

JIMAR – PFRP ANNUAL REPORT FOR FY 2005

P.I./Sponsor Name: Dr. Minling Pan

Industry Economist, Pacific Islands Fisheries Science Center

Dr. Keiichi Nemoto

JIMAR, Pelagic Fisheries Research Program

Project Proposal Title: Regulatory Impact Analysis Framework for Hawaii Pelagic Fishery Management: a Multilevel and Multiobjective Programming Model

Funding Agency: NOAA

NOAA Goal (Check those that apply):

- ☒ To protect, restore, and manage the use of coastal and ocean resources through ecosystem-base 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 objective of this project is to enhance the multi-level multi-objective programming model for the Hawaii fisheries that was developed under PFRP Project #2066/2113. This involves making the basic model structure more tractable for regulatory analysis. It should allow more flexible time-area specification and facilitate updating the underlying data. The update model focuses on the Hawaii-based longline fishery.

2. Progress during FY 2005 (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):

The project was wrapped up during FY05. A non-linear programming model, updated in previous years and implemented by General Algebraic Modeling System (GAMS), was used for a policy simulation to analyze the recent policy for recent (2004) reopening the Hawaii swordfish fishery.

A technical report has been completed as a JIMAR publication in 2005 and titled in "Regulatory Impact Analysis for Pelagic Fisheries Management in Hawaii: A

Spatially Disaggregated Nonlinear Programming Model", by Keiichi Nemoto, SOEST 05-01, JIMAR Contribution 04-353.

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

Project was completed

4. List of papers published in refereed journals during FY 2005.

N/A

5. Other papers, technical reports, meeting presentations, etc.

Publication:

Keiichi Nemoto. 2005. Regulatory Impact Analysis for Pelagic Fisheries Management in Hawaii: A Spatially Disaggregated Nonlinear Programming Model", SOEST 05-01, JIMAR Contribution 04-353.

Presentation:

Evaluating cost-earnings structure of the Hawaii based longline fleet in the last decade: a step toward improved prediction. PFRP (pelagic fisheries research program) PI meeting in November 29 – December 1, in the East-West conference center, Honolulu. (by Keiichi Nemoto)

6. Graduates (Names of students graduating with MS or PhD degrees during FY 2005.

Provide titles of their thesis or dissertation):

N/A

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

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):

	JL Lead Author			NOAA Lead Author			Other Lead Author		
	FY03	FY04	FY05	FY03	FY04	FY05	FY03	FY04	FY05
Peer-reviewed									
Non-peer reviewed									

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):

N/A

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): 1 (Keiichi Nemoto, PFRP economist)
- (ii) Number of employees/students that received 100% of their funding from an OAR laboratory and/or are located within that laboratory. 0
- (iii) Number of employees/students that were hired by NOAA during the past year:
0

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 or 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:
- Caption 2:

12. For multi-year projects, provide budget for the next year on a separate page. Contact Dodie Lau to confirm whether or not your project is to receive continuation funds (e.g., year 2, year 3), and for budget preparation assistance, lau@hawaii.edu