

GROUND FISH ADVISORY SUBPANEL REPORT ON TENTATIVE ADOPTION OF 2007-  
2008 GROUND FISH FISHERY SPECIFICATIONS/MANAGEMENT MEASURES AND  
AMENDMENT 16-4

The Groundfish Advisory Subpanel (GAP) considered options for 2007-2008 optimum yields (OYs) for depleted groundfish species. There are three parts to this statement: the first contains general comments on current and future economic conditions in the groundfish fishery; the second covers OY recommendations for overfished species, including detailed justification rationale; and the third provides sector specific comments with over-arching impacts and respect to more than one species.

The GAP referenced Agenda Item F.2.a, Attachment 2; page 158, Table 7.69, for exvessel values. In addition, the GAP defines “take” in this document as the amount of catch expected to be harvested (including discard mortality). The GAP has also applied a 3:1 multiplier effect when identifying associated community impacts. The income impact multiplier for all groundfish is 2.16. The GAP believes that the community impacts are much more significant than income impacts alone and believes that the 3:1 multiplier is a more accurate depiction of overall community impacts. Recreational information comes from a National Marine Fisheries Service (NMFS) 2001 study “Technical Memorandum NMFS-F-SPO-49 October 2001.”

***General Economic Conditions***

Members of the GAP representing all sectors of the industry continue to voice their desire to be allowed to fish over the long term. Many interpretations of the Ninth Circuit Court’s ruling have been made. Taking into consideration the needs of fishing communities to avoid short-term disastrous consequences has different meanings to different stakeholders. However, one fact is undisputable: short-and long-term consequences to fishing communities are intrinsically linked. In order for there to be commercial and recreational fishing industries over the long term, short-term management measures must help preserve fishing businesses. More plainly said, if no fishing industry exists into the future because of overly extreme cuts in harvest then the Council has not taken into account the economic needs of fishing communities. If individual businesses continue to become depleted, necessary infrastructure within fishing communities that support commercial and recreational industries also become depleted. Once boats are tied to the dock, doors are closed, markets are lost, it isn’t just one season’s fishing foregone.

The GAP believes that some access to depleted species in order to catch healthy stocks is necessary to avoid disastrous short-term consequences to fishing communities. If communities and fishery sectors cannot survive short-term restrictions, longer-term efforts at sustainability apply only to the biology of fish – not to sustaining 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. A difference of \$40 to \$55 million from the earlier period.

During this time of harvest cuts 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.

Taking into consideration the needs of fishing communities goes beyond simple measures of changes in revenue. Socioeconomic effects should also be a major part of the discussion. For example, 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.

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. Recreational and commercial fisheries have adapted to reduced harvests. Areas are now closed to protect overfished stocks. Essential fish habitat was established to protect spawning grounds and sensitive habitats. These reductions, closures, and other management measures are in place and there is evidence that stocks are rebuilding. Further reductions in harvest will harm the West Coast groundfish fishery and support industries without any meaningful gain in rebuilding times for most overfished species.

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

***GAP Recommendations for OYs for Overfished Species***

**The following is a summary of the GAP recommendations:**

Species	2007 OY	2008 OY
Bocaccio	218 mt	218 mt
Canary rockfish	44 mt	44 mt
Cowcod	8 mt	8 mt
Darkblotched rockfish	330 mt	330 mt
Pacific Ocean Perch	217 mt	217 mt
Widow rockfish	456 mt	456 mt
Yelloweye rockfish	Ramp down approach	Ramp down approach

## **BOCACCIO**

### Recommendation

The GAP recommends an OY of 218 mt for 2007 and 2008.

### *Fisheries Involved*

Bocaccio is 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
  - Coastal pelagic species wetfish
  - Pink shrimp
  - Ridgeback prawn
  - Salmon troll
- California Recreational Fisheries

### *Communities Impacted*

There are at least 31 ports that could be impacted with a reduction in the amount of Bocaccio available. These communities are all located south of 40° 10' north latitude and include:

Albion, Bodega Bay, Fort Bragg, Point Arena, Point Reyes, Shelter Cover, Big Creek, Elk, Monterey, Moss Landing, Half Moon Bay, San Francisco, Santa Cruz, Avila, Berkeley, Dana Point, Long Beach, Mission Bay, Morro Bay, Newport Beach, Oceanside, Oxnard, Playa Del Rey, Point Loma, San Diego, San Pedro, San Simeon, Santa Barbara, Terminal Island, Ventura, and Wilmington.

### *Justification for Recommendation*

- An OY of 218 mt represents an 80% probability of rebuilding. The median time to rebuild the stock under this alternative would be 2026, or five years longer than if a zero OY alternative were implemented.
- The Bocaccio biomass is increasing at an accelerated rate. Interactions with Bocaccio will continue to increase as the stock continues to rebuild.
- For 2007 and 2008 this represents an OY which is only 36% and 28% of the Council's preferred acceptable biological catch (ABC) of 602 mt and 618 mt, respectively.
- Dr. Alec McCall reports that there is strong evidence that two strong year classes are moving into the fishery.
- This fishery has already 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, California limited entry trawl fishery and all of the California groundfish recreational fisheries.

### *Impacts of Lower OY Values*

#### Limited Entry Trawl Non-whiting Fishery

Under a zero OY alternative, there would be no limited entry trawl non-whiting fishery south of 40°10' N. Lat. This results in a loss of \$2,600,000 exvessel value which equates to a \$7,800,000 impact to affected communities.

Under the low OY alternative (40 mt), the limited entry trawl non-whiting fishery is expected to take 9.1 mt of Bocaccio (Table 2-14). In 2006, this same fishery is expected to take 47.9 mt of Bocaccio. This is an 80% reduction in catch, resulting in a \$2,080,000 loss in exvessel revenues, which equates to \$6,240,000 loss to affected communities.

Under the high OY alternative (218 mt), the limited entry trawl non-whiting fishery is expected to take 50.5 mt (Table 2-21). This number is more similar to the expected catch in 2006 and the higher OY allows a fishery similar to the status quo fishery, which is already severely constrained.

#### Limited Entry Fixed-Gear Fishery

Under a zero OY alternative there would be no limited entry fixed-gear fishery south of 40°10' N. lat. for shelf and nearshore rockfish. This results in a loss of \$1,200,000 in exvessel revenue which equates to a \$3,600,000 economic impact to the affected communities.

Under the low OY alternative (40 mt), the limited entry fixed gear fishery is expected to take 5.4 mt of Bocaccio (Table 2-14). This same fishery is expected to take 13.4 mt of Bocaccio in 2006. This is a 60% reduction in catch resulting in a loss of \$720,000 in exvessel revenue which equates to \$2,160,000 impact to affected communities.

Under the high OY alternative (218 mt), the limited entry fixed gear fishery is expected to take 13.4 mt of Bocaccio. The higher OY would allow a fishery similar to the status quo fishery, which is already severely constrained.

#### Open Access Directed Groundfish Fishery

Under a zero OY alternative the open access directed groundfish fishery south of 40°10' N. Lat. for shelf and nearshore rockfish would be eliminated. This results in a loss of \$3,000,000 in exvessel value, which equates to a \$9,000,000 economic impact to the affected communities.

Under the low OY alternative (40 mt), the open access directed groundfish fishery is expected to take 4.1 mt (Table 2-14). This is 6.5 mt less than the expected catch for 2006. This is a 37% reduction resulting in a loss of \$1,110,000 exvessel values, which equates to a \$3,330,000 economic impact to affected communities.

Under the high OY, alternative (218 mt), the open access directed groundfish fishery is expected to take 13.4 mt (Table 2-21). The higher OY option allows a near status quo fishery, which is already severely constrained.

#### California Recreational Fishery

Under a zero OY alternative all California recreational fisheries that encounter Bocaccio would be eliminated. This results in a loss of more than \$1 billion to affected communities.

Under the low OY alternative (40 mt), the California recreational fishery is expected to take 16.0 mt (Table 2-14). This same fishery is expected to take 98.0 mt in 2006. This is an 84% reduction in catch and equates to an \$840,000,000 economic impact to California communities.

Under the high OY alternative (218 mt), the California recreational fishery is expected to take 106.8 mt (Table 2-21). The high OY allows a status quo fishery, which is already severely constrained.

Maintaining Bocaccio catches at 2006 levels in order to prosecute fisheries on healthier stocks DOES NOT represent a profitable position for any of the fisheries which interact with Bocaccio. Using 2006 levels as a benchmark for measuring impacts is misleading in that 2006 levels are not reflective of healthy fishing communities. Total Bocaccio catches prior to the groundfish fishery disaster declaration in 2000 were significantly higher with 480 mt landed in 1997. The total catch expected in 2006 is just under 174 mt. This reflects a 64% reduction in Bocaccio catch as well as a higher percentage reduction in catches of associated species.

## **CANARY ROCKFISH**

### *Recommendation*

The GAP recommends a 44 mt OY for 2007 and 2008.

### *Fisheries Involved*

Canary rockfish are caught in essentially all of the major fishery sectors including:

- Research Fisheries
- Tribal 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

### *Communities Involved*

There are at least 46 ports that could be impacted by a reduction in the amount of canary rockfish available for harvest. These ports include: Aberdeen, Astoria, Bandon, Bellingham, Blaine, Brookings, Cathlamet, Charleston, Chinook, Crescent City, Depoe Bay, Eureka, Everett, Fields Landing, Florence, Garibaldi, Gold Beach, Ilwaco, La Push, Mill Creek, Neah Bay, Newport, Pacific City, Port Angeles, Port Orford, Port Townsend, Seattle, Tokeland, Trinidad, Westport, Winchester Bay, Albion, Avila, Bodega Bay, Fort Bragg, Point Arena, Point Reyes, Shelter Cover, Big Creek, Elk, Monterey, Morro Bay, Moss Landing, Half Moon Bay, San Francisco, and Santa Cruz.

### *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 more productive. Video Trawl research from the same project indicates a higher level of abundance than assumed in the stock assessment.
- The recommended OY is 7% less than the 2006 OY and 26% of the 2007 Council preferred ABC of 172 mt.
- Estimated catch for 2006 (44.3 mt) is higher than the high OY option (44 mt).

### *Impacts of Lower OY Values*

#### Tribal Fishery

Under a zero OY alternative, the tribal fishery loses all groundfish and salmon fisheries resulting in an economic loss of \$11,685,700 in exvessel revenue.

#### Limited Entry Trawl Non-Whiting Fishery (non-tribal)

Under a zero OY alternative, the limited entry trawl non-whiting fishery would be eliminated. This results in a loss of \$6,500,000 in exvessel revenue, which equates to a \$19,500,000 economic impact to affected communities.

Under the low OY alternative (32 mt), the limited entry non-whiting fishery is expected to take 3.7 mt (Table 2-14). In 2006 this same fishery is expected to take 7.8 mt. This would result in a 53% reduction in catch and results in a loss of \$3,445,000 in exvessel revenue, which equates to a \$10,335,000 economic impact to affected communities.

Under the high OY alternative (44 mt), the limited entry non-whiting fishery is expected to take 8.5 mt (Table 2-21). The high OY alternative allows a fishery similar to the status quo fishery, which is already severely constrained.

#### Limited Entry Trawl Whiting Fishery (non-tribal)

Under a zero OY alternative, the entire whiting fishery could be lost resulting in a \$30 million exvessel loss, which equates to a \$90 million economic impact to affected communities.

Under the low OY alternative (32 mt), a 3.0 mt hard cap would be imposed on the whiting fishery (Table 2-14). This equates to a 40% reduction from the hard cap in place for 2006. Based on this scenario, it is likely that 50% of the whiting OY would be unattainable, resulting in a \$15 million exvessel revenue loss, which equates to a \$45 million economic impact to affected communities.

Under the high OY alternative (44 mt), it is projected that the whiting fishery would take 5.5 mt (Table 2-21). If the 2006 hard cap of 4.7 mt is implemented there is the possibility that 15% of the fishery would be foregone if, due to the rebuilding paradox, canary rockfish are encountered at an accelerated rate and the hard cap is reached. 5.0% of the fishery equates to \$4.5 million exvessel revenue loss, which equates to a \$13.5 million economic impact to affected communities.

#### Limited Entry Fixed Gear Fishery (non-tribal)

Under a zero OY alternative, the limited entry fixed gear fishery would be eliminated. This results in a loss of \$19,000,000 exvessel value and equates to \$57,000,000 to affected communities.

Under the low OY alternative (32 mt), the limited entry fixed gear fishery is expected to take 0.1 mt (Table 2-14). This same fishery is expected to take 1.2 mt in 2006, resulting in a 98% reduction and a loss of \$18,620,000 in exvessel revenue, which equates to a \$55,860,000 economic impact to affected communities.

Under the high OY alternative (44 mt), the limited entry fixed gear fishery is expected to take .9 mt (Table 2-21), which results in a 25% reduction in catch and equates to a loss of \$4,700,000 in exvessel value. This loss translates to a \$14,250,000 economic impact to affected communities.

#### Open Access Directed Groundfish Fishery

Under a zero OY alternative, the open access directed groundfish fishery would be eliminated. This represents a loss of \$8,000,000 in exvessel revenue, which equates to a \$24,000,000 economic impact to affected communities.

Under the low OY alternative (32 mt), the open access directed groundfish fishery is expected to take 1.0 mt (Table 2-14). This same fishery is expected to take 3.0 mt of canary rockfish in 2006 resulting in a 66% reduction in catch and a loss of \$5,280,000 in exvessel value which equates to a \$15,840,000 economic impact to affected communities.

Under the high OY alternative (44 mt), the open access directed groundfish fishery is expected to take 2.1 mt (Table 2-21). The high OY alternative allows a fishery similar to the status quo fishery, which is already severely constrained.

#### California Recreational Fishery

Under a zero OY alternative the California recreational fisheries that encountered canary rockfish would be eliminated. This results in a loss of more than \$1 billion to affected communities.

#### Oregon Recreational Fishery

Under a zero OY alternative, the Oregon recreational fisheries that encounter canary rockfish would be completely eliminated. This results in a loss of more than \$45 million to affected communities.

#### Washington Recreational Fishery

Under a zero OY alternative, Washington recreational fisheries that take canary would be eliminated. This results in a loss of \$5,000,000 to affected communities (includes total loss of halibut fishery, 50% loss of groundfish fishery, and 25% loss of salmon fishery due to depth restrictions – forced to stay inside of 30 fathoms).

Under the low OY alternative (12.6 mt), the Washington recreational fishery is expected to take 1.6 mt. This same fishery is expected to take 3.1 mt in 2006 which is an 80% reduction in catch which results in a loss of \$4,000,000 to affected communities.

Maintaining canary catches at 2006 levels in order to prosecute fisheries on healthier stocks DOES NOT represent a profitable position for any of the fisheries which interact with canary rockfish. Using 2006 levels as a benchmark for measuring impacts is misleading in that 2006 levels are not reflective of healthy fishing communities.

Total canary rockfish catches prior to the groundfish fishery disaster declaration in 2000 were significantly higher with 1,309 mt landed in 1997. The total catch expected in 2006 is just over 44 mt. This represents a 97% reduction in catches of canary rockfish as well as a higher percentage reduction in catches of associated species.

## **COWCOD**

### *Recommendation*

The GAP recommends an OY of 8 mt for 2007 and 2008.

### *Fisheries Involved*

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

### *Communities Involved*

There are at least 31 ports that could be impacted with a reduction in the amount of cowcod available. These communities are all located south of 38° 10' N. Lat. and include:

Albion, Bodega Bay, Fort Bragg, Point Arena, Point Reyes, Shelter Cover, Big Creek, Elk, Monterey, Moss Landing, Half Moon Bay, San Francisco, Santa Cruz, Avila, Berkeley, Dana Point, Long Beach, Mission Bay, Morro Bay, Newport Beach, Oceanside, Oxnard, Playa Del Rey, Point Loma, San Diego, San Pedro, San Simeon, Santa Barbara, Terminal Island, Ventura, and Wilmington.

### *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 4.2 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, more aggressive rebuilding relative to the 2006 fishery.
- An 8 mt OY for cowcod represents an 80% probability of rebuilding on schedule.
- As this stock continues to be rebuilt, there will be higher incidence of interactions with this stock (rebuilding paradox).

### *Impacts of Lower OY Values*

#### Limited Entry Trawl Non-Whiting Fisheries

A zero OY alternative would eliminate the limited entry trawl non-whiting fishery south of 40°10' N. Lat. resulting in a loss of \$2,600,000 in exvessel value and \$7,800,000 to the affected communities.

The low OY alternative (4 mt) results in an expected catch of 0.2 mt for the limited entry trawl non-whiting fishery (Table 2-14). This same fishery is expected to catch 2.7 mt in 2006. This results in a 93% reduction in catch and a loss of \$2,418,000 in exvessel values, which equates to a \$7,254,000 economic impact to affected communities.

The high OY alternative (8 mt) results in an expected catch of 2.9 mt for the limited entry trawl non-whiting fishery (Table 2-21). The high OY allows a status quo fishery, which is already severely constrained.

#### Limited Entry Fixed-Gear Fisheries

A zero OY alternative would eliminate the limited entry fixed gear fishery south of 40°10' N. Lat. This results in a loss of \$1,200,000 in exvessel revenue and 3,600,000 to the affected communities.

Under the low OY alternative (4 mt) the limited entry fixed gear fishery is expected to take 0.1 mt of cowcod (Table 2-14). This is the same expected catch for 2006.

Under the high OY alternative (8 mt) the limited entry fixed gear fishery is expected to take 0.1 mt of cowcod (Table 2-21). The high OY alternative allows a status quo fishery, which is already severely constrained.

#### Open Access Directed Groundfish Fisheries

A zero OY alternative would eliminate the southern open access directed groundfish fishery. This results in a loss of \$3,000,000 in exvessel value, which equates to a \$9,000,000 economic impact to affected communities.

Under the low OY alternative (4 mt), the open access directed groundfish fishery is expected to take 0.1 mt (Table 4-45). This is the same catch expected for 2006.

Under the high OY alternative (8 mt), the open access directed groundfish fishery is expected to take 0.1 mt. This alternative allows for a status quo fishery, which is already severely constrained.

#### California Recreational Fisheries

Under a zero OY alternative, California recreational fisheries south of Point Conception would have to be eliminated. This results in a loss of approximately \$500,000,000 to affected communities.

Under the low OY alternative, California recreational fisheries are expected to take 0.0 mt (Table 2-14). This same fishery is expected to catch 0.4 mt in 2006. This results in a 100% reduction in catch, which equates to a \$500 million economic impact to affected communities.

Under the high OY alternative, California recreational fisheries are expected to take 0.3 mt (Table 2-21). The high OY allows a fishery similar to the status quo fishery, which is already severely constrained.

Maintaining cowcod catches at 2006 levels in order to prosecute fisheries on healthier stocks DOES NOT represent a profitable position for any of the fisheries which interact with cowcod rockfish. Using 2006 levels as a benchmark for measuring impacts is misleading in that 2006 levels are not reflective of healthy fishing communities. Total cowcod catches prior to the groundfish fishery disaster declaration in 2000 were higher with 9 mt landed in 1997. The total catch expected in 2006 is 3.4 mt, a reduction in catch of over 62%.

## **DARKBLOTCHED ROCKFISH**

### *Recommendation*

The GAP recommends an OY of 330 mt for 2007 and 2008.

### *Fisheries Involved*

Darkblotched rockfish is currently taken in several West Coast fisheries including:

- Research Fisheries
- Tribal Fisheries
- Limited Entry Trawl Non-Whiting Fisheries
- Limited Entry Trawl Whiting Fisheries
- Limited Entry Fixed-gear Fisheries
- Open Access Directed Groundfish Fisheries

### *Communities Involved*

There are at least 13 communities that could be impacted with a reduction in the amount of darkblotched rockfish available. These communities include Astoria, Bellingham, Blaine, Brookings, Charleston, Crescent City, Eureka, Ft. Bragg, Ilwaco, Neah Bay, Newport, and Westport.

### *Justification for Recommendation*

- An OY of 330 mt is 72% of the Council's preferred ABC of 457 mt. The 330 mt OY results in a rebuilt stock by 2010.5, a 1 year increase from a zero OY alternative.
- As the darkblotched rockfish stock rebuilds, the interactions with these fish will continue to increase (rebuilding paradox).
- 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.
- Given higher occurrence of darkblotched, the current fishery could catch 284 mt, which is higher than the high OY option (229 mt).
- A 330 mt OY equates to rebuilding six months into the year 2010. A zero harvest OY equates to rebuilding six months into the year 2009. Both options equate to rebuilding during the *same* management cycle. It is estimated that you could set a 432 mt OY and darkblotched rockfish would still be rebuilt within the same management cycle (2010.9).

### *Impacts of Lower OY Values*

#### Tribal Fishery

Under a zero OY alternative, the tribal bottom trawl fishery would be eliminated, resulting in a direct loss of \$693,379 in exvessel revenue.

#### Limited Entry Trawl Non-Whiting Fishery (non-tribal)

Under a zero OY alternative, the limited entry trawl non-whiting fishery would be eliminated north of 38° N. Lat. This results in a loss of \$14,300,000 in exvessel revenue which equates to a \$42,900,000 economic impact to affected communities.

Under the low OY alternative, the limited entry trawl non-whiting fishery is expected to catch 66.7 mt (Table 2-14). This same fishery is expected to catch 248.9 mt in 2006. This is a 73% reduction in catch and equals \$10,439,000 lost in exvessel revenues, which equates to a \$31,317,000 economic impact to affected communities.

Under the high OY alternative, the limited entry trawl non-whiting fishery is expected to catch 181.1 mt (Table 2-21). This same fishery is expected to catch 248.9 mt in 2006. This is a 28% reduction in catch and equals a loss of \$4,040,000 in exvessel revenues, which equates to a \$12,012,000 economic impact on affected communities.

#### Limited Entry Trawl Whiting Fishery (non-tribal)

Under a zero OY alternative, the entire whiting fishery could be lost resulting in a loss of \$30 million in exvessel revenue, which equates to a \$90 million economic impact to the affected communities.

Under the low OY alternative (130 mt), the whiting fishery is expected to catch 8.6 mt (Table 2-14). In 2005 the whiting fishery took 16.5 mt of darkblotched rockfish. Under the 8.6 mt a 50% reduction would occur, resulting in a loss of approximately \$15,000,000 in exvessel revenue which equates to a \$45,000,000 economic impact to affected communities.

Under the high OY alternative (229 mt), the whiting fishery is expected to catch 16.2 mt (Table 2-21). Based on the darkblotched catch from 2005 only a slight loss would occur. However, under the rebuilding paradox, if darkblotched are encountered at an accelerated rate then the fishery could reach its darkblotched hard cap prior to the attainment of the whiting fishery causing economic loss.

#### Limited Entry Fixed Gear Fishery (non-tribal)

Under a zero OY alternative, the entire limited entry fixed gear fishery would be lost. This results in a loss of \$12,000,000 in exvessel value and equates to a \$36,000,000 economic impact to affected communities.

Under the low OY alternative (130 mt), the limited entry fixed gear fishery is expected to take 0.0 mt (Table 2-14). This same fishery is expected to take 1.3 mt in 2006. This represents a 100% decrease in catch and a loss of \$12,000,000 in exvessel value that equates to a \$36,000,000 economic impact to affected communities.

Under the high OY alternative (229 mt), the limited entry fixed gear fishery is expected to take 1.1 mt (Table 2-21). This results in a 16% decrease in catch or a loss of \$1,920,000 in exvessel value, which equates to a \$5,760,000 economic impact to affected communities.

#### Open Access Directed Groundfish Fishery

Under a zero OY alternative, the open access directed groundfish fishery on the slope north of 38° would be eliminated. This results in a loss of \$1,900,000 in exvessel value which equates to a \$5,700,000 economic impact to affected communities.

Under the low OY alternative, the open access directed groundfish fishery is expected to take 0.2 mt (Table 2-14). This same fishery is expected to take 0.2 mt in 2006.

Under the high OY alternative, the open access directed groundfish fishery is expected to take 0.2 mt (Table 4-43). The high OY alternative allows a status quo fishery, which is already severely constrained.

Maintaining darkblotched catches at 2006 levels in order to prosecute fisheries on healthier stocks DOES NOT represent a profitable position for any of the fisheries which interact with darkblotched rockfish. Using 2006 levels as a benchmark for measuring impacts is misleading in that 2006 levels are not reflective of healthy fishing communities. Total darkblotched catches prior to the groundfish fishery disaster declaration in 2000 were higher with 747 mt landed in 1997. The 2006 OY is 200 mt, a reduction in catch of about 73% as well as a higher percentage reduction in catches or associated species.

## **PACIFIC OCEAN PERCH**

### *Recommendation*

The GAP recommends an OY of 217 mt for 2007 and 2008.

### *Fisheries Involved*

Pacific Ocean perch (POP) is currently taken in several West Coast fisheries including:

- Research Fisheries
- Tribal Fisheries
- Limited Entry Trawl Non-Whiting Fisheries
- Limited Entry Trawl Whiting Fisheries
- Limited Entry Fixed-Gear Fisheries
- Open Access Directed Groundfish Fisheries

### *Communities Involved*

There are 11 ports that could be impacted by a reduction in the amount of Pacific Ocean Perch available. These communities include: Astoria, Bellingham, Blaine, Brookings, Charleston, Crescent City, Eureka, Ilwaco, Neah Bay, Newport, and Westport.

### *Justification for Recommendation*

- A 217 mt OY is equal to 24% of the Council's preferred sustainable ABC of 900 mt in 2007.
- As POP continues to rebuild, interactions with the stock will continue to increase (rebuilding paradox).
- 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.
- Estimated catch in 2006 (116.7 mt) is higher than the high OY alternative (100 mt).
- The high OY alternative (100 mt) results in a rebuilt stock in 2015.6 (just over six months through the year 2015). An OY of 217.5 results in a rebuilt stock in 2016.9. Both options equate to rebuilding during the *same* management cycle.

### *Impacts of Lower OY Values*

#### Tribal Fishery

Under a zero OY alternative, the tribal bottom trawl fishery would be eliminated, resulting in a direct loss of \$693,379 in exvessel revenue.

#### Limited Entry Trawl Non-Whiting Fishery (non-tribal)

Under a zero OY alternative the limited entry trawl non-whiting fishery would be eliminated north of 40°10'. This results in a loss of \$12,000,000 in exvessel value, which equates to a \$36,000,000 economic impact to affected communities.

Under the low OY alternative (44 mt) the limited entry trawl non-whiting fishery is expected to take 32.4 mt (Table 2-14). This same fishery is expected to take 102.6 mt in 2006. This results in a 69% reduction in catch and a loss of \$8,280,000 in exvessel revenues, which equates to a \$24,840,000 economic impact to affected communities.

Under the high OY alternative (100 mt) the limited entry trawl non-whiting fishery is expected to take 85.9 mt (Table 2-21). This results in a 16% reduction in catch and, a loss of \$1,920,000 in exvessel revenues which equates to a \$5,760,000 economic impact to affected communities.

#### Limited Entry Trawl Whiting Fishery (non-tribal)

Under a zero OY alternative, the entire whiting fishery could be lost resulting in a \$30,000,000 loss to exvessel revenues, which equates to a \$90,000,000 economic impact to affected communities.

Under the low OY alternative (44 mt), the whiting fishery is expected to take 3.0 mt of POP (Table 2-14). In 2003 and 2004, the whiting fishery caught 4 mt and 6 mt, respectively. The whiting fishery is expected to take 5.7 mt in 2006. This could result in 33-50% less POP available to the whiting fishery resulting in a loss of \$10 to 15 million in exvessel revenues. This equates to a \$30 to 45 million dollar economic impact to affected communities.

Under the high OY alternative (100 mt), the whiting fishery is expected to take 5.4 mt (Table 2-21). Based on catches in recent years, this may allow for full attainment of the whiting OY. However, based on implications of the rebuilding paradox and the rate of bycatch in the limited entry bottom trawl fishery, there is the possibility of losing part of the whiting OY.

#### Limited Entry Fixed-Gear Fishery (non-tribal)

Under a zero OY alternative, the limited entry fixed gear fishery would be eliminated north of 40°10' N. Lat. This results in a loss of \$10,000,000 in exvessel value, which equates to a \$30,000,000 economic impact to affected communities.

Under the low OY alternative (44 mt), the limited entry fixed gear fishery is expected to take 0.6 mt (Table 2-14). This same fishery is expected to take 0.4 mt in 2006. This results in a 33% reduction in catch and a loss of \$3,300,000 in exvessel revenues, which equates to a \$9,900,000 economic impact to affected communities.

Under the high OY alternative (100 mt), the limited entry fixed gear fishery is expected to take 0.6 mt (Table 2-21). This results in a 33% reduction in catch and a loss of \$3,300,000 in exvessel revenues, which equates to a \$9,900,000 economic impact to affected communities.

### Open Access Directed Groundfish Fishery

Under a zero OY alternative, the open access directed groundfish fishery slope fishery north of 40°10' N. Lat. would be eliminated. This results in a loss of \$1,500,000 in exvessel value and associated loss of \$4,500,000 to affected communities.

Under the low OY alternative (44 mt), the open access directed groundfish fishery is expected to take 0.1 mt (Table 2-14). This same fishery is expected to take 0.1 mt in 2006.

Under the high OY alternative (100 mt), the open access directed groundfish fishery is expected to take 0.1 mt (Table 2-21). The high OY value allows a status quo fishery, which is already severely constrained.

Maintaining POP catches at 2006 levels in order to prosecute fisheries on healthier stocks DOES NOT represent a profitable position for any of the fisheries which interact with POP. Using 2006 levels as a benchmark for measuring impacts is misleading in that 2006 levels are not reflective of healthy fishing communities. Total POP catches prior to the groundfish fishery disaster declaration in 2000 were higher with 751 mt caught in 1997. The total catch expected in 2006 is 116.7 mt, a reduction in catch of over 85% as well as a higher percent reduction in catches of associated species.

### **WIDOW ROCKFISH**

#### *Recommendation*

The GAP recommends an OY of 456 mt for 2007 and 2008.

#### *Fisheries Involved*

Widow rockfish are currently taken in several West Coast fisheries including:

- Research Fisheries
- Tribal 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

#### *Communities Involved*

There are at least 11 ports that could be impacted with a reduction in the amount of widow rockfish available. These communities include Astoria, Charleston, Crescent City, Eureka, Fort Bragg, Bodega Bay, San Francisco, Ilwaco, Newport, Seattle and Westport.

### *Justification for 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.
- The most recent stock assessment revealed that widow rockfish was never overfished and is rebuilding rapidly.
- Interactions with widow rockfish will continue to increase as the stock continues to grow (rebuilding paradox).
- A 456 mt OY equates to rebuilding in 2016. The preferred high OY (368 mt) results in the stock being rebuilt in 2015. Both options equate to rebuilding during the *same* management cycle. It is estimated that an OY of approximately 440 mt would result in a rebuilt stock in 2015.9.
- The 2005 stock assessment indicates that in 2004 the widow stock was not overfished and in 2004 was above the overfished level at 31% of the unfished biomass.

### *Impacts of Lower OY Values*

#### Tribal Fisheries

Under a zero OY alternative, the mid-water trawl and whiting fishery would be eliminated resulting in a \$4,752,058 loss in exvessel revenue.

#### Limited Entry Trawl Non-Whiting Fishery

Under a zero OY alternative, the entire limited entry trawl non-whiting shelf fishery could be eliminated. This results in a loss of \$6,900,000 in exvessel value, which equates to a \$20,700,000 economic impact to affected communities.

Under the low OY alternative (120 mt), projected catch of widow rockfish in the limited entry non-whiting fishery would be reduced to 0.1 mt (Table 2-14). This same fishery is expected to take 0.6 mt of widow in 2006. This results in an 83% reduction in catch and a loss of \$5,727,000 in exvessel revenue, which equates to a \$17,181,000 economic impact to affected communities.

Under the high OY alternative (368 mt), the limited entry trawl non-whiting fishery is expected to take 1.0 mt (Table 2-21). The high OY alternative could allow a status quo fishery, which is already severely constrained.

#### Limited Entry Trawl Whiting Fishery

Under a zero OY alternative the entire whiting fishery would be lost resulting in a \$30 million dollar loss at the exvessel level. This equates to a \$90 million dollar economic impact to affected communities.

Under the low OY alternative, the whiting industry hard cap would be reduced to 64.9 mt (Table 2-14). This equates to a 66% reduction from the hard cap in place for 2006. Twenty million in lost exvessel revenues could be associated with the loss of access to the healthy whiting OY based on the reduction in widow rockfish available (66% of a \$30 million dollar fishery). This equates to a \$60 million dollar economic impact to the affected communities.

Under the higher OY alternatives, it is assumed that the 200 mt hard cap for the whiting fishery would remain in place. It is difficult to predict whether losses would occur under this scenario. While 200 mt is the hard cap in place for 2006, due to the circumstances of the rebuilding

paradox it is unclear whether or not a 200 mt hard cap will affect the 2006 fishery. Presumably as the stock continues to rebound, harvesters in the whiting fishery will continue to encounter widow rockfish at higher rates.

#### Limited Entry Fixed-Gear Fishery

Under a zero OY alternative the limited entry fixed gear fishery would be eliminated. This results in a loss of \$1,800,000 in exvessel value, which equates to a \$5,400,000 economic impact to affected communities.

Under the low OY alternative (120 mt), the limited entry fixed gear fishery is expected to catch 0.5 mt (Table 2-14). This same fishery is projected to take 0.5 mt in 2006.

Under the high OY alternative (368 mt), the limited entry fixed gear fishery is expected to take 0.5 mt (Table 2-21).

#### Open Access Directed Groundfish Fishery

Under a zero OY alternative, the open access directed groundfish fishery would be eliminated. This results in a loss of \$3,000,000 in exvessel value which equates to a \$9,000,000 economic impact to affected communities.

Under the low OY alternative (120 mt), the open access directed groundfish fishery is expected to take 0.1 mt (Table 2-14).

Under the high OY alternative (368 mt), the open access directed groundfish fishery is expected to take 0.1 mt.

#### Oregon Recreational Fisheries

Under a zero OY alternative, Oregon recreational fisheries associated with widow rockfish would be eliminated resulting in a loss of \$3,200,000 to affected communities.

Under the low OY alternative (120 mt), the Oregon recreational fishery is expected to take 0.5 mt. This same fishery is expected to take 1.4 mt in 2006. This equates to a 65% reduction in catch and a loss of \$2,080,000 in exvessel value which equates to a \$6,240,000 economic impact to affected communities.

Under the high OY alternative (368 mt), the Oregon recreational fishery is expected to take 1.4 mt.

#### California Recreational Fisheries

Under a zero OY alternative, California recreational fisheries associated with widow rockfish would be eliminated resulting in a loss of \$1 billion to affected communities.

Under the low OY alternative (120 mt), the California recreational fishery is expected to take 1.6 mt (Table 2-14). This same fishery is expected to take 8.0 mt in 2006. This results in an 80% reduction in catch and a loss of \$800 million to affected communities.

Maintaining widow rockfish catches at 2006 levels in order to prosecute fisheries on healthier stocks DOES NOT represent a profitable position for any of the fisheries which interact with widow rockfish. Using 2006 levels as a benchmark for measuring impacts is misleading in that 2006 levels are not reflective of healthy fishing communities. Total widow catches prior to the groundfish fishery disaster declaration in 2000 were higher with 6,492 mt caught in 1997. The total catch expected in 2006 is 258 mt, a reduction in catch of over 96% as well as a higher percentage reduction in catches of associated species.

## **YELLOWEYE ROCKFISH**

### *Recommendation*

The GAP recommends 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

### *Fisheries Involved*

Yelloweye rockfish are currently caught in several fisheries including:

- Research Fisheries
- Tribal 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

### *Communities Involved*

There are at least 31 ports that could be impacted by lower amounts of yelloweye available. These ports include: Aberdeen, Astoria, Bandon, Bellingham, Blaine, Brookings, Cathlamet, Charleston, Chinook, Crescent City, Depoe Bay, Eureka, Everett, Fields Landing, Florence, Garibaldi, Gold Beach, Ilwaco, La Push, Mill Creek, Neah Bay, Newport, Pacific City, Port Angeles, Port Orford, Port Townsend, Seattle, Tokeland, Trinidad, Westport, and Winchester Bay.

### *Justification for 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, 36% below the ABC of 36 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 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

### *Impacts of Lower OY Values*

#### Tribal Fishery

Under a zero OY alternative, the tribal fishery loses all groundfish and salmon fisheries resulting in an economic loss of \$11,685,700 in exvessel revenue.

#### Limited Entry Trawl – Non Whiting Fisheries

Under a zero OY alternative, the limited entry trawl non-whiting shelf fishery north of 36° N. Lat. would be eliminated. This results in a loss of \$6,500,000 in exvessel revenue, which equates to a \$19,500,000 economic impact to the affected communities.

Under the low OY alternative (12.6 mt), the limited entry trawl non-whiting fishery is expected to take 0.1 mt (Table 2-14). This same fishery is expected to take 0.1 mt in 2006.

Under the high OY alternative (23 mt in 2007), the limited entry trawl non-whiting fishery is expected to take 0.3 mt (Table 2-21).

#### Limited Entry Fixed Gear Fisheries

Under a zero OY alternative, the limited fixed gear fishery north of Point Conception would be eliminated. This results in a loss of \$15,000,000 in exvessel revenue which equates to a \$45,000,000 economic impact to affected communities.

#### Open Access Directed Groundfish Fisheries

Under a zero OY alternative, the open access directed groundfish fishery north of 40° 10' N. Lat. would be eliminated. This results in a loss of \$5,400,000 in exvessel revenue, which equates to a \$16,200,000 economic impact to affected communities.

Under the low OY alternative (12.6 mt), the open access directed groundfish fishery is expected to take 0.9 mt (Table 2-14). This same fishery is expected to take 3.0 mt in 2006. This results in a 70% reduction in catch and a loss of \$3,780,000 in exvessel revenues, which equates to an \$11,340,000 economic impact to affected communities.

#### Washington Recreational Fisheries

Under a zero OY alternative Washington recreational fisheries that take yelloweye would be eliminated. This results in a loss of \$5,000,000 to affected communities (includes total loss of halibut fishery, 50% loss of groundfish fishery, 25% of salmon fishery due to depth restrictions – forced to stay inside of 30 fathoms).

Under the low OY alternative (12.6 mt), the Washington recreational fishery is expected to take 1.6 mt. This same fishery is expected to take 3.1 mt in 2006, an 80% reduction in catch, which results in a loss of \$4,000,000 to affected communities.

#### Oregon Recreational Fisheries

Under a zero OY alternative, Oregon recreational fisheries that take yelloweye would be eliminated. This results in a loss of \$45,000,000 to affected communities.

Under the low OY alternative (12.6 mt), the Oregon recreational fishery is expected to take 1.5 mt. This same fishery is expected to take 3.6 mt in 2006 and results in a 59% reduction in catch and a loss of \$26,550,000 to affected communities.

#### California Recreational Fisheries

Under a zero OY alternative, California recreational fisheries that take yelloweye would be eliminated. This results in a loss of \$400,000,000 to affected communities.

Under the low OY alternative (12.6 mt), the California recreational fishery is expected to take 1.2 mt (Table 4-45). This same fishery is expected to take 3.7 mt in 2006. This results in a 68% decrease in catch and a loss of \$272 million to affected communities.

### ***Sector Specific Comments***

#### California Fixed Gear Fishery

Under the low Bocaccio OY, all recreational and commercial shelf rockfish opportunity would be forced to access shelf species at no deeper than 30 fathoms. This would eliminate access to valued shelf species such as vermillion rockfish as they tend to be in deeper water in the southern California bight. This would also increase pressure on non-assessed nearshore species. The commercial fixed gear impact for directed groundfish fisheries would be \$37,500 per limited entry vessel per year. The open access fleet could lose \$9,300 per vessel per year. With increasingly smaller profit margins, this amount of a reduction in profit would likely be the end of their businesses.

#### Northern Open Access Directed Groundfish Fishery

Reducing the catch of midwater schooling black and blue rockfish is the least effective and most expensive way to protect yelloweye stocks. Limiting benthic species that share habitat with yelloweye by moving into shallower water is a much more effective and less costly alternative. The reduction of any catch in open access affects the most impoverished small boats and ports of the northern California and Oregon coast. The ports of Humboldt, Crescent City, Gold Beach, Pacific City and Port Orford all earned vulnerable category status. Garibaldi earned a most vulnerable title. This lost revenue must all come from the profit side of these small businesses. Due to the reduction imposed on our industry over the last six years, any lost income will have a much harsher outcome to open access fishers. Their profit margins have been eroded by raising costs without coinciding price increases. The cost of living has also gone up. This is a critical period for open access fishermen. A reduction in profits would put all open access nearshore fishermen at risk of bankruptcy. In Crescent City alone, 15 fishermen would be displaced. Each of these fishermen rely on rock cod for over ½ their yearly income. Cutting catches would make it impossible to maintain their yearly cash flow.

#### Southern Open Access

Any reduction in catch of the open access fishery causes a great reduction in profit. Open access boats for the directed groundfish fishery south of 40°10' N. Lat. are generally small vessels run by single family, small businessmen. In some ports, these vessels comprise a large percentage of the fleet.

#### California Recreational Fishery

It is difficult to estimate the social and economic value of recreational fishing. The groundfish draft environmental impact statement notes that the values they calculated were drawn from the dollars anglers spent pursuing the fishery. In 2005 for example, California Recreational Fisheries

Survey data in northern California records almost 57,000 angler trips for the months of September and October. If "Action Alternative 2" were adopted by the Council, and forced an additional closure for the month of October in north-central, it would lead to a loss of almost \$3 million in recreational fishing expenditures.

Another indicator of lost revenue to the state of California is the steady decline of sport fishing license sales. CDFG reports that annual resident licenses sales are down from 2.2 million in 1976 to 1.2 million in 2005. During that time the population of California grew 166%, from 21 to 35 million people, but we lost a million anglers with a drop in sales of 54%. This decline in license sales has cost CDFG over \$32 million at a time when budget cuts leave current regulations unenforced because of the lack of wardens in the field.

The fishing public's uncertainty about the allowed species, changing bag limits and seasons remains the prime culprit for this lost revenue. The public has turned away from fishing because they do not understand the rules. The Council should support California Department of Fish and Game (CDFG's) efforts to simplify the regulations. The main change recreational stakeholders in the north-central region have requested: is expansion of the open depths out to 40 fathoms. We support this mainly for conservation reasons - no additional fish will be taken, despite the estimates in the analysis. The change will merely spread the effort away from minor nearshore rockfish.

The draft DEIS does not include the social value of recreational fishing. Dollar signs cannot describe the value of families fishing for food and fun.

#### Oregon Recreational Fishery

The charter fleet in Oregon has been reduced from 232 boats in 2001 to 94 boats sampled in 2005. About 25% of the 94 boats are NOT full-time operators – many are small 6-pack boats that are on trailers and may only operate on weekends. Management measures implemented since 2001 have greatly reduced and changed the make-up of the fleet. Many of the full-time operators have already gone out of business. The few full-time operators that are left are barely holding on. As management continues to tighten up it takes less and less restrictions to break the remaining participants.

Under low OY conditions the Oregon recreational fishery stands to lose at least \$7.5 million. This equates to 35,187 private trips and 71,427 charter trips lost.

#### Washington Recreational Fishery

For the Washington recreational fleet, – both private and charter operations are operating under restrictions that are difficult to live with currently and further reductions and restrictions will be devastating. Businesses in all sectors, (hotel/motel, bait and tackle shops, charter offices, etc.) are showing a downturn of as much as 1/3 in revenues from this time last year. This is a cumulative effect of short halibut seasons, fathom restrictions, fuel prices, and a poor economy. Many charter operations have been operating on the margin and any further restrictions are likely to break them and place the stronger businesses into their position. A zero OY on yelloweye, short halibut seasons, reduced salmon opportunity, and bad press involving albacore could result in a fleet reduction similar to the collapse of the salmon in the early eighties. There are no immediately feasible fisheries to fall back on. On Table 7-71 Summary of Percentage Change in Recreational Income Impacts it lists the south and central Washington coasts as 0.0% change, due to the fact that these areas can no longer reduce their take of yelloweye. The assumption that

further restricting opportunity in these areas will result in no change in income is ludicrous. Businesses are substantially reduced because of this year's management measures. Loss of revenue from a zero OY on canary or yelloweye will result in a loss in excess of \$5 million.

PFMC  
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