Exhibit C.8
Supplemental 2002 Canadian Rockfish Management Measures
June 2002

Fisheries and Oceans Canada

Backgrounder

BG-PR-02-006E

May 27, 2002

INSHORE ROCKFISH HARVEST REDUCTION MEASURES

Conservation measures for inshore rockfish will include a reduction of inshore rockfish harvest levels. Harvest reduction, together with the other elements of the inshore rockfish conservation strategy, will meet conservation goals and permit fisheries to continue.

Recreational Fishery

In 2002, daily limits will be reduced in the inside waters (Areas 12 to 20, 28 and 29) from five to one and seasonal closures in some areas will also be implemented. In the outside waters along the West Coast of Vancouver Island (Areas 21 to 27), daily limits will be reduced from eight to three, and in the North Coast (Areas 1 to 11), from eight to five. Anglers are advised to keep what they catch and to avoid rockfish by changing fishing locations if the daily limit is attained.

Commercial Fisheries

For the 2002 directed inshore rockfish commercial fishery, the total allowable catch (TAC) will be reduced to align the harvest levels with a fishing mortality rate of 1.5 per cent. The Inside Category ZN inshore rockfish quota has been reduced from 2001 levels by 75 per cent (from 125 tonnes to 32 tonnes) and the Outside Category ZN inshore rockfish quota has been reduced from 2001 levels by approximately 50 per cent (from 538 tonnes to 282 tonnes).

For the 2002 commercial halibut fishery, the inshore rockfish quota has been reduced from 2001 levels by approximately 50 per cent (from 210 tonnes to 110 tonnes).

For the groundfish trawl fishery, the inshore rockfish quota has been reduced from 2001 levels by approximately 50 per cent (from 23 tonnes to 12 tonnes).

Other commercial fisheries that encounter inshore rockfish as by-catch will continue to harvest their target species in 2002; however, efforts to avoid inshore rockfish will be increased. The Department is continuing to work with industry to address by-catch issues in each fishery.

First Nations

Fisheries and Oceans Canada will continue to work with First Nations to incorporate inshore rockfish harvest rate reductions measures into their fisheries.

BACKGROUNDERS

Inshore Rockfish Management Goals
Inshore Rockfish Biology

Fisheries and Oceans Canada

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BG-PR-02-005E **May 27, 2002**

INSHORE ROCKFISH MANAGEMENT GOALS

Outlined below are the components of the inshore rockfish conservation strategy that are being implemented in 2002.

1. Rockfish conservation areas will be expanded to protect rockfish habitat. They will provide a buffer against scientific uncertainty, and for the essential protection and rebuilding of rockfish stocks. Rockfish conservation areas will be most extensive in the inside waters (Strait of Georgia and Johnstone Strait) where science indicates that stock declines have been most precipitous. A first set of expanded conservation areas will take effect in mid to late June, and following consultations, a full slate of rockfish conservation areas will be established for the 2003 fishing season. Details about these conservation areas will be released shortly.
2. Fishing mortality will be substantially reduced. Current estimates of harvest rates are six per cent for the inside waters and four per cent for the outside waters. To reduce harvest rates to the precautionary sustainable harvest rate of less than 1.5 per cent requires drastic reduction of directed rockfish harvest and of rockfisn by-catch levels in the inside waters and significant reductions in the outside waters.

   On December 14, 2001, Fisheries and Oceans Canada stated that a harvest rate of less than two per cent was necessary to reverse declines and ensure stock rebuilding of inshore rockfish stocks. A recent Pacific Scientific Advice Review Committee report recommends that a sustainable fishing mortality rate for inshore rockfish species must be less than 0.75 of the natural mortality rate. Natural mortality rate has been conservatively estimated to be two per cent. A sustainable fishing rate for inshore rockfish must therefore be 1.5 per cent or less.

3. Comprehensive catch monitoring programs will be established that will allow for an accounting of all significant inshore rockfish catch (retained and released). In 2002, significant increases in catch monitoring levels are being implemented in many fisheries.

   Commercial fishery monitoring tools will include increased number of fishery observers, use of experimental camera technology, dockside monitoring, logbook data and biological sampling at landing sites. Improvements to the coverage of recreational creel surveys are being developed, and consultations are currently on-going with First Nations to develop or improve catch monitoring programs. Catch monitoring standards as outlined in Fisheries and Oceans Canada's framework entitled *Pacific Region Fishery Monitoring and Reporting Framework* will be developed for the 2003 fishing season and may be fully implemented by the following year.

4. A stock assessment framework for inshore rockfish will be developed by December 2002. Complementary stock monitoring programs, which will include the collection of abundance and biological data, will be developed in consultation with and participation of commercial and recreational harvesters and First Nations. This framework will enable the Department to more accurately assess rockfish abundance and evaluate the progress toward rebuilding objectives.

OTHER BACKGROUNDERS

Inshore Rockfish Harvest Reduction Measures
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BG-PR-02-007E **May 27, 2002**

INSHORE ROCKFISH BIOLOGY

Thirty-four different species of rockfish live in B.C. coastal waters. Inshore rockfish include quillback, copper, china, tiger, black, and yelloweye (sometimes called Red Snapper) rockfish. B.C. rockfish come in many different shapes, sizes and colours, but they have certain characteristics in common. They are long-lived, have low productivity, mature slowly, are mainly sedentary in nature and rarely survive after being caught. These characteristics make inshore rockfish particularly vulnerable to over harvest and local area depletion.

Yelloweye rockfish, for example, can reach 90 centimetres in length and live over 100 years. After these rockfish reach sexual maturity, at about 20 years of age, they produce larvae annually. The survival of the young rockfish is subject to ocean conditions and years of good survival occur every 15 to 20 years. These life history characteristics of inshore rockfish result in low stock productivity.

Because inshore rockfish rarely survive after being caught, catch and release is not an effective management tool in protecting inshore rockfish stocks. Rockfish possess closed swim bladders, which cause gases in their body cavity to expand when they are brought to the surface. The decompression effects, ruptured swim bladders, damaged sinuses and eyes, are irreversible and fatal and can occur when bringing fish to the surface, from depths as shallow as 10 metres (30 feet).

Conservation concerns are most apparent for the quillback and yelloweye rockfish species where there is specific evidence of unsustainable harvest levels (there is little information to directly assess harvest impacts on the other species). Quillback and yelloweye rockfish are frequently harvested as target species, but all inshore rockfish species intermingle and are impacted in the directed and by-catch fisheries. Since all inshore rockfish species are vulnerable to over harvest and they are caught together, conservation measures will encompass all these inshore rockfish species.

OTHER BACKGROUNDERS

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