National Fish Habitat Board
June 25-26, 2013
Tab 4

Title: Science and Data Committee Report for June 2013

Desired outcome: An informational briefing to the Board on the Science and Data Committee's 2013 work plan progress.

***Background**: At the Board's October 2012 meeting, six priority areas were approved for action in 2013 by the NFHP Science and Data Committee (Committee).*

- Refine Science and Data Committee membership to ensure the Committee can meet the Board's needs.
    - Progress to Date – The approved Committee Terms of Reference provide specific guidance on the composition of Science and Data Committee including integrating additional Fish Habitat Partnership membership, goals for the long-term size of the Committee; and terms of service for Committee membership. Additionally, the Assessment Teams have indicated specific needs for Committee expertise including: coastal and marine system; the ability to provide critical analysis of Assessment Team products within reasonable timeframes; understanding of landscape scale habitat analysis along with appropriate analytical methods; modeling expertise; and the ability to access additional data sources.

      Table 1 lists current Committee membership along with their status with the Committee. The Chairs have solicited interest of current members, examined future needs, and have determined Committee candidates. Current members that have been active, have the needed expertise and agency approval will continue on the Committee. Current members who are inactive will be thanked for their past efforts on the Committee. Additionally, current members who are active, but whose expertise isn't deeply aligned with current committee priorities, will be considered in a pool of technical experts that the Committee may call upon at time of reviews as needed. The membership is currently under review and we are awaiting input from some of our agency partners at this time. Final decisions are expected by the Board meeting.

- The Science and Data Committee will catalog and review current Assessment activities underway by the Fish Habitat Partnerships.
    - Progress to Date – The Committee developed and has surveyed the Fish Habitat Partnerships on their Assessment activities. By April 15th, 55% of all FHPs had

responded. By June 7, a total of 16 of 18 Fish Habitat Partnerships (88.8%) responded with information pending from the Kenai River and Ohio River Fish Habitat Partnerships. A total of 64 assessments or habitat datasets have been completed by FHPs with 26 publications completed from that work. A number of challenges and impediments were noted including: data access and availability (20 responses); data format issues (7 responses); data storage and access (6); methodology issues (6 responses); and resources (5).

These data provide key insights on the availability and location of process level data along with how the National Assessment can directly assist FHP efforts. Another key result is direction on how to improve the utility of the inventory of data that will be housed in the NFHP Data System.

- 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.
    - Progress to date – Improvements continue to be made to the NFHP Data System including an additional viewing option for key priority themes; improved user experience by allowing auto generated summaries of datasets to open within the NFHP Data System webpage instead of sending users to linked systems for the data; and improved capabilities to distribute data via web mapping and ArcGIS services.

- 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.
    - Progress to date – A draft guidance document for FHP dataset input into the NFHP Data System has been developed. Information and case histories are now available on how FHPs can and should upload data; metadata development guidance and criteria; and how web services can be generated out into multiple places including FHP web pages.

- 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.

Inland Assessment Progress to Date - In working towards the 2015 assessment, the Inland Assessment Team is focused on: 1) acquiring new physical and biological datasets; 2) improving elements of the 2010 assessment datasets including elements of the National Hydrography Plus V1 Dataset; and 3) testing refined analytical approaches to improve 2015 assessment results. By the end of July, it is planned to have: the majority of new datasets will be assembled; attributed to appropriate elements of our spatial framework; and ready for Wes Daniel, our current post-doctoral research associate, to begin testing our proposed analytical approaches for 2015 assessment of river systems for the conterminous United States. It is expected that testing, applying, and finalizing our analytical approaches for the conterminous U.S. will be complete by mid-2014. By taking this step at this time, the Assessment Team is expecting to have close collaboration with and detailed reviews of work products by the Science and Data Committee. In addition to the refined analysis for streams of the conterminous United States, the Assessment Team is developing improvements to the 2010 Alaska and Hawaii Assessment components, and those steps are described in more detail in the report. The Assessment Team anticipates taking steps to begin finalizing the 2015 Alaska and Hawaii Assessments by January 2014, and will improve the supporting datasets and analytical approaches for these assessments as time allows. Finally, the development of spatial units for all lakes of the conterminous United States is in progress with lake catchments serving as a basic landscape unit for that work. By 2015, the Assessment Team expects to have: data attributed to lake catchments; summary stats run to describe broad trends in lake conditions throughout the conterminous United States; and a plan for detailed lake assessments. A detailed report on their activities is in Attachment 1.

- 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.

- Marine Assessment Progress to Date - The Marine Assessment Team is completing work on the pilot assessment for Gulf of Mexico estuaries. This work will: serve as a proof-of-concept for the revised Marine Assessment methodology; provide information on habitat condition and threats for regional stakeholders; and contribute to the 2015 Marine Assessment. The Assessment Team at this time is reviewing and refining results, and will be presenting preliminary results to selected regional stakeholders on June 27. A presentation of final results for all interested parties will follow in August, along with a white paper describing the refined proof-of-concept assessment methodology and preliminary results. Scoping activities are beginning for refined Pacific Coast estuary assessment, a collaborative project with the Pacific Marine and Estuary Fish Habitat Partnership. The Assessment Team expects this effort to continue through the fall and into the next fiscal year.

Report Prepared By:

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June 10, 2013

Table 1. Science and Data Committee Membership – May 2013

Name	Affiliation	FHP Association	Status
BOARD LIAISONS and COMMITTEE CHAIRS			
Stan Allen	Pacific States Marine Fisheries Commission	PMEFHP	Board Liaison
Joseph Larscheid	IA DNR		Board Liaison
Gary Whelan	MI DNR		Co-Chair
Andrea Ostroff	USGS		Co-Chair
ASSESSMENT TEAM LEADERS			
Kristan Blackhart	NOAA		Marine Assessment Team Leader
Dana Infante	Michigan State Univ		Inland Assessment Team Leader
ACTIVE MEMBERS			
Jose Barrios	USFWS		
Doug Norton	USEPA		Active member
Katherine Smith	USFS		Active member
Andy Loftus	Loftus Consulting		Active member
James McKenna, Jr.	USGS		Active member
Jennifer Bayer	USGS		Active member
Robin Carlson	Pacific States Marine Fisheries Commission		Active member
Hal Beecher	WA DGF		Active member
Jeff Kopaska	IA DNR		Active member
Kay McGraw	NOAA – Fisheries		Active member

D. Moe Nelson	NOAA - NOS	ACFHP	Active member
Craig Paukert	USGS – Univ. of MO		Active member
Timothy Birdsong	TX PWD	RFHP and SARP	Active member
Thom Litts	GA DNR	SARP	Active member
Cecil Rich	USFWS	AK FHP	Active member
Dirk Miller	WY GFD		Requested to be replaced
Mary Walsh	W PA Conservancy		Active member
INACTIVE MEMBERS			
Charles Bronte	USFWS		Inactive
Brian Alford	LA DFW		Inactive
Michael Dougherty	WV DNR		Inactive
Brian Sanborn	USFS		Inactive
Ryan Smith	TNC		Inactive
Churchill Grimes	NOAA – Fisheries		Inactive – Retired
Christopher Estes	AK DFG		Retired – Technical Experts
Zachary Bowen	USGS		Inactive – Requested to be replaced
Mark Brouder	USFWS	GLBFHP	Inactive
Jonathan Higgins	TNC		Inactive
Mark Hudy	USGS		Inactive – New Position
Scott Sowa	TNC		Technical Experts
Priya Nanjappa	AFWA		Technical Experts