STRATUS CONSULTING **Evaluation of the National Fish** and Wildlife Foundation, **Fisheries Innovation Fund** Prepared for: Anthony Chatwin, Mary Beth Charles, and Christina Kakoyannis The National Fish and Wildlife Foundation 1133 15th Street NW, Suite 1100 Washington, DC 20005

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Contents

Executive S	ummary	1
About this l	Report	3
Section I	Background	
I.1	The Status and Condition of U.S. Fisheries	3
I.2	Fisheries Innovation Fund: Grant Portfolio	4
Section II	Technical Approach	5
Section III	FIF Evaluation Findings	8
III.1	Review of FIF Strategy, Deployment, and Results	8
III.2	FIF Priority Areas and Factors that Enable or Constrain Program and	
	Grantee Performance	
III.3	Answers to FIF Evaluation Questions	17
Section IV	Conclusions and Recommendations	21
Works Cite	d	24
Appendices		
A Fishe	eries Innovation Fund Evaluation Online Survey	
	eries Innovation Fund Theory of Change and Associated Logic Models for Main s of Program Activity	

Executive Summary

Overall, the National Fish and Wildlife Foundation (NFWF) Fisheries Innovation Fund (FIF) has made significant strides during its first three years of operation. FIF operates under the pole stars of "sustainability" and "innovation" within the U.S. fishing sector. Although both of these concepts could benefit from further clarification, FIF has done a good job of identifying and supporting local grantees undertaking important work that is clearly consistent with the revitalization of U.S. fisheries. Areas where FIF grantees are producing exemplary outputs include:

- Conceptualization and establishment of collaborative fishery management bodies;
- Conceptualization and establishment of fishing-oriented community sustainability plans;
- Development, testing, and installation of information systems designed to support fundamental changes in fishing business practices;
- Conceptualization and implementation of fishing business planning models consistent with evolving regulatory mandates and a triple bottom line (TBL) management approach; and
- Stronger and more explicit recognition of socio-cultural factors unique to fishing communities, such as family fishers, legacy fishers, and iconic fisheries.

While grantee accomplishments serve as exemplars for sustainability in the U.S. fishing sector, some challenges linger and important work remains to be done. Importantly, it must be recognized that FIF program outputs are, at this point, mostly intermediary accomplishments that will likely enable, but by no means guarantee, achievement of final outcomes such as fishery stock conservation and restoration, increased profitability of fishermen, or generational succession within legacy fisheries. As such, we feel that additional funding is required in order to complement FIF's current emphasis on innovation with an energetic and well-coordinated focus on the *dissemination* and *uptake* of grantee innovations throughout U.S. fisheries.

A series of seven major recommendations are provided to help assure that sustainability-focused outcomes emerge from the intermediate outputs currently being produced by FIF grantees:

- 1. Explore a wider, broader funding base; consider partnering with community development and rural development agencies: FIF may be able to expand its operational funding if it establishes relationships with community development foundations, state economic development agencies, and state and federal programs and commissions focused on economic development.
- 2. Encourage all grantees to address the role of culture and cultural change as a factor in achieving sustainable fisheries:: The broad-based revitalization being sought by FIF probably cannot be fully implemented through technological and/or organizational innovations alone. As mentioned above, FIF needs to focus more explicitly on facilitating the uptake of its fishery innovations. A program of dissemination should be guided by stakeholder input and sensitivity to the cultural predispositions of specific fishing communities. Consistent with this, we recommend that FIF compel a more distinct project-level focus upon understanding and addressing cultural factors that tend to enable or constrain uptake of innovations within the fishing sector.

3. Consider funding more municipalities: Municipalities appear to be the locus of much activity, including fishing and fishing-related industry, waterfront improvement or restoration, tourism and/or ecotourism, sustainability, and economic development. We recommend that FIF conduct targeted outreach to relevant municipal entities such as port authorities, harbor masters, and others with a fishing-related mission portfolio to recruit new applicants for program funding.

- **4. Use sustainability planning as a program locus:** The process of community sustainability planning appears to have gained traction within U.S. fishing communities. Sustainability provides a central tenet around which diverse fishing stakeholders can come together to plan and collaborate. Adoption of sustainability planning as a program locus would facilitate long-term project success, support implementation of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (MSA), and help FIF stand out from other funders in the fishing space.
- **5. Craft and nurture a sustainable fisheries network:** FIF has assembled a large and diverse agglomeration of grantees and partners. With planning and dedicated resources, FIF could transform this agglomeration into a robust and effective network structure, supporting idea sharing and uptake of lessons learned and innovation.
- **6. Operate the FIF program as a (virtual) business incubator:** In the business world, an "incubator" is a program designed to support successful development of entrepreneurial companies through a variety of support services and resources, coordinated by a management group. We recommend that FIF explore adoption of relevant aspects of the incubator model.
- 7. Craft Request for Proposals (RfPs) to seek grantees with an entrepreneurial bent: We recommend that FIF craft its RfPs to elicit information that would enable the program to focus more explicitly on the entrepreneurial skills and tendencies of applicants.

About this Report

This report has four main sections. Section I provides a background on the status of U.S. fisheries and describes the National Fish and Wildlife Foundation (NFWF) Fisheries Innovation Fund (FIF). Section II describes the six-step evaluation process undertaken by Stratus Consulting. Section III conveys evaluation findings in terms of three different perspectives on the program, each of which is presented in a separate subsection. The first subsection assesses the overall program in terms of strategic soundness, deployment effectiveness, and delivered results. The second subsection articulates findings as they relate to each of the program's five priority areas (see Exhibit 1), focusing especially on factors that act to either enable or constrain achievement of outputs under each priority area. The third and final subsection provides short answers to each of 16 questions used to guide and focus this evaluation. Section IV synthesizes overall conclusions from the evaluation process and outlines a series of recommendations intended to enhance ongoing program performance.

Exhibit 1. Fisheries Innovation Fund Priority Areas

Innovations in capacity building

- Projects that assist and promote the participation of fishing communities in the establishment of Regional Fishing Associations, community trusts, community supported fishing associations, or permit banks to help retain access to fishery resources by fishermen in local communities
- The development of community sustainability plans
- Creation of fishery conservation networks organizing vehicles for sharing information among fishermen, communities, scientists, and others
- Development of viable processes to promote intergenerational fishery access, and entry level access into the fishery

Innovative bycatch reduction initiatives

 Projects that will lead to reduced impacts on non-target species and habitats and enhance the opportunity for fishermen to fully access annual catch limits

Innovations in monitoring and evaluation

 Projects that improve monitoring and evaluation of fisheries, including enhancement in observer coverage, tools to gather data, electronic monitoring on vessels, or development of socio-economic and biological performance measures to establish baselines and track coverage over time

Innovative financing for fisheries

 NFWF is investigating the possibility of incorporating a loanmaking component into the FIF so applicants can support opportunities and/or acquisitions leading to increased profitability

Innovations in recreational fisheries

 Projects that improve monitoring and evaluation (e.g., dockside surveys), reduce release mortality, and otherwise enhance conservation in the recreational sector

Appendix A includes the survey instrument utilized for this evaluation and Appendix B includes a FIF programmatic theory of change and component logic models developed collaboratively by FIF staff and Stratus Consulting.

I. Background

I.1. The Status and Condition of U.S. Fisheries

The Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (MSA) includes provisions to help rebuild overfished stocks; sustain fishermen and fishing communities; and promote safety, fishery conservation, and social and economic benefits. Fishery stocks in the United States appear to be on the rebound. The National Oceanic and Atmospheric Administration (NOAA)

oversees 446 fish stocks under 46 federal management plans. Of this total, NOAA has made overfishing status determinations for 284 stocks. In 2012 NOAA determined that 10 stocks are no longer subject to overfishing, 4 stocks are no longer overfished, and 6 stocks have been rebuilt. In all, 32 fishery stocks have been rebuilt since 2000. Moreover, even stocks that remain on the overfished or overfishing lists are subject to annual catch limits.

These accomplishments are important because sustainable fisheries provide income to fishing families, seafood to consumers, recreational opportunity to anglers nation-wide, and an economic foundation for many coastal communities. In 2011, commercial fishermen in the United States harvested almost 10 billion pounds of seafood, valued at \$5.3 billion. The overall seafood industry (harvesters, processors, wholesalers, and retailers) generated almost \$130 billion in sales, and supported 1.2 million jobs. Recreational fishing resulted in sales of \$70 million and supported 455,000 jobs.

Although there are positive outcomes associated with U.S. fisheries reform, significant challenges remain. The purpose of the FIF is to foster innovation and support effective participation of fishermen and fishing communities in the implementation of sustainable fisheries in the US. Fishery revitalization frameworks based upon collaborative management and quota allocation regimes, information-driven and adaptive management structures, and fishing business professionalization is the foundation upon which the program expects to achieve sustainable fisheries.

I.2. Fisheries Innovation Fund: Grant Portfolio

FIF is administered by the NFWF and co-funded by NOAA, the Gordon and Betty Moore Foundation, and the Walton Family Foundation. FIF funds approximately \$1.5–2.5 million in grant awards on an annual basis.

Since its inauguration in 2011, the FIF program has invested over \$5.5 million in 50 projects to facilitate the sustainability of U.S. commercial and recreational fisheries. With a grantee match of approximately \$4.9 million, FIF influences a total investment of about \$10.4 million dedicated to the revitalization of U.S. fisheries. FIF grantee award amounts have varied significantly over the program's span of activity, averaging \$135,000 per grantee in 2011, \$86,000 in 2012, and \$104,000 in 2013. Across the three award years, grant amounts have ranged between \$20,000 and \$220,000. According to NFWF, FIF receives approximately \$7.50 in funding requests for every \$1 awarded. Grant awards support project performance periods of 1–2 years.

FIF does not operate under a permanent endowment or long-term funding arrangement. The FIF program is compelled to replenish its funding on an annualized basis. This means that FIF's overall funding levels are subject to the uncertainties of budget cycles and can vary appreciably from year-to-year.

FIF grantees are diverse. Almost 60% of lead grantees classify themselves as a nonprofit organization, 16% as an association, 10% as a corporation, 10% as a coop, and 3% as an academic or educational institution. With the exception of a handful of large, national nongovernmental organizations (NGOs), most FIF grantees are relatively small organizations with limited resources to support efforts to enhance fishery management and/or fishing community sustainability. Approximately 17% of grantees have a fisheries-related budget of less than \$50,000 per year, 13% have a budget between \$50,000 and \$100,000, 40% have a budget between \$100,001 and \$250,000, while 30% have a budget of more than \$250,000 per year.

Most FIF grants appear to be place-based, with almost 17% of grantees claiming a "local" scope of work, 23% identifying a "state" as their point of focus, and 40% adopting a "regional" project perspective. Only 17% of grantees indicate that their work has a "national" focus. The FIF portfolio includes grantees from most fishing regions of the United States, including the Northeast, mid-Atlantic, Gulf of Mexico, Pacific coast, Alaska, and the Great Lakes. FIF grantees also display diversity in terms of the type of fishery they pursue, including large- and small-scale commercial, recreational, legacy, and artisanal fisheries.

The FIF grant opportunity is promoted through advertisements and notices in the professional fishery media, staff outreach at fishing-related events and symposia, and interaction with regional councils. Unlike many philanthropic programs, FIF generally avoids grantee recruitment, emphasizing an open Request for Proposal (RfP) process. In other words, FIF does not recruit grantees to conduct specified types of projects or program-level interventions, but instead employs a competitive process to solicit applications and utilizes external panels of expert stakeholders to review proposals and recommend

awards based strictly on their potential for innovation within the sphere of sustainable fisheries.

In addition to its grant portfolio, the FIF program is currently exploring the possibility of making loans to qualifying organizations.

Consistent with its programmatic scope, FIF funds a wide variety of projects. Awards address at least one of five designated "priority" areas, outlined in Exhibit 1. The most common FIF project objectives are to develop technologies to share information and improve fishing practices, enhance the ability of fishermen to collaborate on fishery management, develop ways to reduce bycatch, provide training to enhance the business and technical skills of fishers, and establish collaborative fishing management organizations. As indicated by examination of Exhibit 2, grantee descriptions of their activities suggest a good alignment between FIF priorities and grantee project goals.

II. Technical Approach

In October 2012, NFWF posted an RfP seeking preproposals to conduct an independent evaluation of the FIF program. In January 2013, NFWF awarded a contract to Stratus Consulting to conduct this evaluation. Throughout the evaluation, Stratus Consulting worked in consultation with NFWF, including both evaluation staff and FIF program managers. In addition to this report, we provided frequent project updates, shared research inputs, discussed impressions and preliminary findings, and

Exhibit 2. Primary Goals of FIF Grantees		
000/	Develop technologies or other approaches	
68%	to gather, share, and use data and	
	information to improve fishing practices	
	Enhance ability of fisherman to	
(65%)	communicate, network, or collaborate on	
	fishery management	
48%	Develop ways to reduce bycatch	
	Improve professional and/or business	
(39%)	capacity of existing collaborative	
	organizations	
	Provide training or education to enhance	
(39%)	the business or technical skills of	
	fishermen	
35%	Improve markets for sustainable fisheries	
	Establish a fishing association or other	
35%	collaborative management body	
26%	Develop a process to enhance entry-level	
2070	access to fisheries	
23%	Improve traceability of fish in supply chain	
25 /0		
	Improve monitoring of recreational	
23%	fisheries	
	Davidan a community systemability rales	
19%	Develop a community sustainability plan	
100/	Provide access to financing	
16%		

conducted joint design sessions for a revision of the program's theory of change and associated performance metrics.

Major research steps conducted by Stratus Consulting included:

- 1. Review of technical literature and structured archival review of all 50 projects funded during the first two years of program activity;
- 2. Structured and informal interaction with NFWF/FIF staff to discuss program strategy, program management, evaluation scope, and evaluation questions;
- 3. An online grantee survey administered to all past and present grantees;
- 4. A series of 25 topically oriented, in-depth grantee interviews (by telephone);
- 5. A series of interviews with outside experts knowledgeable about fisheries management; and
- 6. A synthesis of information assembled through previous research steps.

This approach was developed to obtain an ensemble of qualitative and quantitative information about the FIF program. Taken together in an integrated analysis, these methods enabled Stratus Consulting to merge methodologies and provide a careful, nuanced narrative depiction of the soundness of the program's strategic orientation, the effectiveness of its deployment, and the impacts of grantee activity. As a general rule, evaluation findings must be supported by, or at least be consistent with, multiple lines of evidence from the ensemble of research activities.

These research and analytical steps are described in greater detail below.

Step 1: Archival Review: FIF Strategic and Program Documentation; Grantee Proposals, Reports, and Collateral Materials

Stratus Consulting conducted a comprehensive archival review of all FIF grants awarded to date, reviewing project proposals and reports, where available. The goal of the archival analysis was to gain an understanding of the context, purpose, approach, and status of individual grant projects; and to begin a systematic, bottom-up characterization of the grant portfolio, including areas of emphasis across strategy priority areas and geographies. As part of this activity, Stratus Consulting categorized (1) primary and secondary activity types addressed by each project; (2) the project approach and basic output/outcome delivery mechanism; (3) intermediate-term outputs (as applicable); (4) type of project actor [e.g., NGO, association, academic institution]; (5) project outputs or outcomes, both planned and unintentional; (6) significant exogenous factors; and (7) factors that appeared to limit or enable grantee and/or programmatic progress. For each project, we also documented partners and partner roles, and metrics for tracking progress and success.

As part of our initial document review, we also reviewed a limited portfolio of directly relevant technical literature, including relevant journal articles and published outputs from the Moore Foundation, MRAG Americas' evaluation of U.S. catch share programs, selected NOAA workshop reports, the EDF Catch Share Design Manual, and other "defining" literature.

Step 2: Interviews with FIF Team

After completing the archival review, Stratus Consulting worked closely with NFWF and FIF program staff to discuss a preliminary set of evaluation questions derived through review of NFWF and FIF strategic materials and individual project proposals and reports. Specifically, we facilitated a critical discussion of each question, resulting in a vetted set of 16 questions tuned to the specific needs of program staff.

Step 3: Online Survey of FIF Grantees

Stratus Consulting surveyed all grant recipient organizations to collect grantee perspectives on project implementation, near-term outputs, the soundness of program strategies, and how effectively the program is being deployed and managed by NFWF.

Conducted online through *SurveyMonkey*, questionnaires included questions common to all grantees, as well as questions addressing unique aspects of different types of projects (e.g., data and information system development projects versus projects focused on the development of collaborative bodies charged with the administration of specific reforms). The questions included a mix of closed- and openended questions developed in consultation with NFWF and FIF staff. Techniques used to analyze the survey data included quantitative and qualitative approaches, such as simple categorization and coding techniques, contextual analyses, and limited statistical analysis. Open-ended questions were assessed through the use of narrative content analyses. The response rate for the survey was 65% (33 responses out of 51 recipients). The instrument fielded for this survey is included in Appendix A.

Step 4: In-depth Interviews with Grantees

Stratus Consulting conducted a series of 25 in-depth, topically focused interviews with FIF grantees involved in at least one of the following activities: collaborative organization development, community sustainability planning, information system development or implementation, fisherman training or professionalization, or new market development.

Step 5: External Interviews

Working with input from FIF staff, Stratus Consulting identified six individuals knowledgeable about fisheries reform. Conducted by telephone in a semi-structured format, these individuals were interviewed to obtain feedback on FIF strategic directions, program priorities, and general perceptions concerning the role and value of FIF.

Step 6: Analytical Synthesis and Development of Reports and Presentations

Stratus Consulting used inputs and findings derived through Steps 1–5 to address the evaluation questions and provide a set of evaluation findings and key recommendations. For each major FIF intervention strategy, we assessed whether and how well inputs seem to be leading to planned outputs and outcomes. As described under the approach to Task 1, grants were classified according to a typology of basic activities with descriptions of how each grant furthers strategic objectives according to the program's presumed logic of intervention. We also synthesized our research inputs in terms of "enabling" and "limiting" factors. Finally, we collaborated with FIF and NFWF evaluation staff to jointly design a revised theory of change for the program, including problem statements, associated major intervention activities, and related performance metrics.

III. FIF Evaluation Findings

In this section we convey findings from the FIF evaluation. Our findings are expressed in terms of three different perspectives on the program, each of which is presented in a separate subsection. The first subsection assesses the overall program in terms of strategic soundness, implementation effectiveness, and delivered results. The second subsection articulates findings as they relate to each of the five FIF priority areas (see Exhibit 1), including consideration of factors that act to either *enable* or *constrain* achievement of outputs under each priority area. The third and final subsection provides short answers to each of the 16 questions used to guide and focus this evaluation. These three subsections follow below.

III.1. Review of FIF Strategy, Deployment, and Results

In this subsection we provide a general, program-level assessment of the FIF program in terms of the soundness of its strategic orientation, the effectiveness of program- and grant-level deployment, and results.

<u>Program Strategic Orientation</u> Inaugurated with an emphasis on projects to support and enable catch share program design and implementation, FIF now seeks to support innovative activities consistent with the broader goal of sustainable U.S. fisheries.

Although the notion of "sustainability" appears to resonate with most grantees, they sometimes have differing perspectives regarding the importance of the three aspects of the concept of "sustainable fisheries." Although grantees all seem to understand that sustainability involves consideration of environmental, economic, and social equity factors, different grantees tend to favor or emphasize different aspects of this triple bottom line (TBL). Exhibit 3 illustrates that FIF grantees tend, at least initially, to prioritize economic and equity goals above environmental issues. Based primarily on input captured through in-depth interviews, we feel that this fluid conceptualization of sustainability is appropriate and consistent with the FIF emphasis on innovation. Consistent with the MSA. FIF does not try to force a particular constellation of sustainability values upon its grantees. Rather, the FIF strategic orientation is based on provision of support for local entities to devise innovative, place-based solutions to persistent, long-term fishery issues such as bycatch reduction, access to regulatory allocations, perpetuation of family

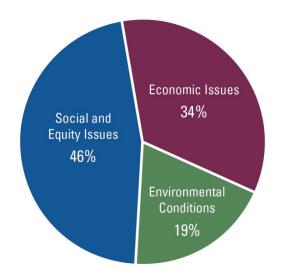


Exhibit 3. How Grantees Think about Fishery Community Sustainability: This graphic was derived through quantitative analysis of an online survey question asking grantees to designate primary and secondary focus areas in their community sustainability plans, with primary designations scored as a single point and secondary designations scored as a half point. Based on this rubric, 46% of responding grantees indicated that social and equity considerations were either a primary or secondary consideration in their sustainability plan; 34% identified economic issues as a primary or secondary aspect of their plan; and a little less than 20% identified environmental factors as a primary or secondary focus of their community sustainability plan. In other words, the social and economic elements of sustainability appear to be more salient to grantees than environmental factors. This perception is broadly consistent with in-depth interviews.

fisheries and iconic fishing communities, and challenging business models. In other words, it makes sense to allow grantees to address their most urgent problems first. Some grantees argue that this strategy may even incentivize fishers to join a collaborative body, thus creating a motivational structure to address environmental compliance as a co-benefit of improved socio-economic conditions.

As indicated by the thematic unity of the "word cloud" in Exhibit 4, grantees clearly see FIF as a catalyst for "innovative," "cutting-edge" activity. Archival review indicates that FIF grantees commonly employ approaches associated with innovative organizations and/or project teams. Each of the following traits was observed among multiple grantees:

- Use of focus groups or other listening sessions at the beginning of projects to help assure that organizational or technological interventions meet real needs or address genuine concerns, thus paving the way for target audience buy-in and acceptance.
- Use of so-called peer- and/or co-learning sessions at the beginning of projects to help build trust and assure convergence of key needs, values, or operational assumptions.
- Explicit recognition of risk factors coupled with an adaptive approach to project execution.
- Interaction with entrepreneurial private-sector entities motivated to open new markets in a revitalized fishing space.



Exhibit 4. How Grantees Think about FIF: This "word cloud" was derived through quantitative analysis of an open-ended survey question asking grantees about FIF's "greatest strengths." In this visual representation, font size depicts the relative frequency with which survey respondents used particular words or concepts. (Note: colors have no meaning in this context.) This word cloud suggests that many FIF grantees view the program as a catalyst for creativity and innovation.

Combining input from grantees, external experts, and technical literature, the following stand out as positive aspects of FIF's strategic approach, in addition to its focus on sustainability and innovation:

- Grantees, outside experts, and review of technical literature converge to support the value of FIF "priority areas" as a means through which to revitalize U.S. fisheries. Indeed, we registered no grantee critique of the topical or substantive focus of FIF priority areas or overall portfolio structure. We also note that FIF priority areas tend to reinforce one another. For example, FIF grantees frequently meld efforts to develop monitoring technologies as part of a larger configuration of activity, including organizational development and market conditioning.
- Although exogenous factors can clearly impact FIF programs, we find that the geographical and
 ecological scales of intervention are generally consistent with the types of problems that FIF
 grantees are addressing. In other words, grantees seem to be tackling appropriately scaled,
 tractable problem sets, consistent with well-defined ecological, socio-economic, and social
 parameters. Although FIF's awards are modest, grantees nevertheless claim funded amounts are
 sufficient to leverage goals in their local circumstances.
- The FIF program appears to welcome a diverse value orientation among grantees. We observed a wide variation in grantee views with respect to marine conservation, appropriate governmental and regulatory roles, and the cultural importance of fishing communities.
- The program's focus on "real fishermen" has been noted and appreciated within fishing communities.

At the time of our review, the FIF program lacked a detailed description of its strategic orientation, mission parameters, goals, and timeline. The only publically available documents that describe the program are a five-paragraph overview on the NFWF website; the 2013 FIF RfP, which includes a bulleted summary of program priority areas; and a list of grantees (also on the FIF page of the NFWF website). The FIF program does not have a written program prospectus, strategic plan, or any type of program-level status report. From the standpoint of an independent evaluation, this lack of written strategic basis is important because it makes it difficult to identify "markers" against which program performance can be assessed.

To address this shortcoming, Stratus Consulting used a backcasting technique to develop a FIF theory of change based on content review of grantee proposals and reports. We documented the problems that grantees were attempting to address; the types of interventions they proposed; and their outputs and outcomes, both targeted and achieved. This set of materials was presented to FIF and NFWF evaluation staff, and enhanced through iterative exchange. The resulting theory of change, component logic models, and metrics (see Appendix B) reflects FIF's actual program orientation and approach, but also makes it clear that the current emphasis on innovation needs to be augmented with a strong focus on the dissemination and uptake of grantee accomplishments.

Program Implementation A number of factors combine to suggest positive and effective deployment of the FIF program. Overall, FIF grantees are very confident that they will achieve their proposed project deliverables. Indeed, almost all (97%) surveyed grantees feel their project is "on track to meet its proposed deliverables." Moreover, grants awarded by the program appear to be consistent with the goals articulated in FIF RfP documents. Based on review of grantee interim and final reports, grantee interviews, and conversations with program staff, we find that grantee project outputs are generally

consistent with activities described in proposals. Grantees tend to be appreciative and complimentary regarding administration of the FIF program; indeed, no grantees indicate that NFWF project administration was a major challenge in the administration or execution of their grant.

Although a relatively small and new program, FIF appears to have developed an extensive body of grantees and partners. We suggest this is due at least in part to FIF's practice of direct outreach to fishermen and fishery stakeholders. Exhibit 5 illustrates FIF grantees and their proposal partners. Structured in terms of east and west coast grantees, interrelationships among grantees and partners are indicated by lines between entities. Very few grantees appear to be operating on their own, apart from interaction with other fishery stakeholders. Focused predominantly on small, locally oriented organizations, Exhibit 5 illustrates that FIF involves very few large organizations with a nation-wide mission. This model puts most FIF resources where the "rubber meets the road," which is to say, with local groups undertaking specific projects to revitalize their community and fishery. Although many FIF grantees have a local point of focus, we note that none of the respondents to the grantee survey self-identify as a town or municipality. This may indicate a gap in FIF program coverage because municipalities are clearly the locus of relevant activities such as fishing-related industry, waterfront improvement or restoration, tourism and/or ecotourism, and economic development.

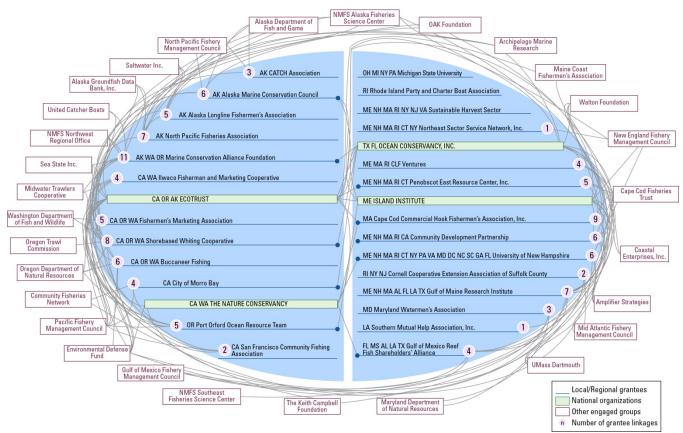


Exhibit 5. Interconnectivity between FIF Grantees and Sector Partners. Based on a review of grantee proposals, this graphic lists FIF grantees and depicts proposed interaction and/or endorsements, both with other grantees and nongrantee stakeholders in the fisheries space. The graphic also displays the number of partnership and/or or endorsement linkages for each grantee.

The multifarious linkages among grantees and other partners within the FIF portfolio suggest intriguing possibilities for resource sharing, co-learning, and a potential network or community of practice through which to disseminate program accomplishments and lessons learned, helping to assure that FIF achievements are not lost with single grantees. Exhibit 5 indicates that FIF grantees already engage with one another (a perception that is supported through archival and in-depth interviews); however, we did not observe the level, frequency, or pattern of ongoing, repeated interactions typically associated with a robust network. Although FIF grantees are often aware of one another and there are instances of coordinated activities, it is less clear that there is a rich and extensive collaboration. We heard few accounts of robust forms of collaborative behavior, such as idea sharing, data sharing, service provision, or joint decision-making. Influenced by archival analysis and input from outside observers, we think this broad collection of localized partners could be leveraged into a deliberate, coordinated network structure.

<u>Program Results</u> The FIF is a relatively young program, currently executing its third term of grantee funding and activity. Since many of the program's objectives involve complex environmental, social, and economic interventions, it is too early to expect final outcomes. For this reason, our evaluation has focused more heavily on project-specific outputs and their apparent consistency with program-level objectives, and near- and mid-term programmatic outcomes.

III.2. FIF Priority Areas and Factors that Enable or Constrain Program and Grantee Performance

Findings in this subsection are structured in terms of FIF's five priority areas. Each program priority area is framed in terms of factors that tend to constrain or enable grantee performance and/or program progress.

Innovations in Capacity Building The FIF program supports a wide variety of activities intended to expand and sharpen the capacity of fishermen and fishing communities. Many FIF grantees (35%) are focused on development of collaborative management bodies, such as fishing associations, coops, or permit banks. These collaborative bodies are being developed to support a variety of fishery sustainability activities, including quota allocation management, risk management, access to capital, financial management, professional development, provision of technical assistance, specialized marketing and sustainable fisheries branding, networking and facilitation of professional interaction, and assistance with regulatory compliance. Other grantees have used FIF resources to develop sustainability plans; create fishery conservation networks; and develop processes through which to promote intergenerational fishery access.

While grantees express optimism that their efforts will lead to successful outcomes, expert opinion and observation are more circumspect. Expert observers stress that collaborative resource management tends to be complicated and organizationally challenging, often necessitating a blending of local, state, and national interests and institutions, as well as ongoing negotiation and reconciliation of conflicting objectives (Gutierrez *et al.* 2011, Kellert *et al.* 2000, Acheson 1981). In this context, we remind that organizational development is rarely an end-in-itself, but rather an output intended to help facilitate other goals.

Almost 40% of FIF grantees are working with fishermen or fishery community stakeholders to improve their ability to develop business-related plans. This is an important endeavor. As one fishing association representative puts it, "business planning for most fishermen consists of the following: wake up, go

fishing, bring back fish, sell it." This lack of rigorous, data-driven business planning and management can constrain fishermen by limiting their access to capital, hamper their efforts to comply with regulatory requirements, and restrict their ability to join in collaborative efforts with other fishermen.

A similar line of activity within the capacity building priority area involves community sustainability planning. Framing their activity in response to the MSA and NOAA Catch Share Policy, six grantees have used FIF funding to develop fishery community sustainability plans. In this model, sustainability is associated with a community or specific marine geography. As one grantee says, "The locality is the perfect entity to approach sustainability, [it is important to] balance social, economic, and environmental needs." Grantees share that they have struggled with development of sustainability plans because of ambiguities in the MSA and lack of "approved templates," but nevertheless appear to view the process as galvanizing for the community and generally worthwhile. Grantees agree that fishery sustainability planning would be strengthened if state agencies and/or regional councils adopted guidelines or some other type of authoritative model.

Factors that appear to *enable* FIF planning and capacity-building efforts include the following:

- Paying Attention to the Social Prerequisites of Organizational Development and/or Collaborative Management: Many of the FIF organizational development activities are based on extensive outreach efforts among fishermen and other local stakeholders, some of which involve innovative networking and co-learning exercises designed to build trust, establish cooperative relationships, and pave the way for effective organizational operations. Sixty-five percent of FIF grantees indicate that their funding was used to support activities intended to "enhance communications [and] collaboration on fisheries management."
- Professional Development Efforts to Support Organizational Change, Technology Utilization, and/or Collaborative Management Regimes: Half of the FIF grantees responding to our survey indicate that "lack of professional capacity" is an impediment to their ability to achieve business-and conservation-related goals. The FIF capacity-building component includes a strong emphasis on training and professional development. Types of activities include training in the use of geographic and data management systems, financial management, regulatory compliance, and accounting and tax management. These are important lines of activity. As one grantee says, we are "teaching fishermen to compete in the new business economy for fisheries." Almost 40% of grantees are working to provide training or education to enhance the business or technical skills of fishermen.
- FIF is Viewed as an Honest Broker: Although distrust (see below) among fishery stakeholders acts as an impediment to some fishery reform efforts, FIF seems to have developed a reputation as an honest broker working, as one grantee puts it, "above the fray." Some grantees believe this actually creates opportunities for FIF that may not be available to other organizations working in the fishery space.

Factors that appear to *constrain* FIF efforts to facilitate development of collaborative fishery management organizations include the following:

• Distrust among Actors in the Fishery Sector: Meaningful interaction and collaboration within the fishery sector is inhibited by a pervasive attitude of distrust among stakeholders. Over half of our in-depth interviews included non-elicited reference to trust-related issues. Among grantees who

are developing a sustainability plan, the lack of trust among stakeholders is listed as a challenge by almost 80% of survey respondents. This distrust colors relationships between fishermen and regulators, between actors within different fishery sectors, between "large" and "small" fishermen, and between community "insiders" and "outsiders."

• Uncertainties in the Overarching Regulatory Environment: Some efforts to establish local and/or regional collaborative bodies appear constrained by uncertainties regarding federal and state regulatory regimes. Nearly 20% of survey respondents view "challenges associated with government regulation" as a "major impediment" to their FIF-funded activity, while almost 40% of respondents see governmental regulation as a "minor impediment" to successful completion of their project activity. Examples of regulatory uncertainty include how catch shares will be applied to fishermen in the Northeast, a lack of guidance regarding an acceptable approach to community sustainability planning, and confusion regarding how the National Marine Fisheries Service (NMFS) plans to administer and use electronic monitoring data.

Innovative Bycatch Reduction Initiatives As defined under the MSA, bycatch is "fish which are harvested in a fishery, but which are not sold or kept for personal use, and involves economic discards and regulatory discards." As one grantee describes it, "bycatch avoidance is difficult, like playing Russian roulette with lots of loaded chambers." FIF addresses bycatch reduction through a combination of activities including gear modification, hotspot mapping, risk pooling arrangements, and other improved fishing practices. Forty-eight percent of surveyed FIF grantees define bycatch reduction as either a "primary" or "secondary" project goal. Although most FIF grantees are still in the early stages of project execution, there is some evidence suggesting that FIF investments are already leading to reduced bycatch. In one case, a grantee has used a geographic information system (GIS) tool to navigate among risk-ranked fishing zones, resulting in a bycatch rate of 2%, while the fleet as a whole maintains a bycatch rate of almost 30%. In addition, many grantees express confidence that technology investments, gear enhancements, or practice changes are sufficient conditions for eventual achievement of bycatch reduction goals.

A factor that appears to *enable* FIF bycatch reduction initiatives involves:

• Recruitment and/or Recognition of Entrepreneurial Fishermen: While some fishers are reluctant to accept new systems and changes in practice in order to avoid bycatch, others have a different view. As demonstrated and explained by some grantees and substantiated in technical literature (Miller and Van Maanen 1982, Carland et al. 1984), a minority of fishers display a markedly different attitude with regard to acceptance of change and perception of risk. FIF appears to have recruited some grantees with exceptional entrepreneurial capabilities.

Factors that appear to *constrain* FIF efforts to facilitate bycatch reduction include:

Regulatory Uncertainty: Fishermen often express frustration with state and federal
implementation of regulatory regimes, claiming that particular prescriptions are unclear, shifting,
and difficult to implement. Several interviewees mention a lack of clear guidance materials to
help them interpret and operationalize particular aspects of the MSA and NOAA policy. As one
grantee puts it, the "regulations are not stable, cuts change from year to year." This leery posture
toward regulatory implementation seems sometimes to fuel reluctance to pilot new technologies
or experiment with alternative practices, leading to defeatist attitudes about new approaches to
bycatch reduction.

• Lack of Trust: Many FIF bycatch reduction activities involve development of spatial information systems and data-sharing protocols that enable fishermen to share "hotspot" locations. Some fishers are disinclined to share data with other fishermen, viewing their knowledge of fishing areas as something akin to a "trade secret." As one grantee describes this, "The fleet mindset needs to be more open. It's more important to share the location of a 'bad tow' then it is to protect the site of a 'good tow.'" Relieving fishermen of this outlook takes a concerted effort in trust-building; something which can add time and expense to projects that might initially have been conceived of as purely technological.

Innovations in Monitoring and Evaluation Almost 70% of FIF projects involve the development or application of technologies or other approaches to gather, share, or use data and information to improve fishing practices and/or support enhanced marketing initiatives. Closely aligned with efforts to reduce bycatch rates, FIF projects in this priority area support a range of activities, including acquisition and testing of monitoring hardware; development of routines for data processing and management; development of business rules and protocols governing crew interaction with monitoring equipment; and development of vessel-specific support equipment to help assure effective operation. Based on archival review and grantee interviews, it is our sense that grantees are making good use of existing technologies and systems, collaborating with vendors, and working closely with vessel owners to pilot systems and help pave the way for fleet-wide applications. We encountered no evidence that individual grantees are "reinventing the wheel" through their various applications, something that may be due to the networking efforts of several large, national NGOs.

Monitoring technologies should not be evaluated merely in terms of their specific function or application, but also for their ability to enable other beneficial changes in the fishing status quo. This means that utilization of the technology may open the door for fishers to consider other changes; or conversely, the desire to achieve other benefits may open the fisherman's mind to the value of other changes, such as enhanced bycatch avoidance. Slightly more than one-quarter (26%) of FIF grantees report that they are pursuing efforts to improve the traceability of fish in the supply chain, an activity that underpins efforts to develop new markets for premium, sustainable fish brands. A number of grantees are working with fishermen and other fishery stakeholders to develop new markets or market niches, specifically framed to promote a higher-end, sustainable seafood product. These markets frequently emphasize the freshness of a "local" product. Rather than "exporting" their fish to a distant or unaffiliated processor or distributor, the fishermen "integrate" with local buyers or a coop to obtain necessary downstream services and a profit share in the final product. Based on the grantee survey, it is our sense that approximately 35% of grantees are undertaking some type of market development or market conditioning activity.

A factor that appears to *enable* FIF efforts to enhance fishery monitoring and evaluation involves:

• NFWF Adaptive Posture: Monitoring projects typically involve complex interaction between users and technologies in a harsh and difficult setting. Grantees relate that things do not always go as planned, and emphasize the need to adapt to circumstances. For example, operation of video monitoring systems can vary significantly from boat-to-boat, even when using the same camera. Procedures or technologies that worked well in one case may be problematic in another case. This reality has caused several grantees to alter their proposed set of activities. These grantees report that NFWF is willing to work with them to accommodate the need for circumstance-specific adaptations to their slate of proposed activities.

Factors that appear to *constrain* FIF efforts to enhance fishery monitoring and evaluation include:

• Target User Reluctance: As described under our discussion of bycatch reduction above, the user community (fishermen) for electronic monitoring systems is not always fully receptive to their installation, testing, and use. This is partially because the testing of monitoring systems requires physical alteration to fishing vessels and gear, an inherently "invasive" action that can result in friction between boat owners and the organization conducting the installation and testing activities. Dealing with this dynamic can add time and complexity to initiatives, and possibly create a need for more support than originally anticipated.

- Grantee Perception of NMFS Preparedness for Advanced Monitoring: A few grantees share a
 perception that NMFS is a slow, paper-driven organization, lacking the administrative
 nimbleness necessary to operate a monitoring regime based on real-time, digitally-based data
 transferal and review. Whether warranted or not, the currency of this perspective may tend to
 dampen enthusiasm for advanced monitoring initiatives.
- At-Sea Usability: It is critical that monitoring systems be intuitive and easy-to-use for fishermen
 in their operational environment. Some grantees seem highly attuned to this need, working with
 fishermen at the system design phase to assure that needs are being met and crew/captain
 capabilities are taken into consideration. However, a few grantees seem not to recognize this
 factor and have struggled to pilot systems that lack crew acceptance.
- Expense: Although efforts are made to keep monitoring systems affordable, they are still more expensive than a "do nothing" option.

Innovative Financing for Fisheries As one grantee puts it, a big part of their challenge is to "teach fishermen how to understand and compete in the new business economy for fisheries." Financial management in the fishing sector is a tricky proposition, involving high levels of risk associated with stock fluctuations, uneven cash flow, and other challenges. About 15% of FIF grantees identify "access to financing" as either a primary (10%) or a secondary (5%) goal. FIF is addressing this problem through projects that involve design of loan funds tailored to the needs of fishers, training fishermen in the development of credit-worthy business plans, and development of financial management software integrated with other fishing management information systems. Also important, NFWF is exploring the possibility of incorporating a loan-making component into the FIF program so applicants can request capital to support activities or acquisitions that would lead to increased profitability for their sectors. A project has been awarded to help NFWF consider options and develop this loan-making function.

A factor that appears to *enable* FIF efforts to introduce innovative funding mechanisms to the fishery sectors include the following:

• Sharing the Reserves of a Collaborative Body: Fishing collaboratives and associated community foundations can sometimes amass significant financial reserves. The prospect of enhanced access to financing serves as a motivator for convincing fishers to change practices and/or gear.

Factors that appear to *constrain* FIF efforts to introduce innovative funding mechanisms to the fishery sectors include the following:

- Short-term Management Perspective in the Fishery Sector: Fishermen have long been forced to operate under year-to-year management protocols, depending upon stock assessments and related regulatory restrictions. Some grantees argue that the regulatory/management system imposes a short-term outlook which is not necessarily consistent with investments in sustainability. In other words, many fishermen are so focused on year-to-year survival that they find it hard to contemplate and invest in new ways of doing business. Changing this mindset requires the articulation of value propositions that motivate fishermen and help them to envision alternative futures. This, in turn, requires dialog, outreach, co-learning, and other efforts to interact with fishery target audiences in order to better prepare them to consider and ultimately accept management, financial, and/or technological changes.
- Lack of Understanding between Fishers and the Financial Community: Grantees and expert observers report that it is difficult to find investment bankers and other financers with a strong understanding of fishing business dynamics and fishing industry risk profiles. Moreover, it is sometimes difficult to structure and manage the finances of coops and other collaborative bodies due to securities-related regulation and oversight.

Innovations in Recreational Fisheries Recreational fisheries were added as a standalone focus area in FIF's 2012 RfP. Thus far, a minority of FIF grants (< 10%) focus predominantly or exclusively on recreational fisheries. Projects to improve monitoring and evaluation that are consistent with the priorities of the NOAA Fisheries Marine Recreational Improvement Program include innovative dockside surveying methods, development and implementation of electronic applications and data collection tools, and other mechanisms to gather data. This program category also involves innovations to address current needs as identified by the recreational sector through the NOAA Fisheries Recreational Fishing Action Agenda, including studies that quantify recreational release mortality rates and the effects of conservation-based methods to reduce release mortality through improved catching, handling, and release techniques.

III.3. Answers to FIF Evaluation Questions

At the beginning of this evaluation, Stratus Consulting worked closely with NFWF and FIF program staff to discuss a preliminary set of evaluation questions derived through a review of NFWF and FIF strategic materials and individual project proposals and reports. Specifically, Stratus Consulting facilitated a critical discussion of each question, resulting in a vetted set of questions tuned to the needs of program staff. These questions helped guide research efforts and many have already been addressed in Subsections III.1 and III.2. Arrayed in a compact tabular format below, in this section we provide answers to each of the evaluation questions.

Evaluation Question	Answer
What has been the on-the-ground impact of FIF grantmaking? Are grants well aligned with strategies and anticipated outcomes?	FIF grants are enabling behavioral and organizational change consistent with triple bottom line (TBL) sustainability in the fishing sector. Although some FIF grants exhibit balance among the environmental, economic, and equity components of the TBL, on the whole FIF grantees appear more inclined to address economic and equity issues than environmental factors. Comparison of proposals against grantee (interim and/or final) reports suggests that program outputs are consistent with proposed activity.
Have fishermen receiving funds been able to access more of their fish allocation?	Although it is too soon to provide a definitive answer to this question, it seems as though FIF funds are achieving <i>intermediary outputs</i> consistent with fishers accessing more of their allocation. There are several factors contributing to this impression: (1) bycatch reduction efforts appear to be proceeding favorably, (2) mechanisms for risk pooling appear to be unfolding on schedule, and (3) pilots for spatial information management systems are producing positive outputs. Although these program outputs cannot yet be shown to have resulted in increased utilization of allocation, expert input confirms that all tend to be consistent with an improved ability to better manage fishery allocations.
Are fishermen receiving funds more profitable than they would have been otherwise?	Given the nascent status of the FIF program, there is little evidence suggesting that grantees have achieved higher profitability than prior to their use of FIF funding. However, grantees believe strongly that the activities they are undertaking will lead to a stronger business base, and eventually to higher levels of profitability. Moreover, the type of capacity improvements being supported by FIF are consistent with those being supported by a broad range of economic development organizations, including technology incubators, community economic development funds, and small business agencies. In other words, FIF is deploying a model that has proven successful in other contexts of business and community economic development.
To what extent have FIF investments reduced bycatch?	Although most FIF grantees are still in the early stages of project execution, there is evidence suggesting that FIF investments are already leading to reduced bycatch rates. At least two grantees are able to cite data showing significant bycatch reduction. In one case, a grantee has reduced its bycatch rate to 2% of total catch, while the fleet as a whole maintains a bycatch rate of almost 30%. In addition, many grantees express confidence that technology investments, gear enhancements, or practice changes are sufficient conditions for eventual achievement of bycatch reduction goals.
What exogenous factors might impact or pose risk to FIF?	Fish stock abundance is outside of FIF control. Several grantees report that unexpected abundance, particularly fish stocks, have demotivated some fishermen from participating in collaborative management programs; similarly, protracted periods of low fish stock can impact fishing effectiveness and, hence, economic returns, also diminishing motivation and incentive to participate in collaborative management arrangements or other FIF initiatives. Variations in the management of federal and state regulatory regimes are also outside of FIF control, yet can significantly influence fishermen attitudes and/or inclination to pursue FIF program objectives. Twenty percent of FIF grantees cite regulatory-related challenges as a "major impediment" to their current efforts to revitalize operations. When asked to elaborate, grantees mention uncertainties associated with regulatory implementation such as adjustment of targets, lack of guidance, and confusion associated with management and use of electronic monitoring data.

Evaluation Question Answer

change and associated metrics) adequately conceptualize all key or indicators of change adequate for FIF program monitoring and ongoing realtime evaluation?

Does the FIF logic framework (theory of As described under Section II, Step 6, Stratus Consulting and FIF staff collaborated to design a theory of change, component logic models, and associated metrics for the FIF program. Development of the theory of change program strategies? Are current metrics was a productive exercise because it highlighted the need for FIF to intensify its focus on the dissemination and uptake of grantee and program accomplishments and lessons learned.

Do fishing communities and other stakeholders appear to be utilizing the FIF program? How many fishermen and fishing communities are participating?

FIF is not a large program, sponsoring 50 grantees over a period of almost three years. FIF staff estimate that their grants have thus far benefited about 10% of U.S. fishing communities. In 2014 FIF plans to make 12 grant awards. Based on input from grantees and outside observers, FIF is an "easy-to-work-with," "honest broker" seeking to identify and support innovative community-level initiatives. Although FIF has not yet operationalized large-scale dissemination of grantee outputs, some grantees report stakeholder uptake of FIF innovations. As one grantee describes this, "We are constantly being asked by stakeholders from Alaska to Maine to share information and lessons learned. We do not hesitate to share the knowledge gained through our experience, so that we may be part of the solution to improve fishing conditions for communities across the country."

Have NFWF staff played a role in connecting grantees across projects to expand success? To what extent are lessons learned from the grant projects being disseminated to appropriate that FIF models, approaches, and outputs are being picked up and replicated by other funders and/or oversight programs?

Yes, this is beginning to happen. As indicated by Exhibit 5, most FIF grantees interact with a variety of fishery partners, including fishermen, fishing business entities, state and federal regulatory agencies, local and municipal government agencies, and NGOs. In-depth interviews suggest that grantees and associated stakeholders are beginning to share lessons learned and other outputs derived audiences? Is there evidence to suggest through FIF-funded activities. Several FIF grantees have developed templatetype products (e.g., organizational charters, business plans, community sustainability plans) for use across networks of fishery actors.

augment similar programs being Betty Moore Foundation, and the Walton Family Foundation?

Does FIF effectively complement and/or Outside observers confirm that the FIF program serves an important segment of the sustainable fishery community, providing focused funds to collaborative implemented by NOAA, the Gordon and bodies seeking to adopt innovative practices to strengthen and revitalize U.S. fisheries. In our interviews with grantees, we uncovered a perception that some of the major foundation donors for fishery reform are more strongly invested in environmental stewardship than other aspects of the TBL. As discussed in Section III.1, FIF has gained a reputation for balanced consideration of environmental, economic, and equity-related components of fisheries sustainability. FIF activities thus appear to augment programs being undertaken among other major fishery funding organizations, including NOAA, the Gordon and Betty Moore Foundation, and the Walton Family Foundation.

Will localized changes associated with FIF grantee outputs lead to (or contribute to) system-level change?

The FIF program is a relatively small program, funding between \$1.5 and \$2.5 million on an annual basis. The program is also quite young, beginning only its fourth year of funding. However, the program has the potential to become strongly networked, fund some exemplary work, and interact closely with other, larger fishery reform initiatives. Perhaps FIF's greatest point of leverage is its credibility with a wide range of fishery stakeholders. This trusted status should enable FIF to disseminate grantee accomplishments and lessons learned to audiences inclined to be receptive, rather than reflexively skeptical. This gives FIF a potential to catalyze systemlevel change.

Evaluation Question	Answer
Have grantees been able to or have a plan to secure non-FIF funds to continue their work after FIF grants ended?	Some grantees are established fishery associations or economic development institutions with long histories of successful financial management. Most grantees appear to have sources of support in addition to their FIF funding; indeed, only about one-third of grantees indicate that over 60% of their project funding was provided by FIF. Many grantees (approximately 40%) are using their grants to support programs of professionalization among fishers, including development of business planning capacity. This enhances an individual fisherman's capability to manage revenues and/or secure private financing, such as bank loans or private lines of credit.
How have grants been used to help fishermen participate in existing catch share programs and/or develop new ones?	Approximately 65% of FIF grants have been used to help recipients either establish or develop capacity necessary to participate in some type of collaborative fishing management body. Funding has been focused on participant deliberation, organizational design, facilitated planning interaction, and training. These activities are all preconditions for the operation of successful catch share programs.
What have been the social impacts or implications of FIF grantmaking? Are there unintended social/community/cultural impacts of FIF grantmaking?	Approximately one-quarter of FIF grantees are specifically working to alleviate social issues associated with circumstances prevalent in contemporary fishing communities. Such issues include blocks to generational succession, conditions that threaten the viability of fishing families, and the loss and diminution of "iconic" fishing communities. We did not learn of any circumstances in which FIF grantee outputs resulted in unintended consequences in the broader fishery community.
What is the perception of FIF by grantees?	FIF has invested significant effort in reaching out directly to the fishing community, an effort that has been noticed and appreciated within the fishing circles. FIF seems to have cultivated a reputation as a neutral, honest broker, with an understanding of the needs of fishermen, regulators, conservation advocates, and other fishery stakeholders. We heard comments about the fishing community's distrust and cynical outlook with regard to other actors and their efforts to reform fisheries, but heard no such commentary with regard to NFWF or FIF.
How would grantees or their communities be impacted if there were no NFWF funding?	As we have already emphasized, FIF is a relatively small program making modest-sized grants. FIF does not provide base program funding for any of its grantees. Indeed, FIF provides less than 30% of the funding for about one-quarter of its grantees. That said, grantees refer to FIF as a "difference maker" and report that they look to FIF to provide funds to "experiment" with new ideas for dealing with long-running, thorny issues.
What factors limit organizational performance and impact at the project and program scale? What is the program's greatest point of leverage?	Factors that tend to limit project performance are described in Section III.2 (above) for each of the five FIF priority areas. Factors that impact multiple priority areas include distrust among actors in the fishery sector, lack of professional business capacity and acumen among fishers, and challenging financial management circumstances within many communities and fishery sectors.

IV. Conclusions and Recommendations

Overall, the NFWF FIF has made significant strides during its first three years of operation. FIF operates under the pole stars of "sustainability" and "innovation" within the U.S. fishing sector. Although both of these concepts would benefit from further clarification, FIF has done a good job of identifying and supporting local grantees undertaking important work that is clearly consistent with the revitalization of U.S. fisheries. Areas where FIF grantees are producing exemplary outputs include:

- Conceptualization and establishment of collaborative fishery management bodies;
- Conceptualization and establishment of fishing-oriented community sustainability plans;
- Development, testing, and installation of information systems designed to support fundamental changes in fishing business practices;
- Conceptualization and implementation of fishing business planning models consistent with evolving regulatory mandates and a TBL management approach; and
- Stronger and more explicit recognition of socio-cultural factors unique to fishing communities, such as family fishers, legacy fishers, and iconic fisheries.

While grantee accomplishments serve as exemplars for sustainability in the U.S. fishery sector, challenges remain and important work remains to be done. Importantly, it must be recognized that FIF program outputs are, at this point, mostly intermediary accomplishments that will likely enable, but by no means guarantee, achievement of final outcomes such as fishery stock restoration and conservation, increased profitability of fishermen, or generational succession within legacy fisheries. As such, additional funding is required in order to complement FIF's current emphasis on innovation with an energetic and well-coordinated focus on the *dissemination* and *uptake* of grantee innovations throughout U.S. fisheries.

In most cases, recommendations have been suggested by grantees, expert observers, or have emerged through dialog with NFWF staff. Some recommendations have been derived through review of technical and professional literature. In all cases, potential recommendations are weighed by Stratus Consulting to assure that they are (1) consistent with FIF's overall orientation; (2) functionally related to strengths or weaknesses described in Sections III.1, III.2, and/or III.3; or (3) logically implied by gaps in the FIF grantee portfolio:

1. Explore a wider, broader funding base; consider partnering with community development and rural development agencies: While some major funders in the fisheries space are primarily interested in the conservation of fish and protection of marine habitat, other potential funding organizations are interested in fishery reform primarily as an engine for local or regional economic development (Johnson and Van Der Voo 2013). FIF may be able to expand its operational funding if it establishes relationships with community development foundations, state economic development agencies, and state and federal programs and commissions focused on economic development.

2. Encourage all grantees to address the role of culture and cultural change as a factor in achieving sustainable fisheries: The broad-based revitalization being sought by FIF probably cannot be fully implemented through standalone technological and/or organizational interventions. Put differently, meaningful sustainability in the fisheries sector probably cannot be achieved merely through technological add-ons, changes in gear, or prescribed changes in practice. Fishing practices are rooted deeply in the lifestyles of fishermen and fishing communities. Changes in fishing practice may represent more than a change in professional activity; they may represent fundamental changes in how people perceive themselves and their communities (Hilborn 2007, St. Martin 2006, Christie et al. 2003, Pretty 2003). In the words of one grantee, "fishing is not just a business; it's a way of life." In this vein, we note how distrust among fishery actors appears to be a pervasive and resilient constraint to the formation of new social and market structures designed to promote community sustainability. Some FIF grantees have done a commendable job of working to gather all stakeholders around the same table, facilitate the articulation of values and differences in perspective, and ultimately create opportunities for mindful interaction and possibly even trust-building. We recommend that FIF prioritize the funding of proposals that recognize culturally rooted constraints and include activities or interventions designed to foster collaboration or at least mutual understanding. We also recommend that FIF explore adoption of a funding area dealing with cultural change within the fishing sector. Funding in this category could support development of educational and communication tools and strategies to support cultural transformation, and other social science interventions to support the establishment and perpetuation of TBL fisheries and fishing communities.

- 3. Consider funding more municipalities: None of the respondents to the grantee survey self-identify as a town or municipality. Yet municipalities appear to be the locus of much activity, including fishing-related industry, waterfront improvement or restoration, tourism and/or ecotourism, sustainability, and economic development. We recommend that FIF explore how grantees might be able to work with or through municipalities and other local governmental agencies, perhaps through targeted outreach to relevant entities such as port authorities, harbor masters, and others with a fishing-related mission. We further suggest that FIF reach out to explore commonality of interests and potential partnership with municipality-focused groups such as the National League of Cities, the National Association of Counties, and Public Technology Incorporated.
- 4. Use sustainability planning as a program locus: The concept of sustainability has gained traction within U.S. fishing communities. Sustainability provides a central tenet around which diverse fishing stakeholders can collaborate, while allowing individual fishing actors to focus predominantly on their most salient aspect of the TBL. Under the MSA, communities seeking to participate in a limited access fishery must develop and submit a Community Sustainability Plan (CSP) to the applicable Fishery Management Council. The language in MSA directing development of a CSP is sufficiently broad as to allow communities to tailor this document to meet their needs. If FIF adopted a focus on community sustainability planning, it could compile grantee outputs and achievements pertinent to CSP development, and provide a clearinghouse or guidance function (see item #5, below), helping fishery communities draw upon the lessons of one another, and thus enhancing innovation in the content of sustainability. Making sustainability planning a priority funding area need not preclude continued funding of existing interventions (e.g., organizational design, development of a loan program, development of bycatch reduction

gear); however, perhaps applicants could be required to couch such activities within the context of an overall integrated community sustainability planning process.

- 5. Craft and nurture a sustainable fisheries network: As Krebs and Holley (2006) point out, networks tend to pass through different stages: (1) an initial scattering of groups and individuals with sparse and shallow ties; (2) a classic "hub-and-spoke" configuration, with the central hub acting as a coordinating agency; (3) a more complex, multi-hub arrangement; and finally (4) a dense mass of functionally interdependent actors. As discussed in Section III.1 and illustrated in Exhibit 5, FIF has assembled a large and diverse agglomeration of grantees and partners, perhaps resembling the first phase of Krebs and Holley's progression. With planning and dedicated resources, FIF could transform this agglomeration into a robust and effective network structure, supporting idea sharing, dissemination of lessons learned, and the uptake of grantee innovations. Such an investment would directly support FIF grantees, but also leverage FIF's reputation as an honest broker within the fisheries sector. It seems possible that the objective of network creation could serve as a fulcrum for enhanced program funding from existing or new partners. Several grantees suggested that FIF consider sponsoring and/or conducting national workshops on topics such as electronic monitoring and fishery community sustainability planning. FIF could also consider development of a knowledge portal or online workspace dedicated to problem-solving in the arena of sustainable fisheries. Investment in a network structure could provide a means through which to catalyze a wide variety of information sharing and coordination activities.
- 6. Operate the FIF program as a (virtual) business incubator: As described in Section III.2, half of the grantees responding to our survey indicate that "lack of professional capacity" constrains their ability to achieve business- and conservation-related goals. The FIF capacity-building component includes a strong emphasis on training and professional development. Types of activities include training in the use of geographic and data management systems, financial management, regulatory compliance, and accounting and tax management. These are important lines of activity; as one grantee says, we are "teaching fishermen to compete in the new business economy for fisheries." In the business world, an incubator is a program designed to facilitate development of entrepreneurial companies through a variety of support services and resources, coordinated by a management group. Business incubators may also provide access to specialized contacts. Most typically, business incubators only serve selected clients, determined through critical review of submitted business plans. Many incubator programs set graduation requirements, based on metrics such as corporate revenue or staff levels. It strikes us that FIF grantees could be managed using some of the tenets of the incubator model. This could be conducted through an online networking tool (see recommendation #5, above) and implemented through contract resources. For example, applicants for a FIF loan (assuming implementation of the loan capability) might be required to complete a sustainable business "boot camp" involving online programs in topics such as accounting basics, regulatory requirements, and a primer on management information system capabilities. Alternatively, eligibility for grant programs (see recommendation #5) could be tied to completion of specified business planning templates geared to the unique requirements of TBL management.
- 7. Craft RfPs to seek grantees with an entrepreneurial bent: While some fishers are reluctant to accept new systems and changes in practice in order to avoid bycatch, others have a different view. As demonstrated and explained by some grantees and substantiated in technical literature (Hilborn 2007, Miller and Van Maanen 1982, Carland *et al.* 1984), a minority of fishers display a markedly different attitude with regard to acceptance of change and perception of risk. FIF

appears to have recruited some grantees with exceptional entrepreneurial capabilities. We recommend that FIF craft its RfPs to elicit information that would enable the program to consider and assess the entrepreneurial skills and tendencies of applicants. For instance, descriptions of project team leaders could be required to address entrepreneurial behaviors such as whether they had ever started a business; brought a product to market; or managed a large-scale complex project. Applicant proposals could also be scored in terms of other factors that tend to facilitate innovation such as (a) clear recognition of risk factors, (b) explicit adoption of an adaptive project execution approach, and (c) inclusion of co-learning or target audience outreach activities prior to initiation of project work.

Works Cited

- Acheson, J. M. "Anthropology of Fishing." *Annual Review of Anthropology* 10.1 (1981): 275-316. *Annual Reviews*. University of California San Diego, 24 Sept. 2008. Web. http://www.annualreviews.org/doi/abs/10.1146/annurev.an.10.100181.001423.
- Bannick, M., and E. Hallstein. "Learning from Silicon Valley: How the Omidyar Network Uses a Venture Capital Model to Measure and Evaluate Effectiveness." *Stanford Social Innovation Review* 10.3 (2012). Summer 2012. Web. 18 Oct. 2013. http://www.ssireview.org/articles/entry/learning_from_silicon_valley1.
- Bonzon, K., K. Mcllwain, C. K. Strauss, and T. Van Leuvan. *Catch Share Design Manual: A Guide for Managers and Fishermen*. Rep. Environmental Defense Fund, 2010. Web. http://catchshares.edf.org/resources/manuals-and-guides.
- Carland, J. W., F. Hoy, W. R. Boulton, and J. A. C. Carland. "Differentiating Entrepreneurs from Small Business Owners: A Conceptualization." *Academy of Management* 9.2 (1984): 354-59. *JSTOR*. Web. 4 Jan. 2010. http://www.jstor.org/stable/258448.
- Christie, P., B. J. McCay, M. L. Miller, C. Lowe, A. T. White, R. Stoffle, D. L. Fluharty, L. T. McManus, R. Chuenpagdee, C. Pomeroy, D. O. Suman, B. G. Blount, D. Huppert, R-L V. Eisma, E. Oracion, K. Lowry, and R. B. Pollnac. "Toward Developing a Complete Understanding: A Social Science Research Agenda for Marine Protected Areas." *Fisheries.* 28.12 Dec. 2003: 22-26. *Fisheries.org*. Taylor and Francis, 9 Jan. 2011. Web. http://www.tandfonline.com/toc/ufsh20/28/12.
- "Collective Business System." *Wikipedia*. Web. 15 Aug. 2013. http://en.wikipedia.org/wiki/Collective_business_system>.
- Conathan, M. "Fish on Fridays: Innovations to Increase and Stabilize Fishing Profits." *American Progress*. 21 Sept. 2012. Web. 26 June 2013. http://www.americanprogress.org/issues/green/news/2012/09/21/38926/fish-on-fridays-innovations-to-increase-and-stabilize-fishing-profits/>.
- Duncan, R. E., and K. J. Gabriel. "Special Forces" Innovation: How DARPA Attacks Problems." *Harvard Business Review* 91.10 (October 2013): 74-84. Print.

Food and Water Watch. *A Closer Look at Catch Shares in the United States: The Gulf of Mexico*. Rep. Food and Water Watch, 16 Nov. 2011. Web. http://www.foodandwaterwatch.org/doc/ACloserLookAtGulfCatchShares.pdf.

- Gutierrez, N. L., R. Hilborn, and O. Defeo. "Leadership, Social Capital and Incentives Promote Successful Fisheries." *Nature* 470.17 (2011): 386-89. *Nature*. Macmillian Publishers Ltd, 5 Jan. 2011. Web. 20 Sept. 2013. http://www.nature.com/nature/journal/v470/n7334/full/nature09689.html>.
- Hilborn, R. "Managing Fisheries Is Managing People: What Has Been Learned?" *Fish and Fisheries* 8 (2007): 285-96. Blackwell Publishing Ltd. Web.
- Johnson, K., and L. Van Der Voo. "Spoils of the Sea Elude Many in an Alaska Antipoverty Plan." *New York Times* 19 June 2013, A14 sec. *New York Times*. NYTimes.com, 18 June 2013. Web. 19 June 2013. .">http://www.nytimes.com/2013/06/19/us/spoils-of-the-sea-elude-many-in-an-alaska-antipoverty-plan.html?_r = 0>.
- Kellert, S. R., J. N. Mehta, S. A. Ebbin, and L. L. Lichtenfeld. "Community Natural Resource Management: Promise, Rhetoric, and Reality." *Society & Natural Resources* 13.8 (2000): 705-15. *TandFOnline*. Taylor and Francis, 15 Dec. 2010. Web. http://www.tandfonline.com/doi/abs/10.1080/089419200750035575#preview>.
- Krebs, V., and J. Holley. *Building Smart Communities through Network Weaving*. Rep. Orgnet.com, 2006. Web. http://www.orgnet.com/BuildingNetworks.pdf>.
- Miller and Van Maanen. "Getting Into Fishing: Observations on the Social Identities of New England Fishermen." *Journal of Contemporary Ethnography* 11:27 (1982): 27-54.
- National Panel on the Community Dimensions of Fisheries Catch Share Programs. *Community Dimensions of Fisheries Catch Share Programs: Integrating Economy, Equity, and Environment*. Rep. Ecotrust, 15 Mar. 2011. Web. http://www.ecotrust.org/fisheries/NPCDFCSP_paper_031511.pdf>.
- Pretty, J. "Social Capital and the Collective Management of Resources." *Science* 302.5652 (2003): 1912-914. Print.
- Rieser, A., L. Watling, and J. Guinotte. "Trawl Fisheries, Catch Shares and the Protection of Benthic Marine Ecosystems: Has Ownership Generated Incentives for Seafloor Stewardship?" *Marine Policy* 40 (2013): 75-83. *Science Direct*. Elsevier. Web. http://www.sciencedirect.com/science/article/pii/S0308597X12002692.
- Ronfeldt, D. "A Long Look Ahead: NGOs, Networks, and Future Social Evolution." Ed. R. Olson and D. Rejeskin. *Environmentalism and the Technologies of Tomorrow*. Washington: Island, 2005. 89-98. Rpt. in *RAND Reprint: RP-1169*. Web-only: RAND Corporation, 2005. Web. Oct. 2013. www.rand.org/content/dam/rand/pubs/reprints/2005/RAND_RP1169.pdf.
- St. Martin, K. "The Impact of "community" on Fisheries Management in the US Northeast." *Geoforum* 37.2 (2006): 169-84. *Science Direct*. Elsevier. Web. 30 Nov. 2012. http://www.sciencedirect.com/science/article/pii/S0016718505000576.

United States. Department of Commerce. National Oceanic and Atmospheric Administration, National Marine Fisheries Service. *Status of Stocks 2012: Annual Report to Congress on the Status of U.S. Fisheries*. By Office of Sustainable Fisheries. NOAA, 2 May 2013. Web. http://www.nmfs.noaa.gov/stories/2013/05/docs/2012_sos_rtc.pdf>.

- United States. Department of Commerce. National Oceanic and Atmospheric Administration. *NOAA Catch Share Policy*. By NOAA. NOAA, Nov. 2010. Web. http://www.nmfs.noaa.gov/sfa/domes_fish/catchshare/docs/noaa_cs_policy.pdf>.
- Wondolleck, J. M., and S. L. Yaffee. *Making Collaboration Work: Lessons from Innovation in Natural Resource Management*. Washington, D.C.: Island, 2000. Print.

A. Fisheries Innovation Fund Evaluation Online Survey

Fisheries Innovation Fund Evaluation Online Survey June 2013

Introduction

Welcome to the survey of organizations that have received funding from the Fisheries Innovation Fund (FIF), a program administered by the National Fish and Wildlife Foundation (NFWF) in partnership with the Gordon and Betty Moore Foundation, the Walton Family Foundation, and the National Oceanic and Atmospheric Administration (NOAA). This Survey is part of a comprehensive evaluation of the FIF being conducted by Stratus Consulting.

The purpose of this survey is to provide feedback to help the program improve the future effectiveness of its strategic orientation and program implementation. This survey is not intended to evaluate the performance of individual grantees. Your responses will be treated as confidential. Information derived from this survey will not be shared with NFWF or FIF staff in a way that enables them to identify the sources of individual comments. Please be assured that your responses to this survey will have no bearing on your organization's current or future grant applications.

Please note that this survey could take as much as 30-45 minutes to complete. We greatly appreciate your willingness to help FIF in its efforts to achieve sustainable fisheries in the United States.

If you have any questions about this survey or the overall evaluation of the FIF, please contact Chuck Herrick at cherrick@stratusconsulting.com or 202/741-1234.

Fisheries Innovation Fund Evaluation Online Survey June 2013 **Grantee Information** First we would like to know some basic information about your organization. 1. Contact information Your name Your organization Project name Proposal ID/Easygrant number 2. Which of the following best describes your organization? Association Coop Town, city, or municipality Non-profit organization Academic or educational institution Corporation Other (please specify) 3. What is your organization's annual budget to be applied toward fisheries? <\$50,000 per year \$50,000 - \$100,000 per year \$100,001 - \$250,000 per year >\$250,000 per year

Fisheries Innovation Fund Evaluation Online Survey June 2013

Qı	estion	ıs abo	ut Sne	ecific	Grant s	Ş
~~		IC CINC				_

Questions about Specific Grants
The following questions address the specific grant(s) your organization has received from FIF. If you have received more than one grant, you are asked to describe each grant. Please begin with the most recent grant, then move on to the next most recent grant. Note that grants awarded in 2013 are not covered in this survey.
When you respond to questions about the project supported by a FIF grant, please refer to the project as a whole, not merely the portion of activity for which FIF funds have been used.
Once again, please be assured that your responses to these questions will be treated as confidential.

Fisheries Innovation Fund Evaluation Online Survey June 2013	
Grant #1	
Please refer to the most recent grant you have received from FIF in responding to the following questions.	

isheries Innovation Fund Evaluation Online Survey J	une 2013	isheries Innovation Fund Evaluation Online Survey June 2013	
Seneral Project Description			
4. What percentage of the overall project was funded by FIF?			
<30%			
30-60%			
>60%			
O 200 %			
5. What were/are the primary goals of this FIF-funded project? (Se	lect no more	e than three	
primary and three secondary goals)			
	Primary	Secondary	
Establish a fishing association or other collaborative management body	\bigcirc	\bigcirc	
Develop a community sustainability plan	\bigcirc	\bigcirc	
Develop ways to reduce bycatch	\bigcirc	\bigcirc	
Develop technologies or other approaches to gather, share and use data and information to improve fishing practices	\bigcirc	\bigcirc	
Improve markets for sustainable fisheries		\bigcirc	
Improve traceability of fish in supply chain	Ö	Ŏ	
Improve professional and/or business capacity of existing collaborative organization	Ō	Ō	
Provide access to financing	\bigcirc		
Provide training or education to enhance the business or technical skills of fishermen			
Improve monitoring of recreational fisheries	\bigcirc		
Develop a process to enhance entry-level access to fisheries		\bigcirc	
Enhance ability of fishermen to communicate, network, or collaborate on fishery management	\bigcirc	\bigcirc	
Other	\bigcirc	\bigcirc	
(please specify)			
		_	
		~	
6. Is your project on track to meet its proposed deliverables?			
Yes, all deliverables			
Yes, some deliverables (please elaborate)			
No, none of the deliverables (please elaborate)			
Comments		<u> </u>	
		_	

General Project Description (continued) 7. Which audiences will deliverables from your project impact? (Check all that apply) Directly Indirectly Not applicable Boat owners Boat operators Boat crews Fishing families Shore-side business and industry Fishing community Fishery regulators Conservation stakeholders Other (please specify) 8. If your grant involved development of a collaborative fisheries organization, please describe what type of organization is being (or was) developed. Association Other (please specify) 9. How would you describe the scope of work under your grant? Local State Regional National Not geographically specific, outputs have general applicability

Fisheries Innovation Fund Evaluation Online Survey June 2013

Fisheries Innovation Fund Evaluation Online Survey June 2013
Project Activities and Outputs
10. If applicable, how will deliverables from your grant help fishermen to achieve business success (e.g. increased profit, improved credit, improved cash flow)? Please briefly explain.
11. If applicable, how will deliverables from your grant help fishing communities to improve their economic status (e.g. new jobs, economic growth, increased tax base)? Please briefly explain.
12. If applicable, how will deliverables from your grant help to improve the social
circumstances of fishing communities (e.g. ensure generational access to fishing, support
fishing families, support fishing legacies)? Please briefly explain.

aluation (Juline Sur	vey June	e 2013			
roject Activities and Outputs (continued)						
rrent level	of interest o	r support fo	or your proj	ect on the		
	Highly interested	Moderately	Disinterested	Antagonistic		
		interested	\bigcirc	\bigcirc		
	$\widetilde{\bigcirc}$	$\widetilde{\bigcirc}$	$\widetilde{\bigcirc}$	$\widetilde{\bigcirc}$		
	$\overline{}$	$\widetilde{}$	$\widetilde{}$	$\widetilde{\bigcirc}$		
	$\widetilde{\bigcirc}$	$\widetilde{\bigcirc}$	$\widetilde{\bigcirc}$	$\widetilde{\bigcirc}$		
	$\tilde{\bigcirc}$	$\tilde{\bigcirc}$	$\tilde{\bigcirc}$	$\tilde{\bigcirc}$		
nd support	for your pro	iect chang	ed over the	duration		
iia cappoit	ioi youi pio	joor onlang		auration		
Much more	Somewhat more	A b 4 4b	Somewhat less	Much less		
supportive	supportive	About the same	supportive	supportive		
\bigcirc	\bigcirc	\bigcirc		\bigcirc		
			\bigcirc			
	\cup	\cup	\cup	\cup		
				<u>~</u>		
			ficial envir	onmental		
				_		
	nd support Much more supportive	Highly interested Highly interested Much more supportive supportive Somewhat more supportive O O O O O O O O O O O O O O O O O O	Highly interested Hoderately interested Highly interested Hoderately intere	Highly interested Moderately interested inte		

6. What role has your project played to help fisher				
illocation?	men access	more of th	neir fish	
Reductions in bycatch	Major role	Some role	No role	Don't know
Enhanced access to targeted fishery				
Less burdensome compliance with regulatory requirements				
Improved supply chain or management of catch		\bigcirc	\sim	\bigcap
Other		$\overline{}$	$\overline{}$	$\overline{}$
please specify)			\cup	
				v
7. If your grant includes an educational or training of knowledge or skill was or is being taught. (Check		_	dicate w	hat type
Business skills	Primar	y focus	Second	ary focus
Regulatory compliance				$\frac{1}{2}$
Fishery science)		\int
Utilization of advanced information systems		5		\int
Working with other fishermen in a collaborative manner		$\stackrel{\sim}{\rightarrow}$		\tilde{a}
Other		$\tilde{}$	($\tilde{}$
please specify)			`	
				_

	Primary Focus	Secondary Focu
eduction in bycatch	\bigcirc	\bigcirc
opulation levels of specified fish species	\bigcirc	\bigcirc
sherman profitability	\bigcirc	\bigcirc
conomic health of fishing communities	\bigcirc	\bigcirc
tergenerational access to fishing as a profession	\bigcirc	\bigcirc
ability of fishing families	\bigcirc	\bigcirc
ell-being of small fishermen	\bigcirc	\bigcirc
atus of native or traditional fisheries	\bigcirc	\bigcirc
iher	\bigcirc	\bigcirc
ease specify)		

oject Activities and Outputs (continued)		
9. Did you deal with challenges in writing the sustainabilit	Major	Minor Not applicab
ack of certainty or clarity concerning regulation	challenge ch	allenge
Concept of sustainability is unclear		
ack of scientific understanding and/or data		
ack of trust among plan stakeholders		
ack of regulatory flexibility		
Short-term mindset prevalent among plan stakeholders		
Competition within sector makes collaboration difficult		
Other		
please specify)	\cup	0
0. In your opinion, did any of the following impede implem	entation of this F	IF-funded
0. In your opinion, did any of the following impede implem roject? (Check all that apply)	entation of this F	
roject? (Check all that apply) Challenges associated with internal project administration		
roject? (Check all that apply)		
roject? (Check all that apply) Challenges associated with internal project administration		
challenges associated with internal project administration Challenges associated with government regulation		
Challenges associated with internal project administration Challenges associated with government regulation Challenges associated with government regulation Cack of scientific expertise or scientific resources Cack of professional capacity Critical partners did not participate as planned		
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Challenges associated with internal project administration Challenges associated with government regulation Challenges associated with government regulation Cack of scientific expertise or scientific resources Cack of professional capacity Critical partners did not participate as planned Disagreement or differing approaches among partners Consider the professional capacity Consider the participate as planned Consider the partners among partners Consider the professional capacity Consider the partners among partners Consider		

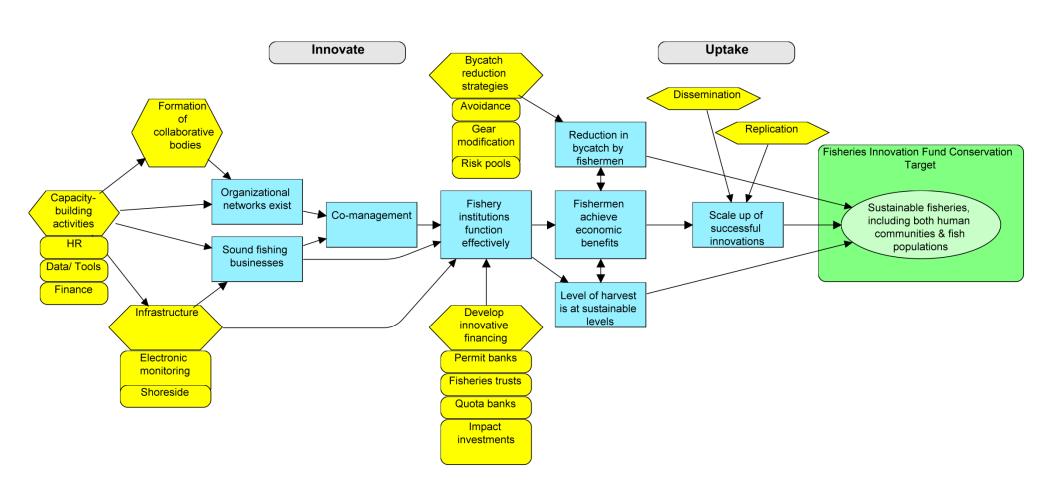
Fisheries Innovation Fund Evaluation Online Survey June 2013
Project Activities and Outputs (continued)
21. Has work under your grant impacted fishing communities in any unexpected ways?
22. Thinking beyond your individual project, what is the FIF program's greatest strength in its ongoing effort to achieve sustainable fisheries in the United States?
23. How can the FIF be improved?

Fisheries Innovation Fund Evaluation Online Survey June 2013 Thank you! Thank you for completing the FIF grantee survey. If you have questions or comments, please contact Chuck Herrick at cherrick@stratusconsulting.com or 202/741-1234.

Stratus Consulting (5/2/2014)

B. Fisheries Innovation Fund Theory of Change and Associated Logic Models for Main Areas of Program Activity

Fisheries Innovation Fund: Theory of Change



STRATEGY DEVELOP INNOVATIVE FINANCING —

KEY INTERVENTION AREAS	ACTIVITIES	OUTPUTS	METRICS	OUTCOMES	METRICS
ESTABLISH PERMIT BANKS, FISHERIES TRUSTS, QUOTA BANKS Problem statement: Fishermen often suffer due to lack of access to capital and financial services. There is a need to develop financial organizations better geared to the environmental and operational factors that govern the fishing business.	 Develop model charters Recruit members Assist with capitalization 	 Vetted charter documents Meetings with financial institutions Dollar value of financial commitments 	 Chartered organization, Y/N Percent of applicable sector or regional partners who belong to an applicable organization Financial awards issued, Y/N Percent of eligible fishery recipients seeking award or obtaining award 	 Pooling of resources and risks results in financial stability and growth for participating fisheries Enhanced access to 	 Industry-wide data indicating widespread uptake of the trust and/or bank organizational model Increased number and
ESTABLISH IMPACT INVESTMENT ORGANIZATIONS AND/OR VEHICLES Problem statement: Fishermen often suffer due to lack of access to capital and financial services. There is a need to develop financial instruments better geared to the environmental and operational factors that govern the fishing business.	 Outreach to banks, other financial organizations Financial and market analyses to assess alternative loan structures NFWF organizational implication assessment to manage loan program 	 Meetings Workshops Targeted disseminations of educational information Completed, vetted study 	 Approved certified vehicle, Y/N Volume utilization of approved vehicle, percentage or number of applicable regional or sector participants 	capital enables fisheries to survive economic downturns, stay in business, and/or take advantage of growth opportunities	aggregate value of fishery loans and successful closure of loan cycles

STRATEGY FORMATION OF COLLABORATIVE BODIES —

KEY INTERVENTION AREAS	ACTIVITIES	INTERMEDIATE OUTPUTS	METRICS	OUTCOME	METRICS	OUTCOMES	METRICS	OUTCOMES	METRICS
SUPPORT AND FACILITATE THE ASSOCIATION OF INDIVIDUAL FISHERMEN AND THE FORMATION OF COLLABORATIVE BODIES Problem statement: Fishermen acting alone are limited in their ability to manage risks associated with stock fluctuations and regulatory restrictions	 Conduct facilitated listening sessions Develop model covenants Develop model charters Recruit members Conduct outreach to potential members Support acquisition of professional staff 	 Sessions Workshops Vetted documents Ad placements Website Articles Recruitment 	 Number of sessions Number of attendees at sessions Approved document Y/N (completed, vetted) Approved vehicle Y/N (completed, vetted) Number of fishermen who attend Number of workshops Number of placements Hired positions 	Formation of operational collaborative bodies	Number or percentage of fishermen in a specified sector or region who work through/ belong to the body	 Collaborative members abide by charter, abide by rules, and agreements Collaborative members share data 	 Reduction in the number or percent of violations Number or percentage of fishermen in specified sector who engage in joint data management 	 Economic status improves for fishermen Sector or regional improvements in fishery stocks Fewer exceptions to MS catch limits 	Monetary increases in fishing-related wage, income (ENOW)

STRATEGY DEVELOP BYCATCH REDUCTION APPROACHES

KEY INTERVENTION AREAS	ACTIVITIES	INTERMEDIATE OUTPUTS	METRICS		OUTCOMES	METRICS	
AVOIDANCE SYSTEMS Problem statement: Fisherman lack access and/or the ability to use data analysis and real-time information systems that would help them to avoid bycatch hotspots	 Software development and testing Information system development Develop data hubs Spatial data system adaptation 	Pilot of systems or tool to meet needs of specified sector or region	Number or percent of fishers in the specified sector or region using the system or tool				
GEAR MODIFICATION Problem statement: Fisherman often lack gear that would enable them to avoid capture of bycatch	 Development and adaptation of excluder devices 	 Pilot of gear to meet needs of specified sector or region 	 Number or percent of fishers in specified sector or region using the device 	$\frac{1}{2}$	 Verifiable reduction of specified bycatch Reduction in bycatch violations 	 Reduction in pounds of specified bycatch species in a particular sector or region Number or percent reduction in bycatch violations 	
RISK POOLS Problem statement: Fisherman acting alone are limited in their ability to manage risks associated with stock fluctuation and regulatory restrictions	 Outreach to potential members Recruit potential members Commission experts to draft pool charter and terms 	 Formation or charter of specified mechanism within designated fishery 	Number or percent of fishers in specified sector or region who belong to or utilize a risk reduction mechanism				

KEY INTERVENTION AREAS	ACTIVITIES	OUTPUTS	METRICS	OUTCOMES	METRICS
DISSEMINATION OF FISHERY INNOVATIONS Problem statement: Innovations successful in one region or sector may not be known of or available to fishermen in other regions or sectors	 Plan and conduct events to introduce innovations outside original setting Distribution of technical briefs through trusted intermediaries 	 Sessions Webinars Workshops Educational conferences Publications Re-publications 	 Number of sessions Number of attendees Number of views Number of distributed copies Percent of target sector members who receive/view information Percent of members who attended who intend to apply that tool in their sector 	Evidence that specified practices and/or systems have been implemented in regions or sectors beyond the initial pilot	Number or percentage of regions that have adopted a practice or system developed by or perfected through the activity of a NFWF grantee
REPLICATION OF FISHERY INNOVATIONS Problem statement: Fishermen can be highly insular and lack trusting relationships with external stakeholders and regulators. For this reason, they may be disinclined to experiment with solutions adapted in other regions or sectors	 Coordinate and conduct demonstration projects Coordinate and conduct technology transfer workshops 	 Sessions Webinars Site visits Regional workshops 	 Number of sessions Number of attendees Percent or target sector members who attend workshop or view outreach material Percent of members who attended who intend to apply that tool in their sector 		

