

To: Dept. of Natural Resources  
SEPA Center,  
Lake Whatcom PDEIS  
1111 Washington ST SE  
PO Box 4-7015  
Olympia WA 98504-7015

*Re: Lake Whatcom Landscape Plan DEIS, SEPA File No. 02-091300*

On behalf of Northwest Ecosystem Alliance and our 8,000 members, 575 of whom live in Whatcom and Skagit Counties, I write to provide comments on the Department of Natural Resources' Lake Whatcom Landscape Plan Draft Environmental Impact Statement. Thank you for this opportunity.

## **I. Summary**

### A) Background

In 2000 the Washington State Legislature unanimously passed legislation, bill number E2SSB 6731, to protect drinking water and public safety in the Lake Whatcom watershed from the potentially catastrophic impacts of logging above neighborhoods and above a significant drinking water source. Today, after much public process, we have before us a preferred alternative in the DEIS that, with exceptions we will note in our comments, follows the prescriptions of the Lake Whatcom Bill in a fairly straightforward manner.

In addition to several opportunities for public input as E2SSB 6731 was before the legislature, there were opportunities for public input into the development of the Landscape Plan. In addition to the initial scoping meetings DNR held, there was a scoping meeting on September 12, 2001, October 10, 2002 and September 22, 2003. At each meeting, more than one hundred citizens attended and the vast majority of citizens and elected officials asked for either no logging, or for logging that carefully protects public resources. While we attended these meetings, and read the comments, we see little change to the preferred alternative as a result of detailed scientific information or an overwhelming preference for logging that poses little risk to the public and our most essential resources. In fact, Alternative 4, which had broad support from scientists, citizens and local government officials, did not receive further review.

The Lake Whatcom Landscape Plan is of the highest importance. It directs management activities on 15,700 acres of state trust lands in a sensitive and irreplaceable watershed. Lake Whatcom is the sole source of drinking water for more than 87,000 people. Half of Whatcom County relies on Lake Whatcom as the only viable source of clean, fresh drinking water. In addition, the neighborhood of Sudden Valley lies directly below Lookout Mountain, where “the terrain is steeper and more complex, with 30 to 40 percent slopes, truncated by deeply incised stream channels with walls generally inclined more than 50 %, often 70% or steeper.”<sup>1</sup> Many of the homes would be in the path of potential debris flows or landslides from the DNR trust lands above.

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<sup>1</sup> DEIS – Lake Whatcom Landscape Plan. Page 44.

Approximately 48% of the Lake Whatcom watershed is state trustlands, owned by the people of the state of Washington and managed on our behalf by the Department of Natural Resources. The DNR trust lands surround Basin 3 of Lake Whatcom and, as we will explain, changes in the total phosphorus levels in basin 3 have been documented and there are decreasing hypolimnetic oxygen concentrations. According to the DEIS, 35% of the inflow into Lake Whatcom is from trust lands. That is likely higher as the Nooksack diversion is rarely used. Given the importance of the trust lands to water quality in Lake Whatcom, and the documented increase in phosphorus levels even in Basin 3, it is likely that high levels of sediments originating on trust lands are negatively impacting water quality. Increased logging can be expected to exacerbate that.

### B. Concerns

Today, the selection of a Landscape Plan is nearly complete, yet two primary questions remain: the role of the Interjurisdictional Committee and the role of science. Those questions must be answered, and should have been answered prior to the release of the DEIS, for any accurate evaluation of the landscape plan to be made by us, by elected officials, by scientists and by the public.

While the preferred alternative generally follows the details of the bill (with a few exceptions), it continues to fall short of the stated intent of the legislature to protect drinking water and public safety, it fails to follow the legislature's directive to incorporate new scientific information and fails to adequately demonstrate that it will keep sediment out of streams. In addition, and of great concern to us, the DEIS did not include the intended management plan for analysis.

### C. Trust lands

Trust lands in the state of Washington are unique in the nation: "All the public lands granted to the state are held in trust for all the people."<sup>2</sup> Upon entering the union in 1889, the federal government granted the state sections 16 and 36 in every township "for the support of the common schools."<sup>3</sup> Other land was given for other institutions, such as prisons and a state capital. The enabling act that made Washington a state contained rules for how the land grants could be sold and Article XVI of the Washington State constitution details how trust lands must be sold.

In 1984 the Washington Supreme Court ruled, in *Skamania v. Washington*, that the state Legislature could not let timber companies off the hook for logging contracts on state trust lands, because of the state's trust duty of "undivided loyalty." It said trust lands "are real, enforceable trusts that impose upon the State the same fiduciary duties applicable to private trustees...A trustee must act with undivided loyalty to the trust beneficiaries, to the exclusion of all other interests...The State may not sacrifice this goal to pursue other objectives, no matter how laudable those objectives may be."<sup>4</sup> In this case the court narrowly ruled that the state cannot favor private industry above their duty to

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<sup>2</sup> Washington State Constitution, 1889, Article XVI

<sup>3</sup> Enabling Act, ch. 180, 25 Stat. 676 (1889).

<sup>4</sup> County of Skamania v. State, 102 Wash. 2d 136, 685 P.2d at 579.

beneficiaries. It did not rule on the conflict between public values such as clean drinking water, recreation or wildlife and the beneficiaries.

While some infer the Skamania ruling means the state must maximize revenue, in a more recent case in Okanagon County, the Chelan County Superior Court said “nothing in the law... requires the department to maximize current income.”

The state Supreme Court has also written that the public trust doctrine is like “a covenant running with the land...for the benefit of the public and the land’s dependent wildlife.”<sup>5</sup> It is this broad public trust that must be protected: the state’s enduring obligation to provide clean drinking water and public safety.

The lands covered by the DEIS have a broad public trust benefit: they provide clean drinking water to half of Whatcom County residents. They also pose a significant threat: thousands of families live in the homes below the steep slopes and in the past, DNR logging triggered catastrophic debris flow events and landslides that put houses, cars, a person, and some 65 cubic acres of timber debris into Lake Whatcom. The repeated requests of legislators, local elected officials and countless citizens are reasonable: they want DNR logging to cause no harm to drinking water and neighborhoods. It is their explicit expectation that, as these lands are held in trust for all the people, and managed by the DNR on our behalf, that activities on these lands shall not harm them but shall provide a public benefit. These expectations are consistent with the state Constitution and Enabling Act and with subsequent laws and court decisions.<sup>6</sup>

Those expectations of a broad public benefit are heightened by the fact that 60% of the Lake Whatcom trust lands are held in trust for Whatcom County. The beneficiaries are largely local and the clear and stated intention of the statutes that originally created this body of trust land was reforestation, not generation of revenue.<sup>7</sup>

Thus, these are trust lands that must be managed “for all the people,”<sup>8</sup> with the objectives of producing clean drinking water, providing for public safety through the attenuation of landslides, and producing some revenues for the beneficiaries. That broad public trust has not been met; the DEIS does not sufficiently protect drinking water or public safety.

## II. The DEIS fails to follow legislative direction in E2SSB 6731

A) We must express our extreme disappointment that the DEIS fails to include the full and correct language of bill number E2SSB 6731 in the DEIS. E2SSB 6731 states: “The department shall consult with the Lake Whatcom management committee on proposed timber harvest and road management activities. The department shall establish an

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<sup>5</sup> Orion Corporation v. State, 109 Wash. 2d 621, 639, 747 P.2d 1062, 1072 (1987)

<sup>6</sup> Chasen, Daniel Jack, 2000. A Trust For All the People: Rethinking the Management of Washington’s State Forests. Seattle University Law Review. Vol 24, No 1.

<sup>7</sup> Chasen, Daniel Jack, 2000. A Trust For All the People: Rethinking the Management of Washington’s State Forests. Seattle University Law Review. Vol 24, No 1.

<sup>8</sup> Washington State Constitution, Article XVI.

interjurisdictional committee for the development of the landscape plan, to review the site-specific activities and make recommendations.” However, that language is missing from the bill language included in the DEIS. I reviewed all past versions of the bill on the legislative website and no previous version matches the one in the DEIS.

The version in the DEIS states: “The department shall consult with the Lake Whatcom management committee for the development of the landscape plan, to review the site-specific activities and make recommendations.” 15 key words are missing and their removal changes the meaning of the bill and the intent of the legislature in the very area that remains controversial. The Lake Whatcom Management Committee consists of the Mayor of Bellingham, the County Executive and the Manager of Water District 10. While the Legislature stated their intent for DNR to consult with that committee, and other groups, they clearly outlined an important role for the Interjurisdictional Committee, a Committee originally established by SSSB 5536 in 1999. The fact that the removal of those key words from the bill happens to support the department’s preference for how to manage public oversight of Lake Whatcom management plan gives the appearance that the omission could have been a deliberate effort to create an outcome the department considers favorable by ignoring the clear written language of the law. The department needs to investigate and determine how a mistake of this magnitude happened and report the results of that investigation to the public. But regardless of how this mistake happened, deleting language from the bill is a serious error and reflects poorly on the DNR.

In addition, it was our expectation that, once this error was pointed out, errors would be corrected with due haste. While a new appendix with the accurate bill was eventually produced, a DNR staff member stated at the DEIS public hearing that it was only a difference of 6 words (it’s 15 words and not a minor error.) Even today, if a citizen downloads a copy of the DEIS from the DNR website, they will be downloading an inaccurate version of E2SSB 6731. It is the responsibility of DNR to ensure that material known to be inaccurate is not disseminated on the DNR website.

- **We ask that you reprint the DEIS, replace all copies in circulation, and remove the inaccurate bill from your website.**

B) Because the DEIS includes inaccurate information (and the *Responses to Public Comments Received Regarding the PDEIS*, dated March 7, 2003) it seems clear that the drafters of the DEIS were writing this document with an incomplete understanding of the law that DNR is required to follow. The inaccurate version of the bill states only that the Interjurisdictional Committee “may recommend to the department restrictions upon timber harvest and yarding activities on a case-by-case basis.” However, the Interjurisdictional Committee has a broader and more important role to play: **they are to review all site specific activities and make recommendations.** The following changes to the DEIS language will be required in order to comply with the law as written: the Inter-Jurisdictional Committee (IJC) will review all site specific activities and make recommendations, including road construction, road maintenance and abandonment, all proposed timber harvests, including proposed activities on potentially unstable slopes to

determine actual unstable areas, any proposed application of herbicides, pesticides or fertilizer and any management of nesting, roosting and foraging sites.

- **You must make those changes so that the Lake Whatcom Landscape Plan follows E2SSB 6731.**

C) The bill states that “On unstable slopes, new road construction shall be prohibited.” The DEIS states that DNR will “follow Watershed Analysis prescription for road construction in ARS #1.” ARS #1 is defined in the DEIS as unstable.

- **You must prohibit road construction on all unstable slopes, including ARS #1 for the Lake Whatcom Landscape Plan to be consistent with E2SSB 6731.**

D) Potentially unstable slopes: the IJC shall oversee all site-specific activities, including any road building on potentially unstable slopes. In addition, all determinations of stability and harvest shall be made with the IJC.

E) Road building: the IJC must be involved with all activities, yet no involvement with the road plan is stated. The PDEIS states that logging roads were largely responsible for past landslides in this watershed, and so families below these forested slopes need to know that roads, and the building and abandonment of those roads, receive the highest level of scrutiny by independent geologists with expertise in this area.

### **III. The Interjurisdictional Committee**

The Interjurisdictional Committee (IJC) was established by legislative directive to oversee all activities on a site specific basis, including road building plans, and to make recommendations. For citizens to have confidence in the Preferred Alternative, there must be a committee that is knowledgeable, in fact expert, and consistent over time in order to make substantive recommendations on details of slope stability, water quality and forestry.

The best approach for an ongoing interjurisdictional committee is to have Whatcom County, the City of Bellingham and the Tribes work together to appoint a committee that will follow the legislative directive for the IJC and the legislative intent to protect public safety and clean drinking water. That committee should be a small group, with a long-term participation commitment, that retains 2 or more scientists on contract to make recommendations to DNR on all activities. Those recommendations must be more than just opinions to be listened to and possibly ignored. There must be a mediation process for potential disagreement in place prior to the formation of the committee. There must also be a funding source to reimburse citizen members of the committee per diem for time spent on committee business, and for the City and County to be reimbursed for contract expenses for any scientists they retain. As timber harvest on trust lands generates revenue, it is reasonable and fair to expect that any costs should be reimbursed from the management account for those lands.

### **IV. Incorporate New Scientific Information When Available**

E2SSB 6731 calls for the landscape plan to “incorporate...**new scientific information when available**,” (emphasis added.) This is a high standard set by the legislature and they and citizens expect that this will be followed. Much of the new scientific information presented by NWEA, scientists and citizens during public comment periods conflicts with established DNR practices, and demonstrates that the bar should be raised even beyond E2SSB 6731 in order to follow the Lake Whatcom Landscape Planning Committee objectives and the legislative intent as detailed below. To date, you have not incorporated that new scientific information in the landscape plan.

In our comments to the PDEIS we provided new scientific information in areas such as slope stability, yet that peer reviewed science was not incorporated into the Preferred Alternative in the DEIS. Since it was not addressed, we incorporate our previous comments to the PDEIS by reference into this document, including comments provided to us by Dave Montgomery on October 10, 2002.

Geologist Dave Montgomery provided the following comments for the PDEIS: “Precluding road construction and timber harvesting on “unstable” slopes in Alternative 2 removes the potential for patently risky actions, but it does nothing to address the fundamental problem of increased risk of landsliding resulting from harvest or road construction on potentially unstable slopes. And yet it is the latter problem that is generally of interest in terms of forecasting the effects of a management regime on public safety. Identifying the existing active landslides and restricting actions on them should not be difficult to do (at least from a technical perspective). In contrast, the identification of future landslide sites among those considered to be potentially unstable is notoriously difficult (if not impossible), and so it is in the management of the potentially unstable slopes that the major differences in the alternatives play out. Alternative 2 allows harvesting and road construction on potentially unstable slopes upon consideration of “*inter-jurisdictional committee and specialists’ recommendations.*” Such consideration provides no guarantee that decisions would in fact “*ensure no significant risk.*” Additionally, Montgomery pointed out that even Alternative 3, with partial cuts on potentially unstable slopes is risky. He stated “I know of no studies that have demonstrated that a 50% partial cut on potentially unstable slopes (such as hollows, headwalls, and slopes steeper than 70% as they are defined in the Draft EIS) would “ensure no significant risk” of landsliding from timber harvest. To the contrary, an analysis of the effect of root reinforcement on slope stability recently published in the Canadian Geotechnical Journal (Schmidt et al., 2001; a study which I was a co-author on), found that spatial variability in root strength – such as one might anticipate would result from a partial cut – was associated with those potentially unstable sites that generated rapidly moving, highly destructive debris flows in the Oregon Coast Range.” Yet you moved Alternative 3 forward for further review without addressing the substantive scientific issues raised by that study. We question whether that study was considered as directed by E2SSB 6731.

- **We ask you to incorporate the new scientific information Dr. Montgomery provided to you in 2002 and move Alternative 4 forward for further review, rather than Alternative 3.**

E2SSB 6731 holds DNR to a high standard, to incorporate new scientific information when available. There is ample available evidence to demonstrate that timber harvest and road construction on potentially unstable slopes is not a low risk endeavor. You state erroneously that it is. We asked Dr. Montgomery to review the PDEIS on our behalf and he clearly stated, and backed it up with scientific references, that logging on potentially unstable slopes is risky. The DEIS says that it's not. The DEIS conclusion is not supported by the best available science.

- **We ask you to provide the studies that demonstrate that logging and road building on potentially unstable slopes meets the stated standard of ensuring “no significant risk.” If you cannot provide substantial scientific studies that ensure that this logging ensures “no significant risk” then you need to change the preferred alternative to ensure no significant risk by prohibiting logging and road building on potentially unstable slopes.**

In addition, a recent, published study indicates that root cohesion in industrial forests, such as comprise many of the DNR lands in the Lake Whatcom watershed, more closely resemble the root cohesion of 10-year old clearcuts than natural forests (K.M. Schmidt, J.J. Roering, J.D. Stock, W.E. Dietrich, D.R. Montgomery, and T. Schaub. 2001. The variability of root cohesion as an influence on shallow landslide susceptibility in the Oregon Coast Range. Canadian J. Geotech./Rev. Can. Geotech. Vol. 38 no.5, pp.995-1024. This indicates that the past may not predict the future of slope stability: slopes previously determined to be stable or potentially unstable based on past disturbances may lack the root cohesion necessary to stabilize slopes in the near future. And industrial logging, as has occurred on DNR lands in the Lake Whatcom watershed, may have altered the stability of the slopes.

- **We ask that you incorporate this new scientific information into your preferred alternative.**

### **Monitoring**

We find no reference to ongoing monitoring in the preferred alternative. In fact, no alternative addresses the clear need to conduct ongoing monitoring to ensure that DNR will “maintain and restore the sediment regime within the range of natural variability.”<sup>9</sup> Without monitoring there is no way of knowing whether the objective is being met, particularly since the objective, to restore the sediment regime, is such a high standard, agreed upon by both the DNR and the Lake Whatcom Landscape Committee.

- **We ask that monitoring and a process for adaptive management be included as part of the preferred alternative.**

### **DOE and DOH letters**

During scoping the Commissioner of Public Lands asked the Department of Ecology and the Department of Health: “What additional water quality protection measures, if any, should the Department of Natural Resources consider beyond those already set forth in the Forest Practices Rules and the Lake Whatcom Watershed Analysis; the Department of Natural Resources’ Forest Resource Plan and HCP for state trust lands, and the additional

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<sup>9</sup> DEIS Preferred Alternative, Objective 2, page 11.

requirements set forth in E2SSB 6731?<sup>10</sup>” The Department of Ecology and the Department of Health each responded with a letter. These two letters continue to be used by DNR staff, and in the DEIS, as substitutes for analysis and scrutiny by the Department of Natural Resources. In the PDEIS the department stated: “Alternative 1 is unlikely to adversely affect the public water supply. (See letters from the departments of Ecology and Health, Appendix D, PDEIS7 and PDEIS8.)<sup>11</sup>” While we’re relieved that the department no longer holds them up as proof that Alternative 1 is fine, given that the letters have always discussed the preferred alternative, they remain merely letters. These letters are then, in part, ignored by the department. The letter from the DOH states: “The Department participated in DNR’s 1999 Lake Whatcom Interagency Advisory Committee. That advisory committee developed water quality protection recommendations that targeted prevention or reduction of future sediment loads reaching Lake Whatcom from DNR’s activities in the watershed. DNR should consider implementing the recommendations of that committee. As noted, the Department is currently participating in DNR’s Lake Whatcom Landscape Plan advisory committee. Site-specific recommendations identified by that process related to enhancing water quality should also be considered.” Let me be clear: the letters from the DOE and DOH should not be used by an agency with scientists on staff, as scientific proof. The community has higher expectations of their Department of Natural Resources. The legislature asked you to incorporate new science, not letters of opinion.

In our comments to the PDEIS we suggested that if you are to use those letters that you follow all of the recommendations of the letter from the DOH. You did not respond. Instead, you continue to cherry pick the parts of the letters you like, rather than following DOH’s reasonable recommendations to implement the 1999 committee’s recommendations.

- **We ask again that you follow the recommendations of the Department of Health and implement the recommendations that emerged from the 1999 Lake Whatcom advisory committee.**

The DEIS states that “total phosphorus concentrations have consistently been lower in Basin 3 than in the more urban influenced Basins 1 and 2.<sup>12</sup>” Yet that doesn’t tell the full story. The 1998/99 Lake Whatcom Final Report states: “Dissolved oxygen appeared to be decreasing over time at Sites 1, 3 and 4...Most of the correlations at Site 3 occurred in deep water (>50m) from July through December (approximate time of destratification in basin 3). Therefore, these correlations were most likely the result of decreased levels of oxygen in the hypolimnion. (We noted earlier that hypolimnetic oxygen concentrations were unusually low at Site 3 during 1998 and 1999.) The correlations at Site 4 occurred primarily during April, June, October, November, and December, and were scattered throughout the water column rather than being confined to the hypolimnion...The absence of any similar pattern in the temperature vs. year indicates that the oxygen results

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<sup>10</sup> Letter from Commissioner Sutherland to DOE and DOH, dated November 8, 2001, printed in the Responses to Public Comments Received Regarding the PDEIS. March 7, 2003.

<sup>11</sup> Lake Whatcom Landscape Plan PDEIS, Executive Summary.

<sup>12</sup> DEIS – Lake Whatcom Landscape Plan, page 50.

are not likely caused by temperature differences from year to year.<sup>13</sup> “There is, however, a very clear change in the total phosphorus levels in basin 3 (see 2001/2002 Report Figures 119-120, pages 184-185.)<sup>14</sup>” The FEIS needs to reflect the likelihood that sediment yields from DNR land are negatively impacting oxygen levels in the lake. The DEIS lists impacts to surface water quality as sediment, water temperature, and nutrients, then states “However, management of trust lands is not a significant contributor to these problems.<sup>15</sup>” This is simply not true: large quantities of sediment enter the stream systems and flow to Lake Whatcom from trust lands – 2.4 times the normal background level over 15,700 acres, according to DNR’s PDEIS.

- **We ask that you evaluate the amount and sources of sediment entering the lake from the trust lands and contributing to phosphorous loading and deoxygenation and adapt the preferred alternative in order to minimize additional sediment inputs**

### V. Evaluation of the preferred alternative

In several places the preferred alternative falls short of the prescriptions outlined in E2SSB 6731 and in key areas the preferred alternative falls far short of the objectives laid out by the committee. When DNR and the committee agreed upon objectives that the preferred alternative would eventually meet, it seemed fair to assume that effort would be made to ensure that the preferred alternative met those objectives.

**RMZs:** We are pleased to see that type 5 streams receive some protection. Not only are these the very headwaters of our streams, but these are often areas of unstable soil. However, we are concerned to read that you intend to build roads and yard across these areas.

- **We ask that any proposed roads crossing type 5 streams occur with the agreement of the IJC, following review by independent geologists, and that only full-suspension cable yarding across type 5 streams be considered by the IJC.**

**Potentially unstable slopes:** In the Lake Whatcom Landscape Plan potentially unstable slopes are described as: “areas that were not included in the previously mapped ARSs, have not been subjected to slope movement processes, and indicate a potential for future slope movement. These include slopes inclined steeper than 70 percent, incised stream channels, convergent (concave) headwall areas, slopes at the outside edges of stream meanders, and slopes greater than 65 percent at the toes and scarps of deep-seated landslides.<sup>16</sup>” We have already stated the opinion of geologist Dave Montgomery that logging on potentially unstable slopes is risky.

- **We ask that you do not log potentially unstable slopes.**

<sup>13</sup> 1998/99 Lake Whatcom Report. Page 12.

<sup>14</sup> Email Communication from Robin Matthews to Lisa McShane 10/6/03.

<sup>15</sup> DEIS – Lake Whatcom Landscape Plan, page 49.

<sup>16</sup> DEIS – Lake Whatcom Landscape Plan, page 46.

**Hydrologic maturity:** Objective 4 states: “Maintain the forest hydraulic (sic) regime for each sub-basin within the range of natural variability.<sup>17</sup>” (I assume you mean to say hydrologic regime.) However, the DEIS doesn’t state what the forest hydrologic regime is within each sub-basin. How can DNR achieve an objective if it isn’t clearly stated?

- **We ask that the FEIS evaluate the forest hydrologic regime for each sub-basin, detailing the natural variability.**

Your criterion is not necessarily protective of water quality. The HM threshold is defined as one that does not increase a two year peak flow by more than 10 percent. Yet you don’t examine what happens with ordinary rainfall events that will increase peak flow, possibly to at or above the normal two year peak flow if stripped of forest cover. When stripped of forest cover, sediment will be rapidly transported through the stream system into the lake. Since each stream system erodes differently, that needs to be evaluated separately for each stream. A recent scientific study by Derek Booth evaluated the impacts of impervious surface and forested cover in a watershed: “The most commonly chosen thresholds, maximum 10 percent EIA and minimum 65 percent forest cover, mark an observed transition in the downstream channels from minimally to severely degraded stream conditions.<sup>18</sup>”

On page 33 of the DEIS hydrologic maturity is estimated at 90% of the forested land. If the forests were at 100% hydrologic maturity at this time, and are harvested at the rate anticipated, 75 acres of clearcuts for 20 years, then 97 acres of clearcuts for the next 20 years, you would reach 88% hydrologic maturity (not taking into account the undefined thinnings intended.) However, at this time there are existing clearcuts on Lookout Mountain that must be taken into account. So, not only does the 90% HM seem unlikely and illogical, it’s inconsistent with your estimates for the sub-basins.

- **We ask that you estimate hydrologic maturity over the next 40 years, taking into account the current state of DNR forests.**

On page 50 of the DEIS, Table 8 shows the hydrologic maturity thresholds for Hydrologic Analysis Units within the Lake Whatcom watershed. This is a confusing way to present the information and doesn’t seem to tell the full story. It doesn’t give the total acreage per hydrologic analysis unit. It can be assumed that no basins are 100% hydrologically mature today, so the current acres of effective hydrologic maturity aren’t 100% of the sub-basins. Given that, it appears DNR is shooting for hydrologic maturity of from 23% to 54%, depending on the sub-basin. That’s remarkably low and will lead to more frequent peak flow events and increased sediment run-off which defeats the objective of restoring the sediment regime.

**Risk analysis:** In the March response to citizen comments, DNR said on Page 88 that it may use a risk assessment matrix in the DEIS. Such an evaluation would be quite useful yet I don’t find it in the DEIS. In our PDEIS comments we stated: “We ask that, as part of the DEIS, the DNR conduct a risk assessment for potential landslides in the watershed

<sup>17</sup> DEIS – Lake Whatcom Landscape Plan, page 12.

<sup>18</sup> D. B. Booth, D. Hartley, R. Jackson. 2002. Forest Cover, Impervious-Surface Area, and the Mitigation of Stormwater Impacts. Journal of the American Water Resources Association, v. 38:835-845.

based on potential costs of lake cleanup, loss of homes, loss of infrastructure and loss of life.”

We also pointed out that in 1996, in Rock Creek, Oregon, logging on steep slopes above homes triggered a landslide that crushed a home. Four people were killed, leaving 2 children orphaned and 2 children without a mother. In the civil suit that followed, Marvin v. Champion International, citizens sought \$11.3 million. Champion settled out of court for an undisclosed amount of money.

Following the 1983 landslides in the Lake Whatcom watershed, DNR was found to be at fault and the court required DNR to pay \$5 million to the City of Bellingham to reimburse costs from the landslide. It’s estimated that the total costs exceeded \$8 million. It’s entirely possible that the cost of logging potentially unstable slopes in the Lake Whatcom watershed can far exceed the benefits of the entire logging operation in the watershed with only one more incident like the 1983 landslide.

There is significant liability in logging potentially unstable slopes above neighborhoods and above a drinking water reservoir. DNR has been reminded time and again of this liability and of the grave risks by hundreds of citizens and elected officials. Yet the preferred alternative remains risky: logging and road building on potentially unstable slopes is anticipated, as are 43 miles of new roads, despite a recent study shows that the heritage of industrial logging is a forest with the root cohesion of a 10-year old clearcut. DNR revenues are calculated out over a 200 year period, and so should the risks be estimated.

- **We ask that a risk assessment matrix be included in the FEIS in order to fully inform the public and decision makers of the potential costs and potential benefits.**

**Cumulative Impacts:** While I understand the perspective in the DEIS that previous law represents a non-action, it sets up an unusual assessment in the DEIS where cumulative effects are analyzed only in the context of a scenario where it could have been worse. Certainly, activities restricted by E2SSB 6731 are better for water quality than those allowed under Forests and Fish and the HCP. However, that doesn’t really assess the cumulative impact that logging ¼ of a watershed can have in a drinking water reservoir and really only addresses the impact the preferred alternative has to current forest practice rules. For example, the DEIS on page 33 states “The risk of sediment and phosphorous loading above natural background levels into Lake Whatcom is less under the Preferred Alternative than under the No Action Alternative.” This is not informative. Nowhere does the DEIS state what the sediment and phosphorous loading is under either the preferred alternative or the no action alternative, giving no basis for the conclusion and providing no means of determining significance.

- **We ask that an analysis of the cumulative effects be provided in the FEIS, including an analysis of: what percent of the total watershed will be stripped of forest cover in 20 years; what effect will that have on water quality; and what will be the impact of 43 miles of new roads?**

- **We ask that the cumulative environmental impacts of the preferred alternative, particularly the impact of 43 miles of new roads to water quality and the increased risk of landslides be addressed in the FEIS.**

**Cultural Resources:** We wish to thank the DNR for working closely with the Lummi Nation and crafting a plan intended to protect cultural resources. It's my understanding that DNR intends to use this plan as a model for other state trust lands. That's commendable.

In reviewing the Lummi Nation's comments to the PDEIS (Lake Whatcom PDEIS Comments and Responses, Appendix C), there appear to be several concerns that have not been addressed: "increased delivery of sediment to streams will impact our ceremonial sites;" "roads and landing locations would have adverse impacts to cultural resources;" "RMZ along our ceremonial areas doesn't protect our concerns." I hope that these good points will be addressed through changes to the preferred alternative in the FEIS. In many cultural traditions water is sacred. The water that flows from a logged area is impaired relative to water flowing from a mature forest. The concerns of the Lummi nation that sediment in streams will impact their ceremonial sites should not be taken lightly.

- **We ask that the preferred alternative be modified to stop the additional delivery of sediment to streams in order to have minimal impact on their ceremonial sites.**

**Revenues:** There are a number of irregularities and problems with the analysis of the revenues.

A) First, the revenues outlined in the PDEIS do not match up with the revenues in the DEIS, when adjusted for annual revenue based on either a 4% or 5% discount rate. Yet the overall acreage of timber harvested is identical. This creates distrust with local citizens and local governments when the same trees and the same logging plan produce such varied estimates of financial benefits. Please explain that difference.

B) On page 17 the DEIS lists strategies for generating revenue, however, reconveyance is not a revenue generating mechanism and should not be included in the DEIS.

C) The DEIS lists conservation easement in its itemization of revenues, but it doesn't receive further explanation and it's not clear how that would generate revenue.

D) In the appendix the DEIS approaches revenue production from the question of how to make up a perceived loss of income from what could have happened before E2SSB 6731 and evaluate the decision of the preferred alternative over the no-action alternative based on that difference. However, in 2000 the legislature made the decision already: DNR is to provide for clean drinking water and public safety without compensation for the lost revenues. It would seem to be more realistic to approach potential additional revenues from the perspective of existing law. For example, the Lake Whatcom bill is a significant step forward in protection of public resources and should be at or close to the mark for FSC certification. DNR has found that certified wood sells for an additional \$21/mbf. At

an average annual yield of 2,730/mbf, DNR would realize an additional \$57,330 per year. That seems worth further investigation.

E) What is not worth further investigation is a destination resort development. DNR land is zoned commercial forestry. Such zoning does not allow for a resort. I think it's unlikely that an upzone that brings more development and traffic into a drinking water reservoir will be tolerated by local citizens or elected officials.

F) While the net present value of timber (Table DEIS4-1) is consistent with the PDEIS it seems to not be internally consistent. The preferred alternative represents 50% less timber production (DEIS Table 6, p. 42) than the no-action alternative yet logging revenues drop by just 35%. We'd appreciate an explanation of that difference.

## VI. SEPA Concerns

The Draft Environmental Impact Statement is a document that evaluates the impact to the environment of alternative actions. Yet, the DEIS is not evaluating the timber plan. DNR distributed a different harvest plan to the Committee, dated March 2003. While the DEIS evaluates the impacts of 43 acres of clearcuts per year and 35 acres of thinnings, DNR's actual intended actions are not those. From 2001 to 2020 DNR intends to clearcut 75 acres and thin 11 acres per year. From 2021 to 2040 DNR intends to clearcut 97 acres per year and thin 24 acres per year<sup>19</sup>. These are not small differences. In fact, for the second two decades DNR intends to double the acreage clearcut per year! Environmental impacts do not average out. The DEIS should have stated and then evaluated the impacts of the intended actions. To include only a 200 year average is mis-leading and avoids the intent of the DEIS – to evaluate the environmental impacts.

- **We ask that the impacts of DNR's actual timber harvest plan be disclosed and evaluated in the FEIS.**

## VII. Conclusion

We thank you for this opportunity to provide comments and review of the DEIS. We ask that you respond to the questions we've asked and incorporate new scientific information we have presented.

The Lake Whatcom Landscape Plan is a unique opportunity for DNR to work closely with an involved community in crafting a plan that meets the stated objectives: “ensure no significant risk to public health, safety and resources, and tribal and archaeological and cultural resources from forest-management related mass-wasting events<sup>20</sup>,” and “maintain and restore the sediment regime within the range of natural variability<sup>21</sup>.” These are high standards, yet goals the public expects that the DNR will reach. These are also goals that are fully consistent with the constitution of the state of Washington and with the broad public trust that runs with these lands.

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<sup>19</sup> Data sheet for LW Draft Alternative dated 3/25/02, given to Lisa McShane by Candace Johnson, 9/25/03.

<sup>20</sup> DEIS – Lake Whatcom Landscape Plan, Objective 1, page 11.

<sup>21</sup> DEIS – Lake Whatcom Landscape Plan, Objective 2, page 11.

The intent of the legislature, to protect clean drinking water and public safety, is also entirely consistent with the status of the Lake Whatcom lands as state trust lands. For indeed, there is no more important role for these lands than to provide clean drinking water and public safety. These are the highest values of the community; our state trust lands should be managed with those values as management goals, rather than management constraints. We urge you to amend the preferred alternative so that those goals may be met and the broad public trust safeguarded.

Sincerely,

Lisa McShane  
Director of Community Relations  
Northwest Ecosystem Alliance

### Additional Scientific Information

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