THE 1992 EMERGENCY RULE CLOSING AT-SEA PROCESSING OF PACIFIC WHITING SOUTH OF 42° N LAT.

On April 22, 1992, the National Marine Fisheries Service (NMFS) published an emergency rule that, in part, closed at-sea processing of Pacific whiting south of 42° N lat. The rationale described in the attached Federal Register notice regarding the at-sea processing prohibition south of 42 are 1) high incidence of bycatch of salmon (4,600 Chinook salmon from the Eureka area in 1991) and 2) high bycatch of bocaccio and chilipepper rockfish (over 500 mt in 1991) near the Cordell Bank and Gulf of the Farallones.

The purpose of providing this Federal Register notice is to provide context regarding the Council's rationale when it decided to close processing of Pacific whiting at-sea in the area south of 42° N lat. NMFS anticipates working with the Council and the Exempted Fishing Permit (EFP) applicants to address the concerns that were raised in the 1990s, if the Council forwards for public comment the two EFP applications for at-sea processing of Pacific whiting south of 42° N lat. (Agenda Item I.2, Attachment 2 and Agenda Item I.2, Attachment 3)

almon in the mainstream Snake River and any of the following subbasins:
The cannon River, Grande Ronde River, and Salmon River.

h) Snake River fall chinook salmon (Oncorhynchus tshawytscha). Includes all natural population(s) of fall chinook salmon in the mainstem Snake River and any of the following subbasins: Tucannon River, Grande Ronde River, Imnaha River, Salmon River, and Clearwater River.

3. In Subpart C. § 227.21 is revised to read as follows:

§ 227.21\ Threatened salmon.

(a) Prohibitions. The prohibitions of section 9 of the Act (16 U.S.C. 1538) relating to endangered species apply to the threatened species of salmon listed in § 227.4 (c), (g) and (h) of this part, except as provided in paragraph (b) of this section.

(b) Exceptions. (1) The exceptions of section 10 of the Act (16 U.S.C. 1539) and other exceptions under the Act relating to endangered species, and the provisions of regulations issued under the Act relating to endangered species (such as 50 CFR part 222, subpart C—Endangered Fish or Wildlife Permits), also apply to the threatened species of and listed in \$227/4 (e), (g) and (h) of art. This section supersedes other actions on the applicability of 50 CFR part 222, including, but not limited to, the restrictions specified in \$222.2(a) and 222.22(a).

(2) The prohibitions of paragraph (a) of this section relating to threatened species of salmon listed in § 227.4 (g) and (h) of this part do not apply to activities specified in an application for a permit for scientific purposes or to enhance the propagation or survival of the species provided that the application has been received by the Assistant Administrator by May 22, 1992. This exception ceases upon the Assistant Administrator's rejection of the application as insufficient, upon issuance or denial of a permit or on December 31, 1992, whichever occurs earliest

\$ 227.72 [AMENDED]

4. In § 227.72, paragraph (e)(1) is amended by removing the words "any species listed in § 227.4" and adding, in their place, the words "any species of sea turtle listed in § 227.4 (a), (b) and (c)."

c. 92-9370 Filed 4-21-92; 8:45 am]

50 CFR Part 663

[Docket No 920403-2103]

Pacific Coast Groundfish Fishery

AGENCY: National Marine Fisheries Service (NMFS), NOAA, Commerce. ACTION: Emergency interim rule; request for comments.

SUMMARY: The Secretary of Commerce (Secretary) issues an emergency interim rule to restrict operations in the Pacific whiting fishery. These regulations are intended to minimize the impact of the Pacific whiting fishery on Pacific salmon stocks without undue hardship to the Pacific whiting industry. This action is necessary because many Pacific salmon stocks appear to be at record low levels, and some stocks may not meet 1992 escapement goals even if no fishery were conducted.

effective DATES: This emergency rule is effective from April 16, 1992 at 1706 hours, e.d.t., until 2400 hours (local time) July 21, 1992, and may be extended for an additional 90 days. Comments will be accepted through May 7, 1992.

ADDRESSES: Comments on this emergency rule may be submitted to Rolland A. Schmitten, Director, Northwest Region, National Marine Fisheries Service, 7600 Sand Point Way N.E., Bin C15700, Seattle WA 98115—0070; or E. Charles Fullerton, Director, Southwest Region, National Marine Fisheries Service, 501 West Ocean Blvd., suite 4200, Long Beach, CA 90802-4213.

FOR FURTHER INFORMATION CONTACT: William L. Robinson at 206-526-6140, or Rodney R. McInnis at 310-980-4040.

SUPPLEMENTARY INFORMATION:

Background

In 1991, the Pacific whiting (whiting) fishery was completely "Americanized." The joint venture fishery (U.S. catcher vessels delivering whiting to foreign processing vessels at sea), which in the previous year had taken over 93 percent of the whiting quota, was completely displaced by a domestic at-sea catching and processing fleet. The domestic atsea processing fleet is permitted to operate in areas that had been prohibited to foreign processing vessels south of 39° N. latitude. Those areas have been closed to foreign processing vessels due to concerns over the bycatch of salmon and rockfish and for national security reasons. In addition, domestic catcher vessels have been allowed to fish from 0-200 nautical miles (nm) offshore, whereas foreign trawl vessels could only fish seaward of 12

Mulatie Whiting age found in fishable concentrations off California in the spring. The fishery follows the stock northward until it is predominantly in Canadian waters or offshore in the fall. The 1992 Pacific whiting season begins on April 15. An earlier fishery could be expected to increase effort in waters near the Cordell Bank and the Gulf of the Farallones National Marine Sanctuaries off the Coast of California, and could increase the likelihood of interception of Sacramento winter-run chinook salmon that have been listed as "threatened" under the Endangered Species Act (ESA). Chilipepper and bocaccio rockfish, which are also caught as bycatch in the whiting fishery, are found in these waters as well and used in fish meal. Otherwise, in a directed fishery for rockfish, chilipepper and bocaccio would generate a significantly higher price. In part to alleviate these concerns, an April 15 opening date was established for the whiting fishery beginning in 1992. This opening date approximates the traditional start of the fishery and was meant to maintain the historical season structure by counteracting the 1991 trend of beginning to fish for whiting early in the year and in the southernmost area of the fishery.

Although the April 15 opening date helps to reduce impacts on some salmon stocks, particularly Sacramento winterrun chinook salmon, further review of the fishery data for 1991 indicates that the bycatch of Sacramento winter run chinook and other salmon stocks, most notably Klamath River fall chinook, could be reduced further without undue hardship on the whiting fishery.

Recently completed salmon stock assessments for 1992 indicate that the abundance of Klamath River fall chinook salmon is predicted to be at a record low level and is not expected to meet the minimum escapement level or "escapement floor" of 35,000 even in the absence of all fishing. This year will mark the third consecutive year of underescapement and will thus require the Pacific Fishery Management Council (Council) to conduct a review of the depressed status of the stock to determine the cause of the stock decline and its relationship to fishing. Because of the depressed status of the Klamath River fall chinook stock, the Council is considering, for the first time, severely restrictive fishing options for the commercial and recreational salmon fisheries, one of which is a prohibition of ocean salmon fishing along a substantial portion of the Oregon and California coasts. These circumstances prompted the Council to consider further ways to minimize the bycatch of salmon

in the whiting fishery.

Between 1980 and 1991, the bycatch of salmon in the whiting fishery was consistently higher in the Eureka area than in other areas. (These bycatch statistics included data from the foreign directed-trawl fishery, the joint venture, and the 1991 domestic at-sea processing fleet.) The southern part of the Eureka region, from 42° N. latitude to Cape Mendocino (40°30' N. lat.), tended to record the highest salmon bycatch. In 1991, approximately 66,000 metric tons (mt) of whiting were caught by the atsea processing fleet in the Eureka subarea (between 43° and 40°30' N. lat.), 34 percent of the total whiting catch. Associated with this catch, approximately 4,800 chinook salmon were taken, 76 percent of the total salmon catch taken by the at-sea processing fleet.

It is generally observed that a majority of the bycatch occurs in a few hauls. Within the Eureka Subarea, 50 percent of the salmon were taken in 8 of the 596 hauls observed by NMFS certified observers. Coastwide only 16 percent of all observed withing tows contained salmon; this percentage increases to about 25 percent in the Eureka Subarea. Although salmon avoidance measures voluntarily adopted by the at-sea processing fleet kept the coastwide incidence of salmon to approximately 0.03 salmon per mt of whiting in 1991 (one salmon in about 30 mt of whiting), well below the voluntary goal of 0.05, the catch and catch rate were higher in the Eureka area (0.07

salmon per mt of whiting). At its March 9-13, 1992, meeting, the Council recommended a number of management measures designed to reduce further the bycatch of salmon without imposing undue hardship on the whiting fishery. These management measures are described below. Because of the extremely poor salmon returns expected in 1992, the Council requested the Secretary to implement these regulations as emergency regulations under section 305(c) of the Magnuson Fishery Conservation and Management Act (Magnuson Act) before the 1992 whiting season begins on April 15.

Prohibit At-Sea Processing South of 42° N. Latitude

To protect the southern part of the Eureka area, the area of highest salmon bycatch, the Council recommended that whiting not be processed at sea south of 42° N. lat. This would shift the high-capacity at-sea processing fleet, which was able to take over 25,000 mt of whiting in a single week in 1991, to more northerly fishing areas where salmon

interception historically has been lower. It also would shift operations away from the waters near Cordell Bank and the Gulf of the Farrallones Islands which experienced high bycatch of chilipepper rockfish (over 500 mt) in 1991.

This restriction would move the largest part of the whiting fleet (the atsea catcher/processors, motherships and their catcher vessels) northward, removing the largest potential impact on Klamath River fall chinook and Sacramento winter-run chinook. Because of the mobility of these vessels, a shift to more northern waters is not expected to limit the at-sea processing fleet's ability to catch whiting, although it may slow their initial operations somewhat if whiting are not fully dispersed along the coast. However, whiting are expected to be migrating into the more northerly areas by April 15, and effort by the at-sea fleet is expected to be sufficient to harvest any amount of whiting that is available to

Catcher vessels that deliver whiting to shoreside processing plants will not be subject to this restriction. The shorebased fleet cannot follow whiting as freely because vessels need to stay within approximately 12 hours of the processing plants to maintain the quality of the fish. Unlike the at-sea processing fleet, shoreside processing plants are at fixed locations and depend on whiting caught locally; obviously; these plants are not able to follow the whiting as they migrate north. In addition, the amount of whiting expected to be harvested for delivery to shoreside processing plants is considerably less than the at-sea processing fleet would harvest in the area; consequently, the shore-based fleet's aggregate salmon bycatch is also expected to be relatively small. Thus, extending the prohibition against catchers that deliver to shoreside processors south of 42° N. lat. would unduly impact their ability to participate in the fishery, but would protect only a relatively small amount of salmon and rockfish.

The definition of processing for the purpose of this rule means the preparation of packaging of whiting to render it suitable for human consumption, industrial uses or long-term storage, except for heading and gutting unless additional preparation is done.

Close the Klamath and Columbia River Conservation Zones to Fishing for Whiting

The Klamath River and Columbia River conservation zones have been closed to the commercial and recreational salmon fisheries for some years in order to conserve salmon stocks returning to these rivers. The Klamath River Salmon Conservation Zone extends approximately 6 nm north and 6 nm south of the Klamath River mouth and 12nm seaward. The Columbia River Salmon Conservation Zone is roughly a square, 6 nm on each side, off the mouth of the Columbia River. Operators of whiting vessels voluntarily agreed not to operate in these relatively small areas in 1991. Given the record low levels of salmon, these zones will again be closed to the whiting fishery in 1992, this time through emergency rule to insure against any whiting fishing occurring in these zones.

Prohibit Directed Fishing for Whiting Shoreward of the 100-Fathom Contour in the Eureka Subarea

Another pattern evident from the analysis of the historical salmon bycatch data is the tendency for bycatch rates to be higher in shallower, nearshore areas. An analysis of the bycatch rate inside and outside of the 100-fathom contour in the Eureka Subarea from 1988 to 1990 indicated that salmon bycatch rates were 9 to 16 times higher shoreward of the 100-fathom contour. Most, if not all, of the 1991 whiting harvest in the Eureka Subarea, the area of greatest salmon bycatch and bycatch rates, was taken seaward of 100 fathoms. Concerned that a shift in the whiting fishery to more nearshore waters could increase the bycatch of Klamath River salmon and other stocks above 1991 levels, the Council recommended that all fishing for whiting be prohibited in waters shoreward of the 100-fathom contour in the Eureka Subarea.

Although catcher vessels that deliver whiting to shoreside processing plants are not subject to the 42° N. lat. restriction applied to the at-sea processing fleet, the restriction against fishing shoreward of the 100-fathom contour in the Eureka area applies to all catcher vessels in the whiting fishery. The Council's recommendation was aimed at the fishery that targets whiting because of the magnitude and intensity of that fishery, and data which indicate that a significant amount of the salmon bycatch in the whiting fishery occurs shoreward of 100 fathoms and in the Eureka Subarea.

Trawl vessels fishing for other groundfish species inside 100 fathoms, primarily bottom trawl vessels, often have a bycatch of Pacific whiting. In order to prevent forcing these vessels to disrupt their fishing operations by having to sort and discard incidentally caught whiting without providing any additional protection to salmon, the Secretary has modified the Council's recommendation to provide an xception to allow them to take, retain, .nd land up to 2,000 pounds of whiting from areas shoreward of the 100-fathom contour. Although little is known about the bycatch of salmon by non-whiting groundfish vessels, it is thought that most of their bycatch occurs during the winter, not during the whiting season.

The prohibition against fishing for whiting shoreward of the 100-fathom contour applies only in the Eureka Subarea. The prohibition was not extended to more northerly areas because the 100-fathom contour extends much further offshore in more northerly areas, which could adversely impact the whiting fleet's ability to harvest whiting. Incidences of higher whiting abundance can occur shoreward of 100 fathoms in the more northerly areas. If the fishery were forced seaward of 100 fathoms in these areas, some vessels would be pushed outside of their normal operating range and be unable to make whiting deliveries to shoreside processing plants. In addition, the immediate salmon bycatch problem is only in the Eureka Subarea, although some concern exists that with a greater amount of whiting effort being shifted to the north, the salmon bycatch rate on other salmon "tocks may increase. The Council

lends to monitor the salmon bycatch ites of both the at-sea processing and the shoreside sectors of the fishery in 1992, and may make future adjustments in response to additional information.

Prohibit Night Fishing

Traditionally, the catcher vessels supplying the foreign joint venture processors did not operate at night until the high-capacity surimi processors appeared in 1988. In 1991, some harvesting did occur throughout the night. An analysis of the 1991 catch rate of salmon by time of day (determined by the time the net began to be retrieved, or "haulback") revealed that salmon were most likely to be taken in the whiting fishery between midnight and 6 a.m. coastwide. Consequently, the Council recommended that fishing for whiting be prohibited coastwide between midnight and one half hour after sunrise.

Classification

The Assistant Administrator for Fisheries, NOAA (Assistant Administrator), has determined that, in light of new information regarding the depressed status of Pacific coast salmon stocks in the Klamath, Columbia, and cramento rivers, the bycatch of imon in the whiting fishery must be educed as much as practicable in order

to protect the salmon stocks. In order to be effective, this rule must be implemented before the start of the whiting season on April 15. This action is consistent with the Magnuson Act and other applicable law. The Assistant Administrator finds that the reasons justifying promulgation of this rule on an emergency basis also make it impracticable and contrary to the public interest to provide prior notice and opportunity for comment, or to delay for 30 days the effective date of this rule, as generally required by section 553 (b) and (d) of the Administrative Procedure Act. The public had opportunities to comment on the substance of this emergency rule during the meeting of the Council and its advisory committees in March 1992. Furthermore, the public participated in the September 1991 Council meetings during which reports were presented that examined the bycatch of salmon and rockfish in the whiting fishery by time of day, month, and geographical area, and which resulted in a delay in the whiting season opening until April 15. The public also will have an opportunity to comment on the emergency measures during the comment period provided by this rule.

This emergency rule is exempt from the normal review procedures of Executive Order 12291 as provided in section 8(a)(1) of that order. This rule is being reported to the Director of the Office of Management and Budget with an explanation of why it is not possible to follow the regular procedures of that order.

An environmental assessment (EA) has been prepared for this action and the Assistant Administrator concluded that there will be no significant impact on the human environment. A copy of the EA is available from the Regional Directors (see ADDRESSES).

This emergency rule does not contain a collection of information for purposes of the Paperwork Reduction Act.

The Regulatory Flexibility Act does not apply to this rule because, as an emergency rule, it was not required to be promulgated as a proposed rule.

This emergency rule does not contain policies with known federalism implications sufficient to warrant preparation of the federalism assessment under Executive Order 12612. Washington, Oregon, and California are expected to implement state regulations compatible with the Federal rule.

The Council has requested that the States of Washington, Oregon, and California concur with its finding that the proposed action is consistent with

the States' approved coastal management programs.

List of Subjects in 50 CFR Part 663

Administrative practices and procedures, Fisheries, Fishing, Reporting and recordkeeping requirements.

Authority: 16 U.S.C. 1801 *et seq.* Dated: April 16, 1992.

Michael F. Tillman,

Acting Assistant Administrator for Fisheries, National Marine Fisheries Service.

For the reasons stated in the preamble, from April 16, 1992 at 1706 hours, e.d.t., until 2400 hours (local time), July 21, 1992, 50 CFR part 663 is amended as follows.

PART 663—[AMENDED]

1. The authority citation for part 663 continues to read as follows:

Authority: 18 U.S.C.1801 et seq.

2. A new § 663.23(b)(4) is added to read as follows:

§ 663.23 Catch restrictions.

(b) · · ·

(4) Pacific whiting—1992 bycatch restrictions.—(i) Closed Areas. Pacific whiting may not be taken and retained in the following portions of the Fishery Management Area:

(A) Klamath River Salmon
Conservation Zone: The ocean area
surrounding the Klamath River mouth
bounded on the north by 41°38′48″ N.
latitude (approximately six nautical
miles (nm) north of the Klamath River
mouth), on the west by 124°23′00″ W.
longitude (approximately 12 nm from
shore), and on the south by 41°26′48″ N.
latitude (approximately 6 nm south of
the Klamath River mouth);

(B) Columbia River Salmon
Conservation Zone: The ocean area
surrounding the Columbia River mouth
bounded by a line extending for 6 nm
due west from North Head along
46°18'00" N. latitude to 124°13'18" W.
longitude, then southerly along a line of
167 True to 46°11'06" N. latitude and
124°11'00" W. longitude (Columbia River
Buoy), then northeast along Red Buoy
Line to the tip of the south jetty:

(ii) No more than 2,000 pounds of Pacific whiting may be taken and retained, possessed, or landed by a vessel that at any time during the same fishing trip fished in the Fishery Management Area shoreward of the 100-fathom contour (as shown on NOAA Charts 18580, 18600, and 18620 in the Eureka subarea (from 43°00'00" N. lat. to 40°30'00" N. lat.).



(iii) Pacific whiting may not be processed at sea south of 42°00'00" N. latitude (Oregon-California border). For purposes of this paragraph (b){4)(iii), "processing" means the preparation or packaging of Pacific whiting to render it suitable for human consumption, industrial uses, or long-term storage, including but not limited to cooking, canning, smoking, salting, drying, filleting, freezing, or rendering into meal or oil, but does not mean heading and gutting unless additional preparation is done.

(iv) Time of day. Pacific whiting may not be taken and retained by any vessel in the Fishery Management Area on any morning between 0001 hours to one-half hour after official sunrise. Official sunrise is determined, to the nearest 5° latitude, in The Nautical Almanac for the Year 1992 issued by the Nautical Almanac Office, United States Naval Observatory under the authority of the Secretary of the Navy, and available from the U.S. Government Printing Office.

[FR Doc. 92-9304 Filed 4-16-92; 8:45 am]

50 CFR Part 663

[Docket No. 920 109-2009]

Pacific Coast Groundfish Fishery

AGENCY: National Marine Fisheries Service (NMPS), NOAA, Commerce. ACTION: Notice of fishing restrictions, and request for comments.

SUMMARY: NOAA announces a reduction in the daily trip limit for sablefish taken with nontrawl gear from 500 pounds to 250 pounds. This action is authorized by the regulations implementing the Pacific Coast Groundfish Fishery Management Plan (FMP). The trip limit is necessary to keep landings within the nontrawl harvest guideline for this species while extending the fishery as long as possible during the year. This 250-pound daily trip limit will remain in effect until the regular season begins on May 12, 1992. DATES: Effective from 0001 hours (local time) April 17, 1992. Comments will be accepted through May 7, 1992.

ADDRESSES: Submit comments to Rolland A. Schmitten, Director, Northwest Region, National Marine Fisheries Service, NOAA, 7600 Sand Point Way NE., BIN C15700—Bldg. 1, Seattle, Washington 98115-0070; or Charles E. Fullerton, Director, Southwest Region, National Marine Fisheries Service, NOAA, 501 West Ocean Blvd; suite 4200, Long Beach, California 90802-4213.

FOR FURTHER INFORMATION CONTACT: William L. Robinson at (206) 526-6140; or Rodney McInnis at (310) 980-4030. SUPPLEMENTARY INFORMATION: The notice of 1992 groundfish fishery specifications and management measures (57 FR 1654; January 15, 1992) announced a two-tier scheme of trip landing limits for the nontrawl sablefish fishery that began in January and was intended to extend until the beginning of the regular nontrawl sablefish season. The fishing year began with a 500-pound daily trip limit that was increased to 1,500 pounds on March 1, 1992, with the stipulation that, if 440 metric tons (mt) of the 3,612 mt designated for the nontrawl sablefish fishery was taken prior to the beginning of the regular season, the 500pound daily trip limit would be reimposed. On March 20, 1992, the 440 mt was projected to have been exceeded, and the daily trip limit was reduced to 500 pounds (57 FR 10429; March 28, 1992).

In early April, the Pacific Fishery Management Council (Council) found that due to increased effort in the fishery, the catch was much higher than initially expected, approximately 1,400 mt before the 500-pound trip limit was reimposed. The trip limits preceding the "regular" season were intended to allow small incidental catches to be landed and to allow small fisheries to operate year-round (57 FR 1654; January 15, 1992). They also were intended to prevent discards (55 FR 52055; December 19, 1990). However, it became apparent that the 1,500-pound daily trip limit had attracted unprecedented levels of new effort and was sustaining a viable and growing target fishery. At its April meeting, the Council heard testimony that substantial targeted effort was likely to continue even under the 500-pound trip limit. The best available April data also support this

Consequently, the Council recommended that the 500-pound daily trip limit be reduced to 250 pounds, so that most of the remainder of the harvest guideline would be available for the regular season to last more than a few weeks. The Council noted that discards would be reduced if target fishing is curtailed, because fewer vessels would be trying to bring in the maximum allowable amount; when fishermen target on small trip limits. they often exceed the trip limit and discard the surplus at sea. The Council also recommended that the 250-pound daily trip limit be reimposed at the end of the regular season, on the date

necessary to extend the nontrawl sablefish fishery as long as possible during the year. To maintain the Council's original intention, NOAA is imposing a 250-pound daily trip limit until the beginning of the regular season on May 12, 1992, and announces its intent to reimpose the 250-pound daily trip limit after the end of the regular season. All weights are in round weight or round weight equivalents.

Secretarial Action

The Secretary of Commerce concurs with the Council's recommendations, and for the reasons stated above announces:

- (1) From 0001 hours (local time) April 17, 1992, until 2400 hours (local time) May 11, 1992, the daily trip limit for sablefish caught with nontrawl gear is 250 pounds. This trip limit applies to sablefish of any size.
- (2) Following the regular season, at 0001 hours on a date to be announced in the Federal Register, the daily trip limit for sablefish caught with nontrawl gear will be 250 pounds, which applies to sablefish of any size.
- (3) The restrictions apply to all sablefish caught with nontrawl gear between 3 and 200 nautical miles offshore Washington, Oregon, and California. All sablefish caught with nontrawal gear and possessed within 0 to 200 nautical miles offshore Washington, Oregon, and California are presumed to have been taken and retained between 3 and 200 nautical miles offshore Washington, Oregon, or California, unless otherwise demonstrated by the person in possession of those fish."

Classification

The determination to reduce the daily trip limit for the nontrawl sablefish fishery is based on the most recent data available. The aggregate data upon which the determination is based are available for public inspection at the Office of the Director, Northwest Region (see ADDRESSES) during business hours until May 4, 1992.

Because any delay in the implementation of this action would result in a continued excessive harvest in the nontrawl sablefish fishery prior to the beginning of the regular season, the Secretary finds that no delay should occur in its effective date. The Secretary therefore finds good cause to waive the 30-day delayed effectiveness requirement of the Administrative Procedure Act.

This action was authorized by Amendment 4 to the FMP for which a Supplemental Environmental Impact