

## RANGE OF ALTERNATIVES FOR MANAGING WEST COAST SKATE SPECIES

The Council decided in April to reconsider the Ecosystem Component (EC) species designation for big skate (*Raja binoculata*). The rationale for this consideration is based on new evidence that big skate are targeted in trawl fisheries and retained for sale in greater amounts than previously understood. According to the National Marine Fisheries Service National Standard 1 Guidelines, EC species do not require conservation and management because (a) they are not be determined to be subject to overfishing, approaching overfished, or overfished; (b) not be likely to become subject to overfishing or overfished, according to the best available information, in the absence of conservation and management measures; and (c) not generally be retained for sale or personal use. The EC designation was specified for all west coast skate species other than longnose skate (*Raja rhina*) beginning in 2015; longnose skate are currently managed with species-specific harvest specifications. The following alternatives were decided in September for considering this action.

### **Alternatives for Managing West Coast Skate Species**

The alternatives presented below, other than No Action, contemplate removing the EC designation for big skate, which has been landed in higher amounts than originally thought when the Council made the EC designation. While other skate species are caught in the fishery, the only new information available since the decision to designate all endemic skate species other than longnose as EC species is the higher amounts of big skate landed. Therefore, the only action alternatives considered for more detailed analysis are those that contemplate removing the EC designation for big skate and actively managing the species beginning in 2017.

#### ***No Action Alternative***

Under the No Action alternative, longnose skate would continue to be managed with stock-specific harvest specifications and all the other endemic skate species (Table 1) would continue to be designated EC species. As EC species, no harvest specifications would be specified except for a monitoring requirement to ensure these species are not being targeted or routinely retained for sale. Big skate cumulative landing limits are listed as a routine management measure for the shorebased individual fishing quota (IFQ) program (§660.60(c)(1)(i)). Current cumulative landing limits for the shorebased IFQ program are unlimited from January 1 to May, 15,000 lbs/month in June, and 35,000 lbs/2 months for the rest of the year. The shorebased IFQ trip limit also requires that big skate are sorted and reported on fish tickets.

Table 1. West coast skate species currently designated as Ecosystem Component species.

Common Name	Scientific Name
Aleutian skate	<i>Bathyraja aleutica</i>
Bering/sandpaper skate	<i>B. interrupta</i>
Big skate	<i>Raja binoculata</i>
California skate	<i>R. inornata</i>
Roughtail/black skate	<i>Bathyraja trachura</i>
All other skates	Endemic species in the family <i>Arhynchobatidae</i>

***Alternative 1: Actively Manage Big Skate with Stock-Specific Harvest Specifications***

Big skate would be actively managed using stock-specific harvest specifications under Alternative 1.

Management Measures Option 1: Big skate cumulative landing limits would remain as a routine management measure for the shorebased individual fishing quota (IFQ) program. Cumulative landing limits and/or bag limits could also be established as a routine management measure for the non-trawl sectors; however, catches in this sector are relatively low and thus such measures may be unnecessary.

Management Measure Option 2: In addition to big skate cumulative landing limits, implement a sorting requirement for all sectors (i.e., not just for the shorebased IFQ program when cumulative landing limits are implemented) to improve coastwide estimates of big skate mortality and to inform future stock assessments.

Management Measure Option 3: Establish shorebased IFQ for big skate in lieu of cumulative landing limits as well as a coastwide sorting requirement for all sectors.

***Alternative 2: Actively Manage Big and Longnose Skate in a Skate Complex***

Big skate would be actively managed in a new Skate complex with longnose skate under Alternative 2. Longnose skate would be an indicator species for the new Skate complex since it has been assessed. The use of longnose skate as an indicator species for the complex is contemplated under this alternative.

***Preliminary Analysis of the Alternatives***

The Groundfish Management Team (GMT) met in October to discuss some preliminary analysis of the big skate alternatives and provide some considerations for selecting a preferred alternative under Agenda Item I.9.a, GMT Report, November 2015. The GMT points out that big skate and longnose skate occupy different depths and habitats (big skate are distributed in shallower depths) and rarely co-occur. Therefore, they are not recommending longnose skate as an indicator species for big skate. Further, big skate and longnose skate have different exploitation histories. Such a separation geographically and their disparate fishery interactions may compel consideration for managing big skate with stock-specific harvest specifications and management measures (Alternative 1) rather than managing them together in a complex (Alternative 2).

Conversely, big skate would be only the second data-poor, category 3 Groundfish FMP species managed with stock-specific harvest specifications (only Pacific cod is currently managed this way) under Alternative 1. One consideration under this alternative is whether actively managing data-poor species outside of a complex is sound policy given the greater uncertainty in determining sustainable fishing limits.

Since both these species are predominantly caught in trawl fisheries, quota for the Skate complex under Alternative 2 could be issued to more effectively manage trawl impacts, although cumulative landing limits for the complex could be used in lieu of IFQ management. Given that longnose skate are not as prevalent in the catch as longnose (2010-2014 average total catch of big skate is about 40% of the total mortality of longnose skate; Table 2 in Appendix 1 in [Agenda Item H.5, Attachment 2, September 2015](#)), there is less concern that the OFL contribution of big skate would act as an OFL inflator in a new Skate complex. They are both landed and marketed on the west coast with both species a likely market substitution for the other.

The GMT intends to provide further analysis in a supplemental report at this Council meeting and will utilize some of the analysis in a University Washington PhD dissertation by Joe Bizzarro to inform this decision.

#### ***Decisions to be Made at this Meeting***

The harvest specifications for big skate that will be decided under Agenda Item I.4 will be used to determine the harvest specifications under these alternatives. Under Alternative 2, the OFLs, ABCs, and ACLs for big skate and longnose skate would be summed to determine specifications for the two-species Skate complex.

The Council is scheduled to determine a final preferred alternative for managing big skate under this agenda item (I.9). This will enable the GMT and Council staff to focus analysis of management measures for big skate that could otherwise vary greatly between the alternatives.

PFMC  
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