



THE WILDLIFE SOCIETY

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Ms. Cathy Barbouletos
Acting Forest Supervisor
Boise National Forest
1750 Front Street
Boise, ID 83701

Dear Cathy:

On behalf of Fran Hunt, Jack McIntyre, Judy Noritake, I wish to thank you for providing us with the opportunity to visit the Boise National Forest to learn first hand about your forest ecosystem health activities. Your efforts to inform us of your plans and actions were very helpful. We learned a lot about on-the-ground challenges to managers.

As you requested, we prepared a brief report on our findings with questions and suggestions for your consideration. As you will see, we have complimented the Forest on some actions but have expressed concerns about the overall approach and long term plans for ensuring ecosystem health.

We appreciate your willingness to open your forest management activities to outside scrutiny and trust that you will consider our comments in the spirit of constructive criticism.

Sincerely,

Thomas M. Franklin
Wildlife Policy Director

enclosure

cc: Fran Hunt
Jack McIntyre
Judy Noritake
William Burbridge
Robert Nelson

Report on the 27-28 October 1994 Forest Ecosystem Health Visit
to the Boise National Forest, Idaho
by

Thomas M. Franklin, The Wildlife Society
Fran Hunt, National Wildlife Federation
Jack McIntyre, American Fisheries Society
Judy Noritake, Pacific Rivers Council

Positive Findings:

1. We commend the Forest Service for inviting us and their state and federal agency partners to visit the Boise National Forest to discuss forest ecosystem health. It opened dialogue on a one-to-one basis.
2. The Forest Service is clearly trying to be sensitive to conservationists' concerns about fire management, post-fire salvage, and long-term forest health issues. They have improved the language used to talk about each of these issues and seem to be trying to improve their approaches. For, example, they decided to leave some standing dead trees unharvested and they paid additional attention to riparian areas.
3. There is definite forward movement on post fire salvage parameters since the fire in 1992 - i.e. retention of all burned trees with any green left in the crown, as opposed to the 25% green crown requirement in 1992.
4. There is progress toward the re-creation of historic ponderosa pine forests as evidenced by remarking some previous sales to retain more trees.
5. Re-hab efforts have been moving toward re-seeding with native cultivars. This may be one step better than non-native cultivars, since we have since been told that the seed is from California. Do any of these occur naturally on the Boise NF?
6. Immediate steps to control sedimentation of streams is commendable. The focus on sediment control (roads and culverts as a part of that), and regular "flood and mud" patrols is very good. They can only do good by this set of actions, which would reduce the chance of error. The switch to "soft structures" such as haybales in drainages is good.
7. An increased sensitivity to "historic ranges of variability" and the role that fire plays in the ecosystem is commendable.

Concerns:Presentation of information

1. During the slide show (which looked like it was being test marketed on us, but intended for wider distribution) the Acting Supervisor said that the forest lost 2 bull trout populations in the 1992 Foothills fire and 3 in the 1994 fires. We followed up in detail with staff who documented that only one population was lost as a secondary effect of the fires (landslide, not increased temperatures). Populations did not go extinct and clearly are recovering. The sub-populations affected in 1992 have already been restored via immigrating fluvial fish or fish that survived in downstream areas of the Boise River system. Fire certainly depressed numbers, but because high quality refuges were available, the populations are recovering.

Animal populations persist either because they occur in very stable habitat or because they reside in several interconnected locations that provide mutual support. If one group goes down because of harsh conditions, another group provides the source for a restart. Much of this mutual support network has been destroyed in the West because the connections have been destroyed or habitat for the component groups has been destroyed or degraded. Forest managers need to take action to ensure that the quality of the connections and that a sufficient number of interconnected groups will be protected to see that species are protected in each region?

2. The acting Forest Supervisor seemed to sidestep answering direct questions about roadless areas, retention of ponderosa pine in normal sales situations, etc. Some of these were answered directly later by the District Ranger on the Idaho City District.

3. The acting Forest Supervisor and the fire management specialist really used the facts liberally to paint their side of the story without exploring other consequences. Their main intent seemed to be to convince us that they need to aggressively manage the parts of the forest that are unburned (much higher stakes) rather than the previously burned areas.

4. No one in the two days focused on any beneficial effects to species from the fires or from leaving the fire sites as they are after burning. There was discussion about how the pileated woodpeckers were going to be affected negatively (large habitat requirements).

5. Although arguments for thinning and prescribed burning make some sense, we are troubled about the on-site examples used to illustrate the benefits. We were taken to a site that had first been burned by managers (in 1994) and subsequently burned by

wildfire. The area burned by managers was in reasonably good shape compared to other near-by areas that had been burned only by wildfire. We were asked whether we wanted site 1 (twice burned) or site 2 (wildfire only) for the forest of the future. It provides a good story, but conclusions are impossible because there is no control.

The mosaic of burn intensity clearly shows that such differences also occur widely in untreated stands. Current research seriously questions our ability to treat large forest areas in a meaningful and effective way (e.g., see Baker, W.L. 1994. Restoration of landscape structure altered by fire suppression. Conservation Biology 8:763-769). Baker states that "Unusually large fires would probably hasten the restoration of landscape structure, while small prescribed fires will not restore the landscape but instead will produce further alteration." Further, he states "Just as restoration of landscapes subjected to decades of fire suppression may require 50-250 years, misdirected policies for management and restoration of these landscapes may simply further alter these landscapes and prolong the period required for effective restoration." Certainly the uncontrolled experiment that we saw on the BNF is no sufficient basis for large-scale forest management.

6. There are few data from which to assess the response of wildlife populations and community structure to wildfire and forest health measures. The public is misled/misinformed when benefits to wildlife are identified and traded off against the costs of forest health prescriptions. In particular, BNF has suggested that reducing risk of fire greatly reduces risk of extinction for sensitive salmonids. They have failed to compare the risk to fire against the risk of continuing degradation of habitat because of sediment accumulation.

7. It was clear from "side" conversations that Boise's standards for snag post-fire retention do not meet their biologists' own recommendations. We question whether 30 percent post-fire retention is adequate. We also are very concerned that they significantly underestimate the value of leaving large trees (green or snags) on the landscape.

Along those lines, we are concerned that they seem to be allowing the logging of large green ponderosa pines -- we have in the past, for example, said that no p-pines over 21 inches dbh should be logged. They don't seem to have clear standards on this -- or perhaps, they are actually not following the existing standards from their forest plan!

Planning

1. They seemed clear about what Phases I and II were for their post fire action plan, but III and IV appeared not to be even crudely defined. This lack of clear, long term vision is what keeps us from getting ahead.
2. We heard that tree densities of 100 per acre occur in ponderosa pine-Douglas fir stands on the north edge of the Frank Church River of No Return Wilderness Area. Present plans for the BNF appear to include upper densities of 25 trees per acre. If that interpretation is correct, a significant portion of the range of variability in stand density, and thus in ecological conditions, will be ignored by forest management.
3. We are led to understand that plans include management of stream sediment levels so as to stay within the range of sediment levels found in wilderness streams. How will these ranges be adjusted to account for the fact that most wilderness streams are in steeper unstable areas that should not be disturbed in any case?
4. The Forest Service is moving ahead with post-fire rehabilitation (and SALVAGE) efforts without a long-term plan for restoring forest health (whatever that is), protecting riparian habitat, providing connectivity for wildlife habitat, protecting old growth, managing roadless areas, using existing roads as fire breaks, etc. They are, in some ways understandably, being driven by each year's fires. However, just because we can sympathize with them does not change the fact that they have little if any idea if they are foregoing long-term options for fish and wildlife (or "ecosystem management"). For example, they say that certain species have large patch size requirements -- yet they really don't seem to have a landscape strategy and plan for achieving these. A good case could be made that they need an EIS and watershed analysis before moving ahead with salvage.
5. They acknowledged that they are not dealing with the Boise NF on a landscape level and that they would like to move more quickly in that direction, as they know that is where the future lies. Again, we understand the Payette is approaching the post-fire situation from a landscape level. Why doesn't the BNF do the same?

Fish and wildlife habitat

1. We don't understand where the streamside prescriptions they laid out came from. With PACFISH out there as "state-of-the-art" there should be no question that they should follow those prescriptions. What they are doing has no scientific basis.

2. We are troubled by what we perceive to be an approach on all fronts of the post-fire plan to do the minimum conservation necessary (streamside buffers, number of trees left after salvage, etc.)
3. We are concerned about logging in riparian areas -- especially non-fish bearing perennial and intermittent streams -- why aren't they doing watershed analysis first?? (The direction in other forests is to protect these areas as well.) - like the Payette.
4. Wildlife is not a priority in fire rehabilitation.
5. There is no intent to retain >40" dbh ponderosa pine within salvage sale areas. Data from Oregon Department of Fish and Wildlife indicate that black bears den in trees >40" dbh and that they are important to other key species.
6. There are no plans for retaining old growth ponderosa pine at the landscape level.
7. There is an inadequate inventory of old growth on the BNF to help protect critical fish and wildlife resources.

Conundrums:

1. There appears to be considerable controversy as to the efficiency of contour felling. There is little scientific support for it -- at least as it is usually accomplished. USF&W indicated that contour felling has been discarded elsewhere -- that in certain cases it accelerates erosion. FS staff couldn't really respond adequately to that when it was brought up.
2. We suspect they are either overestimating the effect of hydrophobic soils or at least using it as an excuse for management which may or may not benefit the resource. NWF has talked to a number of fisheries folks who have indicated that many of the approaches the FS takes to the "problem" of hydrophobic soils may actually aggravate resource damage in one fashion or another. As a part of the BNF effort to deal with hydrophobic soils, they plan to re-seed with fertilizers. What effects will the fertilizers have on fish and streams? They seemed not to have thought about it.
3. The Chief has a team working on forest health policy and another on post-fire policy. Katie McGinty (White House Office of Environmental Policy) has a team working on post-fire policy. But despite all this, it seems the Boise NF is moving ahead with its own EIS process, apart from either of these. And it is different from what the Payette NF is doing. There needs to be better coordination.

4. The Forest Service said that they would be leaving anything > 10 dbh on the ground in burned areas. We know this is an economic consideration for them because this is non-commercial size wood. Ecologically, is this standard too much? Too little? Is there any science involved in this decision? Will this cause fuel loading problems down the road?

5. We heard that salvage logging was going to remove some trees from riparian areas. We were also told that journeyman biologists would make judgements about buffer widths. What justification is there for applying methods of channel protection other than PACFISH guides to these streams, as is being done on the Payette NF for both anadromous & non-anadromous reaches?

6. Recent studies at the Forest Experiment Station in Reno show that the plant communities go through many changes as time progresses. Given these findings, how can BNF managers presume that what is proposed will result in anything like what is desired?

7. The National Forest System has concluded that much of the low and mid-elevation forest in southwest Idaho was in open, park-like stands of ponderosa pine prior to effective fire control policies of the agency. Fire control has allowed proliferation of young trees including Douglas fir which make the stands more vulnerable to catastrophic fire. The prescription for "returning" to the open stands is some combination of harvesting and burning. Given the fact that nutrients are distributed differently in the multi-canopied stands of the present (more in foliage, tops, small branches; less in soil), what are the consequences to long term site productivity of the proposed prescriptions?

Suggestions:

1. The Boise National Forest needs to take steps to ensure that important wildlife habitat components for cavity nesters are protected. Ornithologists find that 80% of bird nests are found in broken top and fork top trees in the absence of fire. They also find that green patches in a burn are important forage sites for nesting birds. Four sensitive bird species reside in the area-- white headed woodpecker, 3 toed woodpecker, flammulated owl, and northern goshawk. All of these species except the 3-toed woodpecker need a range of three sizes up to 40" in diameter. The 3 toed woodpecker needs 10-15" trees.

We heard that a strategy is being developed for protecting a range of tree sizes in the salvage operations planned for the 1994 fires. We also heard, however, that similar strategies for protection of nest and forage sites in the area of the 1992 burn did not result during salvage operations in protection of the desired trees. BNF needs to take steps to ensure that these

important wildlife habitat components are protected.

2. The Boise National Forest should communicate the best scientific information available concerning forest health to administrators and the informed public. There is much rhetoric in the local news media about the mismanagement of forests and appeals for rapid action to see that "forest health" is restored via thinning and burning. The picture being painted is one of crisis; it is being sold as such by politicians, industrialists, and federal forest managers. There seems to be no question that the proponents of this position have right and truth on their side. As long as alternative explanations exist for the propositions that have been put forth as support for this campaign, there is no scientific basis for the arguments. These alternatives and unknowns have not been identified and presented as part of a public debate on the issue. Until this is done, the existing campaign is based on hopes and guesses that more trees can be harvested and only serve to mislead an increasingly bewildered public. The technical staff of the BNF has progressed in their thinking from a definition of forest health that centered on the ratio of ponderosa pine and Douglas fir to one that is focused on ecosystem management. Unfortunately, spokespersons for the forest industry and management have not kept pace with this new thinking.

3. The Boise National Forest should protect all remaining roadless areas from road construction and the impact of helicopter pads -- these areas are critical for "refugia" and the "baseline" purposes.

4. Rather than suggesting salvage as a preventive measure, a program of road closures and erosion control is needed to minimize the risk. Much of the Boise National Forest is in the Idaho Batholith, a large granitic geologic area. Many of the associated soils are unstable and highly erosive. Road development, mining, livestock grazing, urbanization, logging practices, and farming all have disturbed large areas of the Boise River basin and increased erosion. Granitic sand can be seen in most streams in the basin and is known to degrade habitat for salmonids. Habitat for bull trout, red-band trout, cutthroat trout, tailed frogs, and other inhabitants of streams on the Boise National Forest should be improved and protected from further degradation. Current (high density?) road systems in the BNF have serious effects on stream channels. Without active mitigation, the area is at serious risk from erosion, slope failures, and increased sediment production.

5. PACFISH should be the standard for establishing stream buffer widths. PACFISH establishes "default" buffer widths that can be changed via a systematic watershed analysis. These methods have been carefully developed, reviewed, and documented and should be implemented on these watersheds.

6. The Boise National Forest should acknowledge the total historical impact of fire and avoid extensive management treatments until a thorough analysis of past natural and human actions is accomplished. The Northern Rocky Mountains experienced catastrophic fires in the 1870's and in 1910 before modern silvicultural techniques and fire suppression were in use. These fires occurred during periods of drought. Until some basis for assessing the relative contribution of mismanagement and the prolonged drought to the current and widely publicized problems is available, radical new programs are not prudent.
7. Green sales should be reduced commensurate with increased salvage sales.
8. An accurate inventory of old-growth resources must occur soon.
9. The many unknowns about the environmental effects of forest health and salvage treatments requires that the Forest Service use an adaptive approach to management. Management should be performed as an experiment on a limited scale, monitored and evaluated to guide appropriate and effective management direction.