



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

# Board Manual Section 16 and Proposal Initiation for Unstable Slopes

Forest Practices Board  
February 10, 2016

Marc Ratcliff and Marc Engel  
WA Department of Natural Resources

# November 10, 2015 Board Motion

- Moved to approve Board Manual Section 16;
- Moved that items (conservation caucus comment letter dated Nov 9, 2015) near resolution will be addressed by a board manual committee of Qualified Experts;
- Moved that the items not near resolution needing either more science or rule making will be presented at the February 2016 meeting as a proposal initiation for Board approval and recommendations to the AMPA; and
- Directed DNR to report the status of the use of guidance in BM 16 to the Board at their November 2016 meeting.

# Motion Applies to 6 Items Contained in the Conservation Caucus Letter

- (2) Non-glacial Deep-Seated Landslides
- (3) Deep-Seated Landslides (DSL) Reactivation
- (4) Complex or Composite DSL Screening Tool (Anne Weekes document)
- (5) Shallow Rapid Landslide Coarse Screen
- (6) DSL Runout Assessment
- (7) Landslide Risk Decision Pathway

# Items Being Addressed by the Qualified Expert Group

Board Manual Section 16

- (4) Complex or Composite DSL Screening Tool (Ann Weekes)**
  - Incorporating descriptions of complex DSL in the general landslide section
  - Adding indicators of these features using LiDAR
  
- (6) DSL Runout Assessment**
  - Incorporating discussions on assessing historic runout paths of adjacent DSL in the vicinity

# Objectives – Proposal Initiation

- Describe the Purpose and Goals of the Adaptive Management Program (AMP)
- Describe a Proposal Initiation
- Outline the Additional Research and Policy Review questions for AMP review

# Proposal Initiation and Role of the Adaptive Management Program

## Forest Practices Act

**RCW 76.09.370 (7)** In adopting permanent rules, the board shall incorporate the scientific-based adaptive management process . . . (which) shall incorporate the best available science and information, . . . and provide recommendations to the board on proposed changes to forest practices rules.

# Role of the Adaptive Management Program

## Forest Practices Rules

### **WAC 222-12-045** \*Adaptive Management Program

**(1) Purpose:** The purpose of the program is to provide science-based recommendations and technical information to assist the board in determining if and when it is necessary or advisable to adjust rules and guidance. . . The goal of the program is to effect change when it is necessary or advisable to adjust rules and guidance to achieve the goals of the forests and fish report or other goals identified by the board.

# Role of the Adaptive Management Program

## Forest Practices Rules, cont.

**(2)(d)(i) Proposal initiation:** . . . The board may initiate proposals or research questions in the course of fulfilling their duties according to statute.

**(2)(d)(vi) Policy committee petitions and recommendations to the board:** Upon receipt of a board requested action, the policy committee will prepare a report for the board outlining recommended actions including additional research, rule petitions, and/or guidance recommendations.



# Board Manual Section 22- AMP

## Part 3.1 Initiation and Screening Proposals

Proposals are initiated to provide the Board recommendations from the AMP for potential changes to rule or guidance

The proposal needs to identify:

- the affected rules, guidance
- urgency based on uncertainty or resource risk
- outstanding agreements (TFW, FFR) and supporting science or data

The approved Proposal Initiation is sent to the AMPA who will review and make recommendations to Policy for appropriate track - Policy or Science - to perform analyses. Policy will report proposed work plan and timelines for completion to the Board for approval.

# Items Included in the Proposal Initiation

*(2) Non-glacial deep-seated landslides, (3) Deep-seated Landslide Reactivation, and (6) Methods for Deep-seated Landslide Runout Assessment*

## Additional research

- Include all DSL (glacial and bed rock) in the CMER study to determine if any landforms should be added to the list of RILs found in WAC 222-16-050(1)(d)(A) – (E).
- Is there available science to evaluate and assess the reactivation potential for dormant or relict bedrock and glacial deep-seated landslides?
- What are the risks to public safety from known DSL, including dormant and relict?

# Items Included in the Proposal Initiation

*(2) Non-glacial deep-seated landslides, (3) Deep-seated Landslide Reactivation, and (6) Methods for Deep-seated Landslide Runout Assessment*

Policy review for rule and/or guidance recommendations

- Should all DSL and associated groundwater recharge areas be rule-identified landforms?
- Is there a need for additional methods to evaluate and assess the reactivation potential for all dormant or relict deep-seated landslides and any associated groundwater?
- Is there a need for a method to assess the degree of risk (low, moderate, high or uncertain) to public safety for glacial deep-seated landslides?

# Items Included in the Proposal Initiation

## *(4) Complex or composite rotational deep-seated landslide assessment*

### Additional research

- What is the likelihood of increased composite failures in rotational deep-seated slides due to projections of a rise in the magnitude and duration of precipitation caused by atmospheric rivers and diminished mid-elevation snow falling as rain during the winter months?
- Is there available science to evaluate and assess the characteristics of a rotational slide that would indicate it is likely to fail as a composite slide?

# Items Included in the Proposal Initiation

## *(5) Shallow-rapid landslide coarse screen*

### Additional research

- Is there available science to develop a shallow-rapid landslide coarse screen for all geographic and geomorphic regions in Washington?

### Policy review for rule and/or guidance recommendations

- Is there a need to include a shallow-rapid landslide coarse screen for general practitioners or Qualified Experts?

# Items Included in the Proposal Initiation

## *(7) Landslide Risk Decision Pathway*

### Policy review for rule and/or guidance recommendations

- Based on the existing landslide hazard risk decision pathway in the rules, FPA review process and board manual guidance, Is there a need for an additional landslide decision pathway?

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