## JUSTIFICATION FOR CHANGE RECREATIONAL BAIT AND TACKLE ECONOMIC SURVEY OMB CONTROL NO. 0648-0695

This change request seeks the addition of a modeling component to the Recreational Bait and Tackle Economic Survey (RBTES) (OMB Control Number 0648-0695). The goal of the RBTES is to provide the National Oceanic and Atmospheric Administration's (NOAA) Fisheries with a better understanding of the economic characteristics of the saltwater bait and tackle retail industry in the United States (U.S.). The survey will provide the agency with the data needed to generate more precise estimates of the industry's economic contributions to coastal regions. NOAA Fisheries generally conducts analyses of economic contribution in IMPLAN, a software and data package designed specifically for building economic input-output models to estimate the economic impacts of regional business activities (Minnesota IMPLAN Group, Inc., 2010).

IMPLAN combines mathematical algorithms and county-level economic data on 440 distinct business sectors, available for individual states or the entire nation, to estimate input-output models. Input-output models are assembled in IMPLAN by first selecting the appropriate regional models (national, state, or county level) of interest, and then assigning expenditure estimates (retail sales or business costs) to the appropriate economic sectors. When an input-output model is assembled and run, IMPLAN estimates a series of economic indicators: total output, value added output, labor income, taxes generated, and employment (number of full-time equivalent jobs supported by the modeled expenditures).

One common complication when working with IMPLAN is its tendency to aggregate diverse businesses within broad economic sectors. Businesses that specialize in selling bait and tackle to recreational fishermen are generally included within the Sporting and Athletic Goods sector, which includes businesses that specialize in catering to the equipment needs of outdoor recreationalists and athletes. While Sporting Goods is certainly an appropriate category under which to put bait and tackle stores, the majority of products sold under this category are not used for recreational fishing. Furthermore, the Sporting Goods sector is also largely dominated by large national chains (e.g., Dick's Sporting Goods). Given these two issues, a sector that aggregates the economic activity of all these businesses may not accurately represent the operations of independently owned bait and tackle stores.

The RBTES seeks to construct an input-output model in IMPLAN that will provide a more accurate picture of the economic contributions of retail stores that sell recreational fishing bait and tackle. To do this, the RBTES will quantify the gross revenues, expenses by type, and net returns of bait and tackle stores by region (Northeast, Mid-Atlantic, Southeast, Gulf of Mexico, West Coast, Alaska, and Hawaii). The estimated expenditures by type will then be assigned to appropriate economic sectors in IMPLAN. A list of bait and tackle store expenditure categories matched to their corresponding IMPLAN sectors can be found in Table 1. These models will be used to calculate multiplier effects for bait and tackle stores in each region analyzed, which will provide a more accurate assessment of the economic contribution of these stores to regional economies than the multipliers provided by the standard Sporting Goods sector in IMPLAN. These multipliers can also be used to inform and improve NOAA's existing recreational fishing expenditure economic impact models (Lovell et al., 2013).

Table 1. Bait and tackle store IMPLAN sector scheme.

| Expenditure/Income Category               | IMPLAN Sector(s) | IMPLAN Description   |
|---|------------------|--|
| Inventory                                 |                  |  |
| Bait                                      | 3017             | Fish   |
| Fishing tackle (rods, lures, etc.)        | 3311             | Sporting goods   |
| Fishing lines and nets                    | 3129             | Artificial and synthetic fibers and filaments  |
| Accessories (clippers, pliers, etc.)      | 3185             | Handtools  |
| Fishing apparel                           | 3085, 3093       | All other textile products; Footwear   |
| Boat accessories and electronics          | 3249, 3238       | Search, detection, and navigation instruments; Broadcast and wireless communication equipment                  |
| Employee pay and benefits                 | 5001             | Employee compensation  |
| Building rent/mortgage                    | 360              | Real estate  |
| Facility and equipment maintenance        | 385              | Facilities support services  |
| Utility expenses                          | 351, 31, 33      | Telecommunications; Electricity and distribution services; Water, sewage treatment, and other utility services |
| Marketing/advertising                     | 377              | Advertising and related services   |
| Professional services (legal, accounting) | 367, 368         | Legal services, accounting services  |
| Insurance                                 | 357              | Insurance  |
| Taxes and licensing fees                  |                  | State/Local Government NISP; Federal Government NISP   |
| Shipping fees                             | 427              | US Postal delivery services  |

## References

Lovell, S. J., S. Steinback, and J. Hilger. 2013. The economic contribution of marine angler expenditures in the United States, 2011. US Department of Commerce, NOAA Technical Memorandum NMFS-F/SPO-134.

Minnesota IMPLAN Group, Inc. 2010.IMPLAN professional: social accounting and impact analysis software. Minnesota IMPLAN Group, Inc., Minneapolis, MN.