



NORTHEASTERN REGIONAL AQUACULTURE CENTER

PROCEDURES MANUAL

January 15, 2008

Revised & Approved by Board of Directors December 2010

NRAC Procedures Manual

Introduction

The US government through the Department of Agriculture conducts research, education, and extension work to assure the US population of a plentiful, nutritious, and safe food supply. The aquaculture industry, one of the fastest growing components of US Agriculture, produces, processes, transports, and supplies high quality, nutritious seafoods and other products from the aquatic environment. Congress recognized the opportunity presented by this fledging industry with passage of the National Aquaculture Act (P.L. 96-362) in 1980. This act established USDA as the lead agency for aquaculture coordination and called for development of a national aquaculture plan. The National Aquaculture Plan was developed by the Joint Subcommittee on Aquaculture (JSA). JSA is a statutory committee operating under the aegis of the Federal Coordinating Council on Science, Engineering, and Technology, in the office of the Science Advisor to the President.

In 1981, Congress amended the National Agricultural Research, Extension, and Teaching Policy Act of 1977 (P.L. 95-113) by granting authority to establish aquaculture research, development, and demonstration centers in the United States (Title XIV, Subtitle L, Section 1475 (d) of the Agriculture and Food Act of 1981). Congress considered Subtitle L to be the means for the Department of Agriculture to implement the Aquaculture Plan developed by JSA. The centers envisioned by congress were to be used in a national program of cooperative research, extension, and development activities that included the centers, colleges and universities, federal facilities, state departments of agriculture, and private universities and research institutes with demonstrated excellence in aquaculture research, extension, and development. In 1987 four Regional Aquaculture Centers were designated and a fifth was added in 1988. Today the five Regional Aquaculture Centers are located in the northeast, north central, southern, western, and tropical/subtropical Pacific regions of the US.

Regional Aquaculture Centers (RACS)

The Regional Aquaculture Centers are administrative rather than physical centers. The Centers provides a means of assessing research and extension needs, assuring industry input, establishing priorities, and implementing aquaculture research and extension programs. The Centers facilitate implementation, administration, and coordination of regional research and extension programs, and they foster information exchange, research and extension linkages, and cross fertilization of ideas within and between regions.

Northeastern Regional Aquaculture Center (NRAC)

The Northeastern Regional Aquaculture Center (NRAC) provides research, education, and extension support to the aquaculture industry in the Northeast Region of the United States. The region consists of 12 states and the District of Columbia including: Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and West Virginia.

Vision Statement

The generation of new knowledge through NRAC research and extension of this knowledge by NRAC to industry, state agencies and the public will play a significant role in the expansion and diversification of a northeastern aquaculture industry, which will grow by using advanced production and processing technologies to compete in the global marketplace. NRAC will aid the industry to become economically viable and environmentally sustainable, helping aquaculture to become a significant component of Northeast agriculture and an essential complement to wild capture fisheries. NRAC will catalyze the economic development of an industry that comprises open and closed, fresh and salt-water systems-producing a wide array of fish, shellfish and other aquatic organisms-supported by progressive public and private research and development.

Mission Statement

NRAC is a principal public forum for the discovery and dissemination of science and technology needed by Northeastern aquacultural producers and support industries. NRAC facilitates regional stakeholder communications by linking industry and government representatives to university scientists and educators and by stimulating regional research and outreach initiatives. NRAC focuses on science and education that will have a direct impact on attaining long-term public benefits through enhanced aquacultural development in the region. NRAC-sponsored projects emphasize science and education to stimulate growth of the industry, as measured in size and numbers of aquacultural enterprises, through development and dissemination of profitable and environmentally responsible technologies.

Host Institution

The University of Maryland became the host institution for NRAC in 2005. NRAC is under the College of Agriculture and Natural Resources on the College Park Campus, the Flagship Campus of the eleven University System of Maryland campuses in the state. Responsibilities of University of Maryland as the host for the NRAC Administrative Center include:

1. Coordinate proposals, negotiate and enter into Regional Aquaculture Center funding agreements with the U S Department of Agriculture, other government agencies, and other institutions and organizations;
2. Serve as fiscal agent in receiving and disbursing funds made available under the prime grant, utilizing generally accepted accounting practices of educational institutions and in accordance with the terms and provisions of the grants;
3. Develop and execute appropriate agreements with the other parties for purposes of supporting research, education and extension activities, transferring funds, and for coordinating and implementing all projects approved under the grants, subject to approval by the Board of Directors;
4. Assure legal compliance with the terms of the grants and agreements;
5. Provide other normal institutional facilities and services to the NRAC Administrative Center and its staff as requested by the NRAC Director and the NRAC Board of Directors;
6. Develop and execute, with NRAC working through the University of Maryland Office of Research Administration and Advancement, agreements for the purpose of transferring funds and for coordinating and implementing all projects approved under the grants;
6. In accordance with established University of Maryland policies and procedures, employ a Director and such other administrative center staff as may be authorized by the Board of Directors.

The University of Maryland is entitled to recover from USDA all direct costs, as covered by the National Aquaculture Act (P.L. 96-362) of 1980 (and amendments thereof in the National Farm Bills), incurred under its obligations as the Administrative Center. If there is disallowance for any reason of the expenditures made by a grant-receiving institution, that institution is responsible for the reimbursement of the Administrative Center.

The Northeastern Regional Center Staff

NRAC staff includes a one-half time Director, a full-time Administrative Assistant and a full-time Coordinator. The functions of NRAC are to carry out the responsibilities listed above for the host institution under the direction of the University of Maryland.

The Center Director provides leadership for the regional activities of NRAC. The Director's Responsibilities include:

1. Serve as executive secretary to the Board of Directors;
2. Serve as an ex-officio member of the Technical/Industry Advisory Committees;
3. Coordinate development of research and extension plans, budgets and proposals;
4. Coordinate and facilitate interactions among the Administrative Center, Board of Directors and Technical/Industry Advisory Committees;
5. Monitor research and extension activities sponsored by NRAC;
6. Arrange for external peer review of proposals for technical and scientific merit, feasibility, and applicability to priority problems;
7. Prepare summary budgets and reports as required under the grants;
8. Prepare and submit to USDA the NRAC plan of work and annual report;
9. Recruit other Administrative Center staff as required;
10. Maintain liaison with other Regional Aquaculture Centers;
11. Serve as a member of the National Coordinating Council for the Regional Aquaculture Centers in conjunction with other Regional Center Directors and USDA representatives;
12. Facilitate communication amongst and between the research, extension and industry communities in the Northeast.

The Coordinator and Administrative Assistant assist the Director in managing NRAC financial records; travel arrangements for the Board of Directors and NRAC Committee members and the Director; arranging meetings; maintaining the NRAC web site; communicating with NRAC committees, the Board of Directors, and other clientele; and all of the other activities necessary to make NRAC a dynamic and viable organization.

NRAC Aquaculture Programs

The Secretary of Agriculture is charged by congress with responsibility for the Regional Aquaculture Centers. The Secretary delegated responsibility and accountability for the Centers to the Cooperative State Research, Education, and Extension Services (CSREES). The CSREES is now the National Institute of Food and Agriculture (NIFA). The responsibility for preparation, submission, completion and use of funds for the Northeastern Region reside with the Northeastern Regional Aquaculture Center's Board of Directors (BOD). The NRAC Technical and Industry Advisory Committees make recommendations to the BOD.

Periodically the Industry and Technical Advisory Committees identify research and extension priorities for the region, and develop problem statements for the priorities approved by the BOD. NRAC then releases throughout the Northeast Region either a Request for Applications (RFA) or a Request for Statements of Interest (in the case of Project Team approach) based on the problem statements. Potential investigators submit pre-proposals, proposals, or statements of interest, depending on what is requested by NRAC, as a prelude to development of project teams or proposals (depending on BOD approval). When pre-proposals are requested they are reviewed by the IAC and TAC. NRAC requests full proposals from the principal investigators that received the highest rating on their pre-proposals. The full proposals (whether from a RFA or a Project Team) are reviewed by the TAC, IAC and outside reviewers. The proposals are rated based on the reviews and ranked by score. The highest scoring proposals which fully address any technical and budget questions raised during the reviews are then funded using available funds. Once the proposals are approved by the Board, they are included in the NRAC Plan of Work and submitted to USDA, NIFA for approval. Upon approval by USDA, NRAC prepares subawards with the appropriate lead institution for each project. The project group can then begin the work as soon as the subawards are approved by the PI's institution, NRAC and the University of Maryland.

Board of Directors

The Board of Directors (BOD) is the policy making and governing body for NRAC and is made up of appropriate representatives as noted below. Appointment procedures, length of service, and responsibilities of the BOD are detailed below.

Responsibilities of Board of Directors

The NRAC Board of Directors' (BOD) primary functions are:

1. Determine NRAC administrative and management policy;
2. Review the Center's annual Plan of Work and project selection;
3. Approve NRAC's annual budget;
4. Allocate fiscal resources to ensure that the Center develops strong programs in research and extension that result in potential economic development of the aquaculture industry;
5. Charge the Technical and Industry Advisory Committees (TIAC), to work with researchers, industry representatives, extension faculty, and others to establish regional research and extension priorities for NRAC;
6. Provide input to the Dean of the College of Agriculture and Natural Resources regarding performance of the Director.

BOD Composition

The BOD will be made up of nine (9) voting and three (3) *ex-officio non-voting* members with the chairperson acting as moderator and voting only to break a tie. A quorum for the BOD will consist of no less than five (5) voting members. The BOD will represent universities and/or organizations that have an interest in or programs in aquaculture. The BOD will be composed of individuals representing the following:

1. Two Agricultural Experiment Stations in the Northeast Region (in addition to the University of Maryland representative);

2. Two Cooperative Extension Directors from the Northeast Region;
3. One administrator from an 1890 institution located in the Northeast Region;
4. One administrator from a private university, research institute in the Northeast region, or from the broadly defined aquaculture industry;
5. One Sea Grant Director from the Northeast region;
6. One representative from an Agriculture Research Service (ARS) aquaculture program in the Northeast;
7. One representative of the Dean of the College of Agriculture and Natural Resources at the University of Maryland College Park;
8. The NRAC Director and the chairs of the Industry Advisory Committee (IAC) and the Technical Advisory Committee (TAC) will be *ex-officio non-voting* members of the BOD.

Appointment to the BOD

Term of Appointment

The Dean of the College of Agriculture and Natural Resources at the University of Maryland College Park or his/her designee will be the chair of the BOD for the first four years. Subsequently, the BOD will elect a chair from within the BOD membership who will serve a three-year term. The remaining board members (except for the University of Maryland representative and Sea Grant Representative) will be appointed on a four-year cycle except for the first four years. The Representative from the Sea Grant Association will serve two year term. During the first four years appointments will be staggered to assure continuity on the BOD. Initially, one experiment station director and the administrator from the private institution/industry will serve two-year terms; one extension director, the ARS representative, and the 1890 representative will serve three-year terms; and the remaining experiment director and extension director will serve four-year terms. Thereafter all appointees will serve four-year terms except the Sea Grant Director's representative and the Dean's representative from the University of Maryland. It is recommended that BOD members be limited to serving not more that two full or partial (in the case where a position is filled by a resignation prior to the term expiring) terms except for the representative of the Dean of the College of Agriculture and Natural Resources, University of Maryland who will be a permanent representative. The chairs of the TAC and IAC are determined by their respective committees.

Method of Appointment

At the appropriate time, the NRAC Director will request the Northeastern Association of Experiment Station Directors, the Northeastern Regional Extension Directors Associations, and the Sea Grant Directors Association in the Northeast to provide the names of representatives for the experiment station directors, extension directors, and sea grant directors, respectively, to serve on the BOD. Similarly, the 1890 representative from the Northeast Region will be provided by the 1890 Land Grant Association, and the private university or institution/industry representative will be elected by the BOD from nominations submitted, upon request by the Director of NRAC, by private educational and research institutions and the aquaculture industry in the Northeast Region. The directors of the ARS aquaculture programs in the Northeast Region will be asked to submit a nomination for the ARS representative. The chairs of the TAC and IAC are determined by their respective committees.

Industry Advisory Committee (IAC)

The Industry Advisory Committee is designed to assure industry needs are included in NRAC planning

and implementation of research and extension projects.

Responsibilities of the Industry Advisory Committee

1. Recommend to the Board of Directors, jointly with the TAC, research and extension needs and priorities from an industry perspective;
2. Develop with the TAC problem statements and objectives for research and extension activities that have been identified for program development;
3. Recommend to the Board, jointly with the TAC, actions regarding new and continuing regional projects and project modifications and terminations;
4. Make recommendations to the BOD relative to the importance of proposed priorities to the aquaculture industry;
5. Work with the entire aquaculture industry to represent industry-wide needs and priorities for research and extension.

Composition, Appointment, and Terms of IAC

The Industry Advisory Committee will be made up of 13 members, one member from each state in the Northeast Region and the District of Columbia. These members will be industry representatives including members from aquaculture production, processing, and distribution; financial institutions; aquaculture industry suppliers; non-government organization with expertise in aquaculture, etc.

When a vacancy becomes available on the IAC the NRAC Director will contact the state aquaculture association (if one exists), the state aquaculture coordinator, the directors of the state agriculture experiment station and the extension director in the state and request nominations to the IAC. Nominees must be from the industry, a private university or research institute, or a non-government organization having interest in and expertise in aquaculture. The NRAC Director will forward the nominations from the state to the BOD. The BOD will by majority vote select the IAC representative from the individuals nominated.

Each member of the IAC will serve three years. A member can serve no more than two consecutive three-year terms (or one partial term and one full term where someone resigns before their term ends) before a break in service is required. A quorum for the IAC will consist of a minimum of seven (7) voting members or a total of seven (7) votes including members present plus proxy votes. Proxy votes must be in writing and received by the NRAC Director at least three days prior to an IAC meeting either by e-mail or by regular mail. In case of an IAC member who planned to attend but due to an emergency situation (e.g., sudden illness) had to change plans, e-mail proxy votes will be accepted by the NRAC Director up to 24 hours before the IAC meeting.

The first year the IAC will elect by majority vote a chair and a vice-chair. The chair and vice chair will serve for two years in their respective positions. After two years the vice-chair will become chair and the TAC will elect a vice chair. Thereafter, every other year the IAC will elect a vice-chair. The vice-chair will serve two years as vice-chair and then two years as chair. The vice-chair will succeed to chair after two years of service as vice-chair. The IAC Chair will serve as an *ex-officio non-voting* member of the Board of Directors.

The IAC will meet at least once per year and carry out the NRAC business within their charge. Members who miss two or more consecutive meetings without approved or prior written approval for

absence will be automatically rotated off of the IAC.

Technical Advisory Committee (TAC)

The Technical Advisory Committee assures NRAC projects meet rigorous scientific and technical standards and are instrumental in developing the problem statements that address researchable topics or are topics addressable by extension.

Responsibilities of Technical Advisory Committee

The duties of the Technical Advisory Committee Members are to:

1. Recommend to the Board, jointly with the IAC, research and extension needs and priorities from a scientific and extension perspective;
2. Develop with IAC, problem statements and objectives for research and extension activities that have been identified as priorities for program development;
3. Recommend to the Board, jointly with the IAC, actions regarding new and continuing regional projects and project modifications and terminations;
4. Make recommendations to the BOD on the adequacy of scientific and extension methods and procedures for all projects recommended for funding;
5. Assist the Director in identifying appropriate external reviewers for proposals, projects, and/or reports where needed.

Composition, Appointment, and Terms of TAC

The Technical Advisory Committee will be made up of 13 members each representing a state or the District of Columbia. Approximately one-half of these people will be extension and the other one-half will be researchers. When a vacancy become available on the TAC the NRAC Director will contact the state aquaculture coordinator, the directors of the state agriculture experiment station and the extension director in the state and request nominations for the TAC. Nominees must have the appropriate technical expertise and experience in aquaculture research and/or extension. The NRAC Director will forward the nominations from the state to the BOD. The BOD will by majority vote select the TAC member from the individuals nominated.

Each member of the TAC will serve a three-year term. A member can serve no more than two consecutive three-year terms (or one partial term and one full term where someone resigns before their term ends) before a break in service is required. Attempts will be made to alternate extension and research representatives from each state. However, the situation may arise where a state may have only an extension or research person with the appropriate background and interest in aquaculture. In this case the BOD will have some discretion in appointing a research or extension person as long as the research and extension balance among all states is maintained. A quorum for the TAC will consist of a minimum of seven (7) voting members or a total of seven (7) votes including members present plus proxy votes. Proxy votes must be in writing and received by the NRAC Director at least three days prior to a TAC meeting either by e-mail or by regular mail. In case of an TAC member who planned to attend but due to an emergency situation (e.g., sudden illness) had to change plans, e-mail proxy votes will be accepted

by the NRAC Director up to 24 hours prior to the TAC meeting.

The first year the TAC will elect by majority vote a chair and a vice-chair. The chair and vice chair will serve for two years in their respective positions. After two years the vice-chair will become chair and the TAC will elect a vice chair. Thereafter, every other year the TAC will elect a vice-chair. The vice-chair will serve two years as vice-chair and then two years as chair. The vice-chair will succeed to chair after two years of service as vice-chair. The TAC Chair will serve as a *ex-officio non-voting* member of the Board of Directors.

The TAC will meet at least once per year and carry out the NRAC business within their charge. Members who miss two or more consecutive meetings without approved or prior written approval for absence will be automatically rotated off of the TAC.

TIAC Executive Committee

The TIAC Executive Committee provides a balanced yet rapid method of addressing key activities during formation of committees and development of research and extension projects. The Executive Committee consists of five members:

1. The NRAC Director
2. The Chair and Vice-Chair of the Industry Advisory Committee
3. The Chair and Vice-Chair of the Technical Advisory Committee

The responsibilities of the Executive Committee are:

1. Recommend reviewers for proposals and projects;
2. Recommend to the BOD, TAC and IAC members for dismissal based on their missing two or more consecutive meetings without justifiable cause;
3. Recommend members of Project Steering Committees, Project Leaders, and Administrative Advisors (see below) for consideration by the Board of Directors;
4. Maintain oversight of all programmatic issues to insure that equitable and fair procedures are used to develop and conduct projects;
5. Assist the NRAC Director in reviewing project progress reports and termination reports for adequacy and make any appropriate recommendations to the BOD relative to these reports;
6. Assist the NRAC Director in finalizing problem statements for submission to the BOD for approval.

Regional Project Development and Management

The Regional Aquaculture Centers were established to provide a mechanism for assessing regional aquaculture industry needs and establishing research and extension projects to address these needs. Although project development processes vary among the five Regional Aquaculture Centers (RAC's), RAC projects have common goals:

1. Projects are responsive to industry needs;
2. Projects encourage cooperative and collaborative aquaculture research, extension, and educational programs that have regional or national application.

3. Projects should address and resolve, by team efforts, problems that are too vast, complex, require too broad an expertise base, or are too costly in manpower or funds for a single institution to address;
4. Projects and programs are generally implemented using existing institutional mechanisms and linkages in both public and private sectors;
5. Information should be transferred quickly to industry, the research community, and the public in an appropriate format and at an appropriate level of expertise for each specific audience.

Criteria for Regional Projects

The following criteria will be used in determining whether a proposed cooperative regional research and extension project is appropriate for NRAC funding.

1. Involve participation by two or more states in the northeastern region (any exceptions to this must be thoroughly justified and must be approved by the TIAC and BOD);
2. Include an adequate plan to disseminate project results;
3. Require more scientific manpower, equipment, and facilities than generally available at one location;
4. The project approach is adaptable and can be organized and conducted on a regional level, thereby assuring coordinated and complementary contributions by all participants and better use of limited resources;
5. Complement and enhance ongoing extension and research activities by participants, as well as offer potential for expanding these programs;
6. Are likely to attract additional support for the work when support is not likely to occur through other programs and mechanisms without initial NRAC funding;
7. Are sufficiently specific to promise significant accomplishments in a reasonable period of time (usually within 1 to 3 years);
8. Can provide the solution to a problem of fundamental importance to the industry or fill an important information gap.

The NRAC program pays no overhead to participating institutions, will not provide tuition remission, and does not provide “brick-and-mortar” funding. NRAC relies primarily on existing salaried personnel, equipment, and facilities to carry out the projects. Due to the collaborative and cooperative requirements of NRAC projects, organizations in at least two states and usually several institutions and/or organizations are funded under one project.

Identification of Research and Extension Priorities

The Industry Advisory Committee (IAC) has primary responsibility for establishing research and extension priorities. Annually or biannually the IAC will meet and establish 2 to 6 priorities for NRAC research and extension. It is expected that these priorities will meet the requirements for NRAC projects noted above. IAC members will be expected to solicit input from state aquaculture associations, other producers and suppliers, and others involved in the aquaculture industry for inclusion into the priorities list. The IAC and the TAC will then meet and select and rank from highest to lowest (usually not more than four (4) priorities for funding during the year and will develop problem statements or statements of interest, depending on the project development method selected, for each selected priority. Writing groups within the IAC-TAC will draft the problem or interest statements for approval by the IAC and TAC. Problem statement will briefly describe the problem area, its importance, a general set of

objectives and deliverables for the work to be completed. The statement of interest will be similar but the objectives will be more specific and focused.

Problem or interest statements approved by the IAC-TAC by majority vote will be submitted to the Board of Directors (BOD) for approval. At this point the BOD can accept, modify, or reject with cause any priority, funding target, or suggested duration of the project. The BOD may establish final levels for each priority before release of the RFA or can leave this open and then review the budgets of proposals submitted. The Executive Committee will be responsible for including any changes made by the BOD to the problem/interest statements. The BOD will also determine if the project proposals will be developed using the Project Team or the Request for Applications method. The RFA approach will be used except where the BOD determines the project team method provides the best approach.

Request for Applications (RFA)

There are two methods used by NRAC to develop proposals: the Request for Applications (RFA) and the Project Team Method. In the RFA procedure pre-proposals are requested and reviewed. The Project Coordinators or Lead Principle Investigators (PI's) on the highest rated pre-proposals are then asked to submit a full proposals which are then subjected to internal and external review. The Project Team Method is defined later in this manual.

Pre-Proposals

If the RFA method is chosen by the BOD, the problem statements will form the basis for an RFA that will be advertised throughout the Northeast Region. Pre-proposal guidelines and the problem statement will be released by NRAC with an invitation to submit pre-proposals. Interested persons will then submit pre-proposals addressing the problem statement they are interested in by the deadline set in the RFA.

Pre-proposals will be reviewed by the NRAC headquarters to assure they meet the pre-proposal requirements and are in the required form. Pre-proposals not meeting these standards will be rejected. Pre-proposals meeting these standards will be sent to all members of the IAC and TAC for review with a deadline date for completion of review. Each reviewer will numerically rate the pre-proposals using forms provided by NRAC. Reviewer comments will also be solicited from the reviewers. The reviewer's ratings will be tabulated and the reviewer's comments will be organized by project by the NRAC staff. Based on the TIAC reviews of the pre-proposals the projects will be ranked from the highest to the lowest based on the average of the reviewer total scores. The NRAC Director will determine the funds available and go down the list of rated pre-proposals, starting with the highest rated pre-proposal, until enough pre-proposals are selected to require approximately twice as many funds as are available. The P.I.s of these pre-proposals will be asked to submit full proposals. In any case where questions arise for the NRAC Director relative to pre-proposal selection the Director will consult with the Executive Committee. The NRAC Director will request full proposals from the pre-proposals selected and will provide a letter to the Principal Investigators (PI) or the Project Coordinator (PC) of the other pre-proposals indicating they are not being asked to submit full proposals. In all cases the letter to the PI's or PC's of the pre-proposals will contain reviewer comments pointing out the strengths and weaknesses of their pre-proposals. The request for full proposals will include the required format the full proposal must follow and a deadline for submission to the NRAC office.

Pre-proposals are limited to 3 single-sided pages in length in which the project team must respond to specific questions as stated in the RFA for the pre-proposals. The space limitation constrains the authors

in outlining details of their proposal. Thus, the pre-proposal review will concentrate on assessing how well the proposed project meets the problem statements in the pre-proposal RFA and how well it addresses the industry needs, although where possible other attributes will be included in the review such as the general proposal scientific approach and the qualifications of the people involved.

Full Proposals

Upon receipt of the full proposals the NRAC Director, with the assistance of the Executive Committee and where necessary the TIAC members, will attempt to secure at least three outside reviews for each submitted proposal. These reviewers should be experts in the subject matter of the proposal and be able to provide reviews within the allotted time period. Ideally these reviewers will be from outside the Northeast region. A copy of the approved review sheet will also be sent with each proposal. Reviews by the outside reviewers will be returned to the NRAC Director and the Director will remove the reviewer's identification on the reviews and replace it with a code in case it is necessary to contact a reviewer later in the review process. Outside reviewer's identities will be kept confidential by the NRAC Director and staff.

Copies of the full proposals, and when available all outside reviewer comments, will also be transmitted to all members of the TAC and IAC as soon after the full proposal due date as practicable and prior to the next TIAC meeting. A copy of the approved review sheet will be sent with the proposals for use by the TIAC members in reviewing each proposal. The TIAC will meet and consider each proposal separately. In the interest of fairness a timetable will be established by the TIAC Chairs for discussion such that approximately equal time will be allowed for discussion of each proposal. The TIAC will then rate each proposal using the approved review sheet. The total scores of each review sheet submitted by an eligible member of the TIAC (including proxies received before the deadline) will be recorded and an average (based on the number of TIAC members rating each proposal) calculated for each proposal. The proposals with their average scores will be listed in descending order and the TIAC members attending the meeting and listening to the discussion (proxy votes will not be used) will then vote as to whether each proposal will be classified as "fundable" or "not fundable," A majority vote in favor will be required to place a proposal in the "fundable" category. Any proposal not receiving a majority to be classified as "fundable" will be assumed to be unacceptable for funding and will be so classified. Proposals classified as fundable and each proposal's numerical score will be transmitted by the TIAC chairs and/or the NRAC Director to the BOD.

The BOD will then meet and consider only proposals rated "fundable" by the TIAC. The BOD will start at the highest rated proposal and move downward through the proposal ratings discussing each proposal in turn. The BOD will vote by majority vote to fund or not to fund each proposal until the available funds are committed or they run out of "fundable" proposals. It is anticipated that the BOD will follow the TIAC rating order unless there is some ethical, legal, or financial limitation or some aspect of animal care, human subjects, biotechnology concerns, or radiation related limitation, or a major technical problem with the proposal undetected by the TIAC preventing the BOD from funding the project.

It is anticipated that the TIAC and the BOD may make suggestions for changes to improve proposals during their review of the proposals. These suggestions will be collated by the NRAC staff in the form of a letter and sent to the proposal PI or PC after the BOD has accepted the proposal for funding. The PI or PC will be given a specific time period in which to make the changes and resubmit to the NRAC office revised electronic and signed hard copies of the proposal. This revised proposal will be reviewed by the Executive Committee to determine if adequate changes were made to address the suggestions from the BOD and the TIAC. If the EC is satisfied with the changes, the proposal will be included in

the Plan of Work submitted to USDA, NIFA. If the EC is not satisfied with the changes the proposal will be rejected by NRAC and will be returned to the PI or PC.

Upon approval by the BOD and changes by the EC, the project(s) will be included in the NRAC annual plan of work and submitted to USDA for final approval. Upon approval by USDA, NIFA NRAC will develop a subcontract with the PI's or PC's institution for each project. Figure 1 graphically summarizes the proposal process.

Project Team Approach

The Project Team Approach is a cooperative effort designed to develop, implement, carry out, and document NRAC projects. The goals of the Project Team are to:

1. Be responsive to industry needs;
2. Engage the best scientific and technological expertise in the region in planning and conducting projects;
3. Encourage cooperative efforts that will last beyond an individual NRAC project and lead to funding from other sources of important research and extension activities;
4. Carry out high quality, scientifically sound research and extension work.

The identification of research priorities is the same under both the Request for Proposals Method and the Project Team Approach Method and is described above.

Once the BOD has approved a Statement of Interest and approved a Project Team Approach, the Executive Committee (EC) will recommend a Project Leader and members for a steering committee to the BOD for their approval. It is anticipated that there normally will be no more than three steering committee members in addition to the Project Leader except in exceptional circumstances. Nominations for these positions may be made to the EC by TIAC members or others.

The NRAC Director and the Chairs of the IAC and TAC will be *ex-officio* members of all steering committees.

Formation of Project Team and Development of Project Proposal

Project Teams will be formed from individuals who have responded by the deadline to the Statement of Interest, are willing to work cooperatively, have expertise to contribute to the project, have access to the needed facilities to carry out the proposed project, and are willing to work in a cooperative effort toward the solution of the identified problem. Copies of all Statements of Interest received by the deadline will be forwarded to the Steering Committee for their review and consideration. After a sufficient time interval for the steering committee to review the Statements of Interest, the NRAC Director and Project Leader will coordinate a Steering Committee meeting in person or via conference call and the Steering Committee will select the participants invited to join the Project Team. It is the Steering Committee's responsibility to select people for the project that will form a coherent team to address the objectives stated in the Statement of Interest. NRAC requirements demand the team be multi-state geographically, multi-disciplinary and/or multi-institutional to the extent needed to adequately address the objectives. Investigators on the team must be willing to work cooperatively, possess the required expertise, have access to equipment and facilities needed to deliver their part of the project, be responsible enough to complete their agreed-to part of the approved project within both the budget and time limits allocated in

the approved proposal. Only individuals willing to make a commitment to these project demands should join a project team.

Once the Steering Committee has selected the participants for a project, all persons submitting a Statement of Interest will be informed by the Project Leader of the results of the Steering Committee's actions.

Upon formation of the Project Team, the team will develop a proposal in response to the Statement of Interest approved by the BOD. The Steering Committee will be responsible for coordination of the proposal and for meeting any deadline for completion of the proposal. The proposal will follow the NRAC proposal format (See Appendix). In addition, the Steering Committee will provide names of four to six reviewers possessing the necessary subject area expertise to professionally review the proposal. The reviewers can be from within or outside the Northeast Region but they can not be current members of NRAC's BOD, IAC, TAC, the Project Team, or close collaborators with any of the Project Team members. It is recommended that, if possible, the reviewers be from outside the region.

Participants in the Project Team Process

The Steering Committee

The Steering Committee will consist of the Project Coordinator, the Administrative Advisor and usually not more than three research, extension, and/or industry representatives who have demonstrated interest and expertise in specific aspects of the problem being addressed. The NRAC Director and Chairs of the IAC and TAC are *ex-official* members of the Steering committee. The responsibilities of the Steering Committee include:

1. Finalize the Call for Statement of Interest;
2. Review all Statements of Interest and select project participants;
3. Serve as a leadership team for the project development process;
4. Serve as a leadership team in writing the proposal;
5. Serve as the project leadership team in carrying out the project and in writing up the project reports, papers, etc.

Members of the Steering Committee need to possess experience in leading groups, coordinating activities of several scientists and industry people, and in project budgetary matters. They also need to have a regional view of research and extension activities and be proactive in including the people best qualified to solve the problem addressed by the Project Team. Steering Committee members may become members of the Project Team and often serve in leadership roles on the Project Team.

Project Team

The Project Team is responsible for developing the project proposal, modifying the proposal in response to reviews, carrying out the project work, and reporting the results. The Project Team consists of funded project participants. The NRAC Director and the Chairs of the IAC and TAC are *ex-officio* members of the Project Team. Qualified members of the Steering Committee can be members of the Project Team. BOD members will not be funded members of the Project Team. Members of the IAC and TAC may be funded members of a Project Team but can not vote or participate in discussions of the project in IAC or TAC deliberations.

The Responsibilities of the Project Team are:

1. Prepare the draft project proposal with budgets;
2. Recommend external reviewers for the proposal;
3. Assist the Project Coordinator, when needed, in preparing the final draft of the proposal;
4. Conduct the project as outlined in the project proposal;
5. Report, discuss, and evaluate yearly progress toward objectives;
6. Provide in a timely manner semi-annual progress reports to the Project Coordinator;
7. Provide timely required reports to the Project Coordinator.

The Project Coordinator

The Project Coordinator is a key person in the proposal development, project oversight, conducting and coordinating the project, reporting and bringing the project to a successful conclusion. The Project Coordinator is nominated from the Steering Committee by the Executive Committee and is approved by the Board of Directors. The Project Coordinator must have demonstrated expertise and experience in the problem area under consideration and should possess sufficient leadership and people skills to coordinate a multi-state project.

Responsibilities of the Project Coordinator are:

1. Coordinate proposal development, project operation, project reporting, and project termination. This will include scheduling project meetings, conference calls, recording and distributing minutes of project meetings (including Steering Committee and Project Team Meetings), submitting reports, etc.;
2. Coordinate development and submission of the proposal and any required revisions of the proposal to NRAC;
3. Follow the approval process for the proposal, and initiate and coordinate project start up;
4. Oversee conduct of the project, maintain communication and coordination with and between all project participants to assure successful project completion;
5. Review and approve reimbursement invoices of participating institutions;
6. Oversee summarizing project results and preparing and submitting progress , annual, and completion and final technical reports;
7. Work with the NRAC Extension Project Coordinator and project extension participants to develop, prepare, disseminate, and distribute project information, publications, and other communications of project results to industry and other interested audiences;
8. Oversee development and preparation of the final project summary that is prepared 1-3 years after project completion when it is assured that all work is complete and all literature or other communications resulting from the project have been published.

PROJECT ACTIVATION

Project work can begin only after the project proposal has been approved by the NRAC Board of Directors and USDA, NRAC has received a signed contract from the Project Coordinator's institution, and any subcontracts required are signed by the Coordinator's institution and the University of Maryland.

Participating institutions will submit invoices to the NRAC Director for reimbursement of expenditures on a quarterly basis using the form in the Appendix. After approval of invoices by the Project Coordinator and the NRAC Director, and the Office of Contract Accounting at the University of Maryland funds will be transferred to the participating institution. Final payment each year will be contingent upon completion of that year's proposed work and submission to and acceptance by NRAC of an Annual or Completion and Final Technical Reports. Requests for reimbursement will be submitted on the NRAC invoice form. *Accountability of expenditure will be the responsibility of each participating institution.*

Participating institutions may have more than one department participating in the same project. When this occurs and the institution desires to submit individual departmental invoices, an individual budget for each department must be submitted and approved by the Project Leader and NRAC before submission of invoices.

Funding of multiple year projects past the first year will be determined by the Board of Directors and will be contingent upon satisfactory progress toward project objectives and submission and approval of appropriate reports. If requested by the NRAC Director progress reports will be reviewed by the Executive Committee and they will make a recommendation to the Board of Directors as to the adequacy of the report and any recommended action the BOD should take.

Requests for budget modifications, no-cost extensions or other substantial project changes will be approved by the Project Leader and Administrative Advisor, and submitted to NRAC for approval by the NRAC Director.

Assurance Statements

Projects must be carried out in compliance with all applicable laws and regulations. USDA requires formal assurance that all procedures are reviewed and overseen by appropriate committees at each institution with respect to use of recombinant DNA or RNA techniques, humane treatment and care of vertebrate animals, safeguarding the rights and welfare of human subjects, compliance with safeguards when radiation or diving is involved. Thus, Form NIFA-2008, Assurance Statements (or other forms acceptable to NRAC and USDA, NIFA), must be completed by the institution submitting the proposal to NRAC at the University of Maryland.

Project Coordinators must submit USDA, NIFA Form 2008 – Assurance Form (or other forms acceptable to NRAC and USDA, NIFA) with their full proposal. If the form indicates that recombinant DNA or RNA, vertebrate animals or human subjects, radioactive substances or diving are involved in the project a protocol for whichever of these items are to be used must be submitted to the appropriate approval group at the institution doing the work. The protocol must be certified to meet all standards by the appropriate board or committee at the performing organization and a copy of the submitted protocol and an original signed copy of the approval form must be submitted to NRAC. For example, if vertebrate animals are to be used, the project coordinator's institutional Animal Care Committee must approve the protocol, if human subjects will be involved the Institutional Research Board (or similar title) must approve it. These protocols and the signed approval form must then be submitted to the NRAC Director who will submit it to the appropriate Committee or Board at the University of Maryland for approval. **Without these two approvals USDA, NIFA will not release funding for the project.**

Project Coordinators should be aware that this approval process can take several months. Thus, as soon as a Coordinator submits a full proposal to NRAC he/she needs to submit the appropriate paper work to

their institution for approval. It is the Project Coordinator or the lead project P.I.'s responsibility to provide the approvals from their institution to NRAC in a timely fashion so it can be routed through the appropriate University of Maryland approval process prior to project approval by USDA, NIFA.

National Environmental Policy Act Exclusion Form

The National Environmental Policy Act of 1969 (NEPA) establishes national policy and goals for protection of the environment. This act requires all federal agencies, including NIFA and USDA, to consider the environmental consequences of all proposed actions. Thus, NIFA requires all project participants to furnish environmental data or documentation to assist NIFA in carrying out this responsibility. For any action deemed to have a significant environmental effect, a detailed environmental impact statement must be prepared by the project participant. The statement may take the form of either an Environmental Assessment or an Environmental Impact Statement, depending on the uncertainty regarding potential impacts or the significance of the impact on the environment. Activities that may require an Environmental Assessment or Environmental Impact Statement include use of genetically altered or non-native animals and field testing of certain vaccines, antibiotics, or other chemicals. Certain other activities, by their nature, will have little or no impact on the environment and may not require preparation of an Environmental Assessment or Environmental Impact Statement. These activities include policy development, administrative functions, educational and informational activities, certain types of laboratory or wet-laboratory research, and studies conducted in isolated research ponds or facilities that involve the use of familiar chemicals or biological materials.

To assist NIFA in meeting its responsibilities under NEPA, the Project Coordinator's institution must complete Form NIFA -2006 which is then attached to the project proposal before it is submitted to NIFA for approval. Form NIFA -2006 advises NIFA whether or not the proposed activity falls into one or more of the categories excluded from the requirement for preparing an Environmental Assessment or Environmental impact Statement. Activities not covered by one of the exclusions may require filing of an Environmental Impact Statement or Environmental Assessment. In such instances, NIFA will provide instructions on preparing and submitting the required documents.

The information provided on NIFA Form 2006 is advisory, and is used only to assist NIFA personnel in determining whether further documentation of possible environmental effects will be required. However, even if project participants do not consider their component of a project to have any environmental effects, NIFA will make the final determination of whether or not an Environmental Impact Statement or Environmental Assessment will be required before the project can be initiated.

REPORTING REQUIREMENTS

The Project Coordinators (PC) for each project shall submit reports to the Director of the Northeastern Regional Aquaculture Center (NRAC), University of Maryland, 2113 Animal Sciences Building, Bldg. #142, College Park, MD 20742-2317. The PC will submit an annual progress report for multi-year projects (for one year projects the Completion Report will take the place of the Annual Progress Report), and Completion Report at the end of the project. **There are three Completion Reports: 1) a short Completion Report of approximately three pages in length in lay language, 2) a comprehensive Technical Completion Report, and 3) the Final Project Summary Report. The short Completion Report will be due four weeks before the end of the project, the Technical Completion Report will be due 30 days after the project completion date, and the Final Project Summary Report is due two years after the end date of the project and it will summarize the main findings of the project and list all publications resulting from the project. The Final Project Summary Report is an unfunded requirement for the PC of**

each project and is designed to assure all publications from each project are reported to NRAC after publication. These reports will be submitted using the appropriate forms and formats shown in the Appendix of this Procedures Manual.

One (1) hard copy of all reports and one (1) electronic copy of all reports will be submitted to the NRAC. The electronic copy of the reports shall be submitted in a format or program compatible with computer equipment and programs at the Northeastern Regional Aquaculture Center office (in Microsoft WORD). Unless special arrangements are made with the NRAC Director before submitting a report, NRAC reserves the right to place reports onto the NRAC web site for public use. As publications will cover a wide variety of topics and sources, please do not abbreviate source titles as many people may not be familiar with sources used in your area of expertise. Use SI units, but you may use dual units with SI as the primary set of units with English units in parenthesis after the SI units.

Report Format

Reports will be submitted in Microsoft WORD using 12 point Times New Roman font unless the format calls for a different type size for specific items. Paragraphs will be started at the left margin with a double space between paragraphs. The left margin will be 1.5 inches and the right side margin and the top and bottom margins will be 1.0 inches. Bibliographic format will follow that used by the Transaction of the American Fisheries Society which is available at:

<http://www.fisheries.org/afs/publications/journals/tafs.pdf>

Annual Progress Report

The Annual Progress Report shall be due October 31 of each year the project is active. Funding approval for the second year and subsequent years, if appropriate, will be contingent upon NRAC approval of the Annual Progress Report. The format to be followed for the Annual Progress Report is given in the Appendix of this manual. One hard copy and one (1) electronic copy in a format compatible with NRAC computer systems (in Microsoft WORD) must be submitted.

Project Completion Reports

In addition to the Semi-Annual and Annual Progress Reports, the Project Coordinator will be required to submit a **Project Completion Report** four weeks prior to the project end date. The Project Completion Report is a short concise description of project activities and results written in lay language. The body of the report should not exceed three (3) pages. A Final Technical report is also required. The **Final Technical Report** will be submitted no later than 30 days beyond the completion of the project and will include descriptions of all the project activities, methods, results, data analysis, tables, graphic representations, discussion, final conclusions and recommendations (see Appendices of this manual for Completion Report and Final Technical Report formats).

A **public presentation** is also required. This public presentation may take place during the Annual Board of Directors meeting, but other venues may be used as appropriate. This Project Completion Report and public presentation will be used to determine successful completion of the project, including acceptance of all project deliverables, reports, publications, and any other items related to award closeout. Completion Reports will also be used by NRAC for production of the NRAC Annual Report and usually will be placed on the NRAC web site.

Extension Products From Projects

Any extension outputs specified in the project proposal will be submitted to NRAC prior to the completion of the project. Exceptions to this requirement can only be made upon written request of the project PI to the NRAC Director for an exception and approval by the TIAC Executive Committee.

Final Project Summary Report

One of the problems in completing project reporting is the lag time in getting publications published, especially in peer reviewed journals. Thus, the Project Coordinator, Principle Investigator, or Project Leader (whoever is responsible for project reporting) will provide a Final Project Summary two (2) years after the completion date of each active project. This final summary will include the project impacts, major results, and all publications originating from the project. This report should not be long but should be all inclusive of the project outputs such as publications and other delayed outputs. This will be an unfunded obligation of the project leader and is designed to assure all publications from each project are reported to NRAC after publication.

Report Reviews

Project Reports will be submitted to the NRAC Director who will submit them to the Executive Committee. The Executive Committee (EC) will determine if the report is acceptable or if revisions are needed. If revisions are needed the EC will provide information on required changes to the person submitting the report and that person will be responsible for addressing the changes and submitting the revised report. Based on the EC's review of the report the EC will recommend to the NRAC Director whether the project should receive funding for another year, if it is a multi year project, or if the report is acceptable for a termination report. If there is significant disagreement within the EC, the EC recommendations will be reviewed by the BOD and the BOD will either accept or reject the report. If rejected the project person will be informed of the reasons and will make the requested revisions before funding will be released for another year or before the report is accepted as a termination report. **Upon acceptance of a termination report, the PI's or PC's responsibility for the project will cease except for submission of the Final Summary Report after two years.**

NO-COST BUDGET OR NO-COST TIME REVISIONS OF PROJECTS

No-Cost Budget Revisions

Investigators are expected to prepare accurate budgets in their project proposals to complete the stated objectives. Once a project begins, work should be carried out such that costs for individual categories (i.e. salaries, supplies and materials, etc.) remain within the approved budget categories and within the budgeted amounts. However, there are times when it may become necessary to transfer funds from one category to another within an annual budget to meet unexpected costs and allow completion of work on project objectives. Requests for no-cost revisions should be made as soon as the need for revision is evident and the request must be made in writing to NRAC. A full but concise explanation of the need for the budget revisions and the proposed budget revisions must accompany the request. The request should be forwarded to the NRAC Director for approval after approval by the Project Coordinator and (for Project Team) the Administrative Advisor. Budget revisions should not affect the total annual budget for the participating institution and under no circumstances should budget revisions be made to

allow work outside the framework of the original project proposal. A request form for No-Cost Budget Revision is available in the appendix of this manual.

No-Cost Time Revisions

Project participants should endeavor to complete projects within the original project time frame. However, circumstances beyond control of the project participants sometimes arise that require a no-cost time extension. When such circumstances occur, NRAC will consider a no-cost time extension provided it is made in writing at least three months prior to the original project termination date and funding deadlines for the monies supporting the project allow an extension. The request must provide justification for the extension, how long an extension is requested, a concise summary of progress to date and an estimate of the funds expected to remain unobligated on the original completion date. A request form for No-Cost Time Revision is available in the Appendix of this manual.

REVISION, REPLACEMENT, TERMINATION, AND EXTENSION OF NRAC PROJECTS

Revision of a Project

Project personnel including at least the Project Coordinator, and (for Project Teams) the Administrative Advisor, and Steering Committee, should periodically review their project progress to ensure objectives are being addressed, procedures are being followed, and progress is proceeding in a timely fashion. Occasionally, due to circumstances beyond control of the project personnel or in cases where findings require changes in direction, it may be necessary to revise part of a project. Revisions could include the time frame, revisions of objectives, alteration of procedures, reassigning responsibilities within a project, or changing personnel. Changes that remain within the general framework of the original project and provide progressive development of the work are considered to be project revisions. Requests for revision of a project, no matter how slight, should be prepared in writing by the Project Coordinator and submitted through the Administrative Advisor (for Project Teams) to the NRAC Director. Action on the request will depend on the extent, nature, and significance of the changes requested.

Requests for minor changes in procedures or methods will be considered by the NRAC Director who will either: 1) request the Project Team to approve the changes, 2) approve minor changes, or 3) determine the changes are significant enough to require Executive Committee approval.

Where the Project Coordinator (and for Project Teams) Administrative Advisor believe major revisions of a project are needed, requests for revisions should be made only after at least one year of the project has been completed. Major revisions might include changes in objectives and procedures, significant changes in responsibilities (particularly changes in institutional responsibilities), and related changes. Requests for major revisions should be made in the form of a revised project proposal and must include statements explaining the reasons and justifications for the requested changes. A critical review, including a summary of accomplishments and publications resulting from the project, degree to which the original objectives have been accomplished, and incomplete work and areas needing further investigations, must be attached to the request for a revision. The revised project proposal will be reviewed using the same criteria and procedures as new projects and must meet the criteria for new projects.

All changes in project personnel considered to be significant require prior approval by NRAC and USDA. If personnel at a participating institution must be replaced by another qualified individual at the institution, or a person must be removed from a project, the appropriate officer at the participating institution should notify the Project Coordinator as soon as the change is contemplated. The Project Coordinator will forward the request (and for a Project Team through the Administrative Advisor) to the NRAC Director for approval by NRAC and USDA.

Replacement of a Project

In the case where the direction of a project must be substantially altered, the existing project will be closed out and a new project proposal submitted. The Project Coordinator (and for a Project Team the Steering Committee and the Administrative Advisor) of the closing project are responsible for submission of the **Project Completion and Final Technical Reports, copies** of all publications or other media items produced as part of the project. A critical review of the original project, **the completion reports, The Final Summary Report**, publications, and other project produced items will be submitted with the proposal for a new project or by the due dates noted above for these reports, whichever comes first. The new proposed project will go through the normal NRAC project review process and be considered competitively with other projects.

Termination of a Project

Upon termination of a project the Project Coordinator is responsible for submission of the Project Completion, Technical, and Final Project Summary Reports by the deadlines noted above for these reports. These Reports will contain a summary of the major project findings for the duration of the project, a list of publications and other media items developed by the project, and will summarize the project impacts.

Extension of a Project

NRAC regional projects are approved for a fixed time period (usually not to exceed 3 years) with annual funding approval. If it is necessary to extend a project beyond the original approved time limit, the Project Leader will submit a request to extend the project. For Project Teams this request must also be approved by the project Administrative Advisor before submission to NRAC. The request will provide a justification, delineate the gains to be realized by the extension, and define how the extension will help realize the project objectives. The request will be submitted to the NRAC Director and must be submitted early enough to allow timely review of the request by the Executive Committee. If there is any disagreement on the extension by the EC the request will be submitted to the BOD for approval. Generally, extension requests should be submitted approximately one year in advance of the project completion date. Depending on the fiscal year from which funds are drawn for the project, it may not be possible to extend a project due to expiration of the time allowed by USDA for expending the funds.

Publications

NRAC Acknowledgement

Publication of results from NRAC funded projects will appear in many forms including the following: articles in peer reviewed journals, proceedings of meetings, presentations by researchers or extension personnel on work funded partially or fully by NRAC, extension fact sheets and information pieces, videos, DVD, white papers, book chapters, and others. **All NRAC publications** will carry the following NRAC acknowledgement:

“ This publication (video, DVD, etc) was prepared with funding (partial funding) from the Northeastern Regional Aquaculture Center (NRAC) as part of project Number _____ from the United States Department of Agriculture, National Institute of Food and Agriculture. The author(s) gratefully acknowledge NRAC’s and USDA, NIFA’s support.”

Or

“ Work reported in this publication was supported in part by the Northeastern Regional Aquaculture Center (NRAC) under Grant Number _____ from the United States Department of Agriculture, National Institute of Food and Agriculture. The author(s) gratefully acknowledge NRAC’s and USDA, NIFA’s support.”

Disclaimer

Publications, reports, DVDs, electronic media and other materials must contain the following statement:

“Any opinions, findings, conclusions, or recommendations expressed in this publication (*or specify other material, as appropriate*) are those of the author(s) and do not necessarily reflect the views of the U.S. Department of Agriculture, the Northeastern Regional Aquaculture Center, or the University of Maryland.”

If in doubt, authors should contact NRAC to obtain the correct grant number. The authors should also indicate that the findings, opinions, recommendations expressed in the publication are those of the author(s) and not necessarily those of the Northeastern Regional Aquaculture Center, the University of Maryland, or the United States Department of Agriculture, National Institute of Food and Agriculture.

It is also recommended that authors using product trade names for clarity in reports, papers, etc. include the following disclaimer statement:

“Trade names are used here only for clarity and do not imply an endorsement by NRAC, the University of Maryland, or USDA (*or your institution if you wish it included*).”

Affirmative Action Statement

An appropriate affirmative Action Statement will be included in all publications. This statement must at a minimum include one of the following:

“The cooperating agencies’ programs are open to all citizens without regard to race, color, gender, disability, religion, age, sexual orientation, marital or parental status, or national origin.”

Publications and Submission to NRAC

NRAC publications fall into two general categories: 1) publications to be published in peer reviewed journals, proceedings of professional meetings and related publications, and 2) extension and informational publications such as extension fact sheets and DVDs intended to educate targeted audiences, for public education, and for other outreach communications.

NRAC research and extension participants are encouraged to seek publication of NRAC sponsored work in refereed scientific journals and other outlets for scientific information. Authors should prepare publications using their institution’s publication procedure. If the institution does not have a formal publication procedure or policy the authors should seek review by two or three qualified specialists before submitting the paper for publication. **The author must submit one (1) clean hard copy and one (1) electronic copy of the manuscript, with all tables and figures, to the NRAC Director at the time the paper is submitted for publication.** The letter of transmittal accompanying the manuscript should indicate the submission of the article for publication has institutional approval or, if the institution does not have a publication policy, the author should describe what steps were taken to have the paper reviewed before submission and the results of that review. The letter should indicate to what or where (what journal, book publisher etc.) the publication is being submitted to for publication. The NRAC Director and Project Leader will review the manuscript for general content and merit.

All publications in the first category above will provide acknowledgement of NRAC contributions by inserting the above acknowledgement statement in the publication in a prominent location, preferably on the first page.

Extension publications will be reviewed by the publication review committee (a subcommittee of the Extension Project Group), the NRAC Director and the Chairs of the TAC and IAC. Because of the currency of these publications the review process should not exceed 30 days from the date the publication is submitted to NRAC. It is suggested that an electronic version of these publications be submitted to NRAC in WORD format and the publication will be e-mailed out for review by NRAC. Copies of the reviews will be sent to the corresponding author, NRAC Director and Chair of the Extension Publication Committee. The authors are responsible to make the changes required by the reviewer or justify why they should not be made. The Chair of the Extension Publication Review Committee will be responsible to assure the changes are made before publication.

Number of Copies of Publications

All NRAC publications will be submitted to NRAC in both electronic and hard copy forms. One electronic copy is required of all publications (in Microsoft WORD). The number of hard copies are listed below by publication type. NRAC is required by agreement with the other Aquaculture Centers to submit copies of most publications to the other RAC’s. In addition, NRAC requires copies of publications for distribution on the web site and in hard copies throughout the Region. Below are the required number of hard copies of each type of publication:

Project Reports --- **three (3) hard copies** and one electronic copy

Project Completion Reports --- **three (3) hard copies** and one (1) electronic copy

Extension Publications--- **100 copies** and one (1) electronic copy

DVD, Videos --- **eight (8) Master copies and fifty (50) copies**

Peer Reviewed Publication, Journal Articles, Proceedings Articles and similar publication--- **three (3) copies** (Authors are also responsible for informing the NRAC Director if a paper is not accepted for publication).

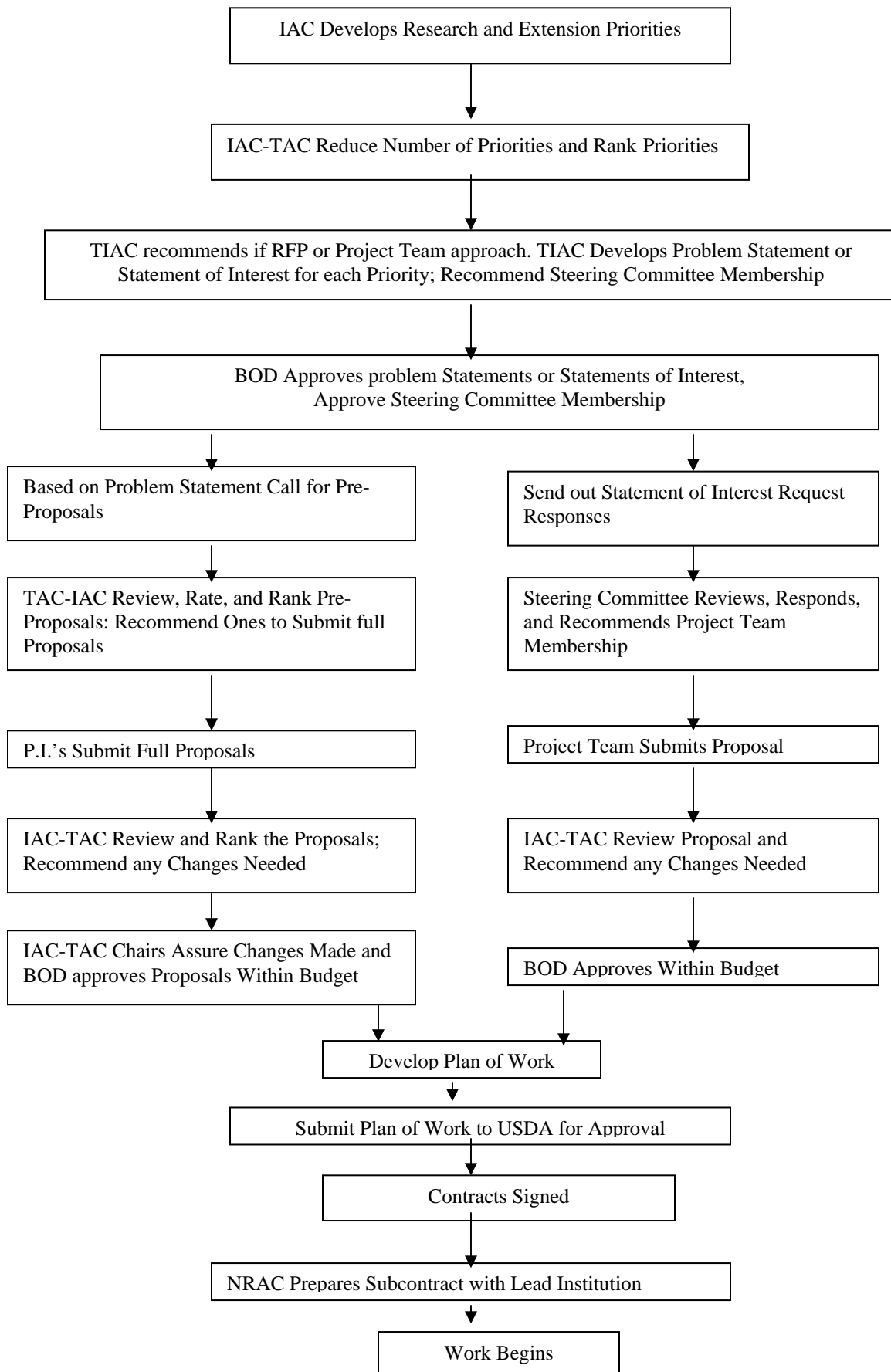


Figure 1. NRAC Project Development Process

APPENDICES

- I. Conflict of Interest Policy
- II. USDA, NIFA Forms – See USDA, NIFA web site under standard forms for copies
 - 1. Proposal cover page—Form NIFA 2002
 - 2. Project Summary -- Form NIFA 2003
 - 3. Budget -- Form NIFA 2004
 - 4. Current and Pending Support – Form NIFA 2005
 - 5. National Environmental Policy Act Exclusions – Form NIFA 2006
 - 6. Conflict of Interest --- Form NIFA 2007
 - 7. Assurance Statement (Animal Care, Biohazard, etc.) (where needed) – form NIFA 2008
- III. NRAC Pre-Proposal Format
- IV. NRAC Pre-Proposal Check List
- V. Pre-Proposal Review Form
- VI. Full Proposal Format
- VII. Full Proposal Review Form
- VIII. Publications, Patents, Inventions, and Copyrights
- IX. **Format for Semi-Annual and Annual Progress Reports and Completion Reports**
- X. **Project Final Technical Report Format**
- XI. Request for No-Cost Budget Revisions
- XII. Request for No-Cost Extension of Time
- XIII. Sample Invoice Format

APPENDIX I - CONFLICT OF INTEREST GUIDELINES

NORTHEASTERN REGIONAL AQUACULTURE CENTER

Conflict of interest is an issue of concern to all granting agencies that use panels of regional experts to establish research priorities and review research proposals. Funding agencies rely on the volunteer assistance and professional expertise of these expert individuals. During recent years, shrinking research funds and increased budget pressure have resulted in intense competition for available funds. This increased competition creates a dilemma for those individuals who may, in their own career interest, be interested or required to apply for funding to the same agencies that they assist in a review capacity.

It is in the interest of the Northeastern Regional Aquaculture Center (NRAC) to encourage the participation of the best qualified researchers, extension personnel and industry members throughout the region on its Technical Industrial Advisory Council (TIAC). Maintaining the most qualified individuals for membership can result in excluding the same individuals from competition for available research funds or, conversely, can result in conflicts wherein individuals setting priorities and reviewing grant proposals could be perceived to be influencing the process in their behalf.

NRAC recognizes the dilemma inherent in utilizing the best-qualified individuals on its TIAC. While NRAC does not intend to exclude TIAC members from involvement on regional research grants, certain concerns regarding the issues and perceptions of conflict of interest must be addressed. It is to be understood that if an individual on the TIAC perceives potential conflict in the inclusion of himself/herself or a fellow TIAC member on a research grant they should seek guidance from the Co-Chairs of the TIAC or the Director of NRAC. Any issues pertaining to the possibility of conflict of interest that arise during a meeting of the TIAC will be recorded into the minutes of the meeting. The best judgment of the Co-Chairs and Director will prevail during the meeting and will be consistent with the NRAC Conflict of Interest Guidelines; however, any decisions will ultimately be reviewed and resolved by the NRAC Board of Directors.

Specific Guidelines

1. Voting members of the Board of Directors and the NRAC Director may not receive funding from any NRAC research or extension project. If a Board member is part of a NRAC funded activity prior to becoming a member of the BOD, that member may continue to receive funding from the approved activity through the end of the activity.
2. IAC and TAC members may receive funding from NRAC, but they may not be part of the decision making process of a pre-proposal or of a proposal for which they are a Project Director, Co-Project Director, or Collaborator. This includes but is not limited to being present during discussion of the pre-proposal, proposal, or project.
3. In a case where a question arises concerning a potential conflict of interest at an NRAC TIAC meeting or discussion, the best judgment of the Chairs of the TAC and IAC and the NRAC Director will determine the action that must be taken.
4. Any concerns regarding potential conflict of interest or unethical conduct involving TIAC members that are not resolved by the above policy criteria will be referred to the Board of Directors for final resolution.

Voted on and approved by the NRAC Board of Directors October 12, 2006.

APPENDIX II -- USDA, NIFA FORMS

THESE FORMS ARE AVAILABLE FROM THE NIFA WEB SITE

- Proposal Cover Page..... Form NIFA 2002**
- Project Summary Form NIFA 2003**
- Budget Form NIFA 2004**
- Current and Pending Support Form NIFA 2005**
- National Environmental Policy Act Exclusions Form NIFA 2006**
- Conflict of Interest Form NIFA 2007**
- Assurance Statement Form NIFA 2008**

Appendix III – Pre-Proposal Format

NRAC Project Summary 20xx__ (Year) Solicitation)		
Project Title:		
Project Status/Duration:	New _ _	Con't. _ _ _ _ _ Project Period: _ _ _ _ _ months
Name, Address, and Telephone Number of Project Coordinator		
Principal Investigator(s) and Brief Statement of Qualifications:		
Project Objective(s):		
Specific Priority(ies) in Solicitation to Which Project Responds:		
Keywords:		
Summary of Work: (for continuing projects, include progress to date)		
Project Funding:		
<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>
NRAC \$ _____ %	NRAC \$ _____ %	NRAC \$ _____ %
Match \$ _____ %	Match \$ _____ %	Match \$ _____ %
Total \$ _____ <u>100</u> %	Total \$ _____ <u>100</u> %	Total \$ _____ <u>100</u> %

NRAC 20xx__ (Year) Pre-Proposal Title Page

Project Title: _____

Targeted Research Area Code (e.g. TRA-07-01): **Project Duration** (months): _____

Total Funding Requested from NRAC: \$ _____

States with Participants in Project (circle / list):

CT DE ME MD MA NH NJ NY PA RI VT WV Wash, DC / Other: _____

Project Coordinator (Lead Principal Investigator) (name/position/institution/address/phone/fax/email):
(one name only)

Principal Investigator(s) (name/position/institution/address/phone/fax/email):

Cooperating, Non-funded Participant(s) (name/position/institution/address/phone/fax/email):

Project Coordinator's Signature: _____ **Date:** _____

NRAC 20xx__ (Year) Pre-Proposal Body

- 1.0 WHY:** Justify the problem or issue addressed by the proposed project.
- 2.0 WHAT:** State the objectives of the project and their relationship to the problem/issue described above.
- 2.1 Describe the product, process, or program that will result from successful accomplishment of the project objectives.
 - 2.2 Identify and describe the end-users and beneficiaries of the project results.
 - 2.3 Indicate what measurable economic benefits will result from the use of the product/process/program.
- 3.0 WHERE:** Identify the states and region (e.g. Chesapeake Bay) and describe the environment (land-based system, freshwater, nearshore, etc.) where the project results will be immediately applicable. Where else may the results be transferred to and applied?

4.0 WHO: Describe who will be involved in the project and their respective roles and responsibilities. Attach a one page vita of each funded participant. (Guidelines on Page 9)

5.0 HOW: Describe how the project will be carried out and achieve the objectives defined above. Describe the supporting facilities that will be made available to the project. How will project results be evaluated? How will the results or products be transferred to industry or public entities?

6.0 WHEN: Indicate desired starting and completion dates (months) for the proposed project (i.e. account for seasonality of data collection). Provide a clear time line for completion of objectives with due dates specified for all products (Funding would not be available until July 2008).

7.0 BUDGET SUMMARY:

NRAC will not pay for indirect costs (overhead), student tuition remission, and capital costs. These may not be included as a component of matching funds. Matching funds or cost sharing funds are not required but if included should be shown on the budget sheet.

Funds Requested

	Funds Requested from NRAC	Matching Funds
Salaries and Wages		
A. Principal Investigators	_____	_____
B. Research Assoc./Postdoctorates	_____	_____
C. Graduate/Prebaccalaureate Students	_____	_____
D. Other Professionals (<u>not</u> consultants)	_____	_____
Fringe Benefits	_____	_____
Non-expendable Equipment	_____	_____
Materials and Supplies	_____	_____
Travel	_____	_____
Publication Costs/Page Charges	_____	_____
Other Direct Costs	_____	_____
Lab Analyses	_____	_____
Consultant Services	_____	_____
Subcontracting	_____	_____
Phone/Fax/Photocopy/Postage	_____	_____
TOTALS	_____	_____
(Enter these values on the title/signature page)		

8.0 VITA (RÉSUMÉ) GUIDELINES:

Name _____

Address _____

Phone _____

Fax _____

Email _____

EDUCATION

B.S. (Institution, Year) _____

M.S. (Institution, Year) _____

Ph.D. (Institution, Year) _____

POSITIONS

List each position on a separate line from newest to oldest.

SCIENTIFIC AND PROFESSIONAL ORGANIZATION

List alphabetically each organization on a separate line.

SELECTED PUBLICATIONS

List relevant publications from newest to oldest.

9.0 OTHER FUNDING:

Are you applying for funds for this work to other agencies? _____

If yes, which / how much? _____

Appendix IV – Pre-proposal Check List

CHECKLIST FOR SUBMISSION OF PRE-PROPOSALS

Pre-Proposal Format:

- Margins (minimum): top 1", sides and bottom 0.5"
- Font not smaller than: Times Roman 12 pt.
- Separate title page
- Body: limited to 3 (single sided) pages
- Separate budget page
- Resume/vita: 1-page per participant

Did You Include the Following?

- Two** originals (single-sided) signed by the PC or PI and each stapled in upper left corner
- Original signatures on signature/title page of the two hard copies
- Vita (résumé) for each researcher or cooperator
- One Electronic copy submitted as a single WORD document

Do NOT:

- Include bibliography and / or reference material
- Submit in binders or folders
- Include letters of support (these are to be submitted with full proposals only)
- Include a cover

Appendix V – Pre-proposal Review Form



University of Maryland, 2113 Animal Science Building
College Park, Maryland 20742-2317
Telephone: 301-405-6085, FAX: 301-314-9412
e-mail: nrac@umd.edu, Web: www.nrac.umd.edu

NRAC Pre-Proposal Review Form

Project Title:

NRAC Assigned Project Number (Assigned by NRAC): _____ Project Duration (months): _____

Total Funding Requested from NRAC: \$ _____ Total Match (If any) \$ _____

States with Participants in Project (circle / list):

CT DE ME MD MA NH NJ NY PA RI VT WV Wash, DC / Other: _____

Project Coordinator (Lead Principal Investigator' name)

Please circle the ranking for each item below. Then please provide an overall recommendation at the bottom of the last page. This recommendation should be based on your provided written comments. You can append sheets for comments if necessary justifying your category and overall rankings.

1. How well does the pre-proposal address the problem statement? Is the approach clearly linked to the RFA?

Poor **Fair** **Good** **Very Good** **Excellent**

Comments:

2. Benefits and potential economic impact to the aquaculture industry. Is it clearly articulated with well described approaches and expected timelines?

Poor **Fair** **Good** **Very Good** **Excellent**

Comments:

3. How adequate is the extension plan to evaluate impacts, change behaviors, disseminate information and make the technology available to the industry. Is the extension co-PI clearly identified with respect to role and deliverables?

Poor **Fair** **Good** **Very Good** **Excellent**

Comments:

4. What is the overall **probably** of the team accomplishing the objectives? Please consider the qualifications of the participants, availability of the facilities and equipment, adequacy of requested funding, and proposed time line?

Poor **Fair** **Good** **Very Good** **Excellent**

Comments:

5. Overall scientific, and technical approach. Is the design rigorous, is the technology traditional or developmental and if successful can it be transferred to the end users?

Poor **Fair** **Good** **Very Good** **Excellent**

Comments:

Final Overall Evaluation:

- Do not fund**
- Consider for next cycle if comments are addressed**
- Fund if resources are available**
- Must fund**

Overall comments and/or suggestions:

Appendix VI – Full Proposal Format

NRAC RFP 20xx_ (Year) Full Proposal Format

Proposals must be received by no later than 4:00 p.m. (Eastern Standard Time) on

_____ (Day of the Week, Date, and Time)

(Submit **two** signed Originals, **10 Hard Copies**, and 1 Electronic Copy)

Grant proposals submitted to the Northeastern Regional Aquaculture Center in application for collaborative and regional research, development or extension education funds shall adhere to the following content and formatting instructions. **Proposals which are incomplete, which do not adhere to content and formatting instructions, which do not include the completed forms listed below or whose budgets do not balance will not be considered for funding.**

NRAC Project Summary Form

Section 1

- 1.1 Project Coordinator Signature Page: one page, single-sided
- 1.2 Principal Investigator & Cooperating and/or Non-funded Participants Form

Section 2 / Body of Proposal (not to exceed 15 pages)

- 2.1 Objectives
- 2.2 Justification
- 2.3 Related Activities and Other Work (include Literature Cited)
- 2.4 Proposed Methods and Activities
- 2.5 Project Schedule
- 2.6 Anticipated Products/Outcome
- 2.7 Supporting Facilities

Section 3 / Budget Information

- 3.1 Budget: Schedule A (NIFA-2004) Form, Section J All Other Direct Costs Worksheet (Optional)
- 3.2 Budget Justification
- 3.3 Current and Pending Support: Schedule C (NIFA -2005) Form

Section 4

- 4.1 Letters of Intent (include funded and non-funded participants)
- 4.2 Conflict of Interest Disclosure Letter
- 4.3 Conflict of Interest List: (NIFA -2007) Form

Section 5 / Supporting Documents

- 5.1 Resumes (include funded and non-funded participants)
- 5.2 Supporting Materials
- 5.3 List of Potential Reviewers

Attachments

Refer to **Forms and Format** below for required forms that shall be completed and submitted.

CHECKLIST FOR SUBMISSION OF FULL PROPOSALS

Font size not smaller than 12 point Times New Roman
Margins not smaller than 1.0 inches
Cover Page must be a separate page, single-sided
Limit Section 2 (Body of Proposal) to 15 pages
All copies must be stapled (upper-left corner)
Submit 2 originals and 10 hard copies and 1 electronic copy (Preferably in WORD)
All copies shall be signed (original signature only required on two copies)
Budgets shall balance (and total from cumulative summary budget shall match Cover Page)
DO NOT submit in binders/folders, etc.

FORMS AND FORMAT

The following forms* are required:

Budget -----Form NIFA -- 2004
Current and Pending Support -----Form NIFA -- 2005
Conflict of Interest List -----Form NIFA -- 2007

Only 1 copy with the original signature shall be required of the forms listed below:
Assurance Statement(s)-----Form NIFA – 2008

Certification Regarding Debarment, Suspension, and Other Responsibility Matters----Forms AD-1047 & AD-1048

Certification Regarding Drug-Free Workplace Requirements (Grants)----Forms AD-1049 & AD-1050

Certification Regarding Lobbying – Contracts, Grants, Loans and Cooperative Agreements

*The NIFA & AD forms may be accessed by going to the NIFA home site http://www.csrees.usda.gov/funding/all_forms.html. Instructions for completing these forms are also included on this site. (This site is in transition from the old paper submission forms to the new electronic forms and thus may not show all of the forms mentioned).

**NRAC Project Summary
(20xx (Year) Solicitation)**

Project Title:

Project Status/Duration:

New_

Con't._____

Project Period:_____ months

Name, Address, and Telephone Number of Project Coordinator

Principal Investigator(s) and Brief Statement of Qualifications:

Project Objective(s):

Specific Priority(ies) in Solicitation to Which Project Responds:

Keywords:

Summary of Work: (for continuing projects, include progress to date)

Project Funding:

	<u>Year 1</u>	%		<u>Year 2</u>	%		<u>Year 3</u>	%
NRAC	\$ _____	_____ %	NRAC	\$ _____	_____ %	NRAC	\$ _____	_____ %
Match	\$ _____	_____ %	Match	\$ _____	_____ %	Match	\$ _____	_____ %
Total	\$ _____	<u>100</u> %	Total	\$ _____	<u>100</u> %	Total	\$ _____	<u>100</u> %

**20__ Proposal to the Northeastern Regional Aquaculture Center (NRAC) for USDA
National Institute of Food and Agriculture Funding**

Section 1.1

Preproposal Code (See cover letter): **Not Applicable**

Project Title:

[Y N] Please circle Y (yes) or N (no) to indicate if the title is the same as the Preproposal (Not Applicable)

Total Funding Requested from NRAC: \$ _____ **Total Match:** \$ _____

Project Duration (total): _____ **Months**

Resubmission Information: _____

[If this proposal is a resubmission from (a) previous year(s), please give the year(s) submitted and whether a preproposal (PP) and a Full Proposal (FP) were submitted.]

Preferred Start Date (circle/list): JAN '07 FEB '07 OTHER _____

States with Participants in Project (circle/list):

CT DE ME MD MA NH NJ NY PA RI VT WV Wash, DC / OTHER: _____

Project Coordinator (Lead Principal Investigator) (one name only)
(name/position/address/phone/fax/Email):

Does this Project Request rental for space or use fees Yes No

If yes the institutions authorized signature on this proposal attests that this space rental or these fees are not included in the institutions Norman over had calculations.

Project Coordinator's Signature: _____

Date: _____

Section 1.2

Principal Investigator(s) (name/position/address/phone/fax/Email):

Cooperating, Non-funded Participants (name/position/address/phone/fax/Email):

A. Section 2

2.1 Objectives (itemize)

This section should present a clear, complete and logically arranged statement of the project's overall objectives and related specific objectives. Use a clear, concise, one-sentence statement for each objective and arrange in a logical sequence.

2.2 Justification

Present a statement of the problem and its background, the extent of the problem, and the importance of the expected results to the aquaculture industry.

2.3 Related Activities and Other Work

Present a brief review, using information from Current Research Information System (CRIS) reports (CRIS website: <http://cris.csrees.usda.gov/menu.html>), published literature and other sources of related research on the problem, how it falls short of meeting current and future requirements, and how the proposed work will supplement and extend our understanding towards a solution of the problem. Essential literature citations shall be listed at the end of this section under the heading Literature Cited. If it is for a continuing project, include progress to date.

2.4 Proposed Methods and Activities

This section should describe what the investigators propose to do, including milestones to be achieved, for each of the stated objectives as listed above in Section 2.1. There should be a numbered statement of procedure to correspond with each numbered objective. Describe the work plans (experimental design where appropriate) and methods to be used in attaining each stated objective. The responsibilities and work assignment of each participating investigator must be stated in the procedure for each objective. Sufficient information should be included to enable the reader to evaluate the approach and to discern joint planning and coordination by the cooperating investigators, possible pooling of data, regional summarization of findings, and plans for publications, extension education, and outreach program(s).

2.5 Project Schedule

This schedule interrelates with all project milestones and objectives on a common time scale (shown in months). The project schedule (bar chart or Gantt chart) should contain the following information:

1. Milestones that will be achieved during the project (link with stated objectives);
2. Names of the individuals responsible for each milestone;
3. Starting date, expected duration, and completion date for each milestone;
4. Completion date for each numbered objective

Although multiple-year projects are approved for the duration of the project, and total project funds are appropriated when the project is approved, funding for each year (after year one) is only released annually, after a public presentation and a favorable review of the progress, performance and merits of the project and approval of a detailed Annual Progress Report.

2.6 Anticipated Products/Outcome

Briefly describe what "deliverables" are expected from this project and budget accordingly (e.g. DVDs [eight sub masters and 50 CD/DVD required]; 100 copies required of: fact sheets, extension bulletins, special reports, etc.). Specifically state who is responsible for these contributions (note: an electronic copy of all publications will be required). Project must include avenues of information/outreach (publications, workshops, extension activities, website contributions, etc.) and how the products of this project will be delivered to, used by, or serve to support the aquaculture industry of the northeastern U.S. For assistance, contact NRAC at 301-405-6085.

2.7 Supporting Facilities

A statement of facilities to be used should be given for each objective listed in Section 2.1; statements should be numbered to correspond to their respective objectives. Describe the facilities available, the institutional location of each facility, and specific procedures to be conducted at that location. Sufficient information should be included to enable the reader to assess the suitability of facilities, to discern alternatives considered, and to evaluate the joint planning and coordination by the participating investigators. [Reminder: USDA does not allow overhead costs, indirect costs, and brick and mortar expenditures.]

B. Section 3

3.1 Budget (Schedules A Form and Section J Optional Worksheet

The Project Coordinator shall provide a budget for each year of the project and a summary budget for the project showing total funding requested from NRAC for each line item. Budgeted line items must reflect programmed expenditures needed to implement the activities enumerated in Sections 2.4 and 2.5. Also include in the budget estimated funding for the presentation of project results in a public forum. Use Form NIFA-2004 Budget and Section J Optional Worksheet (Optional) (See below). Form NIFA-2004 and Instructions for Completing Form NIFA-2004 are provided by the USDA and must be followed, as proposals accepted by NRAC are submitted to the USDA for final approval.

For those projects meeting final approval, a subcontract will be issued to the Project Coordinator's institute, which will issue subcontracts to the PI's of the project. PI's who do not desire a separate subcontract from the Project Coordinator's institute should incorporate their budget information in another PI's budget.

Principal Investigators submitting separate budgets shall submit a budget for each year of support (circle appropriate year in the upper left corner of the Budget Form) and a cumulative budget for multi-year funded projects (circle "T" for "total" in the upper left corner of the Budget Form). Additionally, the Project Coordinator must include a summary budget for each year of requested project funding and a grand total budget (cumulative summary) for the full term of requested support for all participants in the total project. Enter the grand total of requested NRAC funding (NIFA-2004 Budget Item O. "Total Amount of This Request") and the grand total match funding (NIFA-2004 Budget Item Q. "Cost Sharing/Matching") on the Cover Page.

*** Note: Indirect costs (overhead), tuition remission, and capital expenditures are not allowed and may not be included in matching funding.**

3.2 Budget Justification

Include written justification for budget expenditures. Salary and benefits for Principal Investigators must be itemized separately, and requires additional written justification. Travel budget must identify the purpose of travel, how it serves the project, who is traveling, and the destination. Refer to the USDA, NIFA website for instructions for completing the budget form.

3.3. Current and Pending Support (Schedule C)

Each investigator shall complete a Current and Pending Support form (use Schedule C, NIFA-2005 Form) listing all sources of support for active and pending projects including this proposal.

D. Section 4

4.1 Letters of Intent

Each funded and non-funded investigator (including the Project Coordinator), participant, and consultant shall submit an original signed letter of intent indicating his/her willingness to participate in the project, the expected level of funding or financial contribution, which of the objectives (s)/he will participate, and the specific activities/tasks (s)he will perform. **Any proposal submitted without letters of intent from all investigators, participants and consultants will be considered incomplete.**

4.2 Conflict of Interest Disclosure Letter

Participation of TIAC members as **funded** participants of projects may be deemed possible if project PIs can provide evidence that the services/role of the TIAC member is not otherwise available throughout the northeast region and that every attempt was made to locate the indicated services elsewhere. The PI's need to specify all potential conflict of interests and indicate how they will be addressed.

4.4 Conflict of Interest List

Refer to NIFA-2007 Form as instructed under Attachments. This form shall be completed and submitted with the proposal.

E. Section 5

5.1 Resumes

Include a short (no more than 3 pages) resume for each investigator and participant. General formatting instructions must be adhered to (see attached checklist).

5.2 Supporting Materials

Include any **pertinent** support materials (e.g., letters from industry, etc.).

5.3 List of Potential Reviewers

Project Coordinators are requested to provide a list of three to five individuals that are technically competent to review their proposal. It would be helpful if there were research, industry, and extension people in the list. Preferably they should be from outside the Northeast Region but may be from within the region if they have no ties with the investigators on the project. Please supply the potential reviewer's names, affiliation, mailing address, telephone numbers, and e-mail addresses.

Section J Worksheet - (Optional)

Schedule B
Year 1 2 3 T

Organization and Address		
Principal Investigator(s)		
All Other Direct Costs		
Space Rental		
Service Charge for above		
Postage		
Telephone		
Fax		
Photocopy		
Reference Books		
Periodicals		
Consultant Services (see		
Other (Maintenance Agree		
Total (enter in item I.		

Consultant Services		
Name:		
Organization:		
Rate of Pay (hourly ba		
Services		
Travel		
Per Diem		

Name:		
Organization:		
Rate of Pay (hourly ba		
Services		
Travel		
Per Diem		

Total for Consultant Services (enter in		
---	--	--

Appendix VII - Full Proposal Review Form



University of Maryland, 2113 Animal Science Building
College Park, Maryland 20742-2317
Telephone: 301-405-6085, FAX: 301-314-9412
e-mail: nrac@umd.edu Web: www.nrac.umd.edu

NRAC FULL PROPOSAL REVIEW FORM

Project Code/Title:

Date Due:

Please provide the information requested below. Length and detail of responses may vary according to the nature of the proposal. We value your honest appraisal and the format allows you to be as expansive as you deem necessary (feel free to use a separate sheet if necessary). Your comments and scoring will be shared with the principal investigator but with complete anonymity.

- I. Science, Technology, and/or Extension Program Design (technical merit of all aspects of the project, 30%):** Does this proposal use top quality science and/or technology, or demonstrate extension scholarship? Is (are) the PI(s) familiar with relevant previous and contemporary investigations? Are the objectives and hypotheses explicit and clear? Is the experimental plan clear and the statistical design appropriate? Is the methodology described in the plan appropriate to meet the objectives for a research or extension project? Will this work advance understanding of the science and the contemporary problems that the industry faces? If this is an Extension-demonstration or education project do the PI(s) provide an adequate plan to evaluate the success of the effort? Are the proper metrics provided? Can the PI(s) properly assess the short-term, medium-term, long-term outcomes projected?

Comments:

Rating: Maximum score = 30

Excellent (numerical value = 30) _____

Very Good (numerical value = 27) _____

Good (numerical value = 24) _____

Fair (numerical value = 21) _____

Poor (numerical value = 18) _____

2. **Industry Relevance and Probability of Success (30%):** Are the benefits and potential impacts related to industry utility such as increased farm-gate value or grower profitability? Will the project likely provide usable results that can be adopted by the industry in a timely manner? Alternatively, if it is a development effort toward a new technology, will this project's results increase the team's capacity to compete for external funds to support the next iteration of research and outreach needed to take the results to application? Will this project create an opportunity for information to be turned over to the industry for refinement and adoption that will eventually become self-sustaining?

Comments:

Rating: Maximum score = 30

- Excellent (numerical value = 30) _____
- Very Good (numerical value = 27) _____
- Good (numerical value = 24) _____
- Fair (numerical value = 21) _____
- Poor (numerical value = 18) _____

3. **Integration with Extension (20%):** Does this work identify the key stakeholders? Stakeholders include those individuals (industries and agencies) not directly involved in the project. Is the extension plan appropriately designed to reach the targeted stakeholders? How will the results of this work address the needs of key stakeholders? Will this project extend our knowledge to all stakeholders? Are the expected outputs, outcomes, and impacts clearly described? Is the budget appropriate for effective integration?

Comments:

Rating: Maximum score = 20

- Excellent (numerical value = 20) _____
- Very Good (numerical value = 18) _____
- Good (numerical value = 16) _____
- Fair (numerical value = 14) _____
- Poor (numerical value = 12) _____

4. **Capacity (10%):** Is (are) the principal investigator(s) and specified members of the research (extension) team qualified to conduct the research (program)? Is there industry representation as part of the team? Have the investigators clearly articulated they have adequate facilities and equipment to complete the project. Is the overall budget appropriate given the scope of the project? Is there a reasonable chance the project will be completed on-time?

Comments:

Rating: Maximum score = 10

- Excellent (numerical value = 10) _____
- Very Good (numerical value = 9) _____
- Good (numerical value = 8) _____
- Fair (numerical value = 7) _____
- Poor (numerical value = 6) _____

5. **Accountability (10%):** Does the investigator and her/his team have a successful track record of previous NRAC funding being adopted by the industry? Have they leveraged NRAC funding for additional resources to solve bigger problems that can be funded by NRAC alone? Is there evidence that the investigator(s) has (have) an established record indicating a high probability of success on the proposed work? Does the PI(s) have an established record of completing projects on-time meeting the objectives laid out in previous projects? Can this project integrate or be leveraged with funding from other work of the investigator(s)? Does the investigator(s) have a track record that suggests this project will be a good investment for NRAC resources?

Comments:

Rating: Maximum score = 10

- Excellent (numerical value = 10) _____
- Very Good (numerical value = 9) _____
- Good (numerical value = 8) _____
- Fair (numerical value = 7) _____
- Poor (numerical value = 6) _____
- Non-Applicable – First Time Applicant _____

6. **Total score:** _____

Rating	Excellent	_____
	Very Good	_____
	Good	_____
	Fair	_____
	Poor	_____

Final Recommendation:	Must fund	_____
	Fund if resources are available	_____
	Encourage Resubmission next year	_____
	Do Not Fund	_____

7. **Strengths:** What are the major strengths of this proposal? If you provided a rating of excellent for any of the categories above but did not comment, would you please share why you rated a particular category as “excellent”?

8. Weaknesses: Identify the weaknesses of this proposal. Are there any flaws (design, methodological, etc.) that might seriously compromise the scientific integrity, value and/or validity of the work? If you rated an evaluation area as fair or poor, how might that area of the proposal be improved?

Full Proposal Review Form Revised and Approved by Board of Directors December 2010

Appendix VIII - Publications, Patents, Inventions and Copyrights

NRAC projects are expected to result in a variety of publications such as peer reviewed journal articles, presentations, extension bulletins and fact sheets and others. NRAC encourages publication of the results obtained from all projects. There is also a potential for development of patents and copyrights resulting from inventions and products produced in NRAC projects. Rights to patents and copyrights resulting from NRAC projects and funding are covered in the subcontracts between the University of Maryland and the PC's institution when a project is funded and thus will not be covered in this manual. Because NRAC funds are federal funds, the US government patent and copyright policy must also be followed and where possible credit must be given for the USDA, NIFA support.

Acknowledgements

All publications, articles, reports, DVDs, and electronic media, etc., resulting from NRAC sponsorship must give credit to the Northeastern Regional Aquaculture Center (NRAC) at the University of Maryland, and to the National Institute of Food and Agriculture (NIFA) of the United States Department of Agriculture (USDA). The following acknowledgment must appear in the publication of any material which is based upon or developed under this grant (and on the casing label or jacket and in accompanying documentation of DVD and electronic media):

"This material is based upon work supported by the Northeastern Regional Aquaculture Center (NRAC), University of Maryland under grant number insert grant number here awarded to NRAC by the National Institute of Food and Agriculture (NIFA), U.S. Department of Agriculture."

Research Publications

The acknowledgment will be featured prominently in the publication, preferably on the inside of the front cover or first page of the publication. If acceptable to the publishing institution, the NRAC logo and the USDA-NIFA logo may also be prominently displayed on the publication.

Extension Publications

Extension publications which derive from NRAC-funded projects will include the NRAC logo in the upper right corner of the cover; blank space will be provided in the upper left corner of the cover for the logo of the secondary distributor. It may also be requested that the USDA-NIFA logo appear on or in the publication. The NRAC logo and the NIFA logo, and a sample cover page, title page, and citation will be provided upon request by the Director of NRAC.

Number Assignment

An NRAC publication number will be assigned by the NRAC Director and will be noted on the cover and/or title page, or on the casing label or jacket, and in accompanying documentation of DVDs and electronic media, and in the citation.

Disclaimer

Publications, reports, DVDs, electronic media and other materials must contain the following statement:

“Any opinions, findings, conclusions, or recommendations expressed in this publication (*or specify other material, as appropriate*) are those of the author(s) and do not necessarily reflect the views of the U.S. Department of Agriculture, the Northeastern Regional Aquaculture Center, or the University of Maryland.”

Review Process

Prior to release, all publications, reports, DVDs electronic media which have been specifically contracted for by the NRAC must undergo a review process by the NRAC Board of Directors, the NRAC Industry/Technical/ Advisory Council Co-Chairs, and the NRAC Director. Review will occur within 60 days of submission. An additional 30 days for review may be granted upon mutual consent of both parties. No part of the publication can be released before all reviews are completed, unless otherwise negotiated with the NRAC Director.

Number of Copies

Three (3) original reprints of all journal publications or technical bulletins and/or **100 copies** of extension bulletins, fact sheets and special reports (not including abbreviated or annual progress reports) must be submitted to the NRAC Director for distribution, unless otherwise negotiated with the NRAC Director. If DVDs are produced, NRAC must receive no less than **8 sub-masters, and 50 good** quality copies (DVD format) for distribution to the USDA-NIFA, the four other Regional Aquaculture Centers, the aquaculture extension network of the Northeastern US, and to other designated recipients.

One (1) electronic copy of all publications produced for NRAC will be submitted in a program or format compatible with NRAC computer equipment and programs to the NRAC Director for archiving and for possible posting on the NRAC web site. The Project Coordinator will contact the NRAC office to determine acceptable formats or programs. Unless otherwise specifically negotiated by the PI or PC with the NRAC Director prior to submission all publications partially or fully supported by NRAC maybe (at NRAC’s discretion) placed on the NRAC web site for public use.

Publication Costs

Costs for all publications, reports, DVDs, and electronic media must be included in the approved budget of the sub-award in order to be reimbursed.

Patents, Inventions, and copyrights

The USDA clause regarding patents, inventions and copyrights found at 37 CFR 401.14 is incorporated into this sub-award by reference. The University of Maryland patent and copyright limitations are specified in the subcontract forms with the PC’s institution.

**Appendix IX -- Format for Semi-Annual and Annual Progress Report
and for Completion Reports**
(See Report Requirements Section for format requirements)

Signature Page

**Place Title Here (Centered) with the First Letter of Major Words in
Title Capitalized and the Title in 14 Font Times New Roman
(Example) Evaluation of Hard Clam, *Mercenaria mercenaria*,
Stocks for XPX-Resistance**

INSTRUCTIONS: Limit to three (3) single sided, single-spaced pages. Semi-Annual Progress Reports are used to provide NRAC semi-annual updates on project progress and for publishing in the NRAC annual progress report. The reports are included in a Regional Aquaculture Center compendium report, which is distributed nationally to research, government and industry audiences. Style, content and format should, therefore, strictly follow the headings below. *All investigators prepare and provide a brief report to the Project Coordinator at least two weeks prior to the Semi-Annual Progress Report due date.* Reports should be written in an abstract, narrative style. Details may be appended if necessary for clarity. The Project Coordinator will edit all reports into one final report and submit three (3) hard copies in Microsoft WORD and one (1) electronic copy to the Director of NRAC. The report will be printed in 12 point Times New Roman font. The left margin will be 1.5 inches and the right side and both the top and bottom margins will be 1.0 inches. Bibliographic format will follow that used by the Transaction of the American Fisheries Society which is available at: <http://www.fisheries.org/afs/publications/journals/tafs.pdf> As we will be dealing with a wide variety of topics and sources, please do not abbreviate source titles as many people may not be familiar with sources used in your area of expertise. Use SI units, but you may use dual units with SI as the primary set of units with English units in parenthesis after the SI units.

PROJECT CODE:

SUBCONTRACT/ACCOUNT NO:

Grant Number:

(Example: Grant Number 2002-38500-12056 (Year 1))

PREPARED BY: (Type Name here)

Project Coordinator

Date

Place Title Here (Centered) on a new page with the First Letter of Major Words in Title Capitalized. Print Title in Bold and in Font 14 Times New Roman

PROJECT TITLE:

PROJECT CODE:

SUBCONTRACT/ACCOUNT NO:

Subaward Number: (Example 2007-38500-12345)

REPORTING PERIOD:

FUNDING LEVEL: Total allocated to date.

PARTICIPANTS: Funded cooperating personnel and institutions, agencies, and business entities including extension liaison(s) and non-funded collaborators.

PROJECT OBJECTIVES: List objectives as written in approved proposal.

ANTICIPATED BENEFITS: State how the project will benefit the aquaculture industry either directly or indirectly.

PROGRESS AND PRINCIPAL ACCOMPLISHMENTS: Summarize in concise form the progress toward accomplishment of each objective during the year as a regional project unit. Omit details unless essential to understanding. Major results should be presented concisely for each distinct line of investigation. Measurement data are to be given in SI units.

WORK PLANNED: Provide overview of following year activities if appropriate. Detailed statements of work plans need not be included. Any changes in direction or emphasis in your project as established in the initial proposal, or in the responsibilities and assignments of the participants, should be stated.

IMPACTS: In concise statements (possibly a bulleted list) indicate how the project has benefited the aquaculture industry either directly or indirectly and resulting economic values gained (where appropriate).

SUPPORT: Use the format in the table below to indicate NRAC-USDA funding and additional other support, both federal and non-federal, for the project. Indicate the name of the source(s) of other support as a footnote to the table.

YEAR	NRAC-USDA FUNDING	OTHER SUPPORT					TOTAL SUPPORT
		UNIVERSITY	INDUSTRY	OTHER FEDERAL	OTHER	TOTAL	
TOTAL							

PUBLICATIONS, MANUSCRIPTS, OR PAPERS PRESENTED: List under an appendix with the following subheadings: Publications in Print; Manuscripts; and Papers Presented. For the first two subheadings, include journal articles, popular articles, extension materials, DVDs, technical reports, theses and dissertations, etc. using the format of the Transactions of the American Fisheries Society (one journal example below). Under Papers Presented subheading include the authors, title, conference/workshop, location, and date(s).

Example of citation reference format to be used:

Billington, N., R. J. Barrette, and P. D. N. Hebert. 1992. Management implications of mitochondrial DNA variation in walleye stocks. *North American Journal of Fisheries Management* 12:276-284.

Appendix X - Project Final Technical Report Format (See Report Requirements Section for format requirements)

INSTRUCTIONS: Final reports will be really two reports: 1) a short completion report summarizing results the body of which will not exceed three pages (Completion Report) , and 2) a technical report that will summarize the entire project including results (Final Technical Report). The completion report is to be collated with other similar reports in the NRAC Annual Report. The technical report will be written in the style similar to that of a technical paper but include additional details as appropriate for a report that is the final report for the project. The report will be a logical discussion of the projects methods results, etc. and will be one report for the entire project. A compilation of individual investigators reports fastened together is not acceptable. Both of these reports should cover the entire duration of the project and should be comprehensive of the entire project. *All investigators prepare and submit their report to the Project Coordinator at least two weeks prior to the due date.* The Project Coordinator will edit all reports into one final coherent report to be submitted to the NRAC Director. Following revisions/approval, the Project Coordinator will provide the approved Project Completion and Technical Reports to the Director of NRAC in three (3) hard copies and one (1) electronic copy in Microsoft Word. Format of reports should adhere to the following headings and be submitted in WORD using a 12 point Times New Roman font unless otherwise specifically specified. Margins will be 1.5 inches on the left side and 1.0 inches on the right, top and bottom of the page. Bibliographic format will follow that used by the Transaction of the American Fisheries Society which is available at: <http://www.fisheries.org/afs/publications/journals/tafs.pdf>. As we will be dealing with a wide variety of topics and sources, please do not abbreviate source titles as many people may not be familiar with sources used in your area of expertise. Use SI units, but you may use dual units with SI as the primary set of units with English units in parenthesis after the SI units.

(Start a new Page Here)

Place Title Here (Centered) on a new page with the First Letter of Major Words in Title Capitalized. Print Title in Bold 14 Point Times New Roman Font

(See Report Requirements Section for format requirements)

PROJECT CODE: (Example 07-10) **SUBCONTRACT/ACCOUNT NO:**

Project Grant Number: (Example 2002-38500-12056)

DATES OF WORK: (Project start date – End date)

PARTICIPANTS: Funded cooperating personnel and institutions, agencies, and business entities including extension liaison(s) and non-funded collaborators. Give names and institutional or business affiliation for each participant.

PROJECT OBJECTIVES: List project objectives as written in approved proposal.

METHODS AND PROCEDURES: Describe the procedures and methods used in accomplishing the project.

RESULTS AND DISCUSSION: Present the results including figures, data analysis results, tables and other methods of summarizing the project accomplishments. The discussion section may be combined with results or a separate section but the discussion should indicate the significance of the results, what the results mean and related information. These sections should summarize in concise form the findings for the duration of the project and discuss their significance. Measurement data are to be given in SI units. However, to minimize confusion, a dual system of measurement may be used to express results where English units are given in parentheses after the SI units.

CONCLUSIONS: List in bulleted or numbered form the conclusions resulting from the project. These conclusions should summarize the major findings and should follow from the results found in the project. The conclusions should also respond or relate to the project objectives.

IMPACTS: In concise statements (possibly a bulleted list) indicate how the project has or will benefit the aquaculture industry either directly or indirectly and resulting economic values gained (where appropriate).

SUPPORT: Indicate the total NRAC funding and the total matching funds (if appropriate) that supported the project over the life of the project. If matching funds was involved state each source and amount from each source.

PUBLICATIONS, MANUSCRIPTS, OR PAPERS PRESENTED: List under an appendix with the following subheadings: *Publications in Print*; *Manuscripts*; and *Papers Presented*. For the first two subheadings, include journal articles, popular articles, extension materials, DVDs, technical reports, theses and dissertations, etc. using the format of the Transactions of the American Fisheries Society (example below). Under *Papers Presented* subheading include the authors, title, conference/workshop, location, and date(s). List all publications that have been published, those in review or in press but not those in preparation.

Below is an example of the bibliographic format for journal articles to be used in the report reference list. Bibliographic format will follow that used by the Transaction of the American Fisheries Society which is available at: <http://www.fisheries.org/afs/publications/journals/tafs.pdf>. As we will be dealing with a wide variety of topics and sources, please do not abbreviate source titles as many people may not be familiar with sources used in your area of expertise. Use SI units, but you may use dual units with SI as the primary set of units with English units in parenthesis after the SI units.

Billington, N., R. J. Barrette, and P. D. N. Hebert. 1992. Management implications of mitochondrial DNA variation in walleye stocks. *North American Journal of Fisheries Management* 12:276-284.

Appendix XI – Request for No-Cost Budget Revisions

INSTRUCTIONS: Written requests for no-cost budget transfers should be made as soon as the need for the revision is evident. The request should be made using the format shown below. Note that a full, but concise, explanation of the need for the revision must be part of the request. The request should be submitted to the NRAC Director for review and approval through the Project Leader and Administrative Advisor for a project team or by the Project Coordinator for a project awarded under a RFA. Revisions must not affect the total annual budget for the participating institution and under no circumstances should budget revisions be made to allow work outside the framework of the original project proposal.

(Date)

TO: (Name of NRAC Director)

FROM: _____ (Name of participant)

SUBJECT: Budget Revision of Year X of NRAC Project “(Title of Project)”

I would like to request a budget revision for the (Name of Institution) portion of Year X of the NRAC project “title of project” as follows.

	Current Budget	Revised Budget
Salaries & Wages	\$	\$
Fringe Benefits	\$	\$
Materials & Supplies	\$	\$
Nonexpendable Equipment	\$	\$
Travel	\$	\$
Contractual Services	\$	\$
Total	\$	\$

This budget revision is necessary because (explain the basis for the request).

APPROVED:
For Project Team

For Project Approach

(Name), Project Leader Date

(Name) Project Coordinator , Date

(Name), Administrative Advisor Date

(Name), Director, NRAC, Date

(Name) Director, NRAC, Date

Appendix XII– Request for No-Cost Extension of Time

Projects are expected to be completed in the time frame detailed in the original project proposal. Circumstances may arise that are beyond the project participants control that may require additional time to complete a project. If this situation occurs, NRAC will consider a request for a no-cost extension of time to complete the work on project objectives. Such requests must be made in writing at least three months before the end the expiration date of the subcontract. Requests for a no-cost time extension are not automatic and may not be possible if federal funding time limitations would be exceeded by the granting of an extension of time. Time extension requests should, as a minimum, contain the following information:

1. The length of additional time needed to complete the project objectives Normally this should not exceed six month).
2. A justification for the extension (*The fact that funds are expected to be un-obligated at the expiration of the sub contract is not a sufficient justification for an extension*).
3. A concise summary of progress made to date.
4. An estimate of funds expected to remain un-obligated on the scheduled expiration date.

The request for a no-cost extension of time should be submitted by the Principal Investigator or the Project Coordinator (After it is approved by the Administrative Advisor for a project Team) to the NRAC Director.

Date _____

To: Name of NRAC Director

From: _____

Subject: No-cost extension for Year XX of NRAC Project (*Project title*)

I would like to request a no-cost extension of time for the (Name of the Institution) portion of Year XX of the NRAC project (Project Title) from (current termination date) to (the requested termination date).

Provide the justification for the request.

APPROVED:

(Name), Project Leader

Date

(Name), Administrative Advisor

Date

(Name), Director, NRAC

Date

Appendix XIII – Sample Invoice Format

Sample Invoicing Format

Invoice Number

Date

To: University of Maryland
 Northeastern Regional Aquaculture Center (NRAC)
 Sharon S. Adams
 2113 Animal Sciences Building, Bldg. 142
 College Park, MD 20742-2317

Subcontractor Information: reference #, etc.

Grant #

Subcontract#

Project Investigator/Director: Dr. Reginal M. Harrell, NRAC

Project Coordinator Name:

Project Title:

Period of Invoice:					Match/Cost Sharing			
Line Item Breakdown	Budgeted Amount	Costs This Period	Project to Date	Balance Available	Budgeted Amount	Costs This Period	Project to Date	Balance Available
Salaries and Wages	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fringe Benefits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Nonexpendable Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Materials and Supplies	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Travel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Publication Costs/Page Charges	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Computer(ADPE) Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
All Other Direct Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

I certify that the above invoice is just and correct and that payment has not been received.

Signed _____