

# Committee on Resources

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## Witness Testimony

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Testimony of

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Subcommittee

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Western Watershed Analysts is a consulting firm located in Lewiston Idaho that specializes in the analysis of land management effects on streams, and cumulative watershed effects. As the Principal Hydrologist and President of WWA, over the course of more than 20 years I have studied watersheds in several western states, including Alaska, Colorado, Idaho, Montana, Oregon, Utah, Washington and Wyoming. For the past several years I have been involved with the development of aquatic and riparian management area strategies, including the aquatic conservation strategies presently being considered by the Interior Columbia Basin Ecosystem Management Project (ICBEMP). These ICBEMP aquatic conservation strategies are the subject of this statement.

The ICBEMP aquatic conservation strategy goal is to maintain and restore ecological function of aquatic and riparian areas and to replace the interim direction for management of anadromous and resident fish, referred to as PACFISH and INFISH. But the Forest Service and BLM are struggling with both of these goals, and may fail to achieve either of them through the ICBEMP. The PACFISH approach, and the INFISH approach which was developed from PACFISH, need replacement. These aquatic protection strategies have been widely criticized as one-size-fits-all measures by university scientists, by public and private land managers including Forest Service managers, and by elected representatives. PACFISH and INFISH are an outgrowth of the FEMAT plan for the western Oregon and Washington spotted owl forests, and in my opinion which is widely shared, are not compatible with sound management of the "eastside" ecosystems in eastern Oregon, Washington, Idaho and Montana. But in at least three of the six action alternatives being considered by the ICBEMP, PACFISH is replaced with a new set of interim strategies (often called "Defaults") that are, in reality, just PACFISH. Even the three remaining action alternatives are similar in many regards to the PACFISH approaches, and it remains to be seen just how different they will turn out to be from PACFISH; we may not know until we see the final standards and guidelines within the ICBEMP's Final Environmental Impact Statement.

I believe that most Forest Service and BLM ICBEMP managers are trying to progress beyond the interim strategies. However, they are finding it difficult because of the influence of the regulatory agencies; the NMFS, USFWS, and to some degree the EPA. The land management agencies - the Forest Service and BLM - have the responsibility of ensuring that their actions and inactions are ecologically and economically responsible, and they have the land management expertise that can allow them to be successful. But the regulatory agencies don't share these same responsibilities, and don't have land management expertise. The regulatory agencies are wedded to the notion that the PACFISH approach that requires wide buffer strips along streams where management is seldom allowed is the best strategy for aquatic and riparian area preservation. But the regulatory agencies are wrong. They are wrong because they have ignored the natural ecosystem process of wildfire so prevalent within eastside forests.

Eastside ecosystems are naturally dynamic systems; they are not static. Things change. And one of the principal elements of change is wildfire. One of the findings confirmed by numerous forest health condition reports is that eastside forests have become unnaturally dense and often insect and disease infested, with the result that they are now subject to unnaturally widespread and intense wildfire. These wildfires don't stop at 100, or 300, or 600 feet from streams. The streamside areas also burn, and the results are often catastrophic. Entire watersheds have been devastated in recent years by unnatural wildfires on the Boise, Payette, Shoshone, Kootenai, and Wallowa-Whitman and other National Forests.

An example of a watershed and stream system devastated by intense wildfire is provided by the Tanner Gulch Fire of 1989 in the Wallowa-Whitman National Forest. This fire burned 5,000 acres within a small tributary stream basin, killing all the fish in a 36-mile stretch of the upper Grande Ronde River. The endangered spring Chinook salmon population, all Chinook fry from the previous 1988 spawning season, and an estimated 50 percent of the fingerlings from the 1987 spawning season, were killed. In another recent example, the 1994 Boise River Wildfire Complex burned over 200 square miles, with fire fighting costs of over 50 million dollars. The North Fork of the Boise River and several major tributaries were devastated. A total of 479 miles of fish bearing streams were affected, and fish mortality was extensive. (I have recounted these and other examples of unnaturally widespread and intense wildfire in a February 1996 prepublication manuscript entitled "Considerations in Development of Riparian Management Strategies: Potential Consequences of Wildfire on Riparian and Aquatic Systems").

My independent analysis demonstrates that at least 20 percent of total forested area within the Basin falls within riparian areas in not less than five of the six action alternatives considered. This is what will actually occur if the draft Project strategies are implemented on the ground by land managers. Furthermore, effective management of the forest health problem within the riparian areas will not occur in at least some of these strategies, and perhaps all of them, depending on how the ICBEMP sets the management standards. In my opinion, if the standards do not allow wildfire hazards to be effectively managed within entire watersheds, including the riparian areas, watersheds and riparian areas will all too often continue to burn with devastating effects.

The ICBEMP must analyze how alternative management strategies will affect Basin ecosystems and resources. However, there has been inadequate verification by the ICBEMP of how resources are affected at the local level. For example, based on analysis of broad scale maps where only a fraction of all streams are shown, the ICBEMP reported that only five percent of the Basin lies within riparian areas. The ICBEMP based estimates of effects on resource management programs on this estimate of five percent riparian area within the Draft Environmental Impact Statements (DEIS's). However, maps where all streams are shown reveal that 20 percent or more of total area lies within riparian management areas in dry forest environments, with as much as 70 percent of total watershed area in wet forest environments.

Within nearly all of the alternatives considered within the ICBEMP DEIS's, "Riparian management areas shall not be considered as important sources of commercial timber". Furthermore within the ICBEMP alternatives, riparian areas cannot be included in the acreage used to compute allowable timber sale quantities (ASQ). Here the problem with analysis not verified at appropriate scales becomes obvious. It is one thing to dismiss riparian areas as unimportant for production of commercial timber if these areas occupy only 5 percent of the landscape, as the ICBEMP stated within the DEIS's. But it is quite another thing when they occupy 20 to 70 percent of entire landscapes. Moreover, perhaps unnaturally dense, dead and dying riparian forests are tolerable if they only occupy five percent of watershed area. But it is quite another matter when they occupy 20 to 70 percent of watershed area. When I look at "ecosystem management" effects of the ICBEMP alternatives and management restrictions at realistic scale, I conclude that riparian areas are extensive, will not be effectively treated for the severe forest health conditions that often exist within them, and that forest health and wildfire will not be effectively addressed.

The ICBEMP studies ecosystems at broad scales within its analysis, as it must for such a vast area. However, fundamental problems with analytic scale - and I provided only one example - lead to unrealistic estimates of effects on resource management programs such as grazing, mining and timber. In order to provide realistic estimates of effects upon resource management programs and resource production levels, the effect of standards and resource constraints must be examined at local levels, and much finer scales. This verification step is essential and simply unavoidable in order to provide meaningful predictions. In the absence of such verification, ICBEMP predictions may bear no resemblance to reality. Problems with scale in the analysis currently limit the ICBEMP's ability to recognize management actions necessary for effective management of forest health and wildfire, and to provide management direction to the National Forests and BLM Districts, fundamental goals of the Project.

## Conclusions:

The Forest Service and BLM will not achieve necessary ecosystem management goals and objectives unless riparian management areas are realistically defined and actively, but cautiously, managed. If they are not managed, aquatic and

riparian areas will continue to be devastated by unnaturally intense wildfire, as will entire watersheds.

A detailed level of impact analysis is needed that is commensurate with the detail of proposed standards and guidelines. All proposed actions need to be fully evaluated and presented to the public in a timely manner so that meaningful review and comment can be provided.

The Forest Service and BLM will continue to be gridlocked and unable to take necessary actions within riparian management areas if their management authority and responsibilities are not reaffirmed and elevated: They have the expertise to recognize the management actions required in view of local risks and the tradeoffs of action versus inaction, and they have the responsibility to do so. Regulatory agencies cannot be expected to help craft strategies for resources and ecosystem processes that they do not manage.

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