December 2007 Storm: An Overview of the Effects on Forest Land

Presented to the Forest Practices Board

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One Storm-Two Events

- The December storm can be viewed as 2 separate events
  - Heavy precipitation in areas west of I-5 and inland from the coast
  - High winds in a band roughly 10-20 miles wide along the coast
  - Interestingly, in each event damage-water or wind was localized
  - Heavy rain and rain-on-snow in limited areas affected soil stability and resulted in extensive flooding
  - High winds caused severe damage to approximately 19,000 acres of forest
Pacific Cascade Region Map

Severe Wind Area

Heavy Precipitation Area
Storm Damage—Water

- Heavy flooding occurred in the upper and lower Chehalis River system
- Many tributary creeks overtopped their banks
- Large woody material, sand, silt and clay were left by retreating waters
- Many homeowners, forest landowners and farmers suffered damages and loss
Storm Damage—Water

- Extensive damage to road systems
  - Upper Chehalis, Capitol Forest and Hood Canal were hardest hit
  - Other areas had limited damage
  - Many areas remain inaccessible due to road failures, bridge washouts, and snow at higher elevations
  - Latest count is 27 bridges damaged/destroyed
- Numerous landslides, debris slides, slumps
  - Earth movement occurred in many areas
Kennedy Creek:

One of the tributaries to Kennedy Creek had a landslide/debris flow.

The event initiated from two separate tributary branches in the headwaters.

This is one of the two initiation points (in standing timber above the C-4700 road).
Kennedy Creek: Debris on the C-4700
Kennedy Creek:

Aerial view from farther back

The second branch is located in the timber to the left of the photo
The debris flow damaged a recreation trail and an old rail road grade. Eventually, it took out the bridge on the B-Line near the Rock Candy Entrance.
Kennedy Creek: Bridge found more than ¼ mile down steam
Potosi Creek: The C-4500
C-8000 Bridge Site Looking Upstream
Waddell Creek below the C-8000
Camp Four Creek: Waddell Creek tributary south of Potosi Creek.
Camp Four Creek: Looking upstream from the C-8000.
Camp Four Creek: C-8000 culvert remains functional
Storm Damage—Wind

Still in “assessment” phase

Current numbers show

- Large landowners 15,600 acres
- State Trust Lands 3,000 acres
- Family Forest Lands 500 acres
- TOTAL 19,100 acres (30 sq. miles)
Browning Block-Trap Creek
Rue Creek—from County Road
Browning-North
D-Line Browning-South
Riggin’ Fit-TS Area
Jammed Radar-TS Area
Radar Ridge Area
Elochoman Twin Bridges
Doty and Local Area