Pacific Council News

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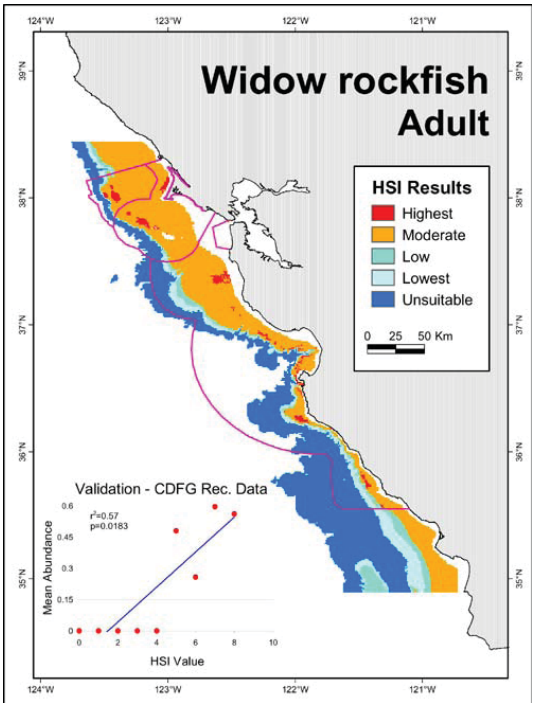
Assessment Finds Widow Rockfish Rebuilt; Stock Assessments Approved

At its November meeting, the Council adopted new stock assessments for widow rockfish, bocaccio, and darkblotched rockfish. These assessments indicate that the widow rockfish stock has been successfully rebuilt, and that rebuilding is on track for bocaccio and darkblotched rockfish. The Council also adopted six new rebuilding analyses recommended by the Scientific and Statistical Committee (SSC). These assessments and rebuilding analyses will inform Council and National Marine Fisheries Service (NMFS) decisions on 2013 and 2014 groundfish harvest specifications and management measures (see article, page 2).

Widow Rockfish

A new stock assessment for widow rockfish was conducted this year by the Southwest Fisheries Science Center. The SSC recommended the new assessment as the best available science informing widow rockfish management (see http://tinyurl.com/7xrgw3r) and the Council adopted the new assessment.

The assessment indicates the stock has successfully rebuilt with a spawning biomass that exceeds the target of 40 percent of initial biomass, and a spawning depletion of 51 percent at the start of 2011. Further, the estimated spawning stock biomass has increased steadily from a low of 30.6 percent at the start of 2001. The assessment estimates that the relative spawning stock biomass never dropped below the 25 percent minimum stock size threshold. The increase in biomass during the past decade was the result of reduced catches, rather than strong year classes. Based on these results, which indicate that the widow rockfish stock is healthy and above target levels, the Council recommends that NMFS declare the stock successfully rebuilt. However, the widow rockfish Stock Assessment Team and the SSC agreed that much uncertainty remains about the finding that the stock has rebuilt. Productivity and status of this stock are highly uncertain because the available biomass indices are not informative. The Council factored this uncertainty into their decisions on harvest specifications for widow rockfish. The SSC recommended a full widow rockfish assessment be conducted next time this stock is assessed.



This map displays habitat suitability index (HSI) model results for adult widow rockfish near San Francisco during June-November. (NOAA Center for Coastal Modeling and Assessment)

There were many structural changes to the 2011 assessment compared to past widow rockfish assessments. For technical details, see http://tinyurl.com/c7e5urh.

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Salmon Schedule for 2012 Adopted

The Council adopted the locations and dates for Council-sponsored salmon hearings in 2012. The hearings will be held in Westport, Washington on March 26; in Coos Bay, Oregon on March 26; and in Eureka, California on March 27. The Council also approved the schedule and process for developing 2012 ocean salmon management measures (page 15).

SSC = Scientific and Statistical Committee; NMFS = National Marine Fisheries Service

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Groundfish News

Council Adopts 2013-2014 Groundfish Harvest Specifications and Management Measures

The Council affirmed their intent in November to limit changes to status quo harvest specifications and management measures for 2013-2014.

Harvest Specifications

The Council adopted final overfishing limits, final acceptable biological catches, and preliminary preferred alternative annual catch limits (ACLs) for non-overfished groundfish stocks and stock complexes for 2013-14 fisheries as shown in Table 1, page 17. The Council requested analysis of two ACL alternatives for longnose skate: 1,349 metric tons (mt) (the status quo), and 2,000 mt (the preliminary preferred alternative). Three ACL alternatives for widow rockfish will be analyzed: 600 mt (status quo), 1,500 mt (the preliminary preferred alternative), and 2,500 mt.

The Council adopted preliminary ACLs and target rebuilding years for overfished species for analysis, as shown in Table 2, page 18-19. The Council elected to maintain current rebuilding plans for bocaccio, cowcod, darkblotched rockfish, petrale sole, and yelloweye rockfish by not changing the target rebuilding years or spawning potential ratio (SPR) harvest rates. The Council is considering modifications to rebuilding plans for two overfished species, canary rockfish and Pacific ocean perch, due to changes in our understanding of stock status and productivity (see page 1). Therefore, a wider range of ACL alternatives will be analyzed for these two species. The preliminary preferred alternative for canary rockfish would maintain the SPR harvest rate in the current rebuilding plan (88.7%) and change the target rebuilding year from 2027 to 2030. The preliminary preferred alternative for Pacific ocean perch would also maintain the SPR harvest rate in the current rebuilding plan (86.4%) and change the target rebuilding year from 2020 to 2051.

The Council is scheduled to choose their final preferred ACLs for 2013 and 2014 at the April 2012 Council meeting.

New Management Measures for 2013-2014

The Council will consider a new management measures for the 2013-2014 cycle, includ-

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Three Exempted Fishing Permits Adopted for Public Review

The Council preliminarily adopted three exempted fishing permits (EFPs) proposed for 2013 and 2014 for public review. The first EFP, sponsored by Steve and Kathy Fosmark, seeks to test the effectiveness of trolled longline gear to selectively harvest chilipepper rockfish in waters off central California. The second EFP, sponsored by the San Francisco Community Fishing Association and Dan Platt, seeks to test the effectiveness of vertical hook-and-line gear to selectively harvest midwater species such as yellowtail rockfish. The third EFP, sponsored by the Central Coast Sustainable Groundfish Association, seeks to survey the distribution and size of overfished species in the Rockfish Conservation Area off the central coast of California using hook-and-line and trap gear.

The Council added a range of EFP total catch limits for the first and second EFPs as recommended by the applicants and Groundfish Advisory Subpanel. Further, the Council chose a preliminary suite of species yield set-asides to accommodate 2013-14 EFPs. No total catch limits or yield set-asides are required for the third EFP, since those impacts will be covered using quota pounds allocated in the trawl individual fishing quota program. The Council also required EFP sponsors to address the concerns raised by the Council's Groundfish Management Team and Enforcement Consultants regarding these activities, and tasked the Scientific and Statistical Committee to evaluate the study design of the Central Coast Sustainable Groundfish Association EFP. The Council will consider final adoption of these three EFPs next June, pending public and advisory body comments and recommendations.

ACL = annual catch limit; EFP = exempted fishing permit; mt = metric ton (1000 kilogramss or 2,204.62 pounds), SPR = spawning potential ratio (the ratio of spawning potential per recruit under a given fishing regime, relative to the spawning potential per recruit with no fishing.) ***November groundfish briefing book materials are at http://tinyurl.com/c7e5urh***

Groundfish News

Inseason Changes Made to 2012 Groundfish Fisheries

Area	Fishery	Jan-Feb	Mar-April	May-June	July-Aug	Sept-Oct	Nov-Dec
North of 36° N. lat (US/Canada border to 36° N. lat)	LE N	1,300 lb. per week, not to exceed 5,000 lb. per two months					
	OA N	300 lb. per day, or one landing per week of up to 900 lb., not to exceed 1,800 lb. per two months					
South of 36° N. lat	LE S	1,800 lb. per week					
	OA S	300 lb. per day, or one landing per week of up to 1,350 lb., not to exceed 2,700 lb. per two months					

In November, the Council considered recent information on fisheries and did not make changes affecting 2011 groundfish management. For 2012, the Council adopted conforming regulations that close portions of Washington Marine Areas 1 and 2 to recreational lingcod fishing; adopted minor nearshore rockfish and black rockfish trip limits between 42° N. lat. and 40°10' N. lat. in both the limited entry and open access fixed gear fisheries for Period 1 of 8,500 lb /two months, of which no more than 1,200 lb may be species other than black rockfish; adopted 2012 trip limits for sablefish daily-trip-limit fisheries (see table above); and changed the trawl Rockfish Conservation Area (RCA) during March and April 2012. During that time, the RCA between 48°10' N. lat. and 45°46' N. lat. will be between the 75 fathom line and the 150 fathom line. Otherwise, the trawl RCA will be the same as in 2011. See http://tinyurl.com/c8b4ztu for details.

Council Continues Work on Trawl Rationalization Trailing Actions

At the November meeting, the Council continued work on trailing actions related to the groundfish trawl catch share program. The Council's work covered a safe harbor from the quota share accumulation limit control rule for lending institutions, identification of quota share holders to facilitate lending, regulations to allow entry of new West Coast observer providers, allowing trawl and fixed gear permits to be stacked on the same vessel at the same time, a revision to the thirty-day deficit opt-out provision to allow a vessel to re-enter the fishery after it has covered its deficit, elimination of double filing of co-op reports, moving the whiting season start date for the shorebased sector to May 15, allowing multiple gears on the same trip, and miscellaneous revisions to trawl gear regulations, including chafing gear.

The Council will continue to work on these issues, with the goal of taking preliminary and final Council action at the March and April Council meetings, respectively, and putting Council recommendations in place on January 1, 2013. However, the last three items, relating to gear, may be finalized in a separate rulemaking and implemented in mid-2013. There are also several minor regulatory modifications suggested by National Marine Fisheries Service (NMFS) and initially slated for completion in 2014 which may instead be put in place for 2013, if that can be done without jeopardizing progress on other priorities (see Items 17–24 of http://tinyurl.com/chs5clh). The Council will also continue to work on other trailing action issues which are not expected to be carried out until after 2013. These include reduction of observer costs, an alternative formula for distribution of the Adaptive Management Program quota pounds (currently passed through to quota share holders), and the redistribution of widow rockfish quota shares (based on widow rockfish being rebuilt).

Trawl-caught fish fillets at Local Ocean Seafoods, Newport, OR (J. Gilden)

A new lingcod management line at 42° N. latitude, and an associated subdivision of the lingcod quota shares, are scheduled for 2012. The Council voted to submit a letter recommending that NMFS either defer subdividing the trawl lingcod quota share until 2013 or provide some flexibility for trawl vessels to fish both north and south of the management line on the same trip. In response to the Council and public comment, NMFS has announced that for 2013 there will not be a subdivision of lingcod quota shares. Such a subdivision is likely for 2014, though at a different management line: 40°10' N. latitude. With this the new line, the lingcod quota share, which currently applies to the entire coast, would be divided into northern and southern shares. As a result, lingcod quota

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DTL = daily trip limit; NMFS = National Marine Fisheries Service

Coastal Pelagic Species News

Sardine Stock Assessment Approved; 2012 Management Measures for Coastal Pelagic Species Adopted

At the November meeting, the Council heard a report on the 2011 Pacific sardine stock assessment, adopted harvest specifications and management measures for 2012, approved a proposal for reviewing a new sardine survey method, considered a Tribal allocation request, and recommended a workshop to review key fishery management parameters.

Sardine stock assessment

The National Marine Fisheries Service Southwest Fisheries Science Center (SWFSC) conducted a full stock assessment for Pacific sardine in 2011, which was reviewed by a Stock Assessment Review Panel in October. The assessment used new abundance data from three survey methods: the SWFSC's Daily Egg Production Model, the industry-led aerial sardine survey, and the SWFSC's acoustic-trawl survey. This was the first time the sardine assessment incorporated the acoustic-trawl survey. The assessment's estimated biomass is 988,385 metric tons (mt).

The assessment also included a re-evaluation of F_{MSY}, the fishing rate that produces maximum sustainable yield. This approach, which removes the temperature-dependent variable in the F_{MSY} calculation, was endorsed by the Scientific and Statistical Committee at the November meeting, and was used as the basis for the overfishing limit and acceptable biological catch benchmarks ultimately recommended by the Council.

Sardines, Oregon Coast Aquarium (J. Gilden)

Tribal harvest request

In a letter dated August

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Coming Up at the March 2012 Council Meeting

The next Council meeting will be held in Sacramento, California on March 2-7, 2012. The Briefing Book will be available on the Council website around February 16 (www.pcouncil.org).

Groundfish
- Adopt 2012 Pacific whiting season management measures
- Scope improved groundfish management process
- Consider alternative stock assessment plans for use in 2015-16 groundfish management
- NMFS report
- Briefing on biennial specifications environmental impact statement development
- Inseason adjustments
- Trailing trawl rationalization & allocation amendments & actions: refine and adopt preliminary preferred alternatives
- Resolution of set-aside flexibility

Salmon
- NMFS report
- Approve Review of 2011 Fisheries & Preseason Report I on 2012 Stock Abundance Forecasts & Status Determinations
- Approve rebuilding plans, if neessary
- Adopt 2012 management objectives and management alternatives for public review
- Scoping of Amendment 17 salmon essential fish habitat revisions
- Appoint salmon hearings officers

Halibut
- Report on the annual International Pacific Halibut Commission meeting
- Adopt incidential catch regulations for public review
- Update on National Environmental Policy Act review of Pacific halibut management and retention of incidential catch in limited entry sablefish fishery

Coastal Pelagic Species
- Exempted fishing permits: public review

Highly Migratory Species
- NMFS report
- Report on Western and Central Pacific Fisheries Commission meeting and update on albacore management (tentative)
- Report on swordfish management

Other
- Habitat report
- Appointments
- Comments on proposed rule for National Standard 10 (safety)

F_{MSY} = the fishing rate that produces maximum sustainable yield; mt = metric ton; NMFS = National Marine Fisheries Service; SWFSC = NMFS Southwest Fisheries Science Center. ***November coastal pelagic species briefing book materials are at http://tinyurl.com/85t4qhn***

Salmon News

New Management Approaches Adopted in Salmon Methodology Review

Each year, the Scientific and Statistical Committee (SSC) and Salmon Technical Team review new methods used to estimate the impacts of the Council's salmon management actions. The SSC salmon subcommittee and the Salmon Technical Team met October 4-5 to review the following topics and make recommendations to the Council: abundance-based management framework for Lower Columbia River tule fall Chinook; cohort reconstruction and harvest model for Sacramento River winter Chinook; examination of the potential bias in the Coho Fishery Regulation Assessment Model (FRAM) of fishery-related mortality introduced by mark-selective fisheries; and multi-year review and evaluation of preseason and postseason mark-selective fisheries both north and south of Cape Falcon.

This year the Council approved recommendations for National Marine Fisheries Service (NMFS) to use an abundance-based management approach for Columbia River tule fall Chinook in their Endangered Species Act (ESA) consultation process, and adopted a new harvest model for Sacramento Winter Chinook. The Coho FRAM bias and mark-selective fishery evaluation issues will continue to be investigated in 2012.

Columbia River Tule Chinook

The Lower Columbia Chinook evolutionarily significant unit (ESU) is listed under the ESA. The fall run tule Chinook stock, a component of the ESU, is harvested in fisheries from Oregon to Alaska, and while no single fishery harvests a large number of this stock, the combined impact of all fisheries can be significant. Because much of the tule fishery occurs in Canada and Alaska, outside the Council's management authority, lower limits have seriously constrained Oregon and Washington ocean and Columbia River fisheries.

The Council recommended NMFS consider an abundance-based management approach for tule Chinook, which helps protect the stock during years of low returns, and allows more flexibility for the fishery when returns are high, as opposed to the current fixed rate approach. The abundance-based approach could increase the average harvest of both tule Chinook and other salmon, while reducing long-term risks to wild tule Chinook.

The Council's Ad Hoc Tule Chinook Workgroup consisted of state, tribal, Council, and NMFS scientists, and worked closely with NMFS policy representatives and the Salmon Advisory Subpanel to develop an approach that was practical and effective, and complemented both existing recovery planning efforts and fishery management needs. The Council recommended NMFS consider the following exploitation rate limits for harvest management consultation standards:

Lower River Hatchery Abundance Forecast	Total Exploitation Rate Limit
0-30,000	0.30
30,000-40,000	0.35
40,000-85,000	0.38
>85,000	0.41

The approach used the lower river hatchery tule Chinook forecast as an abundance index, which the Workgroup found correlated fairly well with natural tule Chinook abundance (a direct forecast for natural tule Chinook was not available).

The Council will forward its recommendations to NMFS for consideration in the ESA consultation process and annual guidance letter for 2012 ocean salmon fisheries.

Sacramento River winter Chinook

The Sacramento River winter Chinook ESU is also listed as endangered under the ESA. As part of its 2010 ESA consultation process, NMFS required the development of a new management framework and new assessment models to evaluate ocean fishery management alternatives. The current consultation standard specified time/area closures and minimum size limits in areas south of Point Arena, California. These conservation measures were intended to limit fishery impacts on winter Chinook, though the exploitation rate was not estimated or forecast annually.

Members of the NMFS Southwest Fishery Science Center developed a cohort reconstruction and harvest model for use in future management of Sacramento River winter Chinook. The models are similar in structure to other models currently used in the salmon management process (i.e., the Klamath Ocean Harvest Model and the Sacramento Harvest Model). Results from cohort reconstructions confirmed that winter Chinook are impacted primarily at age three, by recreational fisheries, and almost exclusively in areas south of Point Arena (the San Francisco and Monterey management areas). The Winter-Run Harvest Model will be used to forecast the age-three ocean fishery impact rate for areas south of Point Arena. Because an abundance forecast will not be made for winter Chinook, the model only forecasts the impact rate and not total harvest. NMFS is expected to establish a new winter-run control rule, which will specify allowable age-three impact rates annually for this stock, prior to the 2012 preseason management process. The Winter Run

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ESA = Endangered Species Act; ESU= evolutionarily significant unit: a distinctive group of Pacific salmon, steelhead, or sea-run cutthroat trout that is uniquely adapted to a particular area or environment and cannot be replaced. FRAM = (Coho) Fishery Regulation Assessment Model; NMFS = National Marine Fisheries Service; SSC = Scientific and Statistical Committee. ***November salmon briefing book materials are at http://tinyurl.com/7spqkt9***

Halibut News

2012 Halibut Sport Fishing Regulations Finalized

At its November meeting, the Council adopted changes to the Pacific Halibut Catch Sharing Plan for Area 2A affecting recreational fishery season structure in Oregon and Washington.

Washington South Coast Subarea

The primary fishery will open on the first Sunday in May (status quo), and remain open for three consecutive Sundays and Tuesdays. If sufficient quota remains, the fishery will continue on Sundays and/or Tuesdays until the quota is reached.

Columbia River Subarea

The allocation for the May-July period will increase from 70 percent to 80 percent of the subarea quota, with the remainder allocated to the August-September period. The Oregon contribution to the subarea quota will now be equal to the Washington contribution.

Oregon Central Coast Subarea

The allocation of the spring fishery quota will decrease from 67 percent to 63 percent of the subarea quota, and increase for the nearshore fishery from 8 percent to 12 percent of the subarea allocation. Remaining quota from the spring fishery can also now be transferred to either the summer fishery quota or the nearshore fishery quota.

South of Humbug Mountain Subarea

The Council did not recommend any changes to the south of Humbug Mountain Subarea recreational fishery in 2012, but did provide guidance on some follow-up issues in anticipation of considering changes for 2013, including development of catch estimates for this subarea; working with the International Pacific Halibut Commission to identify suitable habitat areas and relative abundance information for Pacific halibut south of the Oregon/California border; and engaging the public in California and Oregon south of Humbug Mountain in discussions of potential management changes for the subarea.

Appointments To Advisory Bodies and Other Committees (verb)

In considering advisory body and committee appointments, the Council appointed **Kirk Lynn** to a California Department of Fish and Game Position on the Coastal Pelagic Species Management Team and **Paul Dye**, **Terrie Klinger**, and **Nate Stone** to the Washington at-large positions on the Ecosystem Advisory Subpanel.

Dan Wolford, Council Chairman, appointed **Gway Kirchner** to act as the Council representative to the International Pacific Halibut Commission, replacing **Michele Culver**, and appointed **Buzz Brizendine** as the Council representative in the U.S.-Canada albacore treaty forum.

NOAA Seeks Input on Enforcement Priorities; Public Comment Period Open Through January 9

NOAA has released a draft of its enforcement priorities and invited the public to submit comments through January 9. This is the latest step NOAA is taking to improve its enforcement program, and will help the agency emphasize compliance through better communication with fishermen.

NOAA's jurisdiction spans more than 300,000 square miles of open ocean and 85,000 miles of U.S. coastline, and the agency is charged with enforcing laws and regulations found predominately in the Magnuson-Stevens Fishery Conservation and Management Act, the Endangered Species Act, the Marine Mammal Protection Act, the National Marine Sanctuaries Act, and the Lacey Act.

The draft priorities are available online at http://tinyurl.com/dxatb5c. They focus on helping the fishing industry understand and follow regulations that support sustainable fish stocks and a sustainable fishing industry; implementing compliance and enforcement plans for catch share management; monitoring fish product imports for compliance with domestic and international laws and regulations; protecting marine resources in National Marine Sanctuaries; protecting marine mammal and endangered species by enforcing bycatch reduction, gear, and closed area regulations; and supporting observer programs, which collect critical scientific data about fish stock status, bycatch, and fishery interactions with protected species.

Comments on the Enforcement Priorities may be submitted via email to enforcementpriorities@noaa.gov; via fax at 301-427-2055, attention Acting Deputy Director Tracy Dunn; or by sending hard copy to Acting Deputy Director Tracy Dunn c/o NOAA's Office of Law Enforcement, 8484 Georgia Ave., Suite 415, Silver Spring, MD 20910. Comments will not be accepted by phone.

For a complete list of NOAA enforcement reforms, go to http://www.noaa.gov/lawenforcementupdates/.

NOAA = National Oceanic and Atmospheric Administration. ***November halibut briefing book materials are at http://tinyurl.com/7eu3c68***

Ecosystem and Habitat News

Fisheries Science Centers Roll Out Integrated Ecosystem Assessment

The NOAA Southwest and Northwest Fisheries Science Centers reported to the Council on pilot results from the Integrated Ecosystem Assessment (IEA) in November. The IEA is a synthesis of information on natural and socioeconomic factors, and may be used by the Council in creating ecosystem approaches to management. NOAA plans to use the IEA approach nationwide, but it is being first applied to the California Current Large Marine Ecosystem, where it will focus on bocaccio, sablefish, Pacific whiting and canary rockfish, and Sacramento River fall Chinook. The California Current ecosystem stretches more than 2000 miles from near the US/Canada border to the tip of Baja California; essentially, it includes all Council-managed waters.

IEA results can be tailored to specific issues (including fishery management) and a variety of scales (for example, an ecosystem perspective vs. the perspective of a particular fish stock). The IEA looks at both how fishery practices affect the ecosystem and how ecosystem information can be used to improve fishery practices.

Dr. John Stein, Acting Director of the Northwest Fisheries Science Center, and Dr. Cisco Werner, Director of the Southwest Fisheries Science, provided an overview of a discussion document (http://tinyurl.com/c4cngtx) that assesses the status and trends of key climate drivers, predator-prey interactions, and non-fishing pressures for the five focal species. The pilot IEA for the California Current provides initial findings and is intended to solicit Council feedback on the best ways to adapt the voluminous results to best meet fishery management needs. Further refinement of the IEA and its application to the Council's developing Fishery Ecosystem Plan will occur before it is applied to fishery management.

The Council was encouraged by the pilot results and asked for more work on the predictive value of ecosystem indicators. The Council also provided the IEA team with feedback on ways to improve reporting, and recommended continued coordination between the IEA team and the Council's advisory bodies, including support for a possible workshop in 2012 to explore ways of bringing IEA products into stock assessments and Council decisionmaking.

Fishery Ecosystem Plan Continues to Take Shape

In November, the Ecosystem Plan Development Team (EPDT) provided a draft outline for a fishery ecosystem plan (http://tinyurl.com/bp8wlyu). The Council is considering ecosystem-based approaches to fishery management and is developing a fishery ecosystem plan as a way to bring ecosystem-based principles into the Council process under its existing fishery management plans. The Council has also been exploring the plan's future potential to broaden the Council's authority to species and issues not currently addressed in existing fishery management plans.

The draft outline includes a purpose and need statement, a proposed schedule and process for plan development, and a schedule for providing the Council with an annual report on ecosystem conditions, as well as periodic reports on specific management issues. The draft fishery ecosystem plan also includes an analysis of low trophic level species (species low on the food chain) and their vulnerability to future fisheries exploitation.

Although the fishery ecosystem plan should have broad application to all West Coast fishery management, public testimony and advisory body deliberations focused on unexploited forage species, such as some herrings, eulachon, silversides, Pacific sandlance, Pacific saury, and a host of mesopelagic species (myctophidae, bathylagidae etc.), and the potential for harm to these stocks if new fisheries develop to meet the demands of global aquaculture production.

Divers inspect a large purple soft coral protruding from the surrounding rock wall. Image courtesy of Pacific Deep Reefs Exploration 2011, NOAA-OER

In June, the EPDT was asked to help the Council deter-

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EPDT = Ecosystem Plan Development Team; IEA = integrated ecosystem assessment; NOAA = National Oceanic and Atmospheric Administration. ***November habitat and ecosystem briefing book materials are at http://tinyurl.com/6skum7v.***

Ecosystem and Habitat News

Habitat Committee Discusses Deep Sea Corals, Klamath Dam Removal

Deep Sea Corals

The Habitat Committee heard a presentation from Dr. Elizabeth Clarke, National Marine Fisheries Service Northwest Fisheries Science Center, on the Deep Sea Coral Research and Technology Program, and research efforts of the first two years of the three-year program. The program aims to understand factors that influence deep sea coral distribution and condition, describe distribution and abundance of deep sea coral communities, and inform proposed changes to essential fish habitat and Sanctuary boundaries.

The program focused its at-sea research efforts on the West Coast in 2010 and 2011 at Gulf of Farallones, Cordell Bank National Marine Sanctuary (NMS), Olympic NMS, Channel Islands, and the Southern California Bight. Dr. Clark stressed the difficulty of finding coral and sponge habitat and said that research efforts have been enhanced by multi-beam sonar mapping of the seafloor prior to coral surveys. Surveys confirmed the presence of deep-sea coral and sponge communities with numerous rockfish species in some areas. Notably, new species and a new genus were identified near the Channel Islands. An interactive image database for this cruise is posted at http://tinyurl.com/d6reqga.

The analysis of current research will summarize densities and species composition of corals and sponges, and will describe associations of fish with sponges and corals. Results are being folded into the current Groundfish Essential Fish Habitat review process. A final report will be available after the three-year field effort is completed. Summarized coral and sponge data from the 2007 coral report is now hosted on the OSU-PaCOOS interactive GIS website (http://tinyurl.com/5fv3vc). The Deep Sea Coral Research and Technology Program asked the Habitat Committee for input into research priorities for fiscal year 2012; the Habitat Committee suggested focusing on areas off Cape Mendocino because of the presence of rocky habitat in that area.

Klamath Dam Removal

A draft Environmental Impact Statement/Environmental Impact Report has been released in regard to the Secretary of the Interior's determination on whether to move forward with the removal of four dams from the mainstem Klamath River. The Habitat Committee drafted a letter, which the Council approved, commenting on the need to remove the four Klamath dams. Public comments are due December 30; the letter will be posted on the Council's website at http://tinyurl.com/7fk7qod.

Highly Migratory Species News

Council Discusses Approach to Pacific Bluefin Tuna Overfishing Issue

In April, National Marine Fisheries Service (NMFS) notified the Council that overfishing is occurring on Pacific bluefin tuna, mainly due to fisheries in Japan, Korea, and Mexico. At their November meeting, the Council adopted recommendations to address this international overfishing.

Because U.S. Pacific bluefin catch represents less than one percent of stockwide catch, the Council did not recommend additional domestic regulations to address the relative impact of U.S. fishing vessels. However, as required by the Magnuson-Stevens Act, the Council did develop recommendations to address international overfishing. An important cause of Pacific bluefin tuna overfishing is high catches of juvenile fish (ages 0-3), particularly in the Western Pacific Ocean. To address this problem, the U.S. should promote strengthening the conservation measure adopted by the Western and Central Pacific Fisheries Commission to eliminate exemptions for fisheries in the Korean exclusive economic zone and small, "artisanal" fishing vessels in Japanese waters. In the Eastern Pacific Ocean, the U.S. should seek adoption of a measure by the Inter-American Tropical Tuna Commission similar to the one put forward, but not adopted, by the U.S. and other countries at the 2011 Commission meeting. The proposed measure would have limited commercial catches by each member to their average catch in the eastern Pacific Ocean during the 1994-2007 period, and would have prohibited the sale of recreational bluefin tuna catch. However, in promoting such a conservation measure the U.S. needs to maintain a cooperative relationship with Mexico concerning tuna management, because, through agreement with the government, the Southern California recreational fishery fishes in waters off the Mexican coast.

The Council's recommendations must be submitted to NMFS, the Department of State, and the U.S. Congress by April 2012.

NMFS = National Marine Fisheries Service; NMS = National Marine Sanctuary; OSU = Oregon State University; PaCOOS = Pacific Coast Ocean Observing System.
November highly migratory species briefing book materials are at http://tinyurl.com/cuxyqpz.

Highly Migratory Species News

Council Makes Recommendations on International Highly Migratory Species Management

In November, the Council discussed the Canada-United States Pacific Albacore Tuna Treaty and the upcoming Eighth Regular Session of the Western and Central Pacific Fisheries Commission (WCPFC8). The WCPFC, by agreement among members, manages highly migratory species stocks in the Western Pacific Ocean (generally west of 150° W longitude). The meeting was to be held December 5-9, 2011 in Koror, the Republic of Palau. However, due to damage to the main electricity generating plant there, the meeting has been postponed.

Wild albacore tuna, Steveston Fish Market, Richmond, WA (photo courtesy of roaming-the-planet on Flickr)

Canada-United States Pacific Albacore Tuna Treaty

The Canada-United States Pacific Albacore Tuna Treaty allows vessels from each country to fish for albacore in the other country's Exclusive Economic Zone, subject to specified conditions. U.S. and Canadian delegations are scheduled to meet this November 30 - December 1 to discuss the treaty. In September, the Highly Migratory Species Advisory Subpanel raised the question of whether the Council should recommend terminating the treaty because of concerns among U.S. albacore fishermen that it put them at a disadvantage.

The Council recommended that the U.S. attempt to reach agreement on reciprocal fishing privileges with Canada at the upcoming bilateral meeting, where the U.S. delegation will discuss possible adverse impacts of the Treaty on U.S. albacore fishermen. The Council emphasized that equity of benefits is an important objective in the negotiations, and could be addressed through the terms setting Canadian access to the U.S. Exclusive Economic Zone.

A joint working group met October 19 to address inconsistencies in how each country collects and reports their fisheries data.

Eighth Meeting of the Western and Central Pacific Fisheries Commission

The Council made recommendations to the U.S. delegation to the WCPFC8 meeting, which has been rescheduled to a future date in February 2012. The recommendations focused on conservation of bigeye tuna in the Western Pacific, encouraging better cooperation between the WCPFC and the Inter-American Tropical Tuna Commission, and supporting a variety of management, control, and surveillance measures under consideration by the WCPFC.

The WCPFC's current conservation measure for tropical tunas, which aims (among other things) to end overfishing on bigeye tuna in the Western and Central Pacific Ocean, expires at the end of 2011. However, bigeye overfishing is still occurring, so at this meeting members need to agree on a replacement measure.

The Council also recommended U.S. support for measures addressing purse seine setting on or near whale sharks and cetaceans (whales and dolphins). Such measures need to address the question of whether vessels are intentionally setting around these animals because tuna often aggregate beneath them. In the case of whale sharks in particular, vessel crew may be unaware of the presence of a whale shark until they have already closed their net and begun retrieving the fish, so a blanket prohibition could unreasonably penalize operators who otherwise wish to avoid whale sharks. Another important element of such a measure is the development of best practices for handling and safe release of these animals. (Under the Marine Mammal Protection Act, U.S. purse seiners are already prohibited from setting on cetaceans.) Two such measures were put forward at the 2010 Commission meeting but were not adopted.

In addition, WCPFC members will discuss other issues related to fishery monitoring and compliance with conservation measures.

For more information about the WCPFC meeting, see http://tinyurl.com/7vshkoh.

WCPFC = Western and Central Pacific Fisheries Commission; WCPFC8 = Eighth meeting of the Commission.

Enforcement Corner

Washington Shellfish Heist Discovered, Illegal Salmon Angling Foiled by Wildlife Enforcement

Illegal salmon angling in Oregon: On September 24th, at about 11:00 p.m., Senior Oregon Department of Fish and Wildlife Trooper Craig Gunderson received information from the chief operator at Bonneville Dam that there were boats fishing near the mouth of Eagle Creek on the Columbia River.

Knowing that there were a lot of salmon and steelhead stacked up in that vicinity, and it being unlawful to angle for game fish there after dark, he and Trooper Brent Ochesky responded by boat to check the area. After checking the Columbia River near the mouth of Eagle Creek, the Troopers spotted a headlamp up in Eagle Creek itself. The Troopers beached their boat and quietly walked in on foot to investigate at about 2:30 a.m., when they observed someone cleaning fish in the creek. After they watched him fillet four fish and discard the carcasses in the creek, they made contact. The suspect, Craig Iwase of Stevenson, Washington, was found to have 28 adult coho salmon in his possession, 15 of which were finclipped, and 13 non-finclipped. He had cut the adipose fins off of all but two of the non-finclipped fish. He claimed that he had caught three of the wild coho earlier in the day on the Kalama River in Washington, one wild and one hatchery coho soon thereafter in the Lewis River in Washington, and three wild and three hatchery fish between 8:00 p.m. and midnight in a closed section of Eagle Creek. It was also determined that three of the fish from Eagle Creek were foul-hooked. The subject was arrested and lodged in jail for the following charges: Angling Closed Stream; Angling Prohibited Hours; Unlawful Retention of Foul-Hooked Coho Salmon (three counts); Unlawful Possession of Non-Finclipped Coho Salmon (13 counts); Unlawful Possession of Finclipped Coho Salmon (15 counts); and Unlawful Possession of Mutilated Game Fish (11 counts).

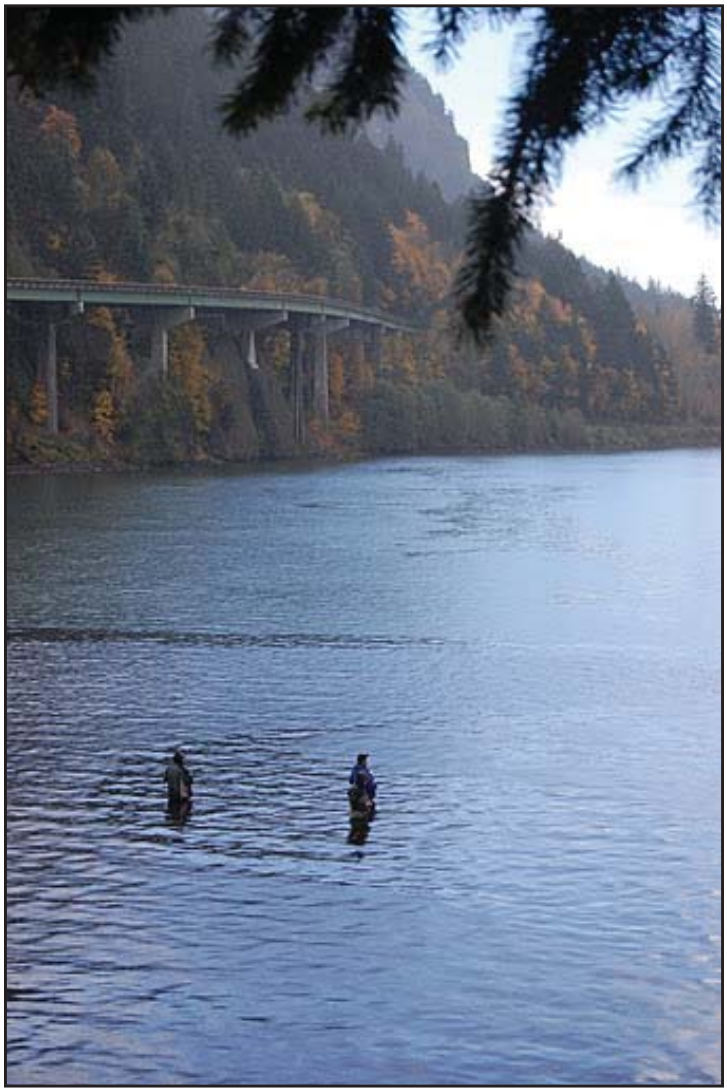
Iwase recently pled guilty to six misdemeanors and received a sentence of 45 days in jail, $7,000 restitution to the Oregon Department of Fish and Wildlife, $250 payable to the TIP (Turn in Poacher) Program, $300 in court costs, and a three year fishing license suspension. The TIP program was put in place to reward members of the public that report poaching-related activity that leads to the conviction of the offender (see story, next page).

Washington shellfish heist discovered: A recent shellfish case not only introduced poached shellfish into local and out-of-state markets, but also put the public's safety at risk. The investigation began with a tip from a shellfish shipper in 2010 who believed his supplier was up to no good.

In this case, enforcement was aided by a Joint Enforcement Agreement between NOAA Office of Law Enforcement and the West Coast States, and by the Federal Lacey Act. Law enforcement efforts can be hobbled by borders, while illegal activity is not. The Lacey Act can be used to pursue those who illegally harvest natural resources and place them into interstate or international commerce. Joint Enforcement Agreements provide Federal funding to focus on the cross-border movement of poached seafood and address illegal competition with industry.

A shellfish processor named Rodney Clark was at center stage of the shellfish case. Clark orchestrated the theft of more than $700,000 worth of oysters and clams from public and private beaches in the Hood Canal area. The product was then laundered with the aid of falsified paperwork, and widely marketed.

Continued on page 11



Angling at the mouth of Eagle Creek, Oregon (J. Gilden)

NOAA = National Oceanic and Atmospheric Administration; WDFW = Washington Department of Fish and Wildlife

Enforcement corner, continued from page 10

In order to commercially harvest shellfish, proof of beach or product ownership must be provided to the Department of Health, which issues an operator's license and a certification number unique to the beach you wish to harvest – provided that tested shellfish are free from contaminants or pollutants. The certification number tracks the product back to origin and follows each sack or container of shellfish through the marketplace. If an illness or outbreak occurs, the product is pulled from shelves and the offending beach is shut down. But if the paperwork is falsified, health officials can't trace where the shellfish came from. In this case, clams and oysters came from beaches that could have been certified if there was a lawful claim. But since the shellfish was all stolen, an alternate certification number associated with a played-out lease was used instead. Shellfish don't have to come from unsanitary waters to be toxic to humans. Handling and refrigeration is also critical. In this case, little care was shown for sanitation.

The poachers worked at night, stealing from whatever beach held enough product for a profitable outing. Law enforcement personnel from NOAA, the Coast Guard and Washington Department of Fish and Wildlife (WDFW) spent many long nights in bad weather tracking their movements. At one point, the surveillance team almost had to go into search and rescue mode when a barge full of stolen shellfish flipped over during a storm. But the thieves were able to swim to shore — wet, cold, and lucky.

Their luck ran out as investigators closed in. Armed with probable cause painstakingly developed under challenging conditions, WDFW Police served a search warrant at the home and business of Rodney Clark, owner of Quilcene Bay- based G&R Quality Seafoods. Clams and oysters were found on the property with false certification tags, sitting in the back of a van with no refrigeration. It was not his first run-in with the law, having served a ten-year prison sentence in the Montana Penitentiary for manufacture of narcotics. Clark was carted away to jail for possession of firearms as a convicted felon as the investigation really only began. Reams of files were analyzed, other suspects interviewed, and markets identified and contacted. After months of work, the King County Prosecutors Office charged Clark and 11 employees with theft and trafficking in stolen property. On Tuesday, November 22, 2011, Clark faced 17 felony charges and a potential of seven years in prison if convicted.

How to Report Poachers in Washington, Oregon or California

Poaching wildlife and damaging habitats affects present and future generations of wildlife, impacts communities and the economy, and creates enforcement challenges.

Poaching is the illegal taking or possession of game animals and fish, or of non-game, protected, threatened, or endangered fish and wildlife species. For example, hunting or fishing during a closed season or in a closed area, using illegal gear, or possessing more than the legal limits of fish or wildlife is poaching.

Rewards for Reporting Poachers

Washington, Idaho, Oregon, and California all have reward programs for people who report poachers when that report results in an arrest and conviction. In all states, you may also remain anonymous.

Washington: To report poaching in the state of Washington, call 877-933-9847, email reportpoaching@dfw.wa.gov, or text a tip to TIP411 (enter WDFWTIP (a space) and the Report). You may also report online at http://tinyurl.com/ccbsd9r.

Oregon: To report a wildlife and/or habitat law violation or suspicious activity, call the TIP (Turn-In-Poachers) Hotline: 1-800-452-7888 or email TIP@state.or.us. When reporting a violation, advise the trooper of your interest in requesting the reward. TIPs can also remain anonymous. For more information, see http://tinyurl.com/cj9xkkw.

Idaho: Call 1-800-632-5999.

California: To report poachers and polluters, call 1-888-DFG-CALTIP (888 334-2258), 24 hours a day, seven days a week.

When Reporting a Poacher

If you believe you have just witnessed a fish/wildlife violation, gather all the necessary information to report:

- Automobile license number, make, color, model, year, general condition (4x4, camper/canopy, etc.).
- Description of person(s) that committed the violation (sex, general age, race, hair color, general build, name/address if known).
- Type of violation, where and when it occurred (time, Game Management Unit, GPS coordinates, road junctions), and species involved.

Immediate reporting will significantly increase the ability of an Officer to contact the violator while still in the field. Use your cell phone if you are in a coverage area.

Never confront a poacher. Avoid getting too close to or examining a dead animal, because such actions may contaminate the site and make an investigation difficult. Be careful not to disturb the crime scene.

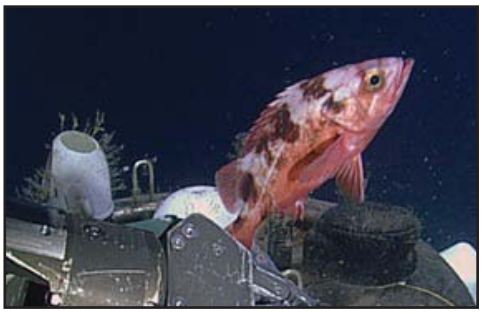
Groundfish stock assessments, continued from page 1

Bocaccio South of 40°10' N latitude

An update of the 2009 bocaccio assessment was reviewed by the SSC in June 2011. The update model provided an unrealistic result—an extremely strong 2010 year class—which compelled Dr. John Field, the stock assessment author, to recommend an alternative model that did not meet the Terms of Reference for an update assessment. The strong 2010 year class was inferred from length frequency data collected in the NMFS Northwest Fisheries Science Center (NWFSC) shelf-slope trawl survey. Although other data sources also suggest that the 2010 year class may be well above average, the magnitude of the 2010 recruitment estimate from Dr. Field's assessment was unprecedented. A year class of this magnitude has a large influence on bocaccio stock dynamics. It would result in the stock reaching the rebuilding target in 2013, when the year class becomes mature, regardless of catch levels, even catch levels up to the overfishing limit.

Dr. Field proposed a base model that uses a time series of pre-recruit (age 0) abundance data from the southern California power plant impingement dataset. This index was not included in the 2009 base model; however, it was re-evaluated following the 2009 stock assessment when updated data became available, and has a strong correlation with the model estimates of recruitments. Dr. Field considered this index a more reliable indicator of impending year class strength than the NWFSC shelf-slope trawl dataset.

The SSC Groundfish Subcommittee reviewed the new assessment recommended by Dr. Field in the late September "mop-up" panel, and the entire SSC further reviewed the assessment in November. The SSC agreed with Dr. Field on the proper model to inform bocaccio management for the next management cycle, and recommended the revised assessment as best available science. The revised model estimates bocaccio depletion at 26 percent of initial biomass at the start of 2011, and suggests that rebuilding is on track with current expectations under the Council's rebuilding plan. New data from the NWFSC trawl survey and other sources should better inform the actual strength of the 2010 year class in the next few years. The SSC recommended a full bocaccio assessment be conducted next time this stock is assessed.



A darkblotched rockfish emerges from a scientific instrument float (Neptune Canada)

Darkblotched Rockfish

An updated darkblotched rockfish assessment was presented at the June 2011 Council meeting, which estimated the 2009 depletion to be 15.1 percent, lower than the depletion of 27.5 percent reported in the 2009 update assessment. This change is unexpectedly large for an update assessment. Therefore, the Council recommended the darkblotched assessment be revisited at the mop-up panel meeting in September.

A number of structural changes were recommended for the darkblotched assessment. For technical details, see http://tinyurl.com/c7e5urh. The SSC Groundfish Subcommittee endorsed this revised assessment model, which was subsequently recommended by the SSC and adopted by the Council in November.

The revised assessment estimates that depletion in spawning output was 30.2 percent at the start of 2011. The SSC recommended a full darkblotched rockfish assessment be conducted next time this stock is assessed.

Rebuilding Analyses

The SSC Groundfish Subcommittee reviewed new rebuilding analyses for bocaccio, canary rockfish, darkblotched rockfish, Pacific ocean perch, petrale sole, and yelloweye rockfish at the September mop-up panel meeting. These rebuilding analyses were reviewed by the entire SSC in November and subsequently adopted by the Council. A new stock assessment and rebuilding analysis for cowcod was not conducted this year since no new data were available to inform the status of the stock.

The new rebuilding analyses indicated that rebuilding progress for four of the overfished stocks (petrale sole, bocaccio, and darkblotched and yelloweye rockfish) are one to eight years ahead of schedule. The new rebuilding analysis for petrale sole projects the stock will reach the rebuilding target in 2013, three years ahead of schedule. The SSC recommends a new full assessment of petrale sole be done to confirm this result.

New assessments and rebuilding analyses for canary rockfish and Pacific ocean perch indicate a fundamental change in our understanding of stock status that compelled a change to their rebuilding plans. The new canary rockfish rebuilding analysis indicates that rebuilding is slightly behind schedule, and that the stock will not reach the target biomass level by the target year of 2027 with at least a 50 percent probability, even if all harvest is eliminated beginning in 2013. The new Pacific ocean perch rebuilding analysis indicates that rebuilding the stock will require significantly more time than previously estimated. The change in our understanding of Pacific ocean perch stock status is mainly due to a higher estimate of initial, unfished biomass (B_0) and a higher target biomass level, rather than to the current biomass level. This in turn warrants revisions to the target year in the Pacific ocean perch rebuilding plan. The preliminary preferred alternatives for revised rebuilding plans for these two stocks are shown in Table 2, page 18.

B_0 = an estimate of what the biomass of a stock would be if it had never been fished; NMFS = National Marine Fisheries Service; NWFSC = NMFS Northwest Fisheries Science Center; SSC = Scientific and Statistical Committee

2013-2014 groundfish harvest specifications, continued from page 2

ing modifications to selected Rockfish Conservation Area coordinates, removing or reducing the lingcod length limit in the individual fishing quota (IFQ) fishery (all gears), and providing for shelf rockfish retention in recreational fisheries in the California Cowcod Conservation Areas. The Council may also consider changes to Amendment 21 widow rockfish allocations in the trawl sector (i.e., between the at-sea sectors and shorebased IFQ fishery). The Council also expressed interest in implementing a sorting requirement for aurora, shortraker, and rougheye rockfish north of 40°10' N latitude, and blackgill rockfish south of 40°10' N latitude, which would provide for more robust tracking of these species.

The Council is scheduled to develop final preferred ACLs and a preliminary preferred suite of 2013-2014 management measures at its April 2012 meeting. After public review, the Council will take final action on this issue in June 2012.

Trailing actions, continued from page 3

share holders would be reissued shares for northern and southern areas in amounts equivalent to their holdings of the coastwide lingcod quota. For example, a person with 1% of the coastwide lingcod quota would receive 1% of the southern lingcod quota and 1% of the northern lingcod quota. In addition, in order to facilitate monitoring, it is likely that trawl fishermen would not be allowed to fish both north and south of the dividing line on the same trip.

Also at this meeting, NMFS announced that quota share and quota pound account balances, vessel account balances, and catch history assignment amounts will become publicly available in the near future for each individual fishing quota program account. The names of account owners and permit owners are already publicly available. Release of this information is expected to enhance function of quota share markets and contribute to achieving the optimum yield for the fishery.

New salmon methodology, continued from page 5

Harvest Model will be used by NMFS and the Council's Salmon Technical Team and Salmon Advisory Subpanel to assess fisheries impacts beginning in 2012.

Ecosystem plan, continued from page 7

mine if additional protection of forage species is necessary, and how such protections would be implemented. The Council generally supported the list of forage species proposed by the EPDT in November (see http://tinyurl.com/bp8wlyu, Appendix A) and their characterization of potential fishery development. In turn, the Council asked for more details on how such new forage fisheries could develop, and on state and Federal measures to protect forage fish. Despite expectations raised by nongovernmental organizations, the Council did not plan to adopt protective measures at the November meeting, since it would have been beyond the scope of Council action scheduled for that meeting. In fact, the Council did not have proper notice, documentation, or administrative record to take such action in November. The Council has directed the EPDT to further review this topic before determining an appropriate course.

The Council expressed support for the draft fishery ecosystem plan and for the process and schedule for plan development. The Council is tentatively scheduled to address the matter next in June, 2012.

Council members and staff, June 2011. Left to right: David Sones (tribal representative), Marija Vojkovich (California), Don McIsaac (Executive Director), Frank Lockhart (NMFS Northwest Region), Judson Feder (NOAA General Counsel) Tim Roth (US Fish & Wildlife Service), Buzz Brizendine (California), Gordy Williams (Alaska), Dale Myer (Washington), Michele Culver (Washington), Mark Cedergreen (Washington), Brian Corrigan (US Coast Guard), Herb Pollard (Idaho), Marci Yaremko (Callfornia), Dave Ortmann (Idaho), Rod Moore (Oregon), Jerry Mallet (Idaho), Dorothy Lowman (Oregon), Mark Helvey (NMFS Southwest Region), David Crabbe (California), Dan Wolford (California), Steve Williams (Oregon), Don Hansen (staff), Gway Kirchner (Oregon)

ACL = annual catch limit; IFQ = individual fishing quota; EPDT = Ecosystem Plan Development Team; NMFS = National Marine Fisheries Service

Sardines, continued from page 4

31, 2011, the Quinault Indian Nation provided notice of their intent to participate in the 2012 sardine fishery, with an anticipated harvest of up to 9,000 mt. Treaties between the United States and Pacific Northwest Indian Tribes reserve the rights of the Tribes to take fish at usual and accustomed fishing grounds, and Federal regulations provide a process by which Tribes may request an allocation and the Secretary of Commerce will implement the Indian fishing right. The allocated tonnage will be deducted from the annual catch target/harvest guideline (see table).

ACT = 109,409 mt; Tribal set aside = 9,000 mt; EFP set aside = 3,000 mt				
	Jan 1- Jun 30	Jul 1- Sep 14	Sep 15 – Dec 31	Total
Seasonal Allocation (mt)	34,093	38,964	24,352	97,409
Incidental Set Aside (mt)	1,000	1,000	1,000	3,000
Adjusted Allocation (mt)	33,093	37,964	23,352	94,409

Sardine management measures for 2012

The Council adopted the SWFSC's stock assessment for use in 2012 management, recommending an overfishing limit of 154,781 mt, an acceptable biological catch of 141,289 mt, an annual catch limit of 141,289 mt, and an annual catch target/harvest guideline of 109,409 mt. Subtracting a tribal set-aside of up to 9,000 mt and an exempted fishing permit set-aside of 3,000 mt (recommended by the Coastal Pelagic Species Advisory Subpanel) provides 97,409 mt for the non-tribal fishery, as shown in the following table. Incidental catch limits during closed periods and rollover provisions for quota overages and underages will remain the same as in prior years.

New Sardine Survey Method

The Council considered a proposal to review a new sardine survey method, the Canadian West Coast Vancouver Island Swept Area Trawl Survey, for use in future stock assessments. This survey has not been used for U.S. sardine stock assessments in the past, and the Council strongly supported a review. The review is tentatively slated for May, 2012.

The Council also recommended a subsequent science workshop to review key fishery management parameters related to sardine management. These may include parameters such as F_{MSY}, productivity regime shifts in F_{MSY} application, and geographic distribution dynamics. No date has been set yet.

Recipe: Spicy Chinese Dungeness Crab

- 2 whole Dungeness crabs
- 2 tablespoons vegetable oil
- 1 (3-inch) knob ginger, minced (about 3 tablespoons)
- 5 cloves garlic, minced (about 2 tablespoons)
- 3 to 4 fresh red bird's-eye chiles, seeded and minced
- 1 tablespoon Chinese fermented black beans or black bean sauce
- 1 tablespoon shaohsing rice wine or sherry
- 1/2 cup plain tomato sauce, purchased or homemade
- 1/4 cup mild chili sauce, such as Heinz
- 1 tablespoon sugar
- 2 teaspoons kosher salt
- 1/4 teaspoon ground white pepper
- 2 teaspoons cornstarch
- 2 large eggs, lightly beaten
- 2 tablespoons fresh cilantro, chopped
- 1 scallion, thinly sliced on bias

Using a cleaver or large chef's knife, cut Dungeness crabs in half lengthwise and remove back shell and spongy green matter. Remove claws from body section and, using the back of a cleaver or chef's knife, crack in several places. Cut each body section into two or three pieces, leaving legs attached. Rinse all pieces thoroughly and pat completely dry.

In a wok or large skillet over moderate heat, heat the oil until hot but not smoking. Add ginger, garlic, and chiles, and stir-fry until fragrant, about 30 seconds. Add black beans and stir-fry several seconds. Add crab and stir-fry until meat begins to turn opaque, about one minute. Stir in rice wine, tomato and chili sauces, sugar, salt, pepper, and one cup water. Bring to a boil, then reduce heat to low and simmer, uncovered, stirring frequently, until crab meat is fully cooked, three to four minutes.

In small bowl, whisk together cornstarch and two tablespoons water. Stir into crab mixture in pan and simmer, uncovered, until sauce thickens, about one minute. Stir in eggs and simmer, uncovered, until bits of egg are fully cooked, about one minute. Stir in cilantro and scallion. Serve immediately with steamed Chinese buns or baguette slices.

Source: Epicurious.com (http://tinyurl.com/748ne62)

ACT = annual catch target; EFP = exempted fishing permit; F_{MSY} = the fishing rate that produces maximum sustainable yield; HG = harvest guideline; mt = metric ton; SWFSC = NMFS Southwest Fisheries Science Center

Schedule and Process for Developing 2012 Ocean Salmon Fishery Management Measures

Nov 1-7, 2011	The Council and advisory entities meet at the Hilton Orange County, Costa Mesa, California, to consider any changes to methodologies used in the development of abundance projections or regulatory options.
Jan. 17-20, 2012	The Salmon Technical Team (STT) and National Marine Fisheries Service (NMFS) economist meet in Portland, Oregon to draft *Review of 2011 Ocean Salmon Fisheries*. This report summarizes seasons, quotas, harvest, escapement, socioeconomic statistics, achievement of management goals, and impacts on species listed under the Endangered Species Act. (February 7 print date, available on-line February 10.)
Feb. 21-24	STT meets in Portland, Oregon to complete *Preseason Report I Stock Abundance Analysis and Environmental Assessment Part 1 for 2012 Ocean Salmon Fishery Regulations*. This report provides key salmon stock abundance estimates and level of precision, harvest and escapement estimates when recent regulatory regimes are projected on 2012 abundance, and other pertinent information to aid development of management options (February 29 print date, March 1 mailed to the Public and available on-line).
Feb. 25 through Mar. 1	State and tribal agencies hold constituent meetings to review preseason abundance projections and range of probable fishery options.
Mar. 2-7	Council and advisory entities meet at the DoubleTree Hotel Sacramento, CA to adopt 2012 regulatory alternatives for public review. The Council addresses inseason action for fisheries opening prior to May 1 and adopts preliminary alternatives on March 4, adopts tentative alternatives for STT analysis on March 5, and final alternatives for public review on March 7.
Mar. 12-16	The STT completes *Preseason Report II: Proposed Alternatives and Environmental Assessment Part 2 for 2012 Ocean Salmon Fishery Regulations* (March 19 print date, March 20 available to the public).
Mar. 12-31	Management agencies, tribes, and public develop their final recommendations for the regulatory alternatives. Public sessions of the North of Cape Falcon Forum meetings are tentatively scheduled for March 12 in Olympia, Washington and March 29 in Lynwood, Washington.
Mar. 20	Council staff distributes *Preseason Report II: Proposed Alternatives and Environmental Assessment Part 2 for 2012 Ocean Salmon Fishery Regulations* to the public. The report includes the public hearing schedule, comment instructions, alternative highlights, and tables summarizing the biological and economic impacts of the proposed management alternatives.
Mar. 26-27	Sites and dates of public hearings to review the Council's proposed regulatory options are: Westport, Washington (March 26); Coos Bay, Oregon (March 26); and Eureka, California (March 27). Comments on the options will also be taken during the Council meeting on April 2 in Seattle, Washington.
Apr. 1-6	Council and advisory entities meet to adopt final regulatory measures at the Sheraton Seattle Hotel, Seattle, Washington. *Preseason Report II: Proposed Alternatives and Environmental Assessment Part 2 for 2012 Ocean Salmon Fishery Regulations,* results from the public hearings, and information developed at the Council meeting is considered during the course of the week. The Council will tentatively adopt final regulatory measures for analysis by the STT on April 2. Final adoption of recommendations to NMFS is tentatively scheduled to be completed on April 6.
Apr. 7-20	The STT and Council staff completes *Preseason Report III: Analysis of Council-Adopted Management Measures for 2012 Ocean Salmon Fisheries* (April 16 print date, mailed to the Council and available to the public April 17). Council and NMFS staff completes required National Environmental Policy Act documents for submission.
Apr. 17	Council staff distributes adopted ocean salmon fishing management recommendations, and *Preseason Report III* is made available to the public.
May 1	NMFS implements Federal ocean salmon fishing regulations.

NMFS = National Marine Fisheries Service; STT = Salmon Technical Team

Status Report of the 2011 Ocean Salmon Fisheries off Washington, Oregon, and California
Preliminary data through September 30, 2011[a/]

	Season	Effort	CHINOOK			COHO[b/]		
Fishery and Area	Dates	Days Fished	Catch	Quota	Percent	Catch	Quota	Percent
COMMERCIAL								
Treaty Indian[c/]	5/1-6/30	285	9,800	19,750	50%	Non-Retention		
	7/1-9/6	292	21,583	21,250	102%	13,484	42,000	32%
Non-Indian North of Cape Falcon[d/]	5/1-6/30	1,520	20,391	20,600	99%	Non-Retention		
	7/1-9/7	815	9,398	10,300	91%	3,517	12,800	27%
Cape Falcon - Humbug Mt.	4/15-8/31	2,600	24,000	None	NA	Non-Retention		
Humbug Mt. - OR/CA Border	5/1-5/31	62	622	NA	NA	Non-Retention		
	6/1-6/30	48	235	1,500	16%	Non-Retention		
	7/1-7/31	21	35	1,200	3%	Non-Retention		
	8/1-8/31	80	336	1,000	34%	Non-Retention		
OR/CA Border - Humboldt S. Jetty	7/2-7/18	155	1,576	1,400	113%	Non-Retention		
	8/1-8/2	50	813	880	92%	Non-Retention		
Humboldt S. Jetty - Horse Mt.	Closed							
Horse Mt. - Pt. Arena	7/23-8/29	1,400	37,600	None	NA	Non-Retention		
	9/1-30	150	500	None	NA	Non-Retention		
Pt. Arena - Pt. Sur	5/1-5/31	1,400	10,700	None	NA	Non-Retention		
	6/25-8/29	1,900	17,300	None	NA	Non-Retention		
	9/1-30	200	800	None	NA	Non-Retention		
Pt. Reyes-Pt. San Pedro	10/3-14	NA	NA	None	NA	Non-Retention		
Pt.Sur - U.S./Mexico Border	5/1-8/29	200	1,000	None	NA	Non-Retention		
RECREATIONAL								
U.S./Canada Border - Cape Falcon[e/f/]	6/18 - 6/25	5,032	2,396	2,396	100%	Non-Retention		
U.S./Canada Border - Cape Alava[d/f/]	6/26-9/18	10,409	2,766	3,330	83%	3,042	5,990	51%
Cape Alava-Queets River[d/f/]	6/26-9/18	3,950	1,443	1,410	102%	2,041	2,550	80%
	9/24-10/9	268	62	50	124%	35	50	70%
Queets River - Leadbetter Pt.[d/f/]	6/26-9/18	29,621	17,172	17,600	98%	13,786	24,860	55%
Leadbetter Pt.-Cape Falcon[d/f/]	6/26-9/30	31,683	6,904	7,710	90%	26,688	33,600	79%
Cape Falcon - Humbug Mt.	3/15-9/30	33,100	2,189	None	NA	Non-Retention		
	7/2-8/13	Included Above		NA	NA	6,125	15,000	41%
	9/1-7	Included Above		NA	NA	6,627	5,900	112%
Humbug Mt. - OR/CA Border (OR-KMZ)	5/14-9/5	3,100	550	None	NA	Non-Retention		
OR/CA Border - Horse Mt. (CA-KMZ)	5/14-9/5	14,800	9,800	None	NA	Non-Retention		
Horse Mt. - Pt. Arena (Ft. Bragg)	4/2-10/30	14,200	7,100	None	NA	Non-Retention		
Pt. Arena - Pigeon Pt. (San Francisco)	4/2-10/30	30,800	18,400	None	NA	Non-Retention		
Pigeon Pt. - U.S./Mexico Border (Monterey)	4/2-9/18	27,800	12,400	None	NA	Non-Retention		

	Effort			Chinook Catch			Coho Catch		
TOTALS TO DATE (through 9/30)	2011	2010	2009	2011	2010	2009	2011	2010	2009
TROLL									
Treaty Indian	**577**	952	803	**31,383**	33,381	12,254	**13,484**	11,485	60,663
Washington Non-Indian	**2,052**	2,436	1,991	**26,872**	45,099	12,316	**3,054**	2,104	20,055
Oregon	**3,094**	4,060	1,159	**28,145**	37,571	817	**463**	1,038	21,968
California	**5,455**	1,979	0	**70,289**	15,098	0	**0**	0	0
Total Troll	**11,178**	9,427	3,953	**156,689**	131,149	25,387	**17,001**	14,627	102,686
RECREATIONAL									
Washington Non-Indian	**68,567**	80,801	101,348	**29,123**	36,829	12,254	**39,553**	36,241	138,401
Oregon	**40,464**	50,001	82,509	**3,809**	4,301	1,359	**12,666**	18,298	89,600
California	**87,600**	48,757	5,359	**45,185**	14,697	672	**0**	171	8
Total Recreational	**196,631**	179,559	189,216	**78,117**	55,827	14,285	**52,219**	54,710	228,009
PFMC Total	**N/A**	N/A	N/A	**234,806**	186,976	39,672	**69,220**	69,337	330,695

a/ Washington sport estimates are through October 9.

b/ All non-Indian coho fisheries are mark-selective.

c/ Treaty Indian effort is reported as landings.

d/ Numbers shown as Chinook quotas for non-Indian troll and recreational fisheries North of Falcon are guidelines rather than quotas; only the total Chinook allowable catch is a quota.

e/ Mark-selective fishery for Chinook

f/ Original quota of 4,800 marked Chinook; unharvested remainder was trasnsferred at an impact-neutral rate (total transfer of 1,200 Chinook) into the sub-area Chinook guidelines assigned to the summer recreational fishery (non-selective for Chinook). Original summer sub-area Chinook guidelines were: 3,200 from the U.S/Canada border to Cape Alava, 1,350 from Cape Alava to the Queets River, 16,900 from Queets River to Leadbetter Pt., and 7,400 from Leadbetter Pt. to Cape Falcon.

Groundfish Table 1: Final preferred 2013 and 2014 overfishing limits (OFLs in metric tons) and acceptable biological catches (ABCs in mt) and preliminary preferred 2013 and 2014 annual catch limits (ACLs in mt) for non-overfished West Coast groundfish stocks and stock complexes (stocks with new assessments in caps; PPA = preliminary preferred alternative).

Stock	2013 OFL	2014 OFL	2013 ABC	2014 ABC	2012 ACL	PPA ACLs		2013-14 ACL Range for Analysis a/	
						2013	2014	Alt 1	Alt 2
NON-OVERFISHED STOCKS									
Arrowtooth Flounder	7,391	6,912	6,157	5,758	12,049	6,157	5,758		
Black Rockfish (OR-CA)	1,159	1,166	1,108	1,115	1,000	1,000	1,000		
Black Rockfish (WA)	430	428	411	409	415	411	409		
Cabezon (CA)	170	165	163	158	168	163	158		
Cabezon (OR)	49	49	47	47	48	47	47		
California scorpionfish	126	122	120	117	126	120	117		
Chilipepper S. of 40°10'	1,768	1,722	1,690	1,647	1,789	1,690	1,647		
DOVER SOLE	**92,955**	**77,774**	**88,865**	**74,352**	25,000	**25,000**	**25,000**		
English Sole	7,129	5,906	6,815	5,646	10,151	6,815	5,646		
Lingcod N. of 42° (OR & WA) b/	2,102	1,984	2,010	1,897	2,151	2,010	1,897		
Lingcod S. of 42° (CA) b/	2,566	2,454	2,137	2,044	2,164	2,137	2,044		
Lingcod N. of 40°10' b/	3,334	3,162	3,036	2,878	NA	3,036	2,878		
Lingcod S. of 40°10' b/	1,334	1,276	1,111	1,063	NA	1,111	1,063		
Longnose skate	2,902	2,816	2,774	2,692	1,349	2,000	2,000	2,000	
Longspine Thornyhead (coastwide)	3,391	3,304	2,825	2,752	NA	NA	NA		
Longspine Thornyhead N. of 34°27'	NA	NA	NA	NA	2,064	2,009	1,958		
Longspine Thornyhead S. of 34°27'	NA	NA	NA	NA	366	356	347		
Pacific Cod	3,200	3,200	2,221	2,221	1,600	1,600	1,600		
SABLEFISH (coastwide)	**6,621**	**7,158**	**6,045**	**6,535**	NA	NA	NA		
Sablefish N. of 36°	NA	NA	NA	NA	5,347	**4,012**	**4,349**		
Sablefish S. of 36°	NA	NA	NA	NA	1,298	**1,439**	**1,560**		
Shortbelly	6,950	6,950	5,789	5,789	50	50	50		
Shortspine Thornyhead (coastwide)	2,333	2,310	2,230	2,208	NA	NA	NA		
Shortspine Thornyhead N. of 34°27'	NA	NA	NA	NA	1,556	1,540	1,525		
Shortspine Thornyhead S. of 34°27'	NA	NA	NA	NA	401	397	393		
Splitnose S. of 40°10'	1,684	1,747	1,610	1,670	1,538	1,610	1,670		
Starry Flounder	1,825	1,834	1,520	1,528	1,360	1,520	1,528		
WIDOW	**4,841**	**4435**	**4,598**	**4,212**	600	**1,500**	**1,500**	**1,500**	**2,500**
Yellowtail N. of 40°10'	4,579	4,584	4,378	4,382	4,371	4,378	4,382		
STOCK COMPLEXES									
Minor Nearshore Rockfish North	110	110	94	94	99	94	94		
Minor Shelf Rockfish North	2,183	2,195	1,920	1,932	968	968	968		
Minor Slope Rockfish North	1,518	1,553	1,381	1,414	1,160	1,160	1,160		
Minor Nearshore Rockfish South	1,164	1,160	1,005	1,001	990	990	990		
Minor Shelf Rockfish South	1,910	1,913	1,617	1,620	714	714	714		
Minor Slope Rockfish South	681	685	618	622	626	618	622		
Other Flatfish	10,060	10,060	6,982	6,982	4,884	4,884	4,884		
Other Fish c/	3,328	3,298	2,286	2,265	5,575	2,286	2,265		

a/ The 2012 ACLs will also be analyzed in the DEIS.

b/ The Council requested analysis of shifting the lingcod management line from the OR-CA border at 42° N latitude to 40°10' N latitude. An analysis using swept area biomass estimates of lingcod derived from the NWFSC trawl survey indicates 48% of the biomass south of 42° N latitude occurs north of 40°10' N latitude. The 40°10' N latitude management line for lingcod is the Council preferred alternative for lingcod specifications to be analyzed in the DEIS.

c/ Values for these specifications are the sum of known contributions of component stocks. Fully specified OFLs and ABCs would require the addition of new species to the complex (e.g., non-FMP skates and grenadiers) since many of these species are landed in generic market categories (e.g., unspecified skates).

ABC = acceptable biological catch; ACL = annual catch limit; DEIS = draft environmental impact statement; FMP = fishery management plan; NWFSC = Northwest fisheries Science Center; OFL = overfishing limit; PPA = preliminary preferred alternative

Groundfish Table 2, Part 1. Estimated time to rebuild and spawning potential ratio harvest rate relative to alternative 2013-2014 annual catch limits for overfished West Coast groundfish stocks (numbered alternatives are those that were chosen for detailed analysis in the draft environmental impact statement)

Stock	Current Ttarget	Current SPR or Harvest Control Rule	PPA Ttarget	ACL Alt.	ACLs (mt)		SPR or Harvest Control Rule	Median Time to Rebuild	Rebuilding Duration Beyond T@F=0 (yrs.)	Prob. of Rebuilding by Ttarget	Prob. of Rebuilding by Tmax	Current Tmax	Re-est. Tmax
					2013	2014							
Bocaccio S of 40°10' N lat. a/	2022	77.7%	2022		0	0	100%	2019	0	88.0%	99.0%	2031	2031
					133	143	90.0%	2019	0	77.0%	97.0%		
					248	263	82.3%	2020	1	NA	NA		
				1, PPA	320	337	77.7%	2021	2	60.0%	90.0%		
					453	471	70.0%	2023	4	49.0%	70.0%		
					691	705	60.0%	2027	8	33.0%	63.0%		
					837	843	53.9%	2031	12	23.0%	51.0%		
Canary	2027	88.7%	2030	1	0	0	100%	2028	0	48.2%	75.0%	2046	2050
				2	48	49	95.1%	2028	0	41.2%	75.0%		
				3	101	104	90.0%	2029	1	36.4%	75.0%		
				4, PPA	116	119	88.7%	2030	2	34.4%	75.0%		
				5	147	151	85.9%	2030	2	31.7%	75.0%		
					184	187	82.9%	2031	3	29.9%	75.0%		
				6	216	220	80.3%	2032	4	27.9%	74.9%		
					302	306	74.0%	2035	7	26.1%	73.6%		
					394	397	67.9%	2040	12	25.1%	66.3%		
					449	451	64.7%	2045	17	25.0%	59.4%		
					752	753	62.2%	2050	22	25.0%	50.0%		
Cowcod b/	2068	82.7%	2068		0	0	100%	2060	0	NA	78.4%	2098	2097
					2	2	90.0%	2064	4	NA	72.4%		
				1, PPA	3	3	82.7%	2068	8	50.0%	66.2%		
					4	4	79.0%	2071	11	NA	66.2%		
					5	5	74.2%	2074	14	NA	66.2%		
					9	9	59.7%	2097	37	NA	53.3%		
Darkblotched	2025	64.9%	2025		0	0	100%	2016	0	100.0%	100.0%	2037	2037
				1, PPA	317	330	64.9%	2017	1	100.0%	100.0%		
					347	360	62.6%	2017	1	100.0%	100.0%		
					353	366	62.1%	2018	2	100.0%	100.0%		
					372	385	60.7%	2018	2	100.0%	100.0%		
					423	437	57.1%	2018	2	100.0%	100.0%		
					488	501	53.0%	2020	4	72.8%	91.0%		
					553	565	49.0%	2025	9	NA	NA		
					676	685	43.0%	2037	21	NA	50.0%		

ACL = annual catch limit; PPA = preliminary preferred alternative; SPR = Spawning potential ratio. The ratio of spawning potential per recruit under a given fishing regime, relative to the spawning potential per recruit with no fishing. T_{max} = The maximum time period to rebuild an overfished stock, according to National Standard Guidelines. T_{target} = The target year, set by policy, for a fish stock to be completely rebuilt.

Groundfish Table 2, Part 2. Estimated time to rebuild and spawning potential ratio harvest rate relative to alternative 2013-2014 annual catch limits for overfished West Coast groundfish stocks (numbered alternatives are those that were chosen for detailed analysis in the draft environmental impact statement)

Stock	Current Ttarget	Current SPR or Harvest Control Rule	PPA Ttarget	ACL Alt.	ACLs (mt)		SPR or Harvest Control Rule	Median Time to Rebuild	Rebuilding Duration Beyond T@F=0 (yrs.)	Prob. of Rebuilding by Ttarget	Prob. of Rebuilding by Tmax	Current Tmax	Re-est. Tmax
Pacific ocean perch	2020	86.4%	2051	1	0	0	100%	2043	0	25.0%	85.5%	2045	2071
					16	17	98.4%	2043	0	25.0%	84.0%		
					35	36	96.5%	2044	1	25.0%	83.0%		
					58	60	94.3%	2045	2	25.0%	81.0%		
				2	74	76	92.9%	2046	3	25.0%	79.0%		
					89	91	91.6%	2047	4	25.0%	78.0%		
					106	108	90.1%	2048	5	25.0%	77.0%		
					122	124	88.8%	2049	6	25.0%	76.0%		
					131	134	88.0%	2050	7	25.0%	75.0%		
					136	139	87.6%	2050	7	25.0%	75.0%		
				3, PPA	150	153	86.4%	2051	8	25.0%	73.0%		
					158	161	85.8%	2052	9	25.0%	72.6%		
					163	167	85.4%	2052	9	25.0%	72.0%		
					175	178	84.5%	2053	10	25.0%	71.0%		
					182	186	83.9%	2054	11	25.0%	70.1%		
					199	203	82.6%	2055	12	25.0%	68.0%		
					209	213	81.9%	2056	13	25.0%	NA		
				4	222	226	80.9%	2057	14	25.0%	NA		
				5	247	251	79.2%	2060	17	25.0%	62.0%		
					291	295	76.2%	2065	22	25.0%	55.8%		
					328	333	73.8%	2071	28	25.0%	50.0%		
Petrale	2016	25-5 Rule	2016		0	0	100%	2013	0	100.0%	100.0%	2021	2021
					867	1,008	60%	2013	0	100.0%	100.0%		
					1,265	1,432	50%	2013	0	100.0%	100.0%		
					1,831	1,994	40%	2013	0	100.0%	100.0%		
				1, PPA	2,592	2,652	25-5 Rule (=ABC @ 28% depletion in 2013)	2013	0	100.0%	100.0%		
Yelloweye	2074	76.0%	2074		0	0	100%	2045	0	99.2%	99.9%	2089	2083
					9	9	86.4%	2053	8	85.3%	93.7%		
					14	14	80.5%	2060	15	75.1%	82.8%		
					15	15	79.5%	2061	16	73.2%	81.0%		
					17	18	76.5%	2066	21	64.1%	73.9%		
				1, PPA	18	18	76.0%	2067	22	62.1%	72.9%		
					21	21	72.7%	2074	29	50.0%	61.3%		
					24	25	69.7%	2083	38	37.2%	50.0%		

a/ All bocaccio alternatives have been reduced from the rebuilding analysis results by 6% to represent the portion of the stock south of 40° 10' N lat.

b/ All cowcod alternatives have been doubled from the rebuilding analysis to account for the Monterey contribution.

ACL = annual catch limit; PPA = preliminary preferred alternative; SPR = Spawning potential ratio. The ratio of spawning potential per recruit under a given fishing regime, relative to the spawning potential per recruit with no fishing. T_{max} = The maximum time period to rebuild an overfished stock, according to National Standard Guidelines. T_{target} = The target year, set by policy, for a fish stock to be completely rebuilt.

Schedule of Events

For more information on these meetings, please see our website (www.pcouncil.org/events/csevents.html) or call toll-free (866) 806-7204.

Highly Migratory Species Management Team

Purpose: To discuss work assignments for the March 2012 Council meeting, including topics related to albacore tuna and swordfish management. Also, to begin work on the next Stock Assessment and Fishery Evaluation document.
Dates: January 10-12, 2012
Location: NMFS Southwest Fisheries Science Center, La Jolla, California
Contact: Kit Dahl (kit.dahl@noaa.gov)

Essential Fish Habitat Review Committee

Purpose: To work on the first phase of the groundfish essential fish habitat review
Dates: January 17-18, 2012
Location: TBA, Portland, Oregon
Contact: Kerry Griffin (kerry.griffin@noaa.gov)

Pacific Fishery Management Council Meeting

Dates: March 2-7, 2012
Location: Doubletree Hotel Sacramento, Sacramento California
Contact: Carolyn Porter (carolyn.porter@noaa.gov)

March Public Comment and Briefing Book Deadlines

The next Council meeting will be held March 2-7, 2012, at the Doubletree Hotel Sacramento in Sacramento, California. Comments received by **11:59 p.m. on February 9** will be included in the briefing books mailed to Council members prior to the March meeting. Comments received by **11:59 p.m. on February 26** will be distributed to Council members at the onset of the March meeting. For more information on the briefing book, see http://www.pcouncil.org/council-operations/council-meetings/current-meeting/.

Pacific Council News
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