

Appendix 1 Scale of measurement of landscape attributes and elements. Adapted from Arriaza et al. (2004), Kiinkenbergr, (1994) and Tveit et al. (2006).

NATURALNESS AND VISUAL SCALE IN ROADSIDE LANDSCAPE OF ROUTE 5 – CHILE (ALTO BONITO AREA)			
Naturalness			
Landscape Attributes	Potential Indicators	Results	Attributes and Elements Description
Natural feature	<i>Fractal dimension of linear features</i>	0	Coastlines = 4, river networks = 3, fault traces = 2, shorelines = 1, none = 0
Structural integrity of vegetation	<i>Vegetation intactness</i>	2	No vegetation = 0; herbaceous and bushes = 1; mix vegetation (bushes + trees) = 2; trees = 3
Vegetation/land-cover type	<i>Percentage of land covered by vegetation observed</i>	2	0–25% = 0; 25–50% = 1; 50–75% = 2; 75–100% = 3
Water	<i>Presence of superficial water</i>	0	No water = 0; river = 1; lake = 2; dam = 3
	<i>Percentage area of superficial water</i>	0	0–25%=0; 25–50%=1; 50–75%=2; 75–100%=3
Management (qualitative)	<i>Management intensity (type and frequency)</i>	Non Observed	The management activity is the surface disturbing activity undertaken on the landscape for the purpose of harvesting, traversing, transporting, protecting, changing, replenishing, or otherwise using resources (Bureau of Land Management, 1984)
	<i>Lack of management</i>	Observed	The management according to the web page of concessioners is highly oriented to preserve the pedestrians and drivers security on the highway. Not oriented to manage the landscape.
Patch shape	<i>Naturalism index</i>	1	The naturalism index (NI) includes 1) those settings that are most natural as indicated by an NI of less than 3; 2) those settings that are most man-made as indicated by an NI of greater than 6; and 3) those that comprise the middle ground between 3 and 6.
	<i>Presence of natural feature</i>	3	None = 0; one element = 1; two elements = 2; three or more elements = 3
Colors and texture	<i>Number of colors</i>	3	One color = 1; two colors = 2; three or more colors = 3

	<i>Internal contrast Presence</i>	1	Weak color contrast = 0; clear color contrast = 1
	<i>Texture</i>	2	Smooth = 1; medium = 2; rough = 3
Edge shape	<i>Degree of wilderness</i>	0	Houses + roads + other = 0; few isolated elements = 1; crops without man-made elements = 2; wild vegetation = 3
Visual scale			
Landscape Attributes	Potential Indicators	Presence/absence	Quality – State
Topography	<i>Viewshed size</i>	90°	The values for vertical angle range from 90° (looking straight up) to -90° (looking straight down).
	<i>View shed form</i>	2	Almost flat = 0; slightly wavy = 1; some mountains = 2; mountains dominate the scene = 3
	<i>Depth of view</i>	3 km (sunny day)	Almost flat = 0; slightly wavy = 1; some mountains = 2; mountains dominate the scene = 3
Vegetation	<i>Degree of openness</i>	3	0–25%=0; 25–50%=1; 50–75%=2; 75–100%=3
	<i>Grain size</i>	2	Smooth = 1; medium = 2; rough = 3
Horizon	<i>Horizon</i>	2	Almost flat = 0; slightly wavy = 1; some mountains = 2; mountains dominate the scene = 3
	<i>Focal view</i>	1	No focal view = 0; focal view = 1
	<i>Scale effect</i>	1	No element presents scale effect = 0; presence of scale effect = 1
Man-made obstacle.	<i>Number of obstructing objects. Presence of negative man-made elements (roads, industries, power lines, etc.)</i>	3	None = 0; one element = 1; two elements = 2; Three or more elements = 3
	<i>Presence of positive man-made elements (sights and typical houses)</i>	0	None = 0; one element = 1; two elements = 2; three or more elements = 3