

NAS Report 1 Abbreviated Implementation Plan: Applied Research

	Recommended for Implementation	Program Component	Recommendation	Description	Fiscally Feasible	Implementation Strategy	Additional Comments
35	Done	Applied Research	Conduct a follow-up fountain darter movement study (119:39)	A follow-up study on movement should be considered, perhaps using tags that provide near-continuous information on the locations and temperatures experienced by the individually tagged fish (Science).	No - the additional cost of pit tagging FD's and tracking would be cost prohibitive.	N/A	A Fountain Darter movement study was conducted in 2014. NAS did not have the benefit of seeing these results prior to putting forth this recommendation.
36	Done	Applied Research	Increase transparency in prioritizing and funding research projects (130:6)	The Applied Research Program would benefit from a more transparent process for prioritizing and funding projects that includes stakeholder involvement, for example through the Science Committee and peer review (Policy).	Yes	N/A (Immediate Implementation)	*In 2014 and 2015, EAHCP staff modified the Applied Research prioritization process to be more transparent, solicit additional proposals from new proposers, solicit more input from the Science Committee on the technical merits of proposals, solicit key elements from the Science Committee to be included in the RFP's, and generally increase the role of the Science Committee in the process.
37	In progress	Applied Research	Increase competition and collaboration with outside scientific experts (130:9)	The Applied Research Program would benefit from a greater competition and collaboration with outside scientific experts through open and widely disseminated solicitation for research (Policy).	Yes	N/A	*For 2016 Applied Research solicitations, EAHCP staff referenced literature cited reports and bibliographies of researchers that performed similar research or are familiar with the EAHCP Covered Species, EAHCP staff will reach out to these identified researchers and ensure they are aware of the EAHCP research projects. * Additionally, for 2016 research solicitations, EAHCP staff will utilize numerous posting boards.

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38	Yes	Applied Research	Remove Literature Review tasks (118:18)	Literature reviews are usually not part of an applied research project, but rather are done during preparation of the proposal to demonstrate that the proposal authors have a strong knowledge of the background information necessary to develop suitable hypotheses and propose appropriate methods for testing them (Science).	Yes - this recommendation could actually result in saved \$.	Request literature reviews with the proposal, rather than as a deliverable of contract.	<p>*Thus far Literature Review has been conducted by all selected contractors and represents a very minor expense. Proposers should do their background work (literature review) prior to submitting, but what is the harm in requesting to see their lit review if selected.</p> <p>*As most of the Applied Research in the HCP has been conducted or determined to not be needed, and new projects and topics are recommended for research by NAS and the Science Committee, a Applied Research work group should be formed to review completed research and establish a new research plan moving forward.</p> <p>*In Table 7.1, applied research funding ends in 2019; with identified additional research needs and continuing unknowns, the Implementing Committee might should consider extending applied research funding through the duration of the ITP. This additional funding would need to be reallocated from another HCP activity to applied research.</p> <p>*Additionally, it is recommended that a scientific Ph. D be added to the HCP staff to assist with workgroup facilitation, analysis and resulting implementation. Additionally, this staff person could assist in review of the research proposals, selecting contractors, and facilitating the research prioritization process and QA/QC of research conductance.</p>

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39	Yes - as allowed for by the FMA	Applied Research	Offer longer-term projects (130:13)	The program should offer some longer-term (two- to five-year) projects in order to maximize interest and collaboration from the region's leading researchers (Policy) .	Currently No - funding is on an Annual cycle	The FMA and budgeting cycle should be explored to identify opportunities to create multiple year research projects. Recommended as a critical component by the Work Group	*The Science Committee has echoed the same recommendation for longer and on-going studies. However, that remains a challenge within the current planning and budgeting framework. *The NAS RRWG supported this as an important step in increasing the number of potential bidders to projects. All opportunities to implement this recommendation should be explored.
40	Done - in progress and continual	Applied Research	Increase transparency of research results (130:17)	Results from the Applied Research Program, Particularly from outside researchers, should be provided in a form that ensures transparency and accessibility to other researchers and to the EAA (Science/Policy) .	TBD - depends on method utilized for formatting, storage and access/dissemination.	*Develop a data management plan. *Utilize a data manager (consultant or staff) or staff scientific Ph. D to establish a required data format for contractors to adhere to, reformat and organize existing data.	*It is recommended that a scientific Ph. D be added to the HCP staff to assist with the creation and implementation of a data management plan, if determined it is needed to achieve compliance. *This recommendation seems to lead one to believe that there is a lack of transparency in the research process or that data generated through the EAHCP is not made available to other entities. However, all reports, results and data are posted on the EAHCP website and provided to any requestor. *The NAS RRWG discussed that the purpose of data generated within the EAHCP is for the purpose of building the Eco Model or providing information to the Implementing Committee to make decisions. The purpose is not to ensure the data is in a usable format for another program/entity to utilize. If it is not in a usable format for a requesting program/entity to use, it should be the responsibility of the requestor to format for their purposes.

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41	TBD	Applied Research	Pursue additional Applied Research topics as provided (125-129).	Numerous projects for varying species are recommended and listed individually below:			<p>Applies to Applied Research Recommendations 41-58</p> <p>*As most of the Applied Research in the HCP has been conducted or determined to not be needed, and new projects and topics are recommended for research by NAS and the Science Committee, a Applied Research work group should be formed to review completed research and establish a new research plan moving forward.</p> <p>*In Table 7.1, applied research funding ends in 2019; with identified additional research needs and continuing unknowns, the Implementing Committee might should consider extending applied research funding through the duration of the ITP. This additional funding would need to be reallocated from another HCP activity to applied research.</p> <p>*Additionally, it is recommended that a scientific Ph. D be added to the HCP staff to assist with workgroup facilitation, analysis and resulting implementation. Additionally, this staff person could assist in review of the research proposals, selecting contractors, and facilitating the research prioritization process and QA/QC of research conductance.</p>

Clarifying Statements

None of the recommendations are required for compliance
 All recommendations are politically and operationaly feasible
 None of the recommendations are fatal flaws of the program
 None of the recommendations support biological goals and objectives