



PO Box 730 • #1 Town & Country Square • White Salmon, Washington 98672 • 509-493-3323 • fax 509-493-2229
www.gorgecommission.org

TO: Columbia River Gorge Commission
FROM: Brian Litt, Principal Planner
DATE: February 26, 2010
SUBJECT: Staff Memo for March 9, 2010 Commission Work Session on Oregon Supreme Court Decision, Geologic Features and Hazards

Commission Direction and Context

At the February 9, 2010 Commission meeting, the Commission requested that staff report back at the March 9, 2010 Commission meeting on two topics: 1) how the Management Plan protects geologic features; and 2) how counties address geologic hazards. This request is within the context of the second issue raised in the Oregon Supreme Court's ruling on the plan review lawsuit. That issue was characterized in the October 14, 2009 staff report as: "Clarify competing definitions of natural resources to determine if geologic features and geologic hazards are 'natural resources' as the term is used in the Act." This staff report treats these as two different topics. As described below, this is because one issue (geologic features) relates to protection and enhancement of Gorge resources, while the other (hazards) addresses protection of public safety and property.

Summary of Court Decision

The following is an excerpt from the October 14, 2009 staff report summarizing the Oregon Supreme Court's ruling with respect to Issue 2:

"The Supreme Court observed that the glossary definition is sufficiently broad (specifically, in its use of the word, "land") that geological features and geological hazards fall within it, but that the Introduction to the Natural Resources Chapter of the Management Plan contains a narrower definition, which does not include geological features or hazards. The Court stated that either definition was a permissible interpretation of the Act. The Court directed the commission to clearly specify which of the two definitions it relied on when it did not regulate geological features and hazards as natural resources in the Management Plan."

What Are Geologic Features?

There is no definition in the Act or Management Plan for 'geologic features.' There is not only a definitional issue when considering 'geologic features' but a scale issue. For example, an individual boulder or soil area can reasonably be described as a geologic feature, as can the entire Columbia River Gorge. As described in more detail below, the Management Plan protects geologic features that constitute significant Gorge resources.

Geologic features evident in the Gorge landscape can be scenic, natural, and in some cases, also recreation and cultural resources. Their character and influence cut across all resource categories.

Scenic Area Act Direction for Management Plan on This Issue

Again, there is no mention of 'geologic features' or 'geologic resources' in the Scenic Area Act. Section 6 provides specific direction for the Management Plan. Section 6(b) directs establishment of

land use designations, including open spaces, and Section 6(d) lists nine standards which include protecting and enhancing farm land, forest land, open spaces and recreation resources, and preventing adverse effects to resources from residential and commercial development. Nothing in these sections mentions geologic features or clarifies whether they are natural, scenic, cultural, recreation or economic resources.

The Act requires protection and enhancement of Gorge resources, and prevention of adverse effects to them. While not specifying protection of geologic features per se, this broad direction includes protection of some geologic features.

How Does the Management Plan Protect Geologic Features?

The Management Plan protects geologic features of the Scenic Area landscape in a number of ways. Some provisions have explicit goals of protecting landforms that are geologic features (e.g. 'Gorge Walls, Canyons and Wildlands' landscape setting). Others provide meaningful if indirect protection to some geologic features (e.g. aquatic buffer zones). This reflects how 'geologic features' touch on many aspects of the Gorge and Management Plan.

Open Space Land Use Designation: One of the most powerful tools in the plan for landscape protection is the Open Space designation. This designation accounts for 34% of all NSA-zoned lands, is the most restrictive zone. For example, this zone allows no new houses or most other buildings, no new cultivation and no land divisions except as needed to facilitate resource protection and enhancement. The majority of the prominent landforms illustrating the geologic processes that shaped the Gorge are protected in the Open Space designation. The accompanying map shows the locations of the Open Space designation and a few examples of some of these well-known landforms that are also geologic features.

Minimum Parcel Sizes Controlling Development Density: Most lands in the Scenic Area not zoned Open Space are designated either Agriculture or Forest designations, with minimum parcel sizes ranging from 20 to 160 acres. SMA Agriculture and Forest Lands have no minimum parcel size, and land divisions are only allowed to facilitate federal land acquisition. Density controls ensure that the character of existing landscapes remains intact and prevent fragmentation of farm and forest lands and wildlife habitat. Several areas in the eastern Gorge with features shaped by the Ice Age Floods and not in Open Space have a 160-acre minimum parcel size. The large minimum lot size provides significant protection of these features, greatly restricting future development.

Landscape Settings: The Management Plan defines landscape settings as "the combination of land use, landform, and vegetation patterns that distinguish an area in appearance and character from other portions of the Scenic Area." One landscape setting in particular, 'Gorge Walls, Canyons and Wildlands', provides significant protection for many geologic features. The plan states that "the landform component of this setting is a much greater determinant of its character than is true for any other setting." The accompanying map shows the location of this setting in relation to Open Space. It includes over 62,000 acres or about 27% of all mapped landscape settings. Additional restrictions beyond those applying to development visible from key viewing areas apply here.

Scenic Policies and Regulations for Minimizing Grading and Restricting Surface Mining: Management Plan scenic resources protection policies include a directive that "New development shall retain the existing landforms and strive to fit into the existing topography to the maximum extent practicable." Guidelines require that grading be minimized "to the maximum extent practicable. The plan also imposes a strict regulatory regime on surface mining. For example, new quarrying activity is not allowed if visible within three miles of key viewing areas. Together, these scenic resource protections contribute to the overall protection of important geologic features in the Scenic Area landscape.

Natural Resource Buffers: Some geologic features are also hydrologic or aquatic features (e.g. side gorges, kolk ponds, floodplains). These features are protected by buffer zones for wetlands, streams, ponds, lakes and riparian areas. For example, any pond has a protective buffer around it of between 75 and 150 feet, depending on the predominant vegetative community. Development in the buffer zone is strictly limited. Although not explicitly articulated in the plan language, these buffer zones provide protection for geologic features associated with aquatic areas.

Interpretive Strategy for the CRGNSA: This document, incorporated into the Management Plan by reference, is the master plan guiding interpretive programs and signage in the Scenic Area. It is highly influential in what features of the Scenic Area get interpreted. It is a critical component of the long-term protection program by increasing public understanding and appreciation. Interpreting Gorge geology features prominently throughout the Interpretive Strategy. An inventory of “outstanding geologic localities” was completed in 1988 for the Commission by Dr. John Eliot Allen, a recognized expert on Gorge geology. This document lists 18 localities with “outstanding geologic features” and recommendations for signage and interpretation. This inventory and its recommendations were influential for a number of specific site recommendations of the Strategy.

Geological Hazards Summary

The NSA Act does not provide for the protection of people or property from geological hazards. Protection from or mitigation of geological hazards is not specifically included in the purposes or standards of the Act. Historically, states and counties have a primary responsibility in protecting public health and safety – including from geological hazards.

The State of Oregon defines a “geologic hazard” to mean “a geologic condition that is a potential danger to life and property which includes but is not limited to earthquake, landslide, flooding, erosion, expansive soil, fault displacement, volcanic eruption and subsidence.” (ORS 516.010) The Oregon Department of Geology and Mineral Industries identifies and maps geologic hazards. Wasco and Hood River Counties adopted geologic hazards overlay zones based on that information to protect people and property. Generally, development in the overlay zones either is restricted, conditioned to minimize hazards, reviewed for site suitability, or required to have a liability waiver. Similarly, in Multnomah County, a Hillside Development Permit is required for most development on slopes of 25 percent or greater, with a geotechnical investigation required in some cases. Multnomah, Hood River and Wasco Counties also have floodplain ordinances that provide standards for development in flood hazard areas.

The State of Washington defines “geologically hazardous areas” as “areas that because of their susceptibility to erosion, sliding, earthquake, or other geological events, are not suited to the siting of commercial, residential, or industrial development consistent with public health or safety concerns.” (RCW 36.70A.030) The Washington Department of Natural Resources (DNR) has mapped areas with steep and unstable slopes. Geologically hazardous areas are considered “critical areas” that all counties must designate and protect under Growth Management Act provisions (RCW 36.70A). Clark, Skamania and Klickitat Counties have critical areas provisions in their ordinances. In general, Washington counties safeguard public health, safety and welfare by placing limitations on development in geologically hazardous areas. For example, geotechnical reports and mitigation measures are required in some cases. Critical areas in Washington include “frequently flooded areas” – so the counties’ critical areas ordinances include also include standards for development in flood hazard areas.

Enclosure (1)