WASHINGTON STATE DEPARTMENT OF
Natural Resources

PETER GOLDMARK
Washington State Commissioner of Public Lands

October 19, 2010

MEMORANDUM

TO: Forest Practices Board

FROM: Marc Engel, Assistant Division Manager – Policy and Services
Forest Practices Division

SUBJECT: Watershed Analysis Mass Wasting Prescription Review Update

Per the recommendations from the Board Committee on Watershed Analysis, and the discussion at the March 26, 2010 Board meeting, we continue to work on the DNR review process which will prioritize those approved Watershed Analyses (WSA's) needing reanalysis and the development of a standardized mass wasting prescription reanalysis process.

Leslie Lingley, Forest Practices Science Team Lead, is facilitating a stakeholder committee for review and feedback. To date, completed work includes:

1. Approval by the stakeholder group of the process DNR will use to review approved WSA to determine the need for reanalysis. The methods used to complete initial review to determine the need and prioritization of the 52 approved WSA included determining landslide frequency for each watershed, forest practices application (FPA) submittal per area for the last 15 years, areas of interest of the stakeholders, and areas of significant storm events. Some landowners with approved Habitat Conservation Plans have been conducting reviews since their watershed analyses were approved and these landowners will continue with their scheduled reanalysis.

2. Requesting landowners of 10% or greater ownership of forest land in approved WSA to determine if they will sponsor the mass wasting prescription reanalysis, participate in a reanalysis, or decide to withdraw mass wasting prescriptions and agree to use standard Forest Practices rules.
    a. As of October 18th of the 115 landowners contacted, we have received 64 responses; 58 landowners would like to agree to use standard rules, and six landowners expressed an interest in participating in a re-analysis sponsored by another landowner. It appears that many (the remaining 51 landowners) are waiting to see the final draft of the reanalysis process before they make a decision.

3. Presentation of the reanalysis process document to stakeholders for a second review and comments. The document was sent on September 28th with a deadline for review comments by October 20th. The next stakeholder meeting with qualified experts has been scheduled for October 25th.

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4. Prioritization of approved WSAs requiring mass wasting reanalysis should be finalized by mid November. DNR is hoping that after landowners have reviewed the final reanalysis process, they will express their choice to sponsor a reanalysis or agree to use standard rules.

I look forward to providing you further information on November 9th. If you have questions in the meantime, please do not hesitate to contact Leslie Lingley at (360) 902-2138 or leslie.lingley@dnr.wa.gov or me at (360) 902-1390 or marc.engel@dnr.wa.gov.

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WASHINGTON STATE DEPARTMENT OF
Natural Resources

PETER GOLDMARK
Washington State Commissioner of Public Lands

MEMORANDUM

TO: Forest Practices Board

FROM: Jim Hotvedt, Adaptive Management Program Administrator

DATE: October 18, 2010

SUBJECT: Policy Recommendation in Response to Forest Practice Board Proposal to Change Rules Pertaining to Watershed Analysis

The Forests and Fish Policy Committee is recommending rule changes pertaining to watershed analysis, in particular, the watershed analysis review and re-analysis process (see attachment).

At its April 23, 2010 meeting, the Forest Practices Board (Board) requested that the Adaptive Management Program (AMP) initiate review of the watershed analysis review process. To that end, I received an AMP proposal from Chair Peter Goldmark on behalf of the Board dated April 23, 2010 making this request (see attached).

The Board's proposal identified two issues:

1. "WAC 222-22-090 places the onus on DNR to perform watershed analysis reviews. Entities with interest in maintaining watershed analysis mass wasting prescriptions should be responsible for committing sufficient resources to the review process and keeping watershed analysis prescriptions current," and
2. "WAC 222-22-090 does not explicitly provide DNR authority to withdraw prescriptions if reviews are not completed, or supplement prescriptions if necessary, prior to and during a review."

The Board's proposal requested that the AMP address these issues, and in doing so, that the recommendations from the AMP for addressing these issues include:

- Reinforce the concept that watershed analyses need to be kept up-to-date;
- Specify that entities with interest in maintaining mass wasting prescriptions in watershed analysis should be responsible for committing sufficient resources to the review process and keeping watershed analysis prescriptions current, in addition to the available resources provided by the DNR to administer the review process;
- Determine how to address watershed analysis reviews where resources are insufficient to conduct the review;
- Give DNR the authority to supplement mass wasting prescriptions, if necessary, prior to and during the review process, with the rules process that is utilized in watersheds not subject to watershed analysis;

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- Give DNR the authority to withdraw mass wasting prescriptions within WAUs in which the required reviews have not been completed within a specific timeline after initiation; and
- Submit a petition for rule making from Policy as soon as possible.

I forwarded the Board's proposal, along with my evaluation and recommendations, to Policy on April 30, 2010. Policy accepted the proposal at their regularly scheduled May 6, 2010 meeting and formed a sub-group to address the Board's proposal. The sub-group developed a charter, approved by Policy, and subsequently developed recommended changes to rule language (see attached).

While the Board's proposal was focused on WAC 222-22-090 Use and review of watershed analysis, Policy recommends changes to other related WACs as well. The recommended rule changes would amend WACs 222-10-030 and 035; 222-16-010 and 050; 222-20-015 and 080; and 222-22-010, 020, 030, 040, 045, 050, 060, 070, 075, 080, and 090.

Many of the recommended rule changes are intended to clarify particular WACs (e.g., adding the term "reanalysis", replacing "5-year review" with "reanalysis", or adding "and approved" behind the word "completed"). Consequently, rather than go through all the changes in detail, I will concentrate on how rule changes addressed your recommendations, as well as any other substantive changes.

- Reinforce the concept that watershed analyses need to be kept up-to-date

  Changes to WACs addressing the need for watershed analyses to be kept up-to-date include those in WAC 222-16-050 Classes of forest practices subsection (1)(d)(iii)(D); WAC 222-20-080 Application and notification expiration subsection (1)(a); and WAC 222-22-090 Use, review, and reanalysis of a watershed analysis subsections (1)(a), (2), (4), and (6)(a).

  Together, these require that approved watershed analyses be kept current and that the forest practices are to be conducted in accordance with conditions required by the department during reanalysis for a forest practice application not to be classified as a Class IV-Special for potentially unstable slopes or landforms. Finally, interim or draft prescriptions that have not been approved after a period of two years following commencement of a watershed analysis or reanalysis will expire.

- Specify that entities with interest in maintaining watershed analysis in mass wasting prescriptions should be responsible for committing sufficient resources to the review process and keeping watershed analysis prescriptions current, in addition to the available resources provided by the DNR to administer the review process

  Changes to WACs addressing the entity responsible for committing sufficient resources to a watershed analysis or reanalysis review process and keeping watershed analysis prescriptions current can be found in WAC 222-22-090 subsections (4), (5) and (7).

  Together, these subsections state that "Entities with an interest in maintaining watershed analysis mass wasting prescriptions are responsible for committing sufficient resources to complete a reanalysis …". Rule language requiring the department to repeat watershed

analysis in a WAU in which the prescriptions are not providing for protection and recovery over a period of three years has been deleted and replaced with requirements for the department to review approved prescriptions every five years or unless certain conditions apply, resulting in an analysis being conducted sooner (WAC 222-22-090 subsections (4) and (6)).

- Determine how to address watershed analysis reviews where resources are insufficient to conduct the review

  Changes to WACs addressing watershed analysis reviews where resources are insufficient to conduct the review can be found in WAC 222-22-090 Use, review, and reanalysis of a watershed analysis subsection (7)(d)(i) "If no affected landowners wish to participate and commit resources, then the department may rescind the watershed analysis prescriptions ..."

- Give DNR the authority to supplement mass wasting prescriptions, if necessary, prior to and during the review process, with the rules process that is utilized in watersheds not subject to watershed analysis

  Changes to WACs that would give DNR authority to supplement mass wasting or other watershed analysis prescriptions prior to and during the review process with the rules process that is utilized in watersheds not subject to watershed analysis can be found in WAC 222-16-050 Classes of forest practices subsection (1)(d)(iii)(D) and WAC 222-22-090 Use, review, and reanalysis of a watershed analysis subsections (1)(e)(iii) and (7)(c).

  These subsections state that the department shall not further condition forest practices applications and notifications "except ... when the department determines that a reanalysis is necessary ..." (WAC 222-22-090 (1)(e)(iii)). Subsection (7)(c) states "the department may condition forest practices applications ... to supplement existing watershed analysis prescriptions ..." Furthermore, the department would not classify an application as Class IV-Special for potentially unstable slopes or landforms if "The approved watershed analysis is current or the forest practices are to be conducted in accordance with conditions required by the department during reanalysis," in addition to other conditions already existing in WAC. In other words, if the latter condition is not met, the department could now classify an application as a Class IV-Special if a watershed analysis is not current or an analysis is not being conducted in accordance with conditions required by the department during reanalysis.

- Give DNR the authority to withdraw mass wasting prescriptions within WAUs in which the required reviews have not been completed within a specific timeline after initiation

  Changes to WACs that would give DNR authority to withdraw mass wasting prescriptions within WAUs in which the required reviews have not been completed within a specific timeline after initiation can be found in WAC 222-22-090 Use, review, and reanalysis of a watershed analysis subsections (2) and (7)(d)(ii).

These subsections state that interim or draft prescriptions that have not been approved after a period of two years since commencement of the watershed analysis or reanalysis shall expire. Further, the department may rescind watershed prescriptions if the established timeline for reanalysis and completion is not being met.

- Additional substantive rule changes

  Other substantive changes include revision of three WAC titles. They are, in their proposed language, WAC 222-22-030 Qualification of watershed resource analysts, specialists, field managers, and qualified experts; WAC 222-22-080 Approval of watershed analysis and reanalysis; and WAC 222-22-090 Use, review, and reanalysis of a watershed analysis.

  The definition of a "qualified expert" in WAC 222-10-030 SEPA policies for potentially unstable slopes and landforms has been applied to WAC 222-22-030 Qualifications of watershed resource analysis, specialists, field managers, and qualified experts. Under WAC 222-22-030, a reanalysis of mass wasting prescriptions under WAC 222-22-090 Use, review, and reanalysis of a watershed analysis would require a qualified expert.

  A definition for "Watershed reanalysis" has been added to WAC 222-16-010 General definitions.

  In prioritizing watersheds for review, the department is no longer required to determine, by region, the order in which it will analyze WAUs (changes to WAC 222-22-040 Watershed prioritization subsection (1)), and the department is no longer required to undertake a watershed analysis on each WAU (subsection (2)), but would now be allowed to undertake a watershed analysis or reanalysis on any WAU. Similarly, changes to WAC 222-22-090 Use, review, and reanalysis of a watershed analysis changes the evaluation of the effectiveness of prescriptions from "[W]here the condition of resource characteristics in a WAU are fair or poor" to the department being able to determine when a reanalysis of a watershed analysis is necessary on any WAU.

  Finally, the selection of prescriptions by the department under WAC 222-22-080 Approval of watershed analysis also applies to WAC 222-22-090 Use, review, and reanalysis of a watershed analysis.

Attached are documents supporting Policy's recommendations. The first contains the recommended WAC revisions.

Policy representatives and Forest Practices Board staff will be available at the November 9 Board meeting to answer questions regarding the proposed rule language.

Enclosures (3)

cc: Stephen Bernath, Policy co-chair
Jim Peters, Policy co-chair

FOREST PRACTICES BOARD
November 2010
Watershed Analysis Rule Proposal for 30-day Review

WAC 222-10-030 *SEPA policies for potentially unstable slopes and landforms. In addition to SEPA policies established elsewhere in this chapter, the following policies apply to forest practices described in WAC 222-16-050 (1)(d) relating to construction or harvest on potentially unstable slopes or landforms.

(1) In order to determine whether such forest practices are likely to have a probable significant adverse impact, and therefore require an environmental impact statement, the applicant must submit the following additional information, prepared by a qualified expert as defined in subsection (5) of this section. The qualified expert must describe the potentially unstable landforms in and around the application site, and analyze:

(a) The likelihood that the proposed forest practices will cause movement on the potentially unstable slopes or landforms, or contribute to further movement of a potentially unstable slope or landform;

(b) The likelihood of delivery of sediment or debris to any public resources, or in a manner that would threaten public safety; and

(c) Any possible mitigation for the identified hazards and risks.

(2) The department's threshold determination will include an evaluation of whether the proposed forest practices:

(a) Are likely to increase the probability of a mass movement on or near the site;

(b) Would deliver sediment or debris to a public resource or would deliver sediment or debris in a manner that would threaten public safety; and

(c) Such movement and delivery are likely to cause significant adverse impacts.

If the department determines that (a), (b) and (c) of this subsection are likely to occur, then the forest practice is likely to have a probable significant adverse impact.

(3) The department will evaluate the proposal, using appropriate expertise and in consultation with other affected agencies and Indian tribes.

(4) Specific mitigation measures or conditions must be designed to avoid accelerating rates and magnitudes of mass wasting that could deliver sediment or debris to a public resource or could deliver sediment or debris in a manner that would threaten public safety.

(5) Qualified expert for the purposes of this section and for reanalysis of watershed analysis mass wasting prescriptions under WAC 222-22-030 means a person licensed under chapter 18.220 RCW as either an engineering geologist or as a hydrogeologist (if the site warrants hydrologist expertise), with at least ~~3~~ three years of field experience in the evaluation of relevant problems in forested lands.

WAC 222-10-035 *Watershed analysis SEPA policies. When the department considers a watershed analysis or reanalysis for approval as in WAC 222-22-080 or 222-22-090, the department will perform a review under SEPA as a nonproject proposal. When making the SEPA threshold determination ~~for a watershed analysis~~, the department shall only make a determination of significance if, when compared to rules or prescriptions in place at the time of the analysis or the ~~5-year review~~reanalysis, the prescriptions will cause a probable significant adverse impact on elements of the environment other than those addressed in the watershed analysis process.

WAC 222-16-010 *General definitions

Unless otherwise required by context, as used in these rules:

"Act" means the Forest Practices Act, chapter 76.09 RCW.

. . .

"Area of resource sensitivity" means areas identified in accordance with WAC 222-22-050 (2)(d) ~~or~~, 222-22-060(2), or 222-22-090.

. . .

"Watershed administrative unit (WAU)" means an area shown on the map specified in WAC 222-22-020(1).

"Watershed analysis" means, for a given WAU, the assessment completed under WAC 222-22-050 or 222-22-060 together with the prescriptions selected under WAC 222-22-070 and shall include assessments completed under WAC 222-22-050 where there are no areas of resource sensitivity.

. . .

"Watershed reanalysis" means, for a given WAU, the department has determined under WAC 222-22-090 (6) that watershed analysis prescriptions need to be assessed for effectiveness of the prescriptions used under the watershed analysis. Watershed reanalysis is conducted according to chapter 222-22 WAC and board manual section 11, Standard Methodology for Conducting Watershed Analysis.

WAC 222-16-050 Classes of forest practices.

*There are 4 classes of forest practices created by the act. All forest practices (including those in Classes I and II) must be conducted in accordance with the forest practices rules.

(1) **"Class IV - special."** Except as provided in WAC 222-16-051, application to conduct forest practices involving the following circumstances requires an environmental checklist in compliance with the State Environmental Policy Act (SEPA), and SEPA guidelines, as they have been determined to have potential for a substantial impact on the environment. It may be determined that additional information or a detailed environmental statement is required before these forest practices may be conducted.

*(a) Aerial application of pesticides in a manner identified as having the potential for a substantial impact on the environment under WAC 222-16-070 or ground application of a pesticide within a Type A or B wetland.

(b) Specific forest practices listed in WAC 222-16-080 on lands designated as critical habitat (state) of threatened or endangered species.

(c) Harvesting, road construction, aerial application of pesticides and site preparation on all lands within the boundaries of any national park, state park, or any park of a local governmental entity, except harvest of less than five MBF within any developed park recreation area and park managed salvage of merchantable forest products.

*(d) Timber harvest, or construction of roads, landings, gravel pits, rock quarries, or spoil disposal areas, on potentially unstable slopes or landforms described in (i) below that has the potential to deliver sediment or debris to a public resource or that has the potential to threaten public safety, and which has been field verified by the department (see WAC 222-10-030 SEPA policies for potential unstable slopes and landforms).

(i) For the purpose of this rule, potentially unstable slopes or landforms are one of the following: (See board manual section 16 for more descriptive definitions.)

(A) Inner gorges, convergent headwalls, or bedrock hollows with slopes steeper than thirty-five degrees (seventy percent);

(B) Toes of deep-seated landslides, with slopes steeper than thirty-three degrees (sixty-five percent);

(C) Ground water recharge areas for glacial deep-seated landslides;

(D) Outer edges of meander bends along valley walls or high terraces of an unconfined meandering stream; or

(E) Any areas containing features indicating the presence of potential slope instability which cumulatively indicate the presence of unstable slopes.

(ii) The department will base its classification of the application or notification on professional knowledge of the area, information such as soils, geologic or hazard zonation maps and reports or other information provided by the applicant.

(iii) An application would not be classified as Class IV-Special for potentially unstable slopes or landforms under this subsection if:

(A) The proposed forest practice is located within a WAU that is subject to an approved watershed analysis;

(B) The forest practices are to be conducted in accordance with ~~an~~ approved prescriptions from the watershed analysis ~~(~~or ~~as modified through the five-year review process)~~reanalysis; ~~and~~

(C) The applicable prescription is specific to the site or situation, as opposed to a prescription that calls for additional analysis. The need for an expert to determine whether the site contains specific landforms will not be considered "additional analysis," as long as specific prescriptions are established for such landforms~~.~~; and

(D) The approved watershed analysis is current or the forest practices are to be conducted in accordance with conditions required by the department during reanalysis. See WAC 222-22-090.

*(e) Timber harvest, in a watershed administrative unit not subject to an approved watershed analysis or reanalysis under chapter 222-22 WAC, construction of roads, landings, rock quarries, gravel pits, borrow pits, and spoil disposal areas on snow avalanche slopes within those areas designated by the department, in consultation with department of transportation and local government, as high avalanche hazard where there is the potential to deliver sediment or debris to a public resource, or the potential to threaten public safety.

(f) Timber harvest or construction of roads, landings, rock quarries, gravel pits, borrow pits, and spoil disposal areas on the following except in (f)(iv) of this subsection:

(i) Archaeological sites or historic archaeological resources as defined in RCW 27.53.030; or

(ii) Historic sites eligible for listing on the National Register of Historic Places or the Washington Heritage Register as determined by the Washington state department of archaeology and historic preservation; or

(iii) Sites containing evidence of Native American cairns, graves, or glyptic records as provided for in chapters 27.44 and 27.53 RCW. The department of archaeology and historic preservation shall consult with affected Indian tribes in identifying such sites.

(iv) A forest practice would not be classified as Class IV-special under this subsection if:

(A) Cultural resources management strategies from an approved watershed analysis or reanalysis conducted under chapter 222-22 WAC are part of the proposed forest practices, and the landowner states this in the application; or

(B) A management plan agreed to by the landowner, the affected Indian tribe, and the department of archaeology and historic preservation is part of the proposed application, and the landowner states this in the application.

*(g) Forest practices subject to an approved watershed analysis or reanalysis conducted under chapter 222-22 WAC in an area of resource sensitivity identified in that analysis which deviates from the prescriptions (which may include an alternate plan) ~~in the watershed analysis~~.

*(h) Filling or draining of more than 0.5 acre of a wetland.

(2) **"Class IV - general."** Applications involving the following circumstances are "Class IV - general" forest practices unless they are listed in "Class IV - special."

(a) Forest practices (other than those in Class I) on lands platted after January 1, 1960, as provided in chapter 58.17 RCW;

(b) Forest practices (other than those in Class I) on lands that have been or are being converted to another use;

(c) Forest practices which would otherwise be Class III, but which are taking place on lands which are not to be reforested because of likelihood of future conversion to urban development (see WAC 222-16-060 and 222-34-050); or

(d) Forest practices involving timber harvesting or road construction on lands that are contained within urban growth areas, designated pursuant to chapter 36.70A RCW, except where the forest landowner provides one of the following:

(i) A written statement of intent signed by the forest landowner not to convert to a use other than commercial forest products operations for ten years accompanied by either a written forest management plan acceptable to the department or documentation that the land is enrolled under the provisions of chapter 84.33 RCW; or

(ii) A conversion option harvest plan approved by the local governmental entity and submitted to the department as part of the application.

Upon receipt of an application, the department will determine the lead agency for purposes of compliance with the SEPA pursuant to WAC 197-11-924 and 197-11-938(4) and RCW 43.21C.037(2). Such applications are subject to a thirty-day period for approval unless the lead agency determines a detailed statement under RCW 43.21C.030 (2)(c) is required. Upon receipt, if the department determines the application is for a proposal that will require a license from a county/city acting under the powers enumerated in RCW 76.09.240, the department shall notify the applicable county/city under WAC 197-11-924 that the department has determined according to WAC 197-11-938(4) that the county/city is the lead agency for purposes of compliance with SEPA.

(3) **"Class I."** Those operations that have been determined to have no direct potential for damaging a public resource are Class I forest practices. When the conditions listed in "Class IV - Special" are not present, these operations may be commenced without notification or application.

(a) Culture and harvest of Christmas trees and seedlings.

*(b) Road maintenance except: Replacement of bridges and culverts across Type S, F or flowing Type Np Waters; or movement of material that has a direct potential for entering Type S, F or flowing Type Np Waters or Type A or B Wetlands.

*(c) Construction of landings less than one acre in size, if not within a shoreline area of a Type S Water, the riparian management zone of a Type F Water, the bankfull width of a Type Np Water, a wetland management zone, a wetland, or the CRGNSA special management area.

*(d) Construction of less than six hundred feet of road on a sideslope of forty percent or less if the limits of construction are not within the shoreline area of a Type S Water, the riparian management zone of a Type F Water, the bankfull width of a Type Np Water, a wetland management zone, a wetland, or the CRGNSA special management area.

*(e) Installation or removal of a portable water crossing structure where such installation does not take place within the shoreline area of a Type S Water and does not involve disturbance of the beds or banks of any waters.

*(f) Initial installation and replacement of relief culverts and other drainage control facilities not requiring a hydraulic permit.

(g) Rocking an existing road.

(h) Loading and hauling timber from landings or decks.

(i) Precommercial thinning and pruning, if not within the CRGNSA special management area.

(j) Tree planting and seeding.

(k) Cutting and/or removal of less than five thousand board feet of timber (including live, dead and down material) for personal use (i.e., firewood, fence posts, etc.) in any twelve-month period, if not within the CRGNSA special management area.

(l) Emergency fire control and suppression.

(m) Slash burning pursuant to a burning permit (RCW 76.04.205).

*(n) Other slash control and site preparation not involving either off-road use of tractors on slopes exceeding forty percent or off-road use of tractors within the shorelines of a Type S Water, the riparian management zone of any Type F Water, or the bankfull width of a Type Np Water, a wetland management zone, a wetland, or the CRGNSA special management area.

*(o) Ground application of chemicals, if not within the CRGNSA special management area. (See WAC 222-38-020 and 222-38-030.)

*(p) Aerial application of chemicals (except insecticides), outside of the CRGNSA special management area when applied to not more than forty contiguous acres if the application is part of a combined or cooperative project with another landowner and where the application does not take place within one hundred feet of lands used for farming, or within two hundred feet of a residence, unless such farmland or residence is owned by the forest landowner. Provisions of chapter 222-38 WAC shall apply.

(q) Forestry research studies and evaluation tests by an established research organization.

*(r) Any of the following if none of the operation or limits of construction takes place within the shoreline area of a Type S Water or the riparian management zone of a Type F Water, the bankfull width of a Type Np Water or flowing Type Ns Water, or within the CRGNSA special management area and the operation does not involve off-road use of tractor or wheeled skidding systems on a sideslope of greater than forty percent:

(i) Any forest practices within the boundaries of existing golf courses.

(ii) Any forest practices within the boundaries of existing cemeteries which are approved by the cemetery board.

(iii) Any forest practices involving a single landowner where contiguous ownership is less than two acres in size.

(s) Removal of beaver structures from culverts on forest roads. A hydraulics project approval from the Washington department of fish and wildlife may be required.

(4) **"Class II."** Certain forest practices have been determined to have a less than ordinary potential to damage a public resource and may be conducted as Class II forest practices: Provided, That no forest practice enumerated below may be conducted as a Class II forest practice if the operation requires a hydraulic project approval (RCW 77.55.100) or is within a "shorelines of the state," or involves owner of perpetual timber rights subject to RCW 76.09.067 (other than renewals). Such forest practices require an application. No forest practice enumerated below may be conducted as a "Class II" forest practice if it takes place on lands platted after January 1, 1960, as provided in chapter 58.17 RCW, or on lands that have been or are being converted

to another use. No forest practice enumerated below involving timber harvest or road construction may be conducted as a "Class II" if it takes place within urban growth areas designated pursuant to chapter 37.70A RCW. Such forest practices require a Class IV application. Class II forest practices are the following:

(a) Renewal of a prior Class II notification where no change in the nature and extent of the forest practices is required under rules effective at the time of renewal.

(b) Renewal of a previously approved Class III or IV forest practices application where:

(i) No modification of the uncompleted operation is proposed;

(ii) No notices to comply, stop work orders or other enforcement actions are outstanding with respect to the prior application; ~~and~~

(iii) No change in the nature and extent of the forest practice is required under rules effective at the time of renewal~~.~~; and

(iv) ~~Renewal of a previously~~A watershed reanalysis under WAC 222-22-090 has been completed and approved if the application is a multiyear permit for forest practices within a WAU with an approved watershed analysis ~~requires completion of a necessary five-year review of the watershed analysis~~.

*(c) Any of the following if none of the operation or limits of construction takes place within the riparian management zone of a Type F Water, within the bankfull width of a Type Np Water, within a wetland management zone, within a wetland, or within the CRGNSA special management area:

(i) Construction of advance fire trails.

(ii) Opening a new pit of, or extending an existing pit by, less than one acre.

*(d) Salvage of logging residue, if none of the operation or limits of construction takes place within the riparian management zone of a Type F Water, within the bankfull width of a Type Np Water, within a wetland management zone or within a wetland; and if none of the operations involve off-road use of tractor or wheeled skidding systems on a sideslope of greater than forty percent.

*(e) Any of the following if none of the operation or limits of construction takes place within the riparian management zone of a Type F Water, within the bankfull width of a Type Np Water, within a wetland management zone, within a wetland, or within the CRGNSA special management area, and if none of the operations involve off-road use of tractor or wheeled skidding systems on a sideslope of greater than forty percent, and if none of the operations are located on lands with a likelihood of future conversion (see WAC 222-16-060):

(i) West of the Cascade summit, partial cutting of forty percent or less of the live timber volume.

(ii) East of the Cascade summit, partial cutting of five thousand board feet per acre or less.

(iii) Salvage of dead, down, or dying timber if less than forty percent of the total timber volume is removed in any twelve-month period.

(iv) Any harvest on less than forty acres.

(v) Construction of six hundred or more feet of road, provided that the department shall be notified at least two business days before commencement of the construction.

(5) **"Class III."** Forest practices not listed under Classes IV, I or II above are "Class III" forest practices. Among Class III forest practices are the following:

(a) Those requiring hydraulic project approval (RCW 77.55.100).

*(b) Those within the shorelines of the state other than those in a Class I forest practice.

*(c) Aerial application of insecticides, except where classified as a Class IV forest practice.

*(d) Aerial application of chemicals (except insecticides), except where classified as Class I or IV forest practices.

*(e) Harvest or salvage of timber except where classed as Class I, II or IV forest practices.

*(f) All road construction except as listed in Classes I, II and IV forest practices.

(g) Opening of new pits or extensions of existing pits over 1 acre.

*(h) Road maintenance involving:

(i) Replacement of bridges or culverts across Type S, F or flowing Type Np Waters; or

(ii) Movement of material that has a direct potential for entering Type S, F or flowing Type Np Waters or Type A or B Wetlands.

(i) Operations involving owner of perpetual timber rights subject to RCW 76.09.067.

(j) Site preparation or slash abatement not listed in Classes I or IV forest practices.

(k) Harvesting, road construction, site preparation or aerial application of pesticides on lands which contain cultural, historic or archaeological resources which, at the time the application or notification is filed, have been identified to the department as being of interest to an affected Indian tribe.

(l) Harvesting exceeding nineteen acres in a designated difficult regeneration area.

(m) Utilization of an alternate plan. See WAC 222-12-040.

*(n) Any filling of wetlands, except where classified as Class IV forest practices.

*(o) Multiyear permits.

*(p) Small forest landowner long-term applications that are not classified Class IV-special or Class IV-general, or renewals of previously approved Class III or IV long-term applications.

WAC 222-20-015 Multiyear permits.

(1) Where a watershed analysis or reanalysis has been approved for a WAU under WAC 222-22-080, landowner(s) may apply for a multiyear permit. The information provided and level of detail must be comparable to that required for a two-year permit. At a minimum, the application must include:

(a) A description of the forest practices to be conducted during the period requested for the permit, and a map(s) showing their locations; and

(b) Prescriptions must be identified where operations are proposed within or include areas of resource sensitivity.

(2) A landowner with an approved road maintenance and abandonment plan (other than a checklist) may apply for a multiyear permit to perform road maintenance, road abandonment, and/or associated right of way timber harvest, if the schedule for implementing the plan is longer than two years.

(3) A landowner may apply for a multiyear permit to perform an approved alternate plan.

WAC 222-20-080 Application and notification expiration.

(1) The approval given by the department to an application to conduct a forest practice shall be effective for a term of two years from the date of approval, with the following exceptions:

(a) Multiyear permits are effective for three to five years. A multiyear permit for lands included in a watershed analaysis pursuant to chapter 222-22 WAC is not renewable if a ~~five-year~~ watershed ~~analysis~~reanalysis ~~review~~ is found necessary by the department and has not been completed and approved.

(b) Small forest landowner long-term applications are effective for terms of three to fifteen years.

(2) A notification is effective for a term of two years beginning five days from the date it is officially received.

WAC 222-22-010 Policy.

*(1) Public resources may be adversely affected by the interaction of two or more forest practices. The purpose of this rule is to address these cumulative effects of forest practices on the public resources of fish, water, and capital improvements of the state or its political subdivisions.

(2) Cultural resources may also be adversely affected by the interaction of two or more forest practices. The purpose of this rule is also to achieve management and protection of these cultural resources by fostering cooperative relationships and agreements between landowners and tribes.

(3) The long-term objective of this rule is to protect and restore these public and cultural resources and the productive capacity of fish habitat adversely affected by forest practices while maintaining a viable forest products industry. For public resources, the board intends that this be accomplished through prescriptions designed to protect and allow the recovery of fish, water, and capital improvements of the state or its political subdivisions, through enforcement against noncompliance of the forest practice rules in this Title 222 WAC, and through voluntary mitigation measures. For cultural resources, with the exception of sites registered on the department of archaeology and historic preservation's archaeological and historic sites data base and all resources that require mandatory protection under chapters 27.44 and 27.53 RCW, the board intends that this be accomplished through voluntary management strategies. This system also allows for monitoring, ~~subsequent~~ watershed ~~analysis~~reanalysis, and adaptive management.

*(4) Adaptive management in a watershed analysis process requires advances in technology and cooperation among resource managers. The board finds that it is appropriate to promulgate rules to address certain cumulative effects by means of the watershed analysis system, while recognizing the pioneering nature of this system and the need to monitor its success in predicting and preventing adverse change to fish, water, and capital improvements of the state and its political subdivisions. The board supports the use of voluntary, cooperative approaches to address impacts to cultural resources. If voluntary approaches are shown to be ineffective, the board may find it appropriate to seek additional protection to prevent adverse impacts to cultural resources.

*(5) Many factors other than forest practices can have a significant effect on the condition of fish, water, capital improvements of the state or its political subdivisions, and cultural resources. Nonforest practice contributions to cumulative effects should be addressed by the appropriate jurisdictional authorities. When a watershed analysis or reanalysis identifies a potential adverse effect on fish, water, capital improvements of the state or its political subdivisions, or cultural resources from activities that are not regulated under chapter 76.09 RCW, the department should notify any governmental agency or Indian tribe having jurisdiction over those activities.

*(6) The rules in this chapter set forth a system for identifying the probability of change and the likelihood of this change adversely affecting specific characteristics of fish, water, and capital improvements of the state or its political subdivisions, and for using forest management prescriptions to avoid or minimize significant adverse effects from forest practices. In addition, the rules in this chapter set forth a system for identifying the likelihood of adverse change affecting cultural resources and for developing voluntary management strategies to avoid or minimize significant adverse impacts to cultural resources. The rules in this chapter are in addition to, and do not take the place of, the other forest practices rules in this Title 222 WAC or laws for the protection of cultural resources including chapters 27.44 and 27.53 RCW.

*(7) These rules are intended to be applied and should be construed in such a manner as to minimize the delay associated with the review of individual forest practices applications and notifications by increasing the predictability of the process and the appropriate management response.

WAC 222-22-020 Watershed administrative units.

*(1) For purposes of this chapter, the state is divided into areas known as watershed administrative units (WAUs). The department shall, in cooperation with the departments of ecology and fish and wildlife, affected Indian tribes, local ~~government~~ governmental entities, forest land owners, and the public, define WAUs throughout the state. The department shall identify WAUs on a map.

*(2) WAUs should generally be between 10,000 to 50,000 acres in size and should be discrete hydrologic units. The board recognizes, however, that identified watershed processes and potential effects on resource characteristics differ, and require different spatial scales of analysis, and the department's determination of the WAUs should recognize these differences. The board further recognizes that mixed land uses will affect the ability of a watershed analysis or reanalysis to predict probabilities and identify causation as required under this chapter, and the department's conduct and approval of a watershed analysis or reanalysis under this chapter shall take this effect into account.

*(3) The department is directed to conduct periodic reviews of the WAUs adopted under this chapter to determine whether revisions are needed to more efficiently assess potential cumulative effects. The department shall consult with the departments of ecology~~,~~ and fish and wildlife, affected Indian tribes, forest land owners, local ~~government~~ governmental entities, and the public. From time to time and as appropriate, the department shall make recommendations to the board regarding revision of watershed administrative units.

WAC 222-22-030 Qualification of watershed resource analysts, specialists, ~~and~~ field managers, and qualified experts.

*(1) The department shall set the minimum qualifications for analysts participating in level 1 assessments conducted under WAC 222-22-050, for specialists participating in level 2 assessments conducted under WAC 222-22-060, ~~and~~ for field managers participating in recommendation of prescriptions under WAC 222-22-070, and for analyst, specialists, and field managers participating in reanalysis under WAC 222-22-090. The minimum qualifications shall be specific for the disciplines needed to participate in level 1 and level 2 assessments and in the recommendations of prescriptions, and shall include, at a minimum, formal education in the relevant discipline and field experience. Minimum qualifications for analysts participating in level 2 assessments should typically include a graduate degree in the relevant discipline. A reanalysis of mass wasting prescriptions under WAC 222-22-090 requires a qualified expert as defined in WAC 222-10-030, SEPA policies for potentially unstable slopes and landforms.

*(2) The department shall coordinate with relevant state and federal agencies, affected Indian tribes, forest land owners, local ~~government~~ governmental entities, and the public to seek and utilize available qualified expertise to participate in watershed analysis or reanalysis.

*(3) Qualified analysts, specialists, and field managers shall, while and only for the purpose of conducting a watershed analysis, reanalysis or monitoring in a WAU, be duly authorized representatives of the department for the purposes of RCW 76.09.150.

*(4) An individual may qualify in more than one science or management skill. Qualification under subsection (1) of this section shall be effective for ~~5~~ five years. When a qualification expires, a person requesting requalification shall meet the criteria in effect at the time of requalification.

*(5) The department shall provide and coordinate training for, maintain a register of, and monitor the performance of qualified analysts, specialists, ~~and~~ field managers, and qualified experts by region. The department shall disqualify analysts, specialists, ~~and~~ field managers, and qualified experts who fail to meet the levels of performance required by the qualification standards.

WAC 222-22-040 Watershed prioritization.

(1) The department shall ~~determine, by region, the order in which it will analyze~~prioritize WAUs for

the purposes of this section and for reviews under WAC 222-22-090 in cooperation~~. The department shall cooperate~~ with the departments of ecology~~,~~ and fish and wildlife, affected Indian tribes, forest land owners, and the public~~ in setting priorities~~. ~~In setting priorities or reprioritizing WAUs, the department~~The prioritization shall consider the availability of landowner participation and assistance and the availability and assistance that may be provided by affected Indian tribes and local ~~government~~ governmental entities.

*(2) ~~Except as set forth in subsection (3) of this section, the~~The department ~~shall~~ may undertake a watershed analysis or reanalysis on ~~each~~ any WAU~~, in the order established under subsection (1) of this section~~. When conducting a watershed analysis or reanalysis, the department shall include available, qualified expertise from state agencies, affected Indian tribes, forest landowners, local governmental entities, and the public.

*(3) The owner or owners of ten percent or more of the nonfederal forest land acreage in a WAU may notify the department in writing that the owner or owners intend to conduct a level 1 assessment, level 2 assessment, or both, and the prescription recommendation process on the WAU under this chapter, or conduct a reanalysis under WAC 222-22-090, at their own expense. The notice shall identify the teams proposed to conduct the watershed analysis or reanalysis, which shall be comprised of individuals qualified by the department pursuant to WAC 222-22-030. The department shall promptly notify any owner or owners sending notice under this subsection if any member of the designated teams is not so qualified. Within 30 days of delivering a notice to the department under this subsection, the forest land owner or owners shall begin the level 1 assessment under WAC 222-22-050 or, at its option, the level 2 assessment under WAC 222-22-060, or the reanalysis under WAC 222-22-090. An approved forest land owner team shall, while and only for the purposes of conducting a watershed analysis or reanalysis in a WAU, be a duly authorized representative of the department for the purposes of RCW 76.09.150. The board encourages forest land owners conducting assessments under this chapter to include available, qualified expertise from state and federal agencies, affected Indian tribes, forest land owners, local ~~government~~ governmental entities, and the public.

*(4) Before beginning ~~an~~ a watershed analysis or reanalysis in a WAU, the department or the forest land owner conducting the analysis or reanalysis shall provide reasonable notice, including notice by regular United States mail where names and addresses have been provided to the department, to all forest land owners in the WAU, and to affected Indian tribes. The department or the forest land owner conducting the analysis or reanalysis shall provide reasonable notice to the public and to state, federal, and local ~~government~~ governmental entities~~,~~ by, among other things, posting the notice conspicuously in the ~~office of the departmental~~department's region office containing the WAU. The notice shall be in a form designated by the department and give notice that an analysis or reanalysis is being conducted, by whose team, the time period of the analysis or reanalysis, and the dates and locations in which the draft analysis or reanalysis will be available for review and comment.

WAC 222-22-045 Cultural resources.

(1) Any watershed analysis initiated after July 1, 2005, is not complete unless the analysis includes a completed cultural resource module. Cultural resources module completeness is detailed in Appendix II of the module and includes affected tribe(s) participation, appropriate team qualification, required maps and forms, assessment of tribal and nontribal cultural resources, peer review of assessment, management strategies based on causal mechanism reports from synthesis, and agreement on the management strategies by affected tribes, landowners and land managers on the field managers team and, where applicable, the department of archaeology and historic preservation.

(2) When conducting a watershed ~~analysis~~reanalysis ~~revisions~~ pursuant to WAC 222-22-090~~(4)~~, the cultural resources module is not required if the watershed analysis was approved by the department prior to the date in subsection (1) of this section. However, the board encourages use of the cultural resources module upon such review.

(3) The department does not review or approve cultural resources management strategies because their implementation is voluntary. The department of archaeology and historic preservation must be consulted and agree on all management strategies involving sites registered on the department of archaeology and historic preservation's archaeological and historic sites data base and all resources that require mandatory protection under chapters 27.44 and 27.53 RCW.

(4) The cultural resources module may be conducted as a stand-alone method separate from a watershed analysis to identify, protect, and manage cultural resources. When used as a stand-alone methodology:

(a) Selected components of the methodology may be used as the participants deem necessary or the module may be used in its entirety.

(b) The methodology may be used at a variety of geographic scales and may be initiated by tribes, land managers or landowners. Landowner or land manager initiation is not limited by the minimum ownership threshold requirements in this chapter. Nothing in this rule grants any person or organization initiating the cultural resources module as a stand-alone method any right of entry onto private property.

(c) Watershed analysis and reanalysis notice requirements to the department do not apply.

(d) Participants are encouraged to engage people that meet the minimum qualifications to conduct the module as set by this chapter.

(e) In order for a stand-alone module to be incorporated into a watershed analysis or reanalysis, the module must have been conducted in accordance with the requirements of this chapter.

WAC 222-22-050 Level 1 watershed resource assessment.

*(1) To begin a level 1 watershed ~~resource~~ analysis or reanalysis on a WAU, the department shall assemble a level 1 assessment team consisting of analysts qualified under WAC 222-22-030(1). A forest land owner or owners acting under WAC 222-22-040(3) may assemble a level 1 assessment team consisting of analysts qualified under WAC 222-22-030(1) or, at its option, may begin the analysis or reanalysis under WAC 222-22-060. Each level 1 team shall include persons qualified in the disciplines indicated as necessary in the methodology, and should generally include a person or persons qualified in the following:

(a) Forestry;
(b) Forest hydrology;
(c) Forest soil science or geology;
(d) Fisheries science;
(e) Geomorphology;
(f) Cultural anthropology; and
(g) Archaeology.

Any owner, and any cooperating group of owners, of ten percent or more of the nonfederal forest land acreage in the WAU and any affected Indian tribe shall be entitled to include one qualified individual to participate on the team at its own expense. The cultural resources module must include the participation of the affected Indian tribe(s). See board manual section 11, J. Cultural Resources Module, Introduction, 1) *Using this methodology in formal watershed analysis*.

*(2) The level 1 team shall perform an inventory of the WAU utilizing the methodology, indices of resource condition, and checklists set forth in the manual in accordance with the following:

(a) The team shall survey the WAU for fish, water, and capital improvements of the state or its

political subdivisions, and conduct an assessment for cultural resources.

(b) The team shall display the location of these resources on a map of the WAU, except mapping of tribal cultural resources sites must be approved by the affected tribe. The location of archaeological sites shall be on a separate map that will be exempt from public disclosure per RCW 42.56.300.

(c) For public resources (fish, water, and capital improvements of the state or its political subdivisions):

(i) The team shall determine the current condition of the resource characteristics of these resources, shall classify their condition as "good," "fair," or "poor," and shall display this information on the map of the WAU. The criteria used to determine current resource conditions shall include indices of resource condition, in addition to such other criteria as may be included in the manual. The indices will include two levels, which will distinguish between good, fair, and poor conditions.

(ii) The team shall assess the likelihood that identified watershed processes in a given physical location will be adversely changed by one forest practice or by cumulative effects and that, as a result, a material amount of water, wood, sediment, or energy (e.g., affecting temperature) will be delivered to fish, water, or capital improvements of the state or its political subdivisions. (This process is referred to in this chapter as "adverse change and deliverability.") (For example, the team will address the likelihood that road construction will result in mass wasting and a slide that will in turn reach a stream.) The team shall rate this likelihood of adverse change and deliverability as "high," "medium," "low," or "indeterminate." Those likelihoods rated high, medium, or indeterminate shall be displayed on the map of the WAU.

(iii) For each instance of high, medium, or indeterminate likelihood of adverse change and deliverability identified under (c) (ii) of this subsection, the team shall assess the vulnerability of potentially affected resource characteristics. Criteria for resource vulnerability shall include indices of resource condition as described in (c) (i) of this subsection and quantitative means to assess the likelihood of material adverse effects to resource characteristics caused by forest practices. (For example, the team will assess the potential damage that increased sediment caused by a slide reaching a stream will cause to salmon spawning habitat that is already in fair or poor condition.) The team shall rate this vulnerability "high," "medium," "low," or "indeterminate" and shall display those vulnerabilities on the map of the WAU. If there are no other criteria in the manual to assess vulnerability at the time of the assessment, current resource condition shall be used, with good condition equivalent to low vulnerability, fair condition equivalent to medium vulnerability, and poor condition equivalent to high vulnerability.

(iv) The team shall identify as areas of resource sensitivity, as provided in table 1 of this section, the locations in which a management response is required under WAC 222-22-070(3) because, as a result of one forest practice or of cumulative effects, there is a combination of a high, medium, or indeterminate likelihood of adverse change and deliverability under (c) (ii) of this subsection and a low, medium, high, or indeterminate vulnerability of resource characteristics under (c) (iii) of this subsection:

Table 1

Areas of Resource Sensitivity and Management Response

Likelihood of Adverse Change and Deliverability

		Low	Medium	High
Vulnerability	**Low**	Standard rules	Standard Rules	Response: Prevent or avoid
	Medium	Standard rules	Response: Minimize	Response: Prevent or avoid
	High	Standard rules	Response: Prevent or avoid	Response: Prevent or avoid

The team shall display the areas of resource sensitivity on the map of the WAU.

(v) The decision criteria used to determine low, medium, and high likelihood of adverse change and deliverability shall be as set forth in the manual. A low designation generally means there is minimal likelihood that there will be adverse change and deliverability. A medium designation generally means there is a significant likelihood that there will be adverse change and deliverability. A high designation generally means that adverse change and deliverability is more likely than not with a reasonable degree of confidence. Any areas identified as indeterminate in the level 1 assessment shall be classified for the purposes of the level 1 assessment as medium until a level 2 assessment is done on the WAU under WAC 222-22-060, during which the uncertainties shall be resolved.

(d) For cultural resources, the team shall follow the methodology outlined in the cultural resources module to determine the risk call for cultural resources based upon resource vulnerability and resource importance.

(e) The team shall prepare a causal mechanism report regarding the relationships of each process identified in (c) and (d) of this subsection. The report shall demonstrate that the team's determinations were made in accordance with the manual. If, in the course of conducting a level 1 assessment, the team identifies areas in which voluntary corrective action will significantly reduce the likelihood of material, adverse effects to the condition of a resource characteristic, the team shall include this information in the report, and the department shall convey this information to the applicable land owner.

*(3) Within 21 days of mailing notice under WAC 222-22-040(4), the level 1 team shall submit to the department its draft level 1 assessment, which shall consist of the map of the WAU marked as set forth in this section and the causal mechanism report proposed under subsection (2)(e) of this section. If the level 1 team is unable to agree as to one or more resource sensitivities or potential resource sensitivities, or the causal mechanism report, alternative designations and an explanation ~~therefor~~ therefore shall be included in the draft assessment. Where the draft level 1 assessment delivered to the department contains alternative designations, the department shall within ~~21~~ twenty one days of the receipt of the draft level 1 assessment make its best determination and

approve that option which it concludes most accurately reflects the proper application of the methodologies, indices of resource condition, and checklists set forth in the manual.

*(4) If the level 1 assessment contains any areas in which the likelihood of adverse change and deliverability or resource vulnerability are identified as indeterminate under this section or if the level 1 methodology recommends it, the department shall assemble a level 2 assessment team under WAC 222-22-060 to resolve the uncertainties in the assessment, unless a forest land owner acting under WAC 222-22-040(3) has conducted a level 2 assessment on the WAU.

*(5) Pending the completion of the level 2 assessment, if any, on the WAU, the department shall select interim prescriptions using the process and standards described in WAC 222-22-070 (1), (2), and (3) and 222-22-080(3) and shall apply them to applications and notifications as provided in WAC 222-22-090 (1) and (2). Before submitting recommended interim prescriptions to the department, the field managers' team under WAC 222-22-070(1) shall review the recommended prescriptions with available representatives of the jurisdictional management authorities of the fish, water, capital improvements of the state or its political subdivisions, and cultural resources in the WAU, including, but not limited to, the departments of fish and wildlife, ecology, and affected Indian tribes.

WAC 222-22-060 Level 2 watershed resource assessment.

*(1) The department, or forest land owner acting under WAC 222-22-040(3), may assemble a level 2 assessment team either, in the case of a forest land owner, to begin a level 2 watershed analysis or reanalysis or to review the level 1 assessment on a WAU. The level 2 team shall consist of specialists qualified under WAC 222-22-030(1). Each level 2 team shall include persons qualified in the disciplines indicated as necessary in the methodology, and should generally include a person or persons qualified in the following:

(a) Forestry;
(b) Forest hydrology;
(c) Forest soil science or geology;
(d) Fisheries science;
(e) Geomorphology;
(f) Cultural anthropology; and
(g) Archaeology.

Any owner, and any cooperating group of owners, of ten percent or more of the nonfederal forest land acreage in the WAU and any affected Indian tribe shall be entitled to designate one qualified member of the team at its own expense. The cultural resources module must include the participation of the affected Indian tribe(s). See board manual section 11, J. Cultural Resources Module, Introduction, 1) *Using this methodology in formal watershed analysis.*

*(2) The level 2 team shall perform an assessment of the WAU utilizing the methodology, indices of resource condition, and checklist set forth in the manual in accordance with the following:

(a) If a level 1 assessment has not been conducted under WAC 222-22-050, the assessment team shall complete the tasks required under WAC 222-22-050(2), except that the level 2 team shall not rate any likelihood of adverse change and deliverability or resource vulnerability as indeterminate.

(b) If the level 2 team has been assembled to review a level 1 assessment, the level 2 team shall, notwithstanding its optional review of all or part of the level 1 assessment, review each likelihood of adverse change and deliverability and resource vulnerability rated as indeterminate and shall revise each indeterminate rating to low, medium, or high and shall revise the map of the WAU accordingly.

*(3) Within 60 days of mailing notice under WAC 222-22-040(4) where a watershed analysis or reanalysis begins with a level 2 assessment or within 60 days of beginning a level 2 assessment

after completion of a level 1 assessment, the level 2 team shall submit to the department its draft level 2 assessment, which shall consist of the map of the WAU and the causal mechanism report.

*(4) The level 2 team shall endeavor to produce a consensus report. If the level 2 team is unable to agree as to one or more areas of resource sensitivity or the casual mechanism report, alternative designations and an explanation ~~therefor~~therefore shall be included in the draft assessment. Where the draft level 2 assessment delivered to the department contains alternative designations or reports, the department shall within 30 days of the receipt of the draft level 2 assessment make its best determination and approve that option which it concludes most accurately reflects the proper application of the methodologies, indices of resource condition, and checklists set forth in the manual.

WAC 222-22-070 Prescription and management strategies.

*(1) For each WAU for which a watershed analysis or reanalysis is undertaken, the department, or forest land owner acting under WAC 222-22-040(3), shall assemble a team of field managers qualified under WAC 222-22-030(1). The team shall include persons qualified in the disciplines indicated as necessary in watershed analysis methods, and shall generally include a person or persons qualified in the following:

(a) Forest resource management;
(b) Forest harvest and road systems engineering;
(c) Forest hydrology;
(d) Fisheries science or management;
(e) Cultural anthropology and/or archaeology, depending on the cultural resources identified in the assessment.

Any owner, and any cooperating group of owners, of ten percent or more of the nonfederal forest land acreage in the WAU and any affected Indian tribe shall be entitled to include one qualified individual to participate on the team at its own expense. The cultural resources module must include the participation of the affected Indian tribe(s). See board manual section 11, J. Cultural Resources Module, Introduction, 1) *Using this methodology in formal watershed analysis*.

*(2) Each forest land owner in a WAU shall have the right to submit prescriptions to the department or the forest land owner conducting the watershed analysis ~~prescriptions~~ or reanalysis for areas of resource sensitivity on ~~its~~ their land. If these prescriptions are received within the time period described in subsection (4) of this section, they shall be considered for inclusion in the watershed analysis or reanalysis.

*(3) For each identified area of resource sensitivity, the field managers team shall, in consultation with the level 1 and level 2 teams, if any, select and recommend to the department prescriptions. These prescriptions shall be reasonably designed to minimize, or to prevent or avoid, as set forth in table 1 in WAC 222-22-050 (2)(c)(iv), the likelihood of adverse change and deliverability that has the potential to cause a material, adverse effect to resource characteristics in accordance with the following:

(a) The prescriptions shall be designed to provide forest land owners and operators with as much flexibility as is reasonably possible while addressing the area of resource sensitivity. The prescriptions should, where appropriate, include, but not be limited to, plans for road abandonment, orphaned roads, and road maintenance and plans for applying prescriptions to recognized land features identified in the WAU as areas of resource sensitivity but not fully mapped;
(b) Restoration opportunities may be included as voluntary prescriptions where appropriate;
(c) Each set of prescriptions shall provide for an option for an alternate plan under WAC 222-12-040, which the applicant shows meets or exceeds the protection provided by the other prescriptions approved for a given area of resource sensitivity;

(d) The rules of forest practices and cumulative effects under this chapter shall not require mitigation for activities or events not regulated under chapter 76.09 RCW. Any hazardous condition subject to forest practices identified in a watershed analysis requiring corrective action shall be referred to the department for consideration under RCW 76.09.300 et seq.; and

(e) The forests and fish riparian permanent rules~~, when effective,~~ supersede all existing watershed analysis riparian prescriptions with the exception of riparian management zones for exempt 20-acre parcels, when watershed analysis prescriptions were in effect before January 1, 1999. (See WAC 222-30-021, 222-30-022, and 222-30-023.) No new riparian prescriptions will be written after completion of the riparian management zone assessment report during a watershed analysis.

*(4) For each identified cultural resource area of resource sensitivity, the field managers team shall develop cultural resources management strategies in consultation with the assessment team and affected tribe(s).

(a) If a management strategy involves a site registered on the department of archaeology and historic preservation's archaeological and historic sites data base, data recovery at an archaeological site, or any resource that requires mandatory protection under chapters 27.44 and 27.53 RCW, the field managers team shall submit the management strategy to the department of archaeology and historic preservation for agreement.

(b) The management strategies should be reasonably designed to protect or allow the recovery of resources by measures that minimize or prevent or avoid risks identified in the assessment.

(c) Management strategies resulting from conducting a cultural resources module are voluntary, not mandatory prescriptions, whether the module is conducted as part of a watershed analysis or as a stand-alone method separate from watershed analysis. However, the mandatory protections of resources under chapters 27.44 and 27.53 RCW still apply.

(5) The field managers team shall submit the recommended prescriptions, monitoring recommendations and cultural resources management strategies to the department within 30 days of the submission to the department of the level 2 assessment under WAC 222-22-060 or within 21 days of the submission to the department of the level 1 assessment under WAC 222-22-050.

WAC 222-22-075 Monitoring. *In connection with any watershed analysis that is not a ~~revision~~ reanalysis ~~(~~under WAC 222-22-090~~(4))~~, the monitoring module will be required to be completed but implementation of monitoring recommendations would be voluntary unless otherwise required by existing laws and rules, or required by an HCP implementation agreement. Implementation of the monitoring recommendations will be encouraged when needed as part of the statewide effectiveness monitoring program.

WAC 222-22-080 *Approval of watershed analysis and reanalysis.

(1) Upon receipt of the recommended prescriptions and management strategies resulting from a level 1 assessment under WAC 222-22-050, a level 2 assessment under WAC 222-22-060 or a ~~level 1 assessment under WAC 222-22-050 where a level 2 assessment will not be conducted~~watershed reanalysis under WAC 222-22-090, the department shall select prescriptions. The department shall circulate the draft watershed analysis or reanalysis to the departments of ecology~~,~~ and fish and wildlife, affected Indian tribes, local ~~government~~ governmental entities, forest land owners in the WAU, and the public for review and comment. The prescriptions recommended by the field managers' team shall be given substantial weight. Within thirty days of receipt of the recommended prescriptions and management strategies, the department shall review comments, revise the watershed analysis or reanalysis as appropriate, and approve or disapprove the watershed analysis or reanalysis for the WAU.

*(2) The department should notify any governmental agency or Indian tribe having jurisdiction over

activities which are not regulated under chapter 76.09 RCW but which are identified in the draft analysis as having a potential for an adverse impact on identified fish, water, capital improvements of the state or its political subdivisions, and cultural resources.

*(3) The department shall approve the draft watershed analysis or reanalysis unless it finds:

(a) For any level 1 assessment or level 2 assessment, that:

(i) The team failed in a material respect to apply the methodology, indices of resource condition, or checklists set forth in the manual; or

(ii) A team meeting the criteria promulgated by the department and using the defined methodologies, indices of resource conditions, and checklists set forth in the manual could not reasonably have come to the conclusions identified in the draft level 1 or level 2 assessment; and

(b) For the prescriptions, that they will not accomplish the purposes and policies of this chapter and of the Forest Practices Act, chapter 76.09 RCW.

(c) In making its findings under this subsection, the department shall take into account its ability to revise assessments under WAC 222-22-090~~(3)~~.

*(4) If the department does not approve the draft watershed analysis or reanalysis, it shall set forth in writing a detailed explanation of the reasons for its disapproval.

(5) All watershed analyses and reanalyses must be reviewed under SEPA on a nonproject basis. SEPA review may take place concurrently with the public review in subsection (1) of this section. ~~(~~See WAC 222-10-035.~~)~~

(6) The department will not review or approve cultural resource management strategies because their implementation is voluntary.

WAC 222-22-090 Use, ~~and~~ review, and reanalysis of a watershed analysis.

*(1) Where a watershed analysis or reanalysis has been completed and approved for a WAU under this chapter:

(a) Any landowner within the WAU may apply for a multiyear permit to conduct forest practices according to the watershed analysis prescriptions. This permit is not renewable if a ~~five-year review~~reanalysis is found necessary by the department under subsection (6) of this section and has not been completed and approved.

(b) Non-multiyear forest practices applications and notifications submitted to the department shall indicate whether an area of resource sensitivity will be affected and, if so, which prescription the operator, timber owner, or forest land owner shall use in conducting the forest practice in the area of resource sensitivity;

(c) The department shall assist operators, timber owners, and forest land owners in obtaining governmental permits required for the prescription. ~~(see~~ See WAC 222-50-020 and 222-50-030~~)~~;

(d) The department shall confirm that the prescription selected under (a) and (b) of this subsection was one of the prescriptions approved for the area of resource sensitivity under WAC 222-22-080 and shall require the use of the prescription; and

(e) The department shall not further condition forest practices applications and notifications in an area of resource sensitivity in a WAU where the applicant will use a prescription contained in the watershed analysis nor shall the department further condition forest practices applications and notifications outside an area of resource sensitivity in a WAU, except:

(i) for reasons other than the watershed processes and fish, water, and capital improvements of the state or its political subdivisions analyzed in the watershed analysis in the WAU~~,~~; or

(ii) ~~and except~~ to correct mapping errors, misidentification of soils, landforms, vegetation, or stream features, or other similar factual errors~~.~~; or

(iii) when the department determines that a reanalysis is necessary under subsection (6) of this section.

*(2) Pending completion of a watershed analysis or reanalysis for a WAU, the department shall process forest practices notifications and applications in accordance with the other chapters of this title, except that applications and notifications received for forest practices ~~on~~ in a WAU after the date the notice is mailed under WAC 222-22-040(4) commencing a watershed analysis or reanalysis on the WAU shall be conditioned to require compliance with interim, draft, and final prescriptions, as available.

Processing and approval of applications and notifications shall not be delayed by reason of review, approval, or appeal of a watershed analysis or reanalysis. After a period of two years, interim or draft prescriptions that have not been approved shall expire. This expiration does not require SEPA review. The department shall notify the landowners in the WAU that the interim or draft prescriptions for that WAU have expired.

*(3) The board encourages cooperative and voluntary monitoring. Evaluation of resource conditions may be conducted by qualified specialists, analysts, ~~and~~ field managers, and qualified experts as determined under WAC 222-22-030. ~~Subsequent watershed~~Watershed ~~analysis~~reanalysis and monitoring recommendations in response to areas where recovery is not occurring shall be conducted in accordance with this chapter.

*(4) ~~Where the condition of resource characteristics in a WAU are fair or poor~~To keep watershed analyses current, the department shall determine when a reanalysis of a watershed analysis is necessary to evaluate the effectiveness of the prescriptions applied under this chapter to the WAU in providing for the protection and recovery of the resource ~~characteristic~~. ~~If the department finds that the prescriptions are not providing for such protection and recovery over a period of 3 years, the department shall repeat the watershed analysis in the WAU.~~ Review and reanalysis of a watershed analysis shall be conducted in accordance with the processes, methods, and standards set forth in this chapter and board manual section 11, Standard Methodology for Conducting Watershed Analysis, except that:

(a) the reanalysis may be conducted on areas smaller than the entire WAU in the case of subsection (6) (a) of this section, and

(b) the reanalysis shall be conducted only on the areas affected in the case of subsection (6) (b) or (6) (c) of this section.

(5) Entities with an interest in maintaining watershed analysis mass wasting prescriptions are responsible for committing sufficient resources to complete a reanalysis in addition to the available resources provided by the department to administer the reanalysis process.

(6) ~~Aside from the foregoing, once~~Once a watershed analysis is completed and approved on a WAU, ~~it~~ the department shall ~~be revised in whole or in part~~conduct a review to determine if a watershed reanalysis is necessary, upon the earliest of the following to occur:

(a) Five years after the date the watershed analysis is final, ~~if necessary~~and every five years thereafter; or

(b) The occurrence of a natural disaster having a material adverse effect on the resource characteristics of the WAU; or

(c) Deterioration in the condition of a resource characteristic in the WAU measured over a 12-month period or no improvement in a resource characteristic in fair or poor condition in the WAU measured over a 12-month period unless the department determines, in cooperation with the departments of ecology, fish and wildlife, affected Indian tribes, forest land owners, and the public, that a longer period is reasonably necessary to allow the prescriptions selected to produce improvement~~; or~~.

~~(d) The request of an owner of forest land in the WAU, which wishes to conduct a watershed analysis at its own expense.~~

~~Revision of an approved watershed analysis shall be conducted in accordance with the processes, methods, and standards set forth in this chapter, except that the revised watershed analysis shall be conducted only on the areas affected in the case of revisions under (b) or (c) of this subsection, and may be conducted on areas smaller than the entire WAU in the case of revisions under (a) and (d) of this subsection. The areas on which the watershed analysis revision is to be conducted shall be determined by the department and clearly delineated on a map before beginning the assessment revision. Forest practices shall be conditioned under the current watershed analysis pending the completion of any revisions.~~

(7) Once the department determines that a watershed reanalysis is necessary under subsection (6) of this section:

(a) The department shall notify the forest landowners in the WAU, the departments of ecology and fish and wildlife, affected Indian tribes, relevant federal agencies and local governmental entities, and the public.

(b) Prior to the start of the reanalysis, the department shall determine and clearly delineate on a map the areas on which the reanalysis is to be conducted.

(c) After completing (a) of this subsection, the department may condition forest practices applications in the WAU to supplement the existing watershed analysis prescriptions under subsection (1)(e) of this section. For conditioning regarding mass wasting prescriptions see also WAC 222-16-050 (1)(d). The department shall inform the landowners in the WAU why conditions are necessary.

(d) The department shall determine if the forest landowners in the WAU want to participate in the reanalysis and commit sufficient resources to complete the reanalysis process in accordance with subsection (5) of this section:

(i) If no affected landowners wish to participate and commit resources, then the department may rescind the watershed analysis prescriptions after conducting SEPA review. If the department rescinds prescriptions, it shall notify the landowners in the WAU.

(ii) If a landowner wishes to participate and commit resources, then the department in consultation with the departments of ecology and fish and wildlife, affected Indian tribes, forest landowners, and the public shall establish a timeline for the reanalysis. If the timeline for completion is not being met, the department may adjust the timeline or, after conducting SEPA review, rescind the watershed analysis prescriptions. If the department rescinds prescriptions, it shall notify the landowners in the WAU.

(e) Upon receiving recommendations from the reanalysis, the department shall select prescriptions in accordance with WAC 222-10-035 and 222-22-080 (1).

(8) The owner or owners of ten percent or more of the nonfederal forest land in the WAU may conduct a watershed reanalysis at any time at their own expense and the reanalysis may be conducted on areas smaller than the entire WAU.

STATE OF WASHINGTON
FOREST PRACTICES BOARD

PO Box 47012
Olympia, WA 98504-7012

April 23, 2010

MEMORANDUM

TO: Jim Hotvedt, Adaptive Management Administrator

FROM: Peter Goldmark, Chair

SUBJECT: Proposal Initiation: Watershed Analysis Mass Wasting Prescriptions

The Forest Practices Board requests that the Adaptive Management Program consider and make recommendations to address current gaps in the watershed analysis review process. The following information is offered for your consideration. It is presented in the order listed in Board Manual Section 22, page M22-7.

1. *The affected forest practices rule, guidance, or DNR product.*

   WAC 222-22-090, "Use and review of watershed analysis."

2. *The urgency based on scientific uncertainty and resource risk.*

   Significant storms in 2007 and 2009 in western Washington produced intense precipitation events coinciding with a large number of landslides in particular areas. Some of these landslides occurred on slopes within Watershed Administrative Units (WAUs) for which approved mass wasting prescriptions were developed under the watershed analysis rules (chapter 222-22 WAC). These storm events prompted concern about the use and review of watershed analysis mass wasting prescriptions.

   The Forest Practices Board wants to ensure resource risks associated with mass wasting prescriptions are avoided or minimized to the greatest extent possible on an ongoing basis. The Board is considering whether rules concerning the use and review of watershed analysis prescriptions should be revised in order to increase confidence that they are protective enough to warrant an exemption from Class IV-special in WAC 222-16-050(1)(d).

   Specifically, the Board requests the Adaptive Management Program's consideration and recommendations related to the following two issues.

   Issue #1. WAC 222-22-090 places the onus on DNR to perform watershed analysis reviews. Entities with interest in maintaining watershed analysis mass wasting prescriptions should be responsible for committing sufficient resources to the review process and keeping watershed analysis prescriptions current.

   Adaptive Management recommendations should address the following concerns:
   - Reinforce the concept that watershed analyses need to be kept up-to-date.
   - Specify that entities with interest in maintaining watershed analysis mass wasting prescriptions are responsible for committing sufficient resources to the review process, in addition to the available resources provided by the Department to administer the review process.

- Determine how to address watershed analysis reviews where resources are insufficient to conduct the review.

Issue#2. WAC 222-22-090 does not explicitly provide DNR authority to withdraw prescriptions if reviews are not completed, or supplement prescriptions if necessary, prior to and during a review.

Adaptive Management recommendations should address the following concerns:

- Give DNR the authority to supplement mass wasting prescriptions, if necessary, prior to and during the review process, with the rules process that is utilized in watersheds not subject to watershed analysis.
- Give DNR the authority to withdraw mass wasting prescriptions within WAUs in which the required reviews have not been completed within a specific timeline after initiation.

3. *Any outstanding TFW, FFR, or Policy agreements supporting the proposal.*

The Timber/Fish/Wildlife Agreement[1], the Forests and Fish Report[2], and WAC 222-22-075 all suggest mass wasting prescriptions should be monitored for effectiveness. However, the Forests and Fish Report and the rule indicate that, while monitoring modules are required to be completed, implementation of the modules is voluntary unless otherwise required in rules, laws, or habitat conservation plans.

The Adaptive Management Program (AMP) is charged with determining the effectiveness of rules affecting aquatic resources, which includes unstable slopes rules. The Cooperative Monitoring, Evaluation and Monitoring Committee's work plan contains several projects in the unstable slopes rule group, the first of which will be completed and advanced to Forest and Fish Policy for consideration in the coming months. Nonetheless, the Board believes the AMP should consider and make recommendations to address gaps in the watershed analysis review process while conclusions are forthcoming through Adaptive Management Program effectiveness studies.

4. *How the results of the proposal could address Adaptive Management Program key questions and resource objectives or other rule, guidance, or DNR product.*

This proposal reflects the Board's intention to meet the following Adaptive Management Program goals expressed in the Forests and Fish Report:

- Appendix C, Unstable Slopes, "The goal of management on unstable slopes … will prevent or avoid an increase or acceleration of the naturally occurring rate of landslides due to forest practices."[3]
- The functional objective under "Sediment" in Schedule L-1:

  > *Provide clean water and substrate and maintain channel forming processes by minimizing to the maximum extent practicable, the delivery of management-induced coarse and fine sediment to streams (including timing and quantity) by protecting stream bank integrity, providing vegetative*

[1] Timber/Fish/Wildlife Agreement, February 17, 1987, p. 32. http://www.dnr.wa.gov/Publications/fp_tfw_agreement_19870217.pdf
[2] Forests and Fish Report, Appendix G (II)(G.1)(b), April 29, 1999, http://www.dnr.wa.gov/Publications/fp_rules_forestsandfish.pdf
[3] Forests and Fish Report, Appendix C (I), April 29, 1999. http://apps.leg.wa.gov/wac/default.aspx?cite=222-22-075

filtering, protecting unstable slopes, and preventing the routing of sediment to streams.[4]

- The performance target related to mass wasting sediment delivered to streams: "… no increase over natural background rates from harvest on a landscape scale on high risk sites."[5]

The Board will have a higher level of confidence that the rules related to watershed analysis mass wasting prescriptions will contribute to these goals if the rules are revised to ensure that entities with interest in maintaining watershed analysis prescriptions be responsible for doing reviews and updates when necessary. Additionally, DNR should have the authority to supplement mass wasting prescriptions if necessary, prior to and during reviews, or discontinue prescriptions if reviews are not completed in a timely manner.

5. *Available literature, data and other information supporting the proposal.*

Information on watershed analysis is available as follows:

- The statute authorizing Forest Practices Board to develop the watershed analysis system is in RCW 76.09.040(1)(e).
- The watershed analysis rules are in chapter 222-22 WAC.
- Board Manual Section 11 contains the "Standard Methodology for Conducting Watershed Analysis." The modules within the manual can be viewed at http://www.dnr.wa.gov/ResearchScience/Topics/WatershedAnalysis/Pages/fp_watershed_analysis_manual.aspx. The module pertinent to this proposal initiation request is in Appendix A, Mass Wasting.
- All approved watershed analyses can be downloaded from http://fortress.wa.gov/dnr/forestpractices/wsasmt.cgi?wsaval=acme.
- Attached letters dated April 16, 2010 and April 23, 2010 from the Services and DNR.

The Forest Practices Board convened a committee of four Board members to inform the Board on policy and resource issues for unstable slopes, and the continued use of watershed analysis prescriptions and the Class IV-special exemption. The meeting minutes and materials supporting this committee's work can downloaded at http://www.dnr.wa.gov/BusinessPermits/Topics/OtherInteragencyInformation/Pages/bc_wsa_agendas_minutes.aspx

Timeline

The Board requests progress reports from the Adaptive Management Program Administrator at upcoming regular Board meetings, and a petition for rule making from Policy as soon as possible.

[4] Forests and Fish Report, Schedule L1. http://www.dnr.wa.gov/Publications/fp_am_ffrschedulel1.pdf
[5] Ibid.

WASHINGTON STATE DEPARTMENT OF
Natural Resources
Peter Goldmark - Commissioner of Public Lands

Caring for
your natural resources
... now and forever

April 23, 2010

Ken S. Berg, Manager
Washington Fish and Wildlife Office
U.S. Fish and Wildlife Service
510 Desmond Dr. SE, Suite 102
Lacey, WA 98503

Steven W. Landino
Washington State Director for Habitat Conservation
National Marine Fisheries Service
510 Desmond Dr. SE, Suite 103
Lacey, WA 98503

Subject: Watershed Analysis Requirements in West Fork Habitat Conservation Plan

Ken Steve
Dear Mr. ~~Berg~~ and Mr. ~~Landino~~:

Thank you for your letter of April 16, 2010 regarding the West Fork Timber Company (West Fork) Habitat Conservation Plan (HCP) and Watershed Analysis (WSA) requirements. The Washington State Department of Natural Resources (DNR) understands your request to be that no new requirements should be placed on West Fork regarding WSA because they have been conducting regular reviews, and keeping prescriptions up to date. WAC 222-12-041 is cited as the forest practices rule authorizing DNR to reach such a conclusion.

As described in your letter, WAC 222-12-041 does provide a mechanism for landowners with an approved state or federal conservation agreement to be exempted from WAC 222-22 through 222-38 if specific criteria are met. Those criteria include addressing the primary risks to public resources dealt with by the forest practices rules; the landowner submitting a proposed list of specific rules replaced; and, providing the DNR and other interested parties information necessary to assist the DNR in implementing 222-12-041.

First, we agree with you that each landowner HCP is unique and needs to be addressed on a case by case basis. Consistent with the recommendations from the Forest Practices Board (Board) Committee on WSA, we will work with you and each landowner with an HCP that incorporates WSA to determine the best path forward. Second, the DNR acknowledges West Fork's efforts

implementing WSA, and agrees with your assessment that they have been conducting regular reviews and keeping their WSA prescriptions current. Likewise, we are encouraged by West Fork's continued commitment to maintaining their WSA and have confidence this will result in good outcomes for the resources and the landowner. Provided this commitment continues, DNR agrees that new requirements pertaining to WSA that may be developed through the adaptive management proposal being considered by the Board need not apply to West Fork's WSA. One primary purpose of WSA reviews is to incorporate and respond to new information; since West Fork has demonstrated a commitment to conduct regular reviews, those reviews are the appropriate venue to determine if any changes in management are warranted. In fact, we are looking to the review model employed by West Fork to inform the development of a standardized review process for all other WSAs.

I am hopeful that DNR, the Washington State Departments of Ecology and Fish & Wildlife, and the Services can maintain a high level of coordination as the standardized review process is developed to ensure common understanding amongst all interested parties and, if necessary, document how the WAC 222-12-041 criteria are being satisfied. Please contact Darin Cramer, Forest Practices Division Manager or Julie Sackett, Forest Practices Assistant Division Manager for Operations should you have any questions. Darin can be reached at (360) 902-1088, and Julie can be reached at (360) 902-1405. Thank you for your attention to this matter and we look forward to working with you.

Sincerely,

Lenny

Lenny Young
Department Supervisor

cc: Forest Practices Board Members
Bill Vogel, U.S. Fish and Wildlife Service
Matt Longenbaugh, National Marine Fisheries Service
Toby Murray, West Fork Timber Company
Scott Swanson, West Fork Timber Company
Chuck, Turley, WDNR
Darin Cramer, WDNR
Julie Sackett, WDNR
Marc Engel, WDNR

United States Department of the Interior
Fish and Wildlife Service
United States Department of Commerce
National Marine Fisheries Service

U.S. Fish and Wildlife Service
510 Desmond Dr SE, Suite 102
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National Marine Fisheries Service
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APR 16 2010

Lenny Young, Department Supervisor
Washington State Department of Natural Resources
1111 Washington Street SE MS 470000
Olympia, Washington 98504-7000

RE: Watershed Analysis Requirements in West Fork Habitat Conservation Plan

Dear Mr. Young:

The purpose of this letter is to elaborate on comments contained in the U.S. Fish and Wildlife Service letter dated January 8, 2010, concerning certain Washington timber companies possessing federally approved incidental take permits under section 10 of the Endangered Species Act and associated Habitat Conservation Plans (HCPs) that incorporate Watershed Analysis (WSA). As each HCP is unique, we believe it is appropriate to address such HCPs separately. This letter focuses on West Fork Timber Company (West Fork) and the relationship between their HCP and WSA.

Certain HCPs, such as West Fork's HCP, require implementation of WSA or WSA-like processes, and provide for the development and implementation of prescriptions for unstable features and other areas based upon WSA. We believe that in such cases where an HCP is based upon these agreed WSA processes, the Washington State Department of Natural Resources (WDNR) should continue to accept how each of those timber companies has used WSA.

We note that WAC 222-12-041 specifically recognizes that landowners who are operating consistent with an approved HCP such as West Fork are exempt from certain forest practices rules if specific criteria are met. Since West Fork has been implementing WSA - including reviews - as described in the State rules, we suggest the criteria described in 222-12-041 are being met and no new requirements should be placed on West Fork regarding WSA.

West Fork's 1993 HCP, as amended in 1995, incorporates WSA provisions as contained in State rules. West Fork's WSA team consisted of scientists that helped developed the WSA methodology during the early 1990s. The Company has spent several million dollars completing required analyses and effectively implementing results. West Fork was encouraged by the Federal government, State, and Tribes to adopt and implement WSA in its HCP.

As a part of its WSA process, West Fork developed an operations manual to help its staff recognize and protect high-hazard landforms. This operations manual was used before Board Manual Section 16 - Guidelines for Evaluating Potentially Unstable Slopes and Landforms was written. In addition, West Fork has been conducting regular reviews of its WSAs. Based upon reviews completed to date, West Fork has reduced the frequency of landslides throughout its property during the 16-year period since the HCP was approved.

All nine of West Fork's WSAs were approved before the State amended the Forest Practices rules to accommodate the Forest and Fish Report. All nine analyses have undergone SEPA review, and all have gone through a 5-year public review and a 10-year public review. Connelly WSA has undergone an additional review because of a storm in 1996. None of these reviews have triggered the need for additional SEPA analysis because prescriptions have not substantively changed. The 5-year review schedule for nine WSAs covering nine watershed administrative units are displayed in Table 1.

Table 1. Review Schedule for West Fork Timber Watershed Analyses

Watershed	Review Schedule
Connelly	1997, 2002, 2007, 2012
E. Fork Tilton	2000, 2005, 2010
Kiona	2001, 2006, 2011
Kosmos	2001, 2006, 2011
W. Fork Tilton/Nineteen Creek (combined)	2003, 2008, 2013
Mineral/North Fork Mineral (combined)	2003, 2008, 2013
Silver	2004, 2009, 2014

In summary, West Fork has been diligently maintaining the 5-year review schedule. They have exceeded the expectations of the HCP by continuing to work collaboratively with the Services, WDNR, and other stakeholders during the review process, by responding to new information from storm events in a timely manner, and by serving as an industry leader in the development and implementation of WSA in a forested environment.

The results from the process outlined above indicate West Fork's WSAs and related mass-wasting prescriptions remain up-to-date and are effective. Given this and the need for West Fork to retain certainty regarding implementation of their HCP, we encourage WDNR to continue to rely on this process.

We appreciate the opportunity to provide these comments. Please feel free to contact Bill Vogel at (360) 753-4367 or Matt Longenbaugh at (360) 753-7761, if you have any questions regarding these matters.

Sincerely,

Ken S. Berg, Manager
Washington Fish and Wildlife Office

Steven W. Landino
Washington State Director
for Habitat Conservation

cc:
WDNR Lacey, WA (P. Goldmark)
West Fork Timber Company, Tacoma, WA (T. Murray)
West Fork Timber Company, Tacoma, WA (S. Swanson)
Forest Practices Board Members

Chapter 222-22 WAC

WATERSHED ANALYSIS

WACs in this chapter were in effect 7/2001 except some have been amended since 7/2001. The effective dates of the amended WACs are shown after the WAC headings.

WAC

222-22-010 Policy. 22-1
222-22-020 Watershed administrative units. 22-2
222-22-030 Qualification of watershed resource analysts, specialists, and field managers. 22-3
222-22-040 Watershed prioritization. 22-3
222-22-045 Cultural resources. 22-4
222-22-050 Level 1 watershed resource assessment. 22-4
222-22-060 Level 2 watershed resource assessment. 22-7
222-22-070 Prescription and management strategies. 22-8
222-22-075 Monitoring. 22-10
222-22-076 Restoration. 22-10
222-22-080 Approval of watershed analysis. 22-10
222-22-090 Use and review of watershed analysis. 22-10
222-22-100 Application review prior to watershed analysis. 22-12

Note: Rules marked with an asterisk (*) pertain to water quality protection and have been adopted or amended by the Forest Practices Board with agreement from the Department of Ecology per WAC 222-12-010.

WAC 222-22-010 Policy. *[Effective 7/1/05]*

*(1) Public resources may be adversely affected by the interaction of two or more forest practices. The purpose of this rule is to address these cumulative effects of forest practices on the public resources of fish, water, and capital improvements of the state or its political subdivisions.

(2) Cultural resources may also be adversely affected by the interaction of two or more forest practices. The purpose of this rule is also to achieve management and protection of these cultural resources by fostering cooperative relationships and agreements between landowners and tribes.

(3) The long-term objective of this rule is to protect and restore these public and cultural resources and the productive capacity of fish habitat adversely affected by forest practices while maintaining a viable forest products industry. For public resources, the board intends that this be accomplished through prescriptions designed to protect and allow the recovery of fish, water, and capital improvements of the state or its political subdivisions, through enforcement against noncompliance of the forest practice rules in this Title 222 WAC, and through voluntary mitigation measures. For cultural resources, with the exception of sites registered on the department of archaeology and historic preservation's archaeological and historic sites data base and all resources that require mandatory protection under chapters 27.44 and 27.53 RCW, the board intends that this be accomplished through voluntary management strategies. This system also allows for monitoring, subsequent watershed analysis, and adaptive management.

*(4) Adaptive management in a watershed analysis process requires advances in technology and cooperation among resource managers. The board finds that it is appropriate to promulgate rules to address certain cumulative effects by means of the watershed analysis system, while recognizing the pioneering nature of this system and the need to monitor its success in predicting and preventing adverse change to fish, water, and capital improvements of the state and its political subdivisions. The board supports the use of voluntary, cooperative approaches to address impacts to cultural resources. If voluntary approaches are shown to be ineffective, the board may find it appropriate to seek additional protection to prevent adverse impacts to cultural resources.

*(5) Many factors other than forest practices can have a significant effect on the condition of fish, water, capital improvements of the state or its political subdivisions, and cultural resources. Nonforest practice contributions to cumulative effects should be addressed by the appropriate jurisdictional authorities. When a watershed analysis identifies a potential adverse effect on fish, water, capital improvements of the state or its political subdivisions, or cultural resources from activities that are not regulated under chapter 76.09 RCW, the department should notify any governmental agency or Indian tribe having jurisdiction over those activities.

*(6) The rules in this chapter set forth a system for identifying the probability of change and the likelihood of this change adversely affecting specific characteristics of fish, water, and capital improvements of the state or its political subdivisions, and for using forest management prescriptions to avoid or minimize significant adverse effects from forest practices. In addition, the rules in this chapter set forth a system for identifying the likelihood of adverse change affecting cultural resources and for developing voluntary management strategies to avoid or minimize significant adverse impacts to cultural resources. The rules in this chapter are in addition to, and do not take the place of, the other forest practices rules in this Title 222 WAC or laws for the protection of cultural resources including chapters 27.44 and 27.53 RCW.

*(7) These rules are intended to be applied and should be construed in such a manner as to minimize the delay associated with the review of individual forest practices applications and notifications by increasing the predictability of the process and the appropriate management response.

WAC 222-22-020 Watershed administrative units. *[Effective 12/22/08]*

*(1) For purposes of this chapter, the state is divided into areas known as watershed administrative units (WAUs). The department shall, in cooperation with the departments of ecology, fish and wildlife, affected Indian tribes, local government entities, forest land owners, and the public, define WAUs throughout the state. The department shall identify WAUs on a map.

*(2) WAUs should generally be between 10,000 to 50,000 acres in size and should be discrete hydrologic units. The board recognizes, however, that identified watershed processes and potential effects on resource characteristics differ, and require different spatial scales of analysis, and the department's determination of the WAUs should recognize these differences. The board further recognizes that mixed land uses will affect the ability of a watershed analysis to predict probabilities and identify causation as required under this chapter, and the department's conduct and approval of a watershed analysis under this chapter shall take this effect into account.

*(3) The department is directed to conduct periodic reviews of the WAUs adopted under this chapter to determine whether revisions are needed to more efficiently assess potential cumulative effects. The department shall consult with the departments of ecology, fish and wildlife, affected Indian tribes, forest land owners, local government entities, and the public. From time to time and as appropriate, the department shall make recommendations to the board regarding revision of watershed administrative units.

WAC 222-22-030 Qualification of watershed resource analysts, specialists, and field managers.

*(1) The department shall set the minimum qualifications for analysts participating in level 1 assessments conducted under WAC 222-22-050, for specialists participating in level 2 assessments conducted under WAC 222-22-060, and for field managers participating in recommendation of prescriptions under WAC 222-22-070. The minimum qualifications shall be specific for the disciplines needed to participate in level 1 and level 2 assessments and in the recommendations of prescriptions, and shall include, at a minimum, formal education in the relevant discipline and field experience. Minimum qualifications for analysts participating in level 2 assessments should typically include a graduate degree in the relevant discipline.

*(2) The department shall coordinate with relevant state and federal agencies, affected Indian tribes, forest land owners, local government entities, and the public to seek and utilize available qualified expertise to participate in watershed analysis.

*(3) Qualified analysts, specialists, and field managers shall, while and only for the purpose of conducting a watershed analysis or monitoring in a WAU, be duly authorized representatives of the department for the purposes of RCW 76.09.150.

*(4) An individual may qualify in more than one science or management skill. Qualification under subsection (1) of this section shall be effective for 5 years. When a qualification expires, a person requesting requalification shall meet the criteria in effect at the time of requalification.

*(5) The department shall provide and coordinate training for, maintain a register of, and monitor the performance of qualified analysts, specialists, and field managers by region. The department shall disqualify analysts, specialists, and field managers who fail to meet the levels of performance required by the qualification standards.

WAC 222-22-040 Watershed prioritization.

(1) The department shall determine, by region, the order in which it will analyze WAUs. The department shall cooperate with the departments of ecology, fish and wildlife, affected Indian tribes, forest land owners, and the public in setting priorities. In setting priorities or reprioritizing WAUs, the department shall consider the availability of participation and assistance that may be provided by affected Indian tribes and local government entities.

*(2) Except as set forth in subsection (3) of this section, the department shall undertake a watershed analysis on each WAU, in the order established under subsection (1) of this section.

*(3) The owner or owners of ten percent or more of the nonfederal forest land acreage in a WAU may notify the department in writing that the owner or owners intend to conduct a level 1 assessment, level 2 assessment, or both, and the prescription recommendation process on the WAU under this chapter at their own expense. The notice shall identify the teams proposed to conduct the watershed analysis, which shall be comprised of individuals qualified by the department pursuant to WAC 222-22-030. The department shall promptly notify any owner or owners sending notice under this subsection if any member of the designated teams is not so qualified. Within 30 days of delivering a notice to the department under this subsection, the forest land owner or owners shall begin the level 1 assessment under WAC 222-22-050 or, at its option, the level 2 assessment under WAC 222-22-060. An approved forest land owner team shall, while and only for the purposes of conducting a watershed analysis in a WAU, be a duly authorized representative of the department for the purposes of RCW 76.09.150. The board encourages forest land owners conducting assessments under this chapter to include available, qualified expertise from state and federal agencies, affected Indian tribes, forest land owners, local government entities, and the public.

*(4) Before beginning an analysis in a WAU, the department or the forest land owner conducting the analysis shall provide reasonable notice, including notice by regular United States mail where

names and addresses have been provided to the department, to all forest land owners in the WAU, and to affected Indian tribes. The department or the forest land owner shall provide reasonable notice to the public and to state, federal, and local government entities, by, among other things, posting the notice conspicuously in the office of the departmental region containing the WAU. The notice shall be in a form designated by the department and give notice that an analysis is being conducted, by whose team, the time period of the analysis, and the dates and locations in which the draft analysis will be available for review and comment.

WAC 222-22-045 Cultural resources. *[Effective 7/1/05]*

(1) Any watershed analysis initiated after July 1, 2005, is not complete unless the analysis includes a completed cultural resource module. Cultural resources module completeness is detailed in Appendix II of the module and includes affected tribe(s) participation, appropriate team qualification, required maps and forms, assessment of tribal and nontribal cultural resources, peer review of assessment, management strategies based on causal mechanism reports from synthesis, and agreement on the management strategies by affected tribes, landowners and land managers on the field managers team and, where applicable, the department of archaeology and historic preservation.

(2) When conducting watershed analysis revisions pursuant to WAC 222-22-090(4), the cultural resources module is not required if the watershed analysis was approved by the department prior to the date in subsection (1) of this section. However, the board encourages use of the cultural resources module upon such review.

(3) The department does not review or approve cultural resources management strategies because their implementation is voluntary. The department of archaeology and historic preservation must be consulted and agree on all management strategies involving sites registered on the department of archaeology and historic preservation's archaeological and historic sites data base and all resources that require mandatory protection under chapters 27.44 and 27.53 RCW.

(4) The cultural resources module may be conducted as a stand-alone method separate from a watershed analysis to identify, protect, and manage cultural resources. When used as a stand-alone methodology:

(a) Selected components of the methodology may be used as the participants deem necessary or the module may be used in its entirety.

(b) The methodology may be used at a variety of geographic scales and may be initiated by tribes, land managers or landowners. Landowner or land manager initiation is not limited by the minimum ownership threshold requirements in this chapter. Nothing in this rule grants any person or organization initiating the cultural resources module as a stand-alone method any right of entry onto private property.

(c) Watershed analysis notice requirements to the department do not apply.

(d) Participants are encouraged to engage people that meet the minimum qualifications to conduct the module as set by this chapter.

(e) In order for a stand-alone module to be incorporated into a watershed analysis, the module must have been conducted in accordance with the requirements of this chapter.

WAC 222-22-050 Level 1 watershed resource assessment. *[Effective 12/22/08]*

*(1) To begin a watershed resource analysis on a WAU, the department shall assemble a level 1 assessment team consisting of analysts qualified under WAC 222-22-030(1). A forest land owner or owners acting under WAC 222-22-040(3) may assemble a level 1 assessment team consisting

of analysts qualified under WAC 222-22-030(1) or, at its option, may begin the analysis under WAC 222-22-060. Each level 1 team shall include persons qualified in the disciplines indicated as necessary in the methodology, and should generally include a person or persons qualified in the following:

(a) Forestry;
(b) Forest hydrology;
(c) Forest soil science or geology;
(d) Fisheries science;
(e) Geomorphology;
(f) Cultural anthropology; and
(g) Archaeology.

Any owner, and any cooperating group of owners, of ten percent or more of the nonfederal forest land acreage in the WAU and any affected Indian tribe shall be entitled to include one qualified individual to participate on the team at its own expense. The cultural resources module must include the participation of the affected Indian tribe(s). See board manual section 11, J. Cultural Resources Module, Introduction, 1) *Using this methodology in formal watershed analysis*.

*(2) The level 1 team shall perform an inventory of the WAU utilizing the methodology, indices of resource condition, and checklists set forth in the manual in accordance with the following:

(a) The team shall survey the WAU for fish, water, and capital improvements of the state or its political subdivisions, and conduct an assessment for cultural resources.
(b) The team shall display the location of these resources on a map of the WAU, except mapping of tribal cultural resources sites must be approved by the affected tribe. The location of archaeological sites shall be on a separate map that will be exempt from public disclosure per RCW 42.56.300.
(c) For public resources (fish, water, and capital improvements of the state or its political subdivisions):
    (i) The team shall determine the current condition of the resource characteristics of these resources, shall classify their condition as "good," "fair," or "poor," and shall display this information on the map of the WAU. The criteria used to determine current resource conditions shall include indices of resource condition, in addition to such other criteria as may be included in the manual. The indices will include two levels, which will distinguish between good, fair, and poor conditions.
    (ii) The team shall assess the likelihood that identified watershed processes in a given physical location will be adversely changed by one forest practice or by cumulative effects and that, as a result, a material amount of water, wood, sediment, or energy (e.g., affecting temperature) will be delivered to fish, water, or capital improvements of the state or its political subdivisions. (This process is referred to in this chapter as "adverse change and deliverability.") (For example, the team will address the likelihood that road construction will result in mass wasting and a slide that will in turn reach a stream.) The team shall rate this likelihood of adverse change and deliverability as "high," "medium," "low," or "indeterminate." Those likelihoods rated high, medium, or indeterminate shall be displayed on the map of the WAU.
    (iii) For each instance of high, medium, or indeterminate likelihood of adverse change and deliverability identified under (c) (ii) of this subsection, the team shall assess the vulnerability of potentially affected resource characteristics. Criteria for resource vulnerability shall include indices of resource condition as described in (c) (i) of this subsection and quantitative means to assess the likelihood of material adverse effects to

resource characteristics caused by forest practices. (For example, the team will assess the potential damage that increased sediment caused by a slide reaching a stream will cause to salmon spawning habitat that is already in fair or poor condition.) The team shall rate this vulnerability "high," "medium," "low," or "indeterminate" and shall display those vulnerabilities on the map of the WAU. If there are no other criteria in the manual to assess vulnerability at the time of the assessment, current resource condition shall be used, with good condition equivalent to low vulnerability, fair condition equivalent to medium vulnerability, and poor condition equivalent to high vulnerability.

(iv) The team shall identify as areas of resource sensitivity, as provided in table 1 of this section, the locations in which a management response is required under WAC 222-22-070(3) because, as a result of one forest practice or of cumulative effects, there is a combination of a high, medium, or indeterminate likelihood of adverse change and deliverability under (c) (ii) of this subsection and a low, medium, high, or indeterminate vulnerability of resource characteristics under (c) (iii) of this subsection:

Table 1

Areas of Resource Sensitivity and Management Response

Likelihood of Adverse Change and Deliverability

Vulnerability	Low	Medium	High
Low	Standard rules	Standard Rules	Response: Prevent or avoid
Medium	Standard rules	Response: Minimize	Response: Prevent or avoid
High	Standard rules	Response: Prevent or avoid	Response: Prevent or avoid

The team shall display the areas of resource sensitivity on the map of the WAU.

(v) The decision criteria used to determine low, medium, and high likelihood of adverse change and deliverability shall be as set forth in the manual. A low designation generally means there is minimal likelihood that there will be adverse change and deliverability. A medium designation generally means there is a significant likelihood that there will be adverse change and deliverability. A high designation generally means that adverse change and deliverability is more likely than not with a reasonable degree of confidence. Any areas identified as indeterminate in the level 1 assessment shall be classified for the purposes of the level 1 assessment as medium until a level 2 assessment is done on the WAU under WAC 222-22-060, during which the uncertainties shall be resolved.

(d) For cultural resources, the team shall follow the methodology outlined in the cultural

resources module to determine the risk call for cultural resources based upon resource vulnerability and resource importance.

(e) The team shall prepare a causal mechanism report regarding the relationships of each process identified in (c) and (d) of this subsection. The report shall demonstrate that the team's determinations were made in accordance with the manual. If, in the course of conducting a level 1 assessment, the team identifies areas in which voluntary corrective action will significantly reduce the likelihood of material, adverse effects to the condition of a resource characteristic, the team shall include this information in the report, and the department shall convey this information to the applicable land owner.

*(3) Within 21 days of mailing notice under WAC 222-22-040(4), the level 1 team shall submit to the department its draft level 1 assessment, which shall consist of the map of the WAU marked as set forth in this section and the causal mechanism report proposed under subsection (2)(e) of this section. If the level 1 team is unable to agree as to one or more resource sensitivities or potential resource sensitivities, or the causal mechanism report, alternative designations and an explanation therefor shall be included in the draft assessment. Where the draft level 1 assessment delivered to the department contains alternative designations, the department shall within 21 days of the receipt of the draft level 1 assessment make its best determination and approve that option which it concludes most accurately reflects the proper application of the methodologies, indices of resource condition, and checklists set forth in the manual.

*(4) If the level 1 assessment contains any areas in which the likelihood of adverse change and deliverability or resource vulnerability are identified as indeterminate under this section or if the level 1 methodology recommends it, the department shall assemble a level 2 assessment team under WAC 222-22-060 to resolve the uncertainties in the assessment, unless a forest land owner acting under WAC 222-22-040(3) has conducted a level 2 assessment on the WAU.

*(5) Pending the completion of the level 2 assessment, if any, on the WAU, the department shall select interim prescriptions using the process and standards described in WAC 222-22-070 (1), (2), and (3) and 222-22-080(3) and shall apply them to applications and notifications as provided in WAC 222-22-090 (1) and (2). Before submitting recommended interim prescriptions to the department, the field managers' team under WAC 222-22-070(1) shall review the recommended prescriptions with available representatives of the jurisdictional management authorities of the fish, water, capital improvements of the state or its political subdivisions, and cultural resources in the WAU, including, but not limited to, the departments of fish and wildlife, ecology, and affected Indian tribes.

WAC 222-22-060 Level 2 watershed resource assessment. *[Effective 7/1/05]*

*(1) The department, or forest land owner acting under WAC 222-22-040(3), may assemble a level 2 assessment team either, in the case of a forest land owner, to begin a watershed analysis or to review the level 1 assessment on a WAU. The level 2 team shall consist of specialists qualified under WAC 222-22-030(1). Each level 2 team shall include persons qualified in the disciplines indicated as necessary in the methodology, and should generally include a person or persons qualified in the following:

(a) Forestry;
(b) Forest hydrology;
(c) Forest soil science or geology;
(d) Fisheries science;
(e) Geomorphology;
(f) Cultural anthropology; and

(g) Archaeology.

Any owner, and any cooperating group of owners, of ten percent or more of the nonfederal forest land acreage in the WAU and any affected Indian tribe shall be entitled to designate one qualified member of the team at its own expense. The cultural resources module must include the participation of the affected Indian tribe(s). See board manual section 11, J. Cultural Resources Module, Introduction, 1) *Using this methodology in formal watershed analysis*.

*(2) The level 2 team shall perform an assessment of the WAU utilizing the methodology, indices of resource condition, and checklist set forth in the manual in accordance with the following:

(a) If a level 1 assessment has not been conducted under WAC 222-22-050, the assessment team shall complete the tasks required under WAC 222-22-050(2), except that the level 2 team shall not rate any likelihood of adverse change and deliverability or resource vulnerability as indeterminate.

(b) If the level 2 team has been assembled to review a level 1 assessment, the level 2 team shall, notwithstanding its optional review of all or part of the level 1 assessment, review each likelihood of adverse change and deliverability and resource vulnerability rated as indeterminate and shall revise each indeterminate rating to low, medium, or high and shall revise the map of the WAU accordingly.

*(3) Within 60 days of mailing notice under WAC 222-22-040(4) where a watershed analysis begins with a level 2 assessment or within 60 days of beginning a level 2 assessment after completion of a level 1 assessment, the level 2 team shall submit to the department its draft level 2 assessment, which shall consist of the map of the WAU and the causal mechanism report.

*(4) The level 2 team shall endeavor to produce a consensus report. If the level 2 team is unable to agree as to one or more areas of resource sensitivity or the casual mechanism report, alternative designations and an explanation therefor shall be included in the draft assessment. Where the draft level 2 assessment delivered to the department contains alternative designations or reports, the department shall within 30 days of the receipt of the draft level 2 assessment make its best determination and approve that option which it concludes most accurately reflects the proper application of the methodologies, indices of resource condition, and checklists set forth in the manual.

WAC 222-22-070 Prescription and management strategies. *[Effective 7/1/05]*

*(1) For each WAU for which a watershed analysis is undertaken, the department, or forest land owner acting under WAC 222-22-040(3), shall assemble a team of field managers qualified under WAC 222-22-030(1). The team shall include persons qualified in the disciplines indicated as necessary in watershed analysis methods, and shall generally include a person or persons qualified in the following:

(a) Forest resource management;

(b) Forest harvest and road systems engineering;

(c) Forest hydrology;

(d) Fisheries science or management;

(e) Cultural anthropology and/or archaeology, depending on the cultural resources identified in the assessment.

Any owner, and any cooperating group of owners, of ten percent or more of the nonfederal forest land acreage in the WAU and any affected Indian tribe shall be entitled to include one qualified individual to participate on the team at its own expense. The cultural resources module must include the participation of the affected Indian tribe(s). See board manual section 11, J. Cultural Resources Module, Introduction, 1) *Using this methodology in formal watershed analysis*.

*(2) Each forest land owner in a WAU shall have the right to submit to the department or the forest land owner conducting the watershed analysis prescriptions for areas of resource sensitivity on its land. If these prescriptions are received within the time period described in subsection (4) of this section, they shall be considered for inclusion in the watershed analysis.

*(3) For each identified area of resource sensitivity, the field managers team shall, in consultation with the level 1 and level 2 teams, if any, select and recommend to the department prescriptions. These prescriptions shall be reasonably designed to minimize, or to prevent or avoid, as set forth in table 1 in WAC 222-22-050 (2)(c)(iv), the likelihood of adverse change and deliverability that has the potential to cause a material, adverse effect to resource characteristics in accordance with the following:

(a) The prescriptions shall be designed to provide forest land owners and operators with as much flexibility as is reasonably possible while addressing the area of resource sensitivity. The prescriptions should, where appropriate, include, but not be limited to, plans for road abandonment, orphaned roads, and road maintenance and plans for applying prescriptions to recognized land features identified in the WAU as areas of resource sensitivity but not fully mapped;

(b) Restoration opportunities may be included as voluntary prescriptions where appropriate;

(c) Each set of prescriptions shall provide for an option for an alternate plan under WAC 222-12-040, which the applicant shows meets or exceeds the protection provided by the other prescriptions approved for a given area of resource sensitivity;

(d) The rules of forest practices and cumulative effects under this chapter shall not require mitigation for activities or events not regulated under chapter 76.09 RCW. Any hazardous condition subject to forest practices identified in a watershed analysis requiring corrective action shall be referred to the department for consideration under RCW 76.09.300 et seq.; and

(e) The forests and fish riparian permanent rules, when effective, supersede all existing watershed analysis riparian prescriptions with the exception of riparian management zones for exempt 20-acre parcels, when watershed analysis prescriptions were in effect before January 1, 1999. (See WAC 222-30-021, 222-30-022, and 222-30-023.) No new riparian prescriptions will be written after completion of the riparian management zone assessment report during a watershed analysis.

*(4) For each identified cultural resource area of resource sensitivity, the field managers team shall develop cultural resources management strategies in consultation with the assessment team and affected tribe(s).

(a) If a management strategy involves a site registered on the department of archaeology and historic preservation's archaeological and historic sites data base, data recovery at an archaeological site, or any resource that requires mandatory protection under chapters 27.44 and 27.53 RCW, the field managers team shall submit the management strategy to the department of archaeology and historic preservation for agreement.

(b) The management strategies should be reasonably designed to protect or allow the recovery of resources by measures that minimize or prevent or avoid risks identified in the assessment.

(c) Management strategies resulting from conducting a cultural resources module are voluntary, not mandatory prescriptions, whether the module is conducted as part of a watershed analysis or as a stand-alone method separate from watershed analysis. However, the mandatory protections of resources under chapters 27.44 and 27.53 RCW still apply.

(5) The field managers team shall submit the recommended prescriptions, monitoring recommendations and cultural resources management strategies to the department within 30 days of the submission to the department of the level 2 assessment under WAC 222-22-060 or within

21 days of the submission to the department of the level 1 assessment under WAC 222-22-050.

WAC 222-22-075 Monitoring. *In connection with any watershed analysis that is not a revision (WAC 222-22-090(4)), the monitoring module will be required to be completed but implementation of monitoring recommendations would be voluntary unless otherwise required by existing laws and rules, or required by an HCP implementation agreement. Implementation of the monitoring recommendations will be encouraged when needed as part of the statewide effectiveness monitoring program.

WAC 222-22-076 *Restoration. Restoration opportunities will also be identified based on the watershed resource assessment. Implementation of restoration opportunities will be voluntary.

WAC 222-22-080 *Approval of watershed analysis. *[Effective 7/1/05]*

(1) Upon receipt of the recommended prescriptions and management strategies resulting from a level 2 assessment under WAC 222-22-060 or a level 1 assessment under WAC 222-22-050 where a level 2 assessment will not be conducted, the department shall select prescriptions. The department shall circulate the draft watershed analysis to the departments of ecology, fish and wildlife, affected Indian tribes, local government entities, forest land owners in the WAU, and the public for review and comment. The prescriptions recommended by the field managers' team shall be given substantial weight. Within thirty days of receipt of the prescriptions and management strategies, the department shall review comments, revise the watershed analysis as appropriate, and approve or disapprove the watershed analysis for the WAU.

*(2) The department should notify any governmental agency or Indian tribe having jurisdiction over activities which are not regulated under chapter 76.09 RCW but which are identified in the draft analysis as having a potential for an adverse impact on identified fish, water, capital improvements of the state or its political subdivisions, and cultural resources.

*(3) The department shall approve the draft watershed analysis unless it finds:

(a) For any level 1 assessment or level 2 assessment, that:

(i) The team failed in a material respect to apply the methodology, indices of resource condition, or checklists set forth in the manual; or

(ii) A team meeting the criteria promulgated by the department and using the defined methodologies, indices of resource conditions, and checklists set forth in the manual could not reasonably have come to the conclusions identified in the draft level 1 or level 2 assessment; and

(b) For the prescriptions, that they will not accomplish the purposes and policies of this chapter and of the Forest Practices Act, chapter 76.09 RCW.

(c) In making its findings under this subsection, the department shall take into account its ability to revise assessments under WAC 222-22-090(3).

*(4) If the department does not approve the draft watershed analysis, it shall set forth in writing a detailed explanation of the reasons for its disapproval.

(5) All watershed analyses must be reviewed under SEPA on a nonproject basis. SEPA review may take place concurrently with the public review in subsection (1) of this section. (See WAC 222-10-035.)

(6) The department will not review or approve cultural resource management strategies because their implementation is voluntary.

WAC 222-22-090 Use and review of watershed analysis. *[Effective 7/1/05]*

*(1) Where a watershed analysis has been completed for a WAU under this chapter:
(a) Any landowner within the WAU may apply for a multiyear permit to conduct forest practices according to the watershed analysis prescriptions. This permit is not renewable if a five-year review is found necessary by the department and has not been completed.
(b) Nonmultiyear forest practices applications and notifications submitted to the department shall indicate whether an area of resource sensitivity will be affected and, if so, which prescription the operator, timber owner, or forest land owner shall use in conducting the forest practice in the area of resource sensitivity;
(c) The department shall assist operators, timber owners, and forest land owners in obtaining governmental permits required for the prescription (see WAC 222-50-020 and 222-50-030);
(d) The department shall confirm that the prescription selected under (b) of this subsection was one of the prescriptions approved for the area of resource sensitivity under WAC 222-22-080 and shall require the use of the prescription; and
(e) The department shall not further condition forest practices applications and notifications in an area of resource sensitivity in a WAU where the applicant will use a prescription contained in the watershed analysis nor shall the department further condition forest practices applications and notifications outside an area of resource sensitivity in a WAU, except for reasons other than the watershed processes and fish, water, and capital improvements of the state or its political subdivisions analyzed in the watershed analysis in the WAU, and except to correct mapping errors, misidentification of soils, landforms, vegetation, or stream features, or other similar factual errors.

*(2) Pending completion of a watershed analysis for a WAU, the department shall process forest practices notifications and applications in accordance with the other chapters of this title, except that applications and notifications received for forest practices on a WAU after the date notice is mailed under WAC 222-22-040(4) commencing a watershed analysis on the WAU shall be conditioned to require compliance with interim, draft, and final prescriptions, as available. Processing and approval of applications and notifications shall not be delayed by reason of review, approval, or appeal of a watershed analysis.

*(3) The board encourages cooperative and voluntary monitoring. Evaluation of resource conditions may be conducted by qualified specialists, analysts, and field managers as determined under WAC 222-22-030. Subsequent watershed analysis and monitoring recommendations in response to areas where recovery is not occurring shall be conducted in accordance with this chapter.

*(4) Where the condition of resource characteristics in a WAU are fair or poor, the department shall evaluate the effectiveness of the prescriptions applied under this chapter to the WAU in providing for the protection and recovery of the resource characteristic. If the department finds that the prescriptions are not providing for such protection and recovery over a period of 3 years, the department shall repeat the watershed analysis in the WAU. Aside from the foregoing, once a watershed analysis is completed on a WAU, it shall be revised in whole or in part upon the earliest of the following to occur:
(a) Five years after the date the watershed analysis is final, if necessary;
(b) The occurrence of a natural disaster having a material adverse effect on the resource characteristics of the WAU;
(c) Deterioration in the condition of a resource characteristic in the WAU measured over a 12-month period or no improvement in a resource characteristic in fair or poor condition in the WAU measured over a 12-month period unless the department determines, in cooperation with the departments of ecology, fish and wildlife, affected Indian tribes, forest land owners, and the public, that a longer period is reasonably necessary to allow the prescriptions selected

to produce improvement; or

(d) The request of an owner of forest land in the WAU, which wishes to conduct a watershed analysis at its own expense.

Revision of an approved watershed analysis shall be conducted in accordance with the processes, methods, and standards set forth in this chapter, except that the revised watershed analysis shall be conducted only on the areas affected in the case of revisions under (b) or (c) of this subsection, and may be conducted on areas smaller than the entire WAU in the case of revisions under (a) and (d) of this subsection. The areas on which the watershed analysis revision is to be conducted shall be determined by the department and clearly delineated on a map before beginning the assessment revision. Forest practices shall be conditioned under the current watershed analysis pending the completion of any revisions.

WAC 222-22-100 Application review prior to watershed analysis. *The watershed analysis system established in this chapter is a principal methodology for assessing the effects on fish, water, and capital improvements of the state or its political subdivisions of two or more forest practices. Recognizing that it will not be possible to achieve state-wide implementation of the analysis process for all WAUs for some time, the board hereby establishes certain interim regulatory measures pending watershed analysis on a given WAU. These measures are designed to ensure use of the best available analysis techniques and existing authorities to protect fish, water, and capital improvements of the state or its political subdivisions.

*(1) The department shall continue to use its implementation and enforcement authority to prevent damage to fish, water, and capital improvements of the state or its political subdivisions. See chapter 222-46 WAC.

*(2) The department shall condition the size of clearcut harvest applications in the significant rain-on-snow zone where the department determines, using local evidence, that peak flows have resulted in material damages to public resources. The department may prepare conditioning guidelines to assess and condition applications located in a significant rain-on-snow zone.

(a) Each year not later than August 31, the department shall provide a summary report of actions taken under rain-on-snow conditioning or conditioning guidelines to the appropriate board committee.

(b) Such conditioning authority shall expire upon completion of watershed analysis in a WAU.

(c) Nothing in this section shall require a watershed analysis to develop harvest size recommendations.

MEMORANDUM

TO: Policy

FROM: Jim Hotvedt
Adaptive Management Program Administrator

DATE: April 30, 2010

SUBJECT: Adaptive Management Proposal: Forest Practice Board request to address gaps in the current watershed analysis review process

The Forest Practices Board (Board) has requested that the Adaptive Management Program (AMP) initiate review of the watershed analysis review process. A letter of request to the Adaptive Management Program Administrator (AMPA) dated April 23, 2010 was received from Peter Goldmark, Chair of the Forest Practices Board, making this request (see attached).

The Board's proposal identified two issues:

1. "WAC 222-22-090 places the onus on DNR to perform watershed analysis reviews. Entities with interest in maintaining watershed analysis mass wasting prescriptions should be responsible for committing sufficient resources to the review process and keeping watershed analysis prescriptions current" and
2. "WAC 222-22-090 does not explicitly provide DNR authority to withdraw prescriptions if reviews are not completed, or supplement prescriptions if necessary, prior to and during a review."

The Board requests (the" proposal") that the Adaptive Management Program address these issues, and in doing so, that the recommendations from the Adaptive Management Program for addressing these issues include:

- Reinforce the concept that watershed analyses need to be kept up-to-date,
- Specify that entities with interest in maintaining watershed analysis in mass wasting prescriptions should be responsible for committing sufficient resources to the review process and keeping watershed analysis prescriptions current, in addition to the available resources provided by the DNR to administer the review process,
- Determine how to address watershed analysis reviews where resources are insufficient to conduct the review,
- Give DNR the authority to supplement mass wasting prescriptions, if necessary, prior to and during the review process, with the rules process that is utilized in watersheds not subject to watershed analysis,
- Give DNR the authority to withdraw mass wasting prescriptions within WAUs in which the required reviews have not been completed within a specific timeline after initiation, and
- Submit a petition for rule making from Policy as soon as possible.

"Proposal" is used generically to identify any form of request, question, task, project, sub-program, etc., whose end product may affect changes in forest practices or otherwise meet one of the program's goals and objectives (M22-6). Proposals are initiated as requests for investigation of potential changes to forest practices rules, guidance, or DNR products (BM22-7). Among others, the types of proposals considered for the Adaptive Management Program include Policy interpretations and modifications to improve forest practices management and aquatic resource protection.

All proposals from the Board (including public requests) or an AMP participant are submitted to the Administrator who will assure that the proposal identifies:

1. The affected forest practices rule, guidance, or DNR product;
2. The urgency based on scientific uncertainty and resource risk;
3. Any outstanding TFW, FFR, or Policy agreements supporting the proposal;
4. How the results of the proposal could address Adaptive Management Program key questions and resource objectives or other rule, guidance, or DNR product; and
5. Available literature, data and other information supporting the proposal.

The proposal may also include:

6. The proposal's testing hypotheses and assumptions;
7. A description of affected public resources;
8. Potential cause and effect relationships with forest practices management;
9. A description of the proposal's study design; and
10. An estimated timeline with milestones and costs associated with implementation of the proposal.

These ten items were addressed in the Forest Practice's Boards April 23, 2010 request.

Board Manual guidelines for the AMP state "The Administrator assesses a proposal for its applicability and relevance to the Adaptive Management Program, i.e., whether it would affect how forest practices are conducted with respect to aquatic resources, or whether it is a directive from the Board to include within the Adaptive management Program." Further, "The Administrator determines a proposal's applicability to the AMP by assessing for management and resource implications based on the Framework for Successful Policy/CMER Interaction (Appendix B)." The AMPA is asked to provide a coarse-level estimation of the expected end results or a range of possible results that may be associated with each proposal. This is considered by answering a series of eight questions listed in the Board Manual (M22-8 & 9).

After reviewing the questions in the Board Manual and the Board's proposal, my responses to the eight questions are as follows:

1. Is the proposal intended to inform a key question, resource objective, or performance target from Schedule L-1?

   The study directly or indirectly informs a range of issues related to Schedule L-1 key questions, resource objectives, and performance targets. In particular, the study informs key questions 2 and 3, and resource and performance targets related to sediment. Schedule L-1 key question number 2 states,"Will the rules produce forest conditions and processes that achieve resource objectives as measured by the performance targets, while taking into account the natural spatial and temporal variability inherent in forest ecosystems?" Key question number 3 states, "Are the resource objectives the right ones to achieve the overall performance goals?"

   Schedule L-1 functional objectives "are broad statements of objectives for the major watershed functions potentially affected by forest practices." The sediment functional objective in Schedule L-1 is to "Provide clean water and substrate and maintain channel forming processes by minimizing to the maximum extent practicable, the delivery of management-induced coarse and fine sediment to streams (including timing and quantity) by protecting stream bank integrity, providing vegetative filtering, protecting unstable slopes, and preventing the routing of sediment to streams."

   Schedule L-1 performance targets are "the measurable criteria defining specific, attainable target forest conditions and processes." The Schedule L-1 sediment performance target for mass wasting sediment delivered to streams are "...[t]imber harvesting-related: no increase over natural background rates from harvest on a landscape scale on high risk sites."

   In addition, this proposal reflects the Board's intention to meet the following Adaptive Management Program goals expressed in the 1999 Forests and Fish Report – Appendix C, Unstable Slopes, "The goal of management on unstable slopes ... will prevent or avoid an increase or acceleration of the naturally occurring rate of landslides due to forest practices."

2. Is the proposal intended to implement projects listed in Schedule L-2?

   This proposal is not a study. Rather, it is a request from the Forest Practices Board to review the watershed analysis review process.

3. Is the proposal intended to inform the forest practices rules, guidance, or DNR product? Is the specific rule, board manual section, DNR product, or effectiveness of compliance monitoring cited and key language provided correctly? If the proposal is for a new forest practices rule, does it fill a gap? If so, would it fit within the current forest practices structure?

   Referring to the Board issues stated above, WAC 222-22-090 places the onus on DNR to perform watershed analysis reviews. Further, WAC 222-22-090 does not explicitly provide DNR authority to withdraw prescriptions if reviews are not completed, or supplement prescriptions if necessary, prior to and during a review.

Responding to this proposal may require a change in rules (including new rules), the Board Manual, or other guidance. Changes in rule(s), Board Manual sections, or guidance most likely would fill a gap that would ensure reviews are conducted, as expected, to ensure mass wasting prescriptions protect public resources and human safety. They would also most likely fill a gap of how to review/revise prescriptions where watershed analysis reviews are not conducted in a timely manner, if at all.

4. If the proposal includes a completed study, was the study carried out using protocols and standards similar to CMER (i.e., study design, peer review)?

   This proposal is not a study (research or monitoring), or proposed study. Rather, it is a request from the Forest Practices Board to review the watershed analysis review process.

5. What does the study tell us?

   This proposal is not a study (research or monitoring), or proposed study. Rather, it is a request from the Forest Practices Board to review the watershed analysis review process.

6. What does the study not tell us?

   This proposal is not a study (research or monitoring), or proposed study. Rather, it is a request from the Forest Practices Board to review the watershed analysis review process.

7. What is the relationship between this proposal and any other studies that may be planned, underway, or recently completed? Cite the information and provide a coarse assessment of the literature, data, or other scientific information provided and determine whether any of the literature or data has been peer reviewed. Identify whether the literature or data is applicable to Washington State forest practices issues. Factors to consider in answering this question include, but are not limited to: 1) Feasibility of obtaining more information (within or outside AMP) to better inform Policy about resource effects. 2) Whether other studies reduce uncertainty.

   This proposal is not a study, or a proposed study.

8. How much of an incremental gain in understanding would/do the proposal results represent? Explain how the proposal results might affect the current rules, numeric targets, performance targets, or resource objectives.

   This proposal does not appear to be intended to change numeric targets, performance targets, or resource objectives. Rather, the proposal is intended to provide more guidance to the watershed analysis review process, with the intent of ensuring that resource protection goals associated with mass wasting are met.

The information found in this report is relevant and suitable to the program. There is a level of urgency based on the Forest Practice Board and public's interests in landslides, the effectiveness of watershed

analysis prescriptions, and associated forest practices. An argument can be made that there is an immediate urgency for reviewing the proposal based on the potential lack of effectiveness of some watershed analysis prescriptions, resource risk, and other factors.

I recommend

1. That Policy send the Board request down the Policy track;
2. That Policy review WAC 222-22-090 and any other rules, Board Manual Sections, and direction related to watershed analysis reviews with the intent to develop recommendations that
    a. Reinforce the concept that watershed analyses need to be kept up-to-date,
    b. Specify that entities with interest in maintaining watershed analysis in mass wasting prescriptions should be responsible for committing sufficient resources to the review process and keeping watershed analysis prescriptions current, in addition to the available resources provided by the DNR to administer the review process,
    c. Determine how to address watershed analysis reviews where resources are insufficient to conduct the review,
    d. Give DNR the authority to supplement mass wasting prescriptions, if necessary, prior to and during the review process, with the rules process that is utilized in watersheds not subject to watershed analysis, and
    e. Give DNR the authority to withdraw mass wasting prescriptions within WAUs in which the required reviews have not been completed within a specific timeline after initiation.
3. That Policy review materials and minutes from the Forest Practices Board Watershed Analysis Subcommittee found at http://www.dnr.wa.gov/BusinessPermits/Topics/OtherInteragencyInformation/Pages/bc_wsa_agendas_minutes.aspx for additional information on context and intent, and
4. That Policy submit recommendations including a petition for rule making and/or Board Manual amendments to the Board as soon as possible.

In summary, following the Board Manual process for new proposals, it is recommended that Policy review the information provided in this recommendation, follow the Policy track as recommended, and make development of recommendations in response to the proposal a high priority.

JH/

Attachements

October 18, 2010

TO: Forest Practices Board

FROM: Sherri Felix, Policy Analyst
Forest Practices Division

SUBJECT: **Request for 30-Day Review for Watershed Analysis Rulemaking**

At your upcoming November 9, 2010 meeting, you will consider the Policy Committee's recommendation for changes to watershed analysis rule language. In anticipation of the Board's acceptance of the recommendation, the Department of Natural Resources (DNR) will request the Board's permission to advance the proposal to the Washington Department of Fish and Wildlife, the counties, and Tribes for 30-day review and comment, pursuant to RCW 76.09.040(2).

At the Board's August 2010 meeting, DNR staff received approval to file a CR-101 Preproposal Statement of Inquiry to inform the public of its rule making intentions. The Forest Practices Act's 30-day notice is required in addition to the Administrative Procedure Act, chapter 43.05 RCW, and is completed prior to commencing a CR-102 Proposed Rule Making.

Jim Hotvedt, Adaptive Management Program Manager, will present Policy's recommended language in his October 18, 2010 memo to you. The language is intended to increase confidence that watershed analysis prescriptions remain current and protective enough to warrant exemption from Class IV-special.

Should you have any questions in the meantime, please contact me at 360-902-1446 or sherri.felix@dnr.wa.gov or contact Marc Engel at 360-902-1390 or marc.engel@dnr.wa.gov .