

APPENDIX G: GLOSSARY OF TERMS

Visual impact assessment is a relatively recent development in natural resource analysis. Several federal agencies have instituted Visual Resource Management (VRM) systems, utilizing their own procedures and terminology, many of which have applicability to Maine.

Over the past two decades a vocabulary has evolved which has been used to describe the landscape and to evaluate changes to it. The vocabulary's origin and use vary. Some are common terms employed in the usual way. In other cases, technical meanings have been applied to very specific functions. Terminology has also been drawn from specialized areas like aesthetics and human physiology.

AESTHETICS: The science or philosophy concerned with the quality of sensory experience; the use here is limited to visual experience.

ANGLE OF OBSERVATION: The vertical angle between a viewer's line of sight and the slope being viewed. The visual magnitude of a slope or object being viewed increases as the angle of observation approaches 90 degrees.

ASPECT: The side of a surface of a landscape element facing a given direction. Visual impacts decrease as the viewer aspect, or lateral viewing angle, increases and as the aspect of the main surface of a landscape element is oblique to the viewer.

ATMOSPHERIC PERSPECTIVE: The effect of distance from the viewer on the color and distinctness of objects. Typically, as distance increases, objects become bluer, greyer, lighter, less contrasting and less distinct.

CHARACTER TYPE: A relatively large area of land that has common distinguishing visual characteristics of landform, rock formations, water forms, and vegetative patterns. Paul Adamus, in The Natural Regions of Maine, describes the state in terms of five major physiographic regions: 1. Coastal Region, 2. Uplands Region, 3. Norumbega Hills Region, 4. Northern Forest Region, and 5. Mountain Region. Each of these is further subdivided into several subregions, or character types.

CHARACTERISTIC LANDSCAPE: The naturally and culturally established landscape in a region. It is described visually by the basic vegetative patterns, landforms, rock formations, water forms, and structures which are repeated throughout the area.

COGNITIVE FACTORS: The largely quantifiable characteristics of visual impact assessment: the number and location of viewers; distances, angles, duration, and conditions of viewing; the characteristic landscape types; and the size, character, and location of the proposed changes. In addition to these, visual assessment involves compositional and connotative factors.

COLOR: The portion of the electromagnetic spectrum visible to the human eye which cause activity in the retina of the eye and its associated nerve systems, enabling one to distinguish between identical objects. Color consists of the three components of saturation, hue and brightness.

COMPOSITIONAL FACTORS: Those visual aspects of the landscape usually considered in aesthetics, namely, color, texture, line, form, dominance, and scale. In addition to composition, visual assessment involves cognitive and connotational factors.

CONNOTATIONAL FACTORS: Observers' mental connections, bonds, or associations between a viewed landscape and sensations, perceptions, ideas, feelings, or memories. Associative values also cause nuclear cooling towers, for example, to receive

extreme negative visual ratings despite their handsome, hyperbolic shapes. Together with cognitive and compositional factors these form the basis for visual assessment.

CONE OF VISION: The horizontal and vertical angle of the landscape that is visible from a viewpoint. Constrictions to the viewer's eye may include buildings, street trees, forest edges, or foreground landforms. Travel speed and the design of the automobile are additional constrictions to the viewer's eye.

CONFIGURATION: The amount of irregularity and/or enclosure in the shoreline. Shorelines with coves, points, bays, islands, and other features are considered highly configured, and are usually thought to be highly scenic.

CONGRUITY: The conformity of one landscape element to its surroundings. Congruity is the opposite of contrast.

CONTRAST: The way in which an introduced element may be compared to determine differences. Contrast is measured in terms of form, line, color, texture, dominance, or scale.

DISTANCE ZONES: Horizontal divisions of the landscape being viewed. The delineations correspond to the most recent draft of the Scenic Character Regulations of the Maine Department of Environmental Protection. Alternatively, the three zones can be defined as being any distance that conforms to the major divisions created by prominent edges or significant lines in the landscape, the only requirement being that the foreground is nearest and the background farthest from the observer.

Foreground - The visible landscape within one-half mile from the observer. At this range textures and gross details are easily discernible. Trees, for example, may be appreciated for their individual characteristics.

Midground - Extends from the edge of the foreground to 4 miles from the observer. Texture is normally characterized by the masses of trees in stands of uniform tree cover.

Background - Extends from the midground to infinity.

DOMINANCE: The extent to which an object is noticeable when compared to the surrounding context. An object(s) may be:

Dominant - The element is visually prominent and occupies a visually sensitive position within a landscape, usually at an upper elevation. A dominant object will greatly influence the visual perception of the landscape from a particular viewpoint

Co-Dominant - Two or more elements have relatively equal visual importance in the landscape

Subordinate - The object is visually inferior to the rest of the landscape as a result of its relative size, brightness, distance, color, or mass.

DURATION: Relative measure of the time available to experience a view. The actual elapsed time will be a function of many factors: mode of transportation, speed of movement, obstacles in the foreground, intention of the viewer, amount of clearing between viewer and view, and opportunities for pull-offs along a road.

Short Views - Fleeting glimpses of relatively short duration, from 1 to 3 seconds.

Medium Views - Visible for a moderate amount of time, from 3 to 10 seconds.

Long Views - Visible for extended periods of time, greater than 10 seconds.

FORM: The mass or shape of an object or combination of objects which appear unified: the physical structure of an object(s).

HUE: The name of a color, such as yellow-green or red, and one of color's three components.

LANDFORM: The dominant topographic features of the landscape, described in terms of slope and repetitive natural forms.

LANDSCAPE: The surface features of an area including landform, water, vegetation, cultural features and all other objects and aspects of natural and human origin.

LANDSCAPE QUALITY: Relative level of visual diversity or landscape character. Features such as Landform, Vegetation, Water, and Cultural Features are compared singularly or in combination with those commonly found in the study area. Landscapes can be classified into variety classes to indicate the degree of variety present:

Class A: Distinctive - Areas where vegetation patterns, landforms, water bodies, rock formations, cultural patterns, or combinations of these elements are of unusual or outstanding visual quality, and are generally considered to be of state-wide or national significance. Examples might include Mount Katahdin, Camden Harbor, or the Loop Road at Acadia National Park.

Class B: Scenic - A combination of landscape elements that is above the average for the characteristic landscape, but not outstanding relative to national or state-wide measures. Examples might include Wolf's Neck State Park, Rangeley Lake, or Rockland Harbor.

Class C: Common - The characteristic landscape of an area.

Class D: Below Average - Little or no visual variety with the landscape. Characterized by monotonous patterns of tree growth, little topographic relief, and the lack of water bodies.

Class E: Disturbed - Landscapes that have been severely altered by natural or man-made forces that result in an alteration or degradation of visual quality. Disturbed landscapes may be either temporary, semi-permanent, or permanent in nature. Examples might include a forest scarred by a forest fire, tailings from a mining operation, or a highly visible quarry on an island.

LINE: Anything that is arranged in a row or sequence. The path, real or imagined, that the eye follows when perceiving abrupt differences in form, color, or texture, or when objects are aligned in a one-dimensional sequence. Line is usually evident as the edge of shapes or masses in the landscape.

MITIGATION: Any action taken or not taken to avoid, minimize, rectify, reduce, eliminate, or compensate for actual or potential adverse environmental impact. Actions may include:

Avoidance - Not taking a certain action.

Design - Measures taken during the siting or design of a facility to minimize contrasts in form, line, color, texture, or scale with the surrounding landscape.

Screening - Installation or preservation of physical visual barriers to minimize views of a proposed activity.

Minimization - Limiting the magnitude, duration, or time of an activity.

Rectification - Restoration, repair, or rehabilitation of an affected environment.

Management - Reducing or eliminating an impact through preservation and maintenance operations during the life of a project.

Compensation - Replacement of affected resources or provision of substitutes.

SCALE: The proportional size relationship between an introduced object(s) relative to the surrounding landscape. Severe contrasts result from the introduction of major objects significantly larger than their surroundings. Viewing angle can affect the perception of scale. Scale can be described in terms of:

Absolute Scale - A measurement of height or width.

Relative Scale - The apparent size relationship between the object and its surroundings.

SCENERY: The general appearance of a place; the features seen in the landscape.

SCENIC AREA: A place which exhibits a high degree of variety, harmony, and contrast among the basic visual elements, resulting in a place with greater than normal visual quality.

SCENIC HIGHWAY: A section of state-assisted highway that has been noted by the Maine Department of Transportation for its scenic quality.

SIGHTLINE: The unobstructed line of sight between an observer and an object.

TEXTURE: The aggregation of small forms or color mixtures into a continuous surface pattern, resulting in a surface's mottling, graininess, or smoothness. These smaller parts do not appear as discrete objects in the landscape.

VALUE: The sensation that one color appears to be lighter or darker than another.

Value is one element in determining the relative contrast or congruity between landscape elements.

VIEW: That portion of the landscape that is seen from a particular vantage point.

VIEWER ELEVATION: The position of the viewer relative to the scene being viewed.

Viewer Inferior - Viewer is below that portion of a scene with the greatest visual interest.

Viewer Normal - Viewer looks straight ahead to see the majority of the view; the most common relationship between viewer and scenery.

Viewer Superior - Viewer is elevated above the scene observed, usually looking down to the rear portions of the foreground. This position tends to increase the importance of landscape elements observed because of the viewer's usual tendency to look slightly downward and more of the view is obstacle-free.

VIEWER EXPECTATION: An estimate of people's concern for visual quality in the environment.

VIEWERS: People who see the landscape at present, or who are likely to see a project in the future.

VIEWPOINT: The actual point from which a viewer sees the landscape or a proposed alteration.

VIEWSHED: All the surface areas visible from a particular viewpoint; also, the surface area(s) within which a critical object or viewpoint is seen.

VISUAL ACCESS. The degree to which a landscape element can be seen from a particular viewpoint. The loss of visual access to a scenic resource could be considered an adverse visual impact.

VISUAL CHARACTER: The overall impression of a landscape created by the order of the patterns composing it: the visual elements of these patterns are the form, line, color, and texture of the landscape's components. Their interrelationships can be described in terms of dominance, scale, diversity, and continuity.

VISUAL IMPACT: The degree of scenic quality change that results from a land use activity. Negative visual impacts affect environmental quality, either by limiting visual access to scenic resources or by disrupting the harmony, diversity, or character of natural landscape elements.

VISUAL RESOURCES: The features that make up the visible landscape.