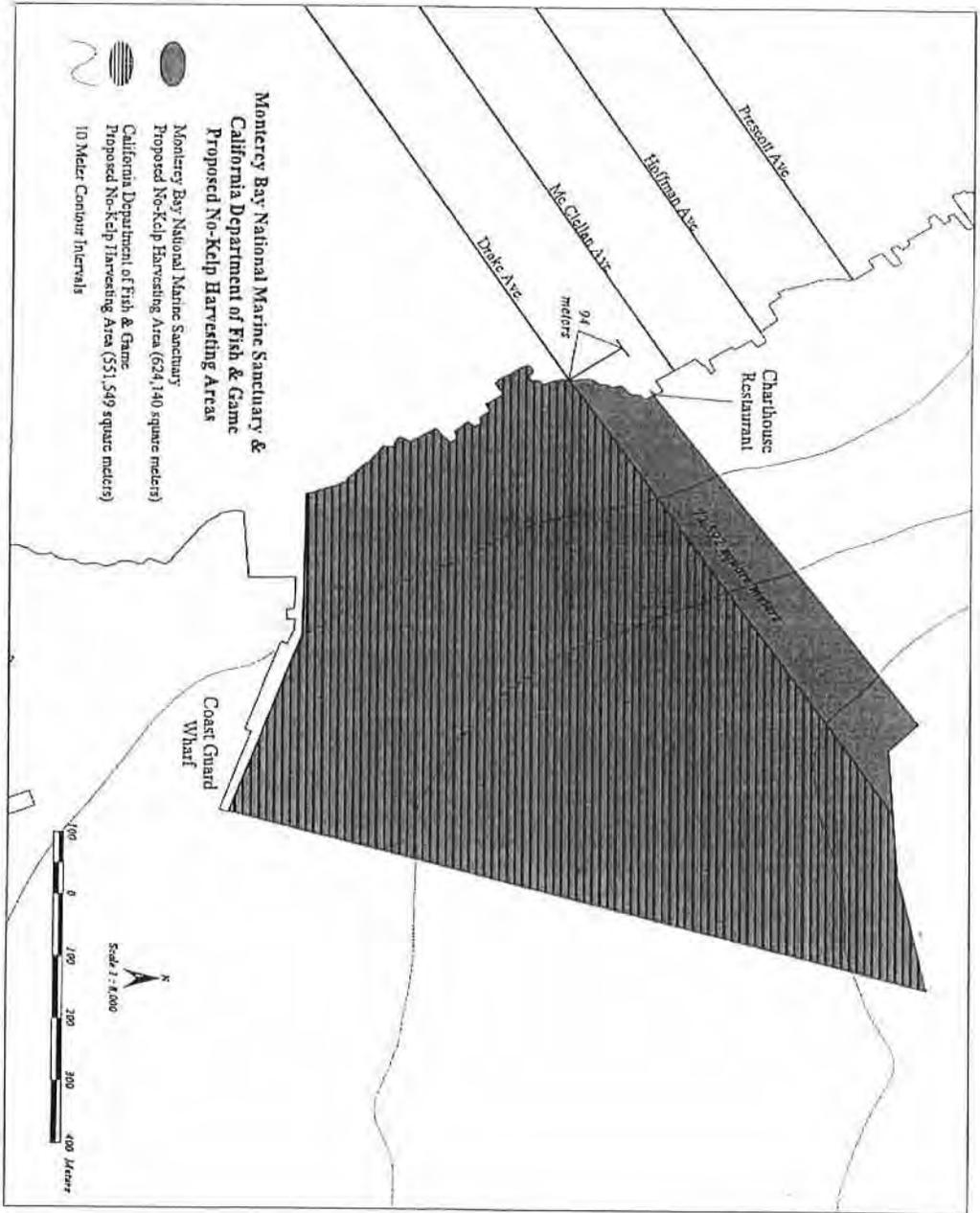
Recommendation #7: The MBNMS recommends that the State implement a more systematic method to collect, analyze and publish useful data on kelp harvesting. The MBNMS further recommends that the State resist any efforts to limit public access to kelp harvesting data.

Recommendation #8: The MBNMS recommends that DFG Beds #224, 225, 226 and 301 be closed to harvesting.

Recommendation #9: The MBNMS recommends that the State ensure its kelp management process evaluates the adequacy of current monitoring and enforcement of kelp harvesting activities, and strengthens them where necessary.

Recommendation #10: The MBNMS recommends that the State implement an education program on kelp forest ecology and sustainable kelp harvesting for a variety of audiences, including kelp harvesters and the general public.

Recommendation #11: The MBNMS recommends that the definition of "take" in the California Code of Regulations (Title 14, CCR, Chapt 1., Section 1.80) be amended to include plants.



The MBNMS proposed no-harvest area along Cannery Row is 94 meters longer than the DFG area. With a boundary out to the 100 foot depth contour, this calculates to a DFG surface area that is 88% of the MBNMS surface area.

MONTEREY ABALONE COMPANY

160 WHARF NUMBER 2
MONTEREY, CA 93940

California Fish and Game Commission
1416 9th St. Room 1320
Sacramento, CA 95814

Dear Commissioners:

As the owners of Monterey Abalone Company, and as citizens concerned about the marine environment, we would like to offer the following comments on the Department of Fish and Game's proposed changes to the kelp harvesting regulations as described in the Department's December, 2000 Draft Final Environmental Document.

We feel that the wording of the following proposed changes is vague, and therefore, these changes should be stricken unless there can be more precise language provided. We would be happy to provide input to help make the language more precise.

13a

- Section 165c4: "The commission may limit or prohibit the harvest of kelp within a bed or portion of a bed for any length of time to ensure that kelp is properly harvested." We would like to understand what is meant by "properly harvested" so that we can avoid improper harvesting, and the closure of the beds where we harvest.
- Section 165c4E: This change has to do with the establishment of harvest control areas. Again, no criteria for the establishment of the control areas are established in the proposed regulation. Such criteria would be helpful as guidelines for us in our harvesting, and would reduce spurious arguments for the designation of harvest control areas.

The regulation proposed in 165c4D creates a no-kelp-harvest area in bed 220. We have lots of experience in this area since our farm is located nearby. Please consider the following points:

13b

- this area was established as a no-kelp-harvest area a couple of years ago. The stated purpose was to use it as a control area in a study on the effects of kelp harvesting. Since then, there have been no studies conducted using this area as a control area, and there are none proposed. The no-harvest area is proposed as a way to separate user groups, although there is little to no interaction between user groups in that, or other areas. The need for a no-kelp-harvest area should be reviewed in five years when Fish and Game conducts its review of kelp harvesting regulations.

13c

- The seaward boundary of the no-harvest area needs to be established. We recommend that the boundary be a straight line between the end of the Monterey breakwater, and the point where the 60 foot depth contour intersects the line created by a seaward extension running 40 degrees magnetic north from the terminus of the west side of Drake Ave., not the 100 foot depth contour as has been proposed by the Sanctuary.

13c

Kelp does not grow outside the 60' contour in this area, and the 100' contour projects the area into commonly used boating lanes. If the area is marked by buoys, as it should be, then there will be buoys in boating lanes, causing a hazard for no good reason. Not one additional kelp plant will be protected by extending the no-harvest area to the 100' contour, but it will cause more regulatory burden, confusion, and hazard by creating a boundary that is difficult to mark and enforce.

13e

In addition to these comments, it should be noted that an educational effort by the Dept of Fish and Game to inform the public about the positive impacts of regulated kelp harvesting would go a long way towards avoiding user conflicts. Such conflicts are most frequently based upon a perception by the public that kelp harvesting is detrimental to the health and well being of kelp beds and injurious to wildlife. This perception is based upon ignorance of the science that underlies the resource and results in problems that could be avoided up front if the general public were better informed. Signage in multiple use areas explaining how and what harvested kelp is used for would be an inexpensive and highly effective way to educate the public about the benefits derived from kelp harvesting.

Sincerely,

Arthur Seavey
President

Joseph Cavanaugh
Chairman

*John -
FYI + Kelp file.
Thanks,
Bob*

HOPE - Helping Our Fish
Box 1495, Carmel, CA 95008

ent

Robert Traynor
Calif. Dept. of Fish and Game

Friday, February 9, 2001

Kelp Regulations DEIR Comments

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 DEPARTMENT

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I. Introduction:

KELP D-EIR

The 22 pages of citations summarized in this Kelp DEIR is generally very good. Although the DEIR missed mentioning the officially Endangered and protected Stellar Sea Lion and Abalone and the legal requirement to make two specific findings of significant impact, this is the first environmental document I've reviewed in a long time where I learned of new environmental impacts (such as fish using the kelp forest as a reference point). All too often, the burden of providing relevant research data and citations is improperly placed on the public. Thank you for your efforts.

14A { But, the alarming, precipitous collapse of animals interdependent upon kelp forests including marine mammals, abalone, rockfish and perhaps other families which is well documented and officially recognized, should be a big red flag. The huge cumulative damage of overfishing, sewage and natural climate variation added to the wholly preventable kelp extraction impacts should make it obvious that it is time to pause and say "Enough" to even more man-made damage until we genuinely begin to permanently reverse the impacts we are causing here.

14B { **INFORMATION AND EXPERTISE MISSING**
In spite of extensive citations some expert rationale is missing and needed. Vital consultations with federal experts on the ESA & MMPA listed species involved will greatly improve the scientific information needed and would provide meaning to the data to allow making the best decision here. Without those Biological Opinions this document is missing significant relevant information and reasoning which prevent making a reasonable decision.

QUANTIFICATION MISSING

14c { Except for the few paragraphs on noise (which we do appreciate) there is little relevant quantification of potentially significant environmental impacts.
Please disclose all quantitative criteria the DEIR uses to determine the threshold for a potentially significant environmental impact (i.e. baseline, thresholds of significance, percent of resource remaining).

14d { **SIGNIFICANT ENVIRONMENTAL IMPACTS IN ADDITION TO USER-CONFLICTS**
This controversy is not simply a user-conflict (p 6-1).

Our Kelp Forest Ecotone harbors the greatest density of biomass, the most productive communities and the greatest biodiversity in the North Pacific. There is widespread public concern about any removal of large areas of vital and critical habitat - habitat for a host of threatened, endangered legally protected and keystone species (e.g. the beloved Southern Sea Otter, Stellar Sea Lion and gray whale calves) and other sea life. It is our opinion almost all Californians prefer to have the kelp forest wholly protected rather than harmed and lost by selling it to industrial extractors.

II. Processes:

14e { **INADEQUATE PURPOSE**
The DEIR purpose (p 2-4) related to protecting natural phenomena is only stated in the negative - it does not state positively or clearly what the goal is. Without a clear purpose no one can determine whether the purpose is ever met.
By doing so it implies that kelp cutting is a natural event when is clearly is not. This may be because the theme is backwards as described below.

* Please rewrite the project purpose to state positively what is proposed related to protecting natural phenomena.

14f { **INTERNALLY INCONSISTENT PURPOSE**
"One-fourth ... shall remain unleased..." yet that fourth is available for new commercial use. If that fourth is used - it no longer remains open.

One can't have both - a fourth either remains open or is used.

Please recraft this so that it is internally consistent.

THEME UPSIDE DOWN
The DEIR often analyzes only what is restricted - not on what is allowed. The far bigger picture is what kelp extraction is allowed under these proposed regulations.

The "No action" alternative uses this novel view and implies it is the same as a no-project Alternative. This is not correct.

14g { **BASELINE**

146

The baseline also improperly attempts to sell this concept. Since the Agency has the authority to prevent all kelp extraction, the baseline is not continued kelp extraction, it is zero kelp extraction.

All potentially significant environmental impacts of regulations must be compared to zero kelp extraction. The impacts SHOULD NOT, as the DEIR attempts, be compared to continued kelp extraction.

III. Facts

144

STELLAR SEA LION (EUMETOPIAS JUBATA) OVERLOOKED

This species is known to inhabit Monterey Bay, to use Kelp forests and to frequent Monterey Coast Guard pier. It is an indicator species. The DEIR did not mention this Endangered Species. This species was listed as Threatened under FESA in 1990, and given heightened protection as "Endangered" FESA status in 1996. Its population has dropped from 140,000 in 1960 to some 16,000 in 1998. They eat bottom dwelling fish such as pollock.

SEA OTTERS

Sea Otters use Kelp beds (Giant Kelp - Macrocystis pyrifera & Bull kelp - Nereocystis leuckana) as refuge from predators including white sharks and winter storms, to define territory and as nursery areas for females with pups. Sea otters feed on various invertebrates that exist in kelp forests (Foster and Schiel, 1985).

The Southern Sea Otter (Enhydra lutris nereis) was federally protected under the Endangered Species Act as a Federally listed Threatened species in 1977. It is also protected under the Marine Mammal Protection Act. The Marine Mammal Protection Act 1972, USC 16 establishes a moratorium on the taking ("harass, hunt, capture or kill") and importation of marine mammals and marine mammal products, with exceptions for scientific research, allowable incidental taking, exemptions for subsistence activities by Alaskan natives and hardship exemptions (16 U.S.C. 1371). The MMPA requires all private or public actions that intentionally take marine mammals to get a permit.

MMPA is administered by US-FWS to protect sea otters.

Monterey County coastal waters contain the largest concentration of the Southern Sea Otter. It lives in nearshore kelp beds out to the 100 meter depth contour and occurs from Ano Nuevo in Santa Cruz County to the north to approximately Pt. Conception in the south. A small number (17 - 25 individuals) were relocated to San Nicholas Island. It is a keystone species (Miller 98) that keeps sea urchins from depleting kelp beds.

"As one of the few marine representatives of the order Carnivora, the sea otter evolved to inhabit a narrow ecological zone adapting to the near shore community and preferring a rocky shoreline with kelp beds." FWS, Draft Southern Sea Otter Recovery Plan June 1996

"Otters feed in both rocky and soft sediment nearshore areas, as well as in the kelp understory and canopy." US-Fish & Wildlife Service, "The Southern Sea Otter. Its Biology, Life Habits and History"

"Otters live in waters with temperatures between 35 and 60 degrees F." Ibid.

Removal of kelp canopy can change the water temperature by changing sunlight reaching the mid and bottom seawater column, decreased insulation that kelp provides, and allowing increased surface disturbance by wind.

14x

14x

WHALE HABITAT

Migrating gray whales, especially the young, stick close to kelp forests for protection. Gray Whales have been observed entering kelp forests to escape predation from killer whales (*Orcinus orca*, Baldrige, 1972) and also to feed on invertebrates such as midwater crustacean swarms (Nerini, 1984)."

ROCKFISH DECLINES

Young fish, such as rockfish and surf perch, graze on plankton found in the top several feet of a kelp canopy. The Monterey Bay rockfish populations experienced a significant decline in the 1990's.

ABALONE IMPACTS OVERLOOKED

Abalone, Sea Urchins, Sea Otters and Kelp forests are all closely interdependent. Their complex relationships are poorly understood. White, Black, Pink and Green Abalone have all experienced catastrophic declines in recent years resulting in a complete ban on commercial take. The decline of abalone correlates with kelp harvesting. These parallel declines may be a coincidence, but it is possible the extraction of kelp forests plays a significant role in the cause of Abalone declines.

WHITE ABALONE HIGHLY ENDANGERED

DF&G Banned harvest of White Abalone in 1995. Calif. Fish & Game Code 5521. "A moratorium is imposed on the taking, possessing, or landing of abalone (genus *Haliotis*) for commercial or recreational purposes in ocean waters of the state south of a line drawn due west magnetic from the center of the mouth of the San Francisco Bay, including all islands offshore the mainland of California, including, but not limited to, the Farallon Islands and the Southern California Channel Islands. It is unlawful to take, possess, or land abalone for commercial or recreational purposes in those ocean waters while the moratorium is in effect."

14y

The White abalone (*Haliotis soreni*) is an endangered species. This abalone has declined by 99.9% in the last thirty years. The White abalone occurs from near Point Conception (near Santa Barbara) to Punta Eugenia, Baja California, Mexico. It lives at a depth of 80-300 feet, feeds on marine algae and can live up to 40 years. Within the lifetime of single abalone, the entire species has declined from between two to four million individuals, to between 600 and 1,600 individuals. In the last 33 three years, it has not successfully reproduced on a broad scale. Though other factors may be preventing reproduction, over fishing is rapidly driving it to extinction. The Southwest Center for Biological Diversity filed a petition on 4-28-99 to list the White abalone (*Haliotis soreni*) as an endangered species.

Selling for \$20 to \$22 per pound in 1999 White Abalone has attracted poachers who have been caught at Point Pinos at night. (Herald July 25 1999 p A7)

KELP IMPACTS

We do appreciate the DLIR's recognition of impact shifting (p 1-2). But the claim "Cut canopy will be restored from young fronds beneath the surface" (p 4-12) is misleading at best, false at worst. Kelp grows up from the ocean bottom. it does not grow from the top. When cut at or near the surface that frond stops growing. Cut kelp might as well have been cut from the bottom as it essentially kills that 30 to 60 to 100 foot frond.

Do you deny or agree with this?

14k

14k

Page 4-18 2nd paragraph: "mainly from growth of new fronds from below." Does this mean fronds from the same stipe or from others?

Cutting Kelp at the surface can result in kelp tips no closer than four to eight feet below the surface. Kelp is typically commercially cut at low tide and stretched to the surface. When not stretched it leans over due to currents. When adding the currents and high tide the top of the cut kelp can easily be 4 to 8 feet below the surface.

Do you deny or agree with this?

KELP DESTRUCTION IS UNSTABLE

"One common phenomena occurring in areas where surface canopies have been removed is the recruitment of the brown alga *Desmarestia ligulata* (Foster, 1982a; Reed and Foster, 1984). This species forms a dense subsurface canopy which can inhibit recruitment of other algal species including giant kelp (Dayton et al., 1992)." - Monterey Bay National Marine Sanctuary Kelp Management Plan Jan 14 2000

14l

When kelp forests are removed, sea otters must move to other kelp canopies. When Sea otters move north the area where they eat sea urchins move north. When sea urchins reach a certain population they can turn the ocean bottom into "barren grounds." P 3-29 Darren grounds do not allow kelp to regenerate. Sewage can worsen the impacts on kelp forests by increasing the number of sea urchins. p 3-49

Because of the extremely threatened state of Abalone it seems highly wise and reasonable to restrict extraction of all species which are closely interdependent until threatened and endangered species (e.g. Abalone, Sea Otters, Stellar Sea Lions) are clearly recovering.

KELP ECOSYSTEM

Kelp (Giant Kelp - *Macrocystis pyrifera* & Dull kelp - *Nereocystis leukeyana*) forests provide habitat for a large variety of invertebrates, fishes, birds, and mammals which are distributed among the three different regions of the forests; the surface canopies, the midwater and the substrate (Foster and Schiel, 1985).

"Fish diversity and abundance decrease in areas where the kelp canopies have been removed (Bodkin, J. of Exp. Mar. Bio. Ecology 1988). Variations in fish abundance may have significant impacts on other communities. For example juvenile rockfishes associated with kelp forests in Monterey bay can reduce the amount of barnacle larvae reaching the intertidal to 2% of the level found in the absence of fish (Gaines and Roughgarden, 1998)." - Monterey Bay National Marine Sanctuary Kelp Management Plan Jan 14 2000

"The floating canopy is thick enough to provide footing for birds as large as the great blue heron. The forests provide a nursery, feeding grounds, and shelter, so it is not surprising that large numbers and a great diversity of invertebrates and fish are found in association with the forests." A number of mammals (California Sea Lion, gray whale, harbor seal, and sea otter frequent the forests. At least 13 birds species use the Giant Kelp as feeding ground (pigeon, guillemot, brown pelican, pelagic cormorant, snowy egret, great blue heron, western grebe, western gull, cared grebe, Brandt's cormorant, surf scoter, common loon, common murre, elegant tern). - California an Environmental Atlas and Guide, Ben Kreissman, 1991 p 68

Page 4-19 says "...plants had been lost during the winter in the experimentally harvested are but not in the unharvested control."

Didn't this kelp cutting impair a Giant kelp bed?

Page 4-18 says "...cut fronds grew very little after harvesting..."

14m

14m { Didn't this kelp cutting impair a Giant kelp bed? If not please explain what criteria you use to determine a Giant kelp bed is impaired?
 Page 4-21 says "...my activity that removes the pneumatocyst and blades results in the death of that (Bull Kelp) plant as well as loss of regenerative and reproductive material."
 14n { Doesn't this mean kelp cutting impairs a Bull kelp bed? If not please explain what criteria you use to determine a Bull kelp bed is impaired?

BIOMASS LOSS
 A Kelp forest, like every other ecosystem, exists in a dynamic equilibrium. It is not a wholly closed system, but its biomass is wholly recycled and used by biota living in and near it.

This action would allow a huge permanent and irrevocable statewide loss of Kelp Biomass. It is a colossal loss of biomass in a fragile ecotone. There is abundantly officially-recognized evidence of the ecological collapse of the kelp-ecosystem. That includes alarming, precipitous declines of keystone and indicator animals dependent upon kelp forests including sea otters, abalone, and rockfish.

14o { Adding the wholly preventable kelp extraction impacts to the huge cumulative damage of overfishing, sewage and natural climate variation is an insult. It should be overwhelming obvious that it is time to say "Enough" to additional, preventable man-made damage until we genuinely begin to permanently reverse the impacts we are causing here.

Please quantify the yearly biomass loss expected with these new regulations.

Please prepare real mitigation for the loss of biomass.

14p { Please prepare a regulation trigger at that level of biomass loss to stop all further harvesting that year.

There is clear evidence that multiple kelp cutting extractions per year can "cause the loss of 'plants' and reduced production of biomass."

14q { Please create a regulation to prohibit multiple kelp cutting extractions per year. A model would be the British Columbia regulation which only allows extraction of 20 percent of the standing stock per year (with other conditions). (p 4-22)

KELP FOREST FRAGMENTATION AND EDGE EFFECTS
 Kelp Extraction is admittedly designed to cause kelp forest fragmentation and increase edge effect impacts.

"Conservation Biology's central tenets are not hard to grasp. For a natural habitat to be viable (and for a conservation strategy to succeed) there is a handful of general rules: bigger is better; a single large habitat is usually better than several small, isolated ones; large native carnivores are better than none; intact habitat is preferable to artificially disturbed habitat; and connected habitats are usually better than fragmented ones." Sierra Magazine Sept./Oct 1995 p 97

14r {

- 14s { "Edge habitats have been well-demonstrated to differ from core habitats in several ecological systems." US-FWS Marbled Murrelet 1997
- 14s { **EDGE EFFECTS & WEATHER**
"Edge effect" describes how kelp at a newly cut edge of a forest are exposed to much higher wave surges - which can stress them prematurely, increase the number pulled out by storms, and cause the loss of marine wildlife and biodiversity necessary to sustain a healthy kelp forest.
Kelp forests near induced edges, for example, may have a higher density but lower diversity of fish than the interior. "A number of studies in land forests have shown increased predation of songbird and quail eggs near forest edges." - Mitch Lausky "Beyond the Beauty Strip"
- 14r { **NEW LINEAR EDGES**
Please identify and map the lengths of each existing and potential edge of kelp forest and analyze the impacts of kelp forest fragmentation and edge effects.
Please identify and map the length of the new edges created for each numbered kelp bed after the proposed extraction that were previously unaffected by edge.
Please describe the health of the forest when it is reduced to "islands" (where there may no longer be any true forest interior).
If Kelp Extraction is allowed, a regulation needs to minimize fragmentation and edge effect impacts.
- 14u { **NOISE IMPACTS ON LISTED SPECIES UNRECOGNIZED**
Thank you for providing atmospheric noise levels for kelp extraction equipment and the noise significance threshold of 65 dBA.
We recognize that acoustics, both atmospheric and underwater, are complex and require careful recognition of references. In light of this the following noise impacts need to be further analyzed because -

1. Noise above the ocean surface can be confined in a reflective layer (like a light tube) and consequently travel many miles without appreciable reduction. The DEIR recognizes noise variance with atmospheric conditions (4-14) - but only when it enhances noise reduction. It fails to recognize "certain atmospheric" conditions which increase noise impacts.

2. Noise levels underwater are louder than air noise levels at the same distance from a source. Underwater spreading loss and attenuation losses are much lower than in air. Compared to noise above the surface, underwater noise travels about six times faster (1,470 m/s vs. 340 m/s at typical California temperatures) and travel much farther before reducing to insignificant levels (noise is substantially louder at greater distances underwater).
As an example Oil Tankers often generate in excess of 200 dBA underwater (A TOC FEIS 1996), yet your table only recognizes a tiny fraction of their noise impact by limiting its analysis to the atmospheric noise of a "Tanker" at 80 dBA.
Please measure actual underwater noise of the kelp extraction vessels at 15 meters, 100 meters and at 1000 meters to determine empirical sound pressure diminishment, if detectable.

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3. Above and below surface noise impacts on listed species.

Noise Impacts on Wildlife

Kelp cutting boats admittedly disturb Sea Otters (p 4-9).

Please describe, and measure in meters how far sea otters move from their locations in kelp before the kelp extraction vessels arrive.

The noise from boat engines and mechanical kelp extraction equipment can disturb Sea Otters -

"Effects [of noise] on animals have not been studied extensively. These [effects] are analogous to those in humans. There is auditory loss which deprives the animal of signals of danger or the presence of prey. Animals depend on hearing in territorial stakeouts, courtship, mating. Noise which masks natural sounds can be detrimental to survival. Impulse noises produce startle, violent escape efforts, and panic. Noise around construction work, factories, and airports disrupt habitats. Such responses have caused injuries to domestic cattle and horses in stalls. Animals migrate from such conditions when an alternate area can be found." (Environmental Protection, Emil Chanlett 1979), citing "Effect of Noise on Wildlife and other Animals," EPA-NITD 300.5, J.Fletcher, 1971

- a. The underwater noise will exceed table 4.1 baseline values (i.e. 78, 76 dBA at 50 feet).
- b. The underwater noise at distances farther than 50 feet will remain higher than in air.
- c. The underwater noise will remain significantly higher than the 65 dBA threshold at "sensitive locations".

Please analyze the impacts of noise on listed species.

We expect that any objective analysis will find a potentially significant impact of noise on the listed species.

Page 4-14 "impacts of the proposed project 'on' noise levels,..." The word "On" is incorrect and we hope it is a typographical error only. The impacts are "Of" or "from" the proposed project's noise levels "ON" recreation...

DISTANCE OFFSHORE REGULATION NEEDED

The noise analysis does not recognize any kelp extraction closer to shore than 2,600 feet. However, there is no condition or regulation to enforce this. Thus it would be perfectly legal to extract kelp up to the shoreline.

Please create a regulation to prohibit use of kelp extraction vessels closer to shore than 2640 feet. Otherwise the DEIR noise analysis need to be revised to include noise impacts closer than 2640 feet from shore.

DEPTH RESTRICTION NEEDED

The DEIR claims Kelp extractors do not operate in waters shallower than 30 feet. p 4-11 However, there is no condition or regulation to enforce this. Thus it would be perfectly legal to extract kelp up to the shoreline.

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- 14w Please describe how close to shore 31 foot deep kelp beds can be. For example at Lover's Point in Pacific Grove kelp beds deeper than 30 feet grow within a stone's throw of the rocky point.
- Please create a regulation prohibiting use of kelp extraction in water depths of less than 30 feet.
- AIR POLLUTION**
We appreciate the Diesel and Gasoline emission tables. No significance thresholds for air pollution are given. Please do so for each air pollutant.
- Table 4-2, 3 and 4 are not meaningful because of the bizarre use of units of measure. Thousands of a ton is clearly not a common unit of measure and is difficult to convert without paper. Pounds of Carbon Monoxide is far more meaningful to the average reader as they are familiar with the concept of suicide by a few ounces of CO in an enclosed garage.
- 14w Please change Table 4-2,3 & 4 so they are more meaningful. We request you change "Emission rate" to pounds per hour from tons/day.
- MISC.**
p 4-14 "appreciable" does not make sense. Please use another word.
p 4-18 2nd paragraph: Please replace "affect" with effect"
p 4-18 states "removal of the canopy eliminates it as a source of food,..."
To which species does a "source of food" refer? Fish?
- 14x p 4-19 Please define "Haptera" and "hapteral growth" since there is no index or glossary. While you're at it - please include an index and a glossary.

IV. Law

- CEQA REQUIRES FINDING OF SIGNIFICANT IMPACT**
CEQA Guideline 15065 "Mandatory Findings of Significance" states -
"A lead agency shall find that a project may have a significant effect on the environment and thereby require an EIR to be prepared for the project where any of the following conditions occur:"
"(a) The project has the potential to ... reduce the number or restrict the range of a an endangered, rare or endangered plant or animal threatened species, ..."
- This means that if the range of species is reduced in any amount (one-quarter acre was enough in the controlling case) a finding of significant environmental impact must be made.
- The DEIR admits ESA listed Sea Otters, MMPA listed Gray Whales, California Sea Lions, Elephant Seals, and Harbor seals use the kelp forest as habitat. pg 3-43
- All whales, sea lions, harbor seals and sea otters are protected under the Marine Mammal Protection Act.
- Migrating gray whales, especially the young, stick close to kelp forests for protection. Gray Whales have been observed entering kelp forests to escape predation from killer whales (Orcinus
- 14y

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ores, Baldrige, 1972) and also to feed on invertebrates such as midwater crustacean swarms (Nerini, 1984)."

Sea Otters use Kelp beds (Giant Kelp - *Macrocystis pyrifera* & Bull kelp - *Nereocystis leukeyra*) as refuge from predators including white sharks and winter storms, to define territory and as nursery areas for females with pups. Sea otters feed on various invertebrates that exist in kelp forests (Foster and Schiel, 1985).

We conclude that the widespread removal of tens of square miles of kelp habitat for these listed species is a legally mandated significant impact.

Because of these mandatory significant impacts, the DEIR must analyze mitigations and alternatives.

* Please make a finding of significant impact for the listed species habitat and range loss, re-write the DEIR, prepare alternatives and mitigations and recirculate it as a revised DEIR.

ESA & MMPA TAKE ARE SIGNIFICANT IMPACTS

The presence of Kelp cutting boats admittedly disturbs Sea Otters (p 4-9 and 6-2 "less disruption of sea otters in occupied beds"). Harassment, ESA "take" of a listed species, includes influencing its behavior by human presence. Both the ESA and MMPA forbid harassment of listed species. This is take of ESA & MMPA listed species. The noise from boat engines and mechanical equipment also disturbs Sea Otters, as does the removal of kelp which serves as their protection from predators including sharks. Any harassment of an ESA listed species is "take", a violation of Section 9 of the U.S. Endangered Species Act.

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Activities authorized by this project which violate a federal environmental law are significant environmental impacts.

Since the Dept is also charged with enforcing Federal ESA, it seems perfectly appropriate to have all California Department of Fish and Game regulations prohibit any activity which could result in take of a listed species.

Please re-write the DEIR to recognize this significant environmental impact.

Please re-write the regulations to avoid this significant environmental impact.

Because of these significant impacts, the DEIR must analyze mitigations and alternatives.

BIOLOGICAL OPINIONS NEEDED

Federal experts are available and required to comment on this document which has federal involvement. We do not understand why there is no Consultation or Biological Opinion.

Is California Department of Fish and Game legally prohibited from having US-Fish & Wildlife Service or US-National Marine Fisheries Service consult on this?

14AA

14AA

* Please obtain a Biological Opinion on this project's impacts on the potential take under the ESA and MMPA of Southern Sea Otter (*enhydra lutris nercis*).

* Please obtain a Biological Opinion on this project's impacts on the potential take under the ESA and MMPA of the Stellar Sea Lion (*Eumetopias jubata*).

The DEIR laments not having a way to measure a precautionary approach (p 6-2). The Dept., also charged with enforcing Federal ESA, can create regulations which use all measures necessary to avoid potential take as one threshold to a precautionary approach and which is minimally consistent with Federal ESA law.

14BB

CONSULTATION REQUIRED

National Marine Sanctuaries Act requires Federal Lead agency to consult with Dept. of Commerce on any activities "that are likely to destroy, cause the loss of or injure any sanctuary resource." (16 USC Sec 1434 (d)) We believe that NOAA is this project's federal lead agency, but whether it is or not it is CDF&G should initiate consultation.

V. Reasoning

CUMULATIVE IMPACTS ADMITTED BUT UNADDRESSED

The document oddly claims it "fully discloses potential cumulative impacts". This is admittedly false. There is substantial evidence that the Kelp forest ecosystem is potentially near collapse. But alarming, precipitous declines in marine mammals, abalone, rockfish and perhaps other families should be a big red flag. The huge cumulative damage of overfishing, sewage and natural climate variation added to kelp extraction impacts should make it obvious that it is time to say - Enough.

The DEIR admits "The numerical relationship of species in some kelp beds has changed due to [human] removal of dominant kelp inhabitants by various sources." p 2-4

This admits there are cumulative significant environmental impacts on kelp inhabiting species. But instead of analyzing this impact as a cumulative impact it is dismissed because, it claims, kelp destruction plays a "minor" role.

Even if kelp destruction plays a minor role in impacts on kelp dependent or inhabiting species kelp extraction contributes to this serious cumulative impact and must legally be analyzed in that context.

ECOSYSTEM SERVICES

Seagrass/algae beds provide approx. \$19,000 in Ecosystem services per hectare per year. "The value of the worlds ecosystem services and natural capital" by Costanza et al, Nature 15 May 1997 pg 256. Those services include: Species protection (think of what it costs to keep an endangered animal alive in a zoo, compared to a native habitat), storm protection, and other aspects of habitat response to environmental variability mainly controlled by vegetation structure, prevention of loss by wind, or other removal processes, nutrient cycling, waste treatment, pollution control, detoxification, atmospheric gas regulation, climate regulation, pollination, dynamic regulation of populations, reduction of herbivory by top predators, habitat for resident and transient populations, food, fuel and fodder production; medicine products, genes for disease

14cc

14cc
resistance, ornamental species, eco-tourism, sport fishing, and other outdoor activities, aesthetic, artistic, educational, spiritual and scientific values.

How many total square miles of kelp are there in California?

How many square miles of kelp could be cut by this project?
(Please count the square miles of each cut separately.)

* Please list and quantify the loss of ecosystem services due to this project.

Please explain and quantify how kelp cutting is in the public interest.

1400
Please obtain, review and incorporate facts from "The Ecology of Giant Kelp Forests in California: A Community Profile. Slidell, Louisiana: US-Fish & Wildlife Service, 1985. Fisher, Michael S. and Schell, David R.

SEWAGE CUMULATIVE IMPACT
"A variety of influences can adversely affect the great kelp, but sewage pollution is a specific peril, as was demonstrated by the loss of a large forest off the Palos Verdes Peninsula in Los Angeles County and disappearances off several other sites in southern California in the 1950s." California an Environmental Atlas and Guide, Bern Kreissman, 1991 p 68

CALIFORNIA SEWAGE
"In 1998, beaches statewide were closed for a combined total of 3,273 days, compared to 745 days in 1991, according to the most recent data available from the Natural Resources Defense Council. Sewage spills and urban runoff caused the majority of the closures." AP May 28, 2000

PACIFIC GROVE
The Pacific Grove sewer system spilled some 70,000 gallons of sewage directly into the Monterey Bay National Marine Sanctuary in January 2000. This violated the Clean Water Act, California Water Code and possibly the Endangered Species Act. As a result the Regional Water Quality Control Board fined Pacific Grove a mere \$75,000 (out of a possible \$700,000) with the warning from staff counsel and board members that "next time there would be a much sterner fine." The four criteria for assessing penalties - History of violations, Ability to Pay, Culpability, Economic Benefit - all were found NOT to justify assessing less than maximum civil liability.

Monterey County Environmental Health Dept. closed Pacific Grove's Lover's Point Beach seven (7) times between January 2000 and May 2000 - four times because of sewage spills and thrice for high bacteria levels. The increased detection of health problems is directly related to increased testing. In Summer 1999 testing began on a weekly basis.

Monterey County Environmental Health Dept. closed Lover's Point Beach in Oct 99 due to an observed 1000 gallon sewage spill. That week, fecal coliform levels exceeded state health standards at San Carlos Beach, Del Monte Beach, Asilomar Beach, Spanish Bay and Stillwater Cove.

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PEBBLE BEACH

Monterey County Health Dept. closed the Spanish Bay beach "for a few days to a week" beginning on March 22 2000 because of a sewage spill from a broken sewer main. Herald Mar 23 2000

"Contamination shuts Stillwater Cove" headline Herald Apr 6 2000 "High levels of fecal coliform have been found...coming from a storm sewer that drains the famous Pebble Beach Golf Links, said Walter Wong, the county's director of Environmental Health."

CARMEL

"About 1,000 gallons of sewage spilled into Mission Trail Park in Carmel early Thursday evening." From the park it flowed into nearby Mission Trail creek, then about half a mile down to the Carmel River and into the Carmel River Lagoon and the Carmel Bay. "Emergency crews flushed the spill area with bleach and about 1000 gallons of water." Herald, Mar 24, 2000

HUNTINGTON BEACH

Huntington Beach was closed for more than 60 peak summer days due to elevated bacteria levels. AP May 28, 2000

CHLORINE

Chlorine bleach is the standard application after a spill. Chlorine is extremely toxic and reactive itself. Chlorine can harm and kill kelp and its reproductive cells.

- * Please analyze the widespread cumulative impacts of sewage and chlorine on kelp forests.
- * Please analyze the cumulative environmental impacts of all related activities on kelp as habitat.
- * Please analyze the cumulative environmental impacts of all related activities on kelp related species.

MITIGATION

Reading Chapter 5 on Mitigation, felt like it had turned my thought processes into a Klein bottle (a 3 dimensional Mobius strip). It confuses Mitigations and Alternatives. That is certainly excusable because not many people clearly understand the difference. Let me try to explain.

MITIGATIONS VS ALTERNATIVES

Mitigation means doing the same project, but changing how you implement that project.
Alternatives means doing a different project with the same goal.

Example: Three experts tell a woman she should walk across an icy river. Toxicologist says she should wade because the water isn't toxic - just cold. Cardiologist says she can mitigate the cold by wearing a wetsuit. Hydrologist says its OK because other rivers aren't more than 4 feet deep. To their shock - the woman refuses. "Why?" they ask. "Because there's a bridge just upstream." (adapted from Mary O'Brien's Making Better Environmental Decisions)

The difference between Mitigations and Alternatives is generally that Alternatives involve the entire goal of the project (to get to the other side by walking across a bridge versus wading across

14f

14ff

a river) while Mitigations deal with subsets of the proposed project (how to minimize freezing if wading the river).

For this project real alternatives would include finding alternative sources for algin and abalone food.

ALTERNATIVES TOO LIMITED

The DEIR is not correct in saying "The only alternatives to regulating the take of kelp would be to allow harvest without restriction or to prohibit consumptive use of these resources." P 5-1

To analyze alternatives properly one must understand the goal.

"Sustainable harvest" and insuring "a supply of kelp" are not necessarily in the public interest or valid goals. Without a valid goal no one can determine whether the goal is ever met.

There seem to be only two different products for which kelp is extracted - algin and abalone food. If alternative sources for products to use in place of algin and abalone food are found there is no need to allow any kelp extraction.

* Please prepare a list and analysis of alternative sources for algin.

* Please prepare a list and analysis of alternative sources for abalone food.

There is no analysis of an alternative which protects the kelp bed habitat used by the ESA-listed Southern Sea Otter (*calydra lutris nereis*).

There is no analysis of an alternative which avoids take of ESA listed species.

* Please analyze an alternative which avoids take and protects all kelp bed habitat potentially used by the ESA listed species Southern Sea Otter, Gray Whale and the Stellar Sea Lion.

INCLUDE A GENUINE NO-PROJECT ALTERNATIVE

As explained above the DEIR claims that the "No action" alternative is the same as a no-project Alternative. This is not correct.

What is the text of the findings that were made to limit the take of Bull kelp north of Point Arguello?

14cc

* Please analyze an alternative which prohibits all extraction of all kelp beds in California. Clearly, this would be the environmentally preferred alternative.

Please put us on your list of "Interested Parties" so we get all notices of the proposed project (if for no other reason than we ask under authority of CEQA Sections: 21092.(b)(3) and 21092.2)

Incidental Take Permits

Please put us on your list of "Interested Parties" so we get all notices of any Incidental Take Application and copies of all related Biological Reports related in any way to this project or this property.

Please send us a copy of the staff report and the FLIR for this item.

If you do not adopt the issues raised in this letter, please send us a copy of the approval as soon as it is signed.

Please also send us the Notice of Determination or Exemption as soon as it is filed. If it is not filed within 5 days of the signed decision, please notify us of that.

Please let us know immediately if you feel we have not yet exhausted our Administrative remedies or that we do not have standing.

If this is the case please let us know what actions you feel are necessary for us to have standing and to have exhausted our Administrative remedies prior to your final decision.

Please acknowledge receipt of this letter within 5 days.

We look forward to your substantive, written response to the issues raised here within 10 days. If any of this is in the slightest way unclear please contact us ASAP by phone, email or mail.

With all due Respect,

David Dilworth, Acting Secretary and Trustee 831/624-6500

HOPE - Helping Our Peninsula's Environment

Box 1495, Carmel, CA 93921 - 831/824-6500

Robert Traynor
Calif. Dept. of Fish and Game

Thursday, February 15, 2001

Kelp Regulations DEIR Errata

On page 6 of our comments please note the word "are" should be "area" in the comment -

Page 4-19 says "...plants had been lost during the winter in the experimentally harvested
are but not in the unharvested control."

We inadvertently wrote "We look forward to your substantive, written response to the issues raised here within 10 days." We realize you will not be able to substantively respond within 10 days. We do look forward to your substantive, reasoned responses to each of our comments as required by CEQA law and Guidelines.

With all due Respect,

David Dilworth, Acting Secretary and Trustee 831/624-6500

15 FEB 01 11 30
CALIF. DEPT. OF FISH & GAME
COMMUNICATIONS SECTION

RCMP - Responsible Consumers of the Monterey Peninsula
Box 1495, Carmel, CA 93921 - 831/624-6500

"To the extent that commerce is ungoverned, commerce governs."
 -Jance Olsen

Robert Traynor
 Calif. Dept. of Fish and Game

Thursday, February 15, 2001

15 FEB 01 11 30 AM
 CALIF. DEPT. OF FISH & GAME
 COMMUNICATIONS

Kelp Regulations DEIR Comments
LEASE TIMES IMPROPER

15A { **We urge redrafting the DEIR and regulations to fit the significant environmental impacts of removing significant critical biomass from habitat supporting several officially listed species in danger of extinction.**

15B { **LEASE DURATION EXCESSIVE**
 The Lease Duration of 20 years is far too long.
 Lessees tend to think they have a property right when leases are too long as evidenced by the fierce and even **violent reactions** (Carson County in New Mexico and in Nevada) to federal agencies trying to reduce grazing leases because of newly realized grazing caused impacts.
Please prepare a regulation that reduces the lease duration to 2 years maximum.

15C { **SUSPENSION FOR LAW VIOLATIONS IS TOO SHORT**
 When a for profit business breaks the law a mere suspension for a maximum of one year does not even add up to a slap on the wrist.
 Please prepare a regulation that increases makes it a criminal act to violate kelp cutting guidelines lease suspension with no maximum.
 Please prepare a regulation that suspends lease time with no maximum number of years.

15D { **ECOSYSTEM COLLAPSE CRITERIA NEEDED**
 We're dealing with an ecosystem where we have substantial evidence of an impending ecosystem collapse.
Please explain all measurable criteria you are using to determine when the trigger point of ecosystem collapse could occur?

Please put us on your list of "Interested Parties" so we get all notices of the proposed project (if for no other reason than we ask under authority of CEQA Sections: 21092.(b)(3) and 21092.2)

With all due Respect,
 David Dilworth, Co-Chair

*American Oceans Campaign * Center for Marine Conservation*

February 15, 2001

Rob Collins
Department of Fish and Game
20 Lower Ragsdale Drive
Monterey, CA 93940

Via Facsimile and U.S. Mail (Fax: (831) 649-2917)

RE: Comments on the Department of Fish and Game's December 2000 Draft Final Environmental Document for Giant and Bull Kelp Commercial and Sport Fishing Regulations

Dear Mr. Collins,

The Center for Marine Conservation and American Oceans Campaign, on behalf of our combined membership of more than 20,000 California citizens, welcomes the opportunity to provide comments on the December 2000 Draft Final Environmental Document for Giant and Bull Kelp Commercial and Sport Fishing Regulations (hereafter, "the Document"). We have several questions with regard to the Document and some specific concerns with it as written. We recommend that the Department of Fish and Game take the following actions:

- 1) Extend the comment period on the Document by 15 days to allow for other interested parties to comment;
- 2) Amend the proposed project to incorporate the Department's recommendation to, "develop a biologically tenable threshold value beyond which the impacts [of kelp harvesting] could be anticipated before imposing harvest limitations on a broad scale."¹
- 3) Review the legal and scientific adequacy of the Document with respect to our comments below, and if inadequate, revise the Document to meet these legal requirements.

We respectfully request a written response to these comments and recommendations, and we look forward to discussing this Document and the management of kelp harvesting further, as time permits.

16A { While the Department of Fish and Game may have the authority under CEQA to produce an environmental document in lieu of the EIR/ND requirement, we can find no discussion in the Document of the reasons for the decision to pursue this approach. We strongly encourage the Department to explicitly state why it chose to develop this alternative approach, particularly in light of the potential for impacts to the Southern sea otter (*Enhydra lutris nereis*), a protected species listed as "threatened" pursuant to the Endangered Species Act (16 U.S.C. §1531 et seq) and protected under the Marine Mammal Protection Act (16 U.S.C. §1361 et seq), and to several groundfish species listed as "overfished" by the National Marine Fisheries Service (NMFS).²

¹ Draft Final Environmental Document, at 1-2

² National Marine Fisheries Service, Report to Congress, Status of Fisheries of the United States, January 2001.

160 { While we support the Department's primary objective for the project (to "insure that kelp harvesting does not impair the health and diversity of marine ecosystems and marine living resources")³ we are concerned that the analysis provided in the Document may not adequately meet the legal requirement of utilizing the "best available science"⁴, and we are unsure that the preferred alternative will effectively meet this objective. Much of the scientific information referenced in the Document is one or more decades old, dating to a period of significantly different ecology, prior to the major El Nino events of the past twenty-plus years, the "200 year storm" event of 1988, and the increased fishing pressure and other human impacts on the nearshore environment. We are concerned by the lack of recent scientific information regarding the impacts of kelp harvesting on the ecosystem and on individual species (particularly fish and marine mammals), and we strongly urge the Department to amend the preferred alternative to require further investigation of the impact(s) of kelp harvesting on the ecosystem. At a minimum, the preferred alternative should also incorporate the Department's own recommendation to "develop a biologically tenable threshold value beyond which the impacts [of kelp harvesting] could be anticipated before imposing harvest limitations on a broad scale."⁵

16c {

Specifically, the Document details several potential impacts to fish, marine mammals, birds, and invertebrates. We commend the Department for recognizing in the Document that kelp provides habitat for a large number of fish species, that kelp provides food and hiding places for juvenile fish species, and that studies have shown a positive relationship between kelp density and fish density.⁶ Reports on Essential Fish Habitat (EFH) and other documents prepared by NMFS and the National Oceanic and Atmospheric Administration (NOAA) reinforce the importance of kelp as habitat for many fish species, including "overfished" species such as Lingcod (*Ophiodon elongatus*) and Bocaccio (*Sebastes paucispinis*).⁷ Moreover, the Document states that, "kelp harvesting affected the distribution of fishes associated with kelp forests, especially juvenile rockfishes... the removal of canopy cover may also contribute to greater predator success in harvested versus control areas."⁸ Other research cited in the Document found "a significant reduction in fish populations in the harvested area following the harvest, as well as a significant reduction in the fish population in the unharvested area."⁹ Recognition that recreational fishermen follow the kelp harvesters to improve fishing effort and to gain access to areas previously "closed due to the density of kelp" demonstrates that "kelp harvesting can indirectly increase fishing related mortality."¹⁰ CEQA requires an analysis of such indirect impacts,¹¹ and we urge the Department to ensure such indirect impacts are not significant.

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³ Draft Final Environmental Document, at 2-4

⁴ Fish and Game Code Section 7056 (g)

⁵ Draft Final Environmental Document, at 1-2

⁶ Draft Final Environmental Document, at 3-38 to 3-41

⁷ See, e.g., NMFS, 1998. Essential fish habitat: West Coast groundfish. Appendix. Seattle, WA., or NOAA, 1990. West Coast of North America coastal and ocean zones strategic assessment: Data atlas. U.S. Dep. Commerce NOAA. OMA/NOS, Ocean Assessments Division, Strategic Assessment Branch. Invertebrate and Fish Volume.

⁸ Draft Final Environmental Document, at 4-1

⁹ *Id.*, at 4-3

¹⁰ *Id.*, at 4-2

¹¹ CCR Title 14 §15126.2(a)

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We recognize that there is much scientific uncertainty surrounding the analysis of impacts of the proposed project. However, the Department's conclusion with respect to Giant Kelp, that "harvesting of canopies may open some areas to predation by fishes that otherwise would not feed in the area, and potentially increases the fishing mortality for some fish species due to easier access to those species,"¹² appears to indicate a potentially significant impact. The Department acknowledges as much with respect to bull kelp harvesting, stating that "at this time, too little research has been done on the effect of bull kelp harvest on fish and until more information is gathered, it is impossible to tell whether the impacts are significant or not."¹³

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Similarly, the Document acknowledges the scientific evidence that kelp is the preferred habitat of the Southern sea otter (*Enhydra lutris nereis*) and that kelp forests function as nursery areas for the species.¹⁴ While there has not been a recorded, direct take of a Southern sea otter by kelp harvesters, there is a potential for harm to the species. Harassment and other forms of "take" of species protected under the Marine Mammal Protection Act and the Endangered Species Act are prohibited by law.¹⁵ The Document notes that kelp harvesting may impact the population of the Southern sea otter by requiring them to shift rafting or foraging locations and/or reducing the amount of available invertebrate prey (food).¹⁶ Even though critical habitat for the species has not been designated under the ESA,¹⁷ consideration of habitat impacts on the species is important. We also note that the status of the Southern sea otter population is listed as threatened under the Endangered Species Act,¹⁸ rather than "uncertain" (as is stated in the Document).¹⁹ Again, we strongly recommend that the Department undertake further studies to examine the impact of kelp harvesting on the Southern sea otter population, and we note that the Monterey Bay National Marine Sanctuary may be required to perform a Section 7 consultation under the Endangered Species Act which would result in the biological assessment by the U.S. Fish and Wildlife Service, which may provide additional scientific information on the impact of kelp harvesting on this species. We strongly urge the Department and Commission to ensure that they meet their mandate of adaptive management²⁰ by incorporating any new scientific information in future management decisions.

160

Furthermore, we are concerned that throughout the Document the analysis of the effects of kelp harvesting on habitat for other marine species may not be adequate under CEQA, and that the project may not conform with existing law protecting marine habitat ("the health of marine habitat is maintained and, to the extent feasible, habitat is restored, and where appropriate, habitat is enhanced"²¹). Although Section 7084 (b) of the Fish and Game Code specifically exempts kelp harvesting from the requirement to address and "minimize adverse effects on habitat caused by fishing",²² CEQA guidelines require that a mandatory finding of significance

¹² Draft Final Environmental Document, at 4-4

¹³ *Id.*, at 4-5

¹⁴ *Id.*, at 3-42 to 3-43

¹⁵ 16 U.S.C. §1361 et seq and 16 U.S.C. §1531 et seq, respectively

¹⁶ Draft Final Environmental Document, at 4-8 to 4-10

¹⁷ 50 CFR 226

¹⁸ 50 CFR 17.11

¹⁹ Draft Final Environmental Document, at 4-10

²⁰ Fish and Game Code §7056 (g); see also Fish and Game Code §7055 (b)

²¹ Fish and Game Code §7056 (b)

²² Fish and Game Code §7084 (a)

16f

be triggered if the project has the potential to substantially reduce the habitat of a fish or wildlife species.²³ The Federal Endangered Species Act also may limit an agency's decision that causes loss of habitat for endangered or threatened species.²⁴ Similarly, we are unsure whether the discussion of cumulative impacts in the Document is appropriate and complete as well. We urge the Department to re-examine the Document in light of these requirements and ensure that the Document meets these legal requirements.

16g

In addition, we are concerned that the discussion of management techniques in Section 2.5 does not include a discussion of per-bed harvest limits. This management technique is a key element of Alternative 1 and is the only alternative to the preferred alternative that is not a "no action" alternative. As such, a more substantial discussion of the technique, its expected costs and benefits to the environment, and the legal authority to apply it, should be provided as though this Document were an EIR.²⁵ The Document states that Alternative 1 would result in both less displacement of juvenile fish and less disruption of sea otters in occupied beds, but suggests that the ecological benefits to kelp and other species would not be significant in most geographical areas.²⁶ We believe that further research and analysis on this issue is warranted.

Perhaps most importantly, we are concerned by the Document's analysis in support of the preferred alternative. In the Document Summary, the Document asserts that the "project is not expected to have any adverse impacts on the bull or giant kelp resources or on their associated communities" because the impacts from kelp harvesting, compared to other human activities affecting these ecological communities, is minor.²⁷ Yet in the discussion of the alternatives to the project, Alternative 1 is not the preferred alternative because of "1) potential impacts to the algin industry and local economies."²⁸ Neither of these arguments seems persuasive or appropriate for an Environmental document prepared pursuant to CEQA.²⁹ We strongly recommend that the Department revise these sections to comply with CEQA.

16h

Finally, we note that the Department's notice and involvement of stakeholders could have been improved. While we recognize that the Department is making improvements, several stakeholders and other interested persons will not be able to meet the deadline for comments, as they were unaware of the availability of the Document. Several comments on the impacts of kelp harvesting on nearshore fish species were raised at the recent scoping meetings for the Nearshore Fishery Management Plan, yet the Department did not announce the availability of this Document or the impending deadline for comments. Moreover, as the proposed project occurs in areas of Essential Fish Habitat (EFH) designated under the West Coast Groundfish Fishery Management Plan, we strongly urge the Department to ensure NMFS has an opportunity to comment on this Document. We strongly encourage the Department to continue to improve their involvement of the public with respect to actions by the Commission and Department with respect to kelp harvesting.

²³ CCR Title 14 §15056

²⁴ 16 U.S.C. §§1538 (a) (1) (B), 1539

²⁵ CCR Title 14 §15126.6 (d)

²⁶ Draft Final Environmental Document, at 6-2

²⁷ *Id.*, at 1-6

²⁸ *Id.*, at 6-3

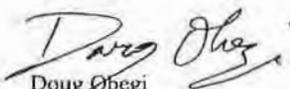
²⁹ See, e.g., CCR Title 14 §15131

161

At this time, we are not prepared to offer substantial comments as to the relative merits of the preferred Alternative, particularly with respect to Alternative 1. As noted throughout the Document, kelp is an important habitat for a wide range of species occurring in the nearshore environment. The Document details a number of impacts which may cumulatively or indirectly be significant. We are concerned that although substantial scientific uncertainty exists, this uncertainty may mask the significance of the project's impact(s) on the marine environment, and in the absence of scientific certainty a precautionary approach must be utilized. We strongly encourage the Department to amend the preferred alternative to, at a minimum, develop a biologically tenable threshold value beyond which the impacts [of kelp harvesting] could be anticipated before imposing harvest limitations on a broad scale.³⁰

Thank you for the opportunity to comment on the Draft Final Environmental Document. Please feel free to contact us at your convenience to discuss these comments and questions. We look forward to working with you to continue to conserve and sustain California's marine ecosystems for the benefit of all the state's citizens.

Sincerely,



Doug Obegi
Center for Marine Conservation
580 Market Street, Suite 550
San Francisco, CA 94104
PH: (415) 391-6204
Fax: (415) 956-7441



Joe Geever
American Oceans Campaign
6030 Wilshire Boulevard
Los Angeles, CA 90036
(323) 936-8242
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³⁰ Draft Final Environmental Document, at 1-2.

17



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February 13, 2001

Commissioners
Fish and Game Commission
1416 9th Street, Room 1320
Sacramento, CA 95814

Down Darryl
21 pieces taken
805 772 7569
FRED W

SUBJECT: Five Year Status Report and Environmental Document on Kelp Management and Harvesting: Item 5, February 2, 2001 Agenda

Dear Commissioners:

The California Aquaculture Association (CAA) and in particular the abalone growers in the State, would like to commend the Department for its considerable effort in preparing the Final Environmental Document on Giant and Bull Kelp Regulations. We are pleased to offer our general support for the document, and offer the following recommendations in an effort to make the regulations clearer and fairer. We hope that the action that your Commission takes on this matter now will establish a kelp management plan that will stay in place until at least the next five-year review.

As you are all well aware, the California Fish and Game Code (Section 1700.f) explicitly charges the Department with the "...development of commercial aquaculture" in the State. Our comments are provided with this mandate in mind.

17a { Firstly, our industry - in this case it is just the abalone growers - is responsible for a *small fraction* of the kelp harvest in the State, yet much of the focus of the document before you deals with the areas and harvesting practices of our growers. Abalone growers account for a mere 1.7% of the State's commercial take. By those numbers alone, we have a very small impact on the resource. Also, the report shows a definite downturn in kelp harvesting in general, providing us all with even greater confidence that our kelp resources are safe.

17b { Second, this document proposes changes to the current regulations that may significantly impede part of our industry's ability to harvest kelp at certain times and in certain areas - despite no evidence that these changes will enhance overall kelp resources. It is therefore imperative that the Commission recognizes that the restrictions on harvesting that are proposed in the document may in fact be addressing user conflict issues rather than kelp sustainability concerns. We urge the Commission to make the distinction between

Fish and Game Commissioners
Kelp EIR
Page 2

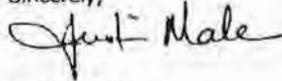
- 17a { these two considerations so that our industry is not needlessly jeopardized by overly restrictive regulations.
- 17c { Thirdly, CAA urges the Commission to consider very carefully the specific recommendations of the abalone growers that seek greater regulatory clarification. Regulatory predictability is a cornerstone of effective and fair government. Businesses – particularly those that have a slow rate of return on their investments like abalone growers – need the assurance that the rules under which they operate are not subject to rapid and unpredictable changes.
- 17c { There is no viable economic alternative to fresh kelp for most of the California abalone growers at this stage. They have built their businesses up with a reasonable expectation that their sustainable harvest will continue to be permitted. Because of this, these kelp harvest regulations *must* be deliberative, science-based and stable.
- 17o { For example, under the Proposed Regulatory changes Section 165.c.4, provides that the “*Commission may limit or prohibit the harvest of kelp within a bed or portion of a bed for any length of time to insure that kelp is properly harvested*”. The phrase “*properly harvested*” is not defined, and is subject to differing interpretation. These regulations should establish clear decision-making process and clear criteria, such as an historical record showing a decline in the kelp resource, to guide such a closure.
- 17e { In addition, the proposed restriction on harvesting *Nereocystis* under Section 165.c.4.B does not appear to have been justified with the data provided. If however this justification can be provided, CAA would seek clarification on whether the restriction would apply to attached kelp, or drift kelp as well.
- 17f { Further, the restrictions on mechanical harvesting under Section 165.c.4.C appear to be redundant if the other harvesting limitations are in place.
- 17g { Finally, we urge the Commission to direct the Department to redraft Section 165.c.4.E under which nonleased kelp beds may be designated as harvest control areas. While we support this adaptive management approach, we need to establish in these regulations better-defined criteria that may trigger such a closure.

Fish and Game Commissioners
Kelp EIR
Page 3

CAA and its abalone growers pride themselves in practicing sustainable aquaculture. We have already accommodated the interests of other users by agreeing to the closure of a significant section of bed 220 and to the restriction on mechanical harvesting in an even greater portion of this bed. We look to your Commission to bring an equitable closure to this matter and to help us secure our small niche in the complex California environment for our businesses.

As always, CAA stands ready to assist you and the Department in any way we can.

Sincerely,



Justin Malan
Executive Director

Cc: Mr. Robert Hight, Director, Dept. of Fish and Game
Senator Bruce McPherson, 15th District
Assemblymember Fred Keeley, 27th District
CAA membership

Fred Wendell

From: Rob Collins <RACollin@dfg.ca.gov>
To: <fwendell@dfg2.ca.gov>
Sent: Friday, February 16, 2001 8:26 AM
Subject: Re: Fw: Comment: Draft Environmental Doc. on Kelp Mgmt.

Fred, you didn't get it all. Here it is again.

John O'Connor Feb. 15, 2001
PO Box 116
Bolinas CA. 94924

Mr. Rob Collins
California Department of Fish and Game
20 Lower Ragsdale Ave.
Monterey, CA. 93940

Re: Kelp harvesting effect on essential fish habitat.

Dear Mr. Collins:

18A { In over four hundred references cited in the Draft Final Environmental Document of The Giant and Bull Kelp Commercial and Sport Fishing Regulations there are five citations that refer to the effects that kelp harvesting has on fish populations and only one of those studies is concerned with the effects that kelp harvesting has on young of the year rockfish. These studies are from before 1968 to 1993, and were all done years before the drastic downturn in rockfish populations was acknowledged by regulators. The Draft Kelp Regulations utilize the 33 year old study by W.J.North (1968) to suggest that changes in the 1968 general equilibrium attributable to kelp harvesting compared to the present conditions surrounding kelp harvesting are minor irrespective of changes that have actually occurred in the ocean since 1968.

Young of the year rockfish and other fish species sometimes swarm in the canopy cover and may be damaged or become vulnerable to predation during harvesting. Major rockfish species such as the troubled bocaccio rockfish that are down to less than 5% of unfished, the blue rockfish and olive rockfish, among others, use the canopy in early life stages. Kelp forests and kelp harvesting are an integral part of the nearshore fishery and should be part of the nearshore fishery management plan. New studies that will quantify present kelp harvesting's disruption of kelp forest fish species must be part of the Giant and Bull Kelp Regulations and the 2002 Nearshore Fishery Management Plan.

18B { Because the Draft Final Environmental Document, Giant and Bull Kelp Commercial and Sport Fishing Regulations, Dec. 2000 lacks timely studies I suggest that the document is incomplete and needs further revisions.

02/16/2001



Abalone International Inc.
P.O. Box 1640
Crescent City, California 95531
Phone (707) 464-6913 - Fax (707) 464-1802

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FEB 11 11 53 AM

Mr. Robert Hight, Director
California Department of Fish and Game

Dear Director Hight,

19a Thank you for this opportunity to comment on the Draft of the Proposed kelp Regulations. I think it is important to note that the kelp harvesting industries of California have worked with the Department for many years with the result being the maintenance of healthy dynamic kelp beds along the coast. It does seem however as if some of the proposed changes will have a negative impact on our industry, that of the abalone farmers, without increasing the protection of the beds in any real scientific way. To help improve the plan, I would like to suggest the following:

Amendment 3 - "Regulations controlling the commercial harvest of bull kelp should be amended to restrict acceptable harvest methods and seasons to protect that species near the southern limits of its geographic distribution."

19b This amendment proposes to increase regulations on the take of bull kelp near the southern limits of its geographic range. As I am certain the Department is already aware, the bull kelp beds only start in Bed #224 which is approximately 15 miles north of Santa Cruz. There are no bull kelp beds in the areas where kelp is harvested. The bull kelp that is taken is either drift or already up on the beach. Therefore recommendation does not appear to have any resource or scientific basis with regards to maintaining a reproducing bed, but it would have the effect of being a great burden on at least one of the farms in particular. The farm uses both drift kelp, and beach kelp to help supplement their feeding of abalone. It would be unreasonably burdensome to expect them to sort through beach kelp removing any bull kelp to be left on the beach. In addition we are talking about a miniscule percentage of the drift/wrack kelp in that area's ecosystem that is used, yet a food supply which can at times be vital. The Sanctuary's Advisory Council strongly urged the MBNMS Staff to reject this proposal. The Cities of Monterey and Santa Cruz bury tons of bull and giant kelp along their public beaches. If this recommendation were to pass as proposed, the burying of bull kelp by these Cities would in effect be a violation of the law.

I strongly urge the Commission to consider rejecting this proposed amendment.

19c Amendment 6 - "The regulations should also be amended to provide a

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19c

method for placing temporary harvest controls in beds or portions of beds where necessary for resource protection."

This regulation is vague and does not indicate or specify how a closure would be determined. As the Department is aware, kelp beds are highly variable changing quite rapidly in a very short time frame. It is not feasible for the Department to assess, develop, and implement temporary harvest controls so quickly in this dynamic system without severely impacting abalone farmers who depend on steady kelp supplies for their survival.

I strongly urge the Commission to consider rejecting this proposed amendment.

Proposed Regulatory Changes (P. Appendix 2-3)

(c) 4 - "The commission may limit or prohibit the harvest of kelp within a bed or portion of a bed for any length of time to insure that kelp is properly harvested."

Kelp harvesting as managed by the Department is being properly harvested, either by hand or by use of a mechanical harvester. The wording here seems vague, and unclear as to it's purpose. Kelp harvesters, and methods are well known to the Department as it is a small group. Both the alginate, and abalone industries have developed with the long term health of the kelp beds in mind.

19d

I strongly urge the Commission to reject this proposed amendment.

(c) 4B - "Between April 1 and July 31, a kelp harvester may not harvest bull kelp from a nonleased kelp bed that lies partially or totally within the boundary of the MBNMS extending from Santa Rosa Creek, San Luis Obispo County, northward to Rocky Point, Marin County."

Here again see my above comments under Amendment #3.

(c) 4C - "Prior commission approval of a kelp harvest plan is necessary before a kelp harvester may use a mechanical harvester to harvest giant kelp in a non-leased kelp bed in the area north of Santa Rosa Creek."

This proposal seems unduly burdensome on both the Commission, as well as the kelp harvester. This process could take months which would effectively stop harvesting of kelp in this area for the season. The Department is already fully aware of the harvest methods used, and inclusion of this change would do nothing more than add extra burdensome regulations without any added protection to the beds. The same tonnage of kelp will be harvested whether it is by hand in a very narrow area or throughout a much broader

19e

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19e

area mechanically.
 Currently kelp is harvested within 1-2 miles of the Santa Cruz and Monterey Harbors. A mechanical harvester would allow for kelp to be harvested in a much larger area, thus reducing the impact in any one area. A mechanical harvester operated out of Santa Cruz for over 10 years with no public complaints or comments being made during the DFG Kelp Plan Review in 1995. The proposal to limit mechanical harvesting does not address the real issue at hand. The whole issue has historically always revolved around hand harvesting along Cannery Row.

I strongly urge the Commission to consider rejecting this proposed amendment.

(c) 4E - "The commission may designate, through emergency regulation, a non-leased kelp bed or portion of a bed as a harvest control area for a specified period of time. The commission shall set a cumulative harvest tonnage limit that may not be exceeded by a kelp harvester while harvesting within the control area during any consecutive 7-day period."

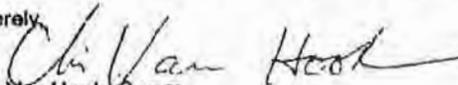
19f

Again the language is vague and unclear as to what the Department is trying to achieve through this recommendation.

I strongly urge the Commission to consider rejecting this proposed amendment.

In summary, one of the main challenges of the Department is to promote aquaculture. It has "encouraged" status within California. These businesses are built over a long period of years, and therefore sudden changes are particularly damaging to aquaculture farms. This is, and has been one of the crucial differences between aquaculture, and the traditional fisheries. One need only look to the recent Department handling of the RLP issue to see the long term damage ill conceived, rash changes in regulations can have on even "exemplary" models of aquaculture in California. I hope the Department will resist the temptation to add more questionable regulations onto the abalone farming, and kelp harvesting industries.

Sincerely,



Chris Van Hook, Owner
 Abalone International Inc.

01/31/2001

CC: Robert Treanor, Exec. Director of Fish & Game Commission
 Robson Collins, Monterey CA Dept. of Fish & Game
 Justin Malat, Exec. Director of California Aquaculture Assoc.

**Comments on the State of CA Draft Final Environmental Document:
Giant and Bull Kelp Commercial and Sport Fishing Regulations**

From a concerned underwater photographer,
Richard Todd
17675 Riverbend Road
Salinas, CA 93908



INTRODUCTION

I am an underwater photographer and videographer intimately acquainted with the kelp forests and their health along the California coast and especially in the area off the city of Monterey known as Ed Ricketts Underwater Park. I have been a certified diver since 1970. I grew up diving the freshwater lakes and quarries of the Midwest. I purchased my first underwater camera in the 1970's in an attempt, like most underwater photographers, to show my non-diving friends and relatives what it is like beneath the surface. In the 70's and 80's I was drawn to areas of richer biodiversity and this included the magnificent kelp forests of California. Nowhere was healthy kelp easier to access for an out-of-state traveler than Monterey. I brought co-workers, I brought small groups, and I even brought foreign exchange students from Netherlands to the kelp forests, so that they too, could experience, photograph and relate the exhilarating experience to *their* friends. It was never difficult finding interest in a return visit. Kelp forests are rather unique to the underwater world, and there just are not that many areas in the world that have them accessible from shore.

It was only natural that I chose to move to Monterey area with my wife. Diving more often and getting to know the diving community, we all shared what we were seeing – with each other and especially our non-diving friends. We organized exhibits at churches, at Monterey Airport, at the Pacific Grove Museum all to show and share what we saw. We started the Monterey Peninsula Underwater Photographers (MPUP) so that we could surround ourselves with others of like interest and incredible talent. We all worked hard to preserve what we all saw as a steady decline in the health of this living ecosystem. We inevitably got involved in the move to act responsibly in preserving this marine heritage for our future generations.

Diving has been around for a relatively short time – since the 50's. In my lifetime, I have seen a devastating decline in the health of kelp ecosystems, in the maturity and numbers of fish, and my diving dates only from the 70's. I am truly concerned that future divers will not have any healthy kelp forests accessible to see *other than* our archived pictures! MPUP includes as members scientists, researchers, and retired Fish & Game marine biologists that can put numbers and percent decline to what we see over the years. I do not need numbers to confirm what my eyes and cameras record. I need only to travel to the Pt. Lobos, where kelp harvesting and commercial fishing are not allowed. The difference is obvious.

DIVERS REACTION TO THE ED RICKETTS UNDERWATER PARK

Divers welcomed the idea of an underwater park in Monterey off Cannery Row. Just like most urban apartment dwellers welcome a city park, a desire for accessibility to nature is inherent in us all. With analogous similarities to an above-water park, it should be an accessible way for people to escape commercial encroachment and enjoy nature. Scenery and intrinsic interrelationships of the entire food chain must be preserved, even protected, so they can be observed by this and future generations. Fish need a haven to reproduce. The kelp forest is such a haven. Living up to the true definition of the term "Sanctuary" this park should provide a safe breeding area and give offspring a tiny space in which to be free of Man's predation, deliberate or accidental.

A portion of divers spearfish for "sport". The overwhelming majority of spearfisherman support an Underwater Park with protections. They are only too willing to travel elsewhere for their "sport" if it means a true sanctuary for reproduction and natural ecosystem is established and if the Ed Ricketts Underwater Park will guarantee public access to this natural environment as proposed.^{1,2}

20A

Divers have witnessed first hand the depletion of the ecosystem that made Cannery Row such a thriving business. Sardines are no longer available in the numbers that enabled multiple processing factories to thrive in Monterey. Hundreds of tons of squid are still taken just outside the Park boundaries. Tons of anchovies go to reduction plants. The rockfish that once were allowed to reach maturity, have been depleted by commercial net fishing. So much, that Department of Fish & Game researchers have reported "...the majority of game fish populations in this area are severely depleted, and consist mainly of immature individuals".³ Even these immature fish are reported to be threatened by live fish trappers operating within the Park.

Divers realize that the kelp forest canopy provides a haven for immature individuals. The canopy itself is the very base of the food web feeding various commercial interests. The canopy is a necessary support for mammals like the endangered Sea Otter. The Sea Otter itself symbolizes a true success story of Monterey embraced by millions of school children, tourists, and proclaimed loudly on T-shirts. Most photos, drawings, and cartoons justly picture a Monterey Sea Otter literally entwined in Giant Kelp. That is how closely dependent their health is related.

Most divers support the no-take concept of the Park and oppose allowing commercial harvesting in the Department of Fish & Game designated Bed 220. We feel that the kelp harvesters unjustly overturned the City of Monterey regulations to go against public trust. We urge the Department of Fish & Game, and the Resources Agency to manage this unique and fragile ecosystem in a manner which fulfills public trust. Please consider the following:

COMMERCIAL INTEREST AND VALUE OF KELP

20B

Divers may own businesses, but to claim that the Underwater Park was "... developed by local business owners," (pg 3-77) is to misrepresent the true concern of over two thousand supporters of the park. It also ignores history of the 5 year campaign waged by citizens, scientists, and concerned individuals who expressed opinions during 7 public hearings. It also diminishes the support of the City Council of Monterey, Congressman Sam Farr, the Center for Marine Conservation, and the Monterey Bay National Marine Sanctuary's (MBNMS) own Sanctuary Advisory Council.

The Monterey County Hospitality Association, in 1996, called for a halt to kelp harvesting from Cannery Row to Lover's Pt. because it, "...impairs our visitors' experience, degrades the watershed,

CommentsEnvirDrft

and is an incompatible use, in light of the value tourism brings to our economy.³⁴ The purpose was to try to impress upon regulators the *value of living kelp* as opposed to abalone feed as a dead plant.

Royalties calculated at \$1.71/ton ignores kelp's value *alive* and assigns a (easy but inaccurate) value of the spot market price of Alginic Acid. At the time of the above-mentioned call for a halt to harvesting, Monterey County Tourism was a \$1.14 billion business, employing over 16,000 persons.⁴ Even using an extremely conservative estimate of 10% as the percentage of tourism due to marine related activities, this places a much higher value on live kelp. Using an estimated production⁵ from Bed 220 of 33,000 tons/year, this places its value at \$3,450 / ton of live kelp.

20c { It is incredulous to accept MBNMS' widely disseminated allegation that "Divers may permanently alter the community structure of this kelp bed". The same paid consultants found "No significant impact" from the removal of up to 600 tons of kelp / year by commercial harvesters from the Underwater Park.⁴ To claim that the kelp bed is damaged more by divers than harvesters is a blatant attempt to discredit diving conservationists.

The Draft Environmental Document loses credibility by including this unsubstantiated smoke screen as fact. It should be removed (pg. 3-77).

MECHANICAL HARVESTING AND RECOMMENDED CLOSURES

20p { The MBNMS recommended (Recommendation #3) closing beds 220 and 221 to mechanical harvesting. DFG's proposed legislation would allow mechanical harvesting north of Santa Rosa Creek if prior Commission approval were given. It took hand harvesters less than a month in 1996 to clear-cut the entire Cannery Row kelp forest. Events such as these added impetus to the establishment of protection as a park. Productivity estimates for Monterey kelp forests are only one-eighth of Southern CA kelp beds.⁶

20e { The MBNMS recommended (Recommendation #5) that harvesting in North Coast beds not be allowed during its breeding season from April 1 to August 31. DFG's proposed legislation would shorten this to July 31. There is no scientific evidence to support disallowing the MBNMS recommendation. Furthermore, the MBNMS (Recommendation #8) that the North Coast beds 224, 225, and 226 are too small to support a commercial aquaculture industry.

ENDANGERED CALIFORNIA SEA OTTER NEED KELP IN THE WINTER

20f { The harvested top portions of kelp are the very parts utilized by California Sea Otters during their winter pupping season. Kelp harvest levels *increase* in the winter when kelp production is at its slowest and natural predation from abalone is at a maximum. In Winter, California Sea Otters retreat to the more protected areas of the Pacific Grove and Monterey shoreline for refuge. Bed 220 is already located in an *existing* refuge, the Pacific Grove Marine Gardens Fish Refuge.

The first draft of the MBNMS recommendations included a Winter closure on harvesting from Lover's Pt. To Hopkins Marine Station (Figure 6-1, area F) but was defeated by the Sanctuary Advisory Committee for inclusion in the final draft. It is already a protected area. Let it truly be so in the Winter when Otters need it most.

SPECIFIC RECOMMENDATIONS

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- 20g { **Proposed Section 165 (7)**
Royalties from kelp harvesting should be calculated, not on the market price for Alginic Acid, but the highest social use and economic value of each kelp forest *when living*.
- 20h { **Proposed Section 165 (5D)**
The MBNMS recommendation to close the area from the Coast Guard Jetty to Drake Avenue alone is inadequate. A *complete* prohibition on all kelp harvesting in the *entire* Ed Ricketts Underwater Park should be included, reflecting its status as a park and refuge.
- 20i { **Proposed Section 165 (5C)**
The MBNMS recommended closing beds 220 and 221 to mechanical harvesting. All mechanical harvesters should be prohibited north of Santa Rosa Creek (bed 219 and northward).
- 20j { **Proposed Section 165 (5B)**
The MBNMS recommended closing all beds to harvesting during their reproductive season of April 1 to August 31. Seasonal closure of all beds to harvesting should be during the entire biological reproductive cycle.
- 20k { **Proposed Section 165 (5)**
The MBNMS proposed closing beds 224, 225, and 226. These beds are too small and should be closed to harvesting.
- 20l { **Proposed Closure in Areas Shown in Figure 6-1, Area F**
The Pacific Grove Marine Gardens Fish Refuge must be left undisturbed to provide refuge for the endangered California Sea Otters during their Winter pupping season. These beds (from Lovers Pt. to Hopkins Marine Station) should be closed to harvesting in Winter.

CONCLUSION

I realize there are Centuries of history of using the sea for commercial value, but kelp beds have a value alive, as much as any terrestrial forest or park. U.S. Forest Service Chief Mike Dombeck recently stated: "Social views are changing. People are looking at forests less as warehouses for products and more for their value as open space, watersheds and recreation." I represent a group of those people, divers, who are privileged to see kelp as a true forest. Its value to us deserves to be protected and held to the same kind of values as any land refuge or forest.

Realizing that this same underwater forest has a value to kelp harvesters, we turn to you to protect *certain areas* of it from exploitation. We realize that harvesting will continue in California. We only ask that commercial kelp harvesting within one small area, the **Ed Ricketts Underwater Park**, be halted. Commercial harvesting is incompatible with any definition of the word "park". Kelp is the very thing that gives meaning to the word "sanctuary" to the food web. Fish, invertebrates, and even the cute-looking Sea Otter turn to the kelp beds for sanctuary. It is the expressed goal of the Ed Ricketts Underwater Park to provide such a sanctuary. The interests of the thousands of California citizens who expressed enough concern to form a park ask that **kelp harvesting be done outside the park boundaries.**

Respectfully submitted,

Richard Todd



CommentsEnvirDrft

¹ **Center for Marine Conservation, 1997.** Recommendations for the Establishment Edward F. Ricketts Marine Park. 18 pgs.

² **Cooper, Ed; McDonnell, et.al., 1997.** Proposal to Establish the Edward F. Ricketts Underwater Park. Unpublished.

³ **Ventresca, D. to Russo, K. August 4, 1995.**

⁴ **Lloyd, J. to Treanor, R., February 6, 1997.**

⁵ **Donnellan, M. D., and Foster, M. S., 1999.** The effects of small-scale kelp harvesting on Giant Kelp – Surface canopy dynamics in the Ed Ricketts Underwater Park – Final Report to the Monterey Bay National Marine Sanctuary and the cities of Monterey and Pacific Grove.

⁶ **Gerard, V.A., 1976.** Some aspects of material dynamics and energy flow in a kelp forest in Monterey Bay, CA. Doctoral dissertation in Biology, University of CA at Santa Cruz.

CommentsEnvirDrift

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DAVID M. FLEIGHMAN
CITY ATTORNEY

February 14, 2001

Mr. Fred Wendell
California Department of Fish & Game
213 Beach Street
Morro Bay, CA 93442

Dear Mr. Wendell:

At my request, our City staff has reviewed your Department's "Draft Final Environmental Document - Giant and Bull Kelp Commercial and Sport Fishing Regulations" (December 2000) and related documents. This letter conveys the City of Pacific Grove's comments on the draft document.

The City generally supports the recommended alternative in the Department's draft document; the proposed kelp management changes generally represent improvements from the status quo.

In addition, the City agrees with the comments and concerns expressed by the Monterey Bay National Marine Sanctuary in the letter dated February 2, 2001 from MBNMS Superintendent William J. Douros to Mike Chrisman, President, California Fish and Game Commission.

21a { We reiterate and emphasize two particular points of concern. First is the need for more and better research on the effects of kelp harvesting on certain components of the ecosystem. This is the first recommendation for research topics listed by the MBNMS's October 3, 2000 document "Monterey Bay National Marine Sanctuary Final Kelp Management Report - Background, Environmental Setting and Recommendations." Of particular concern are the unstudied or little-studied effects of kelp harvesting on kelp canopy fishes, kelp canopy invertebrates, benthic invertebrates, birds, and Sea Otters. Important questions remain regarding both the effects on these animals of kelp habitat reduction and the direct mortality of many kelp canopy organisms through by-catch during kelp harvesting. Adequate quantification is particularly lacking. Researching these questions should be a high priority in managing kelp resources.

21b { Second, we note that both drift kelp and beach kelp wrack are very important ecologically and that both need to be conserved. Drift kelp is almost unique in providing structural habitats in our



*Mr. Fred Wendell
California Department of Fish & Game
February 14, 2001
Page 2 of 2*

218

open water marine environment for many fishes and invertebrates, and it provides important nutrients. Many seabirds make heavy use of drift kelp, both for resting and for foraging. Kelp wrack decomposing on our beaches helps support both aquatic and terrestrial ecosystems along our shores. Kelp wrack is known to be important to migratory shorebird species that feed on the concentrated supply of invertebrates such as amphipods and flies that swarm in the wrack. These shorebirds require regular stops along their migration routes at which they can feed on such rich food sources, without which they cannot deposit enough fat to support their long migratory flights. As California estuaries and other habitats for migratory shorebirds have been developed and degraded by humans, the stresses and limitations on the migrating shorebirds have greatly increased, thus increasing the importance of the food provided by kelp wrack on beaches. For these reasons we must assure that both drift kelp and kelp wrack continue to function in our region's marine and maritime ecosystems, and in sufficient quantities. Kelp management should always have goals of maintaining as vital ecological resources these three forms of kelp: the intact kelp forest, drift kelp, and beach kelp wrack.

Thank you for considering our comments.

Sincerely,


Sandra L. Koffman
Mayor

PATRICK J. LOVEJOY

California Department of Fish and Game
213 Beach Sr.
Morro Bay, Calif. 93442
attn. Fred Wendell

Feb 13,2001

Dear Mr. Wendell,

22A { It has been brought to my attention that the DFG is forming new policy on kelp forest management. I am concerned, as a citizen of central California, that this policy is slanted too much in favor of the commercial harvesters and the abalone industry. I would like to remind you that there is a significant tourism revenue derived from the SCUBA diving industry that is also affected by the policies regarding kelp harvesting. This industry brings far more money into the local economy than the kelp harvesting industry.

22B { Additionally, given that there are only 74 acres of kelp forest in the entire state, there is a strong environmental reason to preserve some portion of this resource unblemished. While there are ample studies demonstrating that cutting the kelp judiciously does not affect the health of the plant itself, there are no studies that show that kelp cutting has no negative affect on the kelp forest environment, including, but not limited to, the rock fish and invertebrate community. In fact, in the report published by the Monterey Bay National Marine Sanctuary on their kelp management recommendations, it was pointed out that up to one third of the motile canopy invertebrates were removed during harvest of the kelp plant. One can assume that the incidental take of the sessile invertebrates is greater. How does this affect the fishery? How does it affect the food resource for sea birds? This has not been shown. The precautionary principle requires you to protect the resource until it can be demonstrated that such use is compatible with the goals of a sustainable resource management. Kelp is not the only resource affected by its harvest.

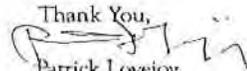
22C { The environmental and tourism user groups' uses for the kelp forest are compatible. The demand for more MPA's along the Monterey and Pacific Grove coast line is demonstrable. The city of Pacific Grove is presently asking the DFG to enforce the already existing laws protecting its shoreline. The city of Monterey has designated the shoreline of Cannery Row as Ed Ricketts underwater park. The users of that park demand it be a fully protected MPA. The Carmel Ecological Preserve, while supposedly an invertebrate preserve, hypocritically allows kelp harvesting and its incidental invertebrate take. Additionally, former President Clinton issued a mandate that more underwater parks be established.

22D { I am also concerned, as a taxpayer, that the public's resource is being sold at unreasonably low prices. I see no rational reason why a rare and valuable resource should be sold a per tonnage rate less than a gallon of gasoline. It is time our resource managers charged a rate for public properties commensurate with market rates for other commodities. The present price structure amounts to a subsidy for a small special interest group.

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FEBRUARY 13, 2001

22F { Can you give me a good reason why one small user group (kelp harvesters) should be given preferential treatment to a much larger group of citizens, to a larger economic resource, to new government policies on ocean management, and to the health of the marine environment?

Thank You,

Patrick Lovejoy

Mr. Fred Wendell
Calif. Dept. of Fish & Game
213 Beach St
Morro Bay, CA 93442

(805-772-1714)

February 13, 2001

Dear Mr. Wendell,

23a

This letter comprises my comments on the "MENMS Final Kelp Management Report." My overall opinion is that the plan permits overly aggressive harvests from an ecosystem management viewpoint, and tilts the balance between destructive users and non-destructive "users" inappropriately in favor of the kelp cutters. It also fails to deal with a newly revived kelp clearing technique that threatens to destroy entire beds, not just their canopies.

Before I get into details, let me relate my background. I've learned to dive in Carmel bay and have been diving the Monterey Peninsula since 1978, twenty three years ago. I make a significant part of my living taking underwater photographs here and around the world. I've watched the slow decline in aspects of local ecosystems, and their shift to warmer-water species. I have degrees in Psychology and Biology from Stanford, the latter based in part on work at Hopkins Marine Station. I'm a former scuba instructor, and am currently active in two local underwater photography clubs, as well as some conservation groups.

Kelp "harvesting" as it's been practiced in recent decades entails the cutting off of kelp stipes near the surface, and the removal of the cut upper portion of the kelp (canopy) plus any life forms that still cling to it, most notably crabs and snails. The fundamental principle is that kelp, which grows quickly, can recover, and the habitat represented by the cut-away canopy would eventually restore itself. Used judiciously, this technique should yield a *sustainable* harvest, so long as habitat removal impacts are properly monitored. Recently an article in the newsletter of the San Jose Flipper Dippers related a State Parks employee's story of how kelp "harvesters" off the Limekiln Creek area of Big Sur are not cutting off the canopy, but have revived a method whereby stipes are grabbed, and yanked upward with enough force to break the stipes (at an uncontrolled depth) or to pull the entire plant, including the holdfast, right off the bottom. This is a horrifying development, as it marks a change from cutting of a plant that can, in time, recover, to the killing and removal of the whole plant and all (not just some) of the organisms attached to it. Whole kelp beds, and the entire underwater ecosystems they support, could be destroyed—no, "harvested"—literally overnight this way. Vibrantly living kelp forests could be turned into the man-made equivalent of impoverished urchin barrens. This practice was, I believe used in the early decades of the 20th century,

23b

The shortest distance between two minds

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23b

when kelp was used in the manufacture of gunpowder, and our understanding of ecosystem management was non-existent. **Harvest of kelp deeper than the surface, especially by this "tug and tear" method must be banned.** I fear the current plan was written without knowledge of the return of this unsound, unsustainable practice.

23c

With regard to **Proposed Section 165 (7)**, which sets royalties of \$1.71 per ton for kelp, I can only conclude the recommendation's author has been brainwashed by the kelp cutting interests. Kelp forests are the key marine habitat in the region, drawing thousands of divers (who support many local businesses), kayakers, (supporting more businesses), whale watchers, birders, sight seers, (all of whom support businesses), and more. Selling off one of the regions primary attractions at \$1.71 a ton is an outrageous government subsidy to one economically tiny industry. Kelp belongs to everyone, as do the animals living in it. Perhaps a few of us can pay \$1.71 per ton to *keep it alive*. The bottom line—philosophically and economically—is that kelp is worth more living than dead.

23d

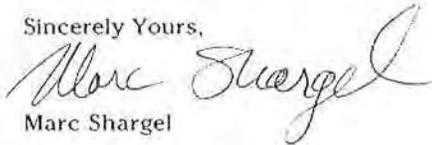
With regard to **Proposed Section 165 (5D)**, which proposes to save the tiny portion of Kelp bed 220 from the Breakwater to Drake Ave., I submit this tiny area of sanctuary is inadequate. From the standpoint of scientific study, the area spared cutting is inadequate as a control. The opportunity to study habitat impact of cutting is lost because just a single, tiny, area is unaffected. Likely habitat impacts could be extreme, rippling through mollusk and crustacean populations, rock fish reproduction, and on and on. From a human use standpoint, turning the overwhelming majority of a major offshore attraction and recreation area into an industrial resource available for the taking makes no sense. The majority of residents, of visitors, of businesses would prefer to have living kelp than dead. A complete ban on harvest from the Breakwater to Pt. Pinos or beyond is appropriate. A ban on cutting in the area from the Breakwater to Lovers' Point, corresponding to the existing Ed Ricketts Marine Park, would seem a minimum. Do we really think a Park and industrial resource exploitation are compatible? Moreover, in light of DFG's current study of remedies to the rockfish population crash, the proposed allowable amount and area of cutting is precipitous. DFG might accept this plan, and then very soon be forced to reverse course because kelp canopies provide key habitat for rockfish fry.

23e

Finally, kelp is the primary habitat of the Southern Sea Otter, a federally listed endangered species. It probably also helps support Steller Sea Lions, another listed species. In light of the Endangered Species Act, this magnitude of assault on habitat is extraordinary and unacceptable, if not illegal. A network of areas closed to cutting, both by area (protected islands) and by season is called for. There is inadequate evidence of consideration for the effects on threatened species in this plan. There is inadequate scientific evidence in existence to show us that removal of this amount of habitat won't have grave impacts on endangered and threatened species. **Allowable limits on areal cutting should be far lower than 50%.**

Please, think about habitat, think about rockfish, think about the economic interests of more Californians than just a few kelp cutters.

Sincerely Yours,

A handwritten signature in cursive script that reads "Marc Shargel". The signature is fluid and stylized, with the first letters of each word being capitalized and prominent.

Marc Shargel



February 15, 2001

Robson Collins
Nearshore Ecosystem Coordinator
California Department of Fish and Game
20 Lower Ragsdale Drive, #100
Monterey, CA 93940

**RE: DEFENDERS OF WILDLIFE'S COMMENTS ON THE
DRAFT ENVIRONMENTAL DOCUMENT FOR GIANT
AND BULL KELP COMMERCIAL AND SPORTFISH
REGULATIONS**

Dear Mr. Collins,

Defenders of Wildlife ("Defenders") submits the following comments on the California Department of Fish and Game ("CDFG") *Draft Environmental Document for Giant and Bull Kelp Commercial and Sportfish Regulations* ("Environmental Document"). Defenders will provide the following comments on the Environmental Document: an overview, legal comments and, finally, a section that presents feedback and comments on specific sections of the document.

OVERVIEW

Defenders appreciates the efforts of CDFG in undertaking this review of their 5 year management plan on kelp harvesting. While there were many opportunities for CDFG to get feedback from stakeholders and the public over the concerns on kelp harvesting and its relationship with this complex ecosystem, Defenders is concerned with the inadequate discussion on sea otter-kelp harvesting issues, potential impacts of harvesting on the entire ecosystem, and the failure to adequately address legal issues.

24 A

The Environmental Document fails to acknowledge that there is a significant **lack of studies** documenting the impact of kelp harvesting on local sea otter populations and other marine animals. Additionally, the Environmental Document falls short in making any research recommendations on how to mitigate kelp harvesting's impacts on sea otters. In the final version (October 3, 2000) of the Monterey Bay National Marine Sanctuary's ("MBNMS") kelp report ("Report"), the Sanctuary recommended a research topic that would attempt to investigate the effects of kelp harvesting on a variety of kelp forest inhabitants, including sea otters. CDFG, despite suggested studies described in the Report, has not adopted any such recommended studies in this Environmental Document.

24 e

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As for the protections afforded to sea otters under the Marine Mammal Protection Act ("MMPA") and the federal Endangered Species Act ("ESA"), the Environmental Document failed to address how removing portions of the kelp canopy, particularly during the winter months when kelp is already sparse, may affect the food supply, shelter and safety of sea otters. These actions, more than likely result in a "take" (defined as "to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal") under the MMPA and the ESA. CDFG has a responsibility to ensure that any activity that occurs within State waters does not result in a "take". The Review fails to adequately address this responsibility and how CDFG plans to monitor this activity against such a violation.

LEGAL COMMENTS ON THE CALIFORNIA DEPARTMENT OF FISH AND GAME KELP CEQA REVIEW

24c { 1. CDFG has a legal obligation to prevent incidental take of sea otters under section 9 of the ESA (16 U.S.C. § 1538) and the MMPA. The courts have ruled that when a state affirmatively allows fishing activities to occur through licensing or other measures, and those activities are likely to result in entanglement of protected species, the responsible agency is in violation of the section 9 take prohibition. (*Strahan v. Coxe*, 127 F.3d 155, 163 (1st Cir. 1997), cert. denied, 119 S.Ct.81, and cert. denied, 119 S.Ct. 437 (1998).) The same rationale that caused the court in *Strahan* to find that Massachusetts violated the Endangered Species Act by licensing gillnet and lobster pot fishing that will likely result in the entanglement of right whales applies to CDFG's, and the MBNMS's, regulation of kelp harvesting within the sea otters' habitat. In addition, recent case law confirms that the failure of government entities to prohibit or restrict activities that are likely to take listed species can be a violation of section 9 of the Endangered Species Act. (*Loggerhead Turtle v. Volusia County*, 148 F.3d 1231, 1249 (11th Cir. 1998), cert. denied, 119 S.Ct. 1488 (1999). The same reasoning would apply under the Marine Mammal Protection Act ("MMPA"), which imposes a strict prohibition against incidental take of sea otters. See 16 U.S.C §§ 1371(a)(1), 1372(a), 1387(a)(4).

Therefore, any Kelp Management Plan approved and implemented by CDFG must provide stringent protection for sea otters within state waters. The failure to do so may result in CDFG being in violation of the ESA and the MMPA.

24b { 2. Social and economic ramifications (or impacts) are not appropriate in a CEQA analysis. Economic and social effects that are not related to physical impacts need not be evaluated in an environmental impact report. 14 Cal. Code Reg., § 15131(a); see *Goleta Union School Dist. v. Regents of the Univ. of Cal.*, 37 Cal.App.4th 1025 (1995). The social and economic effects may be taken into account to assist in determining the significance of physical changes to the environment. 14 Cal.Code Regs. § 15131(b). CDFG's CEQA process should address the environmental impacts associated with kelp harvesting, and economic and social impacts should only be considered or taken into account to assist in determining the significance of the environmental impacts. Environmental Document, Chapter 3 at p. 58, p. 70.

24e { 3. Mitigation. Simply because the proposed project provides for a more conservative set of safeguards than provided for under the existing regulations, does not mean that the impacts to sea otters, and other marine life, are, in fact, mitigated. As the impacts to sea otters may be significant, the document must identify mitigation measures to reduce any such impacts to less than significant.

24f { 4. Alternatives. The Environmental Document fails to provide a range of reasonable alternatives to the proposed action. The document should evaluate, identify, and discuss alternatives that reduce or close harvesting within sea otter habitat, and/or alternatives that reduce the amount of kelp harvested. Additionally, any alternative needs to address resource conflicts throughout the range of the sea otter, not just in bed 220.

SPECIFIC COMMENTS ON SECTIONS OF THE REVIEW

Chapter 3

24g { p. 43, 1st sentence at top of page. "Until recently, the sea otter population,.....". This comment appears to suggest that the decline is now over after the spring 2000 count. This is an inaccurate interpretation of the southern sea otter census results or assessment of southern sea otter population trends. One count does not signify a reversal in a population trend. Some of the top sea otter biologists, including Dr. Jim Estes, have indicated that we would need to observe a minimum of 3 years of successive high spring counts before having any confidence that the trend had been reversed. Additionally, the fall 2000 count was down by 4.7% as compared to fall 1999.

24h { p. 70, *Socioeconomic Environment*, sentence 6. "Kelp provides.....tourism.". Healthy kelp forests translate into the presence of sea otters. Sea otters are a huge focus of the 1.5 billion dollar tourism industry in Monterey County. When the kelp forests are gone or decimated by winter storms and/or kelp harvesting activities, tourists and the public complain about the lack of sea otters and healthy kelp forests to view.

24i { p. 89, *Management Concepts and Tools*. "Reactive" and crisis management has gotten the state of California and wildlife agencies into a lot of trouble (i.e., California condor). There must be foresight and the preemptive strategy of addressing concerns and issues before they reach a crisis level and require "reactive" management techniques.

Chapter 4

24j { p. 1, *Section 4.1*. Studies by Limbaugh (1955), Quast (1968) Miller and Geibel (1973) and others on impacts of kelp harvesting on fish populations are extremely outdated. Newer studies need to be developed, given that there are very different environmental conditions with California's marine ecosystem, and, specifically, kelp forests, from when those studies were conducted.

24k { p. 6, *Section 4.2*. A conclusion that states that, "the overall effect on invertebrate populations does not appear to be significant" is not taking into account that there are a

24k

lack of studies in order to determine "significance" of kelp harvesting impacts on invertebrate and microinvertebrate populations.

24L

p. 8, Section 4.3. A conclusion that states that, "any impacts from the proposed project on bird populations is considered to be short-term and less than significant" is not taking into account that there is a lack of studies in order to determine "significance" of kelp harvesting impacts on marine birds. There is also no reference to the association of marbled murrelets (*Brachyramphus marmoratus*) with kelp forests and that association does exist. This species of marine bird is a federally "threatened" and state "endangered" species.

24M

p. 8, Section 4.4. Sea otters are protected by not just state and federal regulations, but also by state law as a "fully protected mammal" (Fish & Game Code, §4700), and federal law under the ESA and MMPA.

p. 9, Section 4.4, paragraph 1, last sentence. "They hear and see thepasses". This might be applicable to the large harvesting boats used by ISP Alginatges, Inc., but a small skiff, used by many of the local hand harvesters, can potentially move within a sea otters threshold distance well before the otter was aware of the skiff's presence. If sea otters were displaced, disturbed, or harassed, this is a potential violation of the ESA and MMPA.

The reference to the two factors minimizing impact to sea otters to less than significant is not supported within the document. Harvesting that occurs in bad weather must not be allowed to impact any otter, not just within the closure area.

24N

This section on sea otters is wholly inadequate in addressing biological and legal issues in reviewing potential kelp harvesting impacts on sea otters. And, again, a conclusion that states, "two factors tend to minimize the potential impacts to levels that are less than significant" is not based on any scientific studies to support such a conclusion. We know that sea otters use the kelp canopy for shelter and protection against predators and winter storms. They also use this ecosystem as a foraging area. If kelp harvesting has deleterious consequences in the sea otters' ability to use this habitat, the harvesting activity must have appropriate mitigation measures or be ceased, either temporarily or permanently.

Appendix 1

24o

p. 4-5, last sentence of p. 4 continuing to top of p. 5. "Marine aquatic plants may not be cut or harvested in marine life refuges, marine reserves, ecological reserves, national parks or state underwater parks". This sentence should be carefully addressed considering that kelp harvesting occurs in a nationally designated marine sanctuary that has designated reserves and refuges. This is especially critical in areas where there may be a conflict between kelp harvesting practices and disturbance of marine life (sea otters, marine birds, invertebrate populations, etc.).

24p { *p. 19, Sections 2850 and 2851.* The concept of designating "certain areas as sea life reserveswhere minimal disturbance occurs" is a critical point and one that seems to be absent throughout much of this document and is a key focus of the Marine Life Management Act (MLMA).

24q { *p. 19-20, Section 2852, part (a).* There is a great deal of "scientific uncertainty" when reviewing the association between kelp harvesting and the ecosystem that is affected. Necessary studies are missing from the scientific literature on the effects of kelp harvesting on marine invertebrates, marine birds, sea otters, and other marine animals. It is irresponsible to arrive at a conclusion of "no significant impacts" when the studies have not been conducted to determine this. A much more conservative approach needs to be undertaken when looking at alternatives, when "scientific uncertainty" is quite prevalent.

24r { *p. 20-21, Section 2853.* A "master plan" team that is responsible to "advise and assist in the preparation of the master plan" on adoption and implementation of the Marine Life Protection Program" must include representatives from all stakeholders (including NGO's) and the public.

24s { *p. 25, Section 6421.* Artificial reefs is a concept that is opposed by many in the conservation community. Any man-made intrusion upon an already fragile, affected ecosystem may have further detrimental impacts.

Appendix 2

24t { *p. 2, Section (c)(2).* This still does not address the effect upon the first four feet of the kelp plant, a rich, diverse habitat with many marine animals associated with it.

24u { *p. 3, Section (4)(D).* This designated "no harvesting zone" does not begin to take into account the heavily transited, frequently used sea otter areas along the waterfront between Drake Avenue and Hopkins Marine Station. There are rafts of sea otters and individual sea otters that utilize the nearshore waters adjacent to El Torito restaurant, Monterey Bay Aquarium and all along Cannery Row.

CONCLUSION

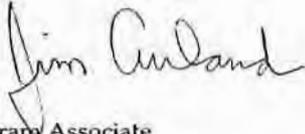
Defenders believes that kelp harvesting and its potential impacts on kelp forests and the associated marine life that inhabits these complex ecosystems suffers from a lack of studies to identify true impacts. Some of the existing regulations and planned changes, as identified by this CEQA Review, do not adequately address the mandates of the MLMA, the ESA and the MMPA. There are certain expectations and responsibilities with regard to the management of this unique resource and its inhabitants.

Defenders appreciates the opportunity to provide feedback on this Environmental Document and intends to continue our review of CDFG's development of a Kelp Management Plan.

Mr. Robson Collins
February 15, 2001
Page 6 of 6

Should you have any further questions please feel free to contact Kim Delfino, Defenders of Wildlife's California Programs Director, Nancy Weiss, Defenders of Wildlife's California Species Associate, or me.

Sincerely,



Jim Curland
Marine Program Associate

Cc: Mary Nichols (California Resources Agency)
Robert Hight (California Department of Fish and Game)
Robert Treanor (California Fish and Game Commission)
Carl Benz, Greg Sanders (U. S. Fish and Wildlife Service)
Aaron King (Monterey Bay National Marine Sanctuary)
Kaitlin Gaffney, Doug Obegi (Center for Marine Conservation)
Vicki Nichols (Save Our Shores)
Burr Henneman
Don Mooney, Esq.

Rob Collins, Ecosystem Manager
California Dept. of Fish & Game
Ragsdale Drive
Monterey, CA 93940

Subject: Comments on Draft for California's Draft Final Environmental Document Giant and Bull Kelp Commercial and Sport Fishing Regulations

February 13, 2001

Dear Mr. Collins:

The foregoing are my comments and questions regarding California's Draft Kelp Environmental Quality Act (CEQA) Environmental Document and proposed kelp management for the period 2001 to 2005.

I have been a Dive Industry Representative on the Sanctuary Advisory Council since it's inception, a past representative and board member for the Northern California Scuba Retailer's Association (NCSRA) a Charter member of the Diving Equipment and Marketing Association (DEMA), a Charter boat operator and an SSI Pro 5000 diver with over 3,000 recreational dives in Central California waters. 95% of my dives have been in kelp forests. I am uniquely qualified to make comment on the behalf of those who I represent.

I appreciate the work you and your staff have done to make the process public, as well as the work the agency has done with respect to the document, however there are many questions that have come to light by my constituents and we appreciate the time and effort it takes to address the issues. Thank you in advance:

1. There are only 74.13 square miles of kelp beds along the entire 1,072 miles of California coastline. It has been said, if you took a globe 250 feet in diameter and laid an eyelash on it, that would represent the total area of our kelp forests. Do you agree with this?

25A { With a habitat this small and important, no part of it should be taken without extensive study by unbiased scientists and ecologists. There is simply too much we don't know.

2. RE: Summary Conclusion (p1-6) The environment is NOT the same in 2000 as it was in 1968 (North) as your summary suggests. New species targeted by commercial fisheries are already depleted. New gear methods, including near-shore fisheries' traps and stick fishing methods, new technologies, pollution, sewage, declines in abalone, young-of-the-year rockfish and other species that are interdependent on kelp. Increased and more intense collection efforts have contributed to the decline of our kelp environment since 1968. More commercial take of sea life including The Monterey Bay Aquarium, Steinhart Aquarium, Pier 39, Marine World, Moss

25e

- 25a { Landing Marine Labs to name a few. More sea life supply companies are working since 1968. These new demands placed on our kelp forests should be cause for caution with respect to harvesting regulations. Question: How many collection permit holders are allowed to take marine life in California's 74.13 square miles of kelp beds? Please provide a list of names and companies in the final EIR and an analysis of their impact.
- 25c { 3. (Effects on Environment 1-2) There is a "no-action alternative" (which is status quo.) and a "control alternative" listed, but no alternative for "no-harvest". Please address and evaluated both environmentally and socioeconomically.
- 25d { 4. Would you please provide an analysis of the following costs?
A. The State's costs in management, research, monitoring and enforcement must be evaluated to determine if the Agency's licensing fees and royalties offsets the costs to the people of the State of California.
B. Environmental costs of harvesting. Please define.
- 25e { 5. Socio-economics: The tourism business in Monterey County for example, is a 1.14 billion-dollar industry. The costs of the loss of the habitat in terms of the socio-economic aspects, view shed, impact to the diving and kayaking industries have not been considered or even recognized. For example the diving industry depends on healthy kelp forest canopies and its inherent sea life for it's sustainability. Millions of dollars have been spent by the industry advertising kelp forest diving. It is the major attraction for diving. With kelp canopies in jeopardy, the businesses suffer as would-be divers travel elsewhere to see marine life. The dive industry certainly brings in more revenue to the State of California than the licensing or the \$1.71 per wet ton fee paid by harvesters. By contrast, when left alive and in place, the value of the kelp in the Ed Ricketts park area is over \$32,000,000.00 (NCSRA: when demonstrating income generated from divers visiting Cannery Row.) In other revenue it has been estimated to be worth over \$3,400.00 per ton if left alive. Would you please provide a substantive analysis of potential costs to the diving and kayaking industries.?
- 25f { 6. Regarding the no-take zone: The Center for Marine Conservation, the City of Monterey, the Sanctuary Advisory Council, Congressman Sam Farr, and many other organizations and scientists favored the Ed Ricketts Park. Over 2,000 petitioners and 50 proponents verbally testified at the last joint city council hearings of Monterey and Pacific Grove specifically favoring a no-take zone from the Breakwater to Lover's Point.
Recommendation: Kelp harvesting should not be allowed anywhere in the Ed Ricketts Park from the Breakwater to Hopkins Marine Refuge, out to the depth of 60 feet (the 10 fathom line). Please note that this is only 9.4% of kelp bed 220, which leaves over 90% of kelp bed 220 to harvesting!
Question:

- 25G { 7. Request for Clarification: It appears there may be a word processing glitch on page 2-4. As you'll see the following words are exactly the same, but the placement of the first bullet makes it appear you are suggesting the opposite of what the policy of the agency suggests. Removing the first bullet clarifies; 2.2 Proposed Objectives (beginning bottom of page2-3) "The proposed project objectives are as follows: Insure that kelp harvesting does not impair the health and diversity of marine ecosystems and marine living resources. Where compatible with that objective;...." That first paragraph therefore should NOT be bulleted because that IS the stated objective. but immediately after "where compatible: the next two paragraphs SHOULD be bulleted as they were.
- 25H { 8. Please correct: Mariculture Industry (Pg. 3-77) The Ed Ricketts Park was created by a grass roots movement of concerns for the environment, not "by local businesses owners for the use of diving" although many business owners as well as others supported the concept and divers were involved. It is well-documented that a retired California Fish & Game Biologist suggested the need for protection.
- 25I { 9. Also a very significant player in the Kelp Co-op (p. 3-77) was Pacific Mariculture, the company who precipitated the public's concerns by clear-cutting the entire kelp canopy along Cannery Row in 1996 was not properly credited or even mentioned in the DEIR. Their action motivated the public's concern for the over harvesting of kelp and precipitated countless hours of meetings. Please include this event in the final document.
- 25J { 10. Presentation of map bed #220 (page 2.9): If maps are shown for proposed closures in #220, a map of the entire bed should be shown with the delineated boundary to illustrate the percentage of the bed that is closed to harvest. A reader should be able to see how much of the bed is still open to harvest. Recommendation and request: include a chart that shows all of bed #220 with a shaded area representing closed or open area. What is the percentage of Bed # 220 that will be left open to harvest?
- 25K { 11. What are the effects of erosion and in-shore and subtidal habitat changes by removal of surface canopy? Beach erosion and sand dispersal may also be effected particularly when a large percentage of the canopy is removed. With a canopy weakened by harvesting, seasonal swell affect surf-zone habitats. Miller & Giebel, 1973 note that repeated harvesting weakens the kelp holdfast, thereby making plants susceptible to being removed by storms.
- 25L { 12. The two back-to-back studies by Coastal Solutions Group is extremely controversial and should not be used in an EIR unless clarified. The first study indicated there was no significant impact of hand kelp harvesting, the second stated that divers swimming through kelp forests may permanently alter the kelp bed. Please acknowledge this and the attached chart by Sanctuary Advisory Council Dive Representative David Clayton to include in the EIR appendix.

25M { 13. Another important point of kelp in the Cannery Row Ed Ricketts Park area is the use of its canopy as a safety barrier for kayakers, swimmers, divers and boaters. It is a very real safety concern by charter operators, divers, power and sailing enthusiasts and kayakers regarding the removal of kelp canopy in certain areas. Heavy hand-harvesting in the portion of bed #220 from the Breakwater to Point Pinos has cause many near-miss accidents without the traditional canopy as a safety barrier. The kelp canopy also provides a means for kayakers to stop themselves from being pushed into boat traffic or dangerous ocean conditions when southerly winds come up, particularly from Ed Ricketts Park along Cannery Row to Lover's Point. What are the liability factors in removal of kelp canopy as a safety barrier for kayakers and divers?

25N { 14. There is no mention of lost habitat for mysid shrimp. This important species is required by state law for toxicology tests for municipalities throughout the State of California. The kelp canopy has been removed often enough by harvesting that there is not enough mysid to conduct the required tests. Now state contracts cannot be fulfilled. (Kim Sievers, collector per. Comm.) Please address this concern.

25o { 15. Section 165 Harvesting of Kelp Weighing: Collection data should be monitored and substantiated by some one other than the harvesters themselves. What is provided as a method of accountability? Please address these concerns.

25P { 16. Section 2.5.1.3.1 (page 2-12) Commercial Harvest: In many years, if 50% of the bed's maximum area is allowed to be taken, there will be no canopy left. There is also no mechanism for decisions of harvest amounts for seasonal variations such as during El Nino or other situations. What are the potential biological impacts of harvesting? Harvesting should be determined on percentage of canopy cover left during the winter when it is most needed by its inhabitants. How will this be monitored and funded? What evidence and methodology was used to determine that 50% should be the percentage of a bed that can be taken?

25Q { 17. In the interest of smaller California companies: If we intend to continue using kelp, for abalone food, fertilizer, or alginate we should be helping companies grow it and enhance it, without endangering wild stocks or endangering its passive use. In New Zealand, harvesters are expected to grow their own after the first year in business.

25R { There should be some limit to the amount of kelp that can be harvested by one company. Kelco is no longer a small California company and ISP Alginates is a multinational corporation with scores of offices throughout the world. Recommendation A: There should be limits placed on the amount of kelp that can be taken by one company as well as seasonal limits for each bed. Recommendation B. There should be a limited entry to this field with an

25R

- 25R { established maximum number of permits available based on winter kelp cover and other ecological impacts How many permit holders are allowed to take kelp? How many permit holders are available? How many are pending approval? . Will the DFG recommend limited permits?
- 25S { 18. Section 3.2.9.4 Mammals: No mention of the endangered Stellar Sea Lions which occasionally frequent our kelp forests and the Breakwater area of Bed #220. This may be critical habitat for them as well as threatened sea otters and abalone. Please address these concerns.
- 25T { 19. Pacific Grove Marine Gardens Fish Refuge is identified as an area of special biological significance in other documents yet this area as a refuge is not mentioned or recognized in the document. Please include areas of special biological significance, reserves and refuges.
- 25U { 20. There is no mention of kelp survivability due to frequency or amount of harvest. What evidence is cited and what mechanisms which have been created to determine the condition or state of the canopy? What percentage is currently dedicated for viewing, diving, otter, fish or other critical animal habitat?

Please respond within 30 days.
If you have any questions for clarification, please call. Thank you.

Sincerely,



Capt. Ed Cooper, Diving Representative
PO Box 148
Pacific Grove, CA 93950
831-375-2200

diving@redshift.com

SEE ATTACHMENT - 2 pgs "POLITICS OF SCIENCE IN THE MBNMS"

Friends of the Edward F. Ricketts Marine Park
PO Box 8475 Monterey, CA 93943-8475 831-375-1670

**Comments on the State of California Draft Final Environmental Document:
Giant and Bull Kelp Commercial and Sport Fishing Regulations**

Introduction

Less than one quarter of a square mile, the City of Monterey's Ed Ricketts Park represents only three tenths of one percent (.003%) of California's 74 square miles of kelp forests. This tiny area is appreciated and used by hundreds of thousands of residents and tourists annually. For many, it is their first sight of a kelp forest.

The Ed Ricketts Park was born out of a grass roots effort to protect all marine life and to guarantee public access to this natural kelp forest environment. (Center for Marine Conservation, 1997; Cooper and McDonnell, et.al., 1997) This Cannery Row area is under consideration as a State of California Underwater Park, for its recreational values. (Barry and Foster, 1997)

The two thousand members of the Friends of the Edward F Ricketts Marine Park organization have decades of experience both above and below the surface of the water. As trustees of our marine heritage, we believe that our children's children are entitled to enjoy some marine areas where all life is permanently protected.

The waters of the Ed Ricketts Park has been heavily fished for over a century. The large Rockfishes are long gone. "The majority of game fish populations in this area are severely depleted, and consist mainly of immature individuals. " (D. VanTresca, DFG to K. Russo: Aug. 5, 1995) These few remaining fishes are now threatened by live fish trappers. What little marine life that remains is a dwindling population of invertebrates and a questionable commercial supply of Giant Kelp. This kelp is the base of the food web, and the very habitat that thousands come to see.

Recommendations and Questions. Please respond:

Recommendation #1: A complete prohibition on kelp harvesting in the entire Ed Ricketts Park, from the Coast Guard Jetty to Hopkins Marine Refuge, out to a depth of 60 feet.

Z6A

Discussion: In light of the large citizen turnouts at hearings, the number of written comments in support of the park, with 2 to 1 testifying in support for no-take, over 2000 petition signers, overwhelming support from the Center for Marine Conservation, Congressman Sam Farr, The Sanctuary Advisory Council, and many others, the MBNMS recommendation to close the area from Drake Street to the Coast Guard Jetty is woefully inadequate. Even the Monterey County Hospitality Association called upon the CA Fish and Game Commission to halt harvesting along Cannery Row and out to Lovers Point, stating that "The Activity of kelp harvesting impairs our visitors' experience, degrades the viewshed, and is an incompatible use in light of the value tourism brings to our economy." (J. Lloyd to R. Treanor, Feb. 6, 1997). *Question: What is the biological and socioeconomic value of leaving the kelp in its natural state without harvest?*

26e

Recommendation #2 The Ed Ricketts Park was developed by local concerned citizens, not "developed by local business owners" as stated in the DEIR (p. 3-77) Please correct this error or substantiate this claim.

Discussion: This was a grass roots movement that involved many people as mentioned in the discussion above. In fact, the first idea of protection came from a retired Fish & Game Department Biologist.

26c

Recommendation #3: Royalties from kelp harvesting should no longer reflect the the world spot market price for Alginic Acid, but should reflect the highest social use and economic value of each kelp forest..

Discussion: Proposed Section 165 (7) (MBNMS Recommendation #1)
Monterey County tourism employs over 16,000 persons, and was a 1.14 billion dollar business in 1996, (J. Lloyd to R. Treanor, Feb. 6, 1997). An extremely conservative estimate is that 10% of tourism revenues are directly marine related (diving, kayaking, marine mammal watching, etc.) With the estimated Monterey production from Bed 220 of 33,000 tons of kelp per year (Donnellan and Foster, 1999) the fair market value of the Ed Ricketts Park kelp forest is approximately \$3,450. per ton, if left alive. The royalties (\$1.71/ ton) from sale of 600 tons of dead kelp generates just \$1,000 per year for the people of California. Question: *What is DFG's estimate of economic value of kelp along Cannery Row to the tourist and dive industry if left unharvested?*

26o

Recommendation #4: All Mechanical Harvesters should be prohibited from Bed 219 northward.

Discussion: Proposed Section 165 (5C) (MBNMS Recommendation #3)
The MBNMS has recommended closing beds 220 and 221 to all mechanical harvesting. DFG's proposed legislation will allow mechanical harvest: "Prior Commission approval of a kelp harvest plan is necessary before a kelp harvester may use a mechanical harvester . . . north of Santa Rosa Creek". (165 (5C))

Productivity estimates for the Monterey kelp forest are one-eighth of those for southern CA beds (Gerard, 1976) Also, these Giant Kelp forests are near the limits of their range. It took *hand* harvesters less than a month in 1996 to clear-cut the entire Cannery Row kelp canopy. These kelp forests will not sustain mechanical harvest. Question: *What are the parameters that the Commission will use to evaluate a mechanical kelp harvest plan in these beds?*

Recommendation #5: We support the seasonal closure of all Nereocystis beds within the MBNMS (221-302) during their entire biological reproductive season.

Discussion: Proposed Section 165 (5B) (MBNMS Recommendation #5)

The MBNMS recommendation—that Nereocystis in north coast Beds not be harvested during its breeding season from April 1 to Aug. 31— has been shortened by DFG to July 31. *Question: Where is the scientific evidence that adequate recruitment will have taken place by either date?*

26E

Recommendation #6: We support the proposed closure of beds 224, 225 and 226

Discussion: Proposed Section 165 (5) (MBNMS Recommendation #8)

As the MBNMS has noted, these north coast Nereocystis beds are too ephemeral, and too small to support a commercial aquaculture industry.

Recommendation #7: Kelp canopies in sheltered areas must be left intact to provide habitat for the threatened California Sea Otter during its pupping season. We continue to support a winter ban on kelp harvest in The Pacific Grove Marine Gardens Fish Refuge, from Lover's Pt. to Hopkins Marine Station.

Discussion: Proposal shown in Figure 6-1 (F): (MBNMS 1st Draft Recommendation)

Much of the problem in the Monterey area is that harvest levels increase in winter, when kelp production is at a minimum. The bulk of the take in Bed 220 comes from an existing State of California Marine Refuge, "The Pacific Grove Marine Gardens Fish Refuge." In winter, Sea Otters retreat to the more sheltered areas of the Pacific Grove and Monterey shoreline. Concern about over harvest in this winter refuge led to the Sanctuary's 2nd draft recommendation for a winter closure from Lover's Pt. to Hopkins Marine Station (Figure 6-1, area F). This area of the Edward F. Ricketts Marine Park remains in the City of Pacific Grove's approval process.

Question: Please provide a substantive analysis that compares the value of the winter kelp canopy for sea otters, harbor seals and YOY rockfish vs. the value and need for commercial harvest during the winter from the Breakwater to Lover's Point.

26F

Other Remarks

CA DFG should enforce the already existing laws, such as Fish and Game Code Section 6654: "If, at any time, the Commission finds that harvesting of kelp will tend to destroy or impair any kelp bed or beds, or parts thereof, or tend to impair or destroy the supply of food for any fish, the Department shall serve on every person licensed to harvest such bed or beds, a written notice that the kelp bed or beds or parts thereof, shall be closed to the harvesting of kelp for a period not to exceed one year." Such closures should be done on a precautionary basis, as required by State Law, before, and not only after, "Irreparable ecological damage" has been done. (R. Collins pers. comm.)

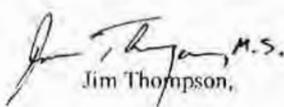
26G

US Forest Service Chief Mike Dombeck recently stated: "Social views are changing. People are looking at forests less as warehouses for products, and more for their value as open space, watersheds and recreation." The same could be said for our seas. It's time to bring California marine resource management into the twenty first century.

Conclusion

Kelp forests are the single most biodiverse temperate marine ecosystem and certainly among the most rare. We are not suggesting a stop to all kelp harvesting in California, but that commercial kelp harvesting within the Ed Ricketts Park be halted. Harvesting in the park is incompatible with its value as watershed, a recreational area and the expressed concerns of literally thousands of California citizens.

Respectfully submitted by Friends of the Edward F Ricketts Marine Park,


Jim Thompson, M.S.


Gayle Todd


Charlene Mitchell

Literature Cited:

Barry, W. James D., and John W. Foster 1997. California Underwater Parks and Reserves 2000 Draft Plan. State of California, The Resources Agency, Department of Parks and Recreation. Sacramento. 38 pp.

Center for Marine Conservation, 1997. Recommendations for the Establishment of the Edward F. Ricketts Marine Park. Washington. 18 pp.

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Donnellan, Michael D. and Michael S. Foster, 1999. The effects of small-scale kelp harvesting on giant-kelp surface canopy dynamics in the Ed Ricketts Underwater Park- Final Report to the Monterey Bay National Marine Sanctuary and the Cities of Monterey and Pacific Grove.

Gerard, Valerie Ann, 1976. Some aspects of material dynamics and energy flow in a kelp forest in Monterey Bay, California. Doctoral Dissertation in Biology, University of California at Santa Cruz.

McEvoy, Arthur, 1986. The Fisherman's Problem: Ecology and Law in California Fisheries. Cambridge University Press. Cambridge, New York and Melbourne. 368 pp.

Murray, Steven N., et. al., 1999. No Take Reserve Networks: Sustaining Fishery Populations and Marine Ecosystems. Fisheries, Nov. 1999.



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PHOTOGRAPHY & CINEMATOGRAPHY

14 February, 2001

Mr. Fred Wendell,
California Fish & Game
215 Beach Street
Morro Bay, CA 93442

Dear Mr. Wendell:

27A

I am writing to you today because I have some dire concerns about the depletion of our inshore marine life in Monterey Bay and in particular, I am very concerned about the extent to which giant kelp is being harvested. I have reviewed your Kelp-CEQA document and am contacting you in hope that you might reconsider your current regulations and rather than take the "no action" stance outlined in your report, I would plead with you to instead implement tighter restrictions on the harvesting of this precious resource — a resource which is the backbone of the world's most biodiverse (and rarest) temperate marine ecosystem.

Regarding my background, I am a resident of Pacific Grove and make my living as a freelance marine/underwater photographer. I also have an undergraduate degree in fisheries biology from the University of Massachusetts/Amherst. My work has been published in such periodicals as *National Geographic*, *Natural History*, *Outside*, *Smithsonian*, *Time* and I am the author/photographer of *California Reefs* (Chronicle Books). My cinematography credits include work on numerous IMAX feature documentaries and television projects; for some six years I was also a diver/cameraman for the Cousteau Society aboard vessels *Alyone* and *Calypso*. I have been a very active diver for over thirty years; I began diving off the coast of New England in the late 60's and made my first dive in Monterey Bay in 1977. While my assignment work has taken me to worldwide locations, the vast majority of my photography and underwater observations in the last ten years or so have taken place in Monterey Bay.

From my first hand underwater observations, I have seen — especially over the past six or eight years — an alarming decrease of marine life in our local kelp forests. In particular the rockfish populations seemed to have crashed — instead of the once vibrant schools which I can remember photographing even in the early '90's, I now see very few adult rockfish and a preponderance of small juveniles instead. Certainly climate fluctuations have not helped this situation, but regardless of global warming, I can still head over to Point Lobos Reserve and find lush schools of rockfish — the only difference is that at Point Lobos the fish are protected from harvest. I think this tells us a lot about the problem with our local fish populations. In direct relation to this, I feel the constant harvesting of giant kelp on the south side of Monterey Bay has not helped the recovery of our fish populations either — in my opinion, any activity which degrades the quality of our local kelp forests (which are a nursery grounds for rockfish) can only make matters worse.

After reviewing your Kelp-CEQA document, I have the following comments and questions:

27b

- 1) I believe that now in the year 2001 it is time to reevaluate how we perceive our kelp resource;

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27b

instead of looking at it solely as a type of seaweed (and regulating it only in terms of its physical structure and growth characteristics) I believe it is time to view it in a grander and more accurate scale as a vital part of a marine ecosystem which offers physical shelter and food to thousands of vertebrate and invertebrate animals. Kelpshred and kelpwreck are not simply useless dead byproducts of the giant kelp forest that should be harvested lest they go to waste: When kelpshred falls to the kelp forest floor it becomes a source of food for myriad other kelp forest creatures. The surface canopy of the giant kelp forest also harbors thousands of marine creatures some very visible like kelp crabs and turban snails, others are microscopic in size. My question for Fish & Game is -- have you ever conducted studies to examine the giant kelp plant's roll in the coastal ecosystem? By removing thousands of tons of the giant kelp canopy -- and along with it subsequent marine life which is then not available as food to marine creatures -- how does that really affect the richness of the whole system? Surely studies have been conducted to assess how fast a kelp plant can grow under various growing conditions, but what happens to the whole system when you remove so much biomass on a regular basis from the same place? Common horse sense tells me that we will see (and are seeing right now) a kelp forest habitat which is a lesser form of itself. I have been simply dumbfounded some days when I've been out working on the water and in one area Fish & Game personnel are working hard to study sea otters and help their recovery -- and I applaud this effort -- yet in the same waters in the dead of winter when the kelp forest and otters are under the most environmental stress, kelp harvesters are allowed to poke, prod and cut off the kelp not only removing the canopy which the otters use for their resting periods, but also the attached marine life such as turban snails, kelp crabs and other creatures which otters use for food. To allow this type of activity within a marine sanctuary which hosts a threatened species of sea otters seems unconscionable to me.

27c

2) I would like to see Fish & Game apportion some areas within the south side of Monterey Bay as no-take reserves which would be completely protected from all kelp harvesting. I would like to see the entire Ed Ricketts Park, from the Coast Guard Jetty to Hopkins Marine Refuge out to a depth of 60 feet included in this no-take area. When considering the wide recreational and aesthetic value of this area -- and the related economic value -- it seems only prudent and fair to set aside this area for the vast majority of tax-paying citizens and visitors who contribute to our local economy. When one adds up the overall value of the kelp forest for the above uses vs. the commercial harvest value (a mere \$ 1.71/ton paid to the state for removing this resource), the latter pales by comparison. I also wanted to ask you if Fish & Game, has ever conducted a study to evaluate the recreational, educational and aesthetic value of our kelp forests vs. the commercial harvesting value of the same?

27d

3) In relation to item #2 above, I would also like to ask Fish & Game to reevaluate the fee it charges harvesters per ton to remove our kelp resource. Where and by what method was the \$1.71/ton figure arrived at? If one considers the real overall value of this resource, it seems to me the value would be thousands of dollars per ton. Monterey County tourism employs over 16,000 people and (by 1996 statistics) is a 1.14 billion dollar business. One conservative estimate of the value of our kelp bed 220 (which estimates that 10% of tourism revenues are directly tied to the local marine environment such as kayaking, diving, coastal hiking/biking, marine mammal watching, etc.) would indicate that the kelp forest within the Ed Ricketts Park would have a fair market value of \$3,450/ton if left alive. Whether one agrees with the practice of harvesting giant

27e

27e

kelp in a marine sanctuary with a threatened population of otters and a dwindling supply of fish -- or not -- it seems that selling a valuable public resource to harvesters at \$1.71 per ton is pretty much giving it away for free.

27f

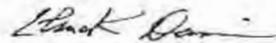
4) After reviewing your Kelp-CEQA document (and looking over the reported tonnages of kelp harvested) I was wondering, how these figures were arrived at? How does the Fish & Game monitor exactly how much kelp is harvested? Is this procedure on the honor system, or do Fish & Game personnel monitor the offloading of vessels? I also wanted to know about the kelp harvesting bycatch -- I apologize if this was published in report and I missed it, but I would like to know if there are any figures on the amount, of kelp snails, crabs and other marine life that go off to market with each ton of kelp that is trucked away for processing? If it isn't already, I feel the above should be monitored.

27g

5) Regarding the closure of all *Nereocystis* beds on the north coast, I am in support of closure of this area within the Monterey Bay National Marine Sanctuary during the entire biological reproductive season. I feel it is a mistake to lessen these restrictions by shortening this season by one month (to July 31 from August 31). Has the Fish & Game done any scientific studies which show adequate recruitment will have taken place by either of these dates?

In closing, I would like to thank you for your careful consideration of my comments. I am not suggesting the Fish & Game completely shut down all kelp harvesting: far from it. But I am asking Fish & Game to please consider the long term effects of this practice when it is conducted to excess for long periods of time in sensitive areas, especially on the south side of Monterey Bay and especially during winter months. I would also like to ask Fish & Game to please carefully consider the fact that kelp is a public resource that is not just important to harvesters but is also highly valued and enjoyed each year by tens of thousands of non-extractive users in the State of California as well.

Sincerely,



Chuck Davis

Comments on:

Draft
Department of Fish and Game
Giant and Bull Kelp Commercial and Sport Fishing Regulations

Thank you for your efforts in the latest draft. As a participant of the Monterey scoping meeting, I am happy to see that some of the comments were addressed.

As an avid underwater photographer in these waters for the last eleven years, a diver for twenty years, and a local underwater photography business owner for seven years I have spent countless hours above and below the waters along the Monterey Peninsula.

General Comments:

28A { We know very little about one of the worlds most unique environments - the giant kelp forest. We are only beginning to acquire knowledge of the long term environmental cycles that effect it. As a place of special social significance and heavy use, the kelp forests of Cannery Row require use of precautionary management.

Recommendations and Questions:

28b { **1) Do not allow kelp harvesting within the Edward F. Rickett's Underwater Park.**
The kelp bed along Monterey is of significant social value. Its proximity to civilization and accessibility make it a viewshed and recreation area for hundreds of thousands of visitors and local residents. As a commercial crop, this small area is of little value to the public interest and represents less than 9.5% of kelp bed 220. Please include a proposal option to close the entire Edward F. Rickett's Underwater Park area (Breakwater to Hopkins) to kelp harvesting or justify its exclusion.

28c { **2) The socio-economic value of kelp along Monterey must be quantified.**
The tourist industry has estimated the kelp within the Ed Rickett's Park to be worth \$3,400 per ton in local and state revenue. This stands in dramatic contrast to the publics income of \$1.71 per ton of harvested kelp. In the EIR, please provide a determination of the actual value of Cannery Row kelp canopy, left unharvested, as a viewshed and recreation area for local residents and the tourism industry vs. its value to the public as a commercially harvested crop.

28d { **3) Lack of baseline data and monitoring procedures.**
Currently, DFG has an infrequent aerial survey and relies mostly on data from harvesters. Closing beds once harvested to 50% of canopy requires constant monitoring of seasonal and large scale environmental changes. How will DFG monitor canopy coverage and overall health of the kelp ecosystem to prevent over harvesting? What data supports that a 50% trigger is adequate to close a bed to harvest?

28e { **4) The kelp canopy must be preserved for juvenile rockfish habitat.**
The rockfish populations have significantly declined. Eliminating harvesting in the Rickett's Park will establish a rookery for juveniles and decrease the potential of predation. Do you agree or disagree?

28f { **5) The kelp canopy must be preserved as habitat for the threatened southern sea otter.**
Although otters have been found to be very adaptive, the Rickett's Park Kelp forest becomes essential habitat during the winter months when canopy levels and available shelter decrease. Please provide an analysis of the potential impacts from harvesting activities and natural phenomenon that could simultaneously impact the limited and frequented winter Sea Otter habitat along Cannery Row in the EIR.

- 28g { **6) An increase in water quality incidents warrant precautionary management.**
While the direct result of bacterial pollution is unclear, southern California kelp forests have been significantly impacted. The solution for our frequent spills is not in sight.
Please provide data and impact analysis analysis of the number and level of historic local sewage spills and an estimate of future spill frequency and include it in the EIR.
- 28h { **7) Hand harvesting has shown a visual effect in the Rickett's Park.**
Page 4-12 states that hand harvesting has had "no appreciable visual effect on the canopy." In 1996 it took hand harvesters less than one month to clear cut the entire kelp forest along Cannery Row. This incident caused enough reaction to initiate many public meetings of concerned citizens, the kayak and diving industry, and the kelp harvesters. Please correct the document to include this significant event or justify its exclusion.
- 28i { **8) The Ed Rickett's Underwater Park was developed by the community not just by business owners.**
Page 3-77 states that the Rickett's Park was "developed by local business owners for the use of diving and kayaking." The process involved a grass roots movement of over 2000 people, seven public hearings, the support of the City of Monterey, the Center for Marine Conservation, Congressman Sam Far, and the Sanctuary Advisory Council. Please correct this error or substantiate the claim.
- 28j { **9) Underwater photographers, divers and kayakers do not benefit from kelp harvesting as the document states.**
Page 4-13 states that harvesting benefits underwater photographers by "opening lanes in the canopy that allows passage through dense beds and more light to penetrate and lighten the subsurface areas." The majority of all diving occurs along the outer edge of canopy. The shadows of the dense canopy is home to the fish we have come to see. The light dancing through the fronds is what makes it a magical place for photography. Kayakers explore this area to view the mammals and birds that inhabit the canopy. The most frequently used water entry points along Cannery Row never require passage through thick canopies. Divers and kayakers have asked for the ban of harvesting, thus how can the report substantiate it as a benefit? Please correct these errors and include researched facts on the economic and recreational effects of kelp harvesting on the diving and kayaking industries and sport users.
- 28k { **10) Local abalone farms need support for alternative food sources.**
To insure a sustainable supply, kelp should be planted and grown. Artificial reefs and commercial food are alternatives to winter harvests along Cannery Row. New Zealand requires farms to grow their own kelp after two years. Please include research on alternative methods to harvesting. Why is their no proposal that encourages farms to grow their own kelp?
- 28l { **11) No new harvesting permits should be issued.**
Local abalone farms state that they can't harvest enough kelp in winter and all central California farms must come to the protected waters of Monterey. To decrease pressure, a moratorium should be issued on all new permits. Please address the growth potential of the harvesting industry and its subsequent impact on the Cannery Row kelp beds in much more detail on the EIR. How many new farms and growing farms can be sustained?
- 28m { **12) No mechanical harvesting from bed 219 northward.**
The low productivity of these northern beds will not sustain mechanical harvest.
- 28n { **13) Seasonal closure of all Nereocystis within the MBNMS (221-302) from April 1 through August 31.**
The MBNMS correctly recommends closure of the beds throughout their entire reproductive cycle, NOT until July 31. Please justify this change of date.

28a { **14) Support the proposed closure of beds 224, 225 and 226.**
These *Nereocystis* are too small to support commercial harvesting. What data and monitoring system will be used if these beds are left open to harvest?

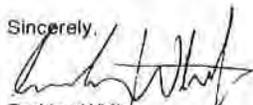
28p { **15) All collection activities should be included in the kelp EIR.**
The collection of invertebrates by aquariums and researchers has dramatically increased with the addition of new aquariums and the growth of the local research community. Please determine the levels of these activities, include a list of permitted collectors and an analysis of their impact on the Cannery Row kelp environment.

Conclusion:

The Cannery Row kelp forest is of significant social value and is most susceptible to industrial impacts. The last 20 years has seen the public's increased reverence with this area. However, it has also been subjected to dramatic increases in invertebrate collection, loss of rock fish and civic pollution. It is time that we redefine the value of our unharvested resource and use precautionary management to insure that this resource is available to future generations.

Please note that I have requested a response to the issues raised in each of the above paragraphs. If the above items are not adopted, please provide a details justification. If you have any questions, please contact me. I look forward to your response to my comments within the next 30 days.

Sincerely,



Berkley White
429 Belden St.
Monterey, CA 93940
831-375-1670

To: Rob Collins
Department of Fish and Game
20 Lower Ragsdale Dr.
Monterey, CA 93940
racollin@dfg.ca.gov

Jessica Wheeler
429 Belden St.
Monterey, CA, 93940
831-375-1670
jesswh@yahoo.com

As a citizen of Monterey and as a biologist, it is important to me that our local unique and diverse ecosystem is properly managed and protected. I have studied marine algae and have a degree in marine biology. As a marine educator, kayaker, diver, and underwater photographer, I have an unique understanding of this system. I have taken 100's of people from all over the world on natural history tours to learn about the kelp canopy. Exploring the invertebrate life in the kelp canopy is a favorite among children and adults alike. What a wonderful resource for education. Thank you for listening in consideration of this critical issue.

Comments on the Draft Environmental Document on
Kelp Management

29a { 1. Recommendation: That The DFG's recommended no-harvest area of kelp bed #220 be expanded to include the area from Drake to Hopkins marine station out to a depth of 60 feet. This area is designated as the Ed Ricketts Underwater park by the city of Monterey, and supported by the Center for Marine Conservation, the Sanctuary Advisory Council and 1000's of citizens. This leaves 90% of kelp bed 220 open for harvest. Please include this recommendation as a proposal option.

29b { 2. Recommendation for consideration of the Kelp beds as extremely important habitat for the California sea otter (*Enhydra lutra nereis*). This animal is protected by both the Endangered Species Act and the Marine Mammal Protection Act. The ESA also defined critical habitat. Habitat modification, impairing essential behaviors like breeding, feeding, and sheltering are included as harm "take".

3. Please continue to consider the vital areas along Cannery Row that are ideal habitat, the most protected areas from wave action, especially north west swell, during winter storms and summer wind waves. Please define long term research goals in solving these problems.

29c { 4. Recommendation: In the kelp bed map, number 220 (page 2-9), should illustrate the closure area within the entire 220 bed. The current map is great for locating the area, but it is important to have a visual scale and reference of how much of bed 220 is open to harvesting vs. closed to harvesting. Please make this correction.

29d { 5. Recommendation: section 2.5.1.3.1 (page 2-12) No more than 50% of a beds maximum seasonal capacity can be removed at any time by harvesting. Seasonal variation would require new surveys for base line and much lower quotas in the winter months. Do you agree with this recommendaion? If not please explain.

Setting a quota per bed, per year is a good idea. However if you are allowed to take 50% of a leased bed there must be a time frame stipulated. What are the Commissions rules on open beds? This would prevent harvesting of 50% of a bed that has only 10% of its original cover. Tidal times, seasonal fluctuation and frequency of kelp bed surveys would be critical.

Comments on the Draft Environmental Document on Kelp Management continued

- 28e { 6. Recommendation: Streamline the enforcement potential by requiring kelp to be weighed at specific landing sights. The ability of the Department of Fish and Game to enforce the kelp harvesting quotas is in question if the kelp harvesters are asked to report their own tonnage taken and to obtain their own "scientifically recognized" studies of kelp abundance in order to obtain their permits. There must be a recommendation for more organized enforcement. Spot checks? Is it possible to have joint enforcement by the MBNMS and the city of Monterey in order to make this a more affordable operation for both organizations? Lack of resources including money and staff to properly address this management problem need to be addressed.
- 29f { 7. Recommendation: Retain the wording of "in specially designated aquatic parks" as per section 10500(f) ... appendix 2-2
In consideration of the fact that the renaming of all designated "marine protected areas" is in process it seems practical to be more general. This also may allow the park system a way to create necessary enforcement without waiting to revisit this 5 year document.
- 29g { 8. Recommendation: Data of kelp harvesting should remain available to the public.
- 29h { 9. Recommendation for Additional Research:
a. Affects of kelp harvesting on California Sea Otters(displacement short and longer term, habitat degradation, exposure, food availability)
invertebrate food resources for otters, birds, fish, and other invertebrates that are removed with the canopy layer is evidence in itself. The remaining kelp canopy is a sanctuary against winter storm waves.
b. Hold Fast Studies concerning stipe density and holdfast health in lieu of less photosynthetic potential should be of highest priority. Weakened holdfasts and vulnerability of part or all of the kelp forest in storm conditions must also be considered. The management of this unique biodiverse ecological system is critical. The reduction considered. The fact that the kelp plant must grow a stipe from the holdfast back up to the surface is an incredible amount of energy spent not to mention the stress on the holdfast of bearing many more stipes, and the fact that the initial stipe may grow as long as one hundred feet on the surface. Drift kelp and kelp wracks are also important to consider. Please define long term research goals in solving these problems.
- 29i { 10. Recommendation:
Balance the cost of management, research, and enforcement of the kelp harvesting with the income generated by the licensing and tonnage fees and determine the actual value of the kelp in this manner. Kelp harvesting fees should generate money for research of the impact of harvesting on Macrocyctis.
- 29j { 11. Recommendation: The socio-economic value of the kelp must be considered. How many people come to Monterey to see sea otters wrapped in the kelp or dive beneath its canopy? Whether above or below water tourism in Monterey is huge. In Monterey County tourism is a 1.14 billion dollar industry. If you consider the value of this resource alive, it is estimated that the kelp is worth \$3400.00 per ton. What is being done to address this issue?
- 29k { 12. Recommendation: Change the inaccurate statement page 3-77 that the Ed Ricketts Underwater Park was created by business owners. Business had nothing to do with its creation. The process of creating the park was a grass roots movement of over 2000 people, including scientists, students and registered voters from all walks of life. Scores of meetings were held in addition to seven city sponsored public hearings. After its creation, however, business organizations supported it.

Comments on the Draft Environmental Document on Kelp Management continued

- 29c { 13. Recommendation:
Remove inaccuracy page 4-12 hand harvesting has "no appreciable visual effect on the canopy".
This may be true in small quantities; however, in 1996 the area along Cannery row was over
harvested! This was visually obvious to all when no kelp was remaining. This was an indicator that
there was a large problem.
- 29c { 14. Recommendation: Please remove inaccuracy page 4-13 that "opening lanes in the canopy that
allows passage through dense beds and more light to penetrate and lighten the subsurface areas"
benefits photographers. The more canopy and diversity the ecosystem has, the more photographs
there are to take.

Conclusion:

It is all too often that our resources are managed in such a way that there is damage before any action is taken for protection. We must learn to manage for sustainability and not crisis. Often damage is irreversible or takes an exponentially long time for recovery. If we want our resources to be sustainable the precautionary approach to management is the only answer.

Again , Thank you for all of the hard work and taking these ideas into consideration. I look forward to your response to each of these concerns. If they are not adopted into the document please explain.

Sincerely,



Jessica Wheeler

CITY HALL
BOX CC
CARMEL-BY-THE-SEA, CALIFORNIA 93921

February 2, 2001

Mr. Robson Collins
California Department of Fish & Game
20 Lower Ragsdale Drive
Monterey, CA 93940

Dear Mr. Collins

Carmel Beach is one of the crown jewels of the California coastline. Its clear waters, smooth white sands, and wind-swept cypresses are known the world over.

Like most other California beaches, Carmel Beach is vulnerable to coastal erosion. For over fifty years, the City of Carmel has been actively involved in protecting our shoreline, its beach, dunes, and bluffs, as well as the road, houses, and utilities that line the bluff top, from these erosion forces.

Just offshore from Carmel Beach lies an extensive kelp forest, described as Kelp Bed #219 in CDF&G documents. This bed is currently classified as "Open" and is subject to mechanical harvesting.

The City of Carmel is concerned about the impacts that large-scale kelp harvesting might have on our shoreline. There is evidence indicating that kelp beds buffer the energy of incoming waves. This might play a critical role in determining how much sand is deposited on the shore between late spring and late fall. And the amount of sand on the beach at the start of the winter storm season is one of the most important factors controlling the extent of erosion incurred by Carmel's beach and bluffs. Another important factor might be the timing of kelp harvesting operations. Kelp cutting early in the season might have a different effect than late harvesting.

Unfortunately, these impacts have been poorly studied and are not well understood. Furthermore, the City is aware that coastal processes impacting Carmel's shoreline, especially those related to sand transport and deposition, may be different from those affecting neighboring shorelines (e.g. Monterey Bay), so the results of studies conducted elsewhere may not apply to Carmel Beach.

30A

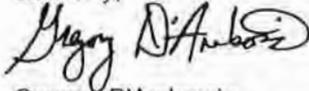
30A

In view of the potential threats and tremendous costs that coastal erosion represents to both public and private property along the our shoreline, the City of Carmel hopes the Department of Fish and Game will take steps to better understand how kelp harvesting affects erosion along Carmel Beach before allowing further harvesting in Kelp Bed #219.

30B

Our kelp beds are a resource that belongs to all Californians. While the City does not oppose occasional commercial harvesting of kelp, we hope this resource will be managed intelligently, and in such a way as to reduce or prevent detrimental effects on our shoreline.

Sincerely,



Gregory D'Ambrosio
Assistant City Administrator

Cc: William J. Douros, Monterey Bay National Marine Sanctuary



January 30, 2001

Robson Collins
Department of Fish and Game
20 Lower Ragsdale Dr.
Monterey, CA 93940

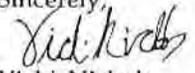
Dear Mr. Collins,

Save Our Shores (SOS) is a marine conservation organization dedicated to *protecting the ecological integrity of the Monterey Bay National Marine Sanctuary through policy research, education, and citizen action.* SOS is grateful for the opportunity to comment on the Department of Fish and Game (DFG) Draft Environmental Document on Kelp Management. We appreciate the significant amount of work that went into the document and want to thank the Department of Fish and Game and your staff for incorporating public concerns into the recommendations.

Save Our Shores has been actively involved in this issue and played a key role in soliciting public opinion for the Final Monterey Bay National Marine Sanctuary (MBNMS) Kelp Management Report. SOS hosted three public forums in Half Moon Bay, Santa Cruz, and Monterey. These forums included a panel discussion with representation from user groups including; recreation, conservation, DFG, NOAA, and kelp harvesters. Many of the people who attended these forums went on to submit formal comments during the NOAA public hearing on the MBNMS Kelp Management Report.

31A { Save Our Shores' concerns regarding Kelp Harvesting were incorporated into the MBNMS staff recommendations in the aforementioned Kelp Report submitted to DFG. Therefore we request that these recommendations be included in the DFG Final Environmental Document on Kelp Management.

Thank you for your consideration of these comments.

Sincerely,

Vicki Nichols
Director of Policy and Research

2222 East Cliff Drive, Suite 5A
Santa Cruz, CA 95062
Phone 831-462-5660 • Fax 831-462-6070
Education Phone 831-462-9122

Sanctuary Watch Hotline 800-9-SHORES
website: www.saveourshores.org
RECYCLED PAPER

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Central California Council of Diving Clubs, Inc.

P.O. BOX 779, DALY CITY, CA 94017

DRAFT ENV. DOC. - KELP

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20 FEB 01 11 08 AM

FISH AND GAME COMMISSION

February 13, 2001

Fish and Game Commission
 State of California
 1416 Ninth Street
 Sacramento, CA 95814

Re: Draft Environmental Document
 Giant and Bull Kelp Regulations

Dear Commissioners and Staff,

The Central California Council of Diving Clubs, Inc. (Cen Cal) represents the recreational diving community from San Luis Obispo County to the Oregon border. We are a not for profit, membership corporation dedicated to protecting marine resources, maintaining ocean access and the education of our members. We are a member of the Underwater Society of America and the Confédération Mondiale des Activités Subaquatiques (World Underwater Federation).

32A

We have reviewed the Draft, 2000 Final Environmental Document, Giant and Bull Kelp Commercial and Sport Fishing Regulations. We request that the proposed closure area in Monterey in Administrative Bed 220 be increased in size. The proposed northwest limit line is near the extension of Drake Avenue. We ask that it be moved northwestward to the extension of Prescott Avenue.

This is a compromise recommendation because we would like to see the proposed closure area extended all the way to Lovers Point. This whole area is used extensively by recreational divers and we would like the kelp and its associated environment kept lush for recreational use.

Sincerely yours,

Stephen E. Campi
 President



ISP ALGINATES, Inc.

2145 East Bell Street, San Diego, CA 92113 • Tel: 619-557-3100 • Fax: 619-557-3128

30 JAN 01 11 09

January 25, 2001

California Fish and Game Commission
1416 Ninth Street
Sacramento, CA 95814

Dear Commissioners:

ISP Alginates Inc., a San Diego based company formerly known as Kelco, is vitally interested in kelp resource management and therefore appreciates this opportunity to comment on the Draft Environmental Document on Giant and Bull Kelp Commercial and Sport Fishing Regulations.

ISP Alginates has sustainably harvested giant kelp (*Macrocystis pyrifera*) in California's waters for 71 years. The kelp we harvest is brought back to our San Diego plant where it is processed into algin - a colloidal chemical that is used in food, medicines, and many other consumer and commercial products. ISP Alginates employs approximately 200 people in San Diego, and our annual payroll and benefits total \$20 million. Annual purchases for our San Diego facilities average \$10 million, a majority of which goes to California vendors. In 2000, we invested over \$5 million in capital to improve our algin processing facilities, research laboratories, and administration offices. The existence of a kelp dependent industry has a substantial indirect effect: new demands for other products are made, new jobs in other industries are created, and taxes are generated.

33A

ISP Alginates is pleased to note that the Draft Environmental Document accurately describes the importance of California's kelp forests, and we strongly agree that there should be effective management of the commercial harvest of kelp. This protects not only the natural resource, but also the industry itself. In general, ISP Alginates supports the Proposed Project set forth in the document. We do, however, have concerns regarding some of the Proposed Project's amendments to the existing kelp harvesting regulations. These concerns are addressed in detail below. For the record, ISP Alginates strongly opposes Alternative 1, which would establish statewide harvest controls. We completely agree with the draft document's conclusion that Alternative 1 should not be implemented. Alternative 1 would severely impact California's algin industry and would provide no ecological benefits to populations of giant kelp or their associated marine biota.

The following are ISP Alginates' comments regarding the Proposed Project's amendments:

1. Proposed Amendment: Clarification of what weighting methods are acceptable to determine the weight of kelp being landed.

33 B

Comment: ISP Alginates agrees that all commercial kelp harvests in California should be appropriately weighed. We are, however, concerned that the proposed language really doesn't clarify what methods are acceptable. We have used a vessel displacement method for determining the weight of our kelp harvests for decades, and this has proven to be accurate, efficient, and cost effective. Assuming that it is the department's intention to continue utilizing vessel displacement as one of the approved volume conversion methods, then ISP Alginates supports this proposed amendment.

2. Proposed Amendment: Clarification of what harvest information is required in landing records and what processes are to be followed in submitting reports.

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Comment: ISP Alginates supports this proposed amendment.

3. Proposed Amendment: Further restrictions on harvest methods and seasons for bull kelp near the southern limit of that species geographic range.

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Comment: The proposed amendment would restrict the harvest of bull kelp to hand held cutting devices in non-leased beds. It would also restrict any bull kelp harvesting between April 1 and July 31 in non-leased beds within the Monterey Bay National Marine Sanctuary. ISP Alginates harvests giant kelp in both leased and non-leased beds in central California from approximately June to November. We specifically avoid collecting bull kelp during our giant kelp harvesting operations because bull kelp's algin content is low and of poor quality. Any bull kelp that we collect results in increased algin production costs and reduced quality of our finished products. ISP Alginates' marine biologists conduct regular serial surveys of the kelp resources throughout California, and we note areas of high bull kelp concentrations. Our harvesters are specifically directed away from areas with abundant bull kelp. We do, however, get a small incidental take of bull kelp since our harvesters cannot completely avoid every bull kelp plant. The Monterey Bay National Marine Sanctuary's Kelp Management Report concluded that the small incidental take of bull kelp during giant kelp harvesting operations was not a concern. If it is the intent of the department to allow a small incidental take of bull kelp during giant kelp harvesting operations, then we could support this amendment. Unfortunately, we must strongly oppose the amendment as it is currently written since it would preclude our harvesting in much of the central California kelp resource.

4. Proposed Amendment: Regulations that specify which kelp beds are closed to harvest should be amended to include those beds where there has been little resource to prevent focused or repeated harvest where the potential is highest for resource damage.

Comment: Of the eighteen beds being recommended for closure, ISP Alginates has only harvested in Beds 22 and 24. We have not harvested any kelp from Beds 22 and 24 since the early 1980s because these beds have not fully recovered from the severe 1982-84 El Niño that destroyed most of the kelp growing on sand along the Santa Barbara coast. The kelp in Beds 22 and 24 remains too scattered for us to harvest economically. Prior to the El Niño, however, these beds were quite productive and important to our industry. We believe that

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both of these beds have the potential to fully recover given an appropriate time frame and favorable ocean and weather conditions. We are therefore opposed to the permanent closure of Beds 22 and 24.

5. Proposed Amendment: Regulations that specify which kelp beds are closed to harvest should be amended to include a portion of Bed 220 near Monterey to reduce user conflicts.

33f

Comment: ISP Alginates is very familiar with the user conflict that exists in the Cannery Row area of Monterey. We have never harvested kelp off Cannery Row and we have no plans of ever harvesting there in the future. If the proposed closure in Bed 220 helps reduce the Cannery Row user conflict without posing undue hardship on the harvesters who have historically harvested that area, then ISP Alginates would fully support this amendment.

6. Proposed Amendment: The regulations should be amended to provide a method for placing temporary harvest controls in beds or portions of beds where necessary for the resource protection.

33g

Comment: The proposed amendment indicates that the Commission may limit or prohibit the harvest of kelp within a bed or portion of a bed for any length of time to insure that kelp is properly harvested. It further proposes that the Commission may designate, through emergency regulation, a non-leased kelp bed or portion of a bed as a harvest control area with specific harvest tonnage limits for a specified period of time. We appreciate the department's stated goal of finding an alternative to closing an entire bed to all harvesting, but we have concerns about how this proposed amendment would be implemented. Our concern rests primarily with the amendment's subjective language. For instance, there is no clear definition for the term "properly harvested". We would assume that a kelp harvester complying with all state regulations would be harvesting properly, but the amendment leaves that undetermined. We therefore would like to see what procedures and criteria would be used to designate a particular kelp bed for temporary closure or harvest control. ISP Alginates cannot support this proposed amendment without further detail on how it would be implemented.

7. Proposed Amendment: Regulations guiding the leasing of kelp beds for the exclusive harvest of kelp should be amended to provide a method where interested parties can easily determine which beds are currently available for harvest.

33h

Comment: ISP Alginates supports this proposed amendment.

8. Proposed Amendment: Prior Commission approval of a kelp harvest plan is necessary before a kelp harvester may use a mechanical harvester to harvest giant kelp in a non-leased kelp bed in the area north of Santa Rosa Creek.

Comment: ISP Alginates has used mechanical harvesters in kelp beds throughout Central California since the early 1970s. It is our policy to notify the department and the Monterey Bay National Marine Sanctuary of our planned harvesting schedules to all central California

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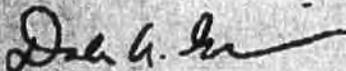
kelp beds. We could support this amendment if its intention is to make this type of communication part of the regulations. Unfortunately, the proposed amendment is quite vague. It does not specify what qualifies as a harvesting plan and what is required for plan approval and implementation. Kelp canopies can develop at different rates and times of year so it is nearly impossible to predict how much kelp would be harvested from any given bed at any given time. Kelp canopies can also be quickly eliminated by storms or sloughing. In addition, weather plays a significant role in determining where we harvest. For example, we might schedule a trip to one of our leased beds only to be forced into a more weather protected non-leased bed because of strong winds or large swells. It would be impractical to get prior Commission approval for any of these unpredictable situations. This amendment as written could potentially restrict us from harvesting many if not all non-leased beds in Central California. We doubt that this is the intention of the proposed amendment, so we suggest appropriate language be added to the amendment to clearly define what a harvesting plan entails and how it is approved. This language should also incorporate the need for flexibility given the ephemeral nature of kelp canopies and changing weather patterns.

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In summary, ISP Alginates generally supports the Proposed Project and agrees with the conclusion of the department in rejecting Alternative 1. Unfortunately, we cannot give full support to the Proposed Project at this time due to the vague and speculative nature of several of the proposed amendments. We urge the department and the Commission to clarify the language in the proposed amendments dealing with mechanical harvesting of bull kelp as it relates to incidental take, temporary bed closures, harvest control areas, and harvesting plans.

ISP Alginates thanks you for the chance to review and comment on the Draft Environmental Document on Giant and Bull Kelp Commercial and Sport Fishing Regulations. If you or your staff has any questions regarding our comments, please feel free to contact me at 619-557-3194.

Sincerely,



Dale A. Glantz
Manager Harvesting and Marine Resources