

Forest Practices Technical Guidance

Avoiding Roads in Critical Locations

Effective January 1, 2024

Objective

Forest Practices Technical Guidance is advisory guidance, developed by the State Forester through a stakeholder process. This Technical Guidance helps landowners and resource professionals implement rules to avoid roads in critical locations. Where there are no alternatives, this Technical Guidance explains how to design and construct roads in critical locations while protecting forest productivity, water quality, and fish and wildlife habitat (OAR 629-625-0000 through 0300).

Note: This Technical Guidance does not apply to existing, functional roads. This Technical Guidance also does not apply to public safety exposure. More restrictive road and harvest practices related to public safety are described in OAR 629-623 and related Forest Practices Technical Guidance.

Background

Senate Bill 1501 (2022) directed the Board of Forestry to adopt rules laid out in the February 2, 2022, Private Forest Accord Report. The Report summarizes agreements between authors of a conservation coalition and authors of a working forest coalition. They agreed to change Oregon's forest practice laws and regulations to craft a habitat conservation plan to obtain an Incidental take permit under Section 10 of United States Endangered Species Act for the covered species in the Report. They also agreed to update the technical guidance related to avoiding roads in critical locations.

Critical locations are areas where road construction has a high potential of impacting waters of the state. These impacts may occur even when the best forest road construction techniques are used. Locating roads in critical locations is only allowed in limited circumstances. Critical locations (OAR 629-625-0200(3)) are defined as:

- High landslide hazard locations.
- Slopes over 60 percent with decomposed granite-type soils.
- Locations within 50 feet of stream channels or lakes, excluding crossings and approaches to crossings.
- Locations within significant wetlands, stream-associated wetlands, or other wetlands greater than 0.25 acres in size.
- Any active stream channel, exclusive of stream crossings in compliance with OAR 629-625-0320.
- Locations parallel to, and within a riparian management area for a distance exceeding a cumulative 500 feet of road length measured from the first point of entry into the riparian management area to the last point of exit from the riparian management area, exclusive of stream crossings in compliance with OAR 629-625-0320.
- High landslide hazard locations where rock is likely to be highly sheared or otherwise unstable so that it is not possible to excavate a stable cutslope. If such a cutslope failure may divert road surface drainage to a high landslide hazard location and could trigger a debris flow below the road with potential for delivery to a stream, that road shall not be constructed unless the operator demonstrates that the cutslope can be stabilized by buttressing or other means.
- Locations cutting through the toe of active or recently active deep-seated landslide deposits and where a reactivated landslide would likely enter waters of the state.

- Highly dissected, steep slopes where it is not possible to fit the road to the topography with full bench end haul construction.

Terminology

"Debris flow" OAR 629-600-0100 means a rapidly moving slurry of rock, soil, wood, and water, which is most often initiated by a landslide that delivers to and travels through steep, confined stream channels.

"Extremely dissected terrain" includes very steeply sloped areas with closely spaced ridges and headwalls. These lands are so irregular that if a full bench end haul road is constructed, it would contain curves so sharp they could not be used by log trucks.

"Lake" OAR 629-600-0100 means a body of year-round standing open water.

- (a) For the purposes of the forest practice rules, lakes include:
 - (A) The water itself, including any vegetation, aquatic life, or habitats therein; and
 - (B) Beds, banks, or wetlands below the high-water level which may contain water, whether or not water is actually present.
- (b) "Lakes" do not include water developments as defined in this rule (OAR 629-600-0100).

"Other wetlands" OAR 629-600-0100 means wetland areas that are not significant wetlands (OAR 629-600-0100) or stream associated wetlands (OAR 629-600-0100).

"Riparian management area" OAR 629-600-0100 means an area along each side of specified waters of the state within which vegetation retention and special management practices are required for the protection of water quality, hydrologic functions, and fish and wildlife habitat.

"Significant wetlands" OAR 629-600-0100 means those wetland types listed in OAR 629-680-0310, that require site specific protection, as follows:

- (a) Wetlands that are larger than eight acres;
- (b) Estuaries;
- (c) Bogs; and
- (d) Important springs in Eastern Oregon.

"Stream" OAR 629-600-0100 means a channel, such as a river or creek, which carries flowing surface water during some portion of the year.

- (a) For the purposes of the forest practice rules, streams include:
 - (A) The water itself, including any vegetation, aquatic life, or habitats therein;
 - (B) Beds and banks below the high water level which may contain water, whether or not water is actually present;
 - (C) The area between the high water level of connected side channels;
 - (D) Beaver ponds, oxbows, and side channels if they are connected by surface flow to the stream during a portion of the year; and
 - (E) Stream-associated wetlands (OAR 629-600-0100).
- (b) "Streams" do not include:
 - (A) Ephemeral overland flow (such flow does not have a channel); or
 - (B) Road drainage systems or "water developments" as defined in this rule.

"Stream-associated wetland" OAR 629-600-0100 means a wetland that is not classified as significant and that is next to a stream.

"Wetland" OAR 629-600-0100 means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands include marshes, swamps, bogs, and similar areas. Wetlands do not include water developments.

"Written plan" OAR 629-600-0100 means a document prepared by an operator, timber owner, or landowner that describes how the operation is planned to be conducted.

Overview

The purpose of the OAR 629-625-0200 road location rules is to minimize impacts to waters of the state. The rules also help reduce hydrologic connectivity between roads and waters of the state. When locating roads, operators shall design road locations that reduce the risk of materials entering waters of the state. These locations should also minimize disturbance to channels, lakes, wetlands, and floodplains (OAR 629-625-0200(2)).

Operators shall avoid locating roads in critical locations (OAR 629-625-0200(3)). Critical locations are where direct impacts to streams are likely even when the best forest road building techniques (the road design and construction rules) are used.

Roads may be constructed on critical locations when avoiding the area is not feasible. The four exceptions that allow roads in critical locations include:

1. legal feasibility due to ownership boundaries,
2. other legal impediments,
3. physical feasibility due to safety considerations, or
4. alternate routes or methods having greater environmental risks.

Where roads must cross critical locations, extra effort is needed to align roads to more suitable ground as soon as possible. Written plans are required before road construction or reconstruction on critical locations. This will be followed by an on-site review by the State Forester, OAR 629-625-0200 (4).

Note: Of the four reasons for why a road can be placed in a critical location established under OAR 629-625-0200(3), economic feasibility is not included.

Techniques for avoiding roads in critical locations include relocating roads to other sides of ridges or streams. Operators may also use steeper grades, other access points, or alternative logging techniques. In some cases, very steep road grades may be used, especially for roads that will not be used often. Steep roads can cause safety issues. Nothing in this guidance supersedes Oregon's Occupational Safety and Health division's (OSHA) forest roads rules. The critical road location rules do not require locating roads on other landownerships but may require alternative harvesting systems. For example, operators may need to use an assist vehicle for safety reasons on steep roads. In other cases, long span cable yarding may be needed. The goal is to have as little road in critical locations as possible while maintaining forest access.

The critical location rules apply to both road construction and road reconstruction. Road reconstruction typically has less impact than building a road in a new location. This is because the latter adds to the total road system on the landscape. Road work becomes road reconstruction when the existing road prism changes. This includes widening or raising the road, lowering the subgrade, or shifting the centerline. Cutbank reshaping beyond bank slough removal and substantial fillslope repair are also considered reconstruction.

Critical location rules do not apply to routine maintenance. Routine road maintenance refers to on-going activities that involve the road surface and ditches. It also refers to minor debris removal from culverts and streams. Maintenance includes mechanical roadside brushing, ditch cleaning from raveling cut slopes and slumps, and cross drain installation for structures that are not in stream channels. It also includes road surface rocking that doesn't significantly change the road prism and grading road surface.

Identification of Critical Locations

There are nine types of critical locations defined in OAR 629-625-0200(3). The following describes how to identify these locations in the field and the potential impacts of constructing roads in these areas. Critical locations can be categorized as steep slopes, areas near waters of the state, and slide areas.

Steep slopes:

1. High landslide hazard locations.
2. Slopes over 60 percent with decomposed granite-type soils.
3. High landslide hazard locations where rock is likely to be highly sheared or otherwise unstable so that it is not possible to excavate a stable cutslope. If such a cutslope failure may divert road surface drainage to a high landslide hazard location and could trigger a debris flow below the road with potential for delivery to a stream, that road shall not be constructed unless the operator demonstrates that the cutslope can be stabilized by buttressing or other means.
4. Highly dissected, steep slopes where it is not possible to fit the road to the topography with full bench end haul construction.

Areas near waters of the state:

5. Locations within 50 feet of stream channels or lakes, excluding crossings and approaches to crossings.
6. Locations within significant wetlands as described in OAR 629-600-0100, stream-associated wetlands as described in OAR 629-600-0100, or other wetlands greater than 0.25 acres in size.
7. Any active stream channel, exclusive of stream crossings in compliance with OAR 629-625-0320.
8. Locations parallel to, and within a riparian management area for a distance exceeding a cumulative 500 feet of road length measured from the first point of entry into the riparian management area to the last point of exit from the riparian management area, exclusive of stream crossings in compliance with OAR 629-625-0320.

Slide areas:

9. Locations cutting through the toe of active or recently active deep-seated landslide deposits and where a reactivated landslide would likely enter waters of the state.

Steep Slopes

1. High Landslide Hazard Locations

Roads must not be located in high landslide hazard locations unless one of the four exceptions (listed above in the overview section) applies. High landslide hazard locations (HLHL) are steep slopes that are likely to cause shallow, rapidly moving landslides. These landslides have the potential to cause environmental disturbance, including delivering large amounts of fine sediment to waters of the state, which adversely impacts water quality and fish habitat. Certain road construction techniques such as full bench road construction and careful road drainage can reduce these impacts.

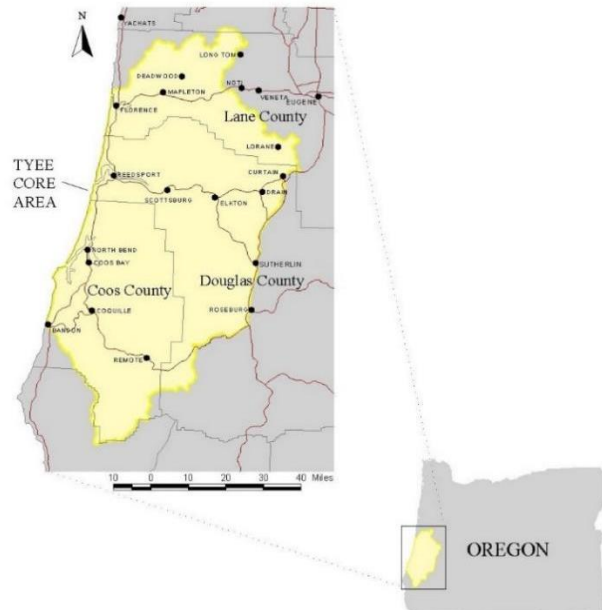


Figure 1. Location of the Tyee Core Area.

High landslide hazard locations (HLHL) are defined in OAR 629-600-0100 as specific sites that are subject to initiation of shallow, rapidly moving landslides. The specific criteria for determination of these sites are:

- (a) The presence, as measured on-site, of any slope in western Oregon (excluding competent rock outcrops) steeper than 80 percent, except in the Tyee Core Area, where it is any slope steeper than 75 percent; or
- (b) The presence, as measured on-site, of any headwall or draw in western Oregon steeper than 70 percent, except in the Tyee Core Area (Figure 1), where it is any headwall or draw steeper than 65 percent.
- (c) Notwithstanding the slopes specified in (a) or (b) above, field identification of atypical conditions by a geotechnical specialist may be used to develop site specific slope steepness thresholds for any part of the state where the hazard is equivalent to (a) or (b) above. The State Forester shall make the final determination of equivalent hazard.

High landslide hazard locations are based on measurements of slopes on the ground. Short pitches of steep slopes less than 30 feet in slope length in otherwise relatively gentle terrain are not considered high landslide hazard locations. Constructed cutslopes are not considered high landslide hazard locations, but sidecast and other fillslopes are if they meet both the slope steepness and slope length criteria.

Refer to Forest Practices Technical Note 2 for more information on identifying high landslide hazard locations. The Forest Practice Rules about shallow rapidly moving landslides and public safety, including high landslide hazard locations, are found in OAR 629-623-0000 through 629-623-0800. Nothing in this guidance or in the rules addressed change any of the requirements found in OAR 629-623-0000 through 629-623-0800.

2. Slopes over 60 percent with decomposed granite-type soils

Decomposed granite-type soils are found in portions of southwest Oregon in areas from east of Roseburg, south to Ashland, and to about 10 miles west of Grants Pass (Figure 2). Granite is also found in parts of northeast Oregon, although in this part of the state it may not be decomposed. The soils of concern have rock fragments that can be easily crushed into sand-sized particles and are usually light colored. These soils are easily eroded because they have few binding fines (little or no clay or silt) making them granular and non-cohesive which makes them behave like sand.



Figure 2. Decomposed granite locations in southwest Oregon

3. High landslide hazard locations where rock is likely to be highly sheared or otherwise unstable so that it is not possible to excavate a stable cutslope.

All HLHL areas are critical locations. HLHL areas with highly sheared rock are a special subset of those HLHL areas that need added consideration before constructing roads. As with any critical location the goal is to avoid road construction in these areas when possible.

This section of the rule applies when all three of the criteria below are present:

- (1) The area is within a HLHL,
- (2) A cutslope failure may route road surface water onto a HLHL, and
- (3) Water flow onto the HLHL could cause a debris flow that has potential to reach waters of the state.

If all three of the above conditions are met, that road shall not be constructed unless the operator demonstrates that the cutslope can be stabilized by buttressing or other means.

Unstable rock is highly fractured and has open or soft bedding and joints making connected, large open blocks in the rock mass. Highly sheared, fractured or otherwise unstable rock makes it difficult to construct a stable cutslope. Cutslope failures may divert road drainage waters into streams or onto steep slopes starting a slide.

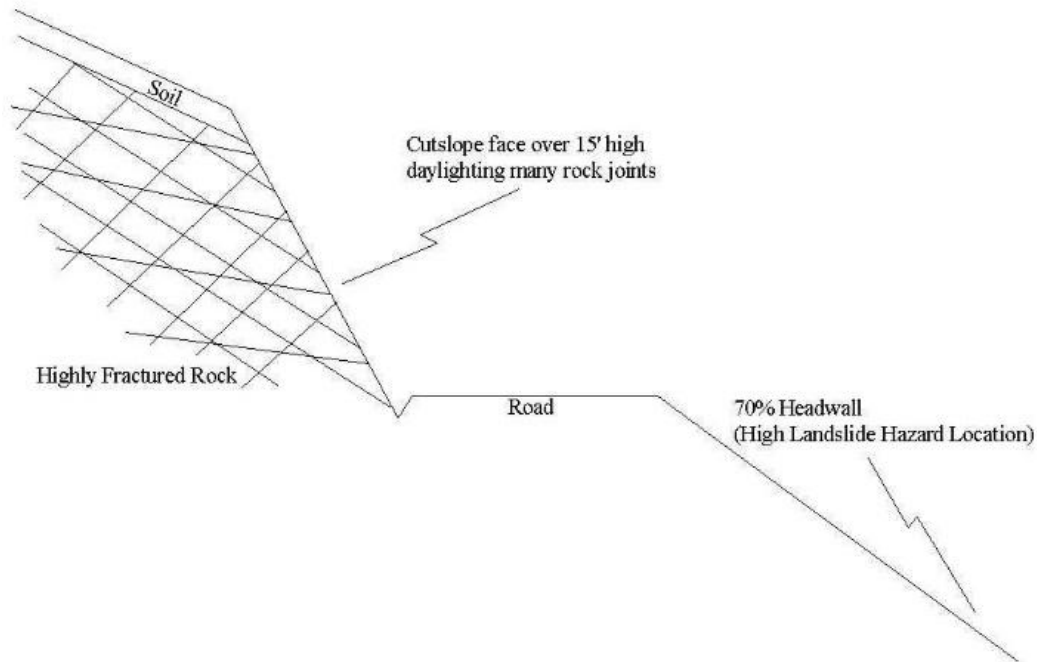


Figure 3. Road prism with unstable rock

The condition of an underlying rock slope can be hard to know before construction. Evidence of unstable rock includes slope failures along the proposed road alignment and large cutslope failures along nearby existing roads. The rock fracture pattern in existing cuts should also be examined for its contribution to cutslope stability. The performance of existing cuts in similar rock may indicate how the proposed cuts will behave. If the cuts have become irregular and ragged over time, making it hard to keep an existing grade open, a similar outcome for the proposed road may occur. The height and number of cutslopes should be minimized in these areas as much as possible.

4. Highly dissected steep slopes

Highly dissected steep slope critical locations include very steep slopes with closely spaced ridges, gullies and/or headwalls. They may also have small waterways crossing the proposed alignment. These locations require difficult design and construction to avoid impacts to water. These requirements may not be possible to achieve in such terrain or could be very costly.

Areas Near Waters of the State

5. Within 50 feet of a stream or lake

Roads near streams or lakes may present direct routes for sediment to reach waters of the state. The best way to prevent this is to locate roads far enough away so that water can be filtered by undisturbed forest floor.

Areas within 50 feet of a stream channel or lake are considered critical locations. Roads may not be built within 50 feet of stream channels or lakes unless one of the above four exceptions applies. Streams include Type F, SSBT, D, Np (perennial), and Ns (seasonal) streams. Lakes do not have a minimum size for the rule to apply.

The requirement to avoid building roads near streams and lakes does not apply to water crossings or approaches to water crossings OAR 629-625-0200(3)(c).

6. Within significant wetlands, stream associated wetlands, or other wetlands greater than .25 acres

Roads must be located outside of significant wetlands, stream associated wetlands, or other wetlands greater than 0.25 acres, unless one of the four exceptions applies. If road construction must occur in these areas, the operator shall follow the requirements under OAR 629-625-0800, Construction in Wetlands. Operators must use the following priority list when planning and locating these roads (OAR 629-625-0800):

- (1) Select the least environmentally damaging landing location, road location and road length. Operators must minimize road length in wetlands.
- (2) Build a temporary road or landing and remove road materials and fills upon completion of the project. Temporary roads or landings shall
 - (a) Reduce the subgrade width, fill acreage, and spoil areas to minimize impacts; and
 - (b) Remove temporary fills or road sections after completing the project.
- (3) When constructing a permanent road, mitigate the impacts by:
 - (a) Reducing or eliminating impacts over time by preserving or maintaining wetland areas; or
 - (b) Replacing affected areas by creating new wetlands or enhancing existing wetlands.
- (4) Filling or draining more than 0.25 acres of a significant wetland, any size of stream-associated wetland, or other wetlands greater than 0.25 acres in size requires the operator to replace by substitution or enhance the road or landing construction site for the lost wetland functions and values. The objective of successful replacement by substitution of lost wetland area is approximately on a two-for-one basis and of the same type and in the same general location. The objective of enhancing wetland function is to provide for an equivalent amount of function and values to replace that which is lost.

Written plans involving preserving, maintaining, replacing, or enhancing wetlands are unique to each site. The Department will evaluate plans with help from appropriate agencies. These agencies may include the Department of State Lands (DSL), the Department of Fish and Wildlife (ODFW) and the Department of Environmental Quality (DEQ).

When using option 3a above, written plans must show how wetland function is being preserved and maintained during and after construction. Wetland functions that may be affected by road construction in a wetland include but are not limited to:

- Fragmentation of wetland hydrologic connectivity
- Fragmentation of wildlife habitat
- Loss of wetland vegetation
- Loss of wetland area

Wetland creation or enhancement are special processes. They require identifying appropriate locations, project design, construction, planting, and long-term maintenance and monitoring. Operators are encouraged to seek appropriate professional services when planning these activities. Operations that require wetland creation or enhancement may fall under DSL authority. A fill-removal permit may be required in some cases.

Wetlands are areas saturated with water during the growing season for a long enough time to support vegetation that grows well in saturated soils. Wetlands include marshes, swamps, and bogs, but can also be much more subtle. In some areas wetlands may be dominated by grasses or grass-like plants and can be hard to identify. These areas may be moister or have greener vegetation than the surrounding area, especially during the dry season. Wetlands are usually found in lowlands, valleys, or depressions. Some wetlands may be converted to agricultural uses such as hay and grazing, but keep wetland characteristics (saturated soils, hydric soils, and agricultural grasses or other plants suitable for growing in wet conditions). These areas are still considered wetlands and may qualify as critical locations. Plants found entirely or mostly in wetlands are listed below:

Trees

- Willow, alder, Oregon ash, and cottonwood

Shrubs

- Willow, spirea, salmonberry (can grow in or adjacent to wet areas), and red-osier dogwood

Herbaceous plants

- Skunk cabbage, sedges/ sawgrass, rushes, cattails, and reed canary grass

There are optional tools to help landowners and operators identify if a wetland is present in their project area. The National Wetland Inventory is used by the electronic notification system. Incoming notifications are screened against this layer. If a wetland polygon overlaps the notified area it will be identified. DSL also has a statewide inventory of wetlands and an online tool that can be used to show if a wetland is in a project area. The State Wetland Inventory contains the National Wetland Inventory and incorporates other wetland information. It also includes soil maps for hydric soils (areas where saturated soils are likely). The State Wetland Inventory can be found at: [Department of State Lands: Statewide Wetlands Inventory: Waterways & Wetlands: State of Oregon.](#)

Wetland databases help operators locate possible wetlands. Actual wetlands must be identified, and boundaries determined based on field conditions.

7. Any active stream channel

All stream channels are critical locations. Roads may not be located in a stream channel unless one of the above four exceptions applies. Stream crossings and their approaches are an exception to the rule.

In most cases, other locations that do not require construction in the channel are available. While also a critical location, it is preferable to construct roads near a stream as opposed to in the stream channel.

An active stream channel is a stream that carries flowing surface water during some portion of the year. The channel includes the bed and banks.

8. Parallel to and within RMA for more than 500 feet

As described in point 5, above, areas within 50 feet of any stream are critical locations. In some cases, Riparian Management Areas (RMA) are wider than 50 feet. A road in an RMA is a critical location if the total road length within the RMA is greater than 500 feet. Include any parts of road where the road prism is within the RMA in the total. In cases where a road enters and leaves an RMA several times, the total length of road within the RMA is considered (figure 4). Stream crossings do not add to the cumulative length. Roads may not be located under these conditions unless one of the four exceptions applies.

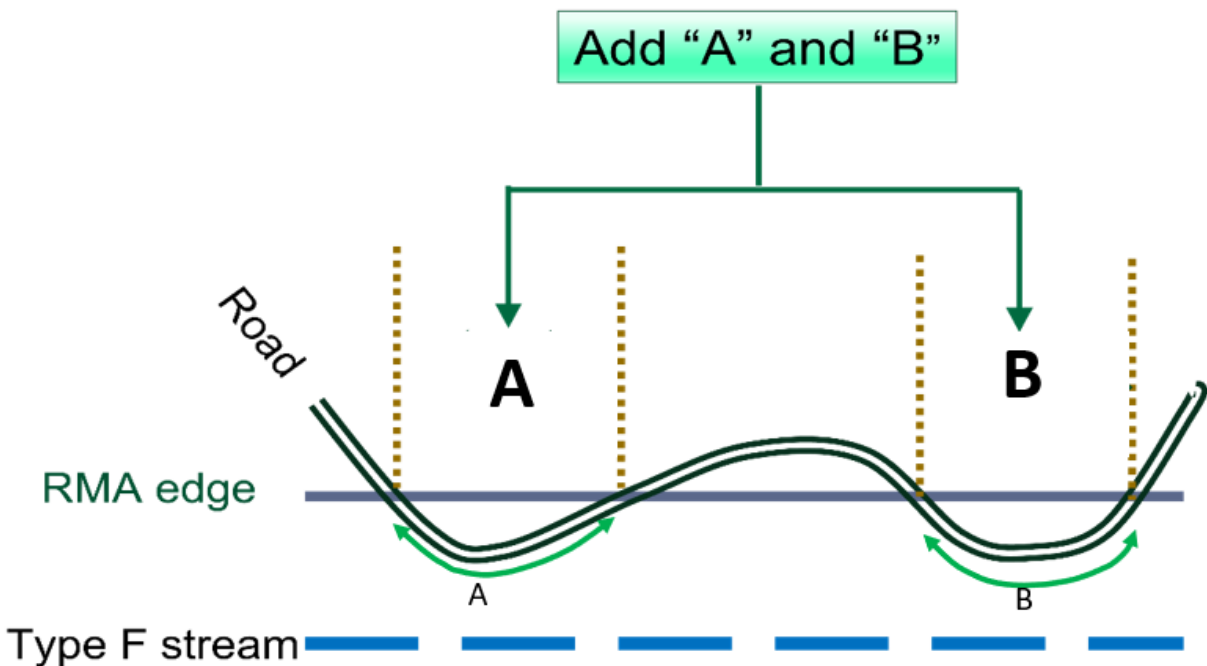


Figure 4. Cumulative length is the total road length along the curving of the road, not the straight-line distance.

Slide Areas

9. Cutting through a toe of active or recently active deep-seated landslide

Deep-seated landslides are best recognized by the shape of the ground surface (Figure 5). Active or recently active deep-seated landslides contain scarp(s), a main landslide body, and a toe. The toe of active landslides is steep and often unvegetated. The toe of a slide also may be stabilizing the upslope, unstable area. Road construction through a toe could remove stabilizing material and reactivate the landslide. Roads may not be located in these areas unless one of the four exceptions applies.

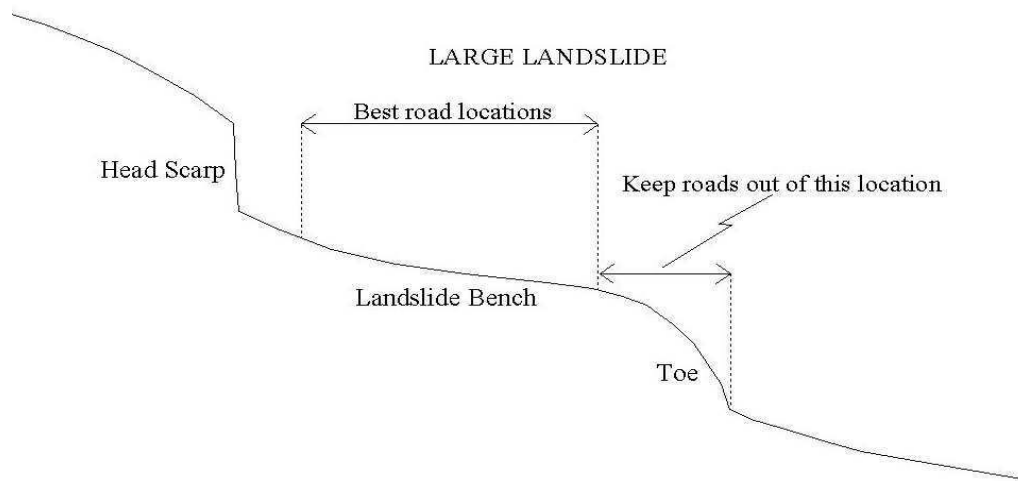


Figure 5. Locating roads on an existing deep-seated landslide

Evidence of movement may include: bent trees; bare soil; tipped old growth stumps; cracks; stair-stepped ground surface; cracked, settled, or off-set roads; ill-defined drainage patterns; ponds; rotated blocks of terrain; and lidar-visible flow structures. The presence of a single indicator, such as bent trees, is not a reliable indicator of landslide activity. Each indicator should be considered along with the presence/absence of other possible indicators to evaluate the area.

If there is evidence of movement within about the last 100 years, it may be considered recently active. The approximate age of vegetation and the freshness of movement features (cracks, scarps) may give hints about the slides age.

Avoidance of Roads on Critical Locations

The best way to avoid critical locations is to carefully evaluate the site with digital mapping tools followed by on-the-ground reconnaissance. Digital mapping tools include Lidar DEMs and their slope steepness products (shading, contours, slope % classification), wetland mapping tools, and aerial imagery.

It is important to observe landforms (shape of the ground) and exposed areas like nearby roadcuts, windthrow holes, and streambanks to evaluate soil and rock conditions. Observing existing cut-slopes and if they are problematic can indicate how proposed cuts in the same area will perform.

Knowledge of local vegetation is critical, especially wet-site vegetation. These are the best indicators of wetlands. Wetlands and ponds can often be identified on orthophotos. Smaller features will need to be searched for along the proposed road during field visits. Figure 6 illustrates two alternatives for crossing wetlands. When the shortest location is close to a narrow part of the wetland ("P" line A), move the

road location to the shortest crossing distance. When the shortest location crosses a wide area of wetland, reroute the road around the wetland ("P" line B).

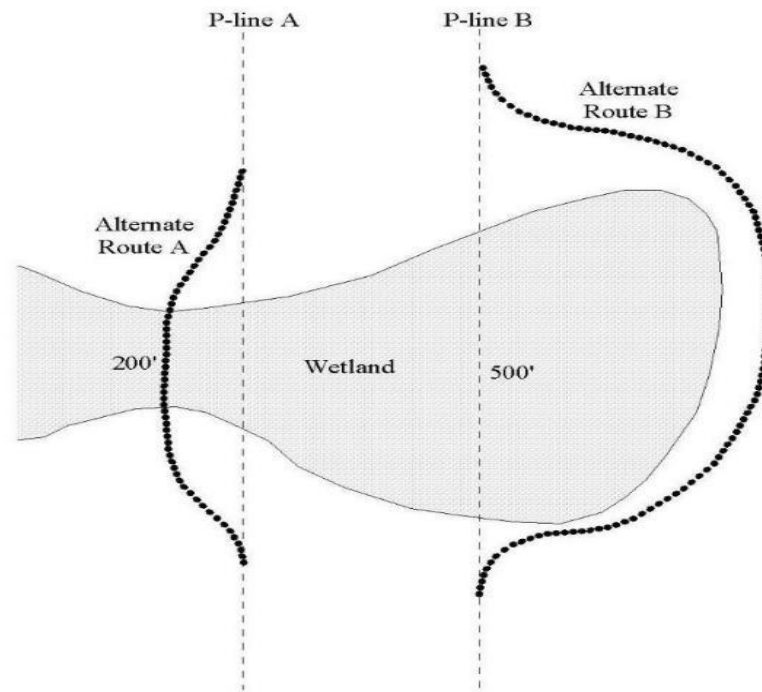


Figure 6. Road location around or through a wetland

The toe of large landslides, and other locations where slopes break sharply and become steep (edge of benches) may contain weak soil. Roads requiring large cuts or fills should be located away from these areas as soon as possible (Figure 5 locating road on an existing deep-seated landslide). The flat benches of large creeping landslides should be avoided when placing waste materials unless geotechnical evaluation has been performed.

Techniques are available for keeping roads away from critical locations. They include relocating roads to other sides of ridges or streams or using steeper grades, other access points, or alternative logging techniques. In some cases, short lengths of very steep road grades (>20%) are needed to avoid critical locations. It may be necessary to use an assistance vehicle for safety reasons on such steep roads.

Consider gaining access across other ownerships to avoid critical locations OAR 629-625-0200(7). The rules and Technical Guidance do not require locating roads on other landownerships. In other cases, it may be necessary to use long span cable yarding. The goal is to have as little of the road on critical locations as possible while maintaining forest access.

Road Construction or Reconstruction on Critical Locations

Relocating existing roads away from streams and other critical locations: Relocating roads that are next to streams can improve year-round use of major access routes and reduce impacts to the stream. Reconstruction in a critical location should move roads away from and above the active channel when possible. A relocated road may still be in the RMA or portions of the other critical locations. Other measures to minimize hydrologic connectivity or mitigate connected areas may be needed (OAR 629-625-0200(1)).

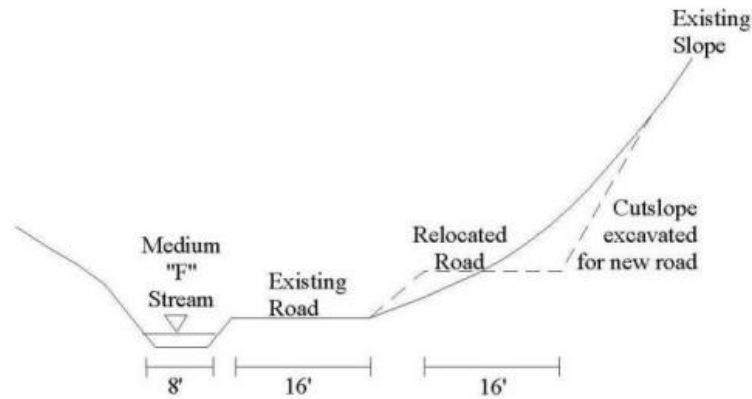


Figure 7. Relocating road away from the stream. (still in RMA, but much better location)

Road Design: Operators may only locate roads in critical locations under the four limited exceptions described above and when considering other logging methods. These roads shall be designed to minimize road length in the critical location and reduce possible impacts to water. In some cases, it may be necessary to use road location, design, or construction techniques that are not normally needed in other areas. Examples might include variable grades, steep grades, retaining walls, placed rip-rap, and subsurface drainage. Operators are encouraged to consult with ODF resource specialists early in the road location process when considering roads in critical locations.

Written plans: The State Forester may not waive the requirement for the written plans for road construction or reconstruction on critical locations, OAR 629-605-0170(10)(b)(E). These written plans must describe how the operation will be conducted. Include enough detail to allow the State Forester to evaluate and comment on the likelihood that the operation will comply with the Forest Practices Act.

Written plans shall include the following components:

- A map showing:
 - Critical locations,
 - Road location,
 - Specific resources requiring protection, and
 - Location of other practices that may affect resources such as landing and waste area locations.
- The specific techniques and methods employed for resource protection such as:
 - Road and landing design,
 - Road construction techniques,
 - Drainage systems,
 - Yarding system and layout, and
 - Post operation stabilization methods.
- Description of why alternate locations are not feasible.
- Description of why alternate routes would have greater environmental risk if applicable.
- Additional written plan content required by rule.

ODF will provide written plans for construction on critical locations to ODFW, DEQ and other appropriate resource professionals for review. The State Forester will review the written plan on site. Other qualified resource professionals may be present for the site review. Qualified professionals may include but are not limited to ODFW, DEQ, ODF Geotechnical Specialists, ODF Wildlife Biologist/wetland Specialist, ODF Water Quality Specialist and ODF Road Specialist. The field review must occur within 14

days of ODF receiving the written plan. If the field review has not occurred in 14 days and the written plan review timeline described below has passed, operations may begin with what is described in the written plan. This does not mean the department has affirmed compliance with the forest practices rules.

Written plans for roads in critical locations may be statutory or non-statutory depending on the type of critical location.

Statutory Written plans are required for the following critical locations:

- Within 100 feet of a Type F, Type D or Type SSBT stream
- Within 100 feet of a significant wetland, bog, or, in Eastern Oregon, important springs
- Within 300 feet from an estuary
- Within 300 feet of protected wildlife sites

Statutory written plans have a required 14-day public comment period. The State Forester may comment on the written plan after the 14th day and before the 21st day after ODF received the written plan. Operations may begin after the State Forester comments or after the 21st day after ODF received the written plan.

Non-statutory written plans are required for critical locations not listed above. Non-statutory written plans do not require a public comment period. Operations may not begin until the State Forester has provided comments or until 14 days after ODF received the written plan.

References or Sources of Additional Information

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Appendix

OAR 629-625-0200(3) Critical Locations. Operators shall avoid locating roads in critical locations. When alternate routes that avoid critical locations are not legally feasible due to ownership boundaries or other legal impediments, physically feasible due to safety considerations, or would have a greater environmental risk, operators may locate roads in critical locations, consistent with sections (4) and (5) of this rule. Critical locations include:

- (a) High landslide hazard locations. If there is public safety exposure, then the practices described in OAR 629-623-0400 through 0800 shall also apply.
 - (b) Slopes over 60 percent with decomposed granite-type soils.
 - (c) Within 50 feet of stream channels or lakes, excluding crossings and approaches to crossings.
 - (d) Within significant wetlands as described in OAR 629-600-0100(70), stream-associated wetlands as described in OAR 629-600-0100(77), or other wetlands greater than 0.25 acres in size.
 - (e) Any active stream channel, exclusive of stream crossings in compliance with OAR 629-625-0320.
 - (f) Locations parallel to, and within a riparian management area for a distance exceeding a cumulative 500 feet of road length measured from the first point of entry into the riparian management area to the last point of exit from the riparian management area, exclusive of stream crossings in compliance with OAR 629-625-0320.
 - (g) High landslide hazard locations where rock is likely to be highly sheared or otherwise unstable so that it is not possible to excavate a stable cutslope. If such a cutslope failure may divert road surface drainage to a high landslide hazard location and could trigger a debris flow below the road with potential for delivery to a stream, that road shall not be constructed unless the operator demonstrates that the cutslope can be stabilized by buttressing or other means.
 - (h) Locations cutting through the toe of active or recently active deep-seated landslide deposits and where a reactivated landslide would likely enter waters of the state.
 - (i) Highly dissected, steep slopes where it is not possible to fit the road to the topography with full bench end haul construction.
- (4) **Critical Locations Written Plan.** All written plans for road construction in critical locations shall be reviewed on site and reviewed by the State Forester with consultation from a qualified professional as appropriate for the site, including, but not limited to, the department, Department of Environmental Quality, and Department of Fish and Wildlife. Onsite review and consultation must occur within 14 days from the date the written plan was received, otherwise the operator may continue with operations, consistent with the written plan and consistent with written plan review timelines in ORS 527.670(10) and OAR 629-605-0170(10) and (11).
- (5) **Operators must outline all road construction in critical locations in a written plan.** The written plan shall include a narrative describing why alternative routes are not feasible or would have greater environmental risk.