GROUNDFISH ADVISORY SUBPANEL COMMENTS ON MANAGEMENT SPECIFICATIONS FOR 2007-2008 FISHERIES

The Groundfish Advisory Subpanel (GAP) considered options for acceptable biological catches (ABCs) and corresponding optimum yields (OYs) for the 2007-2008 management cycle. There are three parts to this statement: the first contains general comments on the economic conditions in the groundfish fishery; the second covers OY recommendations for overfished species and includes detailed rationale; and the third section presents OY recommendations for non-overfished species.

General Economic Conditions

Members of the GAP representing all sectors of the industry continue to voice their desires to be allowed to fish over the long-term. While present fishing opportunities are important to the GAP, the GAP is very aware that present management measures must be conservative enough to sustain and rebuild stocks in order to sustain and increase the future health of the fishery and dependent fishing communities. At the same time, taking into consideration the needs of fishing communities is critical. If communities and fisheries sectors cannot survive short-term restrictions, longer-term efforts at sustainability apply only to the biology of fish – not to sustainable communities. The GAP believes the relationship between sustainable fishing communities and stable fisheries stocks is intrinsic, and preserving both for the long-term is not only worthwhile but a necessity. With this in mind, the GAP notes the following with respect to the level of distress in the current fishery.

Generally from 1981 through 1997 the exvessel value of the commercial non-whiting groundfish fishery ranged from $80 to $100 million. In 1998, the first year of the groundfish disaster, the value of the entire non-whiting groundfish fishery was $61 million. The disaster was officially declared in 2000, and from 2002 through 2005 exvessel value of the fishery ranged from approximately $40 to $45 million.

During this time of reductions many fishing businesses and several seafood processors have gone out of business. Secondary and tertiary businesses associated with the fishing industry have also suffered. The additional hardship of increased fuel costs has only made it more difficult to maintain business plans.

Reductions in the salmon fishery will also affect fishing communities and some of the same vessels affected by groundfish reductions. For 2006, these reductions may potentially reduce exvessel revenue south of Cape Falcon to near zero, about $20 million less than in 2005, and reduce recreational angler days by about 220 thousand. The combined effects on communities may be about $56 million in income impacts. These values are based on Option III of the Preseason Salmon Report II.

Taking into consideration the needs of fishing communities goes beyond simple economics. Socioeconomic effects are also a major part of the discussion. It is a fact that unemployment
rates are higher for older individuals who have a more difficult time transitioning to new employment opportunities. This type of information is difficult to quantify, but we know there are detrimental social consequences when businesses are suffering financially and closing their doors altogether.

Incentives for improved science, management, and fishing practices should always be encouraged and explored. However, the one control the Council has for decision-making today on rebuilding plans is controlling fishing effort.

On the basis of the current distress in the fishery, the array of tradeoffs between present and future production, and the levels of economic activities that each of these OYs affords, the GAP has the following specific recommendations.

**GAP Recommendations for OYs for Overfished Species**

The following is a summary of the GAP recommendations:

<table>
<thead>
<tr>
<th>Species</th>
<th>2007 OY</th>
<th>2008 OY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yelloweye Rockfish</td>
<td>23 mt</td>
<td>20 mt</td>
</tr>
<tr>
<td>Canary Rockfish</td>
<td>44 mt</td>
<td>44 mt</td>
</tr>
<tr>
<td>Cowcod</td>
<td>8 mt</td>
<td>8 mt</td>
</tr>
<tr>
<td>Bocaccio</td>
<td>315 mt</td>
<td>315 mt</td>
</tr>
<tr>
<td>Darkblotched Rockfish</td>
<td>330 mt</td>
<td>330 mt</td>
</tr>
<tr>
<td>Pacific Ocean Perch</td>
<td>405 mt</td>
<td>405 mt</td>
</tr>
<tr>
<td>Widow Rockfish</td>
<td>456 mt</td>
<td>456 mt</td>
</tr>
</tbody>
</table>

References in the following sections to specific page numbers refer to Agenda Item F.1.a., Attachment 4.

**YELLOWEYE ROCKFISH**

*Recommendation*

The GAP supports a ramp-down approach for yelloweye rockfish which results in the following OYs:

- 2007 OY, 23 mt
- 2008 OY, 20 mt
- 2009 OY, 17 mt
- 2010 OY, 15 mt

*Impacts of OY recommendation*

This “ramp-down” approach incorporates a reduced OY on a yearly basis; however the proposal from the GAP would set 15 mt as the lower bound on the OY. The GAP notes that under the first year of this ramp-down approach the OY would be 23 mt, 51% below the sustainable ABC of 47 mt. The 2007 OY also represents a 15% reduction from 2006. Under a ramp-down to 13.5 mt, it is estimated that rebuilding times could increase by approximately 7 months. The rebuilding delay for the 15 mt minimum harvest recommended here has not been calculated.
The GAP believes the yelloweye stock will be rebuilding under this scenario in the shortest time possible while taking into consideration the biology of the stock and the needs of the fishing communities. However, the GAP recognizes that anything lower than a 15 mt OY is tantamount to a zero fishery. The GAP encourages the Council to consider what level of OY is really too low to successfully prosecute a fishery.

**Impacts of Lower OY recommendations**
If the yelloweye rockfish OY is set at zero there will be catastrophic short and long-term effects on the fishing industry and the fishing communities of the West Coast. Yelloweye rockfish are currently caught in several fisheries including:

- Research Fisheries
- Limited Entry Trawl – Non Whiting Fisheries
- Limited Entry Fixed Gear Fisheries
- Open Access Directed Groundfish Fisheries
- Open Access Incidental Groundfish Fisheries
  - Pink shrimp
  - Salmon troll
- Washington Recreational Fisheries
- Oregon Recreational Fisheries
- California Recreational Fisheries

With a zero harvest for yelloweye rockfish all of these fisheries would be severely restricted or completely eliminated.

Anything less then a ramp-down approach will result in disastrous short- and long-term results to the fishing industry and fishing communities on the West Coast. For example, if the OY is set at 12 mt (as specified under OY Alternative 2) impacts occur in the following fisheries:

- **Commercial**
  - Fixed Gear Sablefish Fisheries- Yelloweye is the largest component of overfished species mortality in this sector, and a reduction of approximately 0.2 mt of yelloweye rockfish would correspond to a reduction of approximately $1.8 million in exvessel revenues (holding area closures constant). (Page 5)
  - Northern open access will lose almost $1 million in exvessel revenues when reducing available catch from 3.2 mt to 0.05 mt of yelloweye. In the northern area, there are many small ports that rely on open access boats to support their infrastructure – they will suffer economic losses at an accelerated rate when compared with larger ports.
  - The limited entry trawl fishery in Washington expects further restrictions to their remaining summer flatfish fisheries, arrowtooth and beach fisheries.

- **Recreational**
  - Oregon recreational fisheries would only be open for 2 months out of the year and would be constrained to within 20 fathoms. Immediate losses to the industry include a minimum of $6.6 million annually which may result in total collapse of a $30 million charter industry.
The Oregon charter industry accounts for 70% of the recreational catch of groundfish in Oregon – they rely predominantly on groundfish fisheries and would not be able to maintain their businesses at all without it.

Support industries for private recreational fisheries would also suffer economic losses.

Washington and Oregon estimate a loss of their entire halibut fishery (estimated to be at least 16,000 fish). With a catch per unit of effort of nearly 1 fish per angler and an estimated impact of $200 per angler day, the resulting direct losses for this fishery alone could be $3.2 million.

- Research
  - All research opportunities (fishery dependent and fishery independent) will be completely eliminated

Justification for Recommendation
The ramp-down OY method for yelloweye rockfish allows the fishing industry and managers a period of time to adjust to the rebuilding OY and to consider additional management measures to help mitigate yelloweye catch and/or interaction with other fisheries. Without the ramp-down approach, all opportunities for additional research will be eliminated or require costly reductions in the fisheries. Finally, the data stream for future stock assessments is truncated and no new information will be available to update assessments.

CANARY ROCKFISH

Recommendation
The GAP recommends an OY of 44 mt for 2007-2008.

Impacts of Recommendation
A 44 mt OY is equal to approximately 25% of the Council’s preferred ABC for 2007 (172 mt) and represents a 6% decrease in OY from 2006. This OY results in the stock being rebuilt in 2063, 15 years longer than $T_{\text{min}}$.

Canary rockfish has constrained fisheries severely prior to now and these constraints will continue into the future with a 44 mt OY in place for 2007-2008. The current total annual catch of canary rockfish reflects approximately 1% of the peak catches seen in the early 1980s.

- All shelf opportunities have been constrained and or closed prematurely
- The trawl yellowtail fishery has been essentially eliminated
- All inshore trawl opportunities have been eliminated
- The mid-water trawl rockfish fishery was eliminated due to canary bycatch
- The trawl arrowtooth fishery has all but been eliminated
- Fixed gear fisheries have had the Rockfish Conservation Area (RCA) north of 40:10 reinforced at 100 fathoms
- Fixed gear fisheries have had the RCA south of 40:10 reinforced at 150 fathoms
Impacts of Lower OY Recommendations
If the canary rockfish OY is set at zero there will be catastrophic short- and long-term effects on the fishing industry and the fishing communities of the West Coast. Canary rockfish are caught in essentially all of the major fishery sectors including:

- Research Fisheries
- Limited Entry Trawl Non-Whiting Fisheries
- Limited Entry Trawl Whiting Fisheries
- Limited Entry Fixed Gear Fisheries
- Open Access Directed Groundfish Fisheries
- Open Access Directed Incidental Groundfish Fisheries
  - California Halibut
  - Pink Shrimp
  - Salmon Troll
- Washington Recreational Fisheries
- Oregon Recreational Fisheries
- California Recreational Fisheries

These fisheries would have to be eliminated in their entirety to achieve zero take of canary rockfish. Furthermore, zero take of canary rockfish eliminates research efforts and sharply curtails the data stream necessary for updating the stock assessment.

If the canary rockfish OY is set at 24 mt there will be disastrous short- and long-term effects on the fishing industry and the fishing communities of the West Coast. This level represents approximately half of what is currently available to the fisheries.

- Commercial Impacts
  - Trawl fisheries inside of 150 fathoms would not exist, 4 tons available (1/2 of current catch) result in a $4,000,000 reduction. (Figure 6, Page 9).
  - Open Access fisheries would be forced inside of 20 fathoms with reductions between 20%-30% of current catch in minor nearshore species. A reduction in the catch of canary rockfish from 0.33 mt to 0.07 mt would cost approximately $400,000 (holding area closure constant). (Page 6, Anecdotal Industry Information).
  - Whiting Fishery – A 50% reduction in the current amount of canary available to the fishery (50% of 4.7 mt = 2.3 mt) could result in a loss of over $8 million. (Figure 2, Page 5).

- Recreational Impacts
  - Oregon fisheries will be constrained to inside of 20 fathoms year-round
  - Halibut fisheries off of Oregon will be constrained
  - Possible early closure for Oregon black rockfish will occur with increased pressure inside
  - California fisheries north of 40°10' will be reduced to 3 months from 6 months and be forced inside of 20 fathoms.
  - North central California fisheries will lose October resulting in almost $2 million dollars of direct loss to the industry. This number could double if you include Santa Cruz, Moss Landing, and Monterey. These numbers are estimates of fares only, no wages, fuel, bait, secondary and tertiary businesses, etc.
A 24 mt OY for canary puts the entire coast at jeopardy. Any one fishery could pre-empt the rest of the fisheries and shut down seasonal opportunities for all sectors.

**Justification for Recommendation**
The most recent canary stock assessment reports that the biomass has been increasing since 2000. As the canary stock continues to rebuild the interaction with canary rockfish during fishing operations will continue to grow. Cooperative research currently being conducted indicates that some of the assumptions in the stock assessment surrounding older female fish are inaccurate and that inclusion of the new information would show the stock is actually at larger levels than currently believed.

**Cowcod**
*Recommendation*
The GAP recommends an OY of 8 mt for cowcod in 2007-2008.

**Impacts of Recommendation**
An 8 mt OY is 47% of the Council’s preferred sustainable ABC (17 mt) and will rebuild the stock in 37 years versus the 29 years it would take to rebuild with a zero harvest.

**Impacts of Lower OY Recommendations**
If the cowcod OY is set at zero there will be catastrophic short- and long-term effects on the fishing industry and the fishing communities of the West Coast. Cowcod are caught in the following fisheries:
- Research Fisheries
- Limited Entry Trawl Non-Whiting Fisheries
- Limited Entry Fixed-Gear Fisheries
- Open Access Directed Groundfish Fisheries
- California Recreational Fisheries

Presumably under a zero harvest of cowcod all of these fisheries would be severely restricted or eliminated. California recreational fisheries would be pushed into 30 fathoms from 34°27’ to the U.S./Mexican Border resulting in a $10-15 million dollar direct loss.

Any OY set at less then 8 mt will result in potential closures as current fisheries run into the OY.

**Justification for Recommendation**
The ABC for cowcod more than tripled with the new assessment, from 5 mt to 17 mt. The OY for 2006 was 2.1 mt, 58% below the ABC. With a 17 mt ABC, the status quo rebuilding policy would result in an OY of 5 mt, 71% below the ABC. An OY of 8 mt would be 53% below the ABC, relatively more aggressive rebuilding relative to the 2006 fishery.

An 8 mt OY for Cowcod represents an 80% probability of rebuilding. As this stock continues to rebuild there will presumably be higher incidence of interactions with this stock.

**Bocaccio**
*Recommendation*
The GAP recommends a 315 mt OY for 2007-2008.
Impacts of Recommendation
An OY of 315 mt is 52% of the Council’s preferred sustainable ABC of 602 mt in 2007. An OY of 315 mt reflects a probability of rebuilding of around 65% and results in the bocaccio stock being rebuilt in 2029, eleven years longer than $T_{min}$.

Furthermore this fishery has constrained or eliminated other fisheries, for example, the spot and ridgeback prawn trawl fisheries, the California halibut fishery, sea cucumber fishery, overall open access California groundfish fisheries, and all of California groundfish recreational fisheries.

Impacts of Lower OY Recommendations
If the bocaccio OY is set at zero there will be catastrophic short- and long-term effects on the fishing industry and the fishing communities of the West Coast. Bocaccio are caught in the following fisheries occurring south of 40° 10'.

- Research Fisheries
- Limited Entry Trawl Non-whiting Fisheries
- Limited Entry Fixed-Gear Fisheries
- Open Access Directed Groundfish Fisheries
- Open Access Incidental Fisheries
  - California halibut
  - California gillnet
  - CPS wetfish
  - Pink shrimp
  - Ridgeback prawn
  - Salmon troll
- California Recreational Fisheries

Presumably under a zero harvest of bocaccio all of these fisheries would be severely restricted or eliminated.

Setting an OY less then 315 mt will constrain or close fisheries as they run into the lower OY.

Justification for Recommendation
The bocaccio biomass is increasing at an accelerated rate. Interactions with bocaccio will continue to increase as the stock continues to rebuild. Dr. Alec McCall reports that there is strong evidence that two strong year classes are moving into the fishery.

DARKBLOTCHED ROCKFISH
Recommendation
Impacts of Recommendation
An OY of 330 mt is 72% of the Council’s preferred sustainable ABC of 457 mt. A harvest guideline of 229 mt is 50% of the ABC. The 330 mt OY results in a rebuilt stock by 2010.5, a 1 year increase from T_min. Fisheries that have already been constrained by reductions in available darkblotched include:
  - Trawl Slope Rockfish Fisheries
  - Petrale Sole Winter Fishery
  - Whiting Fishery

Impacts of Lower OY Recommendations
Darkblotched rockfish is currently taken in several West Coast fisheries including:
  - Research Fisheries
  - Limited Entry Trawl Non-Whiting Fisheries
  - Limited Entry Trawl Whiting Fisheries
  - Limited Entry Fixed-gear Fisheries
  - Open Access Directed Groundfish Fisheries

A zero harvest for darkblotched rockfish would eliminate or severely restrict all of these fisheries as well as fisheries dependent and fisheries independent data for stock assessments.

Setting OYs less than 330 mt will constrain or close fisheries as they run into the lower OYs.

Justification for Recommendation
As the darkblotched rockfish stock rebuilds, the interactions with these fish will continue to increase. The current 200 mt OY was imposed as an interim OY pending the development of a rebuilding plan; it was not intended to be a rebuilding OY.

PACIFIC OCEAN PERCH
Recommendation
The GAP recommends a 405 mt OY for 2007-2008.

Impacts of Recommendation
A 405 mt OY is equal to 45% of the Council’s preferred sustainable ABC of 900 mt in 2007. This OY corresponds to a rebuilding plan which has the stock rebuilt in 2021, 7 years longer than a zero harvest alternative.

Impacts of Lower OY Recommendations
Pacific Ocean perch is currently taken in several West Coast fisheries including:
  - Research Fisheries
  - Limited Entry Trawl Non-Whiting Fisheries
  - Limited Entry Trawl Whiting Fisheries
  - Limited Entry Fixed-Gear Fisheries
  - Open Access Directed Groundfish Fisheries

A zero harvest for Pacific Ocean perch would eliminate all of these fisheries as well as fisheries dependent and fisheries independent data for stock assessments.
Justification for Recommendation
As Pacific Ocean perch continues to rebuild, interactions with the stock will continue to increase. There are significant problems associated with attempting to rebuild a stock which is occurring on the extreme southern fringe of its geographic range. This stock has been under rebuilding scenarios of one kind or another for about thirty years. The GAP encourages the Council to consider whether we are attempting to manage to incorrect levels by not considering the biomass of the stock over a larger portion of its range.

WIDOW ROCKFISH
Recommendation
The GAP recommends a 456 mt OY for 2007-2008.

Impacts of Recommendation
A 456 mt OY is equal to 8% of the Council’s preferred sustainable ABC of 5,334 mt in 2007. This OY corresponds to a rebuilding plan which results in the stock being rebuilt by 2016, 3 years longer than zero harvest.

Impacts of Lower OY Recommendations
Widow rockfish are currently taken in several West Coast fisheries including:

- Research Fisheries
- Limited Entry Trawl Non-Whiting Fisheries
- Limited Entry Trawl Whiting Fisheries
- Limited Entry Fixed Gear Fisheries
- Open Access Directed Groundfish Fisheries
- Open Access Incidental Groundfish Fisheries
  - Pink shrimp
  - Salmon troll
- Oregon Recreational Fisheries
- California Recreational Fisheries

A zero harvest of widow rockfish would eliminate all of these fisheries and discontinue current research efforts resulting in no new information for stock assessments.

Widow rockfish OYs set lower then 456 mt could constrain or close fisheries if they bump up against the OY.

Justification for Recommendation
The most recent stock assessment revealed that widow rockfish was never overfished and is rebuilding rapidly. Finally, interactions with widow rockfish will continue to increase as the stock continues to grow.
### GAP Recommendations for OYs for Non-Overfished Species

<table>
<thead>
<tr>
<th>Species</th>
<th>GAP Recommended OY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lingcod coastwide</td>
<td>6,280 mt</td>
</tr>
<tr>
<td>Pacific cod</td>
<td>1,600 mt</td>
</tr>
<tr>
<td>Sablefish Coastwide</td>
<td>5,934 mt</td>
</tr>
<tr>
<td>N of 36°</td>
<td>5,723 mt</td>
</tr>
<tr>
<td>S of 36°</td>
<td>210 mt</td>
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<tr>
<td>Shortbelly</td>
<td>13,900 mt</td>
</tr>
<tr>
<td>Chilipepper</td>
<td>2,700 mt</td>
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<tr>
<td>Splitnose</td>
<td>461 mt</td>
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<tr>
<td>Yellowtail</td>
<td>4,548 mt</td>
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<tr>
<td>Short Spine</td>
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<tr>
<td>N of 34°</td>
<td>1,634 mt</td>
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<tr>
<td>S of 34°</td>
<td>421 mt</td>
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<tr>
<td>Long spine coastwide</td>
<td>3,930 mt</td>
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<td>N of 34°</td>
<td>2,989 mt</td>
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<tr>
<td>S of 34°</td>
<td>941 mt</td>
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<tr>
<td>Nearshore Species</td>
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</tr>
<tr>
<td>Black Rock (WA)</td>
<td>540 mt</td>
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<tr>
<td>Black Rock (OR &amp; CA)</td>
<td>722 mt</td>
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<tr>
<td>Minor Rockfish North</td>
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<tr>
<td>Nearshore Species</td>
<td>162 mt</td>
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<td>Shelf Species</td>
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<td>Slope Species</td>
<td>1160 mt</td>
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<tr>
<td>Remaining Rockfish North</td>
<td>1,216 mt</td>
</tr>
<tr>
<td>Bocaccio</td>
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</tr>
<tr>
<td>Chilipepper – Eureka</td>
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<tr>
<td>Redstripe</td>
<td>432 mt</td>
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<td>Sharpchin</td>
<td>230 mt</td>
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<td>Silvergrey</td>
<td>29 mt</td>
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<tr>
<td>Splitnose</td>
<td>182 mt</td>
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<tr>
<td>Yellowmouth</td>
<td>74 mt</td>
</tr>
<tr>
<td>Other rockfish North</td>
<td>1034 mt</td>
</tr>
<tr>
<td>Minor rockfish South</td>
<td>2,006 mt</td>
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<tr>
<td>Nearshore</td>
<td>666 mt</td>
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<tr>
<td>Shelf species</td>
<td>714 mt</td>
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<tr>
<td>Slope species</td>
<td>626 mt</td>
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<tr>
<td>California scorpionfish</td>
<td>219 mt</td>
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<tr>
<td>Cabezon (off CA only)</td>
<td>69 mt</td>
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<tr>
<td>Dover sole</td>
<td>28,482 mt</td>
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<td>English sole</td>
<td>6,237 mt</td>
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<tr>
<td>Petrale sole coastwide</td>
<td>2,883 mt</td>
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<tr>
<td>Columbia and US vanc.</td>
<td>1347 mt</td>
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<tr>
<td>Eureka, Monterey &amp; conc</td>
<td>1536 mt</td>
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<tr>
<td>N of 40°</td>
<td>1752 mt</td>
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<td>S of 40°</td>
<td>1,131 mt</td>
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<tr>
<td>Arrowtooth flounder</td>
<td>5,800 mt</td>
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<tr>
<td>Starry flounder</td>
<td>1,186 mt</td>
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<tr>
<td>Other flatfish</td>
<td>4,884 mt</td>
</tr>
<tr>
<td>Other fish</td>
<td>7,300 mt</td>
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</table>
CONCLUSION

The GAP wishes to remind the Council that simply maintaining current levels of fishing is not adequate to preserve the long-term viability of the fishing industry and the communities which rely heavily on fisheries. Presumably science is always improving and changing rapidly from year to year. We are considering dramatic short-term fishery modifications based on rebuilding plans that stretch many years into the future. The possibility that the stock assessments will report varyingly different results between now and then is likely. Rebuilding stocks is critical to the long-term health of fisheries and communities, but only if we can preserve the harvesters, processors, recreational businesses, and larger communities as well.

PFMC
04/04/06