P.I./Sponsor Name: Edward W. Glazier, Ph.D./Impact Assessment, Inc.

Project Proposal Title: An Assessment of Small Boat Yellowfin and Bigeye Tuna Operations and Regulatory Scenarios in the Main Hawaiian Islands

Funding Agency: NOAA

NOAA Goal (Check those that apply):

- √ To protect, restore, and manage the use of coastal and ocean resources through ecosystem-based management
- □ To understand climate variability and change to enhance society’s ability to plan and respond
- □ To serve society’s needs for weather and water information
- □ To support the nation’s commerce with information for safe, efficient, and environmentally sound transportation

1. Purpose of the Project (one paragraph)

The primary goal of this project is to provide PFRP and the WPRFMC with valid and reliable information regarding historic and contemporary trends in commercial pursuit of yellowfin and bigeye tuna by the small boat fleet operating around the Main Hawaiian Islands. Special focus is being applied to: (a) description and spatial analysis of private FAD fishing offshore the Big Island (b) description and explanation of changes in extent and manner of use of various gear, and (c) description and explanation of trends in market and distribution of BET and yellowfin by small boat operators. The secondary purpose of the project is to characterize the economic, social, and cultural contexts within which the BET/yellowfin small boat fisheries are conducted in the MHI. Satisfaction of these project goals will enable development of regulatory scenarios and their potential effects on the fleets and their participants. The project is the human dimensions component of the ongoing PFRP project titled “Trophic Ecology and Structured-Associated Aggregation Behavior in Bigeye and Yellowfin Tuna in Hawaiian Waters” currently being conducted by Holland et al.
2. **Progress during FY 2006** (One-two paragraphs, including a comparison of the actual accomplishments to the objectives established for the period and the reasons for slippage if established objectives were not met):

We remain on schedule with our FY 2006 objectives for this project. Thorough review of HDAR, NOAA Fisheries and other sources regarding trends in production and value, costs and revenue, and other critical aspects of handline, FAD, p-FAD, and other gear, strategies, and issues relevant to BET/yellowfin small boat fisheries in the MHI has been conducted. We have also conducted a long series of interviews with state and federal resource managers, scientists, harbormasters, group leaders, market personnel, and highly knowledgeable fishermen in order to more fully understand and characterize the basic operational, geographic, regulatory, and socio-political context of PFAD fishing in the EEZ of the MHI. Preliminary findings have been compiled and submitted to the WPRFMC in a background document titled "Hawai‘i’s Pelagic Handline Fisheries: History, Trends, and Current Status" (84 pp.).

3. **Plans for the next fiscal year** (one paragraph):

Per the project objectives and schedule, plans for the upcoming months involve the convening of a series of small focus groups of fishery participants in order to document reported experiences and perspectives regarding: (a) patterns of change in PFAD and other fishing operations in the region, (b) the nature of recent operational and marketing/distribution challenges, and (c) the perceived effects of preferred and other potential future management and regulatory strategies for the MHI small boat handline and troll fleets. Additional interviews are planned with key informants to further understanding of: (a) observed changes in currents and biological communities associated with the PFADs; (b) interactions with other fishing fleets, including other portions of the small boat fleet; and (c) macro- and micro-social and economic factors that may historically have constrained and/or enabled small boat fishing operations in the MHI. Finally, we intend to incorporate archival review, interview, and observational findings from the ika-shibi project with the same elements derived during the current project to generate comprehensive description and analysis of the nature and estimated extent of BET/yellowfin fishing pressure associated with small boat fishing operations in the MHI. The draft and final reports will focus especially on longitudinal description of social and economic aspects of the fisheries and potential regulatory scenarios and their implications for the fleets.

4. **List of papers published in refereed journals during FY 2006.**

None related to the current project.
5. Other papers, technical reports, meeting presentations, etc.

Preliminary findings from this and the ika-shibi project have been presented at: (1) the 2005 PFRP Principal Investigator's Meeting, (2) the 91st meetings of the WPRFMC SSC, (3) the 131st meetings of the WPRFMC, and (4) the May 2006 meeting of the WPRFMC Pelagics Plan Team. As noted above, preliminary findings from both projects have been compiled and submitted to the WPRFMC in a background document titled "Hawai‘i’s Pelagic Handline Fisheries: History, Trends, and Current Status" (84 pp.).

6. Graduates (Names of students graduating with MS or PhD degrees during FY 2006. Provide titles of their thesis or dissertation):

Participating graduate students are expected to graduate in 2008.

7. Awards (List awards given to JIMAR employees or to the project itself during the period):

None

8. Publication Count (Total count of publications for the reporting period and previous periods categorized by NOAA lead author and Institute (or subgrantee) lead author and whether it was peer-reviewed or non peer-reviewed (not including presentations):

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9. Students and Post-docs (Number of students and post-docs that were associated with NOAA funded research. Please indicate if they received any NOAA funding. For institutes that award subcontracts, please include information from your subgrantees):

The project has involved the participation of two ABDs during FY 2006, both funded through the ika-shibi project contract with Impact Assessment, Inc.

10. Personnel:

(i) Number of employees by job title and terminal degree that received more than 50% support from NOAA, including visiting scientists (this information is not required from subgrantees):

None

(ii) Number of employees/students that received 100% of their funding from an OAR laboratory and/or are located within that laboratory.
None

(iii) Number of employees/students that were hired by NOAA during the past year:

None

11. **Images and Captions.** (JIMAR will be including images in the annual report. Please send two of your best high-resolution, color images (photo, graphic, schematic) as a JPEG of TIFF with a caption for each image. Hardcopies of images can be dropped off at the JIMAR office if no electronic versions are available.)
Caption 1: Overall Small-Boat Reported Commercial Landings by Island, Select Years
Caption 2: Reported Small Boat Participation and Landings in the MHI, Year 2000