

## **NEW ENGLAND FISHERY MANAGEMENT COUNCIL**

### **Habitat/Marine Protected Areas/Ecosystems**

#### **I. STATUS**

##### **A. MEETINGS**

Plan Development Team: The PDT met on June 7 and 8 to evaluate SASI model spatial analyses in the context of committee motions from April 2. These motions asked the PDT to identify which locations are most vulnerable to one or more types of fishing, to provide guidance to the committee on management alternatives that could be used to protect those areas, and to evaluate the appropriateness of existing management areas. The motions and the PDT's recommendations are summarized in Document 1.

Committee: The Committee met on June 10 to consider the PDT's recommendations and develop alternatives to minimize the adverse effects of fishing on EFH. After a presentation from staff and PDT members on the SASI spatial analyses and results, the committee developed a work plan for the PDT, which will be presented to the council at the June meeting. This work plan includes exploring a range of management options including (1) status quo habitat management, (2) an option that maintains some of the current habitat closures while recommending others for elimination, and (3) an option that includes elimination of existing habitat closed areas with adverse effects minimization based on optimizing CPUE and reducing swept area. Under option 2, the committee recommended that the PDT use the results of the SASI Local Indicators of Spatial Analysis (LISA) as a starting point for developing new habitat management areas. They also recommended that the PDT consider a range of options to minimize adverse effects to EFH for each new area, from full closure to all gears to gear modifications only. Also, they asked the PDT to consider landings and revenue per unit of adverse effect to habitat when developing management options. The committee also asked the PDT to evaluate a series of locations as candidate habitat research areas. The PDT presentation, motions and associated discussion will be summarized in Document 2.

##### **B. ONGOING WORK**

The PDT has recently finalized (A) all fishing-effort-independent vulnerability outputs and maps (the uniform simulated outputs/maps), and (B) the fishing-effort-dependent outputs and maps that show previously realized area swept and previously realized adverse effects of fishing on EFH. These maps are included in the SASI Gazetteer (Document 3). The team has developed methods to analyze these outputs, specifically the Local Indicators of Spatial Association (LISA) method, and the Equal Area Permutation (EAP) method (Document 4). Finally, the PDT has developed a practicability module of the SASI model called the 'Z Net Stock' model, which allows for gear-by-gear comparisons of spatially specific instantaneous adverse effect estimates and spatially specific revenue estimates. This approach is briefly summarized in Document 5.

Finally, the PDT has compiled information on deep-sea corals, specifically, (1) their vulnerability to fishing, (2) their distribution, and (3) the overlap between their

distribution and the distribution of fishing effort. This information will be used in the coming weeks to generate a list of areas that might be suitable as coral protection zones. These recommendations will be forwarded to the Committee at their next meeting.

## **II. COUNCIL ACTION**

Review the Committee/PDT work plan for developing Phase 2 alternatives to minimize the adverse effects of fishing on EFH. The Committee is seeking broad concurrence from the Council with their approach, and anticipates having a full set of alternatives for Council review at the September meeting.

## **III. INFORMATION**

1. Memo from Habitat PDT to Habitat Committee re recommendations on adverse effects minimization alternatives dated June 9,
2. DRAFT Committee meeting summary dated June 10, 2010 (forthcoming)
3. SASI Gazetteer
4. SASI Spatial Analyses (forthcoming)
5. SASI Z Net Stock (forthcoming)