

Review of Pollalie-Cooper Timber Sale EA and Related Documents and Data

By Peter Morrison, Pacific Biodiversity Institute, October 13, 2002

Major Area Discrepancies and Questions about Relationship between Clan, Kilt and Tartan Timber Sales and Pollalie-Cooper Timber Sale EA

There is no reference in the EA or in the Decision Notice and FONSI to the Clan, Kilt and Tartan timber sales. The relationship between the timber sales and the EA is not clear. Examination of the EA, corresponding maps, and GIS data for the EA Alternative 2 and similar data for the three timber sales (Clan, Kilt and Tartan) resulted in serious questions about discrepancies between the actions planned, mapped and described in the timber sales and those described and mapped in the EA. There are substantial discrepancies between the activities mapped for the timber sales and those mapped in the EA (Figure 1). An overlay of the three timber sales shows that there are many areas shown as part of the commercial logging that will be conducted under the EA that are not included in the three timber sales, and there are many areas included in the three timber sales which are not included in the EA. So which is right?

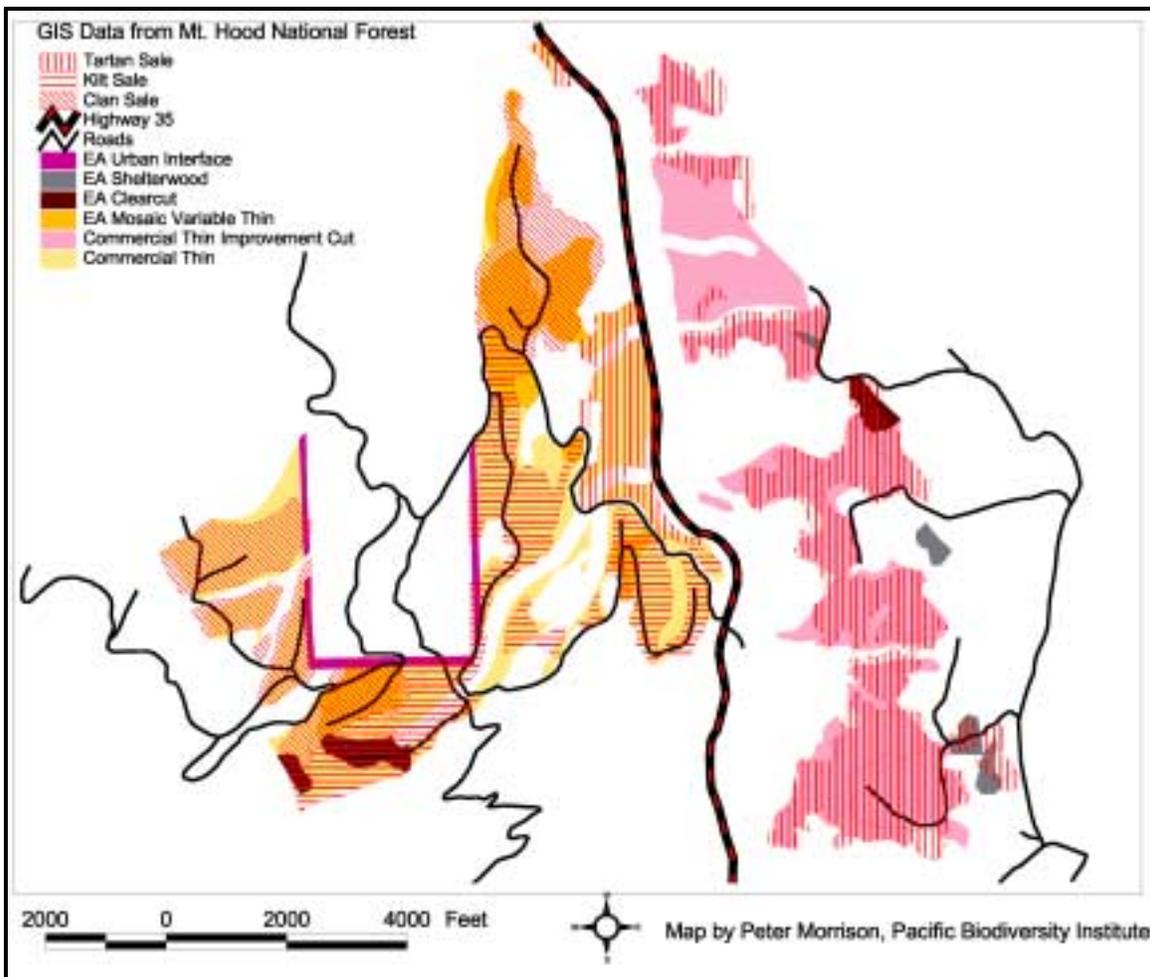


Figure 1. Comparison of GIS Data for the Clan, Kilt and Tartan Timber Sales with the GIS Data for the Environmental Assessment for the Pollalie/Cooper Planning Area. Note that there are many areas where the timber sales and the commercial logging activity described in the EA do not overlap.

The acreages in the EA, the EA's and timber sale GIS data, and acres printed on USFS timber sale maps do not agree. For example the EA states that 1007 acres will be treated by commercial logging; involving skyline, tractor and helicopter methods. But the PC Timber Sale Layout map shows only 865 acres. The acreage for the three timber sales (Clan, Kilt and Tartan) total between 880 and 890 acres based on their GIS data (depending on whether unlabeled polygons are included or not). So which number is right? In the documents there is no clue as to why there is so much discrepancy between the various area estimates.

Substantial discrepancies exist between what is stated in the EA and what can be calculated using the EA's GIS data. The EA states that 414 acres are involved in the commercial thinning to be conducted west of Highway 35. But the EA's GIS data indicate that only 386.7 acres are involved. Which is right? The total area that will be commercially logged according to the GIS data for the EA is 953.5 acres, but the EA states that 1007 acres will be logged. Again, which is right?

Other treatments are described in the EA such as brush conversion and fuel reduction projects. The area to be treated in the "Urban Interface" for fuel reduction is stated to be 94 acres in the EA, but is only 26.2 acres in the EA's GIS data. The area mapped in the GIS data varies in width, but is substantially less wide than the 300 feet described in the EA. The area mapped in the EA's GIS data also does not extend as far north as the area mapped in Photo 1-1 of the EA. Which is correct?

The EA states that 153 acres will be treated with prescribed fire, but the EA's GIS data indicate an area of 135.9 acres. The EA states that 84 acres are included in the brush conversion category, but the GIS data for the EA indicate that 77.6 acres are included in this activity.

The EA states on page 17 that a total of 29 acres of riparian reserves will be commercially thinned as part of a commercial timber sale. Yet on page 54 of the EA, it states that there will be "38 acres of proposed riparian reserve treatment." Which number is correct? Once again, it appears that the EA is a hastily prepared document that does not contain accurate, consistent information about the proposed activities. It is nearly impossible to assess the environmental impacts of these activities when reliable and consistent information is absent from the EA.

Incorrect Information in the EA about Past Timber Harvest

On page 34 of the EA one finds the following statement: "Historically, only a small portion of the planning area has had timber harvest. Table 3-4 illustrates that only 15 acres, less than 1 percent of the area, has had a regeneration cut." Examination of aerial photography and historical satellite imagery reveals that at least five times that much area within the planning area has had timber harvest. This misleading and incorrect information is characteristic of the EA. The presence of incorrect information in the EA leads one to question the credibility of the conclusions of this document.

Further examination of the EA demonstrates the great inconsistencies found in this document. On page 35 of the EA it states: "Understocked mature Douglas fir/grand fir timber stands (approximately 200 acres). These stands occur on the eastern ridge top and have been previously entered with a commercial timber harvest. Most of the overmature timber has been removed." But then the contradiction is repeated again on p 56 of the EA where it states: "Past timber harvest activities, within the planning area, have been minimal." Although the planning area has a relatively intact forest, compared to the surrounding landscape, which is extensively cut, there has been significant cutting within the planning area in the past.

Questions about the Rationale for Choice of Planning Area Boundary and Analysis of Cumulative Effects

The description of the amount of past timber harvest in the planning area is also misleading because the planning area boundary appears to be specifically drawn to exclude many logged areas immediately adjacent to the planning area boundary. In fact, examination of aerial photography of the larger landscape reveals that this landscape has been heavily altered and fragmented by extensive timber cutting in the past.

This calls into question the rationale for the planning area boundary. The planning area boundary is highly irregular. The EA does not discuss the rationale for the choice of the planning area boundary but the planning area boundary appears artificial and arbitrary.

The EA also does not include adequate discussion and analysis of the highly fragmented and altered forest condition outside of the planning area and the cumulative effects of further cutting and forest fragmentation within and outside the planning area. There are several brief discussions of cumulative effects in the EA, but none of these discussions address the fact that there has been extensive forest cutting over the past 50 years in and adjacent to the planning area or the cumulative impact of the additional logging planned in the EA.

Brush Conversion Issue

The purpose for brush conversion/reduction as stated in the EA (p. 6) is to restore conifer vegetation in brushfields supposedly created after wildfires in the late 1800's and early 1900's. These brush fields have persisted for over a century, and may have been a persistent feature on the landscape for much longer than that (Figure 2). Despite this fact, Mt. Hood NF silviculturalists believe that they can change the natural regime and convert these brushfields to timber stands. The USFS does not present any evidence (because no evidence exists) that these areas ever supported dense stands of timber. It is quite likely that efforts to convert these areas to productive commercial timber stands will be futile – despite the expenditure of considerable resources and environmental damage incurred during the attempted conversion process. Areas where deciduous shubby vegetation has persisted for 100 years or more usually have unique soil characteristics with favor shrubs over trees. The soils in such areas are usually much rockier, thinner or wetter than soils that support productive timber stands. The same fires that burned over these brushfield areas in the late 1800's and early 1900's burned the surrounding forest as well. But the USFS has never pondered the question – why did the surrounding forest develop after the fire while the brushfield areas developed into areas dominated by vine maple and other species?

A large issue with regard to the conversion of brush fields is... WHY? These areas are an important natural landscape feature. They contribute substantially to landscape-level biodiversity and offer habitat to many species that may not be found in closed-canopy coniferous forests. These features appear to be fairly stable natural landscape elements (unlike the successional dynamic patches created after clearcutting). The attempted elimination of the brushfields will likely be unsuccessful, but will result in considerable short-term elimination of habitat for certain birds, amphibians, mammals, butterflies and other invertebrates. Increases in sediment production after brushfield conversion activities may also damage fish habitat.

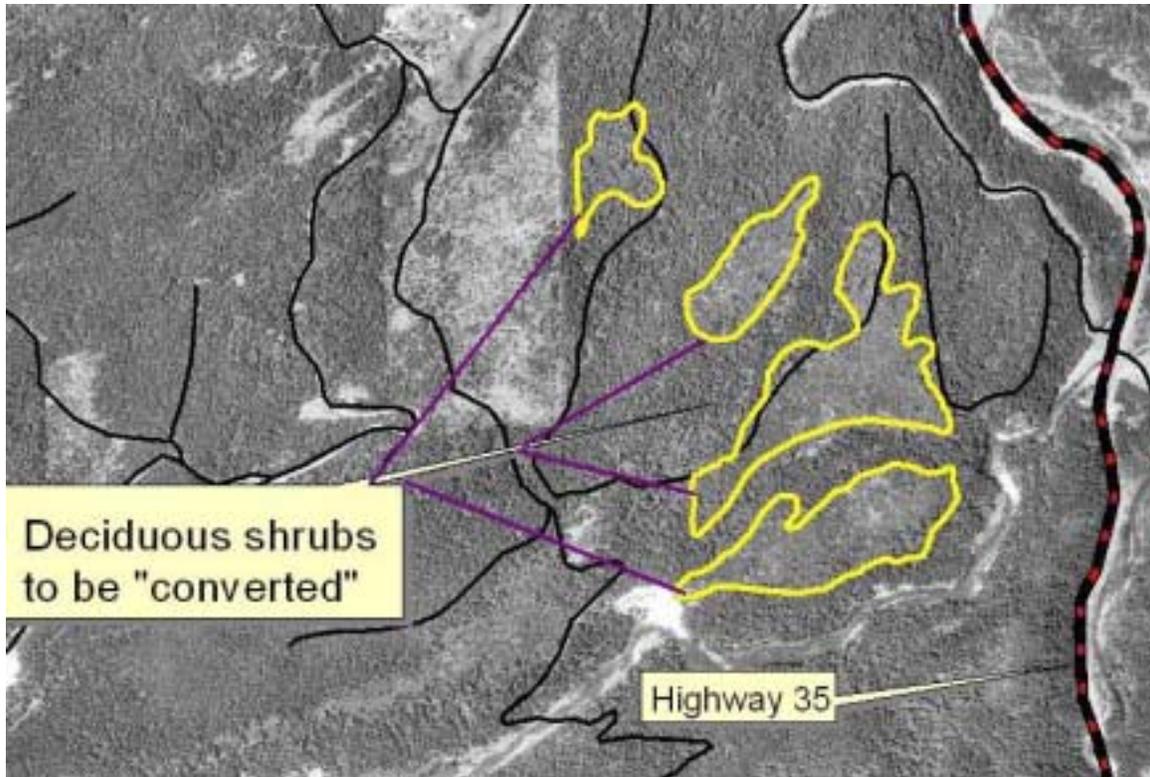


Figure 2. Location of brushfields targeted for conversion to timber plantations.

Page 41 of the EA, specifically refers the Forest Plan Standard and Guidelines (p56) which call for maintaining “areas of hardwoods and brush which provide textural diversity and fall color”. While Alternative 2 would eliminate several significant brushfields, p.69 of the EA states that brushfield conversion “would create subtle textural changes in the landscape that would not be evident.” This is an obvious false statement without basis in fact.

Brushfields, dominated by maple, alder, and willow species are a unique natural landscape feature that have existed on this landscape for millennia and contribute greatly to the natural diversity and scenic beauty of the landscape. The particular brushfields in question have existed for at least a century – perhaps much longer. If maintenance of scenic beauty is one of the objectives of the Mt. Hood National Forest, the conversion of these brushfields into timber plantations is completely contrary to the objective of maintenance of visual quality. Particularly in the autumn, these brushfields are the most striking scenic element in the landscape.

Justification of Timber Sale Based on Visual Quality Improvement

Many of the activities proposed in the EA are justified in part that they will result in visual quality improvement. Whether a clearcut, shelterwood, commercial thinning operation, or deciduous shrubfield conversion will result in visual quality improvement is highly subjective. If the photographs of examples of these activities that are presented in the EA were presented to local residents or a cross section of the general public, it is highly probable that a vast majority would say that visual quality was substantially impaired by the activities rather than improved. The EA frequently states that most of the planned activities would “create subtle textural changes in the landscape that would not be evident” (p 68-69). But the EA provides no justification for this statement and an independent assessment of public opinion is likely to contradict this statement.

Logging in the Riparian Reserves

The EA states that a total of 29 acres of riparian reserves will be commercially thinned as part of a commercial timber sale (p. 17). Elsewhere in the EA, it states that there will be “38 acres of proposed riparian reserve treatment” (p. 54). According to the EA riparian reserves cover 1500 acres within the project area. But the EA and the GIS data related to the EA does not specify where in these 1500 acres the cutting will occur. The EA does not give adequate information about the location of this logging activity for an expert reviewer to comment on either its efficacy or the possible adverse environmental impacts associated with the proposed action.

An overlay of the Clan, Kilt and Tartan timber sale units with the Riparian Reserves shows that nearly 60 acres of riparian reserve are included in the logging units (Figure 3). This is over twice the estimate in the EA. Which is correct?

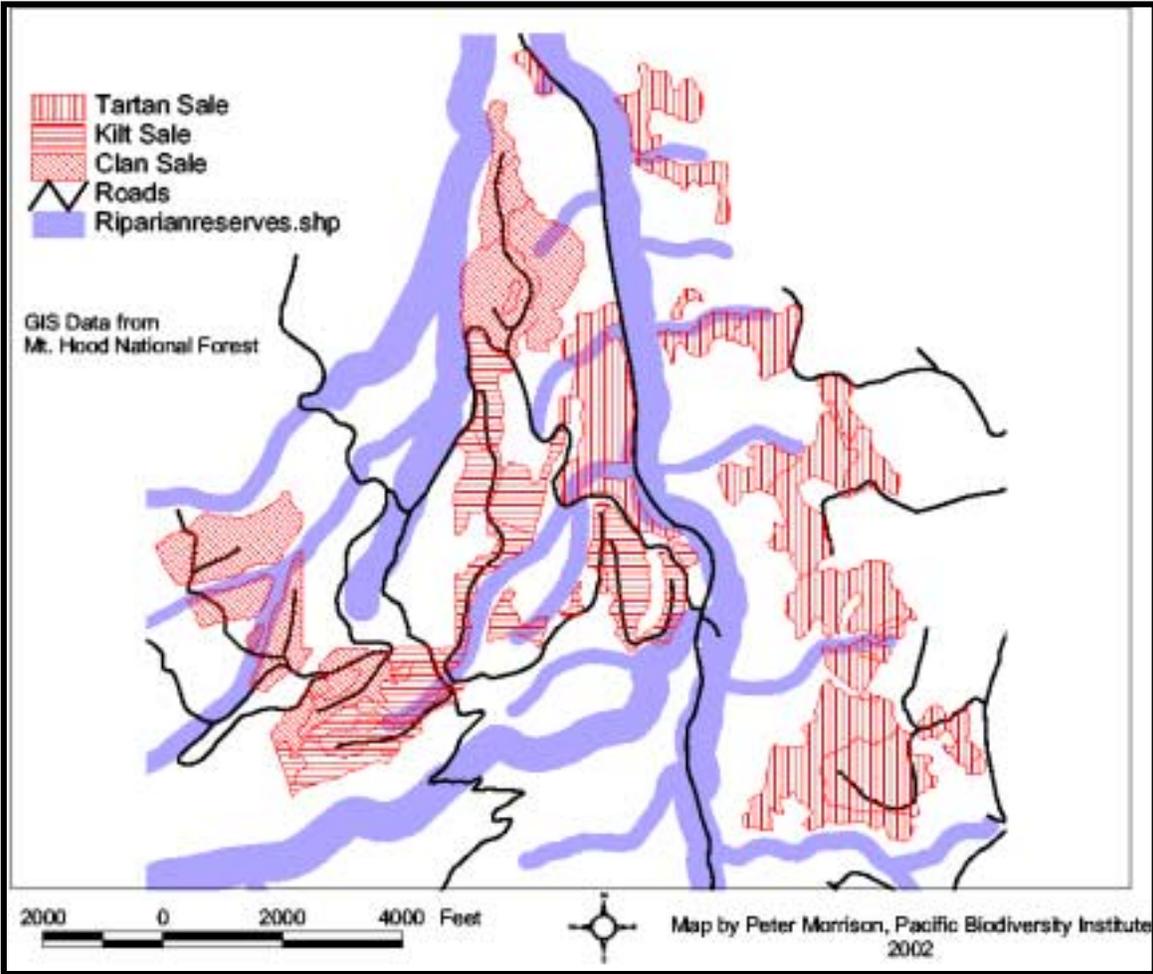


Figure 3. Overlap between logging units in three timber sales and the Riparian Reserve.

Influence of Timber Sales on the Northern Spotted Owl

The EA clearly states that the proposed action “may effect, and is likely to adversely effect” spotted owls and their habitat. Approximately 198 acres of spotted owl habitat will be removed, and 407 acres of habitat degraded as a result of this activity. It will also result in the incidental take of one spotted owl pair (EA p. 60).

Given the new evidence of a precipitous continuing decline (> 5% per year decline) in spotted owl populations across the Pacific Northwest that it seems highly unwise to engage in an activity that will assuredly have such adverse consequences for the owl at this point in time.

Besides the elimination of habitat that is described in the EA, this project severely fragments existing habitat. Forest fragmentation and elimination or alteration of late successional is known to be one of the primary causes of the spotted owl decline. Forest fragmentation is also believed to be one of the primary causes for the incursion of the barred owl, which competes with the spotted owl, into spotted owl habitat. The incursion of the barred owl into remaining spotted owl habitat is a significant factor in the rapid rate of population decline.

Because of these factors, the actions proposed in the EA appear to be a blatant violation of the Endangered Species Act and will contribute to the extinction of this species.

Efficacy of Proposed Wildfire Risk Reduction Measures

The non-vegetated corridor that exists along the East Fork of the Hood River including Highway 35 already provides an extensive fuel break, that has more potential for slowing or stopping a wildfire than any “shaded fuel break” that would be created by this timber sale. This natural fuel break is also much more extensive in length – continuing beyond the project area in both directions. A similar non-vegetated corridor exists along Pollalie Creek on the southern boundary of the project area. These two non-vegetated natural corridors provide significant firebreaks around the project area from fires moving into the project area from the east and south. Neither of these natural firebreaks is discussed in the EA.

This points out the fact that there is no evidence of any attempt for comprehensive fire management planning in the project area. The activities that are described for reducing wildfire risk through fuel reduction show no evidence of being part of a comprehensive fire management plan. They appear to be nearly randomly distributed throughout the project area without being integrated in an effective way to block fire spread through the planning area (Figure 4). Even if the assumption is made that these timber sale units might have a desirable effect on wildfire behavior (which I will challenge in a second paper), they are disconnected from each other and a wildfire could easily circumvent the scattered shaded fuel breaks. The planning area and the surrounding landscape would easily burn in a major fire – even if the thinning activities and fuel reduction activities were as effective as claimed in the EA in slowing and reducing the intensity of a fire.

The choice of areas to target for fuel reduction is also questioned. The proposed “improvement cut” (Tartan Sale) on the east side of Highway 35 has interesting boundaries. The sale boundaries appear to be drawn based on the presence of large diameter timber rather than on areas that need thinning to reduce fire risk. Specifically excluded from the areas planned for the improvement cut are extensive areas of dense young forests with mixed residual older trees that resulted from past logging activities. These areas appear to be prime for carrying wildfire through the dense young forest that developed after logging. But no activity is planned for these areas. It appears that the sale boundaries were primarily driven by the presence of large volumes of commercially valuable wood rather than by issues related to stand density (Figure 5). The Tartan timber sale, which is justified in the EA for its fuel reduction and wildfire risk reduction benefits appears to be designed primarily to extract relatively large diameter timber from one of the only previously uncut areas east of Highway 35.

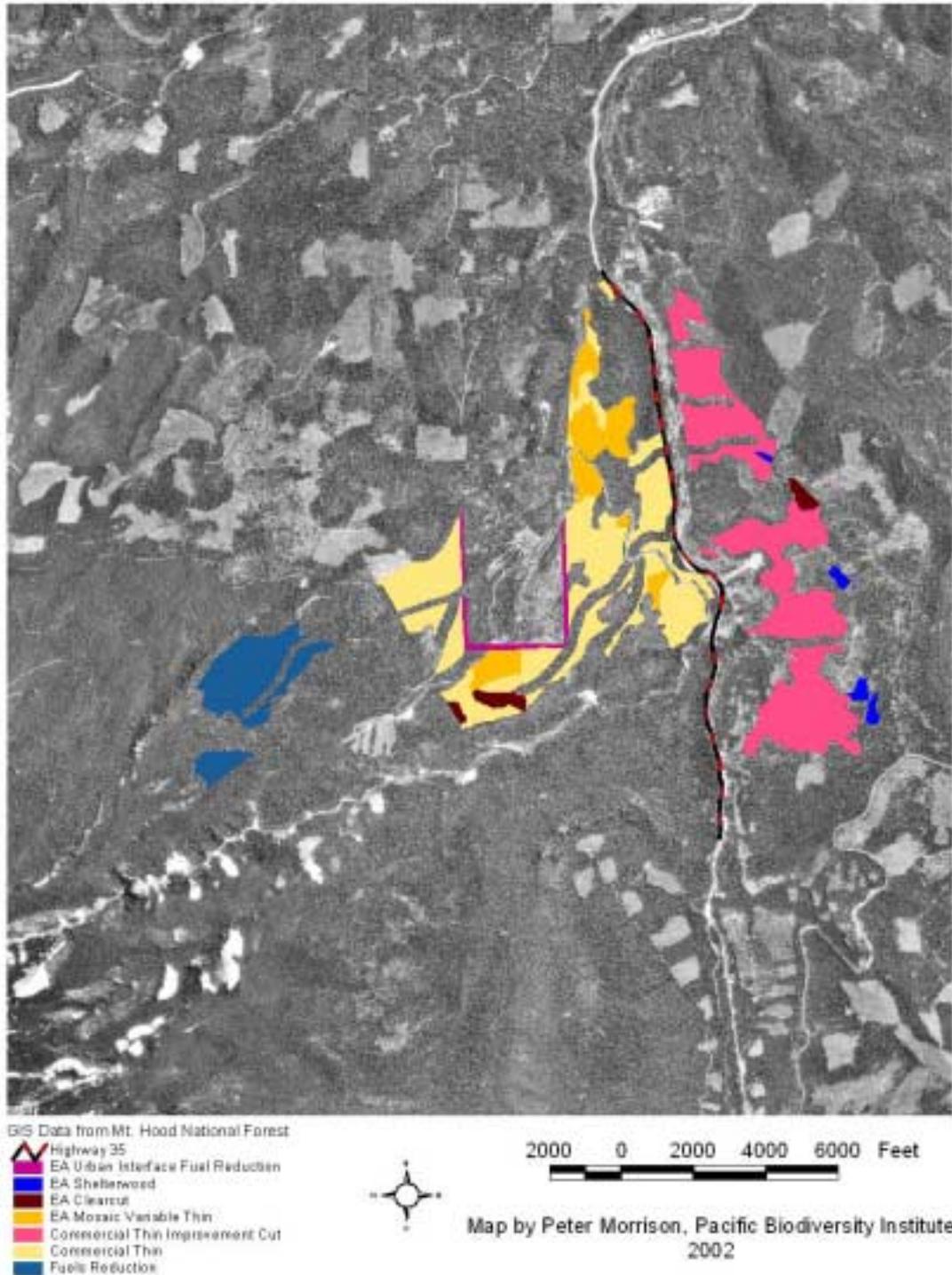


Figure 4. Location of commercial thinning activities and fuels reduction activities from a landscape perspective. Note that wildfires from many directions can easily move around and through the entire planning area and surrounding landscape – even if the thinning activities and fuel reduction activities are effective in slowing or reducing the intensity of a fire.

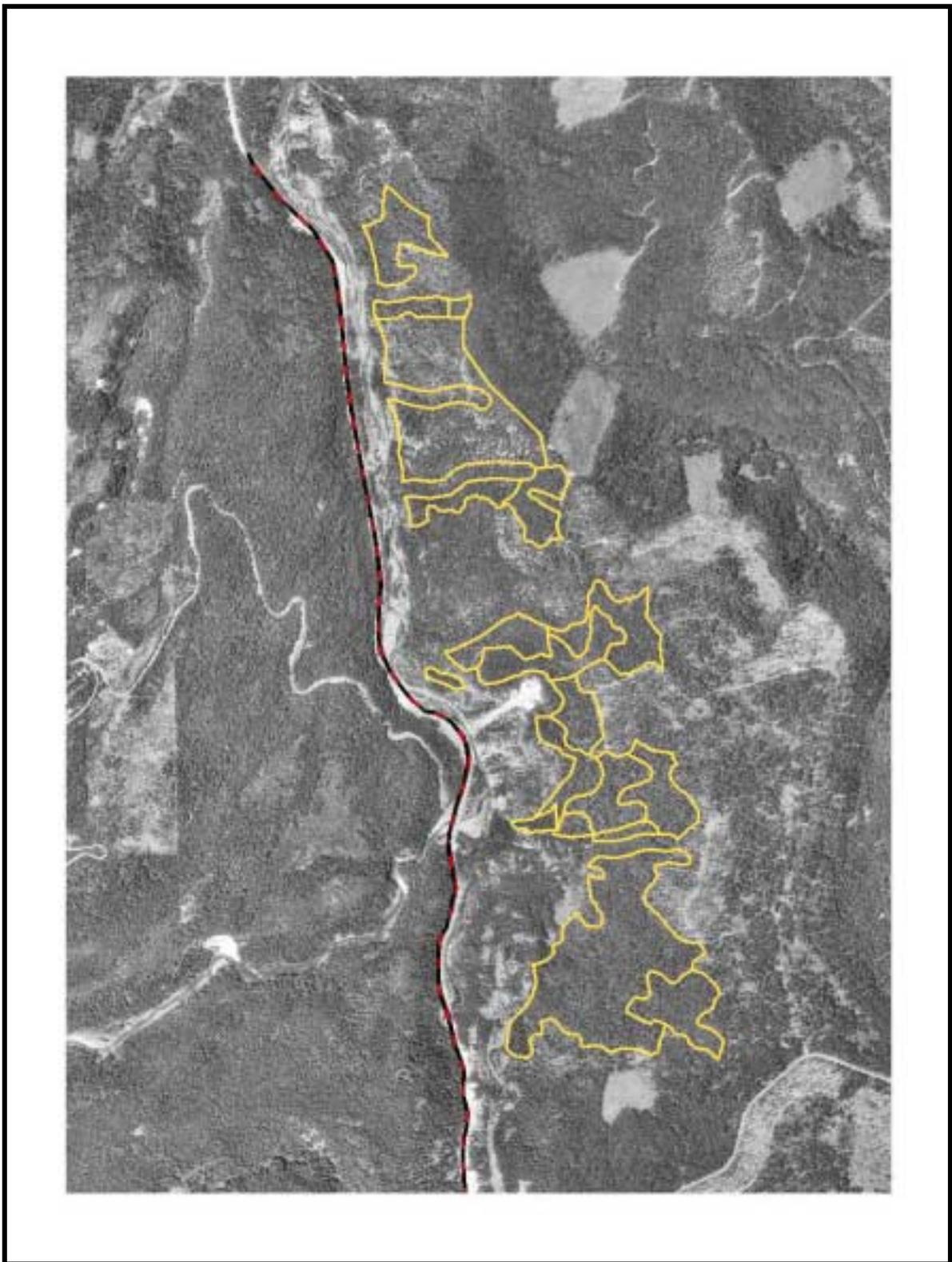


Figure 5. Tartan timber sale (inside yellow outline) and “improvement cut” east of Highway 35. Note that most of the area not included in the Tartan Sale has been cut in the past and is covered with young trees, brush and grass. These previously logged areas would likely burn fiercely in any wildfire that moves through the area. The Tartan Sale boundary appears to focus on the areas of closed-canopy, late successional forest, where substantial volumes of commercial wood are present.

The EA is not clear about the goal of the planned fuel breaks. Is there some specific area that the fuel breaks are designed to protect? Where is this area and how are the fuel breaks designed so that better wildfire protection will be afforded to this area? The shaded fuel breaks that would be created in this timber sale would not provide any continuous zone of protection for any specific area within the project area or outside the project area. It appears that this question has not been examined by the US Forest Service and that fuel reduction has been used as a justification for a series of logging activities planned in the past that were not part of a comprehensive fire management plan.

A good example of the lack of examination of existing conditions and integrated planning is illustrated in the planning of the fuel break around what is called the "Urban Interface." Supposedly, a 300-foot wide shaded fuel break will be created around a parcel of private land in the project area. This is illustrated in Photo 1-1 of the EA (p. 7). A misleading diagram of the proposed fuel break is also included in the EA as Figure 2-2 (p. 19). But the design of this fuel break does not take into consideration that most of the area to be "protected" by this fuel break (on the private land) has already been clearcut (Figure 5). Since the forest vegetation has already been largely eliminated within the "urban" area that is proposed for "protection" the diagram in the EA on p 19 is misleading and the justification for the need for this activity is dubious. It appears that Forest Service planners developed what they thought was a good idea in theory, but never checked out the actual landscape conditions to determine if their plan was appropriate. This is good evidence that there was no attempt to develop a comprehensive fire management and wildfire risk reduction plan for the area and to integrate past activities and actual landscape conditions into this plan.

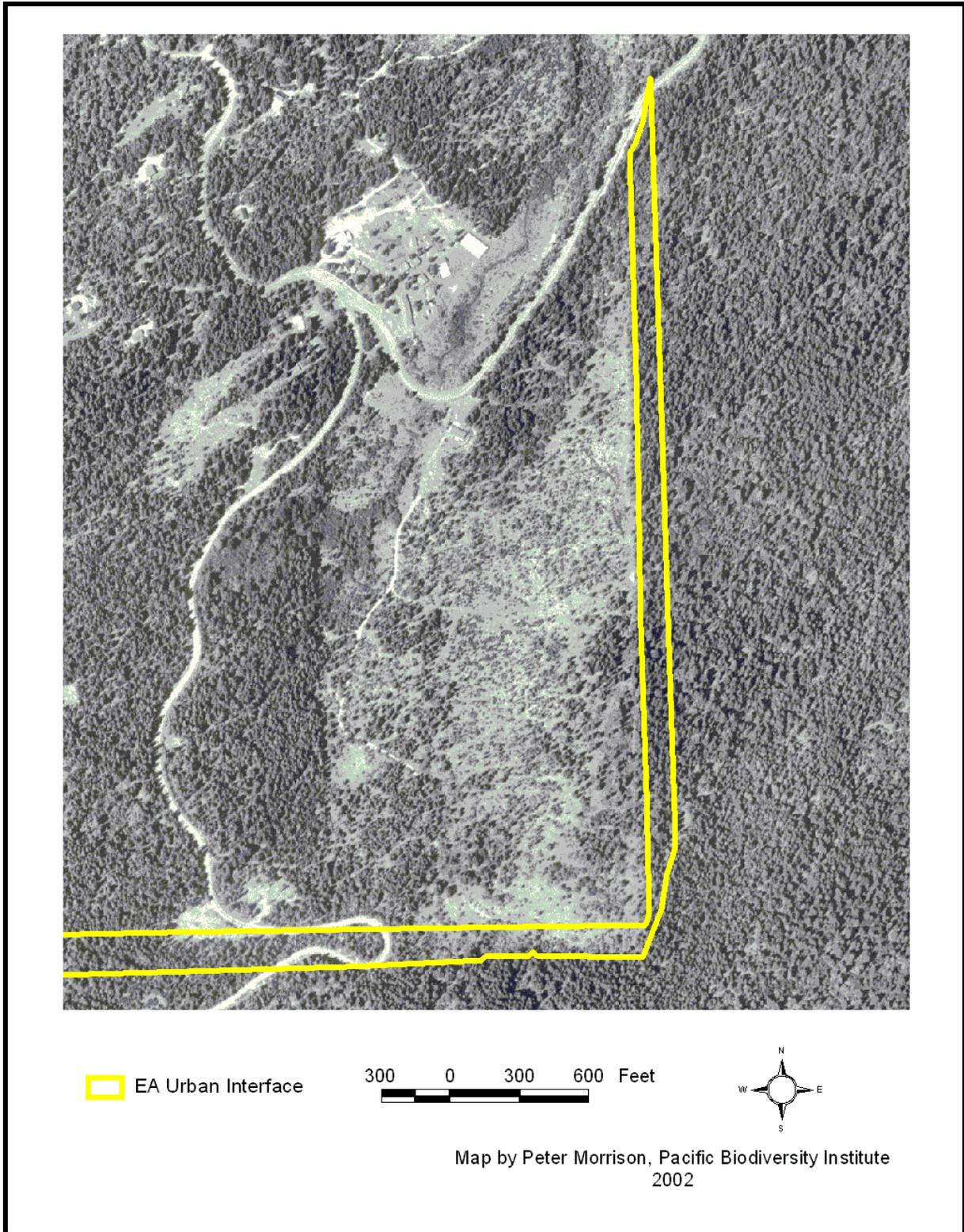


Figure 6. “Urban Interface” proposed fuel break area. Note that the forest vegetation has already been largely eliminated in much of the “urban” area inside the proposed fuel break.