Visual Resource Inventory
DOMAINS

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Version 1

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Domains Specific to Visual Resource Inventory

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Overview

Domain values are an integral part of any data standard to ensure consistency and quality of the data captured using a data standard. This document provides the information necessary to understand those data elements (attributes) that have a set of domain values and the descriptions of the domain values to provide guidance in using the appropriate value. Reference entities and other entities that have a fairly stable list of values are included in this document for the data standard.

As this document will be used for both the data standard report and the implementation guidelines, it includes both the logical and implementation views of each of the domain sets. Standard Geospatial Domain Values will not be included in this document, but will be part of the Implementation Guidelines.

Legend

The background color of the item will be used to distinguish between the logical data model and the table design.

Logical Entities and Attributes
Physical Tables and Columns

For domain values, there will be a cross reference between the logical and physical names of the data elements. In some cases, the physical implementation may include additional columns. The logical reference entity may not have a code value, but the design of the table includes a code value for each domain value. Below is an example of the mapping between the logical attribute name and the table column name.

EXAMPLE: Project Status Domain Values

PROJECT STATUS NAME	PROJECT STATUS TEXT	*No Corresponding Attribute*
PJT_STAT_NM	PJT_STAT_TX	PJT_STAT_CD
Started	Project has begun, first task has been assigned	S
Proposed	Project has been proposed, but no planning	P
Completed	Project is completed	C

Visual Resource Inventory (VRI) Domains

Logical Entity Name	*Observation Point Representation Reference*	
Physical Domain Table	**VRI_DOM_IOP_RPRSNT**	
	DEFAULT VALUE	

Allowable Domain Values

OBSERVATION POINT REPRESENTATION NAME	NO CORRESPONDING LOGICAL ATTRIBUTE
IOP_RPRSNT Code	Description
Stationary	Observation taken from stationary position
Route	Observation taken from along a route (i.e. river, road, trail, flight)
Boundary	Observation taken from along a boundary
Missing	Missing data from old inventory

Logical Entity Name	*Landscape Character Reference*	
Physical Domain Table	**Not applicable**	
Not implemented as a domain table, documented as separate attribute in combination with the landscape feature in the data set.	**DEFAULT VALUE**	**N/A**

Allowable Domain Values

LANDSCAPE CHARACTER ELEMENT NAME
Not Applicable
Color
Form
Texture
Line

Logical Entity Name	*Landscape Feature Reference*	
Physical Domain Table	**Not applicable**	
Not implemented as a domain table, documented as separate attribute in combination with the landscape attribute in the data set.	**DEFAULT VALUE**	**N/A**

Allowable Domain Values

LANDSCAPE FEATURE NAME
Not Applicable
Vegetation
Structure
Landform/Water

Logical Entity Name	**Scenic Quality Unit Factor Score**				
Physical Domain Table	**ONE TABLE FOR EACH SCENIC QUALITY FACTOR SCORE RANGE**				

Each Scenic Quality Factor will have its own domain table to capture the minimum and maximum numeric values for scoring of the factor. Factors may be scored with 0.5 increment. There is also a minimum and maximum for the total score.	**DEFAULT VALUE**	**One for each factor score**

Allowable Domain Values for each Scenic Quality Factor and Total Score

SCENIC QUALITY FACTOR SCORE NUMBER					
Physical Domain Table	GIS Attribute Name	Factor Name	Minimum Value	Maximum Value	Default Value
VRI_DOM_SQ_TOT_SCR	SQ_TOT_SCR	TOTAL SCORE	0	32	0
VRI_DOM_SQ_LFORM_SCR	SQ_LFORM_SCR	Land Form	1	5	1.0
VRI_DOM_SQ_VEG_SCR	SQ_VEG_SCR	Vegetation	1	5	1.0
VRI_DOM_SQ_WATER_SCR	SQ_WATER_SCR	Water	0	5	0
VRI_DOM_SQ_COLOR_SCR	SQ_COLOR_SCR	Color	1	5	1.0
VRI_DOM_SQ_ADJNT_SCR	SQ_ADJNT_SCR	Adjacent Land Uses	0	5	0
VRI_DOM_SQ_SCARC_SCR	SQ_SCARC_SCR	Scarcity	1	5	1.0
VRI_DOM_SQ_CULT_SCR	SQ_CULT_SCR	Cultural Modifications	-4	2	0

Logical Entity Name	Scenic Quality Rating Reference
Physical Domain Table	VRI_DOM_SQ_CODE

			DEFAULT VALUE	

Allowable Domain Values

SCENIC QUALITY RATING CODE	SCENIC QUALITY RATING LOW NUMBER	SCENIC QUALITY RATING HIGH NUMBER	SCENIC QUALITY RATING TEXT
SQ_CODE Code	N/A	N/A	Description
A	18.5	32	Assign this SQ Code if total score is 18.5 or more
B	11.5	18	Assign this SQ Code if total score is from 11.5 to 18
C	-4	11	Assign this SQ Code if total score is 11 or less
N			Not Inventoried
M			Missing Data from Old Inventory

Logical Entity Name	Visual Sensitivity Level Reference	
Physical Domain Table	**VRI_DOM_SL_RATING**	
These domain values are used for the following Attributes: SL_OVRL_RT, SL_USER_RT, SL_AREAUSE_RT, SL _PUBLIC_RT, SL_ADJNT_RT	**DEFAULT VALUE**	

Allowable Domain Values

VISUAL SENSITIVITY LEVEL NAME	NO LOGICAL ATTRIBUTE
SL_OVRL_RT, SL_USER_RT, SL_AREAUSE_RT, SL_PUBLIC_RT, SL_ADJNT_RT, SL_SPCL_RT, SL_OTHR_RT Code	Description
High	Maintenance of Visual Quality has High Value
Moderate	Maintenance of Visual Quality has Moderate Value
Low	Maintenance of Visual Quality has Low Value
None	Not Inventoried
Missing	Missing Data from Old Inventory

Logical Entity Name	*Visual Sensitivity Level Reference*	
Physical Domain Table	**VRI_DOM_SLNA_RATING**	
These domain values are used for the following Attributes: SL_SPCL_RT, SL_OTHR_RT	**DEFAULT VALUE**	

Allowable Domain Values

VISUAL SENSITIVITY LEVEL NAME	NO LOGICAL ATTRIBUTE
SL_SPCL_RT, **SL_OTHR_RT** Code	Description
High	Maintenance of Visual Quality has High Value
Moderate	Maintenance of Visual Quality has Moderate Value
Low	Maintenance of Visual Quality has Low Value
NA	Not Applicable – No special area or other related sensitivity
None	Not Inventoried
Missing	Missing Data from Old Inventory

Logical Entity Name	*Visual Distance Zone Reference*
Physical Domain Table	**VRI_DOM_VDZ_CODE**

		DEFAULT VALUE	

Allowable Domain Values

VISUAL DISTANCE ZONE CODE	VISUAL DISTANCE ZONE NAME	VISUAL DISTANCE ZONE TEXT
VDZ_CODE Code	N/A	Description
NF	near foreground	Near Foreground. This zone includes foreground dimensions up to 0.25 mile. Reserved for use by the cultural resource NLCS National Scenic and Historic Trails team, and the visual inventories of these trails.
F/M	foreground-middleground	Foreground-Middleground. This zone includes areas seen from highways, rivers, or other viewing locations which are less than 3 to 5 miles away.
BG	background	Background. Seen areas beyond the foreground-middleground zone but usually less than 15 miles away are in the background (bg) zone.
SS	seldom seen	Seldom Seen. Areas not seen as foreground-middleground or background (i.e., hidden from view) are in the seldom-seen (ss) zone.
N		Not Inventoried
M		Missing Data from Old Inventory

Logical Entity Name	*Visual Resource Inventory Class Reference*
Physical Domain Table	**VRI_DOM_CLASS_CODE**

	DEFAULT VALUE	

Allowable Domain Values

VISUAL RESOURCE INVENTORY CLASS CODE	VISUAL RESOURCE INVENTORY CLASS TEXT
VRI_CLASS_CODE Code	Description
I	Class I is assigned to all special areas where the current management situations requires maintaining a natural environment essentially unaltered by man.
II	In general, Class II is assigned to areas that have quality rating of A and high public sensitivity.
III	In general, Class III is assigned to areas that have quality rating of B, with medium public sensitivity.
IV	In general, Class IV is assigned to areas that have quality rating of C, with low or medium public sensitivity.
N	Not Inventoried
M	Missing Data from Old Inventory

Logical Entity Name	*No Corresponding Logical Entity*		
Physical Domain Table	**DOM_YES_NO**		
Domain values for a simple yes or no response for an attribute.		**DEFAULT VALUE**	**NO**

Allowable Domain Values

Code	Description
YES	Yes – Answer in the affirmative. VRI_REHAB_IND attribute: YES indicates that the area is in need of rehabilitation as determined during the visual resource inventory analysis. VRI_SPCL_IND attribute: YES indicates that the area contains a special area.
NO	No – Answer in the negative. VRI_REHAB_IND attribute: NO indicates that the area is not in need of rehabilitation. VRI_SPCL_IND attribute: NO indicates that the area does not contain a special area.

Logical Attribute Name	State Alphabetic Code (Administrative State Office)	
Physical Domain Table	**DOM_ADMIN_ST**	
	DEFAULT VALUE	

Allowable Domain Values

ADMIN_ST	Administrative State Office Name
ADMIN_ST Code	Description
AK	Alaska
AZ	Arizona
CA	California
CO	Colorado
ES	Eastern States
ID	Idaho
MT	Montana
NM	New Mexico
NV	Nevada
OR	Oregon
UT	Utah
WY	Wyoming

Visual Resource Inventory (VRI) Guidance

Logical Entity Name	Scenic Quality Factor Reference	
Physical Domain Table	VRI_SQ_FACTOR_GDE	
This table describes what to consider in scoring the seven factors of scenic quality.	DEFAULT VALUE	
SCENIC QUALITY FACTOR NAME	SCENIC QUALITY FACTOR TEXT	
SQ_FCTR_NM	SQ_FCTR_TEXT	
landform	Topography becomes more interesting as it gets steeper or more massive, or more severely or universally sculptured. Outstanding landforms may be monumental, as the Grand Canyon, the Sawtooth Mountain Range in Idaho, the Wrangell Mountain Range in Alaska, or they may be exceedingly artistic and subtle as certain badlands, pinnacles, arches, and other extraordinary formations.	
vegetation	Give primary consideration to variety of patterns, forms, and textures created by plant life. Consider short-lived displays when they are known to be recurring or spectacular. Consider smaller scale vegetational features which add striking and intriguing detail elements to the landscape (e.g. gnarled or windbeaten trees, and joshua trees).	
water	That ingredient which adds movement or serenity to a scene. The degree to which water dominates the scene is the primary consideration in selecting the rating score.	
color	Consider overall color(s) of the basic components of the landscape (e.g., soil, rock, vegetation, etc.) as they appear during seasons or periods of high use. Key factors to use when rating "color" are variety, contrast, and harmony.	
adjacent scenery	Degree to which scenery outside the scenery unit being rated enhances the overall impression of the scenery within the rating unit. The distance which adjacent scenery will influence scenery within the rating unit will normally range from 0-5 miles, depending upon the characteristics of the topography, the vegetative cover, and other such factors. This factor is generally applied to units which would normally rate very low in score, but the influence of the adjacent unit would enhance the visual quality and raise the score.	
scarcity	This factor provides an opportunity to give added importance to one or all of the scenic features that appear to be relatively unique or rare within one physiographic region. There may also be cases where a separate evaluation of each of the key factors does not give a true picture of the overall scenic quality of an area. Often it is a number of not so spectacular elements in the proper combination that produces the most pleasing and memorable scenery - the scarcity factor can be used to recognize this type of area and give it the added emphasis it needs.	
cultural modifications	Cultural modifications in the landform/water, vegetation, and addition of structures should be considered and may detract from the scenery in the form of a negative intrusion or complement or improve the scenic quality of a unit. Rate accordingly.	

Logical Entity Name	Scenic Quality Criteria Reference	
Physical Domain Table	**VRI_SQ_CRITERIA_GDE**	
A table that provides examples of rating criteria text and associated scores that can be used for guidance in scoring the scenic quality factors.	**DEFAULT VALUE**	
SCENIC QUALITY FACTOR NAME	**SCENIC QUALITY FACTOR CRITERIA NUMBER**	**SCENIC QUALITY FACTOR CRITERIA TEXT**
SQ_FCTR_NM	**SQ_SCORE_NR**	**SQ_SCORE_TX**
Landform	5	High vertical relief as expressed in prominent cliffs, spires, or massive rock outcrops, or severe surface variation or highly eroded formations including major badlands or dune systems; or detail features dominant and exceptionally striking and intriguing such as glaciers.
Landform	3	Steep canyons, mesas, buttes, cinder cones, and drumlins; or interesting erosional patterns or variety in size and shape of landforms; or detail features which are interesting though not dominant or exceptional.
Landform	1	Low rolling hills, foothills, or flat valley bottoms; or few or no interesting landscape features.
Vegetation	5	A variety of vegetative types as expressed in interesting forms, textures, and patterns.
Vegetation	3	Some variety of vegetation, but only one or two major types.
Vegetation	1	Little or no variety or contrast in vegetation.
Water	5	Clear and clean appearing, still, or cascading white water, any of which are a dominant factor in the landscape.
Water	3	Flowing, or still, but not dominant in the landscape.
Water	0	Absent, or present, but not noticeable.
Color	5	Rich color combinations, variety or vivid color; or pleasing contrasts in the soil, rock, vegetation, water or snow fields.
Color	3	Some intensity or variety in colors and contrast of the soil, rock and vegetation, but not a dominant scenic element.
Color	1	Subtle color variations, contrast, or interest; generally mute tones.
Influence of adjacent scenery	5	Adjacent scenery greatly enhances visual quality.
Influence of adjacent scenery	3	Adjacent scenery moderately enhances overall visual quality.

SQ_FCTR_NM	SQ_SCORE_NR	SQ_SCORE_TX
Influence of adjacent scenery	0	Adjacent scenery has little or no influence on overall visual quality.
Scarcity	5	One of a kind; or unusually memorable, or very rare within region. Consistent chance for exceptional wildlife or wildflower viewing, etc.
Scarcity	3	Distinctive, though somewhat similar to others within the region.
Scarcity	1	Interesting within its setting, but fairly common within the region.
Cultural modifications	2	Modifications add favorably to visual variety while promoting visual harmony.
Cultural modifications	0	Modifications add little or no visual variety to the area, and introduce no discordant elements.
Cultural modifications	-4	Modifications add variety but are very discordant and promote strong disharmony.

Logical Entity Name	*Visual Sensitivity Factor Criteria Level Reference*	
Physical Domain Table	**VRI_SL_RATING_GDE**	
A table used for guidance in determining which sensitivity level to assign to a sensitivity factor.	**DEFAULT VALUE**	

Allowable Domain Values

VISUAL SENSITIVITY FACTOR NAME	VISUAL SENSITIVITY LEVEL NAME	VISUAL SENSITIVITY FACTOR LEVEL GUIDANCE TEXT
SL_FCTR_NM	**SL_RATE_NM**	**SL_GUIDE_TEXT**
Type of Users	High	Maintenance of visual quality is a major concern for most users.
Type of Users	Moderate	Maintenance of visual quality is a moderate concern for most users.
Type of Users	Low	Maintenance of visual quality is a low concern for most users.
Amount of Use	High	Maintenance of visual quality becomes more important as the level of use increases – high level of use. Roads & highways > 45,000 visitors per year, rivers & trails > 20,000 visitors per year, recreation sites > 10,000 visitor days per year.
Amount of Use	Moderate	Maintenance of visual quality becomes more important as the level of use increases – moderate level of use. Roads & highways 5,000 - 45,000 visitors per year, rivers & trails 2,000-20,000 visitors per year, recreation sites 2,000-10,000 visitor days per year.
Amount of Use	Low	Maintenance of visual quality becomes more important as the level of use increases – low level of use. Roads & highways < 5,000 visitors per year, rivers & trails < 2,000 visitors per year, recreation sites < 2,000 visitor days per year.
Public Interest	High	Maintenance of visual quality is a major public issue.
Public Interest	Moderate	Maintenance of visual quality is a moderate public issue.
Public Interest	Low	Maintenance of visual quality is a minor public issue.
Adjacent Land Uses	High	Maintenance of visual quality to sustain adjacent land use objectives is very important.
Adjacent Land Uses	Moderate	Maintenance of visual quality to sustain adjacent land use objectives is moderately important.
Adjacent Land Uses	Low	Maintenance of visual quality to sustain adjacent land use objectives is slightly important.
Special Areas	High	Maintenance of visual quality to sustain Special Area management objectives is very important.
Special Areas	Moderate	Maintenance of visual quality to sustain Special Area management objectives is moderately important.
Special Areas	Low	Maintenance of visual quality to sustain Special Area management objectives is slightly important.
Other Factors	High	
Other Factors	Moderate	
Other Factors	Low	

Logical Entity Name	**_Visual Sensitivity Factor Reference_**
Physical Domain Table	**VRI_SL_FACTOR_GDE**

A table that provides guidance for descriptions of the visual sensitivity factors.	**DEFAULT VALUE**	

Allowable Domain Values

VISUAL SENSITIVITY FACTOR NAME	VISUAL SENSITIVITY FACTOR TEXT
SL_FCTR_NM	SL_FCTR_TEXT
Type of Users	Visual sensitivity will vary with the type of users. Recreational sightseers may be highly sensitive to any changes in visual quality, whereas workers who pass through the area on a regular basis may not be as sensitive to change.
Amount of Use	Areas seen and used by large numbers of people are potentially more sensitive. Protection of visual values usually becomes more important as the number of viewers increase.
Public Interest	The visual quality of an area may be of concern to local, State, or National groups. Indicators of this concern are usually expressed in public meetings, letters, newspaper or magazine articles, newsletters, land-use plans, etc. Public controversy created in response to proposed activities that would change the landscape character should also be considered.
Adjacent Land Uses	The interrelationship with land uses in adjacent lands can affect the visual sensitivity of an area. For example, an area within the viewshed of a residential area may be very sensitive, whereas an area surrounded by commercially developed lands may not be visually sensitive.
Special Areas	Management objectives for special areas such as Natural Areas, Wilderness Areas or Wilderness Study Areas, Wild and Scenic Rivers, Scenic Areas, Scenic Roads or Trails, and Areas of Critical Environmental Concern (ACEC), frequently require special consideration for the protection of the visual values. This does not necessarily mean that these areas are scenic, but rather that one of the management objectives may be to preserve the natural landscape setting. The management objectives for these areas may be used as a basis for assigning sensitivity levels.
Other Factors	Consider any other information such as research or studies that include indicators of visual sensitivity.

Logical Entity Name	**_Visual Resource Inventory Visual Distance Zone Criteria Reference_**	
Physical Domain Table	**VRI_VDZ_CRITERIA_GDE**	
A table that provides guidance for visual distance zones.	**DEFAULT VALUE**	

Allowable Domain Values

VISUAL DISTANCE ZONE NAME	VISUAL DISTANCE ZONE CODE DESCRIPTION
VDZ_CODE	**VDZ_TEXT**
Foreground-Middleground	This is the area that can be seen from each travel route (highways, rivers, or other viewing locations) for a distance of 3 to 5 miles where management activities might be viewed in detail. The outer boundary of this distance zone is defined as the point where the texture and form of individual plants are not longer apparent in the landscape. In some areas, atmospheric conditions can reduce visibility and shorten the distance normally covered by each zone. Also, where the foreground-middleground zone from one travel route overlaps the background from another travel route, use only the foreground-middleground designation.
Background	This is the remaining area which can be seen from each travel route to approximately 15 miles. Do not include areas in the background which are so far distant that the only thing discernable is the form or outline. In order to be included within this distance zone, vegetation should be visible at least as patterns of light and dark.
Seldom Seen	These are the areas that are not visible within the foreground-middleground and background zones and areas beyond the background zones.

Logical Entity Name	**_Final Visual Resource Inventory Class Reference_**		
Physical Domain Table	**VRI_CLASS_ASGN_GDE**		
A table that provides guidance for assigning the visual resource inventory class.		**DEFAULT VALUE**	

Allowable Domain Values

SCENIC QUALITY RATING CODE	VISUAL DISTANCE ZONE CODE	VISUAL SENSITIVITY LEVEL NAME	INVENTORY CLASS CODE	FINAL VISUAL RESOURCE INVENTORY CLASS TEXT
VRI_SQ_CODE	VRI_VDZ_CODE	VRI_SL_OVRL_RT	VRI_CLASS_CODE	VRI_CLASS_TEXT
Any	Any	Any	I	Designated Special Areas
A	F/M	HIGH	II	
A	BG	HIGH	II	
A	SS	HIGH	II	
B	F/M	HIGH	II	
B	BG	HIGH	III	
B	SS	HIGH	III	If adjacent areas is Class III or lower assign Class III, if higher assign Class IV.
B	SS	HIGH	IV	If adjacent areas is Class III or lower assign Class III, if higher assign Class IV.
C	F/M	HIGH	III	
C	BG	HIGH	IV	
C	SS	HIGH	IV	
A	F/M	MODERATE	II	
A	BG	MODERATE	II	
A	SS	MODERATE	II	
B	F/M	MODERATE	IV	
B	BG	MODERATE	IV	
B	SS	MODERATE	IV	
C	F/M	MODERATE	IV	
C	BG	MODERATE	IV	
C	SS	MODERATE	IV	
A	SS	LOW	II	
B	SS	LOW	IV	
C	SS	LOW	IV	