Discussion Document 97

Habitat Conservation (draft v12 6 January28 Dec 2016)

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(suggest removing MPA in section title as MPAs are just one of several approaches to habitat conservation ... see below)

1. Linkages between habitat attributes, managed species, and biological diversity (the conservation of which is a key component of EBFM).

2. Issues of spatial and temporal scale in our understanding of the role of that habitat mediates patterns and dynamics of fish populations.

3. Effects of fishing on habitat and habitat recovery-resilience.

   a. Current focus on sensitive and vulnerable habitats based on community recovery-resilience. That is, biologic habitats with long recovery times.

   b. We currently discount habitats with rapid recovery times (1 yr or less) for management attention but there is a potential Mismatch(?)overlap in focus on spatial and temporal patterns of habitat use and functional role byfor fishes. (e.g., as shelter and immediate access to prey) and disturbances by fishing.

   c. Effects of natural disturbance on habitat recovery and resilience and recovery.

4. Addressing habitat conservation under EBFM

   a. Minimizing gear effects via conservation engineering.

   b. Addressing indirect and cascading effects of predator removal on biogenic elements of habitat.

   c. Minimizing gear effects via effort reduction.

   d. Use of year round closed areas for habitats with high sensitivity, long recovery times and low resilience.

   e. Use of seasonal closures for habitats with low recovery times and high resilience but high functional role on a seasonal basis.

5. Approaches for developing alternatives

   a. Habitats within EPUs (based on grain size, oceanographic regime, observations)

Comment [DS1]: I agree

Comment [DS2]: Not sure I understand what you mean…that conservation measures that specify a particular place or time don't always do much to benefit the fish?

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Comment [DS3]: Do we know if EPUs include nearshore waters, eg estuaries and coastal habitats that are important nursery grounds for juveniles?

Comment [P4]: Certainly are known nursery grounds but importance remains to be determined for most(?) managed species.

b. Identify functional roles of habitats for managed species.

c. Identify ecological communities and other ecosystem roles.

d. Identify ecological sensitivity and vulnerability to fishing disturbances for each EPU-habitat type based on functional role and community attributes.

e. Analysis based on existing EFH, HMA, HAPC (and Deep Sea Coral) designations.

f. Link to spatial attributes of managed species within each EPU.

g. Identify gaps and redundancies.

h. Draft decision rules to identify (preferred) alternatives.