

PRELIMINARY ECONOMIC ANALYSIS
Forest Practices Rule Making
Affecting Forest Practice Activities on Historic and Archaeological Sites
By Laurence Reeves, Economist, Department of Natural Resources

January 24, 2008

OBJECTIVES

The Forest Practices Board (Board) is proposing changes to WAC 222-16-010 and WAC 222-16-050 that will affect timber harvests, the construction of roads, landings, rock or gravel pits, spoil disposal areas, site preparation, and the aerial application of pesticides that involve certain cultural resources. In some instances, landowners will need to apply for a “Class IV-special” forest practices permit, which requires compliance with the State Environmental Policy Act (SEPA). The objectives of this economic analysis are to determine whether the benefits of the proposed rules exceed the costs, and whether the compliance costs of the proposed rules will disproportionately affect the state’s small businesses.

Prior to rule adoption, the Administrative Procedure Act (chapter 34.05 RCW)¹ requires completion of a Cost-Benefit Analysis (CBA) that demonstrates that probable benefits of the proposal exceed its probable costs and that it is the most cost-effective means of achieving the goal of the rule change. A Small Business Economic Impact Statement (SBEIS) is required by the Regulatory Fairness Act (chapter 19.85 RCW)² to consider the impacts of state administrative rules on “small businesses”, defined as those with 50 or fewer employees. This economic analysis combines the SBEIS and the CBA, as allowed by RCW 19.85.025, as part of the rule making process.

PROPOSED RULES SUMMARY

The proposed rule changes to chapter 222-16 WAC are focused on creating greater consistency between the Board’s Forest Practices Rules and the Washington State Department of Archaeology and Historic Preservation (DAHP) authority with regard to how certain cultural resources, specifically archaeological sites, historic archaeological resources, and historic sites, are defined, reviewed, and protected in the context of forest practices activities. The specific rule changes are as follows:

- 1) Strike the Board’s definition of “historic site” from WAC 222-16-010, thereby deferring to DAHP’s definitions in RCW 27.53.030.
- 2) In WAC 222-16-050(1)(f), replace “archaeological and historic sites registered with DAHP,” with two subsections: “(i) archaeological sites or historic archaeological resources as defined in RCW 27.53.030” and “(ii) historic sites eligible for listing on the Washington Heritage Register or National Register of Historic Places as determined by DAHP”. This separately defines archaeological verses other historic resources, reinstates register-eligible historic sites as Class IV-special, and uses the DAHP definitions.

¹ For CBA requirements, see [Chapter 34.05.328 RCW - The Washington State Legislature](#).

² For SBEIS requirements, see [Chapter 19.85.040 RCW - The Washington State Legislature](#).

- 3) Add a new subsection, (iv), to WAC 222-16-050(1)(f), which creates two exemptions for forest practices activities meeting the criteria in WAC 222-16-050(1)(f) from a cultural resources Class IV-special forest practices . The exemptions are for those proposed applications that have been designed in compliance with (a) cultural resource management strategies from an approved watershed analysis, or (b) a management plan agreed upon by the landowner, the affected Indian tribe, and the DAHP.
- 4) The final rule change strikes the wording “On or are eligible for listing on the National Register of Historic Places” from subsection (i) of Class III WAC 222-16-050(5)(k), in deference to the national register language in subsection (ii) in Class IV-special WAC 222-16-050(1)(f).

Involvement of Concerned Stakeholders

The Timber, Fish, and Wildlife Cultural Resources Committee (Committee) is the stakeholder group that collaboratively developed the proposed rule language. The Committee is a multi-caucus group with representatives of the Inter-tribal Cultural Resources Advisory Group and individual tribes (especially Puyallup, Yakama, Suquamish, Quinault, and Lummi), large and small forest landowners from the Washington Forest Protection Association and Washington Farm Forestry Association, and state agency staff from the DAHP and the Department of Natural Resources’ (DNR) Forest Practices and Land Management programs. The Forest Practices Board recognizes the Committee as the group of expertise on this issue.

Affected Industries

The rule-complying community affected by the proposal is businesses or individuals that own or control the cutting rights on private or state managed forestland or those with the right to dispose of the timber, and intend to conduct a forest practices activity sometime in the future.

Based on a review of Forest Practices Applications (FPAs) processed by the DNR since 2003, there has been an average of approximately 6,250 FPAs submitted each year, with just over 0.7 percent (45) of these FPAs having a cultural resource issue. FPAs from eastern Washington are nearly five times more likely to have a cultural resource issue than FPAs from western Washington. In addition, this review of FPAs indicated that small landowners (small businesses) make up approximately 26 percent of those applying for FPAs and were no more likely to have a cultural resource issue on their land than the overall population of landowners submitting FPAs. Thus, on average, out of the 45 FPAs annually that have a cultural resource issue, only 12 permits belong to small landowners.

ECONOMIC ANALYSIS

To comply with the Administrative Procedure Act and Regulatory Fairness Act, this analysis identifies potentially affected industries, addresses small and large businesses and determines if there is a disproportionate economic impact on small businesses. It also estimates the annual cost of compliance with the proposed rule changes.

Small Businesses versus Large Businesses

The Regulatory Fairness Act defines a “small business” as one with 50 or fewer employees. This definition does not lend itself to commercial forestry, because a growing proportion of

Washington's commercial forest acreage is owned by investment-oriented firms that employ few people and contract out forest management services. Forest ownership acreage and the volume of timber harvested on an annual basis are generally more appropriate metrics for characterizing small businesses in the timber industry. In order to better portray the effects of proposed rule changes on small business, this economic analysis addresses small businesses as those meeting the state's eligibility criteria for small forest landowner status in the Forestry Riparian Easement Program; generally those who harvest an average of less than two million board feet per year from their own land. All other private landowners are categorized as "large businesses" for purposes of this analysis.

Costs of Proposed Rule Changes

The cultural resources covered by this rule change are already protected by current Board and DAHP rules and laws and the proposed rules have no prescription requirements. Thus, there are no changes to buffer widths, leave tree requirements, equipment limitation zones or other operational restrictions as a result of this rule change. Landowners will still need to complete a DNR FPA and pay the associated fee, but under the proposed rules more landowners will need to complete an approximately 10-page environmental checklist (WAC 197-11-960) in compliance with SEPA and SEPA guidelines. The main impact to landowners will be the additional time to complete the SEPA checklist (compared to just completing the FPA), although some landowners may opt to hire a consultant to complete the SEPA checklist. By completing the SEPA checklist, there is a risk the application will be flagged for an Environmental Impact Statement (EIS) by one of the reviewing agencies. If this happens, most landowners will redesign the project so as to avoid the EIS process.

In talking with DNR employees and forestry consultants who are familiar with the SEPA checklist and who work with small landowners, the average estimate for completing a 10-page SEPA checklist is two hours, assuming there are no other environmental resource issues, such as potentially unstable slopes and landforms, critical habitat of threatened or endangered species, etc. For landowners who are not comfortable completing the SEPA checklist and do not wish to hire a private consultant, free help is available through the DNR's Small Forest Landowner Office.

Some aspects of the proposed rule change reduce the number of FPAs that would be classified as Class IV-special and require the SEPA checklist, while other parts of the rule change would increase the number of FPAs that would be classified as Class IV-special and require the SEPA checklist. Thus, it is difficult to say with certainty how the mixed impacts of the individual rule changes will balance out in terms of the final impact on landowners.

The table below lists the individual rule changes and how they will impact landowners.

	Proposed Rule Change	Effect	Time Cost/Benefit
1	Strike historic site definition in WAC 222-16-010, use DAHP's definition	DAHP eligibility standards are stricter, limits number of Class IV-special permits	Benefit to applicants
2a	Replace "registered with DAHP" criteria with definition of Archaeological Site in RCW 27.53.030(3) as Class IV-special WAC 222-16-050(1)(f)(i)	Encompasses more archaeological sites, not just those already "registered with DAHP"	More Class IV-specials: Cost to applicants
2b	Add Historic Archaeological Resources as defined in RCW 27.53.030(11) to Class IV-special WAC 222-16-050(1)(f)(i)	Historic Archaeological Resources are a subset of Archaeological Sites	Neutral to applicants
2c	Replace "registered with DAHP" criteria with "eligible" historic sites as Class IV-special WAC 222-16-050(1)(f)(ii)	Encompasses more historic sites as current rule structure precludes non-archaeological historic sites from Class IV-special	Cost to applicants
3	Add two exemptions as Class IV-special subsections (f)(iv)(a)&(b) based on having cultural resources management plan/strategy	Does not trigger a cultural resources Class IV-special	Benefit to applicants
4	Strike National Register sites from Class III (5)(k)(i)	Shifts some Class III FPAs to Class IV-special, also allows site preparation & aerial pesticide spraying as Class II	Both cost and benefit to applicants

It is generally believed, based on the identified effects in the table above, that the net affect of the proposed rule changes will cause more FPAs with cultural resources to fall into the Class IV-special category, but determining the exact number is not possible. In the FPAs reviewed, Class IV-special FPAs only make up 8 percent of all the FPAs with cultural resource issues (annually, on average, this would be 4 out of 45 permits), so if we assume the remaining 92 percent of the FPAs with cultural resources would now be Class IV-specials, the number of Class IV-special FPAs would increase by 41 in an average year. Assuming the SEPA checklist takes an average of two hours to complete, an additional 82 hours will be spent annually on paperwork by all affected businesses and landowners statewide.

It is also possible that, because the proposed rules clarify which cultural resources trigger Class IV-special or Class III, more FPAs will now be flagged for containing a cultural resource, but as above, the exact number is difficult to determine. If we assume there will be a 30 percent increase in FPAs that get flagged for cultural resources and all those FPAs are Class IV-special, this will add on average 13.5 more Class IV-special FPAs each year, meaning an additional 27 hours spent completing the SEPA checklist by all affected businesses and landowners statewide. Combined with the previous estimate of 82 hours, it would total 109 hours of additional paperwork annually to all affected businesses and landowners statewide. If we assume a

consultant would charge a rate of \$100 per hour to complete the SEPA checklist, this would amount to a cost of \$10,900 dollars annually to all affected businesses and landowners statewide.

However, these 13.5 “new” FPAs each year that would not have been flagged for cultural resource issues under the current rules may require some additional costs such as operational restrictions imposed upon the forest practice activity. If this is the case, this could impose an even greater impact on the business or landowner. Discussions with DNR Region Forest Practices staff indicate that, on the majority of FPAs with cultural resources, the landowner and the tribe work out an agreement for safeguarding the resource. Typical restrictions can range from not driving equipment over the site to leaving buffer trees around the site. However, because these arrangements are often made solely between the landowner and the tribe, it is difficult to determine the “average” or probable restriction requirement on forestlands, so it is also difficult to determine the resulting “average” or probable impact to landowners.

If we assume that all 13.5 “new” FPAs with cultural resources would require the more costly typical restrictions noted by the DNR region staff, buffer trees would be required on these FPAs. If we further assume that 10 buffer trees were left for each FPA, this would total 135 trees annually. Assuming an average tree is 110 feet tall with a 14 inch diameter at breast height, this would yield 200 board feet (Scribner) per tree, or a total of 27 MBF (thousand board feet) for all the trees. Applying a stumpage price of \$326³ per MBF, the additional costs for operational restrictions on the 13.5 FPAs would total \$8,800 per year.

Small Business Impacts

As discussed earlier, small businesses (small landowners) do not appear to be any more likely to have cultural resources on their land than large landowners. Given that on average, small landowners make up approximately 26 percent of the FPA applicants, 29 of the 109 hours of additional paperwork required annually statewide due to the SEPA checklist would fall on small landowners. Using the estimate of \$100 per hour for hiring a consultant, this would cost all affected small landowners \$2,900 annually statewide. Unlike large land businesses (industrial timberland owners), small landowners may not be as familiar with the SEPA checklist and it may therefore take more time to complete. To mitigate this potential added time for small landowners unfamiliar with the SEPA checklist, the DNR’s Small Forest Landowner Office offers free assistance with the completion of both SEPA checklists and FPAs.

As discussed in the previous section, it is estimated that 13.5 additional FPAs statewide would be subject to more costly restrictions due to leave tree buffers around cultural resources. On average, 3.5 of these FPAs would belong to small landowners (since they make up 26 percent of those applying for FPAs), so this would add approximately \$2,290 annually to the impact on small landowners.

QUALITATIVE BENEFITS

The primary benefit of the proposed rules would be to increase protection of the cultural heritage of Washington by identifying and protecting cultural resources that could otherwise be degraded

³ This stumpage value is the average year-to-date price paid on DNR timber sales statewide for FY 2008.

or destroyed by normal forest practices activities. In the Archaeological Sites and Resources Act (chapter 27.53 RCW) and the Indian Graves and Records Act (chapter 27.44 RCW), the legislature declares the “conservation, preservation, protection, and scientific study of the state’s archaeological resources” to be in the public interest and declares these resources “finite, irreplaceable, and nonrenewable”. These legislative proclamations reflect the value to the citizens of the state in identifying and protecting Washington’s cultural resources, including when these resources are in a forest practices setting.

The proposed rules improve the identification and protection of cultural resources by clarifying the currently ambiguous language that determines the review and conditioning of forest practices application involving cultural resources. Additionally, rule clarity in itself leads to better statewide implementation of the Forest Practices Rules, more efficient DNR processing of applications, and smoother and more predictable application processing for forest landowners. It may also lead to increased landowner understanding of, and so compliance with, the forest practices rules.

SPECIFIC DIRECTIVES OF THE STATUTES BEING IMPLEMENTED

The statutes being implemented are the Forest Practices Act and the State Environmental Policy Act (SEPA). In the Forest Practices Act, chapter 76.09 RCW, the legislature declares that it is in the public interest to coordinate and cooperate with the tribes and foster compliance with state and federal laws protecting cultural resources. See RCW 76.09.010 (2). Additionally, in RCW 76.09.370, the legislature strongly encourages the Board to adopt the 1999 Forest and Fish Report which contains two commitments specific to cultural resources: 1) create a cultural resources plan to address landowner–tribes relationships and resolution of cultural resources concerns that arise due to forest practices (Appendix O.3) and 2) complete a cultural resources module to add to the watershed analysis process Appendix (G.1). The Board’s rules now require annual updates on the Cultural Resources Protection and Management Plan (WAC 222-08-160) and completion of the cultural resources module as part of a watershed analysis (chapter 222-22 WAC and Board Manual section 11).

The Forest Practices Act also directs the Forest Practices Board to adopt forest practices rules that identify which forest practices require SEPA review because of their potential for a substantial impact on the environment. See RCW 76.09.050(1) and WAC 222-16-050(1). The SEPA rules (chapter 197-11 WAC) include historic and cultural preservation as an element of the environment which must be addressed in the SEPA checklist required for all Class IV forest practices.

CONCLUSION

The total cost of this rule change is estimated at \$19,700 per year statewide over all businesses.

The costs of the proposed rule changes are measured as the annual statewide increase in time spent completing additional paperwork and additional operating costs in the form of leave trees. An assumed consultant’s rate of \$100 per hour is applied to the hourly estimates and a value of \$65 is applied to each tree to arrive at a dollar value.

Only 0.7 percent of all FPAs reviewed contain a cultural resource issue, and the rule change would increase the number of Class IV-special FPAs making it necessary to complete an additional two hours of paperwork in the form of the SEPA checklist. This adds up to a total of 109 hours annually of time spent on additional paperwork statewide, estimated at a cost of \$10,900 annually statewide, assuming landowners hire a consultant at a rate of \$100 per hour. The SEPA checklist affects both large and small businesses alike, although large businesses may have staff trained at completing this type of paperwork. The impact on small businesses of hiring a consultant to complete the SEPA checklist will be mitigated by utilizing the free assistance available through the DNR's Small Forest Landowner Office.

There will also be an estimated 13.5 more FPAs per year subject to operational constraints due to the presence of cultural resources. Assuming each FPA will be required to leave an average of 10 buffer trees to prevent damage to the cultural resources, the total value of the buffer trees for all FPAs is estimated at \$8,800 per year. While small landowners will bear a portion of this cost, there is no indication they will be disproportionately impacted by the operational constraints.

Taking into account both the qualitative and quantitative benefits and costs, and the specific directives of the Forest Practices Act and SEPA, the probable benefits of the rule amendments are greater than the probable costs. Also, the proposed amendments represent the least burdensome alternative that will achieve the general goals and specific objectives of the Forest Practices Act and SEPA.