

GROUND FISH MANAGEMENT TEAM REPORT  
ON STATUS OF GROUND FISH FISHERIES AND INSEASON ADJUSTMENTS

The Groundfish Management Team (GMT) discussed the status of groundfish fisheries for 2003. The Recreational Fishery Information Network (RecFIN) effort and average weight estimates for California recreational fisheries for Wave 4 (July-August), were considerably higher than anticipated. This results in catch estimates for canary rockfish and lingcod that are significantly higher than the catches projected in the bycatch scorecard. Estimated landings of shallow and deeper nearshore rockfish species categories were also higher than expected. Catch estimates through Wave 5 (in mt), produced from RecFIN estimates through Wave 4 plus projections for Wave 5 using recent fishery data, for these species are:

Canary Rockfish - 15.3 mt (14 mt through Wave 4)  
Lingcod - 667.2 mt (509 mt through Wave 4)

Combining these California recreational catch estimates with the estimated catches in other recreational and commercial fisheries coastwide produces a total mortality estimate for canary rockfish of 52 mt (compared to a 44 mt optimum yield [OY]) and a total mortality estimate for lingcod of 956.4 mt, which exceeds the lingcod acceptable biological catch (ABC) of 841 mt. The California state harvest guidelines for shallow and deeper nearshore rockfish are also exceeded.

The GMT received a presentation from the Recreational Fishing Alliance (RFA) on California recreational fishery catch estimates. There was not sufficient data for the GMT to evaluate whether the methodology was sound; however, the catch and effort results presented were questionably low. The dataset and analysis was not complete enough to be considered for inseason action, and the GMT encourages RFA to work with California Department of Fish and Game (CDFG) to further develop and ground-truth this methodology.

The GMT also reviewed catch estimates from CDFG using different methodologies (which are detailed in Attachment 1), including stratifying the California data north and south of 40°10' and applying the effort and catch per unit effort (CPUE) estimates to those respective areas. This produced a slightly lower catch estimate of canary rockfish of 10.3 mt through Wave 4 (11.6 mt through Wave 5) for a total coastwide canary rockfish estimate of 48.3 mt; the lingcod estimate was reduced to 639 mt for California recreational, for a coastwide lingcod catch estimate of 928.2 mt.

Another CDFG strategy was reviewed, treating the Wave 4 effort estimate as an anomaly and applying a historical effort estimate. This produced a canary rockfish estimate of 11 mt and a lingcod estimate of 532 mt; resulting in a total catch estimate for lingcod of 821.2 mt which exceeds the lingcod OY, but would be 20 mt less than the ABC. Based on this information, the GMT has identified two alternatives for inseason action for the Council to consider:

**Option 1 - Inseason action that results in near-zero impacts to lingcod and canary rockfish**

Under this option, the following inseason adjustments would apply:

#### Commercial Coastwide

- Change the trawl Rockfish Conservation Area (RCA) to extend from the shoreline to 200 fms and not accommodate petrale areas.

The current trawl RCAs are:

North of 40°10' - Extends from 50 fms to 200 fms

Between 40°10' and 34°27' - Extends from 60 fms to 200 fms

South of 34°27' - Extends from 100 fms to 200 fms

- Change the non-trawl RCA to extend from the shoreline to 200 fms

The current non-trawl RCAs are:

North of 46°16' - Extends from the shoreline to 100 fms

Between 46°16' and 40°10' - Extends from 27 fms to 100 fms

Between 40°10' and 34°27' - Extends from 20 fms to 150 fms

South of 34°27' - Extends from 30 fms to 150 fms

#### California Selective Flatfish Trawl Exempted Fishing Permit (EFP)

- Close the California Selective Flatfish EFP, which is currently scheduled through November (Note: A request has been made to extend this EFP through December, but the extension has not yet been approved by NMFS.)

#### Recreational Coastwide

- Close recreational ocean and shore-based fisheries for Council-managed groundfish (currently open: Washington bottomfish fishery; Oregon bottomfish and lingcod fisheries; California bottomfish and lingcod fisheries)

#### **Option 2 - Inseason action that results in minimal impacts, particularly to lingcod**

In reviewing the depth closures available for inseason consideration, the coordinates for a 150-fm line north of 46°16' (Washington/Oregon border) were not specified in the final published rule and have not been publicly reviewed; however, coordinates for 150-fm line south of 46°16' were included. As a result, under this option, the following inseason adjustments would apply:

#### Commercial

##### Between U.S./Canada border and 46°16'

- Change the trawl RCA to extend from the shoreline to 200 fms and accommodate petrale areas
- Use the coordinates for the trawl RCA for the non-trawl RCA

##### South of 40°10'

- Change the trawl RCA to extend from the shoreline to 200 fms and accommodate petrale areas
- Change the non-trawl RCA to extend from the shoreline to 150 fms

### Recreational Coastwide

- Close recreational ocean and shore-based fisheries for Council-managed groundfish (currently open: Washington bottomfish fishery; Oregon bottomfish and lingcod fisheries; California lingcod and bottomfish fisheries)

The GMT believes that these trawl measures would result in minimal impacts to lingcod because the NMFS Triennial Trawl Survey data through 1994 suggests that about 99% of the lingcod are caught in depths  $\leq 150$  fms north of  $40^{\circ}10'$ , and lingcod tend to move to shallower depths ( $\sim 100$  fms) during the winter months coastwide. Using the NMFS observer data ( $\sim 200$  hauls), the GMT estimates that the lingcod impacts resulting from accommodating the trawl petrale areas is about 1 mt total catch (total mortality is expected to be less than this). The estimated impacts from the California Selective Flatfish EFP, if extended through December, would be about 0.4 mt of lingcod and  $< 0.2$  mt of canary. The GMT cannot quantify what the total impacts of other fisheries would be on lingcod and canary if they remained open (e.g., recreational fisheries).

(Note: Under both options, the RCA changes would only apply to those fisheries currently subject to the RCA closures.)

### Trip Limits

With regard to shortspine thornyhead, the GMT notes that the landings in the quota species monitoring (QSM) through mid-October are less than the range of projections through Period 5 that the GMT presented in September. However, the GMT recommends keeping the current trip limit of 900 lbs/two month in place for shortspine in Period 6 as a precautionary measure, particularly if inseason action is taken to close shelf fisheries.

Regarding differential trawl trip limits for small and large footrope, the GMT recommends the removal of differential limits for Period 6 if inseason action is taken to close nearshore and shelf fisheries. Under either of the options presented above, the GMT recommends keeping the current large footrope trip limits in place, which would apply seaward of the RCA regardless of gear type used (i.e., could use either small or large footrope).

### B Platoon Depth Closures

The GMT defers to the GAP on when the changes to the depth closures would apply to the trawl B Platoon for the remainder of the year.

PFMC  
11/05/03

## Attachment 1

### CDFG Technical Report

It is apparent that the RecFIN wave 4 recreational catch estimates for California nearshore rockfish, canary rockfish and lingcod were significantly higher than expected. This may be due in part to the unusual groundfish restrictions for 2003, which kept the recreational groundfish fishery closed for the first six months south of 40° 10'. However, the magnitude of the catch and its variation from the norm warranted further evaluation. Several components of the RecFIN catch estimation inputs were above average during wave 4. For example, mean fish weights and most catch rates were higher than average (table 1), with the notable exception of canary rockfish catch rates.

Beyond the elevated catch rates and average weights, the principle reason the wave 4 catch estimate was exceptionally high was due to unusually high estimates of effort (angler days) for the private and rental boat mode in the area north of Point Conception. The wave 4 effort was estimated at 502.8 thousand angler days (table 2) which is 3 standard deviations above the long-term mean effort from 1980-2003 and is 50 percent greater than the next highest effort estimate reported for those years. There is considerable concern that this estimate may qualify as an outlier. If the next highest estimate of effort in the recorded history of the fishery (in 1985) were used to replace the current wave 4 estimate, the private and rental boat effort estimate north of Point Conception would be reduced by 33%. If this adjustment is applied to the wave 4 catch calculations, the total statewide California recreational catch estimates through wave 5 are lower (table 3), although coastwide total catch estimates for canary rockfish and lingcod still exceed the OYs.

**Table 1 - Descriptive Statistics - Catch Rates****MRFSS Wave 4: 1980 - 2003**

	Canary		Deeper NS		Lingcod		Shallow NS	
	CPFV	Private	CPFV	Private	CPFV	Private	CPFV	Private
<b>Sample Variance</b>	0.02	0.01	1.65	0.24	0.01	0.00	0.11	0.01
<b>Range</b>	0.46	0.23	5.82	2.13	0.34	0.19	0.98	0.40
<b>Minimum</b>	0.00	0.01	0.14	0.32	0.00	0.04	0.01	0.01
<b>Maximum</b>	0.47	0.24	5.96	2.45	0.34	0.23	0.98	0.42
<b>Count</b>	20.00	21.00	21.00	21.00	21.00	21.00	20.00	21.00
<b>Confidence Level(95.0%)</b>	0.07	0.03	0.59	0.22	0.05	0.02	0.16	0.04
<b>2003 Value</b>	0.01	0.03	3.30	1.43	<b>0.34</b>	<b>0.23</b>	<b>0.98</b>	0.25
<b>Mean</b>	0.22	0.10	2.24	0.96	<b>0.12</b>	<b>0.11</b>	<b>0.30</b>	0.17
<b>Standard Deviation</b>	0.16	0.07	1.29	0.49	<b>0.10</b>	<b>0.05</b>	<b>0.33</b>	0.09

**Table 2 - Descriptive Statistics - Total Angler-Trips****MRFSS Private and Rental Vessels Wave 4: 1980 - 2003**

	Southern Area	Northern Area	Both Areas
<b>Sample Variance</b>	30214.3	7009.5	45333.3
<b>Range</b>	810.8	394.0	1011.4
<b>Minimum</b>	183.3	108.8	292.1
<b>Maximum</b>	994.2	502.8	1303.5
<b>Count</b>	21.0	21.0	21.0
<b>Confidence Level(95.0%)</b>	79.1	38.1	96.9
<b>2003 Values</b>	400.8	<b>502.8</b>	903.6
<b>Mean Value</b>	457.5	<b>253.2</b>	710.8
<b>Standard Deviation</b>	173.8	<b>83.7</b>	212.9

**Table 3. California's Estimated Recreational Catch (wt. in MT) for 2003**

**A. Unadjusted RecFIN**

Area of California	Group	Wave 1-3 <sup>1</sup>	Wave 4 <sup>1</sup>	Wave 5 <sup>2</sup>	Wave 6 <sup>3</sup>	Wave 1-5	Wave 1-6	OY <sup>6</sup>
Cape Mendocino south to Mexican border	Shallow NS RF	2.3	86.2	48.2	18.6	136.7	155.3	66.1
	Deeper NS RF	21.6	378.0	43.3	37.0	442.8	479.8	303.1
	CA Scorpionfish	9.3	18.5	33.5	23.1	61.3	84.4	63.9
Cape Mendocino north to Oregon border	Shallow NS RF	0	2	0.4	0.3	2.4	2.7	
	Deeper NS RF	49.6	370.0	8.5	1.8	428.1	429.9	
Total Statewide	Shallow NS RF	2.3	88.2	48.6	18.9	139.1	158.0	
	Deeper NS RF	71.2	748.0	51.7	38.8	870.9	909.7	
	CA Scorpionfish	9.3	18.5	33.5	23.1	61.3	84.4	
	Lingcod	37.5	509.0	120.7	59.2	667.2	726.4	651.0
	Canary	0.4	14.0	0.8	0.4	15.3	15.7	42.0

**B. Stratified Northern California**

Area of California	Group	Wave 1-3 <sup>1</sup>	Wave 4 <sup>4</sup>	Wave 5 <sup>2</sup>	Wave 6 <sup>3</sup>	Wave 1-5	Wave 1-6	OY <sup>6</sup>
Cape Mendocino south to Mexican border	Shallow NS RF	2.3	91.6	48.2	18.6	142.2	160.7	66.1
	Deeper NS RF	21.6	281.8	43.3	37.0	346.6	383.6	303.1
	CA Scorpionfish	9.3	18.5	33.5	23.1	61.3	84.4	63.9
	Lingcod	30.5	244.1	72.0	50.4	346.6	397.0	
	Canary	0.4	2.2	0.8	0.4	3.4	3.8	
Cape Mendocino north to Oregon border	Shallow NS RF	0	1.4	0.4	0.3	1.8	2.1	
	Deeper NS RF	49.6	394.0	8.5	1.8	452.1	453.9	
	CA Scorpionfish	0	0.0	0	0	0.0	0.0	
	Lingcod	7.0	237.1	48.7	8.8	292.8	301.6	
	Canary	0.0	8.1	0.1	0.0	8.2	8.2	
Total Statewide	Shallow NS RF	2.3	93.0	48.6	18.9	144.0	162.8	
	Deeper NS RF	71.2	675.8	51.7	38.8	798.7	837.5	
	CA Scorpionfish	9.3	18.5	33.5	23.1	61.3	84.4	
	Lingcod	37.5	481.2	120.7	59.2	639.4	698.6	651.0
	Canary	0.4	10.3	0.8	0.4	11.5	11.9	42.0

**C. Adjusted MRFSS Effort Estimate for Wave 4**

Area of California	Group	Wave 1-3 <sup>1</sup>	Wave 4 <sup>5</sup>	Wave 5 <sup>2</sup>	Wave 6 <sup>3</sup>	Wave 1-5	Wave 1-6	OY
Total Statewide	Lingcod	37.5	373.4	120.7	59.2	531.6	590.8	651.0
	Canary	0.4	9.7	0.8	0.4	11.0	11.4	42.0

1. MRFSS estimated landings divided into areas north and south of Cape Mendocino using same methodology as used for generating Optimum Yields. 2. Landings estimated using MRFSS sample information for this wave and the average of 1999-2002 angler trips for this wave. 3. Landings were derived by averaging the 1993-2002 MRFSS estimated landings for this wave. 4. MRFSS catch rates from this wave for areas north and south of Cape Mendocino were applied to estimates of total effort for same areas. 5. Private rental catch component of the MRFSS estimate for Wave 4 reduced 33% (difference between the 2003 Wave 4 total effort estimate and the next highest MRFSS Wave 4 total effort estimate). 6. OYs for lingcod and canary are coastwide (Washington south through California).