

Reservoir Fisheries Habitat Partnership

Roadmap to Fish Habitat Partnership National Fish Habitat Action Plan November 20-22, 2007 NCTC, Sheperdstown, WV

Facilitated and Prepared by
Brett Boston and Vern Herr
Group Solutions, Inc.
Box 940
Alpharetta, GA 30009

770.757.9828 (voice)
770-446.9382 (fax)
Vherr@groupsolutions.us
www.group-solutions.com





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Executive Summary

A national conservation strategy for reservoirs is moving forward. Stakeholders from across the nation met at the National Conservation Training Center in Shepherdstown, WV November 20-23 to prioritize activities that will be required to complete a formal application under the National Fish Habitat Action Plan (NFHAP) for a Reservoir Fisheries Habitat Partnership (RFHP) by October 1, 2009.

The meeting built on prior sessions held 9/10/2006 in Lake Placid NY, 6/7/2007 in Atlanta, GA and 9/16/2007 in Louisville, KY that confirmed broad national support for the initiative, established an interim governance structure for the RFHP, provided initial guidance on its organizational structure (AFS/SARP) and integration with existing fish habitat partnerships, and set forth guiding principles and operational objectives.

Accomplishments

On a national scale, the Reservoir Fisheries Habitat Partnership team can point to meaningful progress. Initial skepticism to the partnership has been overcome through dialogue and targeted presentations by Phil Durocher and other members. Strong support has been expressed for the RFHP by Fish Chiefs from all corners of the U.S and by conservation and non-governmental agencies nationwide.

Workshop participants learned about NFHAP requirements for Fish Habitat Partnership from NFHAP staff, representatives from designated Fish Habitat Partnerships, and members of the RFHP steering committee.

Subgroups and a plenary session developed goals for completing elements of the NFHAP Fish Habitat Partnership application, established milestones and check-in points to ensure progress toward those goals, and created agendas for their first post-workshop meetings as formal subcommittees.

1. Phil Durocher will chair the Outreach and Education Subcommittee. This team will coordinate requests for formal letters of support for the Reservoir Fisheries Habitat Partnership from national stakeholders. The Subcommittee will require assistance targeting serious and significant stakeholder support. Fish Chiefs, Nongovernmental Organizations, Power Companies, Recreational Industries, Native Americans, Water Districts, County and Municipal agencies, NRCS, Agricultural interests, Building, Home and Community Associations, and fishing and boating groups will be included in documenting broad support for this initiative.

An updated briefing document will be developed to support this outreach.

John Taylor of TXPWD will maintain a project website (www.reservoirpartnership.org). **The team plans an organizational conference call Tuesday December 16 at 12:00 p.m. EST and monthly follow-up conference calls the 3rd Tuesday of the month to discuss progress.**

2. Chris Horton and Norm Stuckey will co-chair the Governance Subcommittee, coordinating development of governance for the partnership. A draft document addressing aspects of governance, and developed in the Atlanta meeting (6/7/2007), will be shared with the committee for background. A draft governance document will be prepared and submitted for comment and review prior to the North American on 3/16/2009. Additional review and comments will be provided at regional meetings between April and July 2009 with a final review and comment period ending 8/1/2009. A completed governance document will be presented at the AFS meeting in Nashville (August/Sept 2009). **A Governance Subcommittee Conference Call will be scheduled Tuesday December Dec 16th 2 p.m. CST.**



3. A Science and Data Subcommittee co-chaired by Mike McGhee and Karl Hess will address the scientific foundations and technical needs of the partnership, including refinement of the definition of a reservoir for the purposes of the partnership, development of a reservoir inventory, and initiation of a national assessment of reservoir condition and health. By March 16, 2009, the team will produce:
 - A list of data and metrics needed to conduct assessment
 - Reservoir Inventory Outline (MSU can provide assistance on data needs)
 - Spatial data bases: identify lakes >200 acres
 - States can ground truth list of lakes: separate out true reservoirs
 - Develop a DRAFT Reservoir Classification System
 - Form an interdisciplinary Metrics and Data Team
 - Develop multi-state grant proposal (due spring 2009)
 - Conduct planning to identify next steps after March 2009
4. The Steering Committee, led by Phil Durocher, will continue to coordinate all partnership efforts and schedule progress report updates. Members of the steering committee include Phil Durocher, Hannibal Bolton, Chris Horton, Don Gabelhouse, Mike Armstrong, Steve Miranda, Gary Martel, Doug Nygren, Robin Knox, Norm Stucky, and Jim Martin. Karl Hess is interim coordinator for the Steering Committee.
5. USFWS will support planning efforts with support from Karl Hess, Jamie Geiger, Region 5 and Hannibal Bolton. Tom Busiahn has expressed willingness to assist with guidance on proposal submission.

The transcripts that follow are not THE conservation strategy for the partnership. Rather, they represent elements of the application for Fish Habitat Partnership that will be refined by individual subcommittees, subsequent conservation strategy and application writings teams, and the Steering Committee as the partnership prepares for formal application.

Challenges

- A great deal needs to be accomplished quickly to realize the vision of a Reservoir Fisheries Habitat Partnership under the auspices of NFHAP.
- The Reservoir Fisheries Habitat Partnership is bigger than fisheries alone. If executed properly, it will involve an unprecedented number of stakeholders with competing expectations. It will require partnership members to see reservoirs through multiple and complex perspectives.
- Because reservoirs are man-made, inclusion of a reservoir habitat partnership will generate opposition from some quarters. Team messaging must anticipate this.
- The partnership needs a core set of consistent messages, justifications and assumptions. (i.e. more than 70% of recreational fishing occurs on reservoirs or impoundments). While there is room for regional customization, core messages must be validated and supported at a national level.
- The partnership must be able to generate sufficient data and analysis to meet the requirements of the application, while recognizing the size and scope of this effort are unprecedented
- Clean water is not optional for Americans. This message can be an important rallying point.
- Travel constraints will limit participation from many who would like to support this



effort in person. Recognize much work will need to be completed virtually, by email, teleconference and via the internet.

- The Partnership must encompass a broad array of stakeholders – it cannot be limited to just governmental agencies. All Americans are impacted.

Call to Action

Session participants expressed overwhelming support for this initiative by participating in subcommittees and committing to an October 1, 2009 plan submission. The partnership needs broad support from:

- Federal, State and Local Governmental Agencies
- Conservation and Non-governmental Agencies
- Agricultural groups
- Water Districts
- Recreational Fishing Manufacturers and other recreation-based groups
- Property owners
- Academia

Workshop participants are encouraged to think broadly about who should be invited to participate in this process and to be sure Phil Durocher, the steering committee, and subcommittee chairs have points of contact for invitations and information sharing.

Next Steps

Based on progress toward these objectives and recommendations from the Steering Committee a final review meeting may be scheduled (possibly in conjunction with AFS meeting in Nashville) prior to an October 1 submission. This will give all participants a final opportunity to review and comment on the final Reservoir Habitat Proposal.

Let's get busy...there is much to be done.



Team Discussion Notes

Team discussion notes from Day 2 follow. In it, a purpose statement for the Reservoir Fisheries Habitat Program, draft vision elements were presented to the team and refined. These elements should be considered strongly vetted by the team.

Additionally, focus areas for conservation goals and strategies, success factors and metrics, and team impressions of the session are captured. This team-generated content will help the subcommittees in their deliberations and assist the writing team assigned to drafting the RFHP strategic plan and formal application document for a Reservoir Fisheries Habitat Partnership.

1. Purpose Statement

RFHP is a national collaborative partnership to protect, restore and enhance fish habitat through actions that contribute to:

- (a) the ecological health and function of reservoirs and their associated watersheds;*
- (b) the well-being of fish and other aquatic (communities) species, therein;*
- (c) public awareness of the conservation issues and challenges facing reservoir and reservoir system management in the 21st Century.*
- (d) the quality of life of the American people.*

2. Vision Elements

Clean water and healthy aquatic habitat in reservoirs are not optional for America's future. America's reservoirs provide critical drinking water/water supply, flood protection, fishing & other water-based recreation, navigation, hydropower, agricultural use/irrigation and critical habitat for fish and wildlife. (Reservoirs also present conservation challenges...) Balanced use and management of reservoirs will become more critical in the future. We envision a future where:

- Sustainable management of reservoir systems is supported by enhanced dialogue, compromise and consensus building. This success will be measured in decreases in litigation and increased win/win propositions for reservoirs. Adaptive management will be an essential component of this.
- Partners who have not traditionally worked together will now plan, fund and support actions to protect drinking water and aquatic habitat in reservoir systems.
- Reservoir systems are seen to include both upstream and downstream components. A systems approach gives stakeholders a greater appreciation of how landscape pieces fit together and how they are ecologically connected.
- The value of healthy & sustainable aquatic reservoir systems are understood and appreciated by the millions of Americans and their elected officials who fund appropriate levels of support for their protection. (vs. the status quo: underfunding).
- The Reservoir Fisheries Habitat Partnership will provide facilitation and a place for a wide variety of stakeholder groups to meet and discuss critical reservoir-related needs.
- Sustainable economic development supports healthy watersheds and vibrant local communities (to be inclusive of ecosystem services)
- We have adequate information systems to support decision-making with best available/sound science. (Adaptive



Management). Don't let anyone assume we have these now....

- The partnership will provide science, recommendations and practices to support management of reservoir systems (upstream and downstream) and modification and/or removal of structures that are no longer needed.
- The partnership will support decision making for restoration and enhancement of reservoir structures and habitat
- Stakeholders will recognize the impact that reservoir's have on the economy of surrounding communities (get rec fishing in here).

3. Conservation Strategies and Goals should focus on:

- Water quality
- Water quantity, competing uses and climate change
- Recreational fishing
- Hydrology
- Health of resident fish populations
- Managing aquatic vegetation and in-reservoir habitat
- Reservoir Levels
- Adequate downstream flows
- Exotic & invasive species management
- Sedimentation and transport
- Contaminants: point and non-point
- Outreach, education and inclusion of nontraditional partners—promote stewardship
- Public use, access and benefits
- Restoring connectivity (upstream/downstream)
- Riparian zone protection
- Cooperative development of management plans. Collaborate with gov't, private, NGO and tribal nations in all watersheds
- Consider the health of the watershed in planning at levels of activity

4. Success Factors

- Outside stakeholders should perceive our messages as positives. Consider how they could be misunderstood.
- Balance will be vital: multiple use, geographic, species management, and the issue of resource use vs. enjoyment all require collaborative approaches
- Reservoir partnership success may depend more on a thorough understanding of socio-economic factors than pure science and biology (find a way to reconcile this statement to greater customer satisfaction).
- Frequently reservoirs are guided/operated by narrow operating criteria: rules, policies and laws. Understand realities. Consider FERC and other relicensing opportunities.
- Successful integration with other partnerships
- Governance: we will make decisions based on informed consent in the absence of 100% consensus
- Uniting around a common agenda to achieve and allocate funding (equitable distribution)



- Show positive cost/benefit ROI results to reservoir projects
- Regular monitoring and review of all projects; communication of successes and best practices nationally.
- To move from theory to implementation will require an administrative structure, operational guidelines and the ability to accept funding from public and private sources.

5. Measures of Success

- X% of funds received that were distributed. Successes in funding requests.
- Success attracting funding from private/NGOs
- Assistance securing Congressional funding for all fish habitat initiatives..for all fish habitat partnerships
- Broad suite of metrics: Biological/ecological/economic/social metrics of success
- Breadth/depth of partners who are willing to participate
- Reduced litigation
- Improved/protected fish-aquatic habitat and recreational opportunities
- Increased boater/angler registration and license sales
- Reduce the time between bites (45 sec to 30)
- Contribution to the overall goals/objectives to the National Fish Habitat Action Plan
- Effectiveness of collaboration with other partnerships
- Measurable increases in kid's involvement with fishing and outdoor activities



6. Goals & Strategies

1. Stabilization of desirable water levels
2. Adequate instream flows: quality, quantity, timing and amounts
3. Upstream/downstream connectivity
4. Address aging infrastructure (O&M)
5. National categorization/classification/inventory of reservoirs
6. Enhancement of physical fish habitat
7. Better angling opportunities
8. Destabilization of water levels
9. Reduction of sediment input
10. Aquatic system resilience in the face of climate change, population increase and other threats
11. By 2015 50,000 acres protected/enhanced in each region
12. Sustainable sport fishing
13. Goals & objective that are compatible with other partnerships
14. Reduced impact of invasive species
15. Recognition of fishing as an economically-important industry
16. Water quality
17. Improved fishing
18. Science-based
19. Recreational fishing/fish/fish habitat as recognized project use on reservoirs (
20. No net loss of angler access to reservoirs
21. Development and transfer of effective management strategies
22. Improved habitat for nongame animals
23. Protect/restore riparian habitats upstream/downstream
24. Integration with national energy policy. Recognize reservoirs' role in upcoming decisions/dialogue.
25. Resolve internal team conflicts effectively
26. Description of reservoir Bumps for vegetation management
27. Reduce nature-deficit syndrome



7. Lightning Round

Team impressions of the workshop were captured in a concluding lightning round where each participant offered a quick individual assessment or observation.

1. Pleased with progress so far. I was getting skeptical about this
2. Good first start
3. Lots of work ahead
4. Conflicting uses of multiple customers. Balance needs/purposes
5. Really interested in defining upstream/downstream balance and what our role will be
6. Find more involvement for tribes and others
7. Hope we get legislation passed
8. Off to a good start
9. Anxious to see end result
10. Want to see agencies work the processes
11. See how the regional processes get balanced
12. Addressing holes in databases should be a high priority
13. Recognize reservoirs aren't going away
14. Focus on habitat variables vs. fish communities
15. Clarity on the role of Federal Agencies (DoD, EPA, Parks, others)
16. Collaboration and input from all logical partners through the process
17. Eventually reservoirs WILL go away. Consider future implications of this and fish protection
18. Be sure we don't put the cart before horse, get goals together. Let data drive the process
19. Continue to focus on cooperative components vs. conflict
20. Distribution of funds needs to be regional
21. Overlapping SARP cooperation
22. Need to focus on cooperation with other partnerships. We have to fall into the right partnerships
23. **No habit is more limiting to fish than a lack of water**
24. For this to be successful we'll need to consider the entire watershed and multidisciplinary approaches
25. Hope the partnership gets anglers and industry to support our vision
26. Needs to be an entire watershed
27. Partnership needs to actively engage agencies responsible for reservoir mgmt
28. Learn from other partnerships who've made it through the process
29. Interesting to see how big ideas play out on the ground, especially in nontraditional (urban) communities
30. Getting effective input from 30 states who aren't here is key
31. This is the easy part. Tough part is addressing root causes (property rights/economic interests) that work at cross-purposes
32. Important to be sure the right % of money goes to implementation vs. admin. Consider setting targets now
33. We'll be effective bridging gap between recreation and native species and mgmt of those species
34. Entering into a new era of sharing the wealth. Counting on Corps, TVA, BLM to participate with \$\$\$



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35. If we can find ways to communicate with nonfish interests the benefits to working with us then we'll get the greatest impact
36. Reservoirs affect entire communities. Have to ensure the messaging focuses on improvement of water and stabilization of supply
37. Remember multiple users. We can still be successful even if we don't agree on everything
38. Many groups working on conservation are not here. Specialize in what you do best
39. Let's be sure we move the needle
40. Measurable, doable and successful projects!!
41. Be sure we have state/federal agencies that aren't here involved; communicate with them. They have \$\$ and can help us
42. We need a major success with the fish community
43. Have the next meeting on the shores of a reservoir...in the spring
44. SWOT team. Focus on opportunities at all times.
45. We need feedback from internal auditors as this moves forward
46. Let's not rush decision making before we have a thorough understanding of the resource



Science and Data Team Summary

Team Members

Damon Abernathy
Doug Beard
Tim Birdsong
Jeff Boxrucker
Christopher Estes

Jay Haffner
Jim Hedrick
Karl Hess
Mark Hudy
Ron Marteney

Mike McGhee
Brian McRae
Patrick Sollberger
Albert Spells
John A. Sweka
Stan Todd

Co-Chairs: Mike McGhee and Karl Hess

Meeting Purpose: To identify next steps, goals and milestones for the Reservoir Fisheries Habitat Partnership (RFHP) Science and Data Subcommittee in support of RFHP's application for recognition as a Fish Habitat Partnership under the National Fish Habitat Action Plan.

Developing a Comprehensive Definition for Reservoirs under the NRFHP:

How do we define reservoirs? This question needs to be addressed (by Governance Committee) in order to determine the scope of the partnership and to determine the water bodies that should be included in the reservoir assessment. The assessment, in turn, will identify the issues upon which a conservation strategy for restoration, enhancement and protection of reservoirs and reservoir systems can be developed. Because the reservoir assessment is foundational to the RFHP conservation strategy, the Science and Data Committee will begin its work with a partial assessment of U.S. reservoirs, focusing on reservoirs 200 acres or larger. This is not intended to be exclusive of water bodies less than < 200 acres in size; further examination of smaller reservoirs is possible, depending on the final definition of reservoirs that is adopted by RFHP. The Science and Data Committee will coordinate with the RFHP Outreach Committee to request feedback from states on the desirability of the 200-acre minimum size for reservoir assessment. For the time being, the 200-acre minimum provides a practical starting point. [Note: because of data and time constraints, it may be most practical to perform an initial assessment only among reservoirs greater than 500 acres in size. This would provide preliminary results in a timely manner, allowing development of the conservation strategy sooner rather than later – though allowing for modification of the conservation strategy over time if and when the assessment expands to smaller bodies of water.]

National Reservoir Inventory

A significant amount of overlap exists between the proposed RFHP reservoir assessment and the national assessment being conducted by Michigan State University for the National Fish Habitat Action Plan. The first step toward conducting the RFHP assessment is to make contact with Michigan State University (MSU) to review spatial data that may be available from the national assessment. MSU may be able to provide a GIS layer of water bodies >200 acres. If that data exists, the RFHP Science and Data Committee, coordinating with RFHP Outreach Committee, could work with the states [states must have ownership] to ground-truth the spatial data in order to identify water bodies >200 acres that meet the RFHP definition of reservoir. The resulting list of reservoirs would constitute a reasonably complete inventory upon which to launch the RFHP assessment. In addition to providing spatial data, MSU may also be able to provide RFHP with additional data and information from its national assessment that may be applicable to the NRFHP assessment [e.g., what data exists and where, and impairment data]. Further, the SDAFS Reservoir Committee, SARP, IFC, and Andrea Ostroff (USGS) could be important resources as the committee seeks to identify data and information necessary to conduct the reservoir assessment.



Reservoir Classification

Classification of the universe of reservoirs identified within the inventory is a necessary next step in preparation for the assessment process. A meaningful assessment must address reservoir health within typed groupings of physically and/or functionally similar reservoirs. This is necessary for multiple reasons, including comparability of condition scores or ratings among like-typed reservoirs, identification and prioritization of regional and national reservoir conservation targets, and development of transportable models, prescriptions and technologies for reservoir management.

Reservoir Assessment: Metrics and Data

Once the inventory and classification of reservoirs is complete, the Science and Data Committee will move forward with the assessment in partnership with states. Critical to the assessment are the metrics [and the data sources for them] by which to measure and determine reservoir health and status. A comprehensive list of potential metrics must be initially developed. A list of candidate metrics was assembled by the several working groups in Day 2 of this workshop. The SDAFS Reservoir Committee could assist in fleshing out the list of metrics for the assessment, identifying what data and information exist for different metrics, and determining the best metrics for the assessment. The final metrics for the assessment must be sufficiently few in number and adequately supported by existing data to ensure an affordable and timely assessment.

ACTION ITEMS

DUE DEC 3, 2008

- **ACTION ONE**. *Send out notes from Science and Data Committee meeting – Karl Hess: Due December 3*
- **ACTION TWO**. *Send out complete workshop notes to all committee members; workshop notes contain lists of candidate metrics from the working groups and can be used in developing full list of potential metrics [Action Items Five and Six] – Karl Hess: Due December 3*
- **ACTION THREE**. *Distribute current list of committee members to workshop attendees – Karl Hess: Due December 3*

DUE DEC 5, 2008

- **ACTION FOUR**. *Contact MSU regarding RFHP coordination with and support from NFHAP national assessment team – Doug Beard and Karl Hess: Due December 5*

DUE DEC 12, 2008

- **ACTION FIVE**. *Send to Karl Hess and Jeff Boxrucker a preliminary list of metrics and data needs for the assessment [See Action Item Two, above] -- **SPECIFIC ASSIGNMENT to Mark Hudy, Albert Speers, Jeff Boxrucker, Brian McRae, Robin Knox, and Scott Robinson (liaison to SARP): Due December 12***
- **ACTION SIX**. *Submit to Karl Hess and Jeff Boxrucker a preliminary list of metrics and data needs for the assessment [See Action Item Two, above] – **GENERAL ASSIGNMENT to ALL COMMITTEE MEMBERS: Due December 12***
- **ACTION SEVEN**. *Organize planning call to discuss next steps to develop reservoir classification system – Steve Miranda and Karl Hess: Due December 12*



- **ACTION EIGHT.** *Develop list of additional people who should have attended the NRFHP Science and Data Committee meeting but did not – All COMMITTEE MEMBERS: Due December 12*
- **ACTION NINE.** *Develop consolidated definition for reservoirs; deliver to Karl Hess – Jeff Boxrucker: Due December 12*
- **ACTION TEN.** *Send Jeff's consolidated definition to all members of the RFHP Science and Data Committee for initial review and edit – Karl Hess: Due December 12*

DUE DEC 19, 2008

- **ACTION ELEVEN.** *Initiate conversation with SDAFS Reservoir Committee on assessment metrics and data availability, using list from Action Items Five and Six above as starting point [flesh out metrics list; identify what data exists, and availability, for different metrics; recommend additional metrics and data sources; first cut at best metrics for RFHP assessment] – Jeff Boxrucker: Due December 19*
- **ACTION TWELVE.** *Develop list of resources and Science/Data Committee assignments and actions that will be needed to conduct assessment, including staff time; deliver to Science/Data Committee members to share with their bosses to enlist their agency's support for the assessment effort – Karl Hess: Due December 19*
- **ACTION THIRTEEN.** *Submit edited consolidated definition [Action Items Nine and Ten] to the RFHP Governance Committee for action (cc general membership) – Karl Hess: Due December 19*

DUE JAN 30, 2008

- **ACTION FOURTEEN.** *Contact individuals from list in Action Item Eight and engage if possible in Science and Data Committee – Karl Hess: Due January 30*

Milestones:

By March 16, 2009 (i.e., Reservoir Fisheries Workshop, AFS – Arlington, VA), RFHP will finalize:

- Why we exist
- How we define reservoirs for purposes of the partnership (and why)
- What niche we fill that isn't already filled
- How we intend to fill that niche (who we are, scope of partnership, scope/meaning of reservoirs)
- Level of commitment needed from partners

By March 16, 2009 the RFHP Science and Data Committee will provide:

- Initial work on reservoir inventory (MSU – relevant spatial and other supporting data; seek TNC and COE assistance): includes identification of the inventory committee, bodies of water by size, types of data available, and plan for ground-truthing by states
- Additional data identified by MSU and others for conducting assessment
- Laundry list of metrics and data [hopefully pared down] to be used in conducting assessment (coordinated with SDAFS Reservoir Committee and states)
- DRAFT Reservoir Classification System
- Interdisciplinary team to conduct reservoir assessment identified
- Multi-state grant proposal (due spring 09) prepared for doing assessment & other RFHP activities



- Plan established to identify next steps in assessment after March 2009 meeting: ASSESSMENT ROADMAP completed

Other:

- Do non-response survey of states not attending (Outreach Committee/Group Solutions)
- Establish team to assemble Multi-state grant proposal
- Propose 3-day meeting of the three committees in May, at Big Cedar Lodge, Table Rock Lake, Branson, MO

Governance Team Summary

- National Board – Small national board from assoc., feds, other partners
- Work thru Associations based on the Assocs. Preference.
- Provide tools for helping others make decisions.

Each region come up with some number of impoundments (3), then you would have 12 nationally. Chris Horton will chair the group. Norm Stucky will represent industry.

One from each Association (4)

- Mike Armstrong – Arkansas (SE)
- Doug Stang – NY (NE)
- Walt Donaldson – Utah
- Don Gabelhouse – Mid-west
- FWS Fish Habitat – Karl Hess
- Bruce Brown – Reclamation
- Corps – Tim Toplisek
- AFS person – Bob Curry
- Tribal – Janet will help.
- Doug Nygren – trouble-maker

Document Reviewers:

The other partnerships: Include all partnerships in the review of the governance of the document.

- TNC
- Gordon Robertson – ASA
- FLW
- Jim Martin – Berkley
- NALMS – Dick Osgood
- NMFS – Katherine Smith
- Fisheries Mgt section AFS -- Ron Essiq

Operating Principle: Primary edit group that will publish final draft for comment.

A Conference Call is scheduled for December Dec 16th 2 CST

Solidify the core team

- Clarify the milestone dates; make assignments on who will attend. Finalize the work calendar.
- Make sure everyone has resource docs and understands the format of the “Jan 30” draft
- Set the date for getting the first draft out to the team members and reviewers
- Schedule the next conf call.

Actions:

1. Mail existing governance models to team for review
2. Promote Don's Workshop 3/16, 2009 at North American



Create Draft 1 by January 30th. Get Norm's white paper.

- a. Edits returned in 30 days. March 1.
- b. Build diagram and 2-page narrative.

Recommend at late Jan, draft stage touch point for all teams to interact and update progress.

3. March 16 -- Milestone: Have a draft governance diagram Draft 2 ready for North American. This draft should be a diagram explaining the governance model (not necessarily the document). – Phil

4. Promote Don's workshop! March 16th, 2009, at North American

Touch point: North American workshop planning early March to brief Phil and prepare his 20-minute presentation.

2. Schedule time on the 4 Assoc meeting agendas. 4 Regional reps please get us on the Agendas for Assoc meetings. Get us dates for these meetings. – Draft 3

Western: July 16th

SEAFWA: April or May

NE – last week in April

30-Day comment period Aug 1.

Merge edits and prepare a final working draft for Nashville meeting.

Large get together: Target AFS Aug/Sept in Nashville.

Maybe present product to audience

Then have Reservoir teams meet.

Our decision process will be informed consent

October 1 to have our final governance recommendation ready.



Outreach & Education Team Summary

Goals

1. Document support from the largest possible group for the reservoir proposal

- We need formal letters of support and commitment; will serve as adequate documentation as needed
- Need help targeting missing partners and agencies; expand awareness/participation from Fish Chief, NGOs, power Companies, Water Districts/NRCS/Ag interests, rec fishing groups

2. Update messaging and content of the current reservoir letter & brochure

3. Link outreach and presentation to meetings of allied organizations (AFS Southern, etc)

Assumptions

- *We want a large, inclusive list of partner. We expect this is hundreds*
- *Maximize use of available outreach infrastructure*
- *Focus on coordination with national partners, but remember midlevel and grass roots can be good entry points*
- *Avoid surprises with potential stakeholders. Don't overlook anyone. Team Cautions:*
 - Must avoid perceptions we threaten western water rights
 - Support logical dam removal in the west
 - Support rational proposals for new dams
 - Demonstrate connections to species wildlife action plans with reservoirs
- *Build a national template with space for regional hooks for letters/outreach. Eastern/Western team members will share Best Practices & WWW*
- *Corps/TVA need to be part of this effort*
 - It may be tougher/more uncomfortable contacting nontraditional partners to get participation & support..
- *Need a consistent message all can deliver. Consider external review of our product (RBFF or others?)*
- *Assume Karl will continue to assist as National Level contact*
- *We'll strive for consensus, but will not require 100% to move forward*



Roles

- ***Phil Durocher will Chair. Subcommittee Members will include***
 - Gary Martel (VA)
 - Lisa Moss/USFWS R5
 - Jamie Geiger/USFWS
 - Bill Hyatt/CT
 - Craig Walker UT
 - Stewart Jacks (AZ)
 - Terry Foreman (CA)
 - Ken Ostrand (R1 Portland)
 - David Houser (PA)
 - Mike Staggs (WI)
 - Chris Horton
 - Tyler Abbott BLM.Western/Havasu Program
- ***Demonstrate partnership has sought commonality with other partnerships and willingness to address conflict. We'll seek this support in letters from other Habitat Partnerships***
- ***How we interact with all partners and get their input***
 - Phil coordinates; regional focus
- ***MIAs: Primarily Federal***
 - EPA/NOAA/Western Water Councils (Geiger can help here)

Process & Procedures

- ***How we will work together?***
 - Monthly teleconferences/videoconferences scheduled 3rd week of the month
 - John will investigate password protected area for team web uploads/access
- ***Key resources and support needed for successful team operations and goal completion***
 - Karl Hess/Jamie Geiger USFWS

Milestones/Timelines

1. First conference call: Tuesday 12/16 at 1200 EST. Just a quick check-in. Phil will schedule this with the email group
2. Central website (John will handle)
3. Conference calls will follow on the 3rd Tuesday of Month
4. John will have conferencing portal including videoconferencing.
5. Contact lists need to be developed for outreach efforts. There will be an overall national list of contacts with regional lists, and potentially tailored messages for them. Phil will maintain both lists and share them with regional partners and agencies who can assist in expanding the list of potential partners.
6. Jan 1 Phil will circulate contact list to the O&E Team
7. Request letters of endorsement from other Partnerships showing that overlap and potential conflicts have been addressed
8. Show willingness to ID and address conflict in letters of endorsement. Contact the partnership before contacting the Board



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Roadmap to Fish Habitat Partnership

9. Regional people send it out
10. An outreach piece will be completed by Mid-February to committee introducing Partnership. This will be included with a request from letter of endorsement
11. Team will target a draft for completion April/May
12. Consider an early summer meeting 2009 to review progress and finalize the application



Impairment Subteam Discussion Summaries

Team 102 Framework

Dimension	Key Process	Impairment	Goals	Objectives / Guiding Principles
Operational / Jurisdictional	Hydrology	Water level manipulation/management does not support quality fisheries	Water level manipulation / management practices that support quality fisheries	maintain pool levels that positively support growth and mortality timed releases that support recruitment in targeted fishery timed releases that support species of concern downstream timed releases that support tailrace fisheries
Operational / Jurisdictional	Water quality	Low DO Nitrogen supersaturation Thermal Minimum flows Nutrient concentrations / Contaminants	Water level manipulation / management practices that support quality fisheries	
Physical	Connectivity	Barriers upstream Migration barriers created by dam	Fish passage Fish passage	Barrier removal or installation of fish passage
Physical	Material Recruitment	Lack of woody structure / habitat	Attract and produce more fish	Enhance or restore structure
Physical	Channel /Bottom Form	Shoreline Erosion Lack of suitable substrate Sedimentation	stabilize shoreline Optimize substrate composition for target spp Optimize substrate composition for target spp Optimize substrate composition for target spp	Implement shoreline management plan Enhance or restore structure Land use BMPs Dredging / excavation
Physical	Climate change	Thermal changes / spp range extension	Adapt to changing thermal profile	Manage for thermally resilient spp



Team 102 Framework

Dimension	Key Process	Impairment	Goals	Objectives / Guiding Principles
Biological	Energy flow	Undesirable spp Lack of prey Lack of primary production	Balanced fish community Annual recruitment of desired spp Good growth rates and mortality rates of desired spp	Control of invasive spp
	Climate change	Lack of recruitment of desired spp Changes in spp composition	Annual recruitment of desired spp Adapt to changing climate	Adapt to thermally
Biological	Plant community	Excessive exotic aquatic vegetation	Avoid fish kills and access issues Optimize physical habitat for target spp	Control excessive vegetation
		Lack of native aquatic vegetation		Enhance native plant community
Chemical	Water quality	Excessive nutrients	Improve water quality	Manage point source pollution
			Improve water quality	watershed BMPs for non-point sources
		Suspended sediments	Improve water quality	Riparian corridor restoration/protection
			Improve water quality	Watershed BMPs
		Deficient nutrients	Improve water quality	
		pH	Improve water quality	Watershed BMPs
Contaminants	Improve water quality	Watershed BMPs		
DO	Improve water quality	Watershed BMPs		



Team 104 Summary

Impairment	Class	Description 1	Description 2
Connectivity	Biological	Impeding the movement of fish	Allowing for the movement of fish
Connectivity	Chemical	Nutrient sink	
Connectivity	Physical	Impeding habitat access	
Material recruitment	Biological	Habitat loss	
Material recruitment	Chemical	Nutrient cycling	
Material recruitment	Physical	Loss of riparian habitat	Erosion/deposition (disruption of sediment transport)
Hydrology	Biological	Spawning success due to mistiming of withdrawls	
Hydrology	Chemical	Nutrient sink	Toxics, pollutants, contaminants
Hydrology	Physical	Change in elevations and downstream discharge	
Channel and bottom form	Biological	Distribution of fish in the water column (hypoxia)	Vegetation effect on spawning
Channel and bottom form	Chemical	Sequestration of chemicals	
Channel and bottom form	Physical	Sedimentation	Scouring
Water quality	Biological	Eutrophication	
Water quality	Chemical	Nutrient cycling	
Water quality	Physical	Stratification	
Energy flow	Biological	Trophic efficiency	
Energy flow	Chemical	Bioaccumulation	
Energy flow	Physical		



Team 108 Summary

Impairments:

1. Water availability

- *Climatic (climate change, drought, variability in climate)*
- *Competing Needs*
- *Operational*

2. Lack of fish passage. Fragmentation of habitat (including above reservoirs).

3. Invasive species

- *Potential impacts on food web*
- *Loss of public access due to risk of invasive species*

4. Altered Flow Regimes

5. Watershed Land use

6. Loss of In Water Habitat Complexity (woody debris, trees, bulkheads, shoreline alterations, dredging, sedimentation)

7. Vegetation

- *Excessive vegetation due to invasive species*
- *Native plantings*

8. Harmful Algal Blooms

9. Water Quality

- *Nutrients*
- *Bacteria*
- *Turbidity*
- *Temperature*



- *Dissolved Oxygen*
- *Contaminants*

Goals

- *Protect, restore, and enhance fisheries habitats in reservoir systems.*
- *It is not just fish. All fish and wildlife related recreation should be considered.*
- *Increase public access.*
- *Successfully classifying reservoirs across the country.*
- *Perform inventory and create a database.*
- *Improve water quality.*
- *Protect water quantity (water rights, allocation).*
- *Promote stewardship and ethics.*

Principles

- *We will address the complete system associated with the reservoir including the watershed, tailwater, etc. Any potential conflicts in goals should be resolved at the local project or AFWA regional level.*
- *We will work in cooperation with other partnerships.*
- *We will strive for conservation efficiency and avoid duplication of efforts with other partnerships.*
- *Decisions will be made using the best scientific information available.*
- *We will consider social, political and legal perspectives.*
- *We will operate with the understanding that different partners and agencies operate under different rules and missions.*
- *We will be involved with protection, enhancement and restoration.*
- *Many reservoirs could be improved through better management or habitat manipulations.*
- *Linkage between goals and actions would be helpful: Goals - Threats – Sources – Actions*



Team 112 Summary

Principles

Impairments and what is the goal – what are we trying to achieve?

- Guiding Principle: Focus on habitat, not fish communities as a metric for measuring success. However, eventually we must show a connection between habitat and fish and recreation/economic benefits.
- Guiding Principle: Measure fish habitat “quantitatively” and fish populations “qualitatively.”

Impairments:

1. Connectivity/Fragmentation

Within the reservoir – fish and angler use of the reservoir is limited by sedimentation and flow problems within lakes. Migration of fish up-stream for spawning could be an issue (e.g. striped bass). Sometimes disconnect is important to keep invasive species from moving up-stream (carp). Connection to backwater areas could be important (crappie, sunfish, etc).

Goal: We want connectivity to maintain desired fisheries. Different needs for different systems.

Impairments vary by system type:

- 1) Upstream Dams
- 2) Sedimentation
- 3) Inflow Modification
- 4) Wetland loss
- 5) Shoreline Modification

2. Hydrology

Goal: Desire to manage water levels to achieve or maintain desired fisheries/habitat conditions (within environmental limits).

- 1) Hydrograph changes (daily, seasonal, annual) “within reservoir”
- 2) Hydrograph changes (daily, seasonal, annual) “downstream”



3. Shoreline, channel, and Bottom form (physical habitat)

Goal: Desire to manage physical habitats to achieve desired fisheries

- Sedimentation
- Woody debris/habitat structures
- Aquatic vegetation
- Dredging
- Shoreline modifications
- Integrity of remaining floodplain (upstream portion of reservoir)

4. Material Recruitment

Goal: Desire to manage material recruitment to achieve desired fisheries

- 1) Nutrient Inflow
 - Point source (too much or too little)
 - Non-Point source (too much or too little)
- 2) Sediment inflow
- 3) Woody/Other debris

5. Water Quality

Goal: Desire to manage water quality to achieve desired fisheries

- Suspended sediment
- Dissolved Oxygen
- Physical/Chemical
- Contaminants
- Fish Advisories
- Harmful algae
- Fecal coliform bacteria

6. Energy Flow

Suggestion: If we address abiotic impairments above then fish ARE addressed, except for invasive species. Energy flow is really covered in the other impairments



Day 1 Subteam Discussion Summaries

Should impounded lakes be included in the partnership's working definition of reservoirs; or, should only some impounded lakes be included?

Team 104

Yes, scope reduction to make management easier

Team 108

Yes Lakes may fit into the partnership in certain situations. The further the hydrology of a natural lake is affected by man-made manipulation, the greater the likelihood that it would fit in the partnership

Team 102

Reservoir Definition for RFHP - A manmade water body 500 acres or larger at conservation pool formed from the impoundment of public trust resources that provides public access to anglers and supports or has the potential to support a sport fishery

Team 112

Definition: Impounded bodies of water, excluding lock and Dam systems that are used primarily for navigation and are less than 200 acres. Impoundments to raise water level in natural lakes should not be considered for this.

If so, what would be the Criteria?

Team 104

*Reservoirs are waters where water control structures are employed
Project prioritization should be based on*

- AFWS regional level*
- Most “bang for the buck”*
- Broad Based*



– No balance toward regional size

Team 108

The group acknowledged potential overlap with other partnerships and would likely not include lakes already covered by another partnership

What, if any, minimum size/area requirements should the partnership adopt to classify an impounded body of water as a reservoir for the purposes of the partnership?

Team 104

Minimum of 500 acres; No max

Team 108

Initially, it's better to err on the side of being too large due to the number of reservoirs across the country

We recognized a significant amount of recreation/angling occurs on smaller lakes and some adjustments to the size may be made over time as experience is gained

Team 102

EPA 10 acre minimum

Team 112

Multi-use lakes, over 200 acres, will likely be the priority for biologists/states to do projects



What, is the “best” reservoir classification system for the partnership and why?

Team 102

We should have separate classification systems - (1) classification that describes/categorizes reservoir types (ecoregion, physicochemical, morphometrics, purposes/uses); (2) an assessment tool that evaluates health; and (3) a prioritization system that includes socioeconomic variables (angler use days, harvest)s

Team 104

*BEST = the one that allows for standardization “apples-to-apples” comparison at a national level
Must be broad, flexible and have a high probability of success*

An example project could be installation of structure which could be done for \$100k

Team 108

The goals of the partnership should be identified and be used to develop the classification system.

Goals of the partnership may include enhancing recreational fishing on reservoirs and restoring or protecting species in decline.

What does success look like (more fish, improved vegetation, recreation, secure water availability / rights for recreational species, etc)? A one size fits all classification system likely won't meet all of our needs. We may need to consider a scalable classification system or multiple systems. The type of classification system developed will be dependent on the purpose or usage of it.

Some reasons for classification include:

- *Required for strategic plan,*
- *Transfer of knowledge and management practices across areas,*
- *Communication / common vocabulary*
- *Prioritization of Funding*
- *Measuring success*
- *Additionally, a classification system that rolls up into a simple score may not be effective to address some of the needs for a classification system.*



Team 112

We developed our own classification system:

- *Classification plan/data available? (bullets=kinds of data):*
- *EcoRegions/OK*
- *Size (surface area)/OK (as general rule)*
- *Mean Depth*
- *Shoreline Development Ratio – preferred captures littoral areas*
- *Trophic status/OK (as general rule)*
- *To be determined – see Steve’s list for options Impairment type*
- *Nutrient impaired/OK*
- *Sediment impaired/OK (often qualitative)*
- *Lack of Aquatic macrophytes/woody structure/OK*
- *Contaminants/OK (some data, incomplete in west, vary by size)*
- *Invasive plants/OK (presence or absence)*
- *Water level fluctuations/OK (could be a challenge on small lakes 200-500A).*

Advantages?

Team 104

Size variable by AFWA Region

Team 108

- *It would be something that the Board would recognize would fit the model of what they are looking for in a classification system and fulfill that requirement.*
- *It would give you a number that could be used as a metric to measure success, but it may not necessarily be effective.*
- *It could be used to prioritize funding, but there are some issues with boiling the system down to a number to do prioritization.*
- *The proposed classification system fits in nicely with the Science and Data committee, but not sure how helpful it will actually end up being.*
- *The proposed system includes a scoring system rather than being just a classification system. We should be concerned with developing a score and being too married to it as different classification systems and measures will likely be devised in different situations and in different locations.*



Data Needed?

Team 104

- ***Landscape & Reservoir***
- ***Biota should be included but recognize we are not dealing with a pristine system***
- ***Projects that are good for sportfish should be good for native species in need of recovery or conservation***
- ***We need to define subcategories (metrics) that will define impairments***
- ***We need additional categories to the Miranda model that include***
 - Benefits
 - Definition of impairments
 - Beneficial use

Team 108

Ideally, the classification system should not require a lot of new data collection

Components include

- Reservoir Purpose
 - Economic Value
 - Recreational Usage Level
 - Management/Ownership
 - Public Access
 - Regulatory Issues
 - Size of Reservoir
 - Fishery Typology
 - Morphometry
 - Topography
 - Fish Communities relating to T&E Species
 - Important recreational or commercial species
 - Hydrology (not just residence time, but also watershed size, dam release, operations, age of reservoir, trophic status, urbanization/land use, downstream effects)
 - Systems,
 - Climate change
 - Predications, etc
 - We recommend devising a classification system that incorporates those elements
- Another Consider for classification system is identifying future threats over the coming years (diseases, competition for water, invasive, climate change effects)



Notes

102 Notes

(A.) Should impounded lakes be included in the partnership's working definition of reservoirs; or, should only some impounded lakes be included – is so, what would be the criteria?

Impounded lakes should have either been a river or watershed. So no, impounded lakes should not be included. Enhanced natural lakes or oxbows should not be included.

Working definition:

- o Manmade with dam*
- o Impounded stream or river*
- o Dam public trust resources*
- o Public access*
- o Sport fishery – is already or has potential to be a fishery?*
- o The RFHP should focus on 500 acres or larger; RFHP would focus funding on larger lakes; this would free up funding for smaller lakes (community fishing lakes, city lakes)*
- o Minimum size – Conservation pool? Recreation pool?*
- o a SARP could pick up other water bodies that are excluded (natural lakes, oxbows)*
- o Some natural lakes that are managed may be excluded*
- o Should private lakes be included?*
- § Public ownership, public access, publicly managed – should these criteria be included in definition?*
- o What is our focus? We have limited resources. We want to prioritize where to put funds to support fisheries. Water quality metrics and other measures of system health need to be included that would tie to fisheries.*
- o TNC has a partnership with state and federal agencies – focus is on downstream portion of system to address threatened and endangered spp*
- § Is the focus on reservoir proper or the watershed / river system?*
- o If 200-acre minimum, that includes 5,000 to 6,000 reservoirs (national inventory of dams)*
- o 200, 250, 500 all recommended as options*



- o *Are there many 200 to 400 acre reservoirs?*

Reservoir Definition for RFHP - A manmade water body 500 acres or larger at conservation pool formed from the impoundment of public trust resources that provides public access to anglers and supports or has the potential to support a sport fishery.

B.) What, if any, minimum size/area requirements should the partnership adopt to classify an impounded body of water as a reservoir for the purposes of the partnership?

- *Should there be a minimum?*
- *EPA – 10-acre minimum*
- *Most angling occurs on large impoundments; to obtain grassroots support from anglers/public, we should focus on large impoundments*
- *Smaller urban reservoirs may be hit hard by anglers; should they be included?*
- *Should there be a maximum? No*
- *45% of angling occurs at 1782 federal reservoirs (50 acres or more)*
- *75,000 dams in the US*

(C.) What is the “best” reservoir classification system for the partnership, and why? In answering this, address these three points:

(1) What are the advantages of the selected classification system for the partnership?

- *Each state can provide a short list of criteria that are most important; priorities for protection must be set; the classification system must measure change (improvement, decline); impairment measures might be important for this reason;*
- *Are there some that can be removed from Steve’s proposed list?*
- *Something like Steve’s proposed classification provides the level of detail needed*
- *IA based their system on water clarity in order to be explainable to public; is this valid?*
- *Steve – specific impairment types could be included under properties in Steve’s classification system*



- *Could develop a sort of a key that would ask higher level questions that would lead to more specific questions to categorize/classify reservoirs*
- *Use/purpose should be included in the classification system*
- *Action plan to protect, restore and enhance fish and aquatic resources*
- o *What reservoirs are we going to seek to protect, restore or enhance fisheries?*
 - *If focus on sport fishing, then metrics should include measures of angler use, e.g., angler days, harvest, etc*
 - *Topics: consider variables that impact fisheries potential but acknowledge authorized purpose;*
- o *Minimum # of variables that predict fishery potential*
- o *Social management issues*
 - *USACOE reservoirs focused on flood control; BLM created to irrigate crops*
 - *Classifications:*
- o *Physicochemical/morphometric variables classify reservoirs*
- o *Socioeconomics/use of system justify tiers of classification*
- o *Include primary use at category level (in Steve's classification), and primary recreational value*
- o *Classification, assessment and prioritization are separate issues that need to be defined*
 - *Classification*
- o *Must address water quality, water volume*
- o *Needs to include evaluation criteria that gets at likelihood of restoration/enhancement success*
- o *If you know health but need to modify, might be able to lump reservoirs based on the preferred endpoint*
- o *We should have separate classification systems – (1) classification that describes/categorizes reservoir types (ecoregion, physicochemical, morphometrics, purposes/uses); (2) an assessment tool that evaluates health; and (3) a prioritization system that includes socioeconomic variables (angler use days, harvest)*



- o *For initial classification, could separate by ecoregion, then further separate by primary purposes (get at limitations, includes jurisdictional oversight)*

(2) What kinds of data are needed to accomplish it?

(3) Is that data readily available – and from where?

*Identify individual to summarize and report breakout group recommendations and findings
Thursday morning*

104 Notes

- *Scoring should be addressed later. We should be focusing on categorizing criteria development*
- *Regionality may be picked up in scoring*
- *Data related to two categories (landscape and reservoir) can be readily gathered in most states*
- *Classification of some sort is needed to adapt RFHP efforts long-term to make effective use of limited funding*
- *Need definitions of landscape. Is it geomorphology?*
- *Impairment covers quite a bit*
- *Limiting categories to landscape and reservoir may miss some important evaluation criteria*
- *We can't fight with other HP efforts and argue over focus, we are working toward the same goal - habitat improvement in a watershed*

112 Notes

- *Consider including all types (hydropower and navigation) because all types probably have some opportunity for habitat improvement projects (sloughs and backwaters) - might be a lower priority however.*
- *Maybe we should be looking at the size of the watershed and the number of lakes in that watershed for deciding if smaller lakes (<200 acres) should be included.*
- *Big question - what are we losing by going to less than 200 acres as a lake size criteria?*
- *There is a difference between pond and lake management.*
- *Takes lots of resources for relatively small impact (use)*
- *Could always expand limits below 200 if conditions require it*



- *Make stringent now - broaden scope later*
 - *Having too many lakes makes it hard to prioritize for funding.*
 - *Multi-use lakes, over 200 acres, will likely be the priority for biologists/states to do projects*
 - *Establish categories and then rank priorities within categories!*
 - *Which is best given needs or data availability?*
 - *Geographical based typing - eco-regions was suggested - by Mike.*
-
- *To be determined - see Steve's list for options*
 - *Impairment type*
 - *Nutrient impaired/OK*
 - *Sediment impaired/OK(often qualitative)*
 - *Lack of Aquatic macrophytes/woody structure/OK*
 - *Contaminants/OK (some data, incomplete in west, vary by size)*
 - *Invasive plants/OK(presence or absence)*
 - *Water level fluctuations/OK (could be a challenge on small lakes 200-500A).*



Participants

Name	Org	Email
Tyler Abbott	U.S. BLM	tyler_abbott@blm.gov
Damon Abernethy	AL Wildlife & Freshwater Fisheries	Damon.Abernethy@dcnr.alabama.gov
Jason Albritton	The Nature Conservancy	jalbritton@tnc.org
Bill Ardren	USFWS Region 5	william_ardren@fws.gov
Mike Armstrong	Arkansas Game and Fish	mlarmstrong@agfc.state.ar.us
Doug Beard	USGS	Dbeard@usgs.gov
Darren Benjamin	USFWS Region 9	Darren_Benjamin@fws.gov
Tim Birdsong	Texas Parks & Wildlife	timothy.birdsong@tpwd.state.tx.us
Jeff Boxrucker	OK Department of Wildlife Conservation	jboxrucker@odwc.state.ok.us
Bruce Brown	U.S. BLM	bbrown@usbr.gov
Tom Busiahn	USFWS Region 9	Tom_Busiahn@fws.gov
Stephanie Byers	USFWS Region 1	Stephanie_Byers@fws.gov
Richard Christian	USFWS Region 9	Richard_Christian@fws.gov
Bob Curry	NC Wildlife Resources Division	robert.curry@ncwildlife.org
Janet Cushing	USGS	jcushing@usgs.gov
Phil Durocher	Texas Parks & Wildlife	Phil.Durocher@tpwd.state.tx.us
Christopher Estes	Alaska Fish & Wildlife	Christopher.Estes@alaska.gov
Terry Foreman	California Department of Fish & Game	Tforeman@dfg.ca.gov
Don Gablehouse	Nebraska Game and Parks Commission	don.gablehouse@nebraska.gov
Jaime Geiger	USFWS Region 5	Jaime_Geiger@fws.gov
Gene Gilliland	BASS	ggilokla@aol.com
Jay Haffner	AL Wildlife & Freshwater Fisheries	Jay.Haffner@dcnr.alabama.gov
Scott Hale	Ohio DNR, Division of Wildlife	scott.hale@dnr.state.oh.us
Leslie Hartsell	USFWS Region 9	Leslie_Hartsell@fws.gov
Jim Hedrick	West Virginia Division of Natural Resources	jimhedrick@wvdnr.gov
Vern Herr	Group Solutions	Vherr@groupsolutions.us
Karl Hess	USFWS Region 9	Karl_Hess@fws.gov
Chris Horton	BASS	Christopher.M.Horton@espn.com
David Houser	PA Fish and Boat Commission	dhouser@state.pa.us
Mark Hudy	USDA Forest Service	hudymx@csm.jmu.edu
Stewart Jacks	USFWS Region 2	Stewart_Jacks@fws.gov
Robin Knox	WNTI Fish Habitat Partnership	wnti.rknox@wispertel.net



National Fish Habitat Plan
Roadmap to Fish Habitat Partnership

Steven Krentz	USFWS Region 6	Steven_Krentz@fws.gov
Carlton Layne	Aquatic Ecosystem Restoration Foundation	LAYN1111@bellsouth.net
Cecilia Lewis	USFWS-SCEP/Michigan State University	ceciliamlewis@gmail.com
Jeffrey Lucero	U.S. BLM	jlucero@usbr.gov
Ron Marteney	KS Department of Wildlife and Parks	ronm@wp.state.ks.us
Gary Martel	VA Department of Game & Inland Fisheries	gary.martel@dgif.virginia.gov
Mike McGhee	Iowa Department of Natural Resources	Mike.Mcghee@dnr.iowa.gov
Brian McRae	NC Wildlife Resources Division	mcraebj@nc.rr.com
Steve Miranda	USGS/Mississippi State University	smiranda@cfr.msstate.edu
Lisa Moss	USFWS Region 5	lisa_moss@fws.gov
Doug Nygren	Kansas Department of Wildlife and Parks	dougn@wp.state.ks.us
Michael Odum	USFWS Region 5	Michael_Odom@fws.gov
Kenneth Ostrand	USFWS Region 1	Kenneth_Ostrand@fws.gov
Ben Page	PA Fish and Boat Commission	bepage@state.pa.us
Paul Pajak	USFWS Region 5	paul_pajak@fws.gov
Steve Perry	NH Fish & Game/EBTJV	stephen.perry@wildlife.nh.gov
Ron Regan	AFWA	rregan@fishwildlife.org
Ryan Roberts	NFHAP	rroberts@fishwildlife.org
Scott Robinson	SARP Fish Habitat Partnership	scott_robinson@dnr.state.ga.us
Jeff Ross	Kentucky Fish & Wildlife	jeff.ross@ky.gov
Katherine Smith	NOAA	katherine.smith@noaa.gov
Patrick Solberger	Nevada Department of Wildlife	psolberger@ndow.org
Albert Spells	USFWS Region 5	albert_spells@fws.gov
Mike Stempel	USFWS Region 6	mike_stempel@fws.gov
Norm Stucky	Bass Pro Shops	npstucky@aol.com
John Sweka	USFWS Region 5	John_Sweka@fws.gov
Ellen Tarquinio	EPA	Tarquinio.Ellen@epamail.epa.gov
John Taylor	Texas Parks & Wildlife	john.taylor@tpwd.state.tx.us
Dave Terre	Texas Parks & Wildlife	dave.terre@tpwd.state.tx.us
Stan Todd	Arkansas Game and Fish	stodd@agfc.state.ar.us



National Fish Habitat Plan
Roadmap to Fish Habitat Partnership

Tim Toplisek
Craig Walker

U.S. Army Corps of
Engineers
Utah Division of Wildlife

Timothy.R.Toplisek@USACE.Army.Mil
craigwalker@utah.gov

Andrew Warner
Lils Borge Wills

The Nature Conservancy
Virginia Tech

awarner@TNC.org
lborge@vt.edu