

# HUMBOLDT AREA SALTWATER ANGLERS

A VOICE FOR SALTWATER SPORTFISHERS



## 2015 FALL NEWSLETTER

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# President's Message

By Scott McBain



Well, there wasn't a whole lot of offshore fishing to be had since the last newsletter. The albacore headed north of us, Pacific halibut season closed early (see p. 12), and salmon season ended with some windy weather. The Bluefin tuna were elusive, and now Dungeness crab season is postponed indefinitely due to elevated domoic acid concentrations. The coming years will present new challenges to north coast saltwater anglers, and some hard decisions on fishery management issues in the coming years, all of which will make our collective and coordinated efforts to preserve our fishing opportunities that more important.

We have been using more surveys to help the HASA Board of Directors better understand north coast anglers' preferences on Pacific halibut season structure. For example, coming soon will be the results of the 2016 Pacific halibut season structure survey. While CDFW has been reluctant to consider changes for the 2016 season structure, we nonetheless felt it important to gain a better understanding of north coast anglers based on their experience with the 2015 season structure. Based on input at the end of the 2015 season, we developed another two season structure options that attempts to better ensure Pacific halibut fishing opportunities in September and October by assigning an 80% of quota to early and middle season harvest, then 20% of quota to September and October harvest. As of today, we have received 92 responses, with lots of good input via comments. We will post results on the HTC board shortly.

The success of these surveys in getting input means that we will likely expand the surveys to other topics. In addition to your providing input at HASA meetings and fishery management meetings, it provides HASA with a broader perspective on your thoughts, including anglers that reside out of coastal counties but travel here to fish and contribute to our economy. Look for more surveys to come out soon (but not too many!).

As a reminder, the 2016 HASA banquet will be held on April 30, 2016 at the Arcata Community Center, so mark your calendars if you haven't done so already! Also, HASA will be updating the membership process, and will be sending out renewal notices at the beginning of the year. Your joining HASA is critical to improving our voice for representing north coast saltwater anglers, which will be critically important in the coming years.

Lastly, I hope everyone is able to reflect on the high points of the 2015 fishing season, and can tell a few more tall fishing stories amongst friends during the holiday season. Best of luck in the coming year!

A handwritten signature in black ink that reads "Scott McBain".

The mission of Humboldt Area Saltwater Anglers is to represent North Coast fishermen's historic and ongoing right to sport fish along the Northern California coast; advocate reasonable and rational sport fishing seasons and regulations; educate our members and the general public about the economic and cultural contributions of sport fishing to our local economies; and promote sustainable stewardship of the resource.



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# El Niño Impacts on Northern California Fishing

By Kathleen Lewis

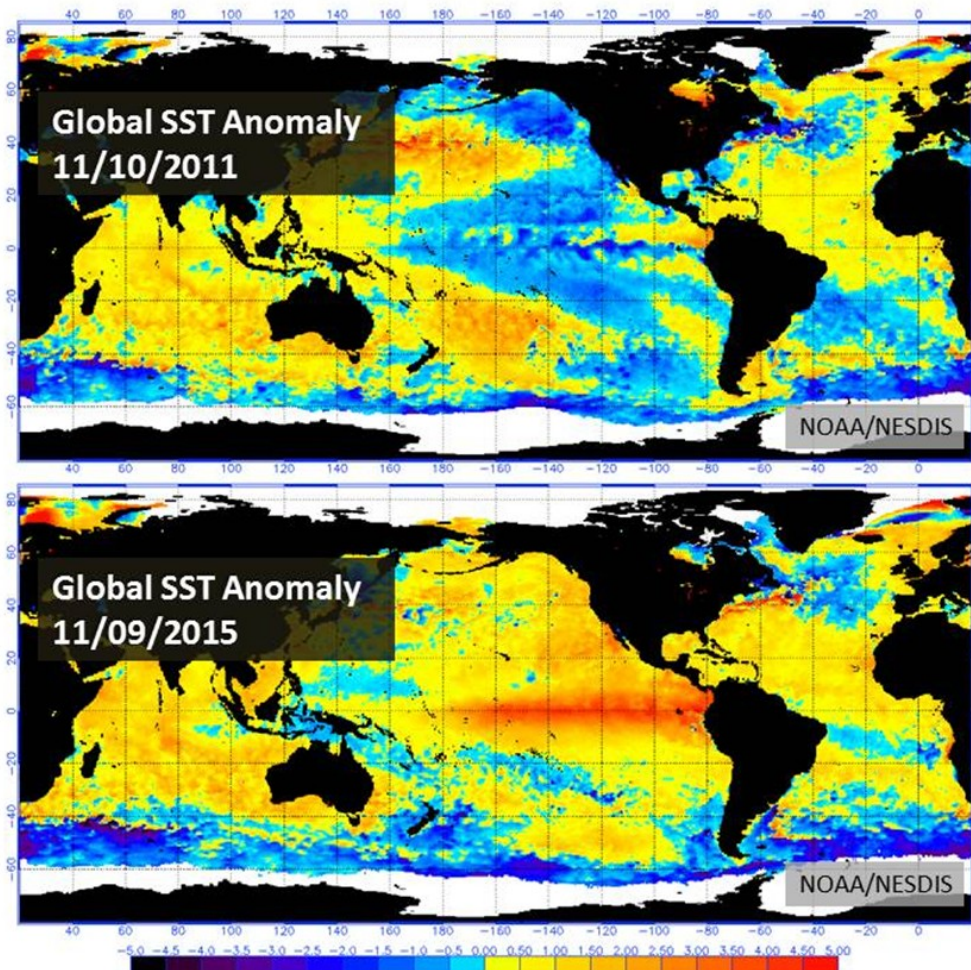
Meteorologist, National Weather Service



El Niño is a recurring climatic pattern that occurs every two to seven years involving a warming of the waters in the central and eastern equatorial Pacific Ocean and a weakening in the easterly trade winds. The warmer than normal sea surface temperatures (SST) off the coast of South America inhibit the upwelling of colder water to the surface. Once El Niño conditions are present it triggers an atmospheric response that can alter weather patterns globally. For the west coast this usually results in wetter than normal conditions in portions of southern California like San Diego and drier than normal conditions in portions of Washington State. Figure 1 shows this tendency but it also shows that northern California is not typically as wet as southern California during El Niño years. What does this mean for California? Plain and simple, El Niño will bring an exceptionally stormy winter with above normal precipitation to southern California. The resulting copious amount of rain will bring an increase in the occurrence of flooding and mud and rockslides. Though southern California experiences the greatest impacts during El Niño events, model simulations suggest a strong El Niño will bring above normal precipitation to central California. The 2015-16 El Niño is forecast to be a strong event and the winter outlook does favor above normal precipitation for northern California. This could be good news for salmon spawning since they have struggled with below average stream flow for the last few years. Of course, this is dependent on this year's El Niño producing the expected impacts for this region. It turns out that each event has different characteristics that can affect the way it impacts any particular region of the United States.

One characteristic that sets this El Niño apart from others is something that is increasingly referred to as the *Blob*. The *Blob* is a region of well above normal SSTs in the northeast Pacific. Warming in this region is not

uncommon during El Niño events yet a persistent ridge of high pressure over the past few years has furthered the warming process (See Figure 2). This ridge was also to blame for the lack of rainfall across California over the past 4 years. The blob is not expected to have any impacts on how this winter's El Niño impacts rainfall amounts but will still have a compounding impact on west coast fisheries from elevated water temperatures.



El Niño events are known to increase sea surface temperatures but they can also change the vertical thermal structure of the ocean and alter currents and upwelling processes near coastal regions. These changes can affect the composition and abundance of fish species across the northeastern Pacific. Cold water species will typically move north as warmer waters restrict their range. These changes to marine habitat have resulted in a loss of commercially significant species like squid off the Califor-

Figure 2: SST Anomaly from 2011 and 2015

nia coast. Changes in Pacific salmon migration patterns have also been observed. Equatorial species, on the other, hand will spread out with the increasing sea surface temperatures. Equatorial game fish that has been previously observed along the central California coast include mahi mahi, swordfish, and marlin. This year there has been numerous reports of sea snakes, hammerhead sharks, and other tropical species along the southern California coast. According to the National Marine Fisheries Service, fishes that remain in an affected region experience reduced growth, reproduction, and survival. The delay of the California Dungeness crab season due to unhealthy levels of a neurotoxin is likely an example of an impact from El Niño. Algal blooms that produce the dangerous neurotoxin domoic acid have flourished in the warmer waters off the west coast of the United States over the past few years. Even though the correlation is very strong there is no direct evidence that these algal blooms are caused by El Niño.

El Niño has consequences that are obvious to the general public which include impacts that come hand in hand with increased rainfall (i.e. flooding, rockslides, etc.) but some of the not so obvious impacts are more strongly noticed by the salt water fishing community. These changes will likely persist through the winter as a strong El Niño is forecast to continue. However, conditions may change by spring 2016 as El Niño is forecast to weaken. Unfortunately, El Niño can be tricky to forecast with multiple sources of variability and uncertainty that can influence its impacts on California.

For more information on El Niño please visit [www.climate.gov/](http://www.climate.gov/) or [www.cpc.ncep.noaa.gov/](http://www.cpc.ncep.noaa.gov/)  
 More information on west coast fisheries can be found at [www.westcoast.fisheries.noaa.gov/](http://www.westcoast.fisheries.noaa.gov/)

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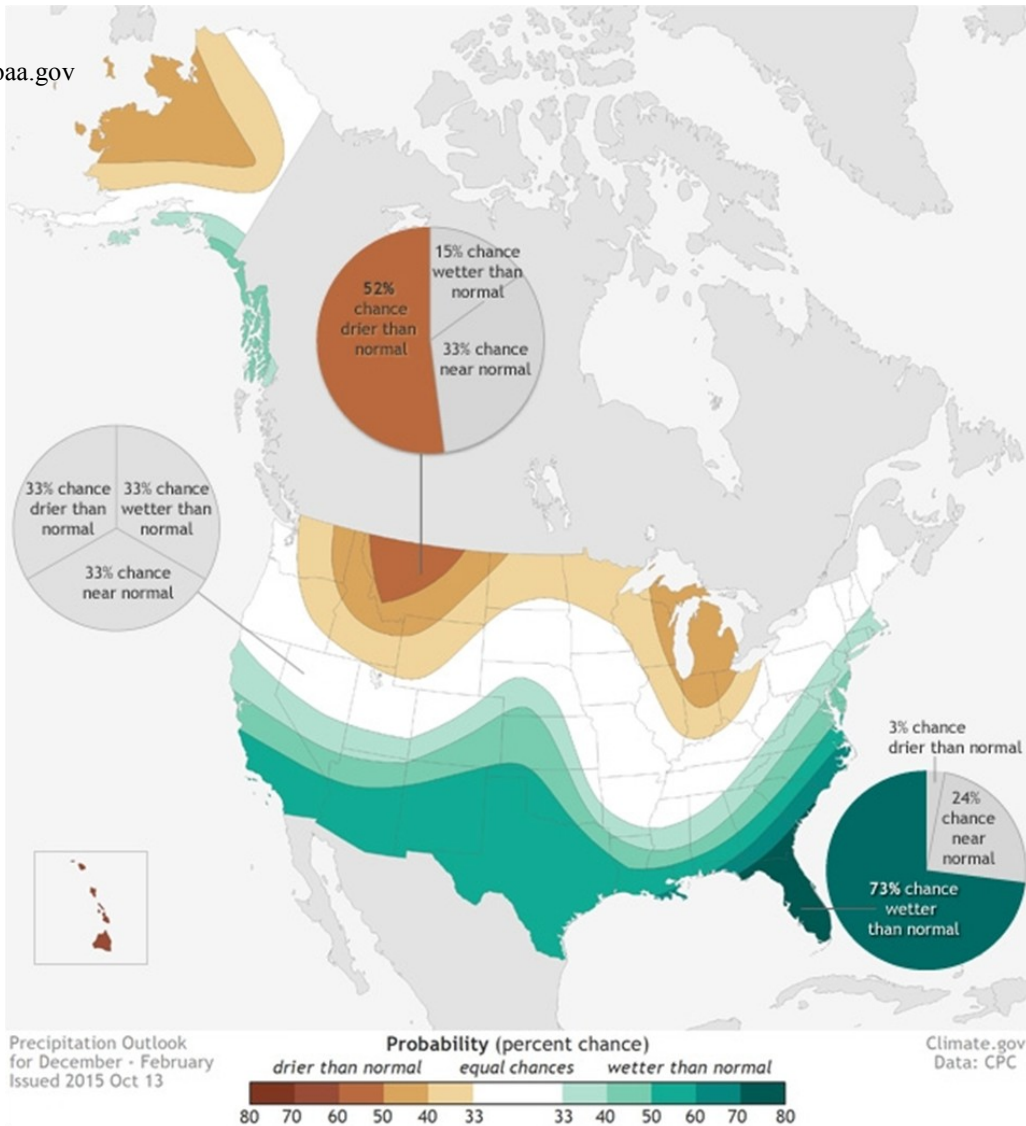


Figure 1: Precipitation Outlook

# The Klamath River – Past and ...Future?

By Larry De Ridder



The Klamath River hosts the third largest salmon run on the west coast of the United States, behind only the Columbia and Sacramento systems. We, as salt water anglers, harvest many fish which originate in this system, as do anglers for hundreds of miles north and south of us. However, the past, and potentially the future, are quite different from what we experience today.

Currently, there are several dams on the upper Klamath River and its estuaries, the first of which was built in 1909. The four largest on the Klamath itself (Iron Gate, Copco 1 and Copco 2 in California and J.C. Boyle in Oregon), block salmon access to about 420 miles of ancestral spawning grounds. The reservoirs store water and produce electricity, but also produce a host of side effects. The number one side effect is to substantially limit the salmon population. The second is the resulting political fights over the stored water. When in the dam planning and building stage, the government promoted the Upper Klamath Basin as farmland, and promised buyers they would receive water rights. However, downstream users also had water rights; hydro power generators require water; salmon need water – you begin to see the issue. In many years promises exceed the amount of water available. In recent years events have gradually conspired to make the issue come to a head. To recap some recent history:

Spring 2001 – the Feds announced there would be no water deliveries from Upper Klamath Lake or the Klamath River to the Bureau of Reclamation’s Klamath Project due to drought and the Endangered Species Act. This was the first time irrigation water was actually turned off, though some limited deliveries were ultimately permitted late that summer.

Fall 2002 – the infamous fish kill on the Lower Klamath was essentially caused by a “perfect storm” of conditions which resulted from a federally ordered change in the water flows. Higher water flows would have prevented the premature deaths of an estimated 33,000 adult salmon.

2005 – the first of what is now an annual public health warning to avoid contact with water in Iron Gate Reservoir, due to toxic algae in the warm, stagnant water.

2006 – low Klamath River salmon adult stocks resulted in severe sport and commercial fishing restrictions for 700 miles of California and Oregon saltwater fishermen, as well as in-system fishers.

2010 – a significant reduction in water deliveries to Reclamation’s Klamath Project due to dry conditions. Klamath Tribes are forced into very limited sucker catches for ceremonial use for the 25<sup>th</sup> consecutive year.

Over at least the last 15 years it has become increasingly clear that the situation as it exists cannot continue. One recurring theme for a solution involves the complete removal of the four dams combined with clearly described water-allocation limits and rules. Most downstream users are in general agreement on the solution, though it generates many new problems. First off is who to bill for the deconstruction work? The most recent study indicates it would cost at least \$1 billion and take a crew of 4,600 about 15 years to accomplish, though that could still be cheaper than building fish ladders around the dams. Opponents include the 100 or so lake-side property owners who would see their waterfront properties become just another collection of parcels located in the hills above the river. Agricultural users promised water by the federal government, and who have in many cases been farming the same property for generations could also be left literally “high and dry”. So, the political infighting continues, and the river still runs too low and warm for much of the year.

So, what does an actual dam removal look like? Though about 1,100 small dams in the U.S. have come down in the last couple of decades, the only comparable project I've been able to identify is the removal of two large dams from the Elwha River in Washington. The Elwha River runs from the forested peaks of Olympic National Park to eventually pour into the Strait of Juan de Fuca. Just as on the Klamath, the Elwha was dammed about a century ago. In this case there was the 110-foot Elwha Dam, built in 1913, five miles from the ocean, and a few years later 210-foot Glines Canyon Dam, ten miles further upriver. Both were built over the objections of the Lower Elwha Klallam Tribe, whose nation is located at the mouth of the river. The purpose of the dams was to provide power to nearby timber and paper mill operations, and neither provided a fish ladder to allow upriver access to salmonids. In fact, about 90 percent of the river was made inaccessible to migrating fish, and salmonid populations crashed. Both dams were removed recently. In the process, scientists were provided a front-row seat and have been observing how the ecosystem has responded. To give a feeling for how long this process took, it was in the late 60's when political pressure for dam removal really took hold, 1992 when Congress provided for the demolition, and 2014 when the project was completed.

There are two basic methods for removing a dam. The simplest is popularly known as "blow-and-go", in which engineers plant dynamite, blow out the concrete and let the water run wild. The second option is to take out the dam in stages, gradually lowering the lake level and running a more controlled (and expensive) process. Previous blow-and-go removals included 49-foot high Marmot Dam in Oregon, and 124-foot Condit Dam in Washington. In 2007 at Marmot Dam, 20% of all the sand and gravel stored behind the dam washed downstream in the first 48 hours. In 2011 at Condit Dam the fine-grained sediment formed a slurry with the water and generated a high-speed flow into the lower river which startled observers with its speed and destructive force. Clearly, blow-and-go is a dangerous game with unpredictable results.

The two Elwha dams were estimated to have locked up about 27 million cubic yards of sediment. On the Elwha, in an attempt to prevent a water-sand-stone destructive storm on the lower river, both dams were taken out more slowly. In 2011 Elwha Dam was taken down in stages over several months, and the upriver Glines Canyon Dam was taken down even more slowly over several years. After the lower dam was removed, the river began to move the stored sediment downstream, particularly during winter storms. In short order the river re-deposited 90% of the accumulated sediment at the river mouth. The massive amounts of fine-grained sediment formed large sandbars and caused the lower river to spread out in a complex system of braided channels. The silt also filled the river bottom, burying the cobbles and stones with a fine-grained blanket, and algae and other aquatic plants promptly began to grow. The silt levels were such that the nearby city of Port Angeles, which draws drinking water from the river, found their intake filters overwhelmed and had to rely on back-up well water for a period of




Mouth of the Klamath on August 5th

time. There are ongoing studies to determine how much silt is still coming downstream, and to try and prevent another closure of the water intakes. The huge plume of silty water dropped the last of its load in the ocean, killing off the local kelp forests. As time passes the sediment is clearing, but it is unclear how long it will take before the lower river and the nearby ocean fully recover.

As fish access to the upper river was restored, some returning fish continued upriver past the sites of the old dams. Other salmon smolts were taken from the two nearby fish hatcheries and manually transported upriver to jump-start the fish recovery. That action prompted a lawsuit from those convinced that putting young hatchery fish in the upper river would actually make it harder for wild fish to recolonize the area. That legal fight is continuing. Final results aren't in yet, but thus far it appears all five native salmon species are increasingly moving into the upper river, and vegetation is increasing in the lower river where the silt has formed sandbars and topsoil. One measure of success is the number of salmon redds observed. One multi-year survey of established river sections found about 400 redds after the lower dam came down. That number increased to 800 in 2013 and nearly 1,100 in 2014. Even the local lamprey eel population has recolonized the area between where the dams once stood.

The next large project in California could be the Carmel River, where engineers want to drain a reservoir without flushing the sediment downstream. All of this data will become more important locally as political pressure to resolve the Klamath Basin's water allocation issues through dam removal continues. Studies predict that removal of the dams could result in an 81% increase in the Chinook, Coho and Steelhead populations on the Klamath.

Recent negotiations between stakeholders resulted in the Klamath Hydroelectric Settlement Agreement (KHSAs) and Klamath Basin Restoration Agreement (KBRA). The Feds, in cooperation with the states of California and Oregon produced a combined joint Environmental Impact Statement and Report. EIR/EIS documents, if done properly, try to anticipate all reasonably foreseeable results of the proposed action, and compare them with alternate actions, and lack of action. If you would like to peruse the document yourself it can be found on-line at [www.klamathrestoration.gov](http://www.klamathrestoration.gov). You will find an Executive Summary, the final EIS, and a host of appendices from the feds, states, tribes and other interested parties. At this stage it's far too early to conclusively state that the dams will come down, and if so to project a timeline. However, since the health of this river and its salmon runs has a major impact on our fishing seasons, it would be wise for us to be aware of what could take place, and understand the consequences of both removal and leaving the dams intact.



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# GROUNDFISH – A LOOK FORWARD TO 2016

By Tom Marking



The 2015 season has come to a close and now begins the task of constructing the groundfish regulations not only for 2016, but for the 2017/18 next biennial specification cycle. The 2016 season should be essentially the same as the 2015 season, working with the existing regulations already on the books for Annual Catch Limits (ACL) set by the Pacific Fisheries Management Council (PFMC). For the 2017/18 two year cycle, there are some new possibilities regarding Canary rockfish and maybe an increased depth beyond 20 fathoms. To understand where we are going, it might be helpful to review the current “state of the fishery”.

The big news for 2015 was the reduction in the bag limit for black rockfish to five and the increase from two to three fish for ling cod. This bag limit reduction was a result of fishing pressure being placed on the nearshore rockfish due to the 20 fathom limitation. This concentration of effort on Black Rockfish (BR) resulted in the recreational sector substantially overfishing our ACL in 2014, thus requiring the bag limit reduction in 2015. The same bag limit restriction on BR should be in effect for the coming year. According to the California Department of Fish and Wildlife (CDFW), this reduction was successful in keeping the recreational harvest level within our target levels in 2015. Also, the heavy pressure in the near shore zone has caused a 25% reduction of harvest on the 11 near-shore species in the Minor Near Shore Rockfish Complex. Locally, the three species in that complex that we catch most are China, Quillback and Copper Rockfish. Northern California is not really the problem, but since we are included in the North of 40 d 10’ zone, we are affected by these concerns. We are the southern end of the zone that includes all of Oregon and Washington. This cutback affects them much more than California. So far, the no-retention policy in Oregon of China, Quilback and Copper and a limit of three Blue Rockfish seems to have kept landings within the target harvest policy. We won’t have all the data until after the calendar year is over, since Oregon and Washington have a year round fishery on rockfish. The increase of ling cod from two to three in the bag limit has witnessed the landings increase from 865 metric tons (mt) to about 2000 mt.

However, for 2017/18, further management actions will be necessary at the PFMC and State levels since the ACL for BR is proposed to be reduced from 420 mt to 335 mt. Keep in mind that this year, 75 mt was shifted from the commercial sector over to the recreational sector so that we could still have five in the bag limit. Without that shift, our BR bag limit would have been two fish. That will be a concern, since with an 85 mt reduction, and the increased harvest of BR by the



commercial sector, that amount may not be available in the 17/18 years. CDFW will have a series of meetings in December of this year to address this and other rockfish issues. While the ling cod increase worked out great for us up North, it created problems in the Central areas of the State. The bag limit for lings may be reduced back to two; however, we may be able to keep our three for Mendocino and North. We need to rally for that modification.

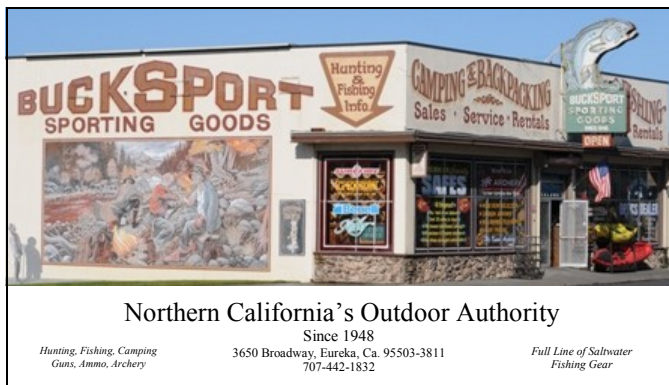
Two other issues are on the table for discussion. First, canary rockfish have been rebuilt, but the ACL for 2016 has already been set in the current biennial specification cycle at 125 mt, and it can't easily be changed without lengthy emergency regulatory effort. The ACL for the 17/18 cycle may be increased somewhere in the 1500 mt range; that is under consideration at the moment. The second issue is the possibility of getting more depth for the North of 40d 10' area. This would relieve some of the pressure on the BR problem, and we need to be supportive of that concept. Of course, the immediate concern will be the yelloweye (YE) by-catch issue, our only over-fished species in the North area. Further south, bocaccio and cowcod are still over-fished as well as YE, although encounters with YE are minimal. Here will be the tradeoff. If CDFW agrees to let us fish into the Rockfish Conservation Area (RCA) deeper than 20 fathoms, we will probably have to agree to form YE hotspot areas that will be off-limit to fishing. Currently, the three known hot spots are: the outer side of the Point St. George reef, Redding Rock and the outer side of the Pinnacles off Cape Mendocino. CDFW will be asking for our knowledge and experience if there are other hot spot areas that will need to be identified. We need to provide that information if we have it so that we don't catch YE if allowed more depth. More depth will allow us to target other rockfish; historically BR makes up about 95% of our catch.

Something else to think about is the bag limit for blacks. If the 75 mt is not available to shift from the commercial sector again, what is the minimum bag limit for black rockfish that we think we can live with? Can we effectively have a fishery with only two or three BR in the bag limit? That will be a topic of discussion. Keep in mind, as we search for other fish than blacks, our risk to catching YE increases and that will be an unknown the CDFW will have to model.

The CDFW is tentatively scheduled to be in Eureka on December 2 at the CDFW office for a face to face meeting from about 5-8 pm. They will be in Ft. Bragg the following day on December 3 at that office for the same discussions. Try to attend, or at least make your wishes known to HASA or to me prior to the meeting, so we can have your comments presented. CDFW is trying to be as creative as possible in consideration of relaxing the RCA boundaries to

provide more opportunity, so we need to be cooperative in helping to construct a set of regulations, including bag limits, which will protect the overfished species issue and meet ACL limitations.

In summary, the 2016 season will have the same regulations and bag limits as 2015, but we need to be proactive for the next biennial cycle.



# 2015 HALIBUT REVIEW

By Tom Marking

The International Pacific Halibut Commission (IPHC) set the area 2A allocation of 970,000 lbs for 2015. California received 4% of the non-tribal portion of this allocation which amounted to 25,220 net pounds. Due to our success in past years the 2015 season was constructed as follows: the first 15 days of May, June, July and August were open and the entire month of

September and October or until the allocation was met. As you all know California Department of Fish and Wildlife (CDFW) and National Marine Fisheries Service (NMFS) made a determination that as of August 13 we would have harvested the allocation, so the season was shut down by in-season action. The early closure caught many by surprise, since May and June were very windy and few fish were harvested. According to CDFW, “partially due to excellent weather during the open days in July, the fishery closed early...”. Some of us happened to be out of the area for that stretch in July, so we missed out on the excellent fishing.

Keep in mind, this is the first year California has had the authority and responsibility to track and stay within an allocated amount. As such, they were probably a bit overly conservative both in sampling effort and in size estimates. That action can be seen in the first two openings where the projected weights were about 12% under the measured and corrected weights based on about 20 fish observed. Therefore, they bumped up the weight estimates by 12%. If this correction is extended over the next two periods where the other 207 fish were observed this would amount to about a 3,000 lb correction. One might question why after seven years of data to develop the 103.4 lb multiplier per fish observed, they bumped this amount up by 12% when only 20 fish were seen. I think the best explanation is they are being over cautious and somewhat defensive due to the Council criticism they have received over our excess harvest in the past years. The California Recreational Fisheries Survey (CRFS) program should smooth out in the future, but we probably got clipped this year of many thousands of pounds. The increase in sampling effort per port exacerbated this problem. Hopefully, in the future, the Department will be less reactive and we will get more days on the water as a result.

CDFW gave two staff reports to the Pacific Fisheries Management Council (PFMC) at the September meeting in Sacramento. The first report references the Catch Sharing Plan (CSP), gives a brief description of the 2015 season and refers to the “difficulty in planning due to inflexible nature of the closure periods relative to when good weather and fishing opportunities are available”. The report goes on to state that they are still analyzing the data and will continue to develop its “in-season management expertise”, and as such, do not recommend any changes in the Catch Sharing Plan (CSP) for 2016. That statement preempted any further efforts to try to get our allocation increased for 2016. I was disappointed with that Department statement since I had been working with the Groundfish Advisory Committee to push our allocation up another 1%. But, in their defense, they are being cautious on this program since this is the initial year of in-season management control. It is proposed that the California allocation will remain at 4% (e.g. 25,220 net pounds) for the 2016 season, subject to IPHC action in January of 2016. CDFW indicates that meetings will be held in February at the statewide level to discuss the season structure for next year.



The Second CDFW Supplemental Report to the Council gave more detailed information about the 2015 season, the CRFS sampling program, and their explanation and estimation of sampling data per port and angler success. If you are interested in the details, I would recommend you go to the pcouncil.org site and look up the Agenda Item 1.a. CDFW Report September 2015. As typical of CDFW reports, the data is generalized, with few exact numbers, making it difficult to extrapolate specific data when you have to use a percent of aggregated totals. But there are some interesting graphs and a lot of information. Here is some of the data as presented.

The season lasted 57 days and the catch projected was 22,740 lbs at the time of the in-season action. Their estimation was that after final analysis we would achieve the 25,220 lbs with the corrected weights. During the 57 days, there were 196 sample assignments for all the ports. Therefore, there were three sample assignments for each open day, scattered among the six ports, a few ports with multiple sites at each port. A bar graph illustrates the observed samples at each port with a table detailing how many sample days they were at each port. It is not specified where the sampler was at each port, or how many fish were observed at a particular location. The problem arises in that Eureka has several sample areas, one being the Charter fleet. Those data are not provided and here is why that is important. The CRFS sample data works as follows: for each fish that is observed there is a multiplier of 103.4 lbs to estimate total catch. That weight was developed using a 20% sample data scenario. If the CRFS samplers were at the various sites in excess of 20%, they may have overestimated the amount of landed halibut. This gets a bit complicated, but doesn't all data sampling. Overall the report states that 54% of sampling effort was for PR1 modes (private boaters), 36% for PC (charters) and 11% for PR2 (private boats in areas like King Salmon where access is limited to samplers). Like much of their data, you have to accept it as presented, but it does leave you wondering?

Trinidad landed 99 of the 217 fish observed (46%), 91% of the total catch were caught by private boats with 9% caught by the Charter fleet. Here is how it turned out by month:

May	379 lb
June	1,784
July	11,684
August	<u>8,892</u>
Total	22,740 lb ( <i>as of this writing, with weight correction and projections this will be closer to 25,220 lb</i> )

Of the 57 days, only 16 days had good weather conditions, 11 days had mixed weather conditions and the remaining days were poor. While fish were caught on 30 days, the bulk of the fish were caught on 15 out of the 57 days. Clearly, the data suggests that we can harvest our allocation very quickly when good weather conditions exist. If you are interested in the particulars, take the effort to go and read these two reports. There is a lot of information and the graphs and charts are very revealing.

In summary, I doubt we'll get any further defining data than what was published in those two reports. CDFW has stated they will hold meetings in February to discuss the season structure for 2016, although I don't expect it to be much different from what we had this year. Very few fish were caught in May and June with the bulk of the fish being caught from July 6 to July 12, and in the three days in August during periods of calm weather. CDFW was probably overly conservative this year in management reactions, but that was to be expected since this was the first year of in-season management between CDFW and NMFS. Hopefully, in 2016 we will get more time on the water, and we will continue efforts in 2017 to increase the allocation greater than the 4% we currently receive.



# The History of B2 Squid

By LaWana Schulz



We would like to start by saying “Thank You!” to HASA, the Humboldt fishing community, and our family and friends for their support! We couldn’t have made it without you all! We are going on our 10<sup>th</sup> Anniversary of manufacturing the B2 Squid fishing lure. If you haven’t heard our story, let us enlighten you.

The B2 Squid High-Tech Hootchie was invented by a salmon commercial fisherman, Glenn Brown of New Port, Oregon in 1989. Glenn started making the 5” squid hootchie for his own business with much success. He started getting requests and began to manufacture and sell the lure he named B2 Squid. By the time he was ready to sell his business he was manufacturing four lure sizes in eleven colors. The most popular, still today, is the Triple Glow. Glenn and his wife, Eileen Brown, manufactured and sold the lures in tackle shops and big distributors across America and some around the world. Adding a web site increased their business before they sold to us. In December 2005, we (Kelly and LaWana Schulz) bought and brought the B2Squid manufacture to Eureka, California. Kelly worked as a truck driver for a local trucking company and LaWana was an orthodontic dental assistant while raising their six year old daughter. Carson Schulz took on the new job of manufacturing a fishing lure now known to most anglers around Humboldt Bay as the B2!

When we first started making the lures we had no idea the impact it would have on our community. We had orders for big companies on the East Coast, Washington and Alaska, along with some companies from Germany and Australia. We sold to a lot of little tackle shops all over America. We really didn’t think much about our fishing community at the time or if anyone really used our lures until one soccer game. We sponsored our daughter’s soccer team the fall after buying the business. A guy was so excited to see his niece’s soccer jersey with the B2Squid letters across the front he asked his sister if she knew who the sponsors were and he wanted to meet them! And he did! It has been a wonderful and great friendship since that meeting with Cliff Hart, we would like to thank him and everyone involved with HASA and all our local tackle shops for much of our success in the Humboldt Bay area!

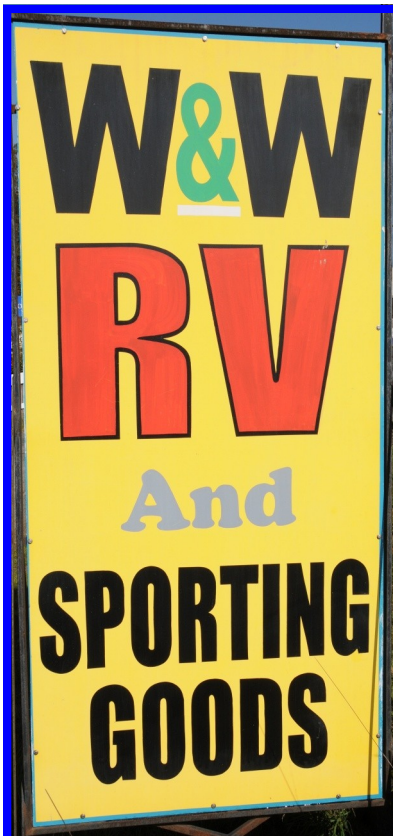
What have we done the past ten years? Well, manufacturing a lot of lures! We started making a smaller size called, Mini B2, in 2007. We added about five new colors, UV Purple Haze, Rootbeer, Appletini, White, and Triple Glow Neon Green. Plus, we started manufacturing “special” colors for Russia and the Gulf Coast area. We also added a heavy lead weight (16oz) to our collection. After about four years into our business, LaWana quit her job to work full time with B2Squid.com. The B2 Squid name has been on a lot of recreational sports team jerseys (we sponsored), banners and baskets for events we sponsored and t-shirts, hats and decals we give to avid fisherman. We have really tried to get our name and business out into our community the past ten years and we feel we are just getting started!

B2 Squid lures are sold in Cabela’s, Bass Pro Shops, Sportsman’s Warehouse, Wholesale Sport’s (Canada), Farris Brothers (Mississippi), Cut Rate Fishing Tackle (Texas), Bluewater Tackle (Australia) and many, many tackle shops all over the world along with our web site, [www.b2squid.com](http://www.b2squid.com). The past five years we have been sponsoring Kayak Tournaments along the California, Oregon and Florida coast. It has been great to watch the Kayak community grow! This year you might get to see us out there in one. The past two years have been very busy for us with orders and trying to keep up our social life (lol), high school sports, fishing,

etc.! Kelly, after almost twenty-eight years with the same truck company, has quit this past July to stay home and work full time manufacturing this awesome lure called B2 Squid. What are we in for the next ten years? Hopefully growing our business, working and supporting our fishing community, traveling, fishing, fishing and more fishing!!!



(Ray, Earle, Carson, Kelly and LaWana Schulz – Homer, Alaska)



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Comments are always welcome. Send to [hasa6191@gmail.com](mailto:hasa6191@gmail.com)

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# Humboldt Currents

By Casey Allen



## National Marine Fisheries Service

I am very pleased to report that HSU grad student **Liz Perkins**, who conducted the first Pacific halibut study funded in partnership by HASA and Sea Grant, is working for NOAA's National Marine Fisheries Service (NMFS). Liz is in charge of compiling fishery projects that align with NMFS commitment to protect and enhance recreational fishing. Although the National Rec Fish Policy and Implementation Plan does not fund these projects, being on the list is an endorsement that makes outside funding easier to obtain. Locally submitted projects include an expansion of the Pacific halibut projects Liz and **Miki Takada** have conducted by doing a genetic analysis of the samples already collected. The results could provide information as to whether we have a local breeding population of Pacific halibut.

Another ambitious but exciting project is tagging Pacific halibut with GPS pop-up tags. This could shed light on the movements of Pacific halibut in and out of our area. The tags can be set to store data for a period of time, release from the fish, and transmit the data via satellite link. The tags are expensive, around \$5,000 each, but the fish does not have to be recovered to collect the data. These projects will help answer the larger question of population diversity. Currently, Pacific halibut are managed as a single biomass, suggesting our fish migrate to other areas of the northeastern Pacific Ocean. If we can prove there is a local breeding population, management methods would be modified. Whether this benefits local recreational halibut anglers remains to be seen.

The last project submitted to the Rec Fish Implementation Plan is the artificial reef project. There is more academic interest in the project because the research that could be conducted will answer questions about the movement of adult rockfish and theories on larval dispersal. The location of the artificial reef, just outside Humboldt Bay, will make the studies easier and less expensive to conduct.

HSU grad student, **Miki Takada**, is working over the winter to age the otoliths she collected from Pacific halibut taken last season from North Coast ports and Charleston, Oregon. Miki's work builds on the study conducted by Liz Perkins and was funded by HASA and Sea Grant. The results will be very interesting (comparing Oregon and California fish) and should be available by spring 2016.

## MPA Collaborative North Coast Forum

I attended the first MPA Collaborative North Coast Forum (second in the state) at the River Lodge Conference Center on November 17th. About 65 people were made up mostly of folks who worked for the Marine Protected Area Initiative or on the baseline study projects. Representatives from the Del Norte, Mendocino, and Sonoma Collaborative gave presentations as well as folks from San Diego and Oregon. There was a large contingent from California

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Department of Fish and Wildlife, Humboldt State University, and local Tribes. Only a handful of us represented fishing interests.

A main theme in the discussions was around education and outreach and each Collaborative was engaged in creating a video showcasing their MPA network. I was surprised at some of the talk which explained that middle class folks and above are getting the message about the importance of MPAs and the regulations against take. They said lower class people were not getting the message. It was hoped the videos and increased signage would help. I saw a statistic from the North Central Coast that said out of 221 marine violations 6% were on MPAs. Locally, our Game Wardens are understaffed but with the remoteness of our MPAs I wonder how vulnerable they really are. New wardens are going through the academy and are predicted to be working by the end of year.

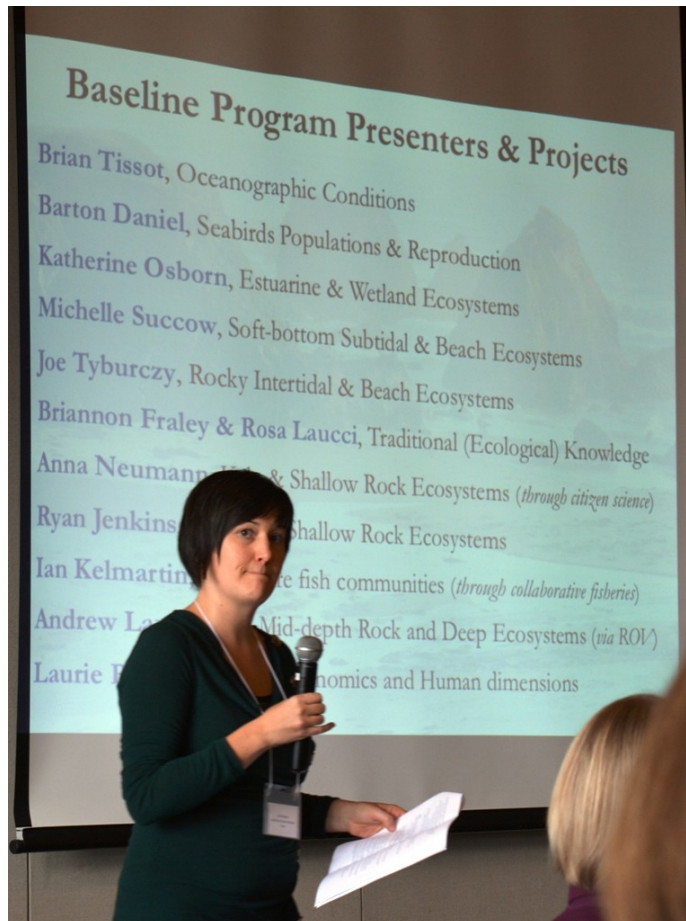
I was most interested in the baseline study projects. They started in 2014 and just finished their second season in the field collecting data. All projects are due to report in 2017 when, based on the results, adaptive management discussions will begin. The baseline data is billed as a “snapshot in time” that will give researchers in the future something to compare to. It is unknown at this time if the results will influence decisions by fisheries managers outside the MPAs.

A few interesting highlights of the preliminary results include the Subtidal Rocky Reef project in 4-12 meters of water. It was found that there are more abalone outside the MPA because the sea urchins have taken over inside the MPA. Since the apex predator, sea otters, are absent there is no control over the urchins. People commercially harvesting urchins have taken over that role. Eliminating that activity allowed the urchins to take over leaving no room for the abs.

The Mid Depth Rock and Deep Ecosystems project in 20-500 meters used a Remote Operated Vehicle (ROV) with six mounted cameras to video survey the life on the bottom. They said they found large numbers of blue, black, and canary rockfish. They also found large numbers of yelloweye rockfish. They did not indicate whether these fish were in or outside MPAs. They have hundreds of hours of video to study as they count the creatures they encountered on film.

There are 11 baseline projects underway that cover every aspect of Marine Protected Areas including socioeconomics and human dimensions. Results of the monitoring will be posted at oceanspaces.org. Results from the North Central Coast are already there. From what I witnessed at this forum I am optimistic that the lessons learned from the creation of Marine Protected Areas and the scientific monitoring will show how resilient the ocean is and how recreational fishing has little detrimental effect on the health of the ocean and its inhabitants.

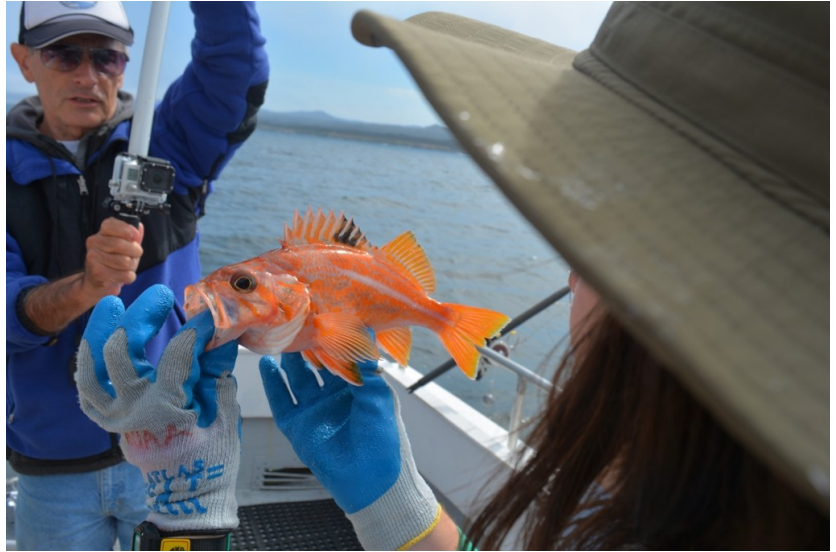
*Erin Meyer leads the MPA baseline monitoring program.*



## News Release from the CDFW

The California Department of Fish and Wildlife (CDFW) will hold five public workshops to discuss groundfish management in California. Attendees will hear an overview of recent groundfish management and scientific developments, and then participate in focused stakeholder discussions on potential changes to recreational and commercial fishery management measures for 2017 and 2018. Several new groundfish stock assessments conducted in 2015 show some previously overfished stocks have been restored, possibly allowing for increased fishing opportunities

Eureka: Dec. 2, 2015  
Eureka Public Marina, Wharfinger Building,  
Bay Room  
1 Marina Way, Eureka, CA 95501



Fort Bragg: Dec. 3, 2015  
California Fish and Wildlife Office  
32330 North Harbor Drive, Fort Bragg, CA 95437

CDFW staff will interact with participants to learn about their preferences for various management measures, including season dates, potential changes to Rockfish Conservation Areas and bag limits - including the possibility of retaining canary rockfish. CDFW is also seeking input on strategies to best minimize interactions with cowcod and yelloweye rockfish, which remain overfished. The public is encouraged to provide input to managers and representatives based on their own personal experience that will assist in the development of groundfish management. Groundfish fishing regulations are developed through a collaborative regulatory process involving the Pacific Fishery Management Council, the National Marine Fisheries Service, CDFW, other West Coast states, and the California Fish and Game Commission.

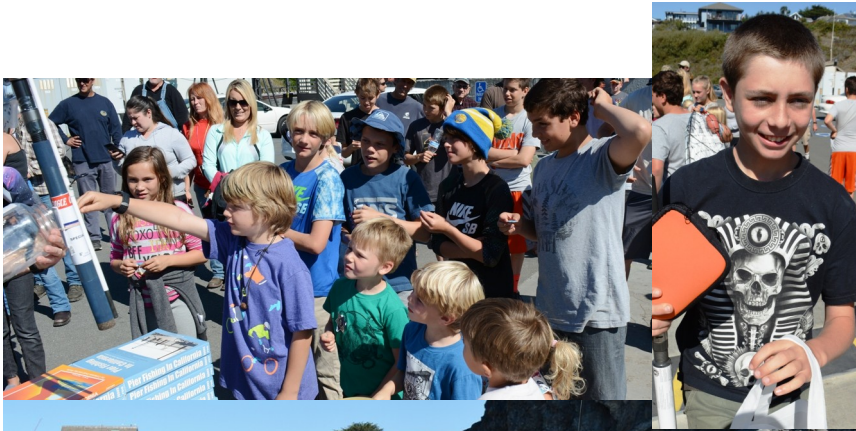
## The Trinidad Pier Young Anglers Tournament

This was the second year for the Trinidad Pier Young Anglers Tournament held on a sunny Sunday, October 4<sup>th</sup>. The first year saw 38 kids participate while this year attracted 56 youths.

The event was hosted by the Cher-Ae Heights Indian Community, **Ed Roberts** of the California Department of Fish and Wildlife, and **Ken Jones** of the United Pier and Shore Anglers of California. Sponsors included HASA, Pacific Outfitters, Mad River Tackle, Costco of Eureka, and the International Game Fish Association (IGFA).

Loaner rod and reels with bait were provided for those without their own gear. A point system was used and the young anglers were assisted by volunteers or mom and dad. The wind held off and although not a lot of fish were caught everyone obviously had a great time. A ton of fishing rods, reels and related gear was raffled and awarded. Winners received a certificate from the IGFA and a copy of Ken Jones book, Pier Fishing California.

All of the organizers and sponsors I talked to deemed the tournament a great success and vowed to hold it again next year. I know we'll be there. Visit our Facebook page for more photos.



# New culverts in Jed Smith State Park reopen access for aquatic life to healthy creeks

By Laura Jo Welter  
Reprinted From the Del Norte Triplicate

Two large culverts are now imbedded in the soil beneath Howland Hill Road where the limpid waters of unnamed creeks and their inhabitants will soon be able to pass with ease for the first time in decades. About a half a mile apart, two rusted-out, undersized culverts fed the streams into Nickerson Creek, a tributary of Mill Creek, where one of the healthiest populations of threatened coho salmon takes refuge in Jedediah Smith Redwoods State Park.

They had impeded aquatic animals from moving further upstream since they were installed, but a California Department of Fish and Wildlife's Fisheries Restoration Grant Program, in the amount of \$570,549, should change that in time for the winter rains.

"Fish are already utilizing everything that's available, and there's more than a mile of pristine habitat above both of those culverts," said Mitch Farro, project manager for the Pacific Coast Fish, Wildlife and Wetlands Restoration Association.

At only 3 1/2 and 4 feet in diameter, the two pipes perched above the stream beds were too small to allow large logs to pass through. In contrast, the new 11-foot waterways are set low to fit the creek profiles to allow fish crossing, and they're large enough to prevent blow-outs that occur when small culverts dam up with debris, said Nanette Nickerson, staff engineer for Michael Love and Associates. When a culvert gets backed up like this, the road may flood, causing unwanted sediment to wash into the creek.

In an effort to more closely match adjacent healthy streams, knee-high metal sills were installed inside the new culverts to hold in place stream bed materials 3 feet deep, Nickerson said. With the large pieces of wood found soaking upstream, there's not a lot of sediment that's able to flush through and recharge the bed.

Contractors were required to do a walk through of the project before they could bid on it – because of the culverts' location, in pristine old growth redwood forest, there are limitations on what can be done, Nickerson said.

Illustrating this point, she said, if they meet the roots of a redwood within a certain distance of a tree while excavating the culvert, the contractors need to be willing to put a hold on the big machinery and instead dig by hand.

The crew didn't run into any roots while they were digging into the road, regardless of the large tree nestled right above one of the culverts. "Apparently, they didn't have those rules when the culverts were put in," Nickerson said.

The masses of dirt that were dug up were spread out right on the road, to avoid having to cart it back and forth from Elk Valley Casino, where the crew was able to set up a staging area.

Howland Hill Road, which has been closed since mid-September between the Boy Scout Tree Trailhead and the Outdoor School, should be opened again to traffic in mid-November, once the contractor is able to "get the park looking like a park again," Nickerson said. The streams, now dry after a parched summer, should be open for the fish again after the first good rain.

Reach Laura Jo Welter at [lwelter@triplicate.com](mailto:lwelter@triplicate.com).



*Nanette Nickerson, staff engineer for Michael Love & Associates, demonstrates culverts installed in Jedediah Smith Redwoods State Park that will open up another 2 miles of stream for fish. Del Norte Triplicate / Bryant Anderson*



## Humboldt Area Saltwater Anglers Inc.

P.O. Box 6191, Eureka, CA 95502

Email: [hasa6191@gmail.com](mailto:hasa6191@gmail.com)

FEIN #61-1575751

October 12, 2015

Peter Kalvass, Senior Environmental Scientist  
Department of Fish and Wildlife, Marine Region  
32330 North Harbor Dr.  
Fort Bragg, CA 95437

Subject: Request for Regulation Change for Clamming Boundary Line at Little River Beach

Dear Mr. Kalvass:

On behalf of Humboldt Area Saltwater Anglers, we wish to express our support for Humboldt County's request to modify the definition of the seasonal boundary line for razor clamming at Little River Beach that is currently defined in section 29.45 in the 2015-16 California Ocean Sport Fishing Regulations. We support Humboldt County's recommendation to change the definition of the seasonal boundary to a location due west of the County's south parking lot (40° 59' 40" latitude or similar, see below). Please let me know if there is any way we can help assist the County and/or CDFW in facilitating this regulation change.

Sincerely,

Scott McBain, President  
Humboldt Area Saltwater Anglers, Inc.



# SALMON MANAGEMENT LINES and WHITING BOAT BY-CATCH PROPOSALS

Tom Marking GAP Sports Fishing Representative, PFMC

## New Salmon Management Line at Klamath:

The PFMC had a few proposals brought to them in the November meeting that should be of interest to us in the Klamath Management Zone area (KMZ). The first request is from the Salmon Commercial Sector and the second is from the Pacific Whiting (hake) fleet to process fish south of the 42 line.

In the spring of 2015 the California Department of Fish and Wildlife (CDFW) received a request from the Commercial Salmon Trollers that a new management line be established between the Eureka-Crescent City areas. The objective is “a test fishery for industry and management considerations that would examine the hypothesis that salmon distribution and associated harvest rates within the KMZ varies between the areas north and south of the Klamath River mouth”. CDFW proposes that a line at 42d32’48”N be the test management line. That is a point from the mouth of the Klamath River westward. The 12mile exclusion zone still remains around the mouth. The data will be derived from the efforts of the hook and line commercial fleet. Both Genetic Stock Identification (GSI) and Coded Wire Tags (CWT) will be used for the comparison of the data. There is a problem with this since the GSI data is not definitive between Spring and Fall runs and the number of CWT’s returned on any given year is sparse and tends to be much higher from the Eureka area. To receive a statistically valid sample they must have at least 10 CWT’s from each area on a yearly basis. Since 1990 only 600 tags have been returned. Eureka has very little representative CWT data available achieving the 20 CWT minimum in only 6 strata since 1990. On its face, this will be a difficult study since both the proposed zones have such little data being returned. Crescent City has much less return than the Eureka area. Returns are further hampered by the demise of salmon since the 1990s. But, CDFW is planning to attempt this test fishery to better define the “weak stock” condition of the salmon populations in our area.

CDFW data shows the total return of CWT annually since 1990. The variability between the Klamath River Fall Chinook (KRFC) and the Sacramento River Fall Chinook (SRFC) catch data is dramatic. Many years no tags are returned, in other years nearly equal returns from the KRFC and the SRFC are obtained and, at times, the SRFC has multiples of return over the KRFC. In total since 1990, the SRFC is about three times the tag returns from the KRFC. The full report can be viewed at the [pcouncil.org](http://pcouncil.org) site: Agenda Item D.2. Attachment 5, November 2015, CDFW report.

## Salmon By-Catch Concern:

The second issue is a proposal by the Whiting Fishery Mother Ship (MS) Sector to allow processing of whiting below the 42 d line (CA/ORE Border). Currently, the Whiting MS sector cannot process south of the 42 line. This was established back in the 1990’s out of concern for salmon by-catch. Currently, they can harvest fish in the CA area, but must haul their nets back up to the border so the MS can then process the fish. This request was brought to the Pacific Marine Fishery Council (PFMC) as an Exempted Fishing Permit (EFP). Due to the difficulty of hauling nets up to the border, they currently only fish about 15 miles south into California. In the discussion there were sev-



eral concerns brought forward. To go below the 40d 10' line at Cape Mendocino special permits were needed, so the EFP was amended to stay above this area. Additionally, this involves both State and Federal waters, which would require the CDFW Commission to promulgate new regulations to allow such a test fishery. And of course, the principal concern was the possible by-catch of salmon. The restrictions would be a maximum of 500 salmon by-catch, not to exceed a .05 fish/metric ton of whiting or all fishing would cease. Also, they cannot fish in less than 100 fathoms of water.

The Industry representatives discussed this at length in the Groundfish Advisory Subpanel (GAP) and it was moved to the council along with several other EFP's of varying test fisheries. At the Council level, due to the shortage of staff time, in conjunction with all the other concerns mentioned above regarding salmon by-catch, the request was denied. Thus, it cannot be requested again for another two years.

To be certain, there is a reasonable basis for their request. With the new Individual Quota System (IQ) established in 2011 for the trawl fleet, and Amendment 20, 21 and 24 of the Magnuson-Stevens Act (MSA), there are many safe guards already in place to test such a fishery. Their position is that they know how to catch whiting with very low salmon bycatch, and were hoping to be able to fish in this region cleanly without leaving millions of dollars of uncaught fish still in the water. The Whiting Fleet reacts immediately to any by-catch issue and literally can pick up and leave the grounds in an hour if they have excessive by-catch when fishing. But, in the end, the Council ruled against their request, as well as many other proposed EFP's, primarily based on the interest of staffing time and ability. These requests would put at risk the ability of the Council to meet the deadlines of February 9, 2016 for all requests to be adequately analyzed and put out for public comment in the Federal Register to meet the Spex Cycle for 2017/18.

These are just a few of the items that routinely come to the advisory panels of the PFMC and require deliberations and due diligence by the committees and Council. I am not sure of the date when the KMZ Management Zone test fishery will be established. CDFW will probably keep us advised of their progress and timeline for this fishery.

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# Crabs and Domoic Acid

By Jim Yarnall



Unless you're lucky enough to have been on an extended out of state hunting trip or vacation, you are well aware of the statewide delay of the recreational Dungeness crab season. The following is a brief summary of the issue to date.

Domoic acid is naturally occurring neurotoxin produced by phytoplankton. Phytoplankton blooms are affected by water temperature, nutrient levels, currents, and other unknown factors. When organisms consume phytoplankton and are then preyed upon by other organisms, domoic acid becomes concentrated as it moves higher up the food chain. By the time a crab feeds upon dead anchovies or razor clams, the domoic acid level in the crab's food may have increased substantially over levels present in the surrounding environment, having been concentrated at each trophic level. Crabs with high acid levels appear to suffer no ill effects, but problems occur when mammals consume crabs or other organisms with concentrated acid levels.

The effects of domoic acid poisoning in humans include a wide range of symptoms from short-term memory loss, brain damage, and, in severe cases, death. The most significant recent case of poisoning occurred in 1987 on Prince Edward Island where numerous patients exhibited serious symptoms and three fatalities were reported as a result of the consumption of blue mussels.

Various California state agencies were aware of high domoic acid levels in crab and razor clams in Washington that caused season closures earlier this year and were monitoring the situation within California waters. Health advisories were issued regarding rock crab and razor clams within certain areas of the state. With the opening of both the recreational and commercial Dungeness crab seasons looming, the state recently completed one last round of sampling and testing from Crescent City to Morro Bay before the recreational season was scheduled to begin. The results still indicated that high levels of domoic acid remained in most sample areas. The state then took action to delay the opening of both the recreational and commercial seasons until the levels drop below threshold levels safe for human consumption. Testing continues on a weekly basis.

The state of California has not dealt with this issue previously, and the agencies involved are doing their best to accurately monitor the situation, provide fishing opportunities as soon as possible, and most importantly, to keep the public safe. They do not, however, have a play-book from previous years' experience but instead are working closely with their counterparts in Oregon and Washington. Currently the commercial seasons remain closed in all three states. Oregon estuaries are open for crabbing north of Heceta Head (Florence) where acid levels have dropped below advisory levels.

The real question everybody wants answered is when and how the season will open in California. My response is that nobody knows for sure. Results from studies in Washington illustrate that it takes considerable time for acid levels to drop within the crab muscle tissue, even after the crab are eating "clean" food free of domoic acid. My personal guess is that it will likely be after Christmas before we can go crabbing on the North Coast. Acid levels



in areas to our south appear be dropping more rapidly. The California Fish and Game Commission has indicated that it intends to open recreational crabbing regionally as areas become safe and to do so prior to the commercial season. To date, the commercial crabbers are in favor of a statewide opening when all areas are deemed to be safe. How this will all play out is anybody's guess.

Below are some links to several sources of information that you may find helpful and interesting.

CA Dept. of Public Health

<http://www.cdph.ca.gov/HealthInfo/Pages/fdbDomoicAcidInfo.aspx>

CA Dept. of Fish and Wildlife

<https://www.wildlife.ca.gov/Conservation/Marine/Invertebrates/Crabs>

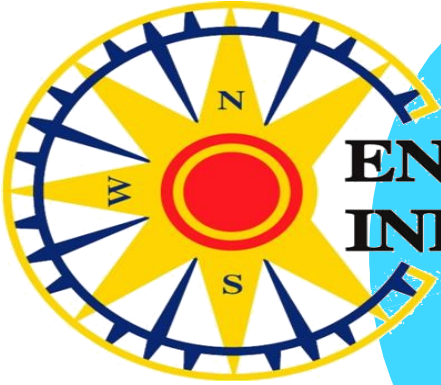
Oregon information

<http://www.dfw.state.or.us/news/2015/>

<http://www.oregon.gov/ODA/programs/FoodSafety/Shellfish/Pages/ShellfishClosures.aspx>



Whales feeding in their bubble net off New England. Photo was taken by a drone and published in Science News Oct. 31st 2015



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