

HUMBOLDT AREA SALTWATER ANGLERS

A VOICE FOR SALTWATER SPORTFISHERS

2019 FALL NEWSLETTER

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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.

**HUMBOLDT AREA
SALTWATER ANGLERS
PO BOX 6191
EUREKA, CA 95502**

hasa6191@gmail.com

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All photos and articles in this issue are donated by HASA members and interested parties.

Submission of article topics and photos should be sent to summerchum@yahoo.com.

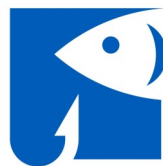
Comments are always welcome and should be sent to summerchum@yahoo.com.

HASA would like to expressly thank our friends for their time and contributions to our newsletter .

All HASA issues can be viewed at <https://humboldtasa.com/mdocuments-library/> and <http://humboldttuna.com/smf/index.php>

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This is issue #37.



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President's Message



Well, the 2019 season is winding down, and it is a time for reflection on the good and the challenging. Let's start with the challenging. Preliminary salmon escapement on the Klamath River system is a small fraction of the pre-season forecast, and will likely be at a decadal low. The Sacramento River system is doing a bit better, but the Klamath Management Zone (KMZ) will almost certainly limit us in salmon fishing season next year. This situation is really a crisis, with low salmon escapement for the last 4-5 years. Removal of the Klamath River dams in 2022 should begin to improve in-river salmon productivity, but much more work needs to be done. It is my hope that HASA can get more engaged on inland habitat improvement needs and help make some improvements.

Now for the good. The biggest news for HASA is that we have finally hired a part-time Executive Director effective in November. Her name is Jennifer Schwartzberg, and she is already making a big difference in making HASA more efficient and effective, and we all are excited to have her working with us. We have many projects that will now receive much more attention. We plan on having her take the lead on our annual fundraiser planning and management, relieving Cliff Hart of much of that workload during his busy basketball coaching season. She will also be helping us implement our improved membership process, board meeting management, coordinating our fisheries representatives, improving our website and social media presence, budgeting and finances, and strategic planning. Most importantly, we will collectively have more time to pursue important fisheries management needs. Please join me in wishing her a warm welcome to our team.

Another high point is that the albacore season was very good off the northern California coast this year. Even I caught some! Hopefully you all did too, and I hope they will be back in good numbers and accessible next year. The California halibut fishing was off the chart this year, I was very impressed by the numbers and quality of the halibut caught in the bay. It was great to see so many boats out there enjoying this important resource.

Another transition that we are making is revamping our merchandise process and teaming up with John LaFargue at Migration Clothing to work with us on an improved ordering and shipping process, as well as new designs. We will be working to link our website with his to facilitate easy ordering of t-shirts, hoodies, and hats. Please visit his website at www.migrationclothing.com in the coming months if you'd like to purchase HASA merchandise, as well as Migration merchandise.

Lastly, we will be kicking off our annual membership drive in early January, so you will likely receive a membership signup soon if you are on our mailing list. If not, please visit our website (<https://humboldtasa.com/product/hasa-membership/>) and you can sign up there. Your membership makes us more effective in our efforts to support sustainable fisheries for the next generation, so please become a member if you can. Also make sure to mark your calendar for our annual banquet on April 25 at the Arcata Community Center, and we will be scheduling our General Membership Meeting sometime in February. Hope to see you there!

Lucas

HASA Annual Fundraiser – 2019

By Cliff Hart

We had another successful fundraiser on April 27, 2019, at the Arcata Community Center, which was our 11th annual event. Thanks to a great fundraiser committee, awesome donators, and all of you loyal supporters. HASA is your local voice for saltwater sportfishing issues and it would not be possible without all of you and your generous support.

We would like to recognize our 2019 fundraiser committee and volunteers: Cliff & Leslie Hart, Gene Morris, Ross Taylor, Scott & Becky McBain, Aaron Martin, Seth Naman, Larry & Carol De Ridder, Tom & Mary Marking, Jimmy & Brenda Yarnall, Ben & Sue Doane, Michael Davies-Hughes, Bill Gillespie, Tim & Sherry Klassen, Mike Beck, and Paul Petros. Also, thanks to all who sold tickets for HASA, including our partners at Bucksport Sporting Goods Eureka, Englund Marine Eureka, Pacific Outfitters Eureka, the fundraiser committee, and HASA board members.

We had 200 dinner tickets turned in for the event, including 19 children. The food was provided by Ramone's Catering (and was awesome), and the linens were donated by Mission Linen. The beverages were donated by Mad River Brewery, Redwood Curtain, North Coast Mercantile, John's Fine Cigars/Myrtlewood Liquors, and HASA.

We raised \$21,000 (gross) with an approximate net income after expenses of \$9,500 that will be used for projects and representing us North Coast sportfishers during the 2019/2020 fiscal year. The silent auction raised \$9,000 and raffle ticket sales were \$4,500.

We had 29 silent auction items, including but not limited to a 7-day Maui trip from Trips for Charities, goose hunt from Mitch Ferro/Don Banducci, Reel Steel and Green Water charter trips, drift boat fishing trip for two with Kenny Priest, six pack boat charter in Shelter Cove with Sea Hawk Sportfishing, an Accurate rod/reel combo donated by Accurate Reels and HASA. These are just a small sample of all the wonderful donations from our sponsors (see list of sponsors below). The Super Raffle prize was an awesome Accurate rod/reel combo, and the door prizes were a large B2Squid basket donated by B2Squid and a Pescaro cooler donated by Englund Marine Eureka.

We had around 60 raffle items that were provided by various donors. We received \$700 in donations for the kids' raffle. All 19 kids walked away with something, such as a rod/reel combo, tackle box, tackle bags, among others. Special thanks to Lima's Pharmacy, O&M Industries, Michael & Jeff Holland DDS, B2 Squid, Phil Grunert, and Pacific Outfitters for donating to the kids' raffle. And thank you to Shalise Miles with Caliber Home Loans and Bob & Charleen Hoopes who provide a large cash donation to HASA every year to support our event.

We had several vendors this year that displayed their products or services, including B2Squid, Sportsman's Warehouse, Floyd Spencer with the USCG Auxiliary, Humboldt County Office of Education Aquarium in the Classroom program, Migration Clothing, and the California SeaGrant folks who discussed their collaborative fisheries work on North Coast rocky reefs.

Please remember to patronize and say thank you to those businesses and individuals who donated to our fundraiser:

Kenny Priest with Fishing the North Coast, Pacific Outfitters, B2Squid, Englund Marine Eureka, Kokatat, Accurate Fishing, Trinidad Rancheria, Sportsman's Warehouse, Shalise Miles / Caliber Home Loans, Rick Urban with Majestic Encounters, West Coast Bait, Sea Hawk Sportfishing, Green Water charters, Mission Linen, Mad River Brewery, Redwood Curtain, North Coast Mercantile, John's Fine Cigars, Tim & Sherry Klassen, Bob & Charleen Hoopes, Lima's Pharmacy, O&M Industries, Michael & Jeffrey Holland DDS, Englund Marine Crescent City, Bucksport Sporting Goods, Sue Doane, Degrees of Green Landscaping/Mike Beck, Jitterbean Coffee, Harper Motors, J's RV Center, Mitch Farro/Don Banducci, Mobile Marine, Trips for Charities, Zulu Nyala Game Preserve Africa, Kent Hulbert, Phil Grunert, Migration Clothing, Green Diamond Resource, Coast Central Credit Union, B2 Squid, Coast Seafoods, Hayabusa USA Fishing Tackle, Ray's Designs, Yoshi Uemura, Pro-Troll Fishing Products, DeeDee Aguilar, and "The Front Porch" Airbnb Arcata.

Thanks again for everyone who contributed to, supported, and attended our annual fundraiser. We are always looking for more volunteers to assist with pre-planning or assisting on the night of the event, so if you're interested and/or have suggestions for improvements in next year's event, please contact Cliff at 707-845-4106.

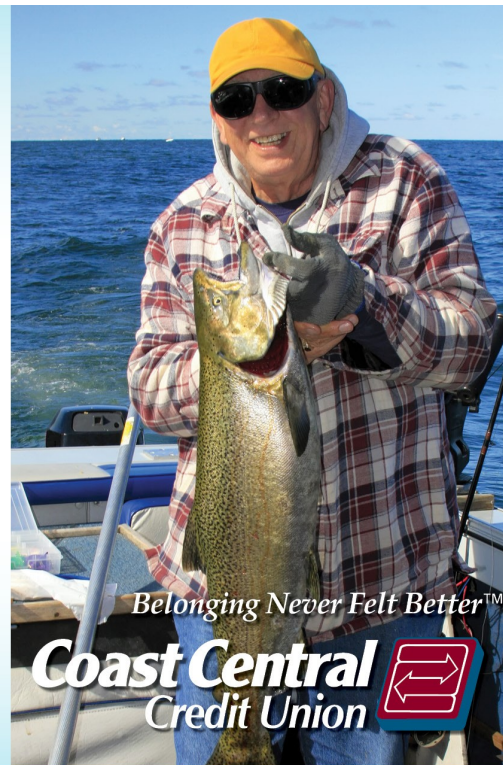
Next year's fundraiser is scheduled for **April 25, 2020** and we're planning on moving the fundraiser earlier the following year to **March 20, 2021**.

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What is the Magnuson-Stevens Fishery Conservation and Management Act and why is it important for North Coast recreational anglers?

By Joe Polos and Scott McBain

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) was passed by Congress in 1976 to establish the authority for the Federal Government to manage marine fisheries in federal waters (waters within 3-200 nautical miles; States have management jurisdiction from the shore to 3 nautical miles). The MSA established eight regional fishery management Councils charged with developing and implementing fishery management plans (FMP) promoting long-term biological and economic sustainability of marine fisheries. While the Councils are charged with developing FMPs and making annual harvest recommendations, the Secretary of Commerce must approve these annual harvest recommendations prior to implementation. Substantial coordination with State, Tribal, and other nations' fishery agencies occurs due to the interjurisdictional fisheries covered by a Council's area of responsibility. The Councils are made up of representatives from the Federal government, Tribes with federally recognized fishing rights, states, and ocean fishery stakeholders (commercial fishers, recreational fishers, and fishery dependent businesses). Additionally, technical committees and advisory committees support the efforts of the Councils in developing and implementing FMPs.

The key objectives of the Councils in implementing FMPs are to:

- Prevent overfishing
- Rebuild overfished stocks
- Increase long-term economic and social benefits
- Use reliable data and sound science
- Conserve essential fish habitat (both marine habitats and freshwater habitats when addressing anadromous species)
- Ensure a safe and sustainable supply of seafood

Additionally, the FMPs must comply with the following ten National Standards:

1. **Optimum Yield:** *Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry.*
2. **Scientific Information:** *Conservation and management measures shall be based upon the best scientific information available.*
3. **Management Units:** *To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.*
4. **Allocations:** *Conservation and management measures shall not discriminate between residents of different states. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (a) fair and equitable to all such fishermen; (b) reasonably calculated to promote conservation;*

and (c) carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privilege.

5. **Efficiency:** *Conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources; except that no such measure shall have economic allocation as its sole purpose.*
6. **Variations and Contingencies:** *Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.*
7. **Costs and Benefits:** *Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.*
8. **Communities:** *Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities by utilizing economic and social data that meet the requirement of paragraph (2) [i.e., National Standard 2], in order to (a) provide for the sustained participation of such communities, and (b) to the extent practicable, minimize adverse economic impacts on such communities.*
9. **Bycatch:** *Conservation and management measures shall, to the extent practicable, (a) minimize bycatch and (b) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.*
10. **Safety of Life at Sea:** *Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea.*



The Pacific Fishery Management Council (PFMC) is the governing body that manages the fisheries along the west coast of the United of States. The PFMC has developed four



FMPs to guide the management of west coast fisheries: Salmon, Coastal Pelagic Species (anchovy, sardine, squid, mackerel, krill), Groundfish Species (Rockfish, Flatfish, Roundfish, Sharks and Skates), and Highly Migratory Species (Tunas, Pelagic Sharks, Billfish). The annual process for setting seasons and quotas follows these general steps: (1) evaluation of previous season's fisheries in meeting harvest objectives, (2) evaluation of stock status for the upcoming season, (3) development of harvest options based on stock status, (4) public input on proposed harvest options, (5) Council adoption of annual harvest plans,

(6) Secretary of Commerce approval of annual harvest plans, and (7) establish annual regulations to implement fisheries.

For local fishers, the MSA (and potential reauthorization) is very important because it:

- Aims for a process to guide species recovery and enable long-term sustainability and access to fisheries important to north coast anglers (salmon, rockfish, Pacific Halibut, etc.)
- Attempts to provide fair and equitable distribution/ allocation of fishery resources among the different fisheries and areas
- Provides a venue for meaningful participation and input on fisheries management
- Mandates good science to inform fisheries management decisions.



The PFMC process provides opportunity for local anglers to provide input to fishery regulations and modifications/amendments to FMPs, which occurs primarily through the PFMC Advisory Subpanels (Groundfish, Salmon, Coastal Pelagic, Highly Migratory Species, and Ecosystem). The Advisory Subpanels are made up of representatives from recreational and commercial fisheries, Tribes, conservation groups and the public. The Advisory Subpanels provide input and recommendations to the PFMC on annual fishery plans (seasons and quotas/bag limits) and amendments to existing FMPs.

There is a renewed effort underway by our congressman, Jared Huffman, to reauthorize the MSA. Congressman Huffman is now the chair of the House Subcommittee on Water, Oceans, and Wildlife, and will be providing leadership in developing legislation language for the MSA reauthorization. The Congressman is convening an MSA “Listening Tour” at various coastal communities across the country, and his first meeting was held in Arcata on October 5, 2019. There were seven panel members representing commercial and recreational anglers (represented by Jim Yarnall and Marc Gorelnik), Tribes, and academia. The panel members provided opening statements regarding recommendations of issues to be addressed by MSA reauthorization, which included the following discussion topics:

- For fishery resources that have part of their life cycle dependent on inland water and habitat conditions (e.g., salmon), the management councils need to have more say in these management issues, not just commenting.
- Clearer labeling of source of fish. For example, albacore caught by Chinese boats are sold to Canada and marketed as locally caught.
- Councils need to better prepare for and address impacts of climate change on fisheries, including labor issues, economic impacts, and the fisheries themselves.



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- Councils need to better support smaller local fishermen to reverse trend of allocations going to large boats and corporations. Provide start-up capital programs and permits to encourage new entrants into fisheries, increasing diversification of participants and providing better overall economic benefits.
- Supporting future commercial fisheries will require more investment into fisheries research, fish processing infrastructure (ice suppliers, harbor maintenance, cold storage), habitat improvements, and fisheries monitoring.
- Disaster relief funding needs to be timelier. It usually takes several years to receive disaster assistance after the event occurs, which is tough on fishermen to wait that long for relief.
- Refining terminology of certain terms (e.g., “overfished stocks” to “depleted stocks”), as sometimes stocks are impacted by factors other than overfishing.
- Need to be able to shift fishing permits around more easily, make more accessible to new entry small boats, and safeguard against hoarding of permits by large boats and processors.
- Councils need to do better at revisiting allocations in Catch Share Plans as stocks are rebuilt, with priority on new access to smaller boats, and highest and best use of those stocks.



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Fall Groundfish Update

By Tom Marking, Sports Representative on the PFMC

Fall, of every other year, we experience the hopes and disappointments of another round in the biennial specifications (SPEX) cycle for establishing new catch limits, overfishing limits, harvest goals and modifications to the management measures, depths, bag limits, lengths, season structures and other arcane details well beyond the interest of recreational anglers. We are deep into that process at the moment. September sees the introductions of the numbers from the NMFS staff on OFL's, ABC's, ACL's (Annual Catch Limits) and information on the last fish assessments and proposed assessments for the coming year. Additionally, the states begin to list all the modifications they are proposing on gear changes, bag limits, season structures, and commercial and recreational adjustments. There is a long laundry list this year, if you care to read them. (see pcouncil.org, [September Briefing Book](#), [Agenda Item H.8. Spex and Management Measures](#)).

The recreational changes can be stated in one sentence: adjustments to the sub-bag limit for Vermillion rockfish, adjustments to the bag-limits on Canary and Black rockfish, and removal of the sub-bag limit for Cabezon. That's it folks. For the commercial fishery there are about six pages of proposed adjustments ranging from trawl/non-trawl allocations and modified gear for flatfish nets, to extensive increases in harvest for non-trawl north and south of the Cape Mendocino line. The proposed increases for analysis are substantial, ranging from 2X to 10X the status quo for non-trawl fixed gear, limited entry or open access commercial anglers. These increases could result in hundreds of metric tons of additional fish of varying species being harvested by the commercial sector. This is of concern for us in the recreational sector because there is a hard split between trawl and non-trawl allocations. The more the non-trawl catches, the less the recreational sector is allowed, unless the ACLs for that species is increased; not normally the case. Also, the March/April closure for non-trawl is proposed to be removed to allow for all year fishing for that sector.

Recreational requests are limited to adjustments to bag limits, time on the water and depths. We could ask for more Black and Canary rockfish, and try to hold on to our Ling Cod bag limits, but that's about all we can expect. With the new sigma value (uncertainty) just adopted in September we can expect cuts in virtually every species we catch, unless an assessment for that stock is done that year. With each passing year, as the stock assessment ages, the cuts get more pronounced until the next stock assessment. Hence the Black rockfish ACLs are being cut another 34% this year for California. Canary rockfish might increase a bit, but this process is not kindly to the recreational sector. In November, the range of alternatives will be selected by the Council to be analyzed over the winter and brought back to the March meeting, with adoption by June of 2020. We could ask that the analysis for Black and Canary rockfish be increased up to 7 each in the sub-bag limit, but if the commercial is given even a portion of what is proposed, we can't expect any increases in anything; in fact we may lose fish to them. This year's process appears to be heavily weighted to the commercial sector but analysis over the winter will provide more information and direction on our options.

It appears we will finally get the November/December all depth fishery this year, as the Yelloweye rockfish by-catch numbers are staying fairly low. We'll have to see if the weather cooperates to allow us to participate in this extended season. This will be the first time we will be able to utilize this season extension put in a few years ago.

Good luck and stay safe out there.



Trinidad Young Anglers Tournament

By Joe Polos

On October 5th the Young Anglers Tournament was held on Trinidad Pier; hosted by the Trinidad Rancheria and California Department of Fish and Wildlife (CDFW). It was a really fun event with about 40 kids (ages 6-15)



participating. CDFW and the Rancheria provided loaner fishing poles and bait for those that needed them.



The kids seemed to have fun fishing but catching was slow with mostly greenling and sculpin being on the catch list, with a little run of jacksnelt near the end of the tournament. Following the tournament a hot dog lunch and awards ceremony was held. Fishers from each age class were acknowledged for the greatest point score based on the numbers/species caught and received a certificate, prize and book on pier fishing in California. In addition to

this, fishing rods and stocked tackle boxes were raffled off to the participants. HASA supported the event by contributing funds to purchase raffle items and received a lot of acknowledgement for their donation. Other sponsors included the International Game Fish Association, Seascape Pier, Cher-Ae Heights Casino, and United Pier and Shore Anglers of California. There was also a special raffle of a very nice 10' custom surf rod made by a CDFW employee, with proceeds to be used to purchase insurance for the next year's event.



For my part in this event, I set up a couple of small aquaria and some small plastic tubs and filled them with intertidal critters captured from under the pier. They were filled with shore crabs, hermit crabs, marine snails, starfish, and anemones. It was a very busy day talking to the kids (and adults) about what the different animals were and where they lived. Many were surprised that all of them were collected right under the pier. Most of the kids really enjoyed holding



the crabs and starfish. One of the volunteers caught a buffalo sculpin and put it in the aquarium. That was actually a fun one to have because it blended in so well with the rock and kelp in the aquarium it was sometimes hard to see. It was fun seeing the reaction of people when they actually found it.

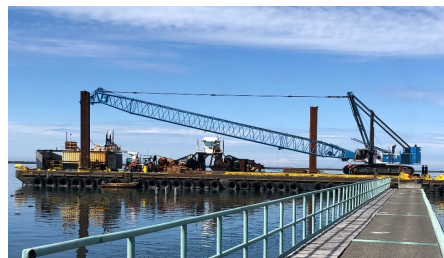


It was a really great day, beautiful Humboldt County fall weather, and hopefully some young fishers are on their way to a lifetime of fishing enjoyment.

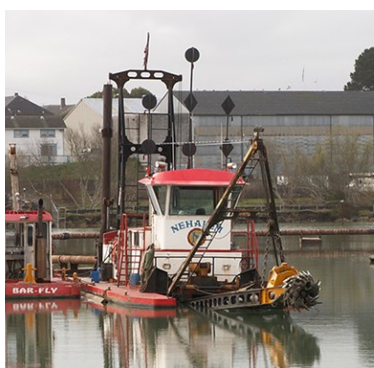
Humboldt Bay – 2019 Dredging Update

By Adam Wagschal
Deputy Director, Humboldt Bay Harbor, Recreation and Conservation District

In Humboldt Bay, the US Army Corps of Engineers (USCOE) dredges the federal navigation channels while locally maintained sites are dredged by private entities, the City of Eureka, County of Humboldt and Humboldt Bay Harbor, Recreation and Conservation District. These locally maintained sites include smaller channels, marinas and docks.



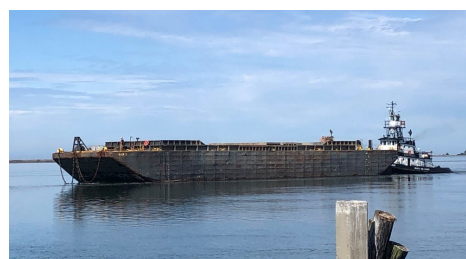
Barge with crane and clamshell bucket positioned to dredge Fields Landing Travel Lift Dock.



Cutter head suction dredge and support work boat owned by the Humboldt Bay Harbor District.

The two primary dredging types used can be categorized as suction dredging and clamshell bucket dredging. Suction dredging removes dredged material (sand and sediment) through direct suction, like a vacuum. Clamshell dredging uses a clamshell bucket attached to an excavator or crane. The USCOE uses a suction dredge and, historically, many of the locally maintained sites were also dredged using suction methods. However, in 2018 and 2019, only clamshell dredging was conducted at locally maintained sites. The use of clamshell dredging rather than suction dredging in recent years is partly due to potential impacts of suction dredging on longfin smelt, a species listed under the California Endangered Species Act in 2009. Local entities are finding that clamshell dredging is more expensive than suction dredging.

The USCOE deposits dredged material at the Humboldt Open Ocean Disposal Site (HOODS) which is located approximately three nautical miles offshore. Historically, material from locally maintained sites has been deposited at upland sites, trucked to disposal sites, or placed on Samoa Peninsula beaches. However, in 2018 and 2019, material from locally maintained sites was only deposited at HOODS. The USCOE and US Environmental Protection Agency are assessing options to expand HOODS and/or find alternative disposal options because the site is nearing capacity.



Tug pushing dump scow that will bring dredged material to the Humboldt Open Ocean Disposal Site.

There is interest in beneficially using dredged material for habitat restoration, sea level rise adaptation and beach nourishment projects rather than depositing it at HOODS. Unfortunately, beneficially using the material has regulatory and logistical challenges which have generally been prohibitive. For example, suction dredging at locally maintained sites could allow for relatively efficient transport (pumping) of dredged material to beneficial use sites. However, there are regulatory challenges associated with suction dredging and the necessary dewatering of dredged material. Harbor District staff is coordinating with local partners and regulatory agency staff to find solutions.

Due to large storms this past winter, more sediment accumulated in Humboldt Bay than in typical years. This resulted in a temporary closure of the bay to deep draft vessels until the USCOE was able to remove the shoaling. The USCOE also dredged the Entrance Channel and Inner Channel, as they do every year. The locally maintained sites dredged this year included the Chevron Dock, Fields Landing Boatyard Travel Lift Dock and Woodley Island Marina. At Woodley Island Marina, funding was not adequate to dredge the entire marina to design depths. Hence, dredging at the marina targeted the highest priority areas. Harbor District staff is developing a strategy to fund, permit and implement the remaining needed dredging as soon as possible.



Clamshell bucket removing sediment at Woodley Island Marina.



Survey boat that maps depths before dredging to determine where material needs to be removed and after dredging to ensure target depths are reached.

To address the need for more predictable dredging and beneficial uses of dredged material from locally maintained sites, the Harbor District and partners are developing a Humboldt Bay Sediment Management Program Environmental Impact Report that will describe alternatives for dredging and beneficial use of dredged material. Similarly, the Harbor District and local partners are coordinating with the USCOE to find solutions that will keep the bay open to shipping year-round. These solutions could involve actions other than dredging. For example, strategic construction of groins or reconfiguration of the federal navigation channel could complement and reduce the need for dredging.

District staff is grateful to all the agencies and private partners that assist with surveying, design, permitting, logistics and operations to dredge the bay. We look forward to continuing to work with these partners to identify solutions that will make future dredging more efficient and predictable, allow for beneficial uses of dredged material, and keep the bay at depths that allow for safe year-round shipping and boating.

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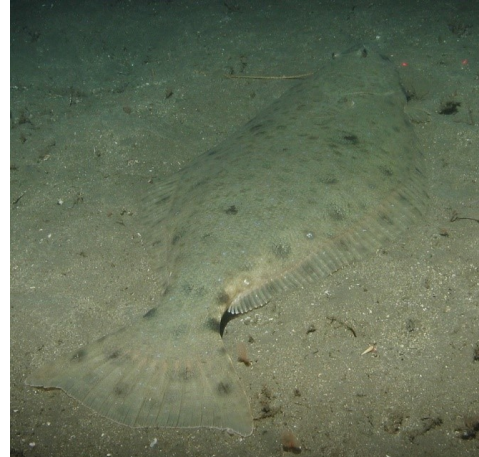


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Eureka ~ 443-2348
mhollanddds@gmail.com

California Halibut in Humboldt Bay

By Kathryn Meyer
Environmental Scientist, CDFW Marine Region

California Halibut (*Paralichthys californicus*) is a member of the large-tooth flounder family that has been observed as far north as the Quillayute River, Washington and Baja California Sur, Mexico to the south. Not to be confused with the Pacific Halibut (*Hippoglossus stenolepis*), which is a much larger and more northerly species, California Halibut are found relatively nearshore (seasonally in bays and estuaries) where they feed on schools of baitfish such as anchovy and squid. They prefer warmer water, especially for reproduction, and historically they were thought to be most abundant in the southern California Bight and northern Baja, Mexico. A commercial fishery emerged in that area as far back as the late 1800's and the population has supported popular commercial and recreational fisheries across the state ever since.



A well disguised California Halibut.
Photo Credit: CDFW/MARE

California Halibut (Halibut) are managed exclusively by the California Department of Fish and Wildlife. The recreational fishery is primarily managed using a 22-inch minimum legal length and a daily bag limit of 3 fish north of Point Sur (CCR Title 14 sections 1.17, 7.00, 7.50(a), 27.60(c) and 195). As with any fish that has a minimum legal size, it is always important to handle 'shorts' with care to ensure they survive after being released. Landing them in soft, small-mesh nets and releasing them quickly can greatly improve their chances of survival. More information and tips on carefully releasing sub-legal Halibut can be found here: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=146633&inline>

A Snapshot of the Recreational Fishery in Humboldt

When ocean temperatures are much higher than average along the West Coast, survival of larval and juvenile Halibut in central California is much higher than in an average year. These large survival or 'recruitment' events in central California are very likely the source of the increased catch in Humboldt several years later when those fish reach the minimum size limit. Since the inception of the California Recreational Fisheries Survey (CRFS) in 2004, we have seen two significant Halibut 'events' in the Humboldt region (Figure 1).

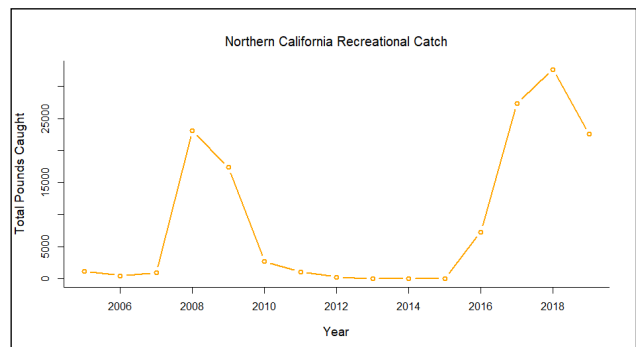


Figure 1. Annual total recreational catch estimates of California Halibut in Humboldt County. Estimates are produced by the California Recreational Fisheries Survey and are sourced from www.recfin.org.

Many of you probably remember the huge spike in Halibut landings in 2008 and 2009, which virtually disappeared until they showed up again in 2016. The 2019 season now marks the third year in a row of record-level Halibut catch on the north coast, and there is likely a lot of interest with regards to what may be on the horizon.

If we compare the two recruitment events in Humboldt, a few key differences become apparent which suggest that another good Halibut year is likely on the horizon. I've summarized our local CRFS data over the course of both of those events, beginning with the year that sub-legal sized fish began showing up in the area (Figure 2). This occurred first in 2007 and then again in 2016, when most of the fish that anglers encountered were too small to keep. In the following year of each 'event', many fish had reached the legal size and catch began to pick up significantly. Over the next few years, as fish continued to reach the minimum legal size, less and less were being thrown back until 2010 when there were essentially no sub-legal sized fish left and overall catch rates were fairly low. This year (2019), however, we've continued to see very high catch rates and some sub-legal fish remaining for next year's season (exact values not yet available).

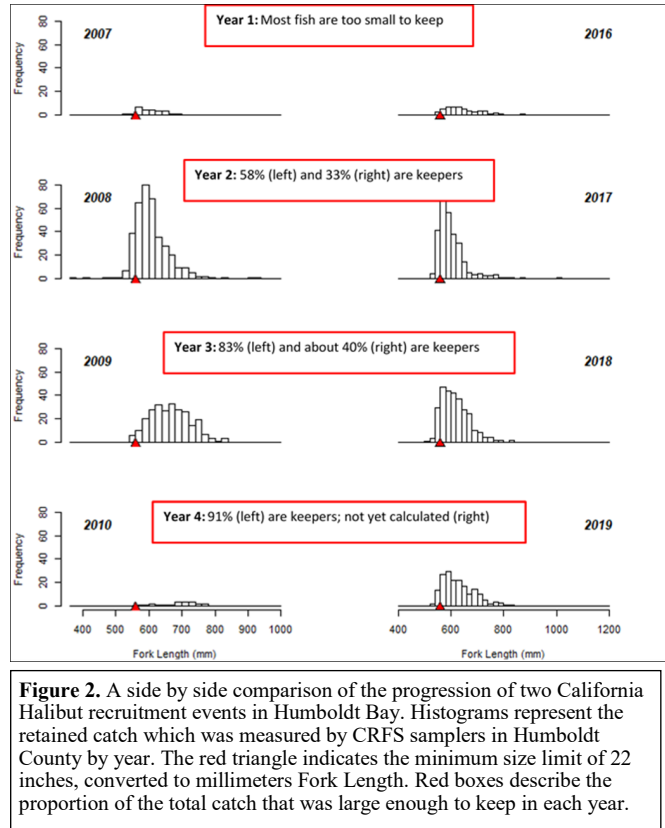


Figure 2. A side by side comparison of the progression of two California Halibut recruitment events in Humboldt Bay. Histograms represent the retained catch which was measured by CRFS samplers in Humboldt County by year. The red triangle indicates the minimum size limit of 22 inches, converted to millimeters Fork Length. Red boxes describe the proportion of the total catch that was large enough to keep in each year.

This most recent recruitment was much larger and very likely composed of several back-to-back year classes, resulting in three years in a row of record-high catches for this area. The timing of this most recent event coincides with a significant marine heat wave between 2013 - 2016 that became known as “the Blob”. It created exceptionally warm water conditions along the California coast, which appear to be favorable for juvenile Halibut survival along the northernmost extent of their range. NOAA scientists are reporting that a new marine heatwave is developing off the West Coast currently, so another large recruitment event may be in our future. It should be noted, however, that impacts of “the Blob” on other species and the overall marine ecosystem were not generally positive.

Humboldt Bay Halibut Research in 2019

Since Halibut are only periodically found in the Humboldt area, there haven't been a lot of local research efforts. Most of our understanding of how Halibut grow and reproduce has come from data collected in the San Francisco Bay area or further south. Growth and reproduction are essential pieces of information for many aspects of fisheries management, such as establishing minimum legal sizes, understanding how quickly the population can recover from fishing, among numerous other applications. Growth, age at maturity, and spawning season can change significantly from north to south – as we see when comparing

the southern and central California Halibut populations. For this reason, we began a research project this year focused on growth and reproductive patterns for California Halibut in the Humboldt area. The goal was to obtain regional-scale data to help better understand the dynamics of our local Halibut population.

Earlier this year, we began asking recreational anglers to participate in this project by donating their Halibut carcasses after the filets were removed but with the rest of the fish fully intact. In exchange for every fish donated, each angler received one raffle ticket towards the drawing of a local, custom-made Halibut rod (courtesy of Bassman Dan’s Custom Rod and Repair). Participation this season has been great and thanks to numerous recreational anglers, we have collected over 125 Halibut carcasses so far! The smallest donated fish were 22 inches (the minimum legal size) and several fish were almost 40 inches; the full size-distribution is shown in Figure 3. All but three fish out of 125 were female, which is similar to what we observe in the recreational and commercial catch in other areas. One reason for this is that male fish simply don’t get as large as females and so less of the male population tends to be ‘available’ to the fishery. It is also possible that more females seasonally enter estuaries, where all of the donated fish were caught.

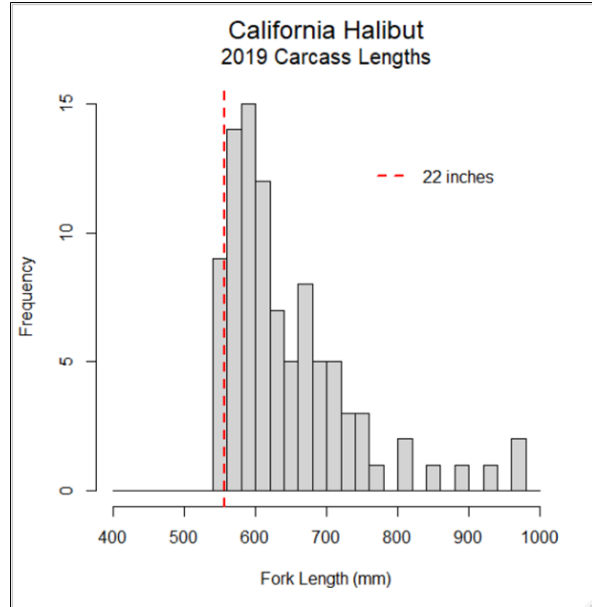


Figure 3. Histogram of California Halibut carcass lengths donated by recreational anglers in 2019. The red dashed line indicates the minimum legal size limit of 22 inches, converted to millimeters fork length.

We removed ear bones (otoliths) from each fish, which are used to determine age. Over the winter, we will section them in half using a micro-saw, polish each one, and count the rings under a microscope - similar to the way you would count tree rings (Figure 4). Knowing both the age and length of enough fish will allow us to get a very good sense of how our local population grows and whether or not that is different from populations to the south. We also removed ovaries from the female fish to visually determine their maturity status. The majority of the females that we observed were of a reproductively mature size but did not contain ripening eggs. A few, however, had recently spawned suggesting that either spawning occurred outside of the Bay or that we just weren’t lucky in encountering females in spawning condition. Regardless, that marks the first concrete evidence that spawning has ever occurred for Halibut in our region. Larval surveys conducted in Humboldt Bay have never detected Halibut larvae and previous research suggests that it may be too cold here for reproduction to occur.

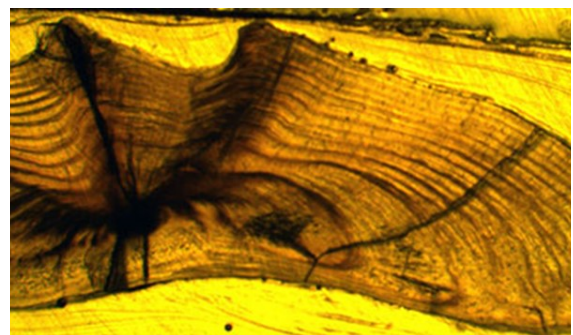


Figure 4. Cross-section of a California Halibut Otolith.

Our next steps are to age fish this winter and to begin analyzing the maturity and growth data to see if we have enough data or if we need to collect carcasses for another season. Please stay tuned for updates on the results of this season's research and note that we may be out there again if you would like to participate next year. But most importantly, it's almost time to draw a raffle ticket and see who won that sweet new fishing rod! If you donated a carcass this season, I'll be contacting the lucky winner over the next few weeks. It has been great talking Halibut with many of you this year and I'd like to take this opportunity to express my genuine thanks to all of the individuals who participated in the study this season!



For more information contact:

Kathryn Meyer
 Environmental Scientist, CDFW Marine Region
 619 2nd St. Eureka, CA 95501
 Phone: 707-445-5306
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Settlement in Whale Entanglement Lawsuit

By Larry DeRidder

Pursuant to Northern District Local Rule 6-2, Plaintiff Center for Biological Diversity, Defendant Charlton H. Bonham, in his official capacity as Director for the California Department of Fish and Wildlife, and Intervenor-Defendants Pacific Coast Federation of Fisherman's Associations and the Institute for Fisheries Resources (collectively, the "Parties") submit this stipulation and proposed order staying the case.

So starts the official Stipulation and (Proposed) Order Staying Case. The case in question was filed October 3, 2017, and was intended to stop commercial crabbing in California, at least temporarily. This was a result of an unusual spike in whale entanglements. In 2015 there were 50 whales known to have become entangled – a substantial jump from the previous average of less than ten per year. In 2016 there were 48 known entanglements. In 2017 there were at least 31 entanglements, a decline from the previous two years, but still three times the norm. The effect this year was an April 15 closure of the commercial crab season in California. The gist of the case was a complaint that alleged Defendants were "killing, injuring, harming, capturing, and otherwise causing 'take' of humpback whales, blue whales and leatherback sea turtles in violation of" Section 9 of the Endangered Species Act (ESA). Exhibit A, attached to the Stipulation, covered circumstances which would activate future early crab season closures, until such time as the California Department of Fish and Wildlife (CDFW) acquires an Incidental Take Permit (ITP) for the subject species. The 2020 commercial crab season is scheduled to close April 1, and could close earlier.

Specifically, until CDFW applies for and is granted a Federal ITP, a set of rules was agreed to which will prompt district-wide closures if certain "triggers" are met. So, the following scenarios will result in closures: (1) One or more confirmed entangled ESA-listed whale species in California Dungeness crab gear, or two or more ESA-listed species confirmed entangled in unknown gear; or (2) the presence of 20 or more ESA-listed whales in a NOAA survey, or a running average of 5 or more ESA-listed whales over a one-week period. Predictive factors for gauging entanglement risk will take into account regional krill levels, anchovy and herring abundance, El Nino Southern Oscillation (ENSO) predictions, upwelling assessments and crab fleet disposition.

Further, the April 1 closure in Districts 10, 17 and south can only be lifted if all parties to the suit concur that the risk is low. Beginning April 1, 2021 and until the overall situation is more permanently settled, Districts 10, 17 and south will only be open to ropeless crab gear. There are further provisions dealing with sea turtle evaluation studies, whale presence modeling studies and exploring technologies for ropeless crab gear, and of course lots of meetings between parties.

The full history and original documents can be found at https://videobookcase.org/fishandgame_media/april17/pdf/item_25.pdf.

Thus far this has not affected the sport season regulations, but that could change if a whale is found to be entangled in sport gear.

Vertical Plastic Waste Distribution in Monterey Bay

By Larry DeRidder

In several recent issues we've discussed the issue of oceanic plastic pollution. Generally speaking, what we see when we're on the ocean is large floating plastic waste items. Recent evidence indicates that plastic is accumulating within animals and deep ocean bottom sediments. Scientists in Monterey decided to see just what might be less visible. Toward that end, they employed remotely operated submersible vehicles and specially designed samplers to test the ocean from five to 1,000 meters below the surface. They also collected various organisms in the water column to see how readily micro-plastics enter the food chain.

Water samples were taken from immediately below the surface all the way to 1,000 meters (nearly 550 fathoms) deep. The water samplers were designed to extract microplastics, the very small particles that large plastic waste eventually becomes. Microplastic concentrations varied by depth. They were lowest at the ocean's surface and at 1,000 meters. Between those depths the concentration varied but was far higher from 200 - 600 meters deep.

To test how readily microplastic particles enter the food column, two organisms were collected. One was dead pelagic red crabs which had washed up on the beach. They are shallow-living lobsters with omnivorous diets, which are in turn eaten by a wide variety of tunas, seabirds, squid, turtles and mammals. They tend to come up the coast during El Nino events and can be extremely abundant during El Nino events. The other organism tested was giant larvaceans, a free-swimming tunicate which lives in the water column. They look somewhat like a semi-transparent tadpole and eat by filtering particles from the water with a mucous mesh. Tests showed that both species were accumulating tiny plastic debris.

The water samples, crabs and larvaceans were tested for microplastic contamination. Every water sample and every organism checked was found to be contaminated with plastic. Individual crabs, for example, contained anywhere from one to fourteen pieces of ingested plastic. The most common plastic found was polyethylene terephthalate, a common material for single-use beverage bottles and packaging. The second most commonly identified plastic was polyamide, commonly used to make textiles and by the auto industry. Third and fourth places went to polycarbonate and polyvinylchloride. The authors noted that plastic debris from fishing gear, while present in the water, was a minor source of the plastic particles identified.

Ultimately the authors concluded that filter-feeding organisms likely accumulate plastic throughout their lives, and then transport that plastic to the seafloor when the organism dies and sinks. If the organism is eaten prior to death, then the plastic simply moves one step up the food chain and continues to accumulate, but still ultimately sinks to the bottom when that organism dies. They fear that the macro-sized plastic on the ocean surface is literally just the visible tip of the problem. If you are interested in the full article it can be found at www.nature.com/articles/s41598-019-44117-2.

As fishermen we need to be proactive in pressing for meaningful plastic use, disposal and recycling laws. All the indications are that what washes out to sea ultimately returns to us when we eat our catch.

NOAA Using Futuristic Sailing Drones to Study Fish Populations Along the North Coast

By John Ross Ferrara, reprinted with permission of Lost Coast Outpost

Originally published July, 30, 2019.



A Saildrone spotted west of Trinidad Head | Photos by Ted Pease.

A fleet of autonomous, carrot-colored sailboats are patrolling the North Coast.

Local fisherman and friend of LoCO Ted Pease took these photos on Friday (July 26, 2019) after happening upon one of the 16-and-a-half-foot drones 3 miles west of Trinidad Head.

The solar-powered boats, built by the Bay Area company Saildrone, are conducting a summer long survey for the Northwest Fisheries Science Center, NOAA spokesperson Michael Milstein told the *Outpost*.

“[The drone seen in the photos] is participating in our surveys of fish populations offshore to know biomass volumes and how many there are to catch,” Milstein said. “This is the second year of testing using Sailsdrones to augment research ships that regularly do those surveys.”

The NOAA is specifically studying hake, or Pacific whiting, populations — one of the West Coast’s biggest fishing industries — which the drones can measure using sonar technology.

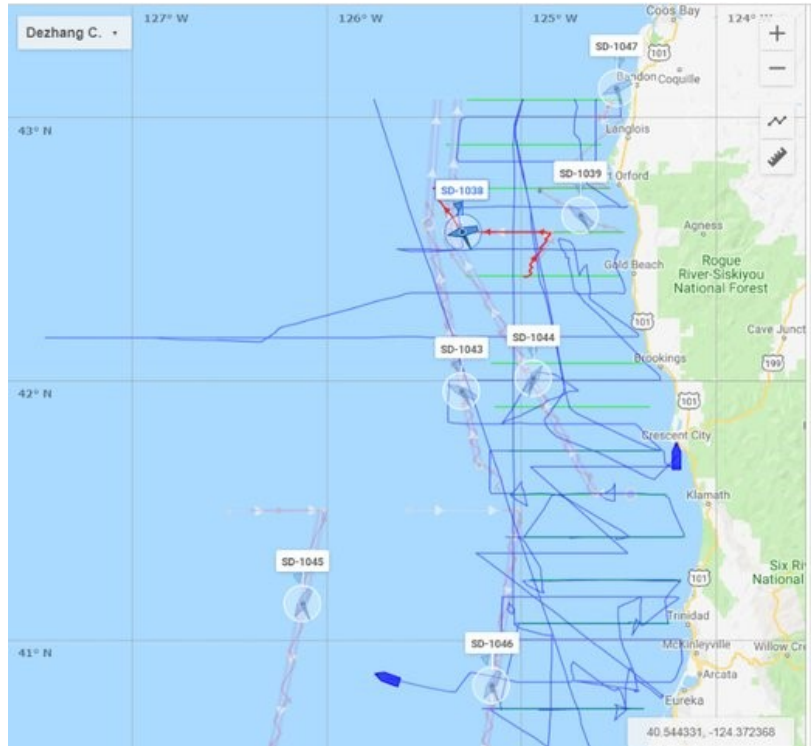
The NWFSC reported in late July that there were two NOAA Fisheries survey vessels and seven Saildrones collecting data between Eureka and Coos Bay, OR. However, Milstein said only one saildrone is still surveying Humboldt waters.



Young Pacific hake | Wikipedia.

“We don’t know that [Saildrones] are better [than traditional survey ships], but it adds to what the ships can gather over a larger area,” he said. “They can also access shallower waters where the ships can’t go, so they can potentially expand the reach of the survey. Some [scientists] think that those shallower areas have more biomass.”

According to the Saildrone website, the drones began the survey at Point Conception near Santa Barbara, and will finish their journey at the U.S.-Canada border after the 60-day survey is complete.



A screen capture from the Saildrone mission portal showing the location of two NOAA survey ships (blue) and seven Saildrones (SD) on July 19. | NWFSC

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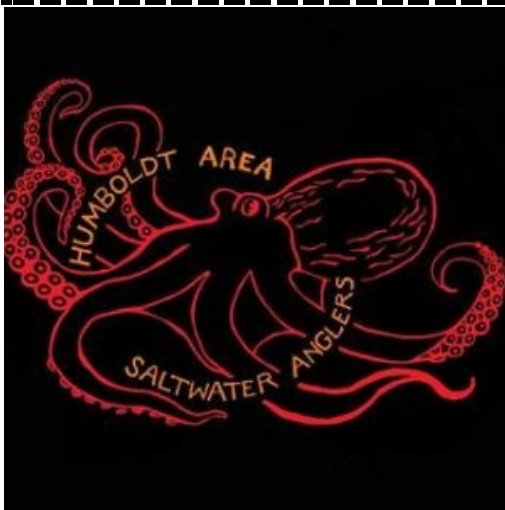
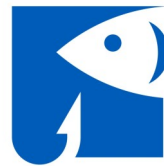
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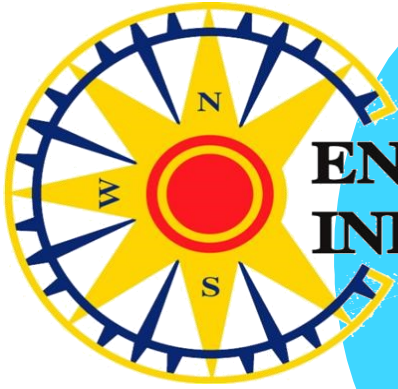
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