

1 **Gulf of Alaska Integrated Ecosystem Research Program Project Management Plan**

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3 **Purpose**

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5 The North Pacific Research Board (NPRB) is supporting an integrated investigation of factors
6 influencing juvenile groundfish in the Gulf of Alaska ecosystem during 2010-2014. The scientific
7 foundation for this project is the 2008 Gulf of Alaska Integrated Ecosystem Research Program
8 (GOAIERP or Gulf of Alaska Project) **Implementation Plan**, which is based on the 2005 NPRB
9 *Science Plan*.

10
11 NPRB considers it critical for principal investigators to agree on binding provisions and protocols
12 that will promote development of a seamless team effort for the scientific research. The purpose
13 of this project management plan is to identify those binding provisions and protocols. Many of
14 these provisions were presented during the initial meeting of principal investigators on May 25-
15 27, 2010. The document was revised by the group of lead scientists leading this program - the
16 Gulf of Alaska Board of Investigators (GABI) - with opportunity for review provided to all
17 investigators.

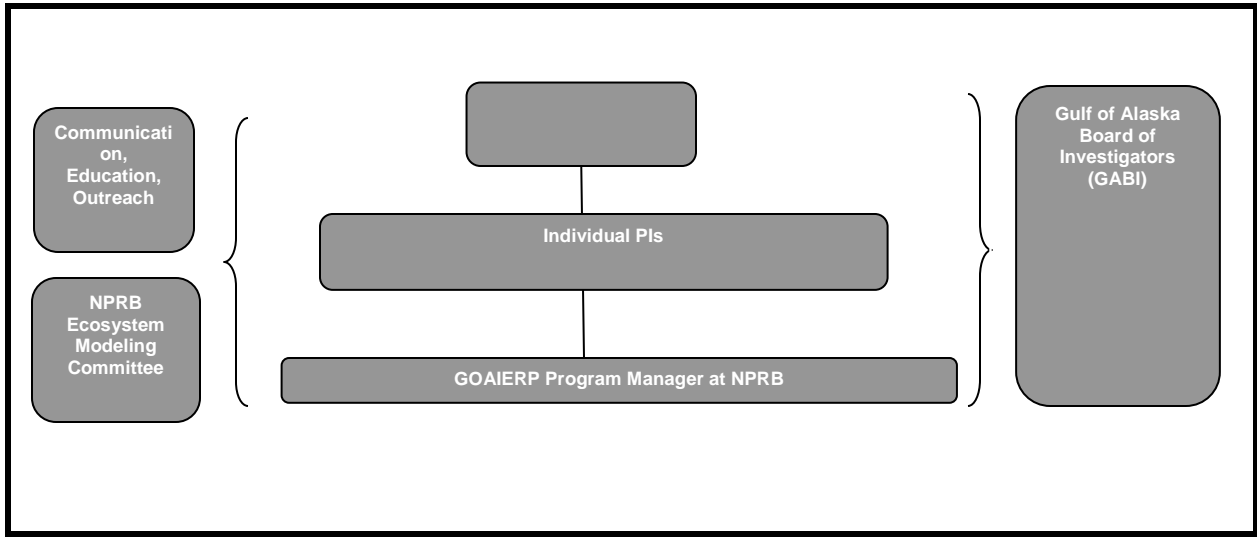
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19 The concurrence of all principal investigators, co-principal investigators and key sub-contractors
20 (hereafter referred to as principal investigators or PIs) in this consultative process is indicated by
21 signature in Attachment A, which will be revised from time to time if individuals join or depart
22 the program.

23
24 **Requirements and Responsibilities**

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26 **1. Project leadership and program responsibilities**

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28 As shown in the Gulf of Alaska Project’s organizational chart below, the following components
29 will provide program leadership and identify individual program responsibilities.

30
31 Program Office. A program office has been established for the GOAIERP program at the NPRB
32 main office. This office is responsible for program coordination and communication, planning,
33 web site development and maintenance, meeting planning and logistics, symposia, and synthesis
34 and reporting, among other activities. The program office may retain advisors as needed to
35 enhance program understanding and direction.



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Gulf of Alaska Board of Investigators (GABI). The GABI is composed of five members, one from each of the large project components of the study (lower, middle and upper trophic levels, plus modeling), and the lead data manager. In addition, the NPRB GOAIERP Program Management lead, or their designee, forms part of this group as a non-voting member. GABI members will serve staggered two-year terms (initially two members with one-year terms and three members with two-year terms, and thereafter, all members with two-year terms) and may be re-elected. NPRB will draw the initial one- and two-year terms randomly. The lead investigators for each of the components will serve as the initial GABI members. Thereafter, principal investigators can nominate potential GABI members, or any investigator can choose to self-nominate. NPRB will administer an election by e-mail or web-based form one month before the end of the terms. For each component, the nominee receiving the highest number of votes will be elected. GABI membership will be identified on the program website and updated as needed.

As the guiding body for the GOAIERP, the Gulf of Alaska Board of Investigators (GABI) is responsible for scientific leadership, encouragement and oversight in program integration, data exchange and synthesis, dispute resolution, and for providing scientific input to the NPRB. Any recommendations for program revisions must be forwarded in writing to the NPRB, whose representatives will meet to assess the status and success of the program and take action as appropriate. The GABI is thus specifically responsible for ensuring coordinated planning of field, lab, and modeling work to be performed in line with the approved statements of work and the goals of the overall program. It will also be their responsibility, in conjunction with the NPRB representative, to plan annual principal investigator meetings, help organize special issue publications, represent the GOAIERP at outside scientific and public meetings, and to proactively promote scientific partnerships with other programs as applicable. GABI members will also be expected to communicate the results of GABI discussions and meetings to the other PIs in their respective components. More details can be found in the GABI Terms of Reference.

2. Schedule of meetings and other activities

The program office and the GABI will establish (and publish on the website), a schedule of meetings that will be subject to revision, depending on program needs. Representation by each project is expected at annual PI meetings. It is envisioned that the following meetings (or e-meetings) will be needed in the coming years:

73	Feb 2012	PI meeting (results of first field season)
74	Nov 2012	PI meeting (cruise planning for 2013 and update on analysis/lessons learned)
75		
76	Feb 2014	PI meeting (update on analysis with results of second field year; synthesis plan)
77		
78	Dec 2014	Final PI meeting
79		

80 Additional meetings or special sessions at national and/or international meetings may also be
81 planned as opportunities arise.

82

83 **3. Planning field seasons and selection of chief scientists**

84

85 GOAIERP chief scientists and cruise plans will arise from the relevant program component in
86 consultation with the GABI. The plan should also include a statement regarding the use of berths
87 available to other program PIs, media, and other outside investigators. Participation of media,
88 teachers, and other non-scientists should be coordinated with the NPRP Communication and
89 Outreach Director.

90 **4. Communications protocols among field programs and with modelers**

91

92 A list of lead principal investigators and all collaborating investigators for each component of the
93 overall program, along with their full statements of work, contact information and pictures, will
94 be posted on a special website established for this program (<http://gulfofalaska.nprb.org/>). All
95 meeting and conference summaries will be posted on the website as well to ensure open
96 communication among scientific participants, agency representatives and interested communities.
97 A password protected SharePoint site will be established and maintained by the PIs
98 (<https://agora.afsc.noaa.gov/sites/gisr/default.aspx>). This service will serve as a communications
99 nexus for program participants.

100

101 A Google group for this program has been created (goaproject@nprb.org). The NPRB Program
102 Managers will arbitrate the group to ensure it is used appropriately and should be contacted to add
103 or remove participants.

104

105 The GABI will aim to hold monthly teleconferences to ensure continuous communication and
106 collaboration between program components and to resolve any issues as they arise.

107

108 There will be a monthly teleconference for all investigators to share updates, ask questions, and
109 describe future plans amongst all program participants. These calls will be led by the current
110 GABI chair. These meetings will generally be held on the 4th Tuesday of every month. Meeting
111 minutes will be kept and posted on SharePoint.

112

113 All sub-projects (Lower Trophic Level [LTL], Mid-Trophic Level [MTL], Upper Trophic Level
114 [UTL], Modeling, Data Management, and Retrospective Analysis) will submit semi-annual
115 progress reports on April 1 and December 1 to the NPRB. These will follow the template for this
116 program established by the NPRB. Approved reports will be posted on the website and on
117 SharePoint and will serve program management and for the purpose of communication between
118 program components.

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121 **5. Data sharing protocols**

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123 NPRB requires data sharing in its agreements among all principal investigators and program
124 components. For field data, investigators will submit all data and metadata to the data manager as
125 soon as practical but within six months of collection unless the respective program managers
126 grant special permission regarding time or content or extensive post-collection processing (e.g.,
127 zooplankton identification, laboratory analyses). Consideration may also be made to adjust time
128 requirements in submitting data and metadata as part of a graduate student program with
129 respective program manager approval. Modelers will provide pseudocode and a simplified list of
130 parameters when significant changes are made or every six months, for the purpose of getting
131 feedback from field scientists. These may not be final versions, and so should not be archived as
132 such.

133
134 Investigators should submit simple example plots along with their data and metadata to enable
135 program partners and collaborators to easily understand data significance and usage.

136
137 All data may be shared among investigators in the GOAIERP, so long as individual and
138 community intellectual property rights are protected. Principal investigators will strive to assign
139 important preliminary data, which may be of great interest to other researchers, a high priority for
140 availability. Intellectual ownership and authorship will be protected under any data-sharing
141 protocol. For the first two-year period following final data collection and model development,
142 data usage and authorship are fully protected. Following this two-year period, permission and the
143 right of authorship should be fully recognized, that is, if anyone has an intent to actually **use** other
144 investigators' data for **any** publication, they **must** have explicit written permission from the
145 investigator who collected the data prior to circulation of draft manuscripts or results that include
146 the data. Initial data owners should be given every opportunity for collaboration and participation
147 in the analysis and publication process.

148
149 Data managers will communicate with field researchers about their needs in terms of common
150 standards, units and formats, and will endeavor to keep metadata requirements simple and
151 provide templates where possible. Data managers will facilitate development of a unified data
152 table with common units and formats.

153
154 The data managers and NPRB, in consultation with the PIs where necessary, will ensure
155 appropriate long-term data archiving for any data collected in this program. This will include
156 archiving at NPRB in a publically available manner, but may also entail submitting data to state
157 or national data centers as appropriate.

158

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160 **6. Coordination of education and outreach to achieve maximum synergies**

161

162 The audiences for research efforts are multiple and include, among others: the scientific research
163 community, management agencies, policy makers and congressional representatives and staff,
164 commercial and subsistence users, teachers and students, the general public, media and non-
165 governmental organizations. The NPRB Communication and Outreach Director will lead this
166 effort, and will strive to involve communities, teachers and students to determine the best ways to
167 promote information exchange. College students may be included in the scientific teams, if
168 appropriate, and high school students may be included as community residents.

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170 As detailed in Section 3, berth space on scientific cruises will be made available to community
171 residents, teachers and students, and media representatives to interact with the science objectives
172 and provide insight on ocean processes in the Gulf of Alaska, assuming that applicable medical
173 and training requirements have been met. NPRB will strive to create opportunities for community

174 representatives and scientists to exchange views and knowledge. Principal investigators will be
175 expected to be responsive to needs of journalists and other communicators, and to involve science
176 team members in communication within the bounds of completing research tasks. The NPRB
177 Outreach Director will provide principal investigators with talking points and general guidance on
178 working with the media.

179
180 Principal investigators will be expected to coordinate with the NPRB Outreach Director to
181 provide suitable outreach products. If principal investigators have their own websites, they will
182 recognize NPRB and link their website to the Gulf of Alaska Project website.

183 184 **7. Coordination with other programs**

185
186 The Gulf of Alaska Project will coordinate with other scientific programs in the region as
187 appropriate and as opportunities arise. Ideas for collaboration and coordination should be
188 forwarded to the GABI and NPRB for discussion.

189 190 191 192 **8. Annual PI meetings and Progress Reports**

193
194 NPRB requires semi-annual reports on 1 April and 1 December. Provided templates must be used
195 and they must be submitted on time or the investigator may lose access to additional funds and
196 data.

197
198 NPRB staff will assess the status and success of the program after review of progress reports and
199 PI meetings (annual review) and share their findings with the GABI. If corrective action is
200 deemed advisable for any specific research components, the Program Managers will take the
201 following escalating steps as they deem necessary and appropriate:

- 202
203 (1) Inform the GABI of the need for corrective action and receive a signed
204 acknowledgement from the investigator in question that the action will be taken;
205 (2) Negotiate corrective action directly with the principal investigator(s) and receive a
206 signed acknowledgement from that investigator that the action will be taken;
207 (3) If no corrective action is taken, consider no further release of additional funds for that
208 investigator's work until the problem is resolved.

209
210 In addition to the annual review, in-season and between-season reviews of operations will be
211 convened as necessary to assess how field seasons went and identify possible improvements.
212 Suggestions of any external advisory panel brought in to review progress will be forwarded to the
213 GABI for consideration and action. The GABI will be responsible for responding to the
214 suggestions with input from all interested investigators.

215 216 **9. Reporting of research results and synthesis**

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218 The GABI will organize a schedule for reporting research results, publishing a special volume of
219 preliminary results, and at least one synthesis of the major findings. Publishing of research results
220 in primary peer-reviewed literature is critical for the success of the program. Scientists may
221 publish in journals of their choice or special issues organized by the GABI. The special volume
222 of preliminary results and syntheses will be organized by the GABI and interested principal
223 investigators, and supported by the NPRB Program Manager. Principal investigators may serve as
224 guest editors and the GABI will encourage a multidisciplinary editorial membership. Results also

225 may be disseminated to Gulf of Alaska communities and at scientific and management meetings
226 (e.g., the North Pacific Fishery Management Council, particularly through incorporation in the
227 stock assessment and fishery evaluation (SAFE) documents as determined appropriate by the
228 relevant council plan teams), American Fisheries Society, PICES, etc.). Principal investigators
229 will forward titles and publication information for accepted manuscripts to the GOAIERP
230 Program Manager, who will maintain a web-based list of GOAIERP publications.

231

232 **10. Dispute resolution**

233

234 Participants in this program are strongly encouraged to resolve disputes at the lowest level
235 possible. Disputes that cannot be resolved through negotiation and compromise will be elevated
236 for consideration by the GABI for resolution. If resolution is not practical, respective agencies
237 and organizations involved will be consulted. NPRB may withhold funds as necessary and
238 allowable until disputes are resolved.

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240 **Attachment A: Signature Pages**

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