

PACFISH/INFISH FIELD REVIEW
Beaverhead – Deerlodge NF
October 2007

Field Review Team Members

If you have comments and questions, please contact: Dorothy Mason,
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Review Team Member

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General Field Review Objectives

1. Determine if the Biological Opinions have been implemented in accordance with the mechanisms, terms and conditions.
2. Determine if on-the-ground management decisions are consistent with the Biological Opinions, and PACFISH and INFISH Goals and Objectives.
3. Determine if PACFISH and INFISH Standards and Guides have been correctly interpreted and implemented on the ground.
4. Determine if grazing implementation monitoring activities have been evaluated to eliminate duplication between the PACFISH/INFISH Grazing Implementation Monitoring Module and other grazing implementation monitoring activities.
5. Improve communication and coordination between agencies. Strengthen interagency commitment to watershed management under the management direction of PACFISH/INFISH.



FINDINGS

Commendation: The Forest did a good job of organizing the field review. The format in which broad subjects (acquisition, forest practices, range) were divided into 3 separate days was helpful to the review.

Commendation: Participation by Forest leadership and the Regional Office was important to the review.

Commendation: Inclusion of the riparian buffers (1 tree height + SMZ) in the proposal to harvest additional acres in the acquisition property was innovative and consistent with the goals of INFISH.

Commendation: The continued application of INFISH, the Forest Plan restoration strategy, and the focus on cooperative, inter-agency fish habitat protections and restoration are commendable. The use of stewardship programs to restore fish habitats is innovative and helpful to replacing budget shortfalls.

Commendation: The Forest Plan prioritizes fish habitat and watershed restorations and the Forest emphasizes fisheries restoration as a priority.

Commendation: The Forest appears to be doing a good job of implementing the Aquatic Framework of the Interior Columbia Basin Strategy.

Commendation: There has been improvement in the implementation of INFISH standards and guidelines when compared to what was observed in the 2001 Review.

Commendation: Grazing changes have likely resulted in improvements to important bull trout habitats (e.g. Middle Fork Rock Creek)

Commendation: BLM's use of MIM is a good way to evaluate grazing impacts in an objective and defensible manner. MIM reduces bias and provides for evaluation of multiple indicators to effectively evaluate management implementation and effectiveness. The use of the field data recorder is an excellent way to minimize sampling bias and to save time in data handling.



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OBSERVATIONS AND PRELIMINARY RECOMMENDATIONS

I. Warm Springs Creek property acquisition (Handout). Summary: 23,500 acres purchased in 3 phases beginning from 2001 through 2003. The property includes headwater tributaries that contain the most important bull trout populations in the Upper Clark Fork recovery Sub unit. Abundance of bull trout is between 50 and 250 adults, certainly below desired levels. Both resident and migratory bull trout have been documented within the Warm Springs watershed. The streams within the area of the acquisition contain spawning and early rearing habitats for bull trout in the system. These populations are currently fragmented/isolated by mostly diversions and culvert barriers to migration. Some of the streams are listed 303d for flow alteration, siltation, habitat modification, and metals contamination. The acquired lands have been heavily roaded and harvested for timber production. The most important factor influencing viability of bull trout is likely the lack of connectivity to adult rearing habitats. Many of the ditch diversions are not permitted and none have undergone consultation.



INFISH Standards and Guidelines: “For each existing...road: meet the riparian management objectives and avoid adverse affects to inland native fish by: ..Implementation of a road management or transportation plan, avoiding sediment delivery to the stream from the road surface, and avoiding disruption of natural hydrologic flow paths. Improve existing culverts to...accommodate a 100 year flood. Provide and maintain fish passage at all road crossings.” (RM)

“Use land acquisition, exchange, and conservation easements to meet Riparian Management Objectives and facilitate restoration of fish stocks and other species at risk of extinction.” (LH4)

“Where the authority to do so was retained, adjust existing leases, permits, rights-of-way, and easements to eliminate effects that would retard or prevent attainment of the Riparian Management Objectives or adversely affect inland native fish.” (LH)

Observation: With acquisition of the property, there has not been a legal review of the discretionary authority of the FS to adjust existing permits or develop new permits for the ditches.

Recommendation: Investigate the State's allocation of water rights in the drainage.

Observation: For the segment we traveled, we observed a number of road sediment drainage reduction opportunities on the Storm Lake road. These were often opposite the stream on the uphill side of the road, but some were in vegetated flats adjacent to the road on the stream side where vegetation would accomplish sediment filtering.

Recommendation: It may not be necessary to spend limited funds on paving if road drainage can be re-designed to accomplish the same objective. This would expand the use of road mitigation funding for other projects in the basin.

Observation: There was a discussion regarding the impacts of road maintenance and road management and the inability of the Forest to manage and maintain roads. Roads have been a focus of restoration in the Biological Opinions.

Observation: There was a discussion about the use of streamlining consultation in this area.

Recommendation: Level I consultation covers both ongoing and new actions in a programmatic format. Updating the baseline for this consultation, in a timely manner has been problematic. Consequently the Forests and BLM are likely implementing actions not covered under the programmatic. Actions under this project; barrier restoration, travel management actions, etc. may not be covered by the programmatic. A new consultation should be pursued with respect to the proposal covering all discretionary actions.

Recommendation: It would be good to develop a long-term strategy for water uses in the watershed, in coordination with local agencies and the State.

Recommendation: Initiate discussions with the municipality, the Butte-Silverbow water *district?* about the possibility of leaving water in the channel in off-season periods. There may be opportunities to restore some streamflow during critical periods of bull trout migration.

Recommendation: With respect to the brook trout issue, the Fausch-Rieman synthesis of risk from invasive species could be used (Fausch, C., B. Rieman, J. Dunham, and M. Young. 2006. Strategies for conserving native salmonid populations at risk from nonnative invasions: tradeoffs in using barriers to upstream movement. USDA Forest Service, Rocky Mountain Research Station, GTR-RMRS-174, Fort Collins, CO.). This assessment would help to determine where the greatest concerns occur, the role of habitat, the effect of re-connection, and other issues associated with invasive salmonids.

Recommendation: Initiate a legal review of ditches/diversions both for existing water rights and potential access authorization on the part of the FS. Clarifying these conditions would help inform planning for ditch mitigations, including instream flows, fish passage, and fish screening needed at the diversion structures.

Recommendation: The restoration plan developed for this area should be consistent with the draft bull trout recovery plan. This may include a programmatic consultation as part of the plan.

Recommendation: With respect to the road sedimentation mitigations, the GRAIP model would be an excellent tool for identifying road segment restoration priorities. This model is specifically designed to assess watershed condition, cumulative effects, priorities for treatment, and Treatment/BMP effectiveness. The GRAIP package includes the entire process from data collection to analysis and mapping. It requires a 2 person crew, Sub-meter GPS unit, Vehicle, Laptop and the software.

The URL for this model is: <http://www.fs.fed.us/GRAIP/index.shtml>

II. Basin Creek hazardous fuels reduction



Observation: The use of Stewardship projects to restore fish habitats and watershed conditions was discussed. As a municipal watershed, sediment is an important issue in this area. The salvage sale implemented INFISH standards and guidelines and was designed to avoid sediment generation. Roads are temporary and out of the RHCA.

Observation: A portion of the road entered the RHCA of an adjacent wetland. The site-specific analysis and rationale for entering the RHCA was documented. In the case of a wetland, fish habitat objectives (RMO's) don't apply. So the determination of management within the RHCA must go back to the basic intent of RHCA management in INFISH: "Where riparian-dependant resources receive management emphasis." This necessitates evaluation of achieving goals and objectives for riparian-dependant resources as stated in the INFISH goals. Specifically:

“Habitat to support populations of well-distributed native and desired non-native plant, vertebrate, and invertebrate populations that contribute to the viability of riparian-dependent communities.” And “natural timing and variability of the water table elevation in meadows and wetlands.”

Recommendation: Since the road is temporary, the Forest might consider restoring the portion of the road within the RHCA to the original soil conditions conducive to establishment of hydric vegetation important to riparian-dependant resources. Monitoring of the road, both before and after road use, is suggested to evaluate the effectiveness of road mitigations associated with the slash filter windrows.

Observation: There was a discussion about those instances where locating roads within the RHCA are lower in risk to RMO’s than having the road outside the RHCA on a steep slope where steep cuts and fills might be needed.

Recommendation: Construction of roads within the RHCA must meet the RMO’s as required by the Standards and Guidelines. The site-specific or watershed analysis in this case must focus on the effects of the road location on the riparian resources and RMOs and assure that they are attained.

Observation: There was a discussion on the issue of improper RHCA delineation. In some cases, RHCAs boundaries were not properly located mostly because of the misunderstanding on the part of field crews.

Recommendations: Rather than depend upon the fish biologist and hydrologist to delineate all boundaries, it would be preferable to designate field personnel for this purpose and provide training. Fish biologists and hydrologists should periodically audit RHCA boundary delineations to check the accuracy of field crews.

III. Hazard tree removals

Observation: Hazard tree removals were observed within the RHCAs of Blacktail Creek. The team observed a lot of hazard tree removal within the RHCA along the county road. The INFISH standard is:

“Trees may be felled in Riparian Habitat Conservation Areas when they pose a safety risk. Keep felled trees on site when needed to meet woody debris objectives” (RA-2)

There was concern on the part of the team that the observed treatment along the highway is not consistent with the INFISH standard. Questions: Were any of the treatments along the highway on NFS lands? Answer: No So the Forest basically had no discretion. However, along a side road there was a section of harvest across the RHCA. Some trees were marked to be left for LWD, but most were removed. This may be a violation of the INFISH standard if woody debris objectives were not met. In any case, the rationale for the modification must be clearly analyzed and reported.

Observation: It appeared that hazard tree removals and other kinds of timber harvest are being used to generate revenue to accomplish restoration activities, as described at the Archery Range road. Because the roads are so often adjacent to the stream network, this necessitates removing trees and LWD to accommodate the timber sale.



Recommendations: We recommend that the Forest analyze hazard tree removals more intensively before removing substantial amounts of wood from RHCA's. This is consistent with the intent of INFISH. Removing hazard trees for commercial purposes is more than just hazard tree removal. The requirement for commercial harvest where riparian conditions are degraded (trees are dying) is:

“In degraded riparian conditions, allow salvage and fuelwood cutting in Riparian Habitat Conservation Areas only where present and future woody debris needs are met, where cutting would not retard or prevent attainment of other Riparian Management Objectives, and where adverse effects can be avoided to inland native fish.” (TM-1a)

Modification of RHCA widths requires “...stream reach or site-specific data to support the change. In all cases, the rationale supporting RHCA widths and their effects would be documented.”

Likewise, the rationale for hazard tree removals and salvage of dead and dying trees (essentially why the woody material should not remain in the RHCA) should be documented.

IV. Road graveling and road crossing barrier removals

Observation: We observed that, typical to granitic geologies, fine sediments are elevated in these watersheds. The natural levels of fines in the substrates of Blacktail Creek, however, are unknown. Fine sediments may or may not be elevated above background levels depending upon the significance of fine sediment delivery from road-related disturbances relative to natural sources. In this case an RMO for fines is needed and the baseline condition evaluated with respect to the RMO. The RMO's are the basis upon which INFISH standards consistency are determined.

Recommendation: Establish the fine sediment RMO for Blacktail Creek, determine fine sediment levels within the substrates of



the stream, and evaluate relative sources of fine sediment in the watershed. This could be the focus of a watershed analysis in this area. The results would inform future road restoration priorities and could be used to provide rationale for RHCA and S&G variations in this drainage. The Montana Department of Environmental Quality should be contacted to determine if they have established a reference in the boulder-batholith. Also check to see if there is a PIBO reference site in that area.

Observation: Culverts appear to be generally undersized in this watershed. Evidence of this was culvert entry blockage observed at several stream crossings.



Recommendation: INFISH requires that any new stream crossing be designed to: “accommodate a 100-year flood, including associated bedload and debris.” (RF-4) And to provide for fish passage (RF-5). The stream-simulation design is a good approach to achieving these requirements (stream-simulation = crossing width equal to or greater than the active channel width.)

Observation: We observed a number of road segments experiencing severe erosion with associated fine sediments being directly delivered to streams.

Recommendation: Road restorations in this watershed should seek to disconnect road drainage from streams, or harden the road and ditch surfaces to avoid erosion (as was done on the Archery Range road). The GRAIP (Geomorphic Roads Analysis and Inventory Package) model suggested above, is recommended for assessment in this watershed. Model outputs would provide the information needed to determine the primary sources of road sediment and allow setting restoration priorities.



Observation: Sanding the main road appears to be a significant source of fine sediments. Road-side berms often concentrate and direct road discharge and sediment to points that have direct access to the stream.

Recommendation: Silt fences could be used to filter these sediment sources. The Forest could work with the county to install and maintain sediment filters adjacent to the road. Redesigning the road drainage to discharge road runoff into

vegetative filters would also be effective. Particular attention to sediment controls at stream crossings, as proposed at the Thompson Park, would be important.

V. Redd trampling study.

We discussed a redd trampling study and the conclusion was that releasing the results may be controversial.

Recommendation: Prior to or concurrent with the release of the trampling study findings, we recommend that the results be published through a thoroughly peer-reviewed publication.

VI. Level 1 Team:

Observation: L1 was involved in development of programmatic consultations, which are fundamental to the approach on the Forest. This causes a lowered effort on project-specific oversight. The FS has responsibility to report compliance and updated environmental baselines. Any project under the programmatic BA does not need additional concurrence. There is a yearly reporting requirement in which the Forest reports what was done under the programmatic BA. With Forest Plan revision, the Forest is working on updating the environmental baselines. If a project is not under the programmatic, the District biologist works directly with the F&WS to complete consultation outside of the Level 1. Level 2 does not meet regularly so there has been limited oversight. Essentially streamlining is not fully implemented here. There has not been a L2 meeting for at least 2 years. They don't have a charter for the L1 team. The Line Manager Certification report is filled out at the Forest Level and then it is submitted to the F&WS for review. The LMCR is compiled through the Regional Office. Level 2 does not meet to complete the LMCR.

VII. Implementation monitoring

A. Scotchman Gulch (BLM). We went to Scotchman Gulch to view a DMA that was selected following the Implementation Monitoring Team's criteria. This DMA was located on Public lands administered by the Missoula Field Office of BLM. Present were the ID Team and Manager: Jo Christensen, fishery biologist, Steve Flood, hydrologist, and Steve Bell, range conservationist; and Nancy Anderson, field manager,



Observation: BLM does not do PIBO monitoring in this area because Scotchman Gulch is a cutthroat trout stream. Scotchman Gulch is a tributary to a bull trout stream, but the effect of the grazing may not be relevant to bull trout. However, the applicability of INFISH is relevant if bull trout occur within the 6th field HUC, even if they don't presently occupy this stream. Scotchman Gulch is in HUC 170102020601 which encompasses upper Willow Creek and Minor's Gulch. BLM is monitoring here to address cutthroat, a Montana species of special concern and has been petitioned for

federal listing in the past. It was not apparent if there is a riparian management objective for shrubs. Shrubs were found to be lacking and over-grazed. Bank alteration and stability also did not appear to be in compliance.

Recommendation: Achieving riparian management objectives should be a priority for special status species. We recommend that the BLM work with the permittee, aggressively to continue to implement allotment triggers and achieve good habitat conditions for cutthroat trout, and potentially bull trout. This will require quantifying the long-term objectives for woody species, bank and channel stability, and ecological status of the riparian vegetation.

Scotchman Gulch occurs within a HUC that contains bull trout, therefore the Scotchman Gulch unit is a Category I pasture use area. By definition, a Category I pasture use area is: “**Module Category I:** All USFS/BLM projects that are associated with any RHCA that occurs entirely or partially within a 6th field HUC/subwatershed containing ESA-listed fish species (salmon, steelhead, bull trout) or designated or proposed critical habitat.” (Implementation Monitoring Program Manual, July 1, 2003). We also note that this HUC was chosen by PIBO for monitoring. The DMA on Scotchman Gulch should be provided to PIBO for effectiveness monitoring. Data collected here should be entered into the IM Monitoring Database.



Observation: The nearby exclosure, which has been in place for 2 years, appears to have a rather dramatic rate of recovery. The exclosure helps to separate the impacts of grazing from wildlife on the stream. The exclosure appeared to have good wildlife accessibility. A comparison of conditions at the DMA with those inside the exclosure will help to determine if management is achieving or moving towards attainment of the RMOs.

Recommendation: The exclosure is an excellent management tool, particularly in areas of potential controversy. We recommend that it be retained for the long-term and monitored in comparison to the DMA to evaluate grazing versus natural disturbance effects. In addition, the exclosure can be a good education tool.

Observation: The permittee was concerned that the DMA is not representative of the whole pasture.

Recommendation: The riparian complex chosen for monitoring is necessarily among the more sensitive to grazing, so that monitoring can more effectively detect change. It might be helpful to occasionally monitor within the other, less sensitive riparian complex in the pasture to evaluate overall conditions, however it is important to recognize that the meadow complex is the most critical for cutthroat trout and therefore must be used as the

selection for the DMA and to accommodate application of riparian management measures.

B. MF Rock Creek – Moose Lake DMA

Observation: This area contains a significant component of bull trout in the Rock Creek drainage and the highest densities of BT spawners on the Forest. Many grazing management measures have been implemented to restore and protect these habitats. These result from a concerted effort on the part of local biologists and range staff to make it work and still allow livestock grazing. The area evaluated by the DMA is used by livestock for short periods while cattle are moving onto and off the allotment. The DMA is used to monitor grazing use compliance on stubble height and bank disturbance. Those who were here in 2001 observed that the area appears to have improved since the previous review. Unfortunately there has been no effectiveness monitoring in this pasture, so the level of recovery is not documented. This also means that the Forest cannot quantify the level of RMO recovery and whether or not RMOs have been attained.

Observation: This watershed was selected by PIBO for monitoring, but the Forest has not provided the DMA to the PIBO team for effectiveness monitoring. This year, PIBO went to the watershed to conduct monitoring at the integrator reach. They should also have sampled the grazing DMA at that same time to be in compliance with the monitoring strategy. The monitoring strategy under the Biological Opinion requires that the Forest do DMA monitoring wherever livestock access streams within a PIBO HUC. Of the 16 PIBO HUCS known to contain grazing adjacent to streams on the Forest, 9 are missing DMA's.

Observation: The Forest has not fully implemented the criteria for implementation monitoring at the DMA, as indicated in the responses to the monitoring questionnaire. Resolving these deficiencies would not require a lot of effort – include a photo and a UTM coordinate at the downstream end of the DMA.



Recommend: Establish a PIBO DMA at this location, in accordance with the Deputy Team directive, to evaluate future trends and to quantify local conditions with respect to achieving the RMOs. This applies to every PIBO HUC in which there is grazing on the stream(s). Any 6th field HUC selected by PIBO for monitoring, in which livestock have access to streams, need DMAs to be established for implementation monitoring by the local unit, and provided to the PIBO team for effectiveness monitoring.

Observation: Local requirements are that the DMA be visited every week, with bi-weekly reporting (required by the BO of 2002) after livestock enter the pasture.

Recommendation: The one week frequency may not be necessary in all cases. With limited resources available to monitoring, the FS should consider re-evaluating this requirement. Conditions vary by allotment and pasture, and this requirement should take local conditions into account. A BO amendment might be useful here. A re-prioritization of the allotments for monitoring might be made and discussed with the F&WS.

Observation: The Forest collects monitoring data for both INFRA and the IM Module. There are some overlaps in these databases.

Recommendation: See Deputy Team recommendations below

The Deputy Team should address these recommendations.

Road restoration continues to be an underfunded program. Road impacts are among the major causes of impact to listed species and water quality. We recommend that the Deputy Team make road restoration and maintenance funding a high priority task.

There is a need for continued training, particularly for new members of ID Teams, with respect to the details of PACFISH/INFISH, the Biological Opinions, and the monitoring strategy. There should also be a process/workshop to help managers understand what is required under the decisions/consultations. (where local training has been done, there has been positive results in terms of the effectiveness of implementing the opinions – the Forest Supervisor indicated that the review was very helpful in this regard)

There is a need to connect the IM Database to INFRA. This would provide much more information to the PIBO effort and make it easier for field personnel to report monitoring results in a one-stop effort. We recommend that the Deputy Team put together a task group to evaluate linking the Databases and to provide a single data entry module that facilitates populating both systems at the same time.

ATTACHMENT –



USDA Forest Service
Northern Region
Intermountain Region
Pacific Northwest Region



USDI Bureau of Land Management
Washington/Oregon State Office
Idaho State Office

Reply Refer To: 2670(FS)/6841 (OR-930) P (BLM)

Date: July 18, 2007

FS-Memorandum

EMS TRANSMISSION 07/18/2007
BLM-Instruction Memorandum No. OR-2007-071

To: Forest Supervisors: Regions 1, 4, 6
Bureau of Land Management District Managers: MT, ID, OR/WA
(with PACFISH or INFISH amended Management Plans or via BLM Letter of Direction)

Subject: Clarification of NMFS and USFWS 1998 Biological Opinion Requirements for Completing Watershed Analysis (PACFISH, INFISH) and Subbasin Assessments (PACFISH only)

In March 2007, the Interior Columbia Basin, Interagency Deputy Team agreed that an update to a previous clarification letter (July 29, 2004) that addressed implementation of the 1998 United States Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration Fisheries (NOAA) Biological Opinions was warranted. In 2004, the Deputy Team adopted the recommendation to leave in place the legal obligations from the 1998 Opinions for watershed analysis and subbasin assessments until Land & Resource Management Plans were amended or revised. Both the 1998 National Marine Fisheries Service (NMFS) and USFWS Opinions require the use of the 1995 Federal Guide (Version 2.2) for watershed analysis. Only the 1998 NMFS Biological Opinion, covering the 1995 PACFISH amendment to existing Forest Service (FS) and Bureau of Land Management (BLM) Land & Resource Management Plans, requires that one watershed analysis and one subbasin assessment each be completed per year on each administrative unit (National Forest, BLM District).

The purpose of this letter is to review the 1998 Opinion obligations related to watershed analysis and subbasin assessments, clarify their objectives, and provide options for meeting these requirements, including participation in development of salmon & steelhead recovery plans and continued oversight of plan implementation (attachment). We strongly encourage you to work with your counterparts in the streamlining process to develop both a schedule and list of priorities for completing watershed analyses, and where applicable, subbasin assessments.

Please refer to the enclosed attachment for the clarification as outlined above. If you have any questions or comments, please contact Linda Ulmer, FS and BLM Columbia River Basin Coordinator, at 503-808-2929.

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Attachment(s)
1 – Watershed Analysis (3pp)

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Eric Johnston FS, R1
Lee Jacobson FS, R4
Mike Crouse, NOAA-Fisheries
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Authenticated by:
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Records Section

ATTACHMENT 1

WATERSHED ANALYSIS

What is Watershed Analysis and what do the 1998 USFWS and NMFS Opinions require?

Watershed analysis is a procedure used to characterize the human, aquatic, riparian, and terrestrial features, conditions, processes, and interactions (ecosystem elements) within a watershed. It provides a systematic way to understand and organize ecosystem information. The 1998 USFWS (INFISH) and NMFS (PACFISH) Biological Opinions require use of the 1995 Federal Guide (Version 2.2) for watershed analysis. Only the 1998 NMFS Opinion requires each FS and BLM administrative unit to complete one per year.

What are the objectives of Watershed analysis and associated benefits to Line Managers?

- Evaluate cumulative watershed effects - watershed analysis enhances the ability to estimate direct, indirect, and cumulative effects of management activities
- Define watershed restoration needs, goals and objectives – provides guidance on the general type, location, and sequence of appropriate activities within a watershed.
- Monitor the effectiveness of watershed protection measures – iterative process for adaptive management feedback loop.
- Provide sufficient watershed context for understanding and carrying out land use activities within a geomorphic context – important tool used in meeting management objectives at larger scales

What is the appropriate methodology(s) for conducting Watershed Analysis?

As described in the 1998 Biological Opinions (NMFS, USFWS), administrative units should continue to rely on the 1995 Federal Guide for Watershed Analysis, Version 2.2. (rev. August, 1995) titled Ecosystem Analysis at the Watershed Scale¹ until FS and BLM Land Management Plans are amended or revised. EAWS or the Six-Step Process is a “tool box” of analytical methods and techniques designed to help address various aspects of watershed analysis and meet the aquatic goals and objectives described in PACFISH, INFISH, and requirements of the 1998 Opinions.

What are the Deputy Team’s Expectations for Line Managers for Completing Watershed Analyses?

- Each Forest Supervisor and BLM District Manager is responsible for completing one watershed analysis per year* until PACFISH is replaced through Plan revision or amendment {NMFS’s 1998 Opinion requirement to complete one subbasin assessment per year on each unit ONLY applies to National Forest and BLM Districts with anadromous fish where plans have been amended by PACFISH and the 1998 anadromous fish biological opinion is applicable}.
- Use an Interagency (states, tribes, public stakeholders as appropriate) and/or Interdisciplinary team, as appropriate.

- Although use of the 1995 Federal Guide is required for all watershed analyses, line managers will define the scope, intensity, and depth of analysis based on the complexity of the management or resource issue.

The 1995 Federal Guide provides line managers with the flexibility to focus the analysis as appropriate. Line managers, guiding a analysis, are responsible for balancing the number and scope of the issues addressed, dependent on available staffing and funding levels

We want to emphasize that watershed analyses can be a very simple and straightforward process taking a few days or weeks to develop or a complicated process. The complexity is intertwined with the issues and questions being addressed.

What can be used to meet this Watershed Analysis requirement?

Depending on the option selected below, results (watershed analysis, subbasin assessments, recovery plan) should be applied at the appropriate scale

Options*:

1. Completion of one watershed analysis per year² until PACFISH is replaced through Plan revision or amendment;
2. Update to an existing watershed analysis;
3. Technical staff participation in local forums for development of NMFS's 'domain' recovery plans. Specifically, providing accurate and timely current condition information for federal lands, and identifying limiting factors and future actions needed to meet {recovery} plan goals and objectives;

*Identification of the option (1-3) selected by the Line Manager and accompanying short narrative will be required to be documented in annual Deputy Team Line Manager Certification Reports.

SUBBASIN-SCALE ASSESSMENT (1998 NMFS Biological Opinion Only)

What is it?

A subbasin-scale assessment provides the perspective necessary to determine which watersheds should be prioritized for subsequent watershed analysis.

What are the objectives of Subbasin-scale assessments and associated benefits to Line Managers?

1. Provides an appropriate ecological and social (place-based) context for identifying priority watersheds for integration of multiple resource objectives, and the conservation and restoration of aquatic and terrestrial species and habitats. This objective is consistent with the Interior Columbia Basin Strategy (e.g., use of hierarchical analysis consistent with ICBEMP Science step-down process)
2. Development of goals and objectives that can be incorporated into action plans at the watershed scale. Provides a mechanism for identifying multiple resource goals and objectives that can be integrate, maximizing efficiencies at the watershed scale in planning and implementation
3. Enhanced linkage with other state and tribal assessment efforts at this scale, including the NW Power and Conservation Council's Subbasin Planning effort, in setting priorities across administrative boundaries for restoration of aquatic and terrestrial habitats needed for recovery of ESA-listed species.

What is the appropriate methodology(s) for conducting Subbasin Assessments?

NMFS's 1998 Opinion required that subbasin assessments adhere to defined protocols, mutually agreed upon by the USFS, BLM, and NMFS. Protocols identified in the 1998 Opinion (p.90) for subbasin assessments included (1) South Fork Clearwater River assessment methods and procedures , (2) procedures developed by Kerry Overton (FS-RMRS, Yankee Fork), or (3) other jointly agreed upon procedures: either 1) Level 1 or 2 team has agreed to an alternate procedure that meets subbasin-scale assessment goals and objectives; or 2) it is a process that has been developed for an individual NMFS 'domain' recovery planning effort to assess current condition, identify limiting factors, priority populations and {recovery} actions.

What are the Expectations for Line Managers in completing Subbasin Scale Assessments?

Each National Forest and BLM District Manager is responsible for completing one subbasin assessment per year¹² until PACFISH is replaced through Plan revision or amendment {NMFS's 1998 Opinion requirement to complete one subbasin assessment per year on each unit ONLY applies to National Forest and BLM Districts with anadromous fish where plans have been amended by PACFISH and the 1998 anadromous fish biological opinion is applicable}. For FY07 and beyond, Line Manager and technical staff participation in development and implementation of NMFS 'domain' recovery plans meets this requirement. If completing a Subbasin Scale Assessment, use an Interagency (states, tribes, public stakeholders as appropriate) and/or Interdisciplinary

team, as appropriate. Line Managers will use the results of subbasin assessments to prioritize watersheds for further analysis and identify goals and objectives at the watershed scale.

What can be used to meet this Subbasin- Scale Analysis requirement?

Options*:

1. Completion of one subbasin assessment per year² until PACFISH is replaced through plan revision or amendment;
2. Line Managers and/or technical staff participation in development of salmon and steelhead recovery plans;
3. Continued participation in local forums responsible for oversight of recovery plan implementation and use of recovery plans to prioritize watersheds for further analysis and identify goals and objectives at the watershed scale.

*Identification of the option (1-3) selected by the Line Manager with accompanying short narrative will be required to be documented in annual Deputy Team Line Manager Certification Reports).

1 The links go to www.fs.fed.us/r6/fish and www.icbemp.gov/implement/example.shtml

2 For scattered tracts of BLM and NFS lands, the majority landowner should collaborate with the other federal land management agency to complete watershed analysis and subbasin assessments. For small tracts of federal lands associated with high value salmonid habitats, we encourage use of a focused analysis at the reach, watershed, or subbasin scales using approaches described in this attachment.