

Chapter 222-22 WAC

WATERSHED ANALYSIS

WAC

222-22-010	Policy.
222-22-020	Watershed administrative units.
222-22-030	Qualification of watershed resource analysts, specialists, field managers, and qualified experts.
222-22-040	Watershed prioritization.
222-22-045	Cultural resources.
222-22-050	Level 1 watershed resource assessment.
222-22-060	Level 2 watershed resource assessment.
222-22-070	Prescriptions and management strategies.
222-22-075	Monitoring.
222-22-076	*Restoration.
222-22-080	*Approval of watershed analysis.
222-22-090	Use, review, and reanalysis of a watershed analysis.
222-22-100	Application review prior to watershed analysis.

Reviser's note: For an explanation of the rules marked with an asterisk (*), see WAC 222-12-010.

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 practices 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 database 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.

[Statutory Authority: RCW 76.09.040. WSR 05-12-119, § 222-22-010, filed 5/31/05, effective 7/1/05. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. WSR 94-01-134, § 222-22-010, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. WSR 92-15-011, § 222-22-010, filed 7/2/92, effective 8/2/92.]

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 governmental entities, forest landowners, and the public, define WAUs throughout the state. The department shall identify WAUs on a map.

*(2) WAUs should generally be between ten thousand to fifty thousand 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 and fish and wildlife, affected Indian tribes, forest landowners, local 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.

[Statutory Authority: RCW 76.09.040, WSR 11-12-009, § 222-22-020, filed 5/20/11, effective 6/20/11; WSR 08-24-011, § 222-22-020, filed 11/21/08, effective 12/22/08; WSR 05-12-119, § 222-22-020, filed 5/31/05, effective 7/1/05. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. WSR 97-24-091, § 222-22-020, filed 12/3/97, effective 1/3/98. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. WSR 94-01-134, § 222-22-020, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. WSR 92-15-011, § 222-22-020, filed 7/2/92, effective 8/2/92.]

WAC 222-22-030 Qualification of watershed resource analysts, specialists, 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, for field managers participating in recommendation of prescriptions under WAC 222-22-070, and for analysts, 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.

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

*(3) Qualified analysts, specialists, field managers, and qualified experts 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 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, field managers, and qualified experts by region. The department shall disqualify analysts, specialists, field managers, and qualified experts who fail to meet the levels of performance required by the qualification standards.

[Statutory Authority: RCW 76.09.040, WSR 11-12-009, § 222-22-030, filed 5/20/11, effective 6/20/11. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. WSR 94-01-134, § 222-22-030, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. WSR 92-15-011, § 222-22-030, filed 7/2/92, effective 8/2/92.]

WAC 222-22-040 Watershed prioritization. (1) The department shall prioritize WAUs for the purposes of this section and for reviews under WAC 222-22-090 in cooperation with the departments of ecology and fish and wildlife, affected Indian tribes, forest landowners, and the public. 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 governmental entities.

*(2) The department may undertake a watershed analysis on any WAU. When conducting a watershed analysis, 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 and management strategy processes 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 thirty days of delivering a notice to the department under this subsection, the forest landowner 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 landowner 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 landowners conducting assessments under this chapter to include available, qualified expertise from state and federal agencies, affected Indian tribes, forest landowners, local governmental entities, and the public.

*(4) Before beginning a watershed analysis in a WAU, the department or the forest landowner 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 landowners in the WAU, and to affected Indian tribes. The department or the forest landowner conducting the analysis shall also provide reasonable notice to the public and to state, federal, and local governmental entities, by, among other things, posting the

notice conspicuously in the department's office in the region containing the WAU. The notice shall be in a form designated by the department and give notice that a watershed 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.

[Statutory Authority: RCW 76.09.040, WSR 11-12-009, § 222-22-040, filed 5/20/11, effective 6/20/11. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. WSR 97-24-091, § 222-22-040, filed 12/3/97, effective 1/3/98. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. WSR 94-01-134, § 222-22-040, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. WSR 92-15-011, § 222-22-040, filed 7/2/92, effective 8/2/92.]

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 reanalysis of a watershed analysis pursuant to WAC 222-22-090, 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 database 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.

[Statutory Authority: RCW 76.09.040, WSR 11-12-009, § 222-22-045, filed 5/20/11, effective 6/20/11; WSR 05-12-119, § 222-22-045, filed 5/31/05, effective 7/1/05.]

WAC 222-22-050 Level 1 watershed resource assessment. *(1) To begin a watershed resource assessment on a WAU, the department acting under WAC 222-22-040(2) or a forest landowner or owners acting under WAC 222-22-040(3) may assemble a level 1 resource assessment team consisting of analysts qualified under WAC 222-22-030(1) or, at its option, may begin the watershed analysis as a level 2 resource assessment 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
<i>Vulnerability</i>	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 landowner.

*(3) Within twenty-one 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 shall be included in the draft assessment. Where the draft level 1 assessment delivered to the department contains alternative designations, the department shall within 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 landowner 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). 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.

[Statutory Authority: RCW 76.09.040. WSR 11-12-009, § 222-22-050, filed 5/20/11, effective 6/20/11; WSR 08-24-011, § 222-22-050, filed 11/21/08,

effective 12/22/08; WSR 05-12-119, § 222-22-050, filed 5/31/05, effective 7/1/05. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. WSR 97-24-091, § 222-22-050, filed 12/3/97, effective 1/3/98. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. WSR 94-01-134, § 222-22-050, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. WSR 92-15-011, § 222-22-050, filed 7/2/92, effective 8/2/92.]

WAC 222-22-060 Level 2 watershed resource assessment. *(1) The department acting under WAC 222-22-040(2) or forest landowner acting under WAC 222-22-040(3) may assemble a level 2 resource assessment team either to begin a watershed analysis at a level 2 resource assessment or to review the level 1 resource 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 sixty days of mailing notice under WAC 222-22-040(4) where a watershed analysis begins with a level 2 assessment or within sixty 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 casual 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 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 thirty 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.

[Statutory Authority: RCW 76.09.040. WSR 11-12-009, § 222-22-060, filed 5/20/11, effective 6/20/11; WSR 05-12-119, § 222-22-060, filed 5/31/05, effective 7/1/05. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. WSR 94-01-134, § 222-22-060, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. WSR 92-15-011, § 222-22-060, filed 7/2/92, effective 8/2/92.]

WAC 222-22-070 Prescriptions and management strategies. *(1) For each WAU for which a watershed analysis is undertaken, the department acting under WAC 222-22-040(2) or forest landowner 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 landowner in a WAU shall have the right to submit prescriptions to the department or the forest landowner conducting the watershed analysis for areas of resource sensitivity on 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.

*(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 prescriptions to the department. 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 landowners 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) Effective July 1, 2001, the forests and fish riparian rules 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 function 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 database, 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 thirty days of the submission to the department of the level 2 assessment under WAC 222-22-060 or within twenty-one days of the submission to the department of the level 1 assessment under WAC 222-22-050.

[Statutory Authority: RCW 76.09.040, WSR 11-12-009, § 222-22-070, filed 5/20/11, effective 6/20/11; WSR 05-12-119, § 222-22-070, filed 5/31/05, effective 7/1/05. Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). WSR 01-12-042, § 222-22-070, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. WSR 94-01-134, § 222-22-070, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. WSR 92-15-011, § 222-22-070, filed 7/2/92, effective 8/2/92.]

WAC 222-22-075 Monitoring. *In connection with any watershed analysis that is not a reanalysis under WAC 222-22-090, 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.

[Statutory Authority: RCW 76.09.040, WSR 11-12-009, § 222-22-075, filed 5/20/11, effective 6/20/11. Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). WSR 01-12-042, § 222-22-075, filed 5/30/01, effective 7/1/01.]

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

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). WSR 01-12-042, § 222-22-076, filed 5/30/01, effective 7/1/01.]

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

(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 reanalysis under WAC 222-22-090, the department shall select prescriptions. The department shall circulate the draft watershed analysis to the departments of ecology and fish and wildlife, affected Indian tribes, local governmental entities, forest landowners 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 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, or 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) The prescriptions, will not accomplish the purposes and policies of this chapter and 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.

(4) If the department disapproves the draft watershed analysis, it shall set forth in writing a detailed explanation of the reasons for its disapproval.

(5) To become final under subsection (1) of this section, 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) As of July 1, 2011:

(a) Existing interim or draft prescriptions will expire; and

(b) A new draft watershed analysis or reanalysis will expire if the requirements in subsections (1) and (5) of this section are not met.

These expirations sunset the draft watershed analysis for the WAU and do not require SEPA review. The department shall notify the landowners in the WAU that the watershed analysis has expired.

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

[Statutory Authority: RCW 76.09.040, WSR 11-12-009, § 222-22-080, filed 5/20/11, effective 6/20/11; WSR 05-12-119, § 222-22-080, filed 5/31/05, effective 7/1/05. Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). WSR 01-12-042, § 222-22-080, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. WSR 97-24-091, § 222-22-080, filed 12/3/97, effective 1/3/98. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. WSR 94-01-134, § 222-22-080, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. WSR 92-15-011, § 222-22-080, filed 7/2/92, effective 8/2/92.]

WAC 222-22-090 Use, review, and reanalysis of a watershed analysis. *(1) Where a watershed analysis 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 reanalysis is found necessary by the department under subsection (6) of this section and either the reanalysis has not been completed and approved or the department has rescinded the prescriptions.

(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 landowners shall use in conducting the forest practice in the area of resource sensitivity;

(c) The department shall assist operators, timber owners, and forest landowners 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 (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 noti-

fications 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) To correct mapping errors, misidentification of soils, landforms, vegetation, or stream features, or other similar factual errors.

*(2) Pending completion and approval 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.

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, field managers, and qualified experts 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) To keep watershed analyses current, the department shall determine if and 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. The department shall determine which watershed analysis modules and prescriptions need to be included in the reanalysis. Review and reanalysis shall be conducted in accordance with 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 (c) of this section.

(5) Entities with an interest in maintaining prescriptions the department has identified for reanalysis 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) Once a watershed analysis is completed and approved on a WAU, the department shall conduct a review to determine if a reanalysis is necessary, upon the earliest of the following to occur:

(a) Five years after the date the watershed analysis is final, 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 twelve-month period or no improvement in a resource characteristic in fair or poor condition in the WAU measured over a twelve-month period unless the department determines, in cooperation with the departments of ecology and fish and wildlife, affected Indian tribes, forest landowners, and the public, that a longer period is reasonably necessary to allow the prescriptions selected to produce improvement.

(7) Once the department has determined that a 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) The department shall classify per WAC 222-16-050 proposed forest practices within the mapped reanalysis area that would have been subject to those prescriptions identified for reanalysis.

(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 forest landowners in the WAU wish to participate and commit resources, then the department may rescind the prescriptions it identified for the reanalysis 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 prescriptions it identified for the reanalysis. 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 and approve or disapprove the reanalysis in accordance with WAC 222-22-080.

(f) Reanalysis must be reviewed under SEPA on a non-project basis. See WAC 222-10-035.

(8) Regardless of subsection (7) of this section, the owner or owners of ten percent or more of the nonfederal forest land in the WAU may conduct a reanalysis at any time at their own expense and the reanalysis may be conducted on areas smaller than the entire WAU.

[Statutory Authority: RCW 76.09.040, WSR 11-12-009, § 222-22-090, filed 5/20/11, effective 6/20/11; WSR 05-12-119, § 222-22-090, filed 5/31/05, effective 7/1/05. Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). WSR 01-12-042, § 222-22-090, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040 and chapter 34.05 RCW. WSR 97-24-091, § 222-22-090, filed 12/3/97, effective 1/3/98. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. WSR 94-01-134, § 222-22-090, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. WSR 92-15-011, § 222-22-090, filed 7/2/92, effective 8/2/92.]

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 statewide 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.

[Statutory Authority: Chapter 34.05 RCW, RCW 76.09.040, [76.09.]050, [76.09.]370, 76.13.120(9). WSR 01-12-042, § 222-22-100, filed 5/30/01, effective 7/1/01. Statutory Authority: RCW 76.09.040, 76.09.170 and chapter 34.05 RCW. WSR 94-01-134, § 222-22-100, filed 12/20/93, effective 1/1/94. Statutory Authority: RCW 76.09.040, 76.09.050 and chapter 34.05 RCW. WSR 92-15-011, § 222-22-100, filed 7/2/92, effective 8/2/92.]