Title: Science and Data Committee Report for FY2012

Desired outcome: An informational briefing to the Board on the Science and Data Committee's 2012 work plan outcomes and Board concurrence for the Science and Data Committee's proposed priority issues it will address in 2013.

Background: At its January and April 2012 Meetings, the Board tasked the Science and Data Committee with addressing the following priority issues during 2012:

1. Through the in-kind contributions of the agencies that staff the Committee, develop standard effectiveness measures for conservation actions used to address nationwide fish habitat focus areas.
2. Develop and initiate implementation of a strategy to refine the 2010 National Fish Habitat Assessment (Assessment) for 2015 and beyond.
3. Develop and submit a Multistate Conservation Grant (MSCG) Pre-proposal and Proposal (if requested) to fund the Science and Data Strategy.

2012 Work Plan Outcomes

- The Science and Data Committee completed the 2015 National Fish Habitat Assessment Strategy (Strategy), which was approved by the Board in July 2012. The strategy was developed by key inland and coastal assessment team representatives and National Science and Data Committee members, vetted by the Committee multiple times including a key strategy meeting in April 2012, and reviewed by the Fish Habitat Partnerships and Board members. The Strategy outlines assessment components and products of the 2015 Assessment and a prioritized list of tasks that are necessary to complete the assessment for inland and coastal habitats by 2015. The approved Strategy also lays the groundwork for the 2020 Assessment.

- The Science and Data Committee developed the Science and Data Committee Terms of Reference and Operation, which was approved by the Board in April 2012. The approved document outlines the Committees' purpose, member duties and roles, terms of membership and co-chairs, and process for meetings and decisions.

- The Science and Data Committee established a Project Tracking Working Group to review existing conservation project tracking systems and provide recommendations for project data collection from Fish Habitat Partnerships and partner agencies for use in reporting progress and effectiveness. The working group identified the basic project information that should be collected from the Fish Habitat Partnerships, which was accepted by the Board in April 2012.

- The Science and Data Committee developed and submitted a MSCG pre-proposal (May 2012) and proposal (August 2012) to address key Assessment needs. The proposal was not accepted by AFWA for funding.

- Work continued on refinements to the 2010 Assessment including the initial development of a new connectivity assessment methods for the inland assessment, the acquisition of fish datasets for the marine assessment, and the development and completion of key peer review documents on the 2010 Assessment. New staff were also hired for the inland assessment.

Draft Science and Data Priorities for FY2013:

- Refine Science and Data Committee membership to ensure the Committee can meet the Board's needs.

- The Science and Data Committee will catalog and review current Assessment activities underway by the Fish Habitat Partnerships.
  Resources: $20,000 to support a single Science and Data Committee meeting to focus on FHP Assessment efforts and to review progress on the National Fish Habitat Assessment.

- Develop mechanisms and document procedures to guide Fish Habitat Partnerships and partners in data management practices to improve data and information exchange that will facilitate collaborative science and data efforts across the National Fish Habitat Partnership.
  Resources: $197,000 to support applications developer, metadata specialist, infrastructure maintenance and support – inkind from USGS, Core Science Analytics & Synthesis for FY2013

- Catalogue science data products and assessments completed and underway within each of the established Fish Habitat Partnerships via the NFHP Data System. Dedicated workflow strategies will be developed to implement best practices in data management including data curation and preservation tasks to ensure data access and re-use in the future.
  Resources: $63,200 to provide dedicated data management support to catalog FHP data – in-kind from USGS, Core Science Analytics & Synthesis for FY13

- The inland assessment will refine and update fisheries, aquatic nuisance and invasive species, dam inventory, land conservation status, and water quality status (focusing on potentially using Section 303d listings and NPDES violation data) information as data become available. Improved river fragmentation analyses and national calculation of fragmentation metrics will be completed. Demonstration project areas will be identified with interested Partnerships.

Approaches to refine the marine-inland linkages between the inland and marine assessments will be evaluated.
Resources: $42,300 to support data management activities for inland assessment team – in-kind from USGS, Core Science Analytics & Synthesis for FY13
Resources: $151,000 to continue core development of the Inland Assessment – USFWS funds.

- Refine the existing geospatial framework for estuaries in the contiguous United States and complete initial development of a geospatial framework for all estuaries across Alaska. A pilot project, illustrating the proposed new fish stressor methodology and regional assessment approach, will be conducted for estuaries in the Gulf of Mexico, including methodological refinements as necessary. Begin data collection and processing to support additional regional estuarine assessments, including datasets on fish/shellfish abundance and diversity, physical habitat, anthropogenic stress, and biological response. Explore methodologies to improve linkages between the inland and marine components of the National Assessment.
  Resources: $220,000 to support continued core development of the Marine Assessment – in-kind from NOAA-Fisheries for FY2013.
  Resources Needed: $60,000 for 1 FTE for 6 months to do GIS and coordination support with partners (AK FHPs and NMFS, FWS) to complete geospatial framework for Alaska estuaries.

Key Areas Without Resources for FY2013:

- Strengthening the science foundation of the National Fish Habitat Partnership Board's National Assessment by determining the best approaches for incorporating data on connectivity, hydrology and marine fish and shellfish. These were all gaps in the Assessment that were consistently identified by reviewers and FHPs.
  Resources Needed - $300,000 for 2.0 FTEs and workshops to fully develop strategy to be combined with $100,000 in matching resources from USGS.

- Refinement of the National Fish Habitat Partnership Board's National Assessment by initiating the filling analytical gaps on connectivity, hydrology and in the marine assessment identified by National Fish Habitat Board (Board) and Fish Habitat Partnerships (FHPs) in the 2010 National Fish Habitat Assessment (Assessment).
  Resources Needed - $150,000 for 2.0 FTEs to fill key gaps in the Marine Assessment to be combined with $220,000 in matching resources from NOAA- Fisheries.

- Strengthening the science foundation of the National Fish Habitat Partnership Board's National Assessment by developing standardized effectiveness measurements for FHPs' connectivity projects which will include developing new methods to incorporate fine-scale system process information from FHP projects. This task was requested by the Board.

Resources Needed - $206,000 for 2.0 FTEs to develop standardized connectivity effectiveness measures that will be combined with $177,500 from USGS.

- Development and attribution of detailed socioeconomic data and analyses on the same geospatial scale as habitat assessment to improve conservation planning abilities of the Board and FHPs. This information was requested for inclusion into the Assessment by the Board.
  Resources Needed - $100,000 to contract for the acquisition and attribution of socioeconomic data.

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September 25, 2012